Broward County Board of Rules and Appeals Meeting Agenda

July 13, 2023
Time: 7:00 PM

Zoom Meeting Information:
https://broward-org.zoomgov.com/j/1607131959
Meeting ID: 160 713 1959

I. Call Meeting to Order

II. Roll Call

III. Approval of Agenda

IV. Approval of Minutes – June 8, 2023, Regular Meeting

V. Public Comment (Except public hearing items on this agenda)
Public comments are limited to 3 minutes.

VI. CONSENT AGENDA

1. **Certifications** – Staff Recommended

BROWARD COUNTY, UNINCORPORATED
Harder, Benjamin Leigh, Plumbing Inspector – Provisional

CITY OF CORAL SPRINGS-PARKLAND
Fernandez, Steven, Fire Inspector
Harvey, Martin, Fire Inspector

CITY OF DEERFIELD BEACH
Borisov, Denis, Structural Inspector (Limited) – 120-Day Temporary

CITY OF HOLLYWOOD
Buhagiar, Destiny Shelik, Fire Inspector
Jones, Timothy S., Chief Structural Inspector
Paiva, Luiz A., Structural Inspector – 120-Day Temporary
Suastegui, Christopher, Roofing Inspector – 120-Day Temporary

CITY OF MIRAMAR
Perez, Jose M., Mechanical Inspector – 120-Day Temporary

CITY OF PEMBROKE PINES
Rodriguez, Alexander, Electrical Inspector – 120-Day Temporary
Rourke, Timothy John, Plumbing Inspector – 120-Day Temporary

CITY OF POMPANO BEACH
Olsen, Jay, Electrical Inspector – 120-Day Temporary

CITY OF WILTON MANORS
Guendjoian, Armen, Chief Plumbing Inspector

COUNTYWIDE
Sera, Ralph, Structural Plans Examiner

VII. REGULAR AGENDA

1. **Guidance of the Fire Code Committee as it relates to Building Appeal #23-01**

    a. Staff Report
    b. Board Questions
    c. Board Action

2. **Appeal #23-02 – Antonio Gonzalez (2030 S Ocean Dr. Hallandale Beach)**

    a. Staff Report
    b. Appeal Presentation
    c. Board Questions
    d. Board Action

3. **First reading of proposed revisions to the Florida Fire Prevention Code, Section F-103.3.7**

    a. Staff Report
    b. Board Questions
    c. Board Action

4. **Fiscal Year 2024 Budget (October 1, 2023 – September 30, 2024)**

    a. Staff Report
    b. Board Questions
    c. Board Action

5. **Director's Report**

6. **Attorney's Report**

7. **Committee Reports**

8. **General Board Member Discussion**

9. **Adjournment**

If a person desires to appeal any decision with respect to any matter considered at this meeting, such person will need a record of the proceedings and, for this reason, such person may need to ensure that a verbatim record of the proceeding is made, which includes the testimony and evidence upon which the appeal is to be based (FS Sec.286.0105)

Members: If you cannot attend the meeting, please get in touch with Dr. Barbosa at 954-931-2393 between 6:00 PM and 7:00 PM.

June 8, 2023
Board Meeting Minutes

Broward County Board of Rules and Appeals Meeting Minutes

June 8, 2023
Time: 7:00 PM

Zoom Meeting Information:
https://broward-org.zoomgov.com/j/1605817392
Meeting ID: 160 581 7392

I. Call Meeting to Order

Chairman Lavrich called a published virtual meeting of the Broward County Board of Rules and Appeals to order at 7 p.m.

II. Roll Call

Daniel Lavrich, Chairman
Gregg D'Attile, Vice Chairman
Ron Burr
Steven M. Feller
Shalanda Giles-Nelson
R. Art Kamm
Sergio Pellecer
David Rice
Daniel Rourke
David Tringo
Dennis Ulmer
Derek A. Wassink
Lynn E. Wolfson

III. Approval of Agenda

Mr. Feller made a motion, and Ms. Wolfson seconded the motion to approve the agenda as written. The motion was carried out by a unanimous vote of 13-0.

IV. Approval of Minutes – May 11, 2023, Regular Meeting

Mr. Feller made a motion, and Mr. Wassink seconded the motion to approve the May 11, 2023, minutes as submitted. The motion was carried out by a unanimous vote of 13-0.

V. Public Comment (Except public hearing items on this agenda) - none
Public comments are limited to 3 minutes.

VI. CONSENT AGENDA

1. **Certifications** – Staff Recommended

2. **Certifications** – Staff Recommended

CITY OF COCONUT CREEK
Vaughn, Thomas G., Chief Plumbing Inspector

TOWN OF DAVIE
Allen, Adam, Fire Inspector

CITY OF FORT LAUDERDALE

Mark, Preston G., Structural Inspector – Temporary 120-day

TOWN OF HILLSBORO BEACH
Siravo, Michael, Chief Plumbing Inspector
Switalski, Joseph, Chief Mechanical Inspector

CITY OF HOLLYWOOD
Francois, Louis, Fire Inspector

CITY OF LIGHTHOUSE POINT
Siravo, Michael, Chief Plumbing Inspector
Switalski, Joseph, Chief Mechanical Inspector

CITY OF MIRAMAR
Arcelay, Javon, Fire Inspector
Arcelay, Stephon, Fire Inspector

CITY OF POMPANO BEACH
Pelaez, Jonathan, Electrical Inspector – Temporary 120-day
Sayer, Christopher A., Fire Plans Examiner
Zalewski, Ashley, Fire Plans Examiner

CITY OF TAMARAC
Alexander, Diko, Plumbing Inspector – Provisional

COUNTYWIDE
Monier, Claudio Rubin, Structural Inspector
Quesada, Sandy, Electrical Plans Examiner
Rodriguez-Gonzalez, Jose L., Electrical Plans Examiner/Inspector

Mr. Pellecer made a motion, and Mr. Feller seconded the motion to approve the certifications as recommended. The motion was carried out by a unanimous vote of 13-0.

VII. REGULAR AGENDA

1. Appeal 23-01 – Accent Closets Inc. and Pompano Beach Building Department

a. Staff Report
Mr. Michael Guerasio, Chief Structural Code Compliance Officer, reviewed and expanded on his memorandum to the Board, dated June 8, 2023, provided to the Board and attached hereto. This is a request by Accent Closets to reverse the City of Pompano Beach Building Official's ruling for fire sprinkling of the subject space after the annual fire inspection. He explained that the showroom/office square footage space is not surrounded by bounding walls etc. and therefore cannot be separated from the woodworking space with respect to fire sprinkler requirements and the entire 7,800 square feet. With the area exceeding 2,500 square feet, the Code requires fire sprinklers. He went on to say when going from the South Florida Building Code to the Florida Building Code in 2001 and more code changes in 2004. The group occupancy classification changed during that time and with the type of work being done it was put into a moderate hazard F1 designation. The F1 designation under the South Florida Building Code was a low hazard. He concluded by stating it is the staff's opinion that the area needs fire sprinklers and it is recommended that the Board deny the appeal.

b. Appeal Presentation
Mr. Ryan Abrams, representing Accent Closets, Inc., noted the individuals present to speak this evening. Mr. Charles Kramer, Board Attorney, noted that the law does not permit an expert to testify against another expert's work. He also did not think it appropriate to call witnesses who were not noticed. Mr. Abrams clarified that the testimony would be within the confines of what was submitted. A zoning use certificate was issued on June 11, 2023.

Chairman Lavrich indicated he would allow the experts to testify but not about somebody else's work.

Mr. Abrams indicated Accent Closets is a tenant at the subject location. They have been a family-owned business at this location since 2013. He reviewed information in a slide presentation attached to these minutes. He outlined a chronology from the fire inspection on May 16, 2013, to the one on July 19, 2021. The 2013 inspection was made at Accent Closets' request prior to moving in. A zoning use certificate was issued on June 11, 2013, which indicated that the site was compliant with the Florida Building Code. Accent Closets moved in shortly thereafter, and there were regular fire inspections throughout the years. Based on those approvals, lease extensions were signed in 2016 and 2019. The July 19, 2021 fire inspection concluded that woodworking was happening in an area exceeding 2,500 square feet and fire sprinklers were required. Accent Closets disputed this and invited the City to inspect the property. With that inspection, the City cited them for unpermitted work. There were minor items cited. Eventually, Accent Closets decided to submit permit applications. This was in early 2022. There have been six cycles of comments from the City and finally a determination on the sprinkler issue this past April. The Fire Department withdrew their comment and has conditionally approved the application. They have determined that no sprinklers are required. He went on to review the Florida Building Code, the International Building Code Rule, and the Building Official's opinion. If the woodworking area is 2,500 square feet or less, sprinklers are not required. He noted that there is no option to rectify this situation. If the appeal is not granted, Accent Closets will have to vacate the premises. There are only 1,316 square feet of floor area where woodworking activity is occurring. The Building Official has no jurisdiction to say that sprinklers are required under the rule shown in the slide presentation. The occupancy classification within the group has not changed. He showed a slide of the zoning use certificate approved in 2013. The owner of Accent Closets relied on this certificate and moved into this Pompano Beach location. No issue was raised about sprinklers until 2021.

Mr. Simeon Kirilov, Boca Raton, Florida, Architect for Accent Closets, pointed out that this is an existing use in place for eight years. It is technically grandfathered in with respect to the Florida Building Code. The slide presentation by Mr. Abrams notes the Florida Building Code section that indicates buildings that have already been there prior to the permit being pulled. Also, the existing building code applies. The main use of this tenant is cabinet assembly. All components are brought into the space. Much of the space is used for storage. There are only two machines used to cut to size. The machines happen to be large because they are automated. Most of the machines are belts. The primary function is sales, storage, and assembly.

Mr. Andrew Cobbe, an attorney with The Soto Law Group, 2400 East Commercial Boulevard, Fort Lauderdale, Florida, advised that he is board certified in construction law by the Florida Bar, a Florida licensed general contractor and roofing contractor. He questioned using the 2020 Florida Building Code for a building constructed in 1986 with a certificate of use provided in 2013 that would be subject to the 2010 building code that includes chapters on both fire prevention and change of occupancy. He believed that the application of the 2020 Florida Building Code is inappropriate. The 2020 code is for new structures and the change occurred in 2013. With respect to the sprinkler requirement being triggered, the Code refers to fire areas in their totality and specifically indicates a fire area is more than 12,000 square feet. A letter from the Pompano Beach Building Department specifies sprinklers shall be provided for woodworking operations of more than 2,500 square feet. Mr. Cobbe contended that there is no reading of the Code that leads to that conclusion unless one is determining that the Code requires fire areas in excess of 2,500 square feet to have sprinklers if woodworking exists. Under that interpretation a single circular saw plugged in and placed on a table would trigger a sprinkler requirement which he would find inexplicable. New building codes to an existing building is a misapplication and misreading of the code itself.

Mr. Paul Del Vecchio indicated that he is a Florida-licensed general contractor and teaches the Florida Building Code as certified by the Florida Building Commission. He believed that the 2010 building code was applicable. He did not think that the City of Pompano Beach interpretation is applicable.

Mr. Ron Annechiarico, the owner of Accent Closets, indicated that he is 46 years old and has been in this business in Broward County since he was 17. He outlined the process he followed with the City of Pompano Beach when he sought to move to this location. After he received the zoning use certificate, he decided to request a fire inspection before signing the lease. He complied with the things required by the landlord and moved in. The fire inspector came back and closed out the inspection. This was in 2013. Nothing has changed since that time. Throughout the years inspections continued and he complied with the minor things raised. In the last inspection, the inspector said that fire sprinklers were required. The City then came to the shop again and took multiple photographs of all sorts of things. He agreed to comply with everything brought up and received approval from the Fire Department. Now the Building Department has become involved. He has already signed the lease and has invested a lot of money.There is no fire line to the building for fire sprinklers to be installed.

c. Board Questions

Mr. Burr asked Mr. Kramer if grandfathering was allowed. Mr. Kramer indicated it is less grandfathering than it is occupancy use change. He referred to applicable case law. If you change from storage to woodworking, it is a change in occupancy use, therefore he did not think grandfathering is possible. Also, even though it was allowed for a period, it does not mean it should continue. Mr. Abrams pointed out that in those other cases, there was a specific code provision that said something very specific, and it was ignored. One cannot expect a city official to make a wrong decision to effect a policy change. In this case, the Code says nothing about this specific situation. Moreover, it says a change of group or change of classification. Accent Closets has been at this location with a building code approval since 2013, and there has not been any change since that time. There is nothing in the code to indicate it is not correct whereas in the other cases, the code expressly stated contrary to what was happening which is what makes this different.

Mr. D'Attile questioned sprinklers being cited after some ten previous years of inspections. Ms. Giles-Nelson believed that work without a permit was discovered. It progressed from that point. She asked if the City of Pompano Beach is going to speak this evening. Chairman Lavrich indicated that the City's response was provided with the staff's submittal packet. Ms. Giles-Nelson indicated that the Code needed to be applied when the work was installed. It was cited in 2021 therefore 2020 Building Code would be applicable. Mr. Burr noted that the Fire Department has signed off on this and it has now moved to the Building Department. He wanted to know what had changed since 2013 when it was approved.

Ms. Jill Ziluck, Assistant City Attorney, City of Pompano Beach, advised that the zoning use certificate did not indicate woodworking. The F1 classification does not include woodworking. It is not clear when the machines came into the facility. One is labeled 2018 and the other 2019. The issue came to light in 2021 when the inspector went to the site. In dealing with life safety issues, she thought it is irrelevant to investigate the history. It is clearly a change in occupancy use. They are woodworking and need to abide by the Code. The original use was manufacturing and display of closets. Mr. Abrams noted that the zoning certificate indicates closets. In the F1 classification next to woodworking it says closets. The City approved it for closets.

Mr. Kamm asked if a fire rating was installed around the area, would the facility be compliant. Mr. Guerasio advised that if the area is enclosed and is less than 2,500 square feet, it would be compliant. Ms. Ziluck added that this suggestion had been posed to Accent Closets many times.

In response to Mr. D'Attile, Mr. Abrams advised that if the appeal is denied, Accent Closets would have to relocate.

Mr. Feller suggested referring this matter to the Fire Code Committee. Perhaps the Committee could act as an intermediary between the City and Accent Closets.

d. Board Action

Mr. Feller made a motion, and Mr. D'Attile seconded the motion to refer this matter to the Fire Code Committee to work with the Appellant for a solution amenable to the City of Pompano Beach and the Appellant. The motion was carried out by a unanimous vote of 13-0

During the discussion of the above motion, Chief Peter McGinnis, Assistant Fire Chief/Fire Marshall, City of Pompano Beach, explained that the Fire Department referred this back to the Building Department because it was unpermitted work and the change of use which is clarified by the Building Department. Accent Closets was cited in August of 2021 for lack of fire sprinklers. However the unpermitted work would ultimately be addressed by the Building Department.

2. **Agreement between Broward County Board of Rules and Appeals and Charles Kramer, Esquire for legal services effective July 1, 2023**

a. Staff Report

Dr. Ana Barbosa, Administrative Director, advised that the proposed contract would be for a three-year period. The rate was changed to what it was three years ago. She felt Mr. Kramer had done a great job.

b. Board Questions

She responded to Mr. D'Attile, indicating the rate was negotiated and it is comparable to other municipal attorneys.

c. Board Action

Chairman Lavrich said that Mr. Kramer has been outstanding in his work and interactions with the Board.

Ms. Wolfson made a motion, and Mr. Rice seconded the motion to approve the agreement as submitted. The motion was carried out by a unanimous vote of 12-0. Mr. Feller was not present.

3. **Director's Report**

Dr. Barbosa apologized for not sending meeting invites to the Board. She indicated they have now been sent to the Board in a monthly format. She would be happy to change the format if that would be preferred.

Dr. Barbosa indicated that she is looking into adding an operations manager to the staff.

4. **Attorney's Report**

Mr. Charles Kramer, Board Attorney, advised that he has yet to hear from the 17th Circuit Court on the appeal filed with respect to the Plantation Inn case. The Board's answer brief for the My Amelia case concerning virtual inspections was filed with the Fourth District Courts of Appeals on June 5. He offered to send a link to the brief to the Administrative Director so it could be forwarded to the Board.

5. **Committee Reports** - none

6. **General Board Member Discussion**

Chairman Lavrich announced the upcoming Board Open Discussion on June 14th at 9 a.m. via Zoom. A notice and link will be posted on the website.

7. **Adjournment**

There being no further business, the meeting adjourned at 8:12 p.m.

Consent Agenda

Section 1

BROWARD COUNTY, UNINCORPORATED
Harder, Benjamin Leigh, Plumbing Inspector – Provisional

CITY OF CORAL SPRINGS-PARKLAND
Fernandez, Steven, Fire Inspector
Harvey, Martin, Fire Inspector

CITY OF DEERFIELD BEACH
Borisov, Denis, Structural Inspector (Limited) – 120-Day Temporary

CITY OF HOLLYWOOD
Buhagiar, Destiny Shelik, Fire Inspector
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Suastegui, Christopher, Roofing Inspector – 120-Day Temporary

CITY OF MIRAMAR
Perez, Jose M., Mechanical Inspector – 120-Day Temporary

CITY OF PEMBROKE PINES
Rodriguez, Alexander, Electrical Inspector – 120-Day Temporary
Rourke, Timothy John, Plumbing Inspector – 120-Day Temporary

CITY OF POMPANO BEACH
Olsen, Jay, Electrical Inspector – 120-Day Temporary

CITY OF WILTON MANORS
Guendjoian, Armen, Chief Plumbing Inspector

COUNTYWIDE
Sera, Ralph, Structural Plans Examiner

Regular Agenda

Section 1

Broward County
Board of Rules and Appeals
1 N. University Drive Suite, 3500B, Plantation, FL 33324
Phone: 954-765-4500 | Fax: 954-765-4504
broward.org/CodeAppeals

TO: Members of the Board of Rules and Appeals

FROM: Chief Fire Code Compliance Officer

DATE: July 13, 2023

RE: Guidance of the Fire Code Committee as it relates to Building Appeal #23-01

At the June 8, 2023, Board meeting, the Board heard Building Appeal #23-01. The Board voted to send the appeal to the Board of Rules and Appeals, Fire Code Committee, for discussion. Staff would like to advise the Board that issues regarding the Building Code and Building Appeal #23-01 cannot be heard per the requirements as set out in our Local Fire Code, as provided below.

> **F-105.4 Appeals from the Decisions of the Fire Chief and/or Building Official:**
>
> **F-105.4.1** The BCFCC shall review all appeals from the decisions of the Fire Chief and/or Building Official, wherein such decision is on matters regulated by the Fire Protection Provisions of this Code, the FFPC, and all Fire Codes. Appeals can be submitted by any person who has reason to believe they have been subjected to unreasonable enforcement of the Fire Protection Provisions o this Code, the FFPC, and all Fire Codes.
>
> **F-105.4.2** Procedures for Appeals: The BCFCC shall review the appeal prior to the hearing by BORA and shall make recommendations to BORA for the resolution of the appeal. BORA shall then hear the appeal and make a final ruling.
>
> **F-105.4.3** Decisions by the Board related to an appeal of the FFPC can be challenged by submitting a request for a Declaratory Statement to the State Fire Marshal's Office.

Staff would like to Recommend two options for the Board's consideration and guidance.

Option 1: Staff would like to suggest to the Board that the Fire Code Committee could discuss and provide a recommendation based on like or equivalent code sections as found in the Fire Code and which are provided in the Building Code as cited in Appeal #23-01.

> The Fire Code addresses in the Florida Fire Prevention Code NFPA 1, in Section 13.3.2.28, "Woodworking Operations," wherein it addressed the requirements for fire protection.

Option 2: The Board might also consider asking the Structural and Fire Code Committee to hold a joint meeting wherein Fire Committee members could address fire code issues, Structural Committee members could discuss the issues related to the building code, and a joint report be sent to the Board for their consideration and action.

Sincerely,

Bryan Parks

Section 2

BORA Staff Report

Broward County
Board of Rules and Appeals
1 N. University Drive Suite, 3500B, Plantation, FL 33324
Phone: 954-765-4500 | Fax: 954-765-4504
broward.org/CodeAppeals

TO: Members of the Board of Rules and Appeals

FROM: Chief Energy Code Compliance Officer

DATE: July 13, 2023

RE: Appeal #23-02 – Antonio Gonzalez and Hallandale Beach Building Department

Recommendation
That the Board approves, by vote, the appeal submitted by Antonio Gonzalez requesting the overturning of the City of Hallandale Beach Chief Building Inspector Phil Sauer's decision not to require the replacement of the existing roof insulation on re-roofing permit #BRFG-22-01085. Mr. Gonzalez is requesting that insulation be installed to the original design of the building.

Reasons
Reducing the insulation value on the roof is a violation of the 2020 Existing Building Code, Section 701.2 Conformance. *"An existing building or portion thereof shall not be altered such that the building becomes less safe or energy efficient than its existing condition."*

The Existing Building Code prohibits making the building less energy efficient. Additionally, it increases the cooling load of the building and increases the run-time of cooling equipment, increasing energy use. The 2004 through 2020 Existing Building Code requires that a building not be altered to make the building less energy efficient.

Section 501.2 was added to the 2004 Existing Building Code effective on October 1, 2005, to prevent existing buildings from being made less energy efficient than the original design. This provision remains in the current 2020 version of the existing 2020 Florida Building Code in Section 701.2.

The air conditioning loads were required to be calculated in accordance with 1965 South Florida Building Code Section 4902.2 using ASHRAE standards "The Guide" when the building was constructed in 1970.

Respectfully Submitted,

Timothy de Carion

CHAPTER 7

ALTERATIONS—LEVEL 1

SECTION 701
GENERAL

701.1 Scope. Level 1 *alterations* as described in Section 602 shall comply with the requirements of this chapter. Level 1 *alterations* to *historic buildings* shall comply with this chapter, except as modified in Chapter 12.

701.2 Conformance. An *existing building* or portion thereof shall not be altered such that the building becomes less safe or energy efficient than its existing condition.

Exception: Where the current level of safety or sanitation is proposed to be reduced, the portion altered shall conform to the requirements of the *Florida Building Code, Building.*

[BS] 701.3 Flood hazard areas. In *flood hazard areas*, *alterations* that constitute *substantial improvement* shall require that the building comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable.

SECTION 702
BUILDING ELEMENTS AND MATERIALS

702.1 Interior finishes. All newly installed interior wall and ceiling finishes shall comply with Chapter 8 of the *Florida Building Code, Building.*

702.2 Interior floor finish. New interior floor finish, including new carpeting used as an interior floor finish material, shall comply with Section 804 of the *Florida Building Code, Building.*

702.3 Interior trim. All newly installed interior trim materials shall comply with Section 806 of the *Florida Building Code, Building.*

702.4 Window opening control devices on replacement windows. In Group R-2 or R-3 buildings containing dwelling units and one- and two-family dwellings and townhouses regulated by the *Florida Building Code, Residential*, window opening control devices complying with ASTM F2090 shall be installed where an existing window is replaced and where all of the following apply to the replacement window:

1. The window is operable;
2. The window replacement includes replacement of the sash and the frame;
3. One of the following applies:
   - 3.1. In Group R-2 or R-3 buildings containing dwelling units, the top of the sill of the window opening is at a height less than 36 inches (915 mm) above the finished floor; or
   - 3.2. In one- and two-family dwellings and townhouses regulated by the *Florida Building Code, Residential*, the top sill of the window opening is at a height less than 24 inches (610 mm) above the finished floor;
4. The window will permit openings that will allow passage of a 4-inch-diameter (102 mm) sphere when the window is in its largest opened position; and
5. The vertical distance from the top of the sill of the window opening to the finished grade or other surface below, on the exterior of the building, is greater than 72 inches (1829 mm).

The window opening control device, after operation to release the control device allowing the window to fully open, shall not reduce the minimum net clear opening area of the window unit to less than the area required by Section 1030.2 of the *Florida Building Code, Building.*

Exceptions:

1. Operable windows where the top of the sill of the window opening is located more than 75 feet (22 860 mm) above the finished grade or other surface below, on the exterior of the room, space or building, and that are provided with window fall prevention devices that comply with ASTM F2006.
2. Operable windows with openings that are provided with window fall prevention devices that comply with ASTM F2090.

702.5 Replacement window emergency escape and rescue openings. Where windows are required to provide emergency escape and rescue openings in Group R-2 and R-3 occupancies and one- and two-family dwellings and townhouses regulated by the *Florida Building Code, Residential*, replacement windows shall be exempt from the requirements of Sections 1030.2, 1030.3 and 1030.5 of the *Florida Building Code, Building* and Sections R310.2.1, R310.2.2 and R310.2.3 of the *Florida Building Code, Residential* accordingly, provided the replacement window meets the following conditions:

1. The replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The replacement window shall be permitted to be of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window.
2. The replacement of the window is not part of a change of occupancy.

Window opening control devices complying with ASTM F2090 shall be permitted for use on windows required to provide *emergency escape* and *rescue openings*.

702.6 Materials and methods. All new work shall comply with the materials and methods requirements in the *Florida Building Code, Building*; *Florida Building Code, Energy Conservation*; *Florida Building Code, Mechanical*; and *Florida Building Code, Plumbing*, as applicable, that specify

CHAPTER 5

ALTERATIONS—LEVEL 1

SECTION 501
GENERAL

501.1 Scope. Level 1 alterations as described in Section 303 shall comply with the requirements of this chapter. Level 1 alterations to historic buildings shall comply with this chapter, except as modified in Chapter 10.

501.2 Conformance. An existing building or portion thereof shall not be altered such that the building becomes less safe or energy efficient than its existing condition. If in the alteration the current level of safety or sanitation is to be reduced, the portion altered shall conform to the requirements of the *Florida Building Code, Building*.

501.3 Flood hazard areas. See Section 401.4.

SECTION 502
RESERVED

SECTION 503
BUILDING ELEMENTS AND MATERIALS

503.1 Interior finishes. All newly installed interior finishes shall comply with the flame spread requirements of the *Florida Building Code, Building*.

503.2 Carpeting. New carpeting used as an interior floor finish material shall comply with the radiant flux requirements of the *Florida Building Code, Building*.

503.3 Materials and methods. All new work shall comply with materials and methods requirements in the *Florida Building Code* and the *Florida Fire Prevention Code* as applicable, that specify material standards, detail of installation and connection, joints, penetrations, and continuity of any element, component, or system in the building.

503.3.1 Florida Building Code, Fuel Gas. The following sections of the *Florida Building Code, Fuel Gas* shall constitute the fuel gas materials and methods requirements for Level 1 alterations.

1. All of Chapter 3, entitled "General Regulations," except Sections 303.7 and 306.
2. All of Chapter 4, entitled "Gas Piping Installations," except Sections 401.8 and 402.3.
   2.1. Sections 401.8 and 402.3 shall apply when the work being performed increases the load on the system such that the existing pipe does not meet the size required by code. Existing systems that are modified shall not require resizing as long as the load on the system is not increased and the system length is not increased even if the altered system does not meet code minimums.
3. All of Chapter 5, entitled "Chimneys and Vents."
4. All of Chapter 6, entitled "Specific Appliances."

SECTION 504
FIRE PROTECTION

504.1 Level 1 alterations shall be done in a manner that maintains the level of fire protection provided.

SECTION 505
MEANS OF EGRESS

505.1 General. Means of egress for buildings undergoing alteration shall comply with the requirements of Section 501.1 and the scoping provisions of Chapter 1 where applicable.

Exception: Door and window dimensions. In residential dwellings and dwelling units, a maximum of 5 percent reduction in the clear opening dimensions of replacement doors and windows shall be allowed.

SECTION 506
ACCESSIBILITY

506.1 Accessibility shall be in accordance with Chapter 11 of the *Florida Building Code, Building*.

506.1.1 through 506.2 Reserved.

SECTION 507
STRUCTURAL

507.1 General. Where alteration work includes replacement of equipment that is supported by the building or where a reroofing permit is required, the structural provisions of this section shall apply.

507.2 Design criteria. Existing structural components supporting alteration work shall comply with this section.

Exception: Nonstructural alterations exclusive of fixtures and furniture, the cost of which does not exceed 25 percent of the replacement value of the existing building or structure, with the approval of the building official may be made of the same material of which the building or structure is constructed.

507.2.1 Replacement of roofing or equipment. Where replacement of roofing or equipment results in additional dead loads, structural components supporting such reroofing or equipment shall comply with the vertical load requirements of the *Florida Building Code, Building*.

Exceptions:

1. Structural elements whose stress is not increased by more than 5 percent.
2. Buildings constructed in accordance with the conventional construction methods of the *Florida Building Code, Building* and where the additional dead load from the equipment is not increased by more than 5 percent.

507.2.2 Roof diaphragm. Where roofing materials are removed from more than 50 percent of the roof diaphragm of a building or section of a building where the

Chapter 49 — Air Conditioning and Refrigeration

4901 GENERAL

4901.1 SCOPE: All air conditioning and refrigeration equipment shall be as herein set forth and existing installations not conforming with the requirements of this Chapter shall be made to comply when relocated, resized, or when altered or repaired, the cost of which exceeds 25 percent of the value of the existing installation.

4901.2 PERMITS: (a) A permit, as set forth in Chapter 3, shall be required for the installation, alteration, or major repair of any air-conditioning or refrigeration system. A permit shall not be required for repairs that do not change the location, size or capacity of a compressor, condenser, coil, cooling tower, duct, or evaporating condenser.

(b) Application for permit shall be accepted only from a person or firm currently licensed and holding a Certificate of Competency as an air-conditioning or refrigeration contractor or from an owner, provided such owner is competent and otherwise qualified to do the work proposed.

(c) Applications for permit shall be accompanied by sufficient description to clearly define the proposed work. When the proposed work is for the installation or major alteration of a system of more than one and one-half ton capacity or is connected to two or more separately occupied areas, application for permit shall be accompanied by plans describing the proposed work. When the proposed work serves an occupant content of 100 or more persons, or has a value of ten thousand ($10,000) dollars or more, such plans shall be prepared by and bear the impress seal of a qualified Registered Professional Engineer.

4901.3 INSPECTION: Inspections shall be requested and made at the following stages:

(a) Before concealing any portion of the system.

(b) Final inspection.

4902 STANDARDS

4902.1 The following standards are hereby adopted as a part of this Code and supplement, but do not supersede, the specific requirements set forth herein:

(a) The American Standards Associations "Safety Code for Mechanical Refrigeration," ASA B9.1.

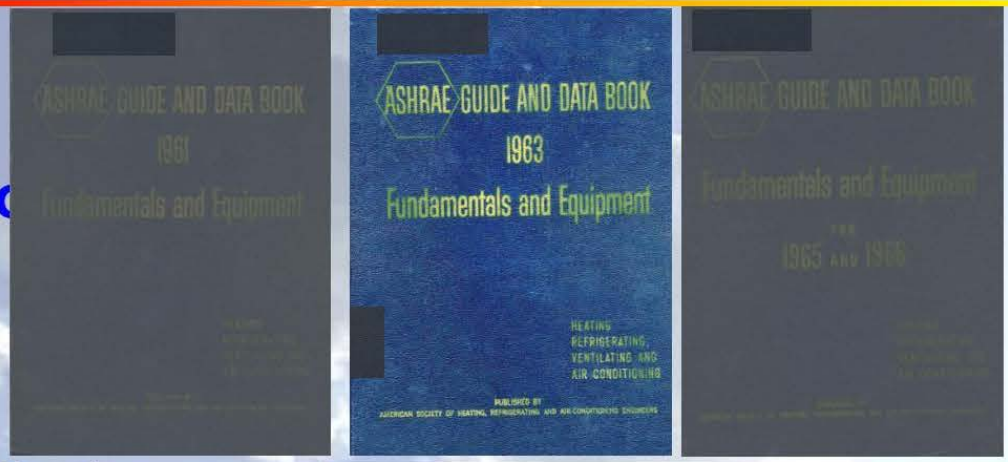
(b) The National Board of Fire Underwriters Pamphlet 90A.

(c) The National Board of Fire Underwriters Pamphlet 90B.

(d) The American Standards Associations "Code for Pressure Piping," ASA B31.1.

4902.2 "The Guide," as published by the American Society of Heating and Refrigerating and Air Conditioning Engineers, Inc. shall be accepted as a standard of good practice.

History: 1946 – 1969 Cooling Load Calculation



Peak Cooling Load Calculatio

- 1961 TETD/TA Method:

✓ **T**otal **E**quivalent **T**emperature **D**ifference/**T**ime **A**veraging Method
✓ Original Outlined by Stewart in 1948
✓ TETD table added to **ASHRAE Guide and Data Book** in 1961

Basic heat gain equation for exterior surface:

$$q = UA(TETD)$$

Thermal mass is in the TETD

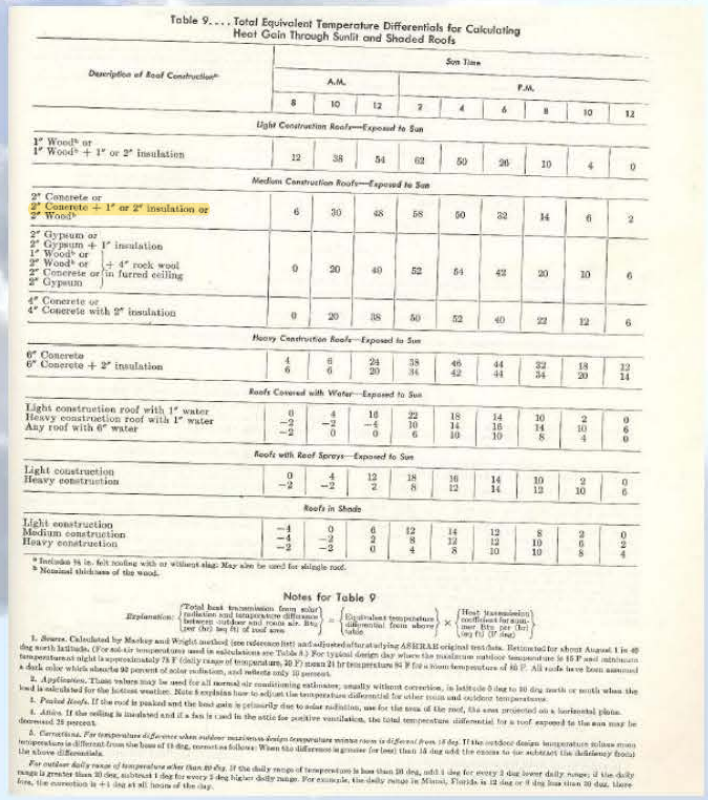


Table 9.... Total Equivalent Temperature Differentials for Calculating Heat Gain Through Sunlit and Shaded Roofs

Description of Roof Construction*	Sun Time A.M. 8	10	12	P.M. 2	4	6	8	10	12
Light Construction Roofs—Exposed to Sun									
1" Wood[b] or 1" Wood[b] + 1" or 2" insulation	12	38	54	62	50	26	10	4	0
Medium Construction Roofs—Exposed to Sun									
2" Concrete or 2" Concrete + 1" or 2" insulation or 2" Wood[b]	6	30	48	58	50	32	14	6	2
2" Gypsum or 2" Gypsum + 1" insulation 1" Wood[b] or 2" Wood[b] or 2" Concrete or 2" Gypsum + 4" rock wool in furred ceiling	0	20	40	52	54	42	20	10	6
4" Concrete or 4" Concrete with 2" insulation	0	20	38	50	52	40	22	12	6
Heavy Construction Roofs—Exposed to Sun									
6" Concrete 6" Concrete + 2" insulation	4 6	6 6	24 20	38 34	46 42	44 44	32 34	18 20	12 14
Roofs Covered with Water—Exposed to Sun									
Light construction roof with 1" water Heavy construction roof with 1" water Any roof with 6" water	0 −2 −2	4 −2 0	16 −4 0	22 10 6	18 14 10	14 16 10	10 14 8	2 10 4	0 6 0
Roofs with Roof Sprays—Exposed to Sun									
Light construction Heavy construction	0 −2	4 −2	12 2	18 8	16 12	14 14	10 12	2 10	0 6
Roofs in Shade									
Light construction Medium construction Heavy construction	−4 −4 −2	0 −2 −2	6 2 0	12 8 4	14 12 8	12 12 10	8 10 10	2 6 8	0 2 4

[a] Includes ¾ in. felt roofing with or without slag. May also be used for shingle roof.
[b] Nominal thickness of the wood.

Notes for Table 9

Explanation: {Total heat transmission from solar radiation and temperature difference between outdoor and room air, Btu per (hr) (sq ft) of roof area} = {Equivalent temperature differential from above table} × {Heat transmission coefficient for roof, Btu per (hr) (sq ft) (F deg)}

1. *Source.* Calculated by Mackey and Wright method (see reference list) and adjusted after applying ASHRAE original test data. Bottomed for about August 1 at 40 deg north latitude. (For sol-air temperatures used in calculations see Table 8.) For typical design day where the maximum outdoor temperature is 95 F and minimum temperature at night is approximately 75 F (daily range of temperature, 20 F) mean 24 hr temperature 85 F for a room temperature of 80 F. All roofs above been assumed a dark color which absorbs 90 percent of solar radiation, and reflects only 10 percent.

2. *Application.* These values may be used for all normal air conditioning estimates; usually without correction, in latitude 0 deg to 50 deg north or south when the load is calculated for the hottest weather. Note 8 explains how to adjust the temperature differential for other hours and outdoor temperatures.

3. *Peaked Roofs.* If the roof is peaked and the heat gain is primarily due to solar radiation, use for the area of the roof, the area projected on a horizontal plane.

4. *Attics.* If the ceiling is insulated and if a fan is used in the attic for positive ventilation, the total temperature differential for a roof exposed to the sun may be decreased 25 percent.

5. *Corrections. For temperature difference when outdoor maximum design temperature mean room is different from 85 deg.* If the outdoor design temperature arises room temperature is different from the base of 85 deg, correct as follows: When the difference is greater (or less) than 15 deg add the excess to (or subtract the deficiency from) the above differentials.

For outdoor daily range of temperature other than 20 deg. If the daily range of temperature is less than 20 deg, add 1 deg for every 2 deg lower daily range; if the daily range is greater than 20 deg, subtract 1 deg for every 2 deg higher daily range. For example, the daily range in Miami, Florida is 12 deg or 8 deg less than 20 deg. Therefore, the correction is +1 deg at all hours of the day.

Source: 1961 ASHRAE Guide and Data Book- Fundamentals and Equipment

Appeal 23-02:
2030 S. Ocean Drive
Hallandale Beach, FL 33009

August 30, 2023

Broward County Board of Rules and Appeals

C/o: Timothy G. de Carion, CECCO

1 N. University Dr. Suite 3500B

Plantation, Florida 33324

Dear Mr. de Carion,

Enclosed please find three sets of my signed appeal application submittal which includes Exhibits "A" through "E". The only document missing is the City of Hallandale Beach Chief Building Official's letter rejecting this appeal. As discussed, you will be requesting the letter from the CBO.

I would like to thank you for your continued assistance with my appeal, keeping everyone informed, and appreciate all of the hard work you have exerted in making this happen.

If you have any questions regarding the submittal, please do not hesitate to call or email me.

Respectfully,

Antonio P. Gonzalez, R.A.

RECEIVED BY
BROWARD CO.
BOARD OF RULES & APPEALS
2023 MAY 31 AM 9:03

Broward County
Board of Rules & Appeals

1 N. University Drive, Suite 3500B
Plantation, FL 33324
Phone 954-765- 4500
Fax 954-765- 4504
http://www.broward.org/codeappeals

Appeal Application
Please Type or Print Information

Appellant Representative Information:

Name ANTONIO P. GONZALEZ
Address 2030 SOUTH OCEAN DRIVE #912
City/State HALLANDALE BEACH, FLORIDA 33009
Business/Profession FL REGISTERED ARCHITECT- LICENSE #AR0009204
Phone (954) 789-9292 Fax
E-mail Address tonygonzalez10@hotmail.com

Project Information:

Address 2030 SOUTH OCEAN DRIVE HALLANDALE BEACH, FL 33009
Type of Construction TYPE 1A - NON-COMBUSTIBLE
Height of Building 230 FT.
Square Footage per Floor APPROX. 37,000
Permit Number BRFG -22-01085
Permit Application Date 3/18/2022
Group of Occupancy RESIDENTIAL GROUP (R-2)
Number of Stories 24

Office Use Only

Date of Receipt:
Appeal #
Hearing Date
Notice Mailed
Code in Effect
Electrical
Fire Code
Mechanical
Plumbing
Structural
Alternate Material
Alternate Method

We, the undersigned, appeal the decision of the Building/Fire Code Official of HALLANDALE BEACH as it pertains to Chapter 7, Section 701.2, of the (check one) ☐ South Florida Building Code / ☑ Florida Building Code / ☐ Florida Fire Prevention Code, / ☑ Other FBC, EXISTING BUILDING, as applicable to Broward County. (Attach copy of relevant Code sections). SEE EXHIBIT A (RELEVANT CODE SECTION)

Note: The Board shall base their decision upon the section(s) of the Code you have indicated above. If these are in error, you will be required to re-submit your appeal.

The Board is not authorized to grant variances from the Code.

Summary of appeal (attach additional sheets as necessary): REFER TO EXHIBIT A - SUMMARY OF APPEAL
Existing roof replacement includes the removal of insulation. The proposed roofing system does not include insulation therefore, making the building less energy efficient.

Results desired (attach additional sheets as necessary): REFER TO EXHIBIT A - RESULTS DESIRED
Permit revision to include insulation specifications and details. Insulation to match existing conditions in compliance with FBC, Existing Building, 7th Edition, Section 701.2

Note: Exhibits intended for distribution to the Board, supporting the appeal, must be submitted with the appeal. No additional material shall be passed out at the appeal hearing. A letter from the Building Official rejecting the applicant's appeal must be included in the appeal packet submitted to the Board of Rules and Appeals.

By signing this application I confirm that I have not requested review or relief for the claims, or substantially similar claims, as set forth herein, by any other judicial or administrative body and for which a decision is pending or has previously been rendered.

Appellant Name (Please print) ANTONIO P. GONZALEZ

Appellant Signature

Relevant Code Section:

2020 FLORIDA BUILDING CODE, EXISTING BUILDING,7TH EDITION CHAPTER7 ALTERATIONS—LEVEL 1

701.2 Conformance.

An *existing building* or portion thereof shall not be altered such that the building becomes less safe or energy efficient than its existing condition.
Exception: Where the current level of safety or sanitation is proposed to be reduced, the portion altered shall conform to the requirements of the *Florida Building Code, Building.*

Summary of Appeal:

The existing building originally incorporated 1-1/2" of rigid fiberglass insulation throughout the roof, see enclosed documentation as follows:

Exhibit B & B1 – Roof plan with insulation thickness annotation

Exhibit C – Roof details with insulation thickness dimension

Exhibit C1 – Evidence of existing insulation during tear-off

Permit BRFG-22- 01085 was issued without meeting the requirements of the 2020 FBC, Existing Building, 7th Edition, Section 701.2 – Conformance, making the building less energy efficient.

Results Desired:

Request for the City of Hallandale Beach to require a permit revision and have the contractor install at a minimum the same thickness (1-1/2") of insulation throughout the roof, matching the original details shown on the construction documents by Morris Lapidus, Associates.

The specified roofing replacement by the EOR is composed of a three-layer SBS-modified bitumen system with an embedded gravel topping surface over the existing flat concrete deck. The roofing application shows a proposed ¼" / ft slope that cannot be achieved without insulation or by using regular flat insulation (**Refer to Exhibit D**).

Although not mandated by the FBC, a tapered insulation system with a positive slope towards the roof drains would also be desired. The roofing system after completion of the first layer is showing ponding at several areas of the roof that may be improved with a tapered insulation system as well as an improvement in energy conservation and efficiency (**Refer to Exhibit E**).

EXHIBIT A

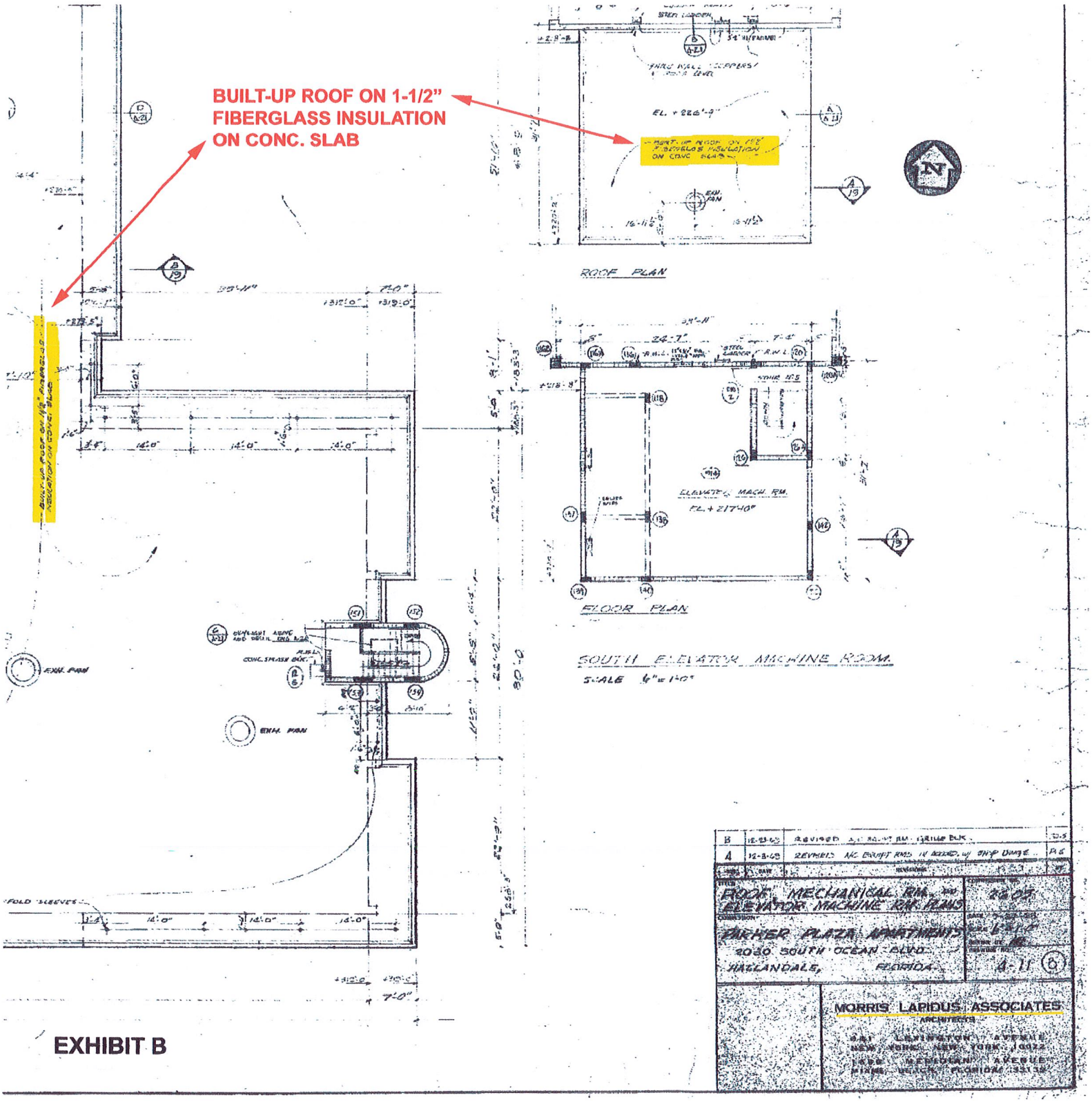
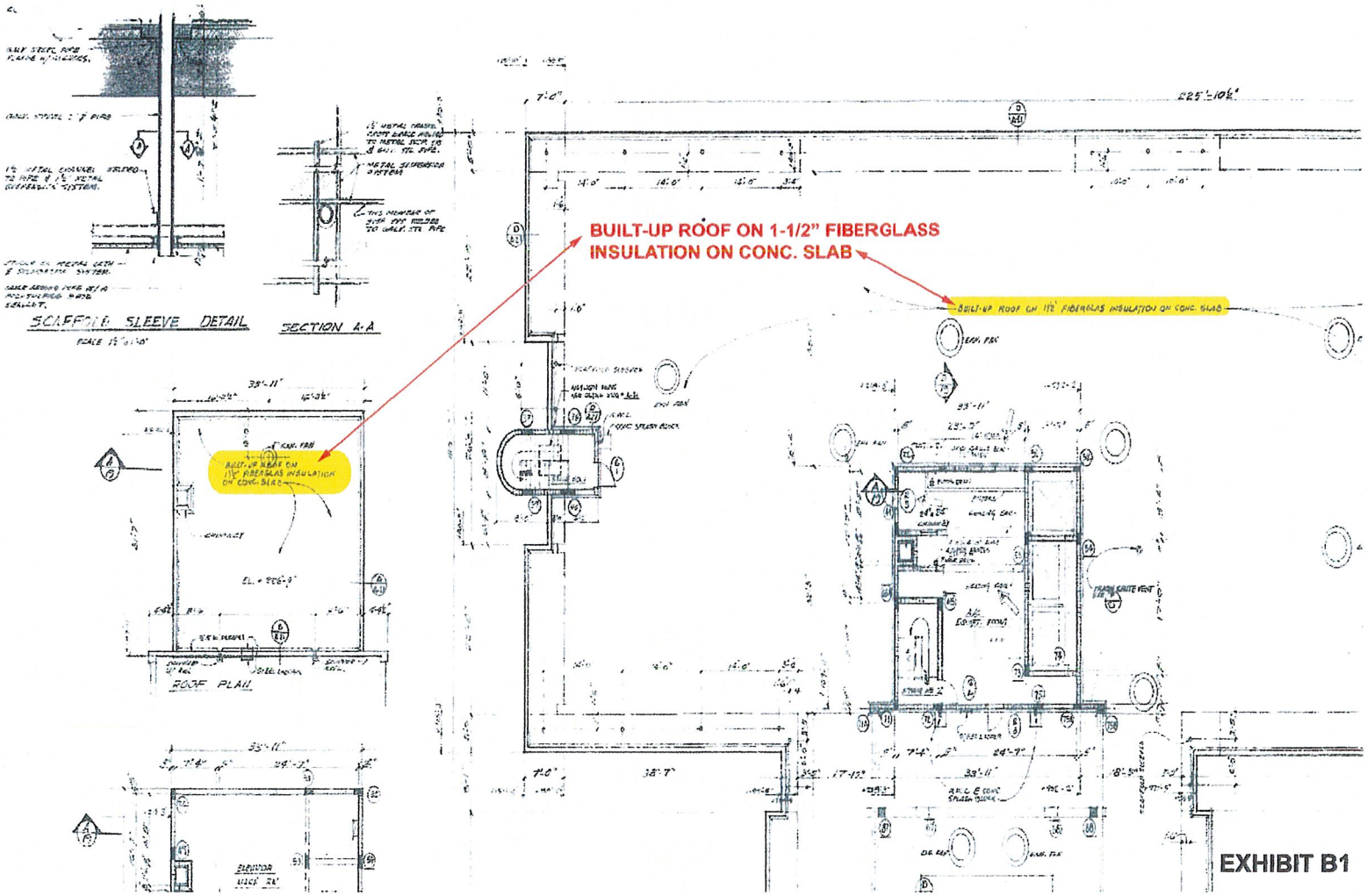
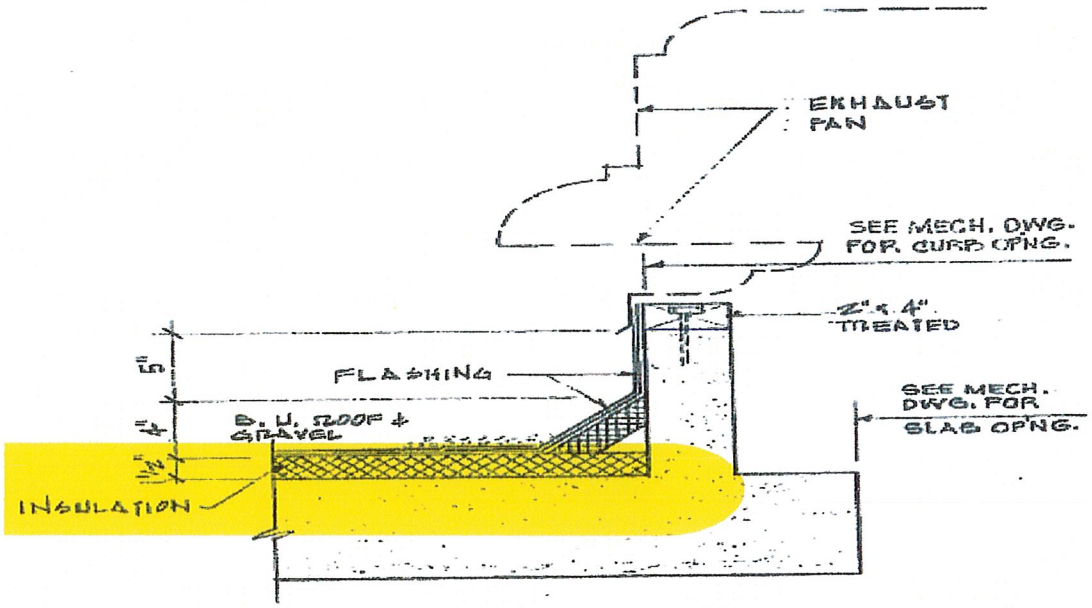

BUILT-UP ROOF ON 1-1/2" FIBERGLASS INSULATION ON CONC. SLAB
ROOF PLAN
FLOOR PLAN
SOUTH ELEVATOR MACHINE ROOM
SCALE 4"=1'-0"
EXH. FAN
EXH. FAN
FOLD SLEEVES
ROOF MECHANICAL RM. AND ELEVATOR MACHINE RM. PLANS
ARCHER PLAZA APARTMENTS
2030 SOUTH OCEAN BLVD.
HALLANDALE, FLORIDA
MORRIS LAPIDUS ASSOCIATES
ARCHITECTS

EXHIBIT B

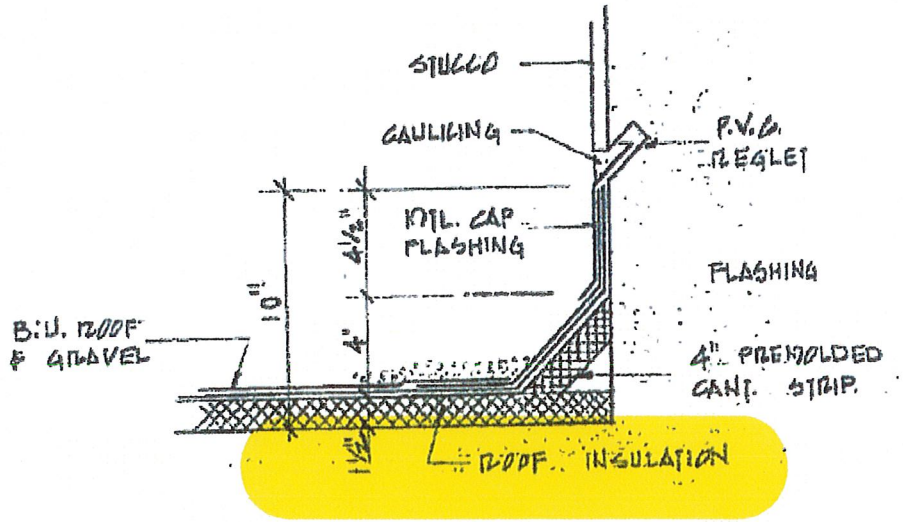
>>PAGE A-11:


BUILT-UP ROOF ON 1-1/2" FIBERGLASS INSULATION ON CONC. SLAB
BUILT-UP ROOF ON 1½" FIBERGLAS INSULATION ON CONC. SLAB
SCAFFOLD SLEEVE DETAIL
SECTION A-A
ROOF PLAN
EXHIBIT B1



EXHAUST FAN DETAIL — E / A-21

@ 1½" = 1'-0"



FLASHING @ COOLING TOWER W/LS. — B / A-21

@ 1½" = 1'-0"

EXHIBIT C

Allied Roofing Removing Old Roofing System

EXHIBIT C1

Florida Building Code 7th Edition (2020)
High-Velocity Hurricane Zone Uniform Permit Application Form

Section C (Low Slope Application)

Fill in specific roof assembly components and identify manufacturer
(If a component is not used, identify as "NA")

System Manufacturer: SOPREMA

Product Approval No.: FL23301-R8

Design Wind Pressures, From RAS 128 or Calculations:

Zone 1': -101.5 Zone 1: -101.5 Zone 2: -163.3 Zone 3: -225.0

Max. Design Pressure, from the specific product approval system: - 270 psf

Deck:
Type: CONCRETE

Gauge/Thickness:

Slope: 1/4:12

Anchor/Base Sheet & No. of Ply(s): N/A

Anchor/Base Sheet Fastener/Bonding Material: N/A

Insulation Base Layer: N/A

Base Insulation Size and Thickness: N/A

Base Insulation Fastener/Bonding Material: N/A

Top Insulation Layer: N/A

Top Insulation Size and Thickness: N/A

Top Insulation Fastener/Bonding Material: N/A

Base Sheet(s) & No. of Ply(s): SOPRALENE 250 SANDED

Base Sheet Fastener/Bonding Material:
COLPLY EF ADHESIVE APPLIED @ 1.5-2.5 GAL PER SQ

Ply Sheet(s) & No. of Ply(s): SOPRALENE 180 SANDED

Ply Sheet Fastener/Bonding Material:
COLPLY EF ADHESIVE APPLIED @ 1.5-2.5 GAL PER SQ

Top Ply: SOPRALENE 180 FR GR

Top Ply Fastener/Bonding Material:
COLPLY EF ADHESIVE APPLIED @ 1.5-2.5 GAL PER SQ

Surfacing: GRAVEL

Fastener Spacing for Anchor/Base Sheet Attachment: N/A

Zone 1': ____" oc @ Lap, # Rows ____ @ ____" oc

Zone 1: ____" oc @ Lap, # Rows ____ @ ____" oc

Zone 2: ____" oc @ Lap, # Rows ____ @ ____" oc

Zone 3: ____" oc @ Lap, # Rows ____ @ ____" oc

Number of Fasteners Per Insulation Board: N/A

Zone 1': _____ Zone 1: _____ Zone 2: _____ Zone 3: _____

Illustrate Components Noted and Details as Applicable:
Woodblocking, Gutter, Edge Termination, Stripping, Flashing, Continuous Cleat, Cant Strip, Base Flashing, Counterflashing, Coping, Etc.

Indicate: Mean Roof Height, Parapet Height, Height of Base Flashing, Component Material, Material Thickness, Fastener Type, Fastener Spacing or Submit Manufacturers Details that Comply with RAS 111 and Chapter 16.

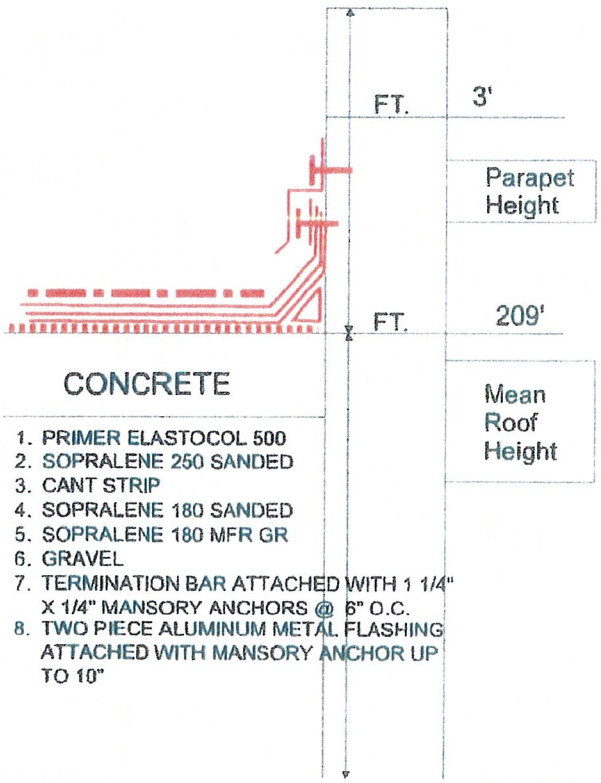
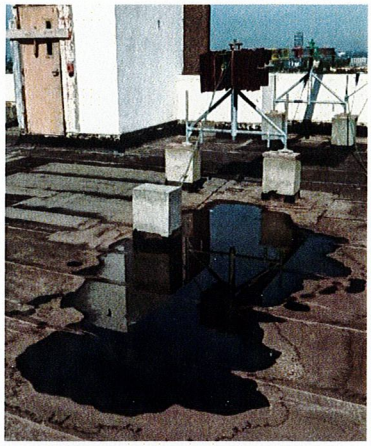
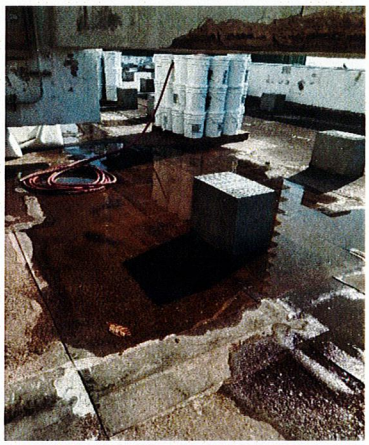


EXHIBIT D

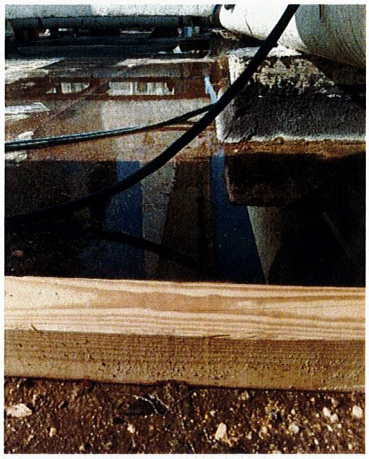
Northeast



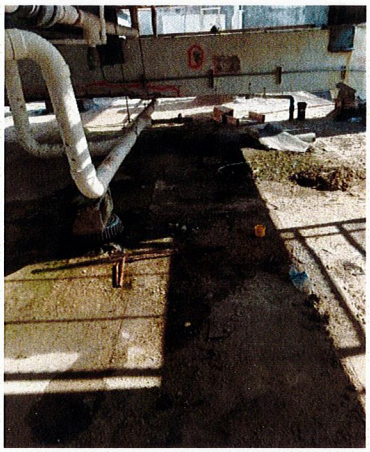
Northwest



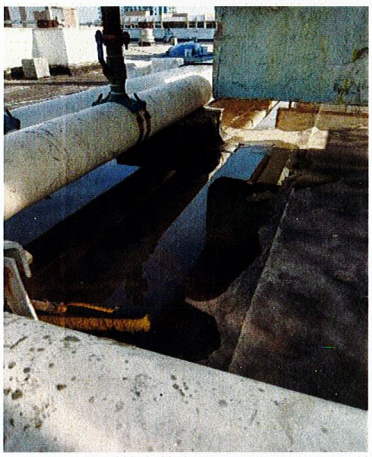
Cooling Tower Southeast side



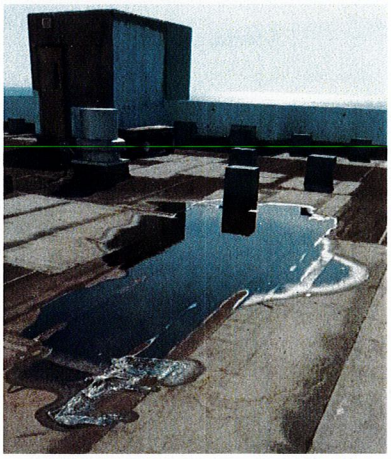
Cooling Tower Northwest side



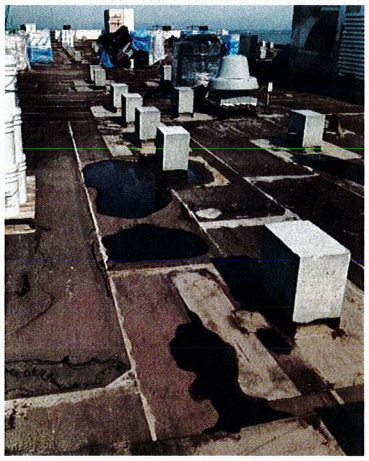
Directly under Cooling Tower



Cooling Tower Southwest side



Southeast



Southeast

Southwest

ROOF CONDITIONS ON MAY 29, 2023 FOLLOWING RAINFALL ON 5/23 THRU 5/27.

EXHIBIT E

From: De Carion, Timothy <TDECARION@broward.org>
Sent: Wednesday, May 31, 2023 11:28 AM
To: Bostwick, Albert <ABostwick@hallandalebeachfl.gov>; Al Bostwick <abostwick@cgasolutions.com>; Sauer, Phil <psauer@hallandalebeachfl.gov>; Philip Sauer (psauer@cgasolutions.com) <psauer@cgasolutions.com>
Cc: Agbenohevi, Emmanuel <EAgbenohevi@hallandalebeachfl.gov>; Leroy, Vanessa <vleroy@hallandalebeachfl.gov>; tony gonzalez <tonygonzalez10@hotmail.com>
Subject: Appeal Received-Response Required by June 7th
Importance: High

Dear Mr. Bostwick and Mr. Sauer:

Today (5/31/2023) the Broward County Board of Rules and Appeals received an appeal by a resident (Antonio Gonzalez) of 2030 South Ocean Drive #912 (Parker Plaza Condo Estates). See attached.

The permit number for this work is BRFG-22-01085, it was applied for on 03/18/22 and issued on 04/11/2022. See attached.

Mr. Gonzalez is requesting that original building insulation be replaced on this permit per the 2020 Existing Building Code Section 701.2.

Please provide the city's response to the Board of Rules and Appeals within five (5) working days (June 7th, 2023) upon receipt of this email defending your decision or interpretation of the 2020 Existing Building Code Section 701.2.

Respectfully,
Timothy de Carion

Timothy G. de Carion, Chief Energy Code Compliance Officer
Broward Co. Board of Rules and Appeals
1 N University Dr. Suite 3500B, Plantation Fl 33324
Office: 954-357-9682 Cell: 954-599-4205
www.broward.org

From:	Sauer, Phil
To:	De Carion, Timothy
Cc:	Agbenohevi, Emmanuel; Leroy, Vanessa; tony gonzalez; Bostwick, Albert; bret@taylorforensicsandengineering.com; Sonny Hogue
Subject:	RE: Appeal Received-Response Required by June 7th
Date:	Wednesday, May 31, 2023 4:56:55 PM
Attachments:	image002.png

Good afternoon Mr. De Carion,

The code section stated, 701.2, clearly states that the building or portion thereof shall not become less energy efficient than its existing condition, not original condition which in itself cannot be verified.

"701.2 Conformance. An existing building or portion thereof shall not be altered such that the building becomes less safe or energy efficient than its ***existing condition***."

It was found the existing roof through forensics prior to tear off and at tear-off was an asphalt built-up roof system with one layer of ½" recovery board (wood fiber board). The engineer of record has been tasked with preparing documentation to show the performance of the new roof system is equivalent or better than the existing.

Regards,

Philip Sauer, CBO | Chief Structural Inspector
Hallandale Beach Community Enhancement and Sustainability Development Department
400 South Federal Highway | Hallandale Beach, FL 33009 | (954) 457-1489 Ext. 3066
www.coHB.org | Follow us on Twitter | Facebook | Instagram | LinkedIn
Report a Concern via the MyHB app
Progress, Opportunity, Innovation

Monthly Board of Directors Meeting June 21st, 2023

Exterior Elevation Progress:

- Work being performed to complete work uncompleted by CTC
- West elevation well underway and making significant progress

Roof Progress:

- Flashing continues
- Addition of additional roof layers is held up by an appeal filed by Tony Gonzalez with the Board of Rules and Appeals. TF+E will issue a comprehensive report to address this issue

Window and Sliding Glass Door Leaks:

- Window and Sliding Glass Door Leaks noted, repair protocol is being developed.

Monthly Board of Directors Meeting June 21st, 2023

Pool Deck:

- Development of plans continues

Garage:

- Development of plans continues

Broward County
Board of Rules & Appeals

1 N. University Drive, Suite 3500B
Plantation, FL 33324
Phone 954-765- 4500
Fax 954-765- 4504
http://www.broward.org/codeappeals

Appeal Application

Please Type or Print Information

RECEIVED BY
BROWARD CO.
BOARD OF RULES & APPEALS
2023 MAY 31 AM 9:03

Appellant Representative Information:

Name ANTONIO P. GONZALEZ
Address 2030 SOUTH OCEAN DRIVE #912
City/State HALLANDALE BEACH, FLORIDA 33009
Business/Profession FL REGISTERED ARCHITECT- LICENSE #AR0009204
Phone (954) 789-9292 Fax
E-mail Address tonygonzalez10@hotmail.com

Project Information:

Address 2030 SOUTH OCEAN DRIVE HALLANDALE BEACH, FL 33009
Type of Construction TYPE 1A - NON-COMBUSTIBLE
Height of Building 230 FT.
Square Footage per Floor APPROX. 37,000
Permit Number BRFG -22-01085
Permit Application Date 3/18/2022
Group of Occupancy RESIDENTIAL GROUP (R-2)
Number of Stories 24

Office Use Only

Date of Receipt:
Appeal #
Hearing Date
Notice Mailed
Code in Effect
Electrical
Fire Code
Mechanical
Plumbing
Structural
Alternate Material
Alternate Method

HALLANDALE BEACH

2020 FLORIDA BUILDING CODE, EXISTING BUILDING,7TH EDITION
CHAPTER7 ALTERATIONS—LEVEL 1

701.2 Conformance.

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Summary of Appeal:

The existing building originally incorporated 1-1/2" of rigid fiberglass insulation throughout the roof, see enclosed documentation as follows:

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Exhibit C – Roof details with insulation thickness dimension

Exhibit C1 – Evidence of existing insulation during tear-off

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Results Desired:

Request for the City of Hallandale Beach to require a permit revision and have the contractor install at a minimum the same thickness (1-1/2") of insulation throughout the roof, matching the original details shown on the construction documents by Morris Lapidus, Associates.

The specified roofing replacement by the EOR is composed of a three-layer SBS-modified bitumen system with an embedded gravel topping surface over the existing flat concrete deck. The roofing application shows a proposed ¼" / ft slope that cannot be achieved without insulation or by using regular flat insulation (**Refer to Exhibit D**).

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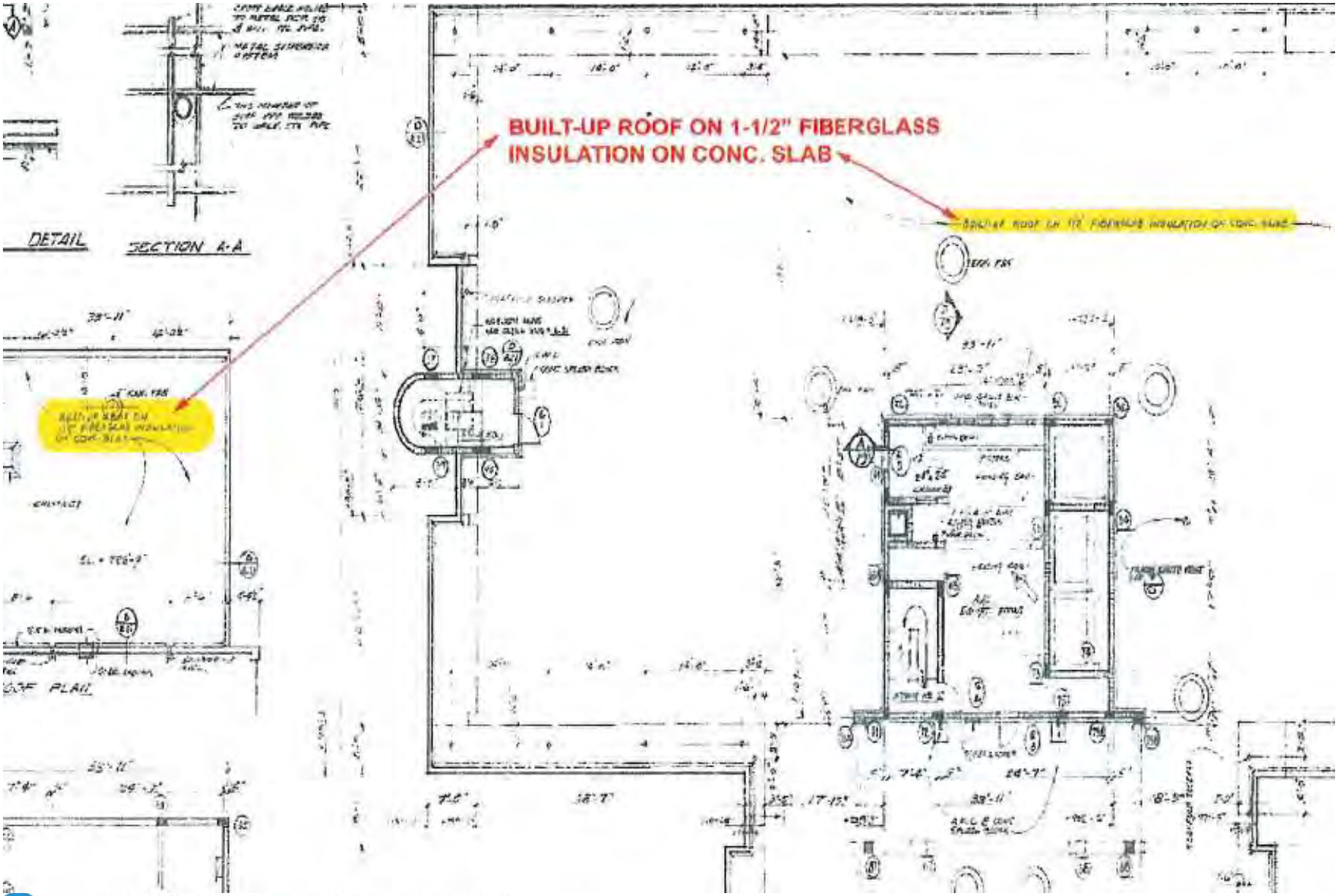

BUILT-UP ROOF ON 1-1/2" FIBERGLASS
INSULATION ON CONC. SLAB
DETAIL
SECTION A-A

This photograph shows a large section of existing roofing removed and the concrete deck cleaned for water testing. The contrast between the Modified Bitumen and the ½ fiber cover board can be seen.

This is the sample taken from the above photograph showing the rotted wood fiber coverboard and moisture in the roof system.

This photograph shows a roof section cut at the parapet wall and the clearly saturated conditions

2004 Aerial Image

2009 Aerial Image

CEBB
Engineering & Testing Co.
7450 Griffin Road, Suite 140, Davie, FL 33314
Phone: (954)581-7115, Fax: (954)581-2415
www.cebb.net

September 3, 2009

To: **Condominium Association of Parker Plaza Estates**
Donald Pinkus
2030 S. Ocean Drive
Hallandale Beach, FL 33009

Re: **Roof Moisture Survey (TAS 126)**
Address: **Parker Plaza Estates**
2030 S. Ocean Drive
Hallandale Beach, FL 33009
Contractor: N/A
Permit: N/A

Pursuant to your request and authorization from the Director of the Condominium Association of Parker Plaza Estates, we have performed the enclosed roof moisture survey at the above referenced site.

CONSTRUCTION:

The tested flat roof system consists of a Modified Bitumen Roof System over a wood fiber insulation applied directly the structural concrete deck.

Roof Area

METHOD:

A roof moisture test in strict accordance with the Florida Building Code, testing Application Standard TAS – 126 was performed. Core samples were taken at eighteen (18) locations, including the high, medium and low reading sites. The core samples were then gravimetrically tested to determine the percentage of moisture contained in each sample.

Equipment Types - Non-Destructive Testing:	Impedance Testing
Equipment Used:	Tramex Leak Seeker
Serial Number:	1064966

CONCLUSION:

The 2007 Florida Building Code sets an allowable maximum limit of moisture content of the existing roofing assembly of 5 percent by weight in the roofing membrane and 8 percent by weight in the insulation (Section 1521.12).

Based upon the Roof Moisture Survey the subject roof does exceed the maximum allowable limit at the highlighted locations (over 8%) as revealed by the Chart "A" on pages 2. Therefore, it is in our belief and professional judgment that the said roof system could remain in place, subject to repairs at the selected locations. **However, if the source of water infiltration is not found these repairs may prove to not have been economically feasible after all.** Once the repairs are completed we recommend that a moisture survey with gravimetric analysis

Condominium of Parker Plaza Estates, Inc.

Meeting of the Board of Directors
October 21, 2009
At 7:30 p.m. in the Plaza Room

Roof Repair: We have had a myriad of problems with the roof of late. Now we have a contract that will take about 6 working days to complete. The City of Hallandale Beach approved the plans and the work has begun. Before we contracted for the work we performed a moisture test to identify the roof areas that needed repair. The roof will have 40 one way moisture vents and 2 coats of sealing material placed over the entire roof. The sealing material has a 10 year guarantee and the workmanship has a 5 year guarantee. The cost will be approximately $60,000. No money was given up front. To date, material has been delivered and secured. $12,000 has been paid to contractor to cover the cost of material. This repair will give up between 4 to 5 years of "roof life". The City of Hallandale Beach building inspectors will be checking at the phase of this repair to insure the quality of the work. We thank Tony Gonzalez and Bob Fisher for their valuable assistance.

Permit Number: 2009-2280-NRPR-0

Permit Details | Tab Elements | Main Menu

Type:	Building Roofing - Combo	**Status:**	Finaled	**Project Name:**	
IVR Number:	660684	**Applied Date:**	09/29/2009	**Issue Date:**	10/08/2009
District:	Hallandale Beach	**Assigned To:**		**Expire Date:**	04/06/2010
Square Feet:	0.00	**Valuation:**	$60,000.00	**Finalized Date:**	09/04/2012
Description:	REPLACE ROOF				

Z ROOFING & WATERPROOFING, INC.
2525 WEST 3 COURT, HIALEAH, FL 33010
OFFICE: (305) 623-7663 FAX: (305) 384-1209

TEL 305-623-ROOF – FAX 305-384-1209
WWW.ZROOFING.COM

CONTRACT

Date: **09/17/09**

Proposal Submitted to:		Attention:	Job Name:
PARKER PLAZA		**DON, JULIO, HERB**	**PARKER PLAZA**
Address:			Job Location:
2030 SOUTH OCEAN DRIVE			**2030 SOUTH OCEAN DRIVE**
City:	State:	Zip Code	Job Phone:
HALLANDALE BEACH	**FLORIDA**	**33009**	**FAX: 954-458-3276: 954-458-5111**

We hereby submit specifications and estimates for: **REPAIR ROOF**

1. SIX LEAKS WHERE REPORTED AT TIME OF INSPECTION AND SHALL BE REPAIRED.
2. CLEAN ENTIRE ROOF OF ALL DEBRI GRANULE ETC...
3. HAUL AWAY ALL ROOFING DEBRI, LEAVING PREMISES AND ROOF IN A CLEAN CONDITION.
4. REMOVE ANY AND ALL OBJECTS THAT MAY BE OBSTRUCTING THE DRAINAGE ON THE ROOF.
5. REMOVE AND REPLACE 72 FEET OF FLASHING AND COUNTERFLASHING AT PARAPET AREA.
6. CUT OPEN ALL AIR BUBBLES AND SEAL WITH MODIFIED MEMBRANE, TORCH DOWN.
7. CUT OPEN AND INSTALL (48) ONE WAY VENTS THROUGH OUT THE ROOF.
8. INSTALL MODIFIED TARGETS AT ONE WAY VENTS.
9. REMOVE AND REPLACE 1,210 SQ. FT. OF ROOF AREA WITH MODIFIED MEMBRANE, TORCH DOWN.
10. CONCRETE CRACKS WILL BE REPAIRED WITH HYDRAULIC CEMENT, INSTALL BASE SHEET, INSULATION, AND TORCH DOWN.
11. SEAL ALL LEAD STACKS AND ALL PENETRATIONS.
12. SEAL ALL PENETRATIONS ON EXISTING ROOF.
13. FILL ALL PITCH PANS ON ROOF WITH ROOF ASPHALT.
14. PROVIDE AND INSTALL TWO COATS OF G.A.F. TOP COAT 10 YR WARRANTY, WHITE COAT
15. PAINT ALL PENETRATIONS, LEAD STACKS, GRILLS, VENTS, ETC.
16. ALL WORK GAURANTEED FOR TWO (2) YEARS.
17. CONTACT PRICE INCLUDES ALL TAXES, PERMITS, AND INSPECTIONS.

GAF Acrylic Top Coat - Data Sheet

PRODUCT DESCRIPTION

GAF Acrylic Top Coat is a water based, acrylic elastomeric top coat that is part of the GAF Acrylic Coating System. **GAF Acrylic Top Coat** is designed to be applied over GAF Acrylic Base Coat. **GAF Acrylic Top Coat** forms a monolithic coating that helps provide protection against damage from the exposure to UV and weather elements. It is also effective in sealing and encapsulating spray polyurethane foam (SPF).

APPROVED SUBSTRATES

New and existing metal, structural concrete, TPO, PVC, Hypalon®, SPF, EPDM, and asphaltic roofs. New TPO and asphaltic roofs should be weathered for at least 30 days. Do NOT use on gravel-surfaced roofs or shingle roofs.

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION: Roof must have positive drainage, and be clean and dry with no trapped moisture. Repair damaged membrane, flashings, and penetrations. Conduct test patches to verify adhesion of coating prior to start of work. Priming of substrate is recommended and may be required. See *Liquid-Applied Roofing Manual* at gaf.com.

MIXING: Mix uniformly for 3 minutes prior to use. Do NOT attempt to thin or self-tint.

APPLICATION: Apply by brush, roller, or airless sprayer evenly at the rates specified below. Do NOT apply more than 1.5 gallons per 100 ft² (6.1 L per 10 m²) in a single coat. Apply additional coats

LIMITATIONS & PRECAUTIONS

APPLICATION AIR TEMPERATURE: Min 50°F (10°C). Do NOT heat containers.

APPLICATION SURFACE TEMPERATURE: 50°F (10°C) and rising. Care should be taken when coating surfaces above 120°F. Contact GAF Design Services if you have application questions.

Do NOT apply if rain, dew, fog, heavy moisture, condensation, or freezing temperatures are in the 8-hour forecast to ensure proper cure. Cool temperatures/high humidity may slow curing.

SAFETY & HANDLING

For specific information regarding safe handling of this material please refer to the Safety Data

2010 Aerial Image

2011 Aerial Image

Roof Moisture Survey (TAS 126)
Parker Plaza Estates
2030 S. Ocean Drive

Engineering & Testing Co.
7450 Griffin Road, Suite 140, Davie, FL 33314
Phone: (954)581-7115, Fax: (954)581-2415
www.cebb.net

December 23, 2011

To: **Condominium Association of Parker Plaza Estates**
Donald Pinkus
2030 S. Ocean Drive
Hallandale Beach, FL 33009

Re: **Roof Moisture Survey (TAS 126)**
Parker Plaza Estates
2030 S. Ocean Drive
Hallandale Beach, FL 33009

Pursuant to your request and authorization from the Director of the Condominium Association of Parker Plaza Estates, we have performed the enclosed roof moisture survey at the above referenced site.

CONCLUSION:

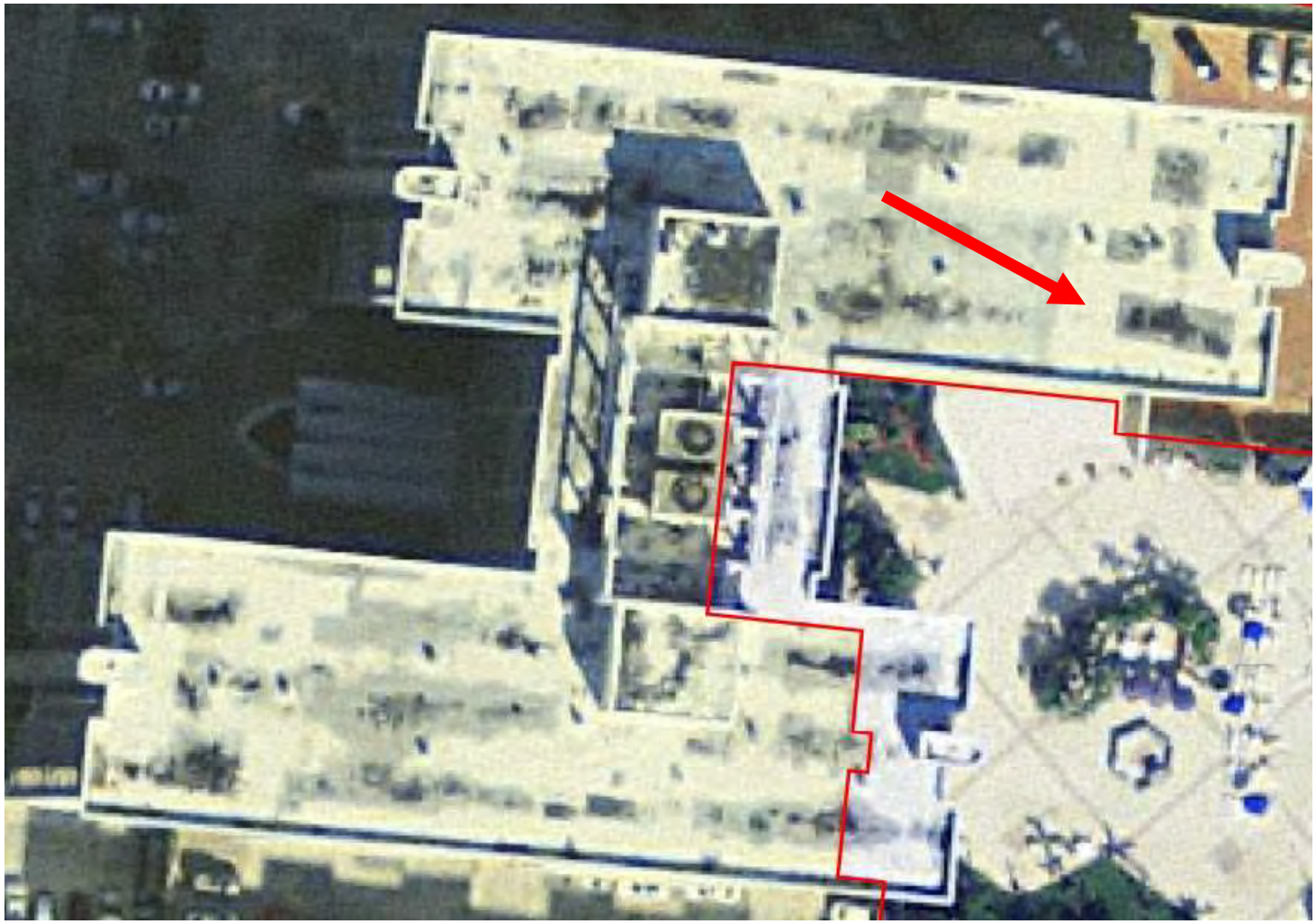
The 2007 Florida Building Code sets an allowable maximum limit of moisture content of the existing roofing assembly of 5 percent by weight in the roofing membrane and 8 percent by weight in the insulation (Section 1521.12).

Based upon the Roof Moisture Survey the subject roof does exceed the maximum allowable limit (over 8%) at the highlighted locations ONLY as revealed by the Chart "A" on pages 2. Therefore, it is in our belief and professional judgment that the said roof system could remain in place, subject to repairs at the selected locations.

However, the subject roof is a "loaded" roof that reveals numerous penetrations and roof to wall terminations that are known to be the primary cause and leading source for water infiltrations and roof leaks. In addition to that improper repairs of previously discovered roof deficiencies have only exacerbated the problems.

2013 Aerial Image

Warranty?



APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION: Roof must have positive drainage, and be clean and dry with no trapped moisture. Repair damaged membrane, flashings, and penetrations. Conduct test patches to verify adhesion of coating prior to start of work. Priming of substrate is recommended and may be required. See *Liquid-Applied Roofing Manual* at gaf.com.

No Warranty!

2016 Aerial Image

Building Information	
Building / Structure address	2030 SOUTH OCEAN DRIVE, HALLANDALE FL
Legal description	PARKER PLAZA ESTATES CONDO
Folio Number of Building /Structure	514226020210 (See attached sheets for additional unit folio numbers)
Owner's name	CONDOMINIUM ASSOCIATION OF PARKER PLAZA ESTATES INC.
Owner's mailing address	2030 SOUTH OCEAN DRIVE, HALLANDALE FL. 33009
Building Code Occupancy Classification	R-2 In Accordance with Building Code Edition 2010
Type of Construction	Type I and Type II In Accordance with Building Code Ed. 2010
Electrical Installation	Multi-Unit Residential-In accordance w/ National Electrical Code Ed.2012
Size (Square footage)	520 Units
Number of Stories	22 Story Building

Inspection Firm	
Inspection Firm or Individual Address	G. Batista & Associates
Address	10400 Griffin Road • Suite 201, Cooper City, FL 33328
Telephone Number	(954) 434-2053
Inspection Commencement Date	11/13/2013 Inspection Completion Date 11/13/2013
Inspection made by	Gregorio Batista, P.E.

In accordance with Section 110.15 of the Broward County Administrative provisions of the Florida Building Code and the Broward County Board of Rules and Appeals Policy # 05-05 the required safety inspection has been completed.

☑ No Repairs required
☐ Repairs are required as outlined in the attached inspection report.

Licensed Professional Engineer / Architect Gregorio Batista, P.E.

License # 52349

"I am qualified to practice in the discipline in which I am hereby signing."

Seal

Signature and Date 11-21-13

As a routine matter, and in order to avoid possible misunderstanding, nothing in this inspection Report Form, attached Minimum Inspection Guideline and our Non-Destructive Observations, should be construed directly, or indirectly, as guaranteed or warrantee for any portions of the structure. To the best of my knowledge and ability, this report represents an accurate appraisal of the present condition of the structure, based upon careful evaluation of observed conditions, to the extent reasonably possible.

II. Floor and Roof Systems:

A. Roof:

1. Describe type of framing system (flat, slope, type roofing, type roof deck, condition.).

   The roof framing system on this property is composed of a concrete cast-in place system and in satisfactory condition.

[BS]706.1General.

Materials and methods of application used for recovering or replacing an existing roof covering shall comply with the requirements of Chapter 15 of the Florida Building Code, Building, or Chapter 9 of the Florida Building Code, Residential. Roof repairs to existing roofs and roof coverings shall comply with the provisions of this code.

Exception: Reroofing shall not be required to meet the minimum design slope requirement of one-quarter unit vertical in 12 units horizontal (2-percent slope) in Section 1507 of the Florida Building Code, Building for roofs that provide positive roof drainage (High-Velocity Hurricane Zones shall comply with Sections 1515.2.2.1 and 1516.2.4 of the Florida Building Code, Building).

708.1Minimum requirements.

Alteration subject to this chapter shall comply with the requirements of the Florida Building Code, Energy Conservation.

Energy Conservation :
C101.4.2Exempt buildings.
Buildings exempt from the provisions of the Florida Building Code, **Energy Conservation**, **include existing buildings** except those considered renovated buildings, changes of occupancy type or previously unconditioned buildings to which comfort conditioning is added.

Therefore, Parker Plaza is exempt from upgrading to new roof insulation requirements as we are existing, we are not renovating, changing occupancy, or conditioning previously un-conditioned space.

REPORT OF FINDINGS

On Behalf Of

Parker Plaza Condominium Association, Inc.

2030 South Ocean Drive
Hallandale Beach, FL 33009

Re: Response to Appeal by Antonio Gonzalez to Broward County Board of Rules and Appeals

TFE Job Number: 2103

J. Bret Taylor, PE SE FMPC
FL PE 073499

Prepared By:

Taylor Forensics + Engineering, LLC.
11161 E SR 70, #110-316
Lakewood Ranch, Florida 34202
FL License No: 73499
Registry #34991
June 22, 2023

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY J. BRET TAYLOR PE, SE, ON 06/19/2023 USING A SHA AUTHENTICATION CODE.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA AUTHENTICATION CODE MUST BE VERIFIED ON ANY

TABLE OF CONTENTS:

1.0 EXCUTIVE SUMMARY:

As this report will show, the appeal submitted, and recorded May 31, 2023 (**Exhibit A)** by Mr. Antonio Gonzalez is without merit.

Additionally, although this technically may not impact the ultimate ruling by BORA, this response will also demonstrate that this entire dispute is based on undisclosed political motivations, in which the claimant is involved, with the apparent purpose of interfering with the progress of this project to repair much neglected aspects of the building. Not the least of which is a roof that should have been replaced before the 40-year Certification of the building. Based on Parker Plaza meeting minutes, Mr. Gonzalez appears to have been involved in assisting the association with professional advice. Indeed, Mr. Gonzalez has apparently failed to disclose his involvement with the failure to repair the past roof issues or that he is currently running for a director's position in an upcoming election of the condominium. Additionally, some of the same parties interfering with the current repair, of this unfortunately neglected building, are the same actors involved in avoiding roof replacement in 2010 when it aged out and during the 40-year recertification in 2013 despite knowledge of 2009 and 2011 moisture surveys (**Exhibit B**) that clearly indicated significant and continuing elevated moisture in the system despite multiple band-aid repair attempts. A documented history and philosophy of "don't fix it until it's broken" has been prevalent until recently and has resulted in the association taking a $27,000,000.00 construction loan to address the past deferred maintenance which includes the roof.

To make it crystal clear, prior to our current roof replacement work, the roof was last replaced in 1980 and then in 1995, with a long history of continued leaks, with the "new roof" and "re-roof" lasting only 10 and 15 years respectively. The City of Hallandale Beach Building Official during the 2009 timeframe, Mr. Gonzalez, allowed approval of a "re-roof" at an estimated cost of $60,000.00 as documented by a 2009 permit (**Exhibit C**). Coincidentally, Parker Plaza Board meeting minutes indicating "We have had a myriad of problems with the roof of late" and show their appreciation for Mr. Gonzalez and Mr. Fisher "for their valuable assistance". However, aerial imagery shows that the roof was just coated with a white material and was not a re-roof. Documents from the roofing contractor (**Exhibit D**) prove that the roof was simply patched with GAF Top Coat (Acrylic membrane). GAF Top Coat was not appropriate for installation at Parker Plaza as moisture was known to be trapped under the membrane, a flat roof, and not intended for use in ponding conditions. 2010 aerial imagery shows a pristinely white roof, but in 2011 aerial imagery the roof is again showing signs of distress, and in 2013 aerial imagery there are clearly new areas were additional GAF Top Coat was added to most likely address the continued moisture intrusion noted in the 2011 moisture survey performed.

Yet, in 2013 with the age of the roof at that time being 18 years old, with multiple failed repair attempts and continuing water intrusion, the 40-year certifying engineer without any apparent real condition analysis magically concludes that the roof is in "satisfactory condition". TF+E can't fathom, given the significant data available, that an informed and experienced professional would risk licensure and exposure to liability knowingly by approving such a dilapidated roof. In fact, I can't imagine that any reasonably intelligent person would believe that one could leave a wet 1/2-inch wood fiber board trapped under an asphaltic roof, baked by the sun daily, exposed to moisture regularly, and expect it to be in serviceable condition after 18 years with the simple application of a fluid applied acrylic.

Specific to the appeal made, Mr. Gonzalez claims that the roof was insulated with 1 ½" insulation, however the Engineer of Record (TF+E) found, and other third parties verified and documented, that only a ½" wood fiber cover board was installed. This knowledge was communicated to the association, including Mr. Gonzalez, well prior to the filing of the appeal. Whether a cover board is considered insulation is arguable and, in this case, a moot point as it has been wet since before 2009.

Additionally, as his basis for making the appeal Mr. Gonzalez cites Existing Building Code Section:

> *701.2 Conformance. An existing building or portion thereof shall not be altered such that the building becomes less safe or energy efficient than its existing condition*.

Mr. Gonzalez's concern is purportedly energy efficiency. However, he conveniently omits the controlling Energy Code Section that clearly exempts this building as it does not fall into one of the exception classes:

> C101.4.2 Exempt buildings.
>
> **Buildings exempt from the provisions of the** Florida Building Code, **Energy Conservation**, **include existing buildings** except those considered renovated buildings, changes of occupancy type or previously unconditioned buildings to which comfort conditioning is added.

Additionally, an energy savings analysis was performed and the return on investment is approximately 18.6 years to install the requested 1.5 inches of insulation that was shown not to exist in 2009 during Mr. Gonzalez's involvement in addressing the roof water intrusion issues.

A thermal analysis (**Exhibit E**) was also performed and does **not** show a significant difference between the original and new roof configurations. In fact, an argument could be made that since the roof was wet since at least 2009 (14+ years),

the new configuration is more energy efficient. The R Value of the existing (assuming dry) roof would be R=2.19 and the new roof system is R=1.54. Therefore, this appeal is based on a difference of R=0.65.

Finally, I would caution forcing improvements that are not in the spirit of, or justified by, the Existing Building and Energy Codes as the direct and indirect costs would significantly increase the costs of this already costly project. Given the numerous complaints by some association members about the needed repair costs, I would assume reasonable minds would want to manage costs were possible, unless of course their motivations are less than pure and logical.

Therefore, asking the association to upgrade conditions that didn't exist to achieve minimally improved insulative values at an extremely significant cost, without proper justification, is unwarranted and we ask that BORA respond quickly so that we can move forward with this project which is now continued to be held up due to this appeal by Mr. Gonzalez. Holding up the roofing contractor may lead to contractor or legal delays or issues.

Below you will find the supporting documentation for our analysis.

End of Section

2.0 PROJECT HISTORY AND REBUTTAL OF MISREPRESENTATION IN APPEAL:

Parker Plaza Condominium Association (Parker Plaza) is currently undergoing a 50-year recertification to include much needed concrete restoration, new railings, waterproofing and painting work on the exterior elevation. Work is also in the planning stages for concrete restoration and waterproofing for the plaza deck and parking garage areas. The work that gives rise to the abovementioned appeal by Mr. Gonzalez, an Architect, to the Broward County Board of Rules and Appeals (BORA) is related to concrete restoration of the roof deck and the resulting, and much overdue, roof replacement. Work related to the referenced permit number BRFG-22-01085 is roof replacement.

Due to a 1-year roof replacement mandate by Parker Plaza's insurance carrier (**Exhibit F**), approximately **12** months ago, the roof replacement work had to be started prior to the EOR, TF+E, being prepared to start that work and therefore the work was handled on an expedited basis to dry in the roof at an attempt to maintain the policy. Given the expedited process, existing limitations, and the remaining unknowns, TF+E in combination with the roofer and manufacturer selected a system that could accommodate different configurations and allow for the evaluation and repair of the concrete roof slab.

The existing roof membrane was in severe disrepair, as can be seen in the roof cores (**Exhibit G**) taken prior to the start of work, was improperly maintained, and was at least 15+ years overdue for replacement. The roof should have been replaced during the 40-year recertification but appears to have been ignored, or value engineered out, consistent with past Boards and building maintenance practices. In fact, several Board meeting minutes indicate that they were deferring replacement for various reasons.

An email provided by Mr. Robert Fisher had past roof permit information which sheds light on past roof work for the Project (**Exhibit H**). Apparently, based on limited documentation, a "New Roof" was installed in 1980, approximately 10 years after original construction, for $143,810.00. Additionally, a "re-roof" in 1995, 15 years later, for $303,000.00 was permitted. Analysis of these project values in today's dollars, and compared to the current roof replacement costs, it appears that the prior roof work performed may not have been full replacements or was significantly undervalued compared to the roof replacement cost as shown in the contract by our current roofer (**Exhibit I**) showing a contract amount of $1,461,807.00.

Given the as-replaced (1980 & 1995) roof membrane construction and condition, prior to our current replacement, the roof should have been replaced no later than 2010 assuming a 15-year roof life of the 1995 replacement. A 2010 roof

replacement would have fallen under the 40-year re-certification timeline. It is my understanding that Mr. Gonzalez was the Hallandale Beach Building Official during that timeframe and resided at Parker Plaza. It is also my understanding that Mr. Gonzalez was involved at various levels with the Parker Plaza Board. Mr. Fisher, also an Architect, was also involved on the Board in many capacities over many years from 2006 - 2019 (**Exhibit J**).

Additional documents recently discovered indicate that a TAS-126 Roof Moisture Survey report was completed by CeBB Engineering & Testing Co. (CeBB) and dated September 9, 2009 (**Exhibit B**). The report confirms the as-built construction as indicated previously by TF+E to be Modified Bitumen over a ½" wood fiber cover board. This is not consistent with the original building details calling for 1 ½" fiberglass insulation. Therefore, either the original construction never had 1 ½" insulation, or prior roof replacements inappropriately omitted the 1 ½" originally called for insulation. The CeBB reported moisture in the system exceeded that allowed by Code and appeared to impact a very large portion of the roof. Having this moisture test done implies that the roof was in disrepair and in need of replacement. The Board and Committee members leading up to and during this timeframe would have had to duty to rectify the roof conditions. The 2009 "re-roof" added vents to the existing system but would only be viable if it was proven that the existing construction would accommodate and benefit from the use of vents. No such testing or evaluation appears to have been done. Another report dated December 23, 2011, by CeBB (**Exhibit B**) also found that the moisture continued to exceed allowable limits and the readings appear to have increased over the 26 months between tests. This is in spite of the fact that repairs were made in 2010.

It is unclear to TF+E how CeBB concludes in their reporting that a wet wood fiber cover board could stay in place as wet wood fiber cover board has essentially no significant uplift resistance capacity. Additionally, TF+E found that this wood fiber cover board was rotted in the best locations and liquified in the worst locations. If these reports were developed today, roof replacement would be warranted. Instead of replacing the roof in 2010, the Boards, apparently chose to literally band-aid the dilapidated roof with a white acrylic fluid applied membrane to address leakage issues supported by the aerial photographs and permit data.

Additionally, the 40-year recertification was performed by G Batista & Associates in 2013 (**Exhibit K**) and according to Mr. Batista, despite the 2009 and 2011 moisture evaluations to the contrary, the roof was satisfactory. Aerial Images from 2010 and 2013 show that despite the "2009 re-roof" degradation of the roof continued. The 40-year recertification does not comport with that data available.

As part of our due diligence for the roof replacement, TF+E performed some destructive testing (**Exhibit L**) and had a third party perform some destructive roof core testing of the roof membrane which confirmed the findings by CeBB as noted above. Additionally, we had thermography of the roof performed. This additional analysis confirmed that the roof was saturated and needed full replacement.

Given the above clarified requirement that the roof replacement was mandated to be completed within one year, along with the need to execute roof deck corrosion evaluation and repairs, the roof system ultimately selected met the needs for this project. The selected system was submitted to the City of Hallandale Beach for approval and prior to that TF+E met with the Building Official (Shellie Jackson Lee) to communicate our circumstances and intentions to repair the roof assembly. The permit submittal for Permit Number BRFG-22-01085 was issued on April 11, 2022 (**Exhibit M**).

Complaints by association members, which appear to have driven the current appeal, have ignored the numerous attempts to educate them on the complexities of this roof replacement. As was also communicated to the Building Official, TF+E communicated to the association that Parker Plaza is exempt from the requirements to upgrade the insulation of the roof assembly. This information was shared with the Building Official and the Board in an email dated August 2022 that communicated the walk through of the code requirements is attached as part of this report (**Exhibit N**).

In his appeal, Mr. Gonzalez references Existing Building Code Section

> *701.2 Conformance. An existing building or portion thereof shall not be altered such that the building becomes less safe or energy efficient than its* ***existing condition***.

As noted above, the existing condition was wet and rotted wood fiber coverboard. Given that a wet roof transfers more heat than a dry roof, the existing wet conditions were less energy efficient than the new installation.

Knowing that this evidence would still not appease Mr. Gonzalez, I had the existing roof assembly evaluated. The attached Roof Assembly R-Value Evaluation report that indicates, under the assumption of perfectly dry wood fiber cover board conditions which haven't existed since 2009 or before, that the R-value (insulation value) of the (perfect/not wet) original construction (R=2.19) and the new construction was (R=1.54). Therefore, this appeal is based on a difference of R=0.65.

If new Energy Code requirements are triggered, per an evaluation performed by Mr. Rey Miranda, this would require an minimum R value of 19 and would be approximately 3.25 inches deep for a flat assembly. This cost of insulation alone, on top of the current roof replacement costs, would be approximately $703,154.00. Mr. Miranda estimated an air conditioning costs savings for R=19 of $37,544.00 per year. Therefore, the return on investment would be 18.7 years which is about the time a new roof system would need to be installed.

This additional cost of insulation does not even begin to consider the additional work that would be triggered by the addition of the insulation such as raising roof drains, additional roof insulation to accommodate roof sloping requirements, raising/reconstructing other roof penetrations, installing new secondary roof drainage, raising roof access door thresholds, etc. These, and other considerations, were all part of our initial analysis in finding a solution for Parker Plaza to re-roof the building without triggering unwarranted code requirements and the resulting costs to the Association. As BORA is well aware, this is **not** the intent and spirit of the Existing Building Code (EBC). The EBC promotes improvements of existing buildings depending on the level of improvement while keeping the requirements to a minimum as to be sensitive to the cost benefit ratio of forcing repairs on building owners. Parker Plaza has taken out a $27,000,000.00 construction loan (**Exhibit O**) to facilitate the estimated repairs and improvements. Adding additional unwarranted costs would negatively impact on the already thin budget and add no value to how the building has been functioning for the last 50 years without upgrades.

TF+E does not dispute that Existing Building Code Section - *701.2 Conformance* would seemingly apply. However, further code review is needed. As we demonstrated in our August 10, 2022, email, which indicates in the 2020 Florida Energy Conservation Code, that Parker Plaza is exempt.

> C101.4.2 Exempt buildings.
>
> **Buildings exempt from the provisions of the** Florida Building Code, **Energy Conservation**, **include existing buildings** except those considered renovated buildings, changes of occupancy type or previously unconditioned buildings to which comfort conditioning is added.

Parker Plaza falls into the Alteration Level I category and is not considered renovated, has no change of occupancy, nor is comfort conditioning being added and is therefore **exempt**.

I hope this adequately addresses the appeal raised and will gladly meet with the BORA if needed. While I've written this report to address the appeal to BORA, my client is Parker Plaza. Parker Plaza has unfortunately deferred needed repairs

for far too long, due to actions by some of the association members who I understand create turmoil for political gain and have been fighting against much needed repairs and claiming that they have better or cheaper alternatives. While there were issues with past Boards/Committees/Contractors/etc., Parker Plaza is finally in a great position to fund and complete the work with a team dedicated to quality repairs. Politically motivated and irresponsible accusations do not help the association meet its 50-year re-certification and are dangerously close to creating project delays. Even under perfect conditions there will be unforeseen challenges and the association would be better served by utilizing association member experience to assist the association and your team of professionals complete this challenging work.

Finally, I think it is important to point out that some people seem to think that their experience somehow grants them authority to direct professionals on how to best perform their work. If they did direct the professionals work, then this would be prejudicial influence on my licensure and "hijack" my opinion. The result of which would be absolve me of my liability for negligence.

In other words, while options of others may have application somewhere, I think their value is eloquently categorized by the quote from Mark Twain:

> "The difference between the almost right word and the right word is really a large matter—it's the difference between the lightning bug and the lightning."

Since I'm not Mark Twain, I would just say if you have an opinion then put it in writing and submit it for consideration. If I don't respond, then that is my polite way of indicating that your opinion is more lightning bug than lightning.

There is also another quote by Simone Elkeles involving opinions which I will encourage you to find on your own.

End of Section

2.1. EXHIBIT A – GONZALEZ APPEAL

2.2. EXHIBIT B – 2009 AND 2011 ROOF MOISTURE TESTS

2.3. EXHIBIT C – 2009 ROOF PERMIT

2.4. EXHIBIT D – 2009 ROOF CONTRACT

2.5. EXHIBIT E – ROOF R-VALUATION EVALUATION:

2.6. EXHIBIT F – INSURANCE NOTICE TO REPLACE ROOF:

2.7. EXHIBIT G – CORE SAMPLES TAKEN FROM THE ROOF:

2.8. EXHIBIT H – EMAIL FROM ROBERT FISHER:

2.9. EXHIBIT I – ALLIED ROOFING CONTRACT:

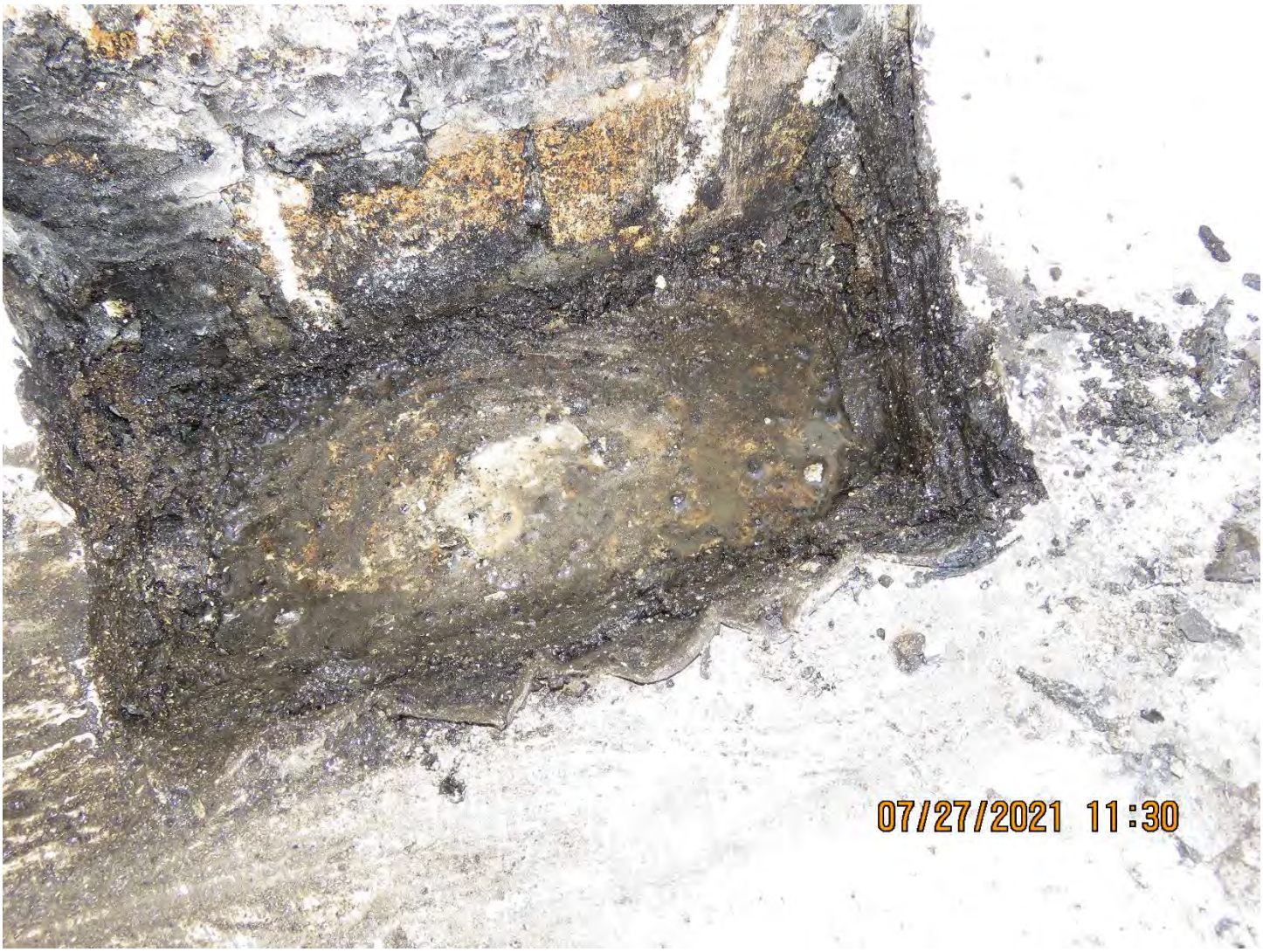
2.10. EXHIBIT J – PARKER PLAZA BOARD MEMBER PLAQUES 2006 - 2019:

Board Member Plaques from 2006 - 2019

2.11. EXHIBIT K – G. BATISTA & ASSOCIATES 40-YEAR RECERTIFICATION 11-21-2013:

2.12. EXHIBIT L – PHOTOGRAPHIC DOCUMENTATION OF EXISTING ROOF CONDITIONS:

TF+E performed visual site investigation(s) of various portions of this roof and provides photographs taken during our testing.



This photograph shows a roof section cut at the parapet wall and the clearly saturated conditions

This is the sample taken from the above photograph showing the rotted wood fiber coverboard and moisture in the roof system.

This photograph shows easy removal of the roof with shovels and the degraded condition of the fiber cover board.

This photograph shows a large section of existing roofing removed and the concrete deck cleaned for water testing. The contrast between the Modified Bitumen and the ½ fiber cover board can be seen.

2.13. EXHIBIT M – APPROVED PERMIT PARKAGE:

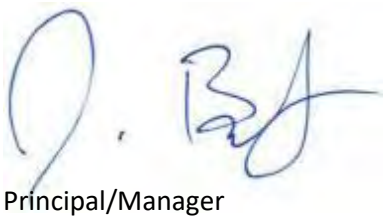
2.14. EXHIBIT N – EMAIL TO BUILDING OFFICIAL:

2.15. EXHIBIT O – ROOF LOAN CLOSING BINDER:

3.0 CLOSING:

This report is based upon the information acquired to date, the reference data noted herein, and on the observations made, and data collected, at the site. This report summarizes work performed to date and presents the findings resulting from that work. JBT reserves the right to supplement this report and to expand or modify opinions based upon additional services performed or upon review of additional material as it becomes available. The investigation(s) performed, and/or relied upon, consisted of non-invasive visual observations, and intrusive and/or destructive testing as deemed necessary at this stage. The signing consultant is the author of this report. JBT reviewed the noted documents and personally performed, directed, and/or relied on persons trained with established and repeatable inspection, instructions, testing, and/or protocols.

The documents contained herein, or as part of this report, are solely for the purposes of this project. Documents shall only be reproduced by the client or participants for the claim-related activities. Documents are not to be provided to any other party, in whole or part, or on any other project without written consent of Taylor Forensics + Engineering, LLC.



Principal/Manager

Taylor Forensics + Engineering, LLC
11161 E SR 70, Suite 110-316
Lakewood Ranch, FL 34202
FL License No: 73499
Registry #34991

End of Report

Broward County
Board of Rules & Appeals

1 N. University Drive, Suite 3500B
Plantation, FL 33324
Phone 954-765- 4500
Fax 954-765- 4504
http://www.broward.org/codeappeals

Appeal Application
Please Type or Print Information

Appellant Representative Information:

Name ANTONIO P. GONZALEZ
Address 2030 SOUTH OCEAN DRIVE #912
City/State HALLANDALE BEACH, FLORIDA 33009
Business/Profession FL REGISTERED ARCHITECT- LICENSE #AR0009204
Phone (954) 789-9292 Fax
E-mail Address tonygonzalez10@hotmail.com

Project Information:

Address 2030 SOUTH OCEAN DRIVE HALLANDALE BEACH, FL 33009
Type of Construction TYPE 1A - NON-COMBUSTIBLE
Height of Building 230 FT.
Square Footage per Floor APPROX. 37,000
Permit Number BRFG -22-01085
Permit Application Date 3/18/2022
Group of Occupancy RESIDENTIAL GROUP (R-2)
Number of Stories 24

Office Use Only

Date of Receipt:
Appeal #
Hearing Date
Notice Mailed
Code in Effect
Electrical
Fire Code
Mechanical
Plumbing
Structural
Alternate Material
Alternate Method

We, the undersigned, appeal the decision of the Building/Fire Code Official of HALLANDALE BEACH as it pertains to Chapter 7, Section 701.2, of the (check one) ☐ South Florida Building Code / ☑ Florida Building Code / ☐ Florida Fire Prevention Code, / ☑ Other FBC, EXISTING BUILDING, as applicable to Broward County. (Attach copy of relevant Code sections). SEE EXHIBIT A (RELEVANT CODE SECTION)

Note: The Board shall base their decision upon the section(s) of the Code you have indicated above. If these are in error, you will be required to re-submit your appeal.

The Board is not authorized to grant variances from the Code.

Summary of appeal (attach additional sheets as necessary): REFER TO EXHIBIT A - SUMMARY OF APPEAL
Existing roof replacement includes the removal of insulation. The proposed roofing system does not include insulation therefore, making the building less energy efficient.

Results desired (attach additional sheets as necessary): REFER TO EXHIBIT A - RESULTS DESIRED
Permit revision to include insulation specifications and details. Insulation to match existing conditions in compliance with FBC, Existing Building, 7th Edition, Section 701.2

Note: Exhibits intended for distribution to the Board, supporting the appeal, must be submitted with the appeal. No additional material shall be passed out at the appeal hearing. A letter from the Building Official rejecting the applicant's appeal must be included in the appeal packet submitted to the Board of Rules and Appeals.

By signing this application I confirm that I have not requested review or relief for the claims, or substantially similar claims, as set forth herein, by any other judicial or administrative body and for which a decision is pending or has previously been rendered.

Appellant Name (Please print) ANTONIO P. GONZALEZ

Appellant Signature

Relevant Code Section:

2020 FLORIDA BUILDING CODE, EXISTING BUILDING,7TH EDITION CHAPTER7 ALTERATIONS—LEVEL 1

701.2 Conformance.

An *existing building* or portion thereof shall not be altered such that the building becomes less safe or energy efficient than its existing condition.
Exception: Where the current level of safety or sanitation is proposed to be reduced, the portion altered shall conform to the requirements of the *Florida Building Code, Building.*

Summary of Appeal:

The existing building originally incorporated 1-1/2" of rigid fiberglass insulation throughout the roof, see enclosed documentation as follows:

Exhibit B & B1 – Roof plan with insulation thickness annotation

Exhibit C – Roof details with insulation thickness dimension

Exhibit C1 – Evidence of existing insulation during tear-off

Permit BRFG-22- 01085 was issued without meeting the requirements of the 2020 FBC, Existing Building, 7th Edition, Section 701.2 – Conformance, making the building less energy efficient.

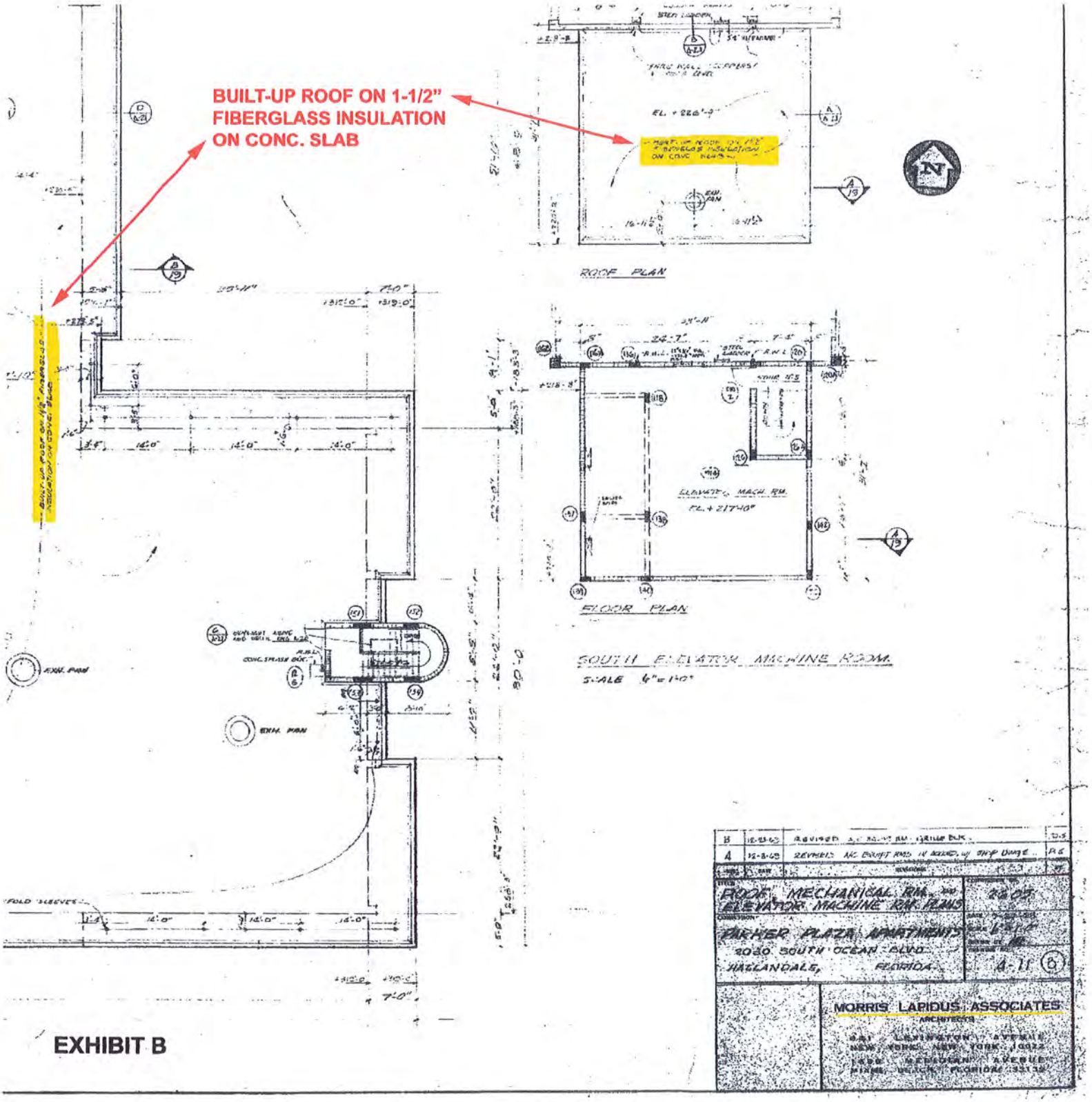
Results Desired:

Request for the City of Hallandale Beach to require a permit revision and have the contractor install at a minimum the same thickness (1-1/2") of insulation throughout the roof, matching the original details shown on the construction documents by Morris Lapidus, Associates.

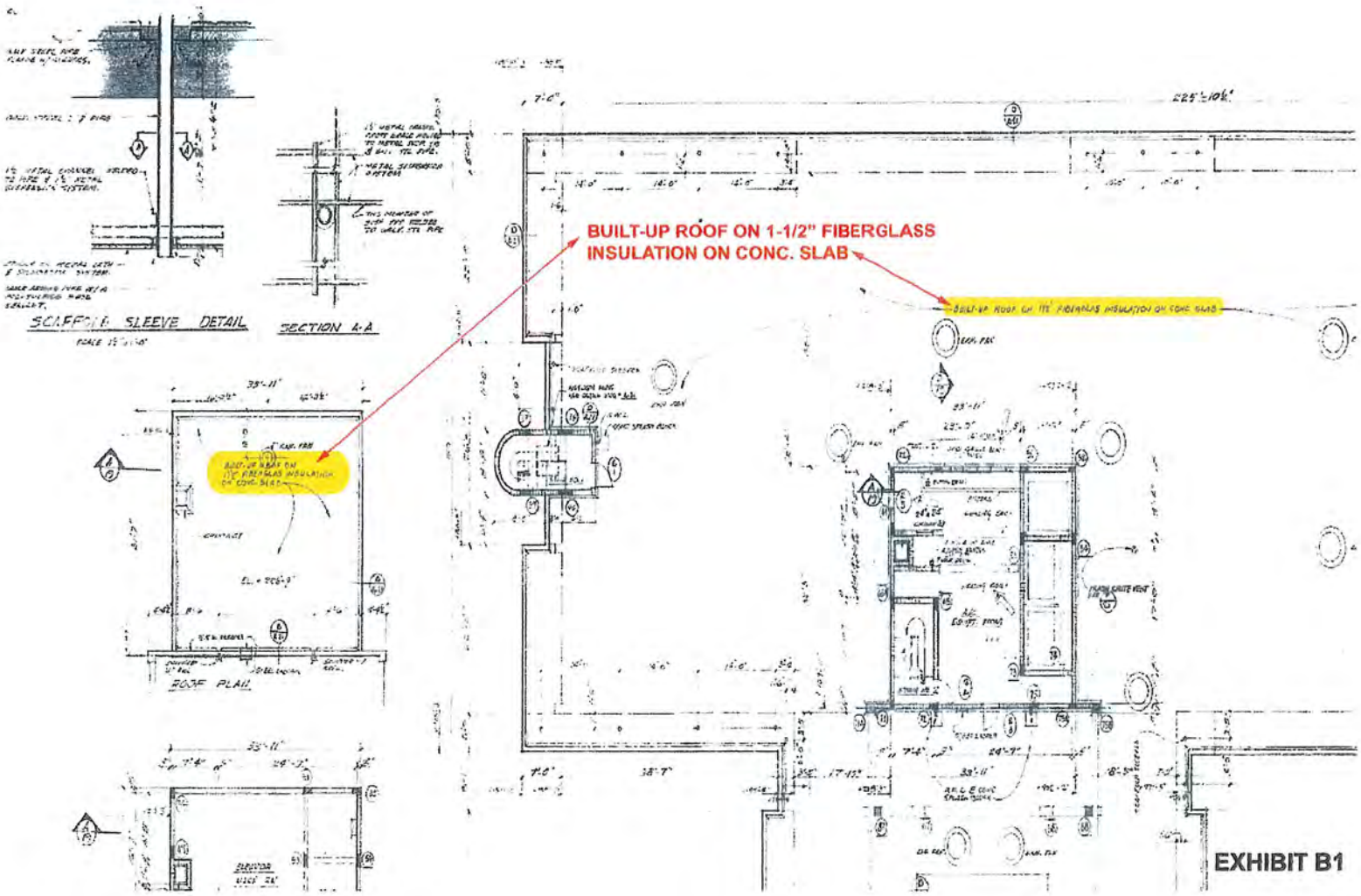
The specified roofing replacement by the EOR is composed of a three-layer SBS-modified bitumen system with an embedded gravel topping surface over the existing flat concrete deck. The roofing application shows a proposed ¼" / ft slope that cannot be achieved without insulation or by using regular flat insulation (**Refer to Exhibit D**).

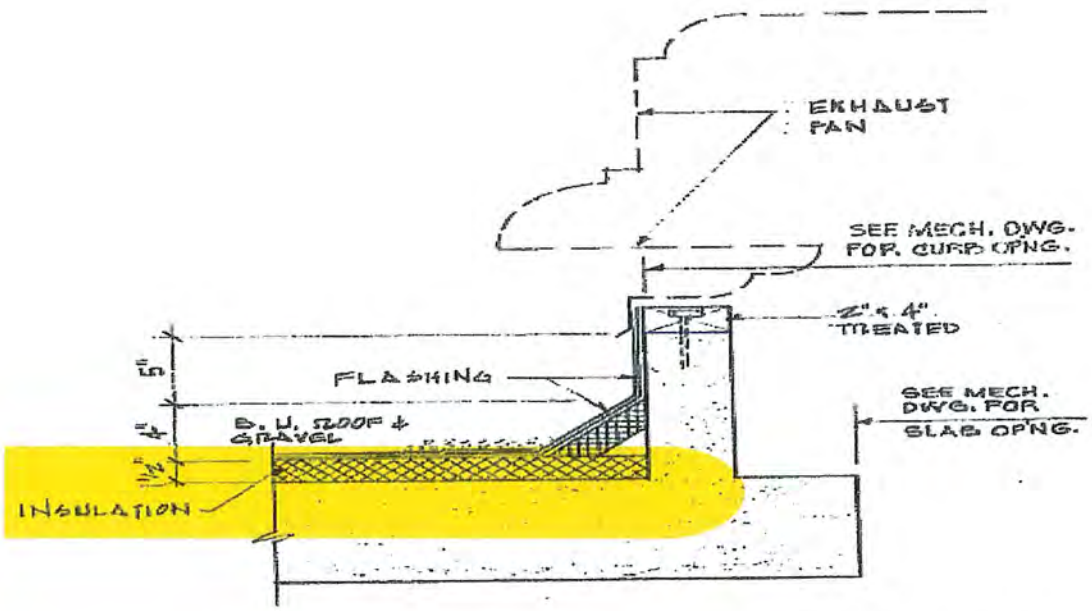
Although not mandated by the FBC, a tapered insulation system with a positive slope towards the roof drains would also be desired. The roofing system after completion of the first layer is showing ponding at several areas of the roof that may be improved with a tapered insulation system as well as an improvement in energy conservation and efficiency (**Refer to Exhibit E**).

EXHIBIT A


BUILT-UP ROOF ON 1-1/2" FIBERGLASS INSULATION ON CONC. SLAB
ROOF PLAN
FLOOR PLAN
SOUTH ELEVATOR MACHINE ROOM
SCALE 4"=1'-0"
ROOF, MECHANICAL RM. AND ELEVATOR MACHINE RM. PLANS
ARCHER PLAZA APARTMENTS
2030 SOUTH OCEAN BLVD.
HALLANDALE, FLORIDA
MORRIS LAPIDUS ASSOCIATES
EXHIBIT B

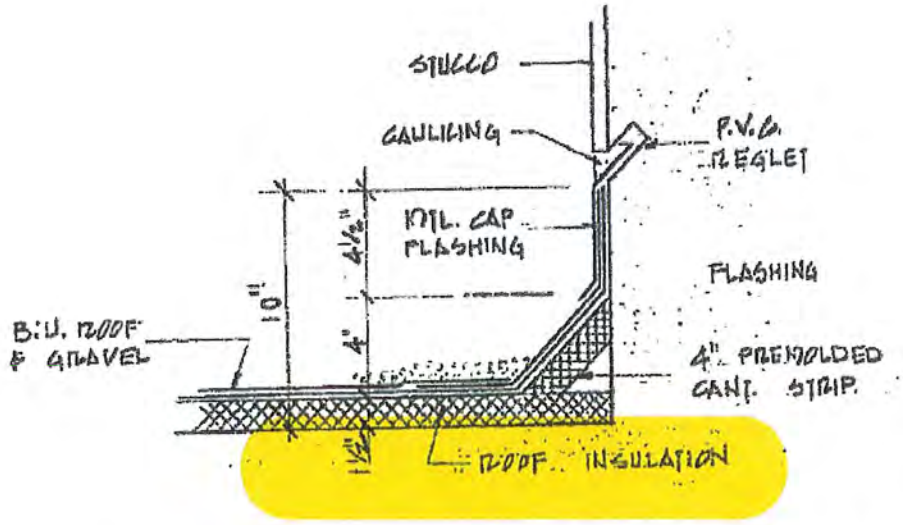
>>PAGE A-11:


BUILT-UP ROOF ON 1-1/2" FIBERGLASS INSULATION ON CONC. SLAB
SCAFFOLD SLEEVE DETAIL
SECTION A-A
ROOF PLAN
EXHIBIT B1



EXHAUST FAN DETAIL E A-21

@ 1½" = 1'-0"



FLASHING @ COOLING TOWER CURBS. B A-21

@ 1½" = 1'-0"

EXHIBIT C

Allied Roofing Removing Old Roofing System

EXHIBIT C1

Review for Code Compliance Building
04/06/2022

Florida Building Code 7th Edition (2020)
High-Velocity Hurricane Zone Uniform Permit Application Form

Section C (Low Slope Application)

Fill in specific roof assembly components and identify manufacturer

(If a component is not used, identify as "NA")

System Manufacturer: SOPREMA

Product Approval No.: FL23301-R8

Design Wind Pressures, From RAS 128 or Calculations:

Zone 1': -101.5 Zone 1: -101.5 Zone 2: -163.3 Zone 3: -225.0

Max. Design Pressure, from the specific product approval system: - 270 psf

Deck:

Type: CONCRETE

Gauge/Thickness: ______

Slope: 1/4:12

Anchor/Base Sheet & No. of Ply(s): N/A

Anchor/Base Sheet Fastener/Bonding Material: N/A

Insulation Base Layer: N/A

Base Insulation Size and Thickness: N/A

Base Insulation Fastener/Bonding Material: N/A

Top Insulation Layer: N/A

Top Insulation Size and Thickness: N/A

Top Insulation Fastener/Bonding Material: N/A

Base Sheet(s) & No. of Ply(s): SOPRALENE 250 SANDED

Base Sheet Fastener/Bonding Material: COLPLY EF ADHESIVE APPLIED @ 1.5-2.5 GAL PER SQ

Ply Sheet(s) & No. of Ply(s): SOPRALENE 180 SANDED

Ply Sheet Fastener/Bonding Material: COLPLY EF ADHESIVE APPLIED @ 1.5-2.5 GAL PER SQ

Top Ply: SOPRALENE 180 FR GR

Top Ply Fastener/Bonding Material: COLPLY EF ADHESIVE APPLIED @ 1.5-2.5 GAL PER SQ

Surfacing: GRAVEL

Fastener Spacing for Anchor/Base Sheet Attachment: N/A

Zone 1': ____" oc @ Lap, # Rows ____ @ ____" oc

Zone 1: ____" oc @ Lap, # Rows ____ @ ____" oc

Zone 2: ____" oc @ Lap, # Rows ____ @ ____" oc

Zone 3: ____" oc @ Lap, # Rows ____ @ ____" oc

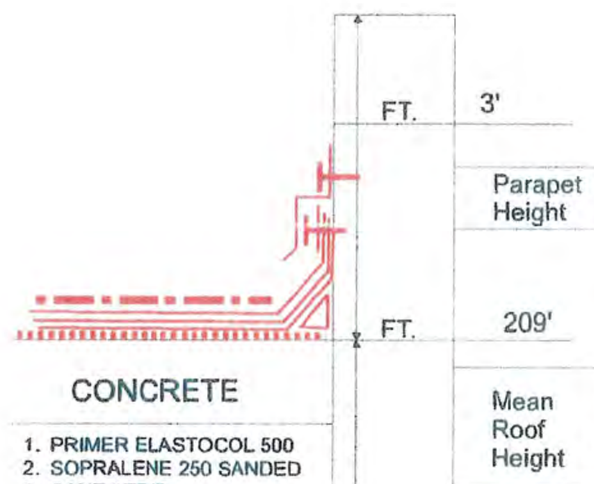
Number of Fasteners Per Insulation Board: N/A

Zone 1': _____ Zone 1: _____ Zone 2: _____ Zone 3: _____

Illustrate Components Noted and Details as Applicable:

Woodblocking, Gutter, Edge Termination, Stripping, Flashing, Continuous Cleat, Cant Strip, Base Flashing, Counterflashing, Coping, Etc.

Indicate: Mean Roof Height, Parapet Height, Height of Base Flashing, Component Material, Material Thickness, Fastener Type, Fastener Spacing or Submit Manufacturers Details that Comply with RAS 111 and Chapter 16.

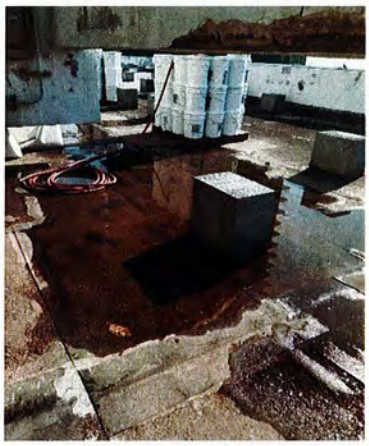


1. PRIMER ELASTOCOL 500
2. SOPRALENE 250 SANDED
3. CANT STRIP
4. SOPRALENE 180 SANDED
5. SOPRALENE 180 MFR GR
6. GRAVEL
7. TERMINATION BAR ATTACHED WITH 1 1/4" X 1/4" MANSORY ANCHORS @ 6" O.C.
8. TWO PIECE ALUMINUM METAL FLASHING ATTACHED WITH MANSORY ANCHOR UP TO 10"

EXHIBIT D

Northeast

Northwest



Cooling Tower Southeast side

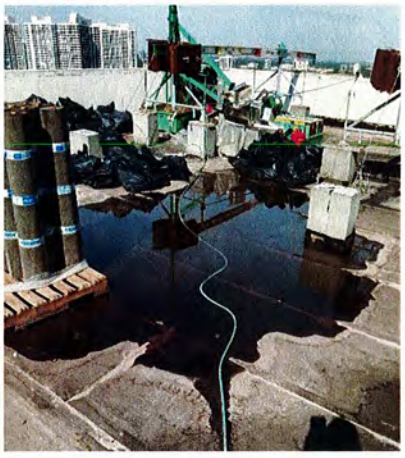
Cooling Tower Northwest side

Directly under Cooling Tower

Cooling Tower Southwest side

Southeast

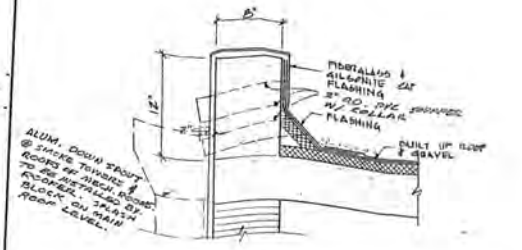
Southeast



Southwest

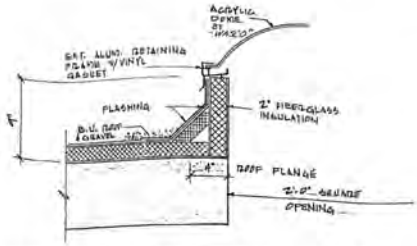
ROOF CONDITIONS ON MAY 29, 2023 FOLLOWING RAINFALL ON 5/23 THRU 5/27.

EXHIBIT E

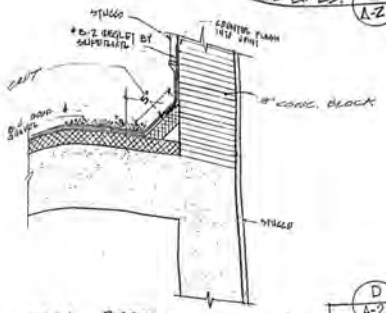


TYPICAL COPING DETAIL (A A-21)

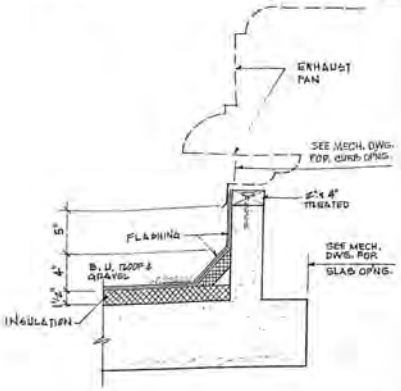
FLASHING @ COOLING TOWER COLS. (D A-21)



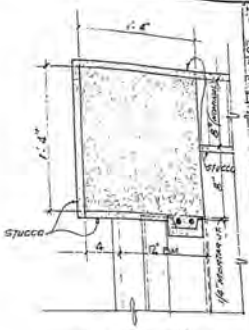
SKYLIGHT DOME DETAIL (C A-21)



TYPICAL ROOF FLASHING DETAIL (D A-21)

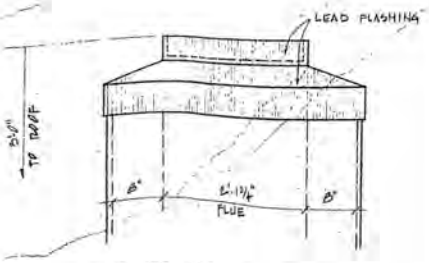


EXHAUST FAN DETAIL (E A-21)

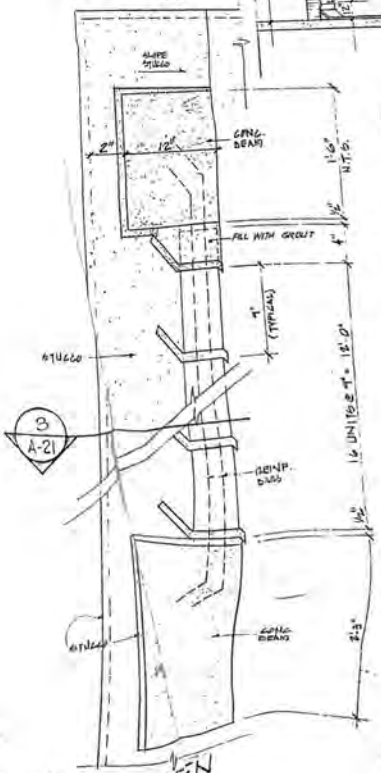


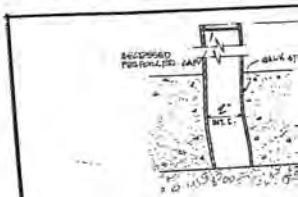
PLAN (3 A-21)

SECTION (T A-21)

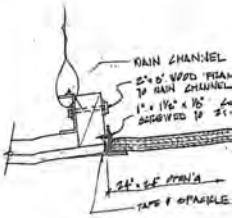


SMOKE STACK DETAIL (F A-21)

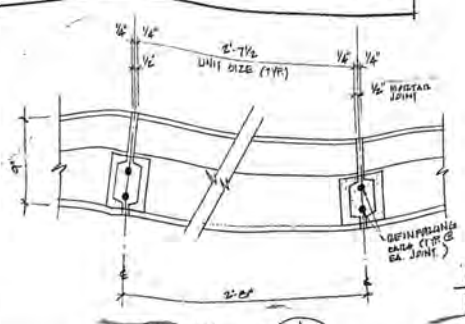




RELIEF PIPE



CEILING ACCESS



SECTION (1 A-21)

COOLING TOWER SCREEN DETAILS (G A-21)

SECTION (2 A-21)

CEBB
Engineering & Testing Co.
7450 Griffin Road, Suite 140, Davie, FL 33314
Phone: (954)581-7115, Fax: (954)581-2415
www.cebb.net

September 3, 2009

To: **Condominium Association of Parker Plaza Estates**
Donald Pinkus
2030 S. Ocean Drive
Hallandale Beach, FL 33009

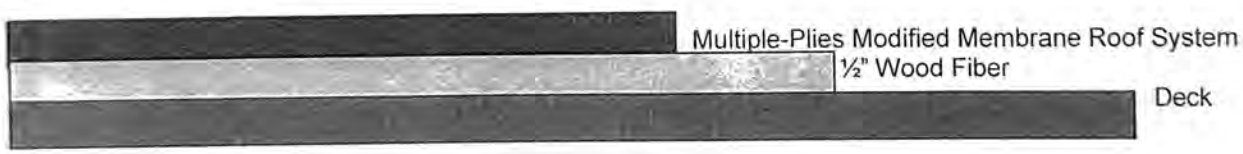
Re: **Roof Moisture Survey (TAS 126)**
Address: **Parker Plaza Estates**
2030 S. Ocean Drive
Hallandale Beach, FL 33009
Contractor: N/A
Permit: N/A

Pursuant to your request and authorization from the Director of the Condominium Association of Parker Plaza Estates, we have performed the enclosed roof moisture survey at the above referenced site.

CONSTRUCTION:

The tested flat roof system consists of a Modified Bitumen Roof System over a wood fiber insulation applied directly the structural concrete deck.

Roof Area



METHOD:

A roof moisture test in strict accordance with the Florida Building Code, testing Application Standard TAS – 126 was performed. Core samples were taken at eighteen (18) locations, including the high, medium and low reading sites. The core samples were then gravimetrically tested to determine the percentage of moisture contained in each sample.

Equipment Types - Non-Destructive Testing:	Impedance Testing
Equipment Used:	Tramex Leak Seeker
Serial Number:	1064966

CONCLUSION:

The 2007 Florida Building Code sets an allowable maximum limit of moisture content of the existing roofing assembly of 5 percent by weight in the roofing membrane and 8 percent by weight in the insulation (Section 1521.12).

Based upon the Roof Moisture Survey the subject roof does exceed the maximum allowable limit at the highlighted locations (over 8%) as revealed by the Chart "A" on pages 2. Therefore, it is in our belief and professional judgment that the said roof system could remain in place, subject to repairs at the selected locations. **However, if the source of water infiltration is not found these repairs may prove to not have been economically feasible after all.** Once the repairs are completed we recommend that a moisture survey with gravimetric analysis

Roof materials samples were inspected and visually classified by our personnel. Materials stratification, as shown on page 1 of this report, is based on examination of recovered samples and technician interpretation in the field. It indicates only the approximate boundaries between membrane layers. The actual transitions between the membrane layers may be gradual and indistinct.

Due to the fact that membrane layers are generally, installed under variable conditions, it must be understood that surface discontinuity may occur. It is unlikely that the tests (cores) used for this investigation revealed all surface conditions. Our office does not warrant or imply that the data collected on our cores locations are indicative for all the surface area, except the locations were cores were taken. If variant or unusual conditions are found during construction, please notify this office for further evaluation.

CeBB Engineering & Testing Co.
(NOA 08-0924.12 revises NOA 07-1002.07)

09/03/2009
Eduard C. Badiu, P.E.
#59997

TRAMEX Ltd, Station House,
Shankill Business Centre,
Shankill, County Dublin, Ireland
Tel: (353) 1-2823688 Fax: (353) 1-2827880

Email: sales@tramex.ie
Web Site: www.tramexltd.com

CALIBRATION CERTIFICATE

Instrument	Serial Number	Date
LS	1064966	25th Jun 09

We confirm that the above Moisture Meter has been calibrated in accordance with our standard method of calibration.

TRAMEX
29 JUN 2009
CALIBRATED

For Tramex Ltd.

26'

Miami-Dade County, Florida
Building Code Compliance Office
Suite 1603
140 West Flagler Street
Miami, Florida 33130-1563
(305) 375-2901
Fax (305) 375-2908

Laboratory Certificate

MIAMI-DADE COUNTY APPROVED

This certifies that CEBB Engineering & Testing Co., located at 7450 Griffin Road, Suite No. 140, Davie, FL 33314 is an approved Testing Laboratory in accordance with Miami-Dade County Building Code Compliance and Protocol TAS301-94, and is Certified to perform the following tests:

TAS105
TAS106
TAS124 (Bonded Pull Test)
TAS126 (Impedance Method Only)

Results of the above mentioned test shall be properly submitted to the Miami-Dade County Building Code Compliance Office per TAS301-94, along with all other documentation required for the approval of products. Approved engineer(s) for this laboratory:
Eduard C. Badiu, P.E., Pavel Peana, P.E.

This Certification and Registration Approved: October 30, 2008
This Certification and Registration Expires : January 01, 2014

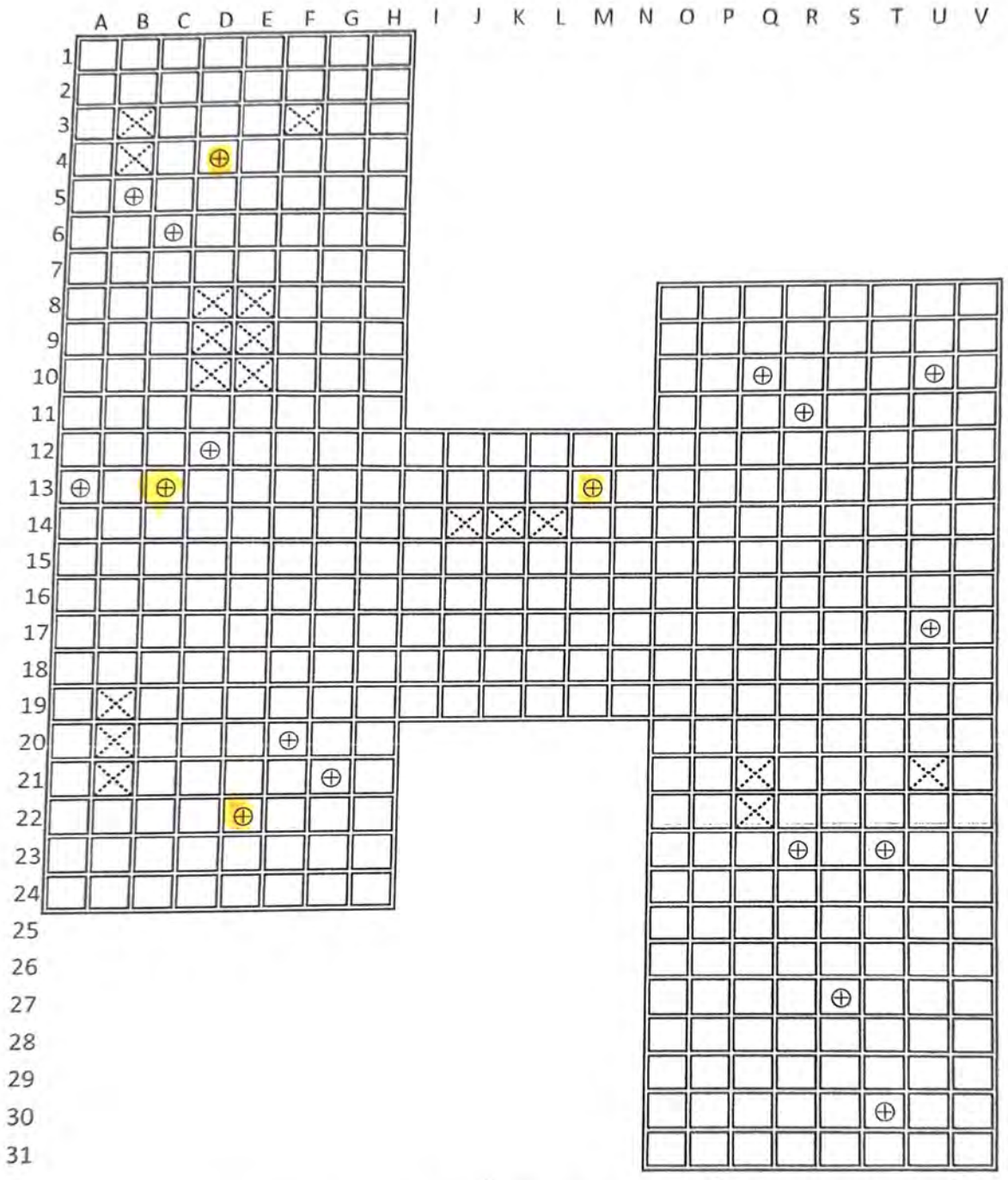
Certification No. : **08-0924.12** *Revises: 07-1002.07*

Jaime D. Gascon, P.E.
Chief
Product Control Division

Americo Segura
Senior Quality Assurance Inspector
Product Control Division

The Miami-Dade County Building Code Compliance Office reserves the right to remove this certification for non-compliance with rules and regulations as set by Protocol TAS301-94.

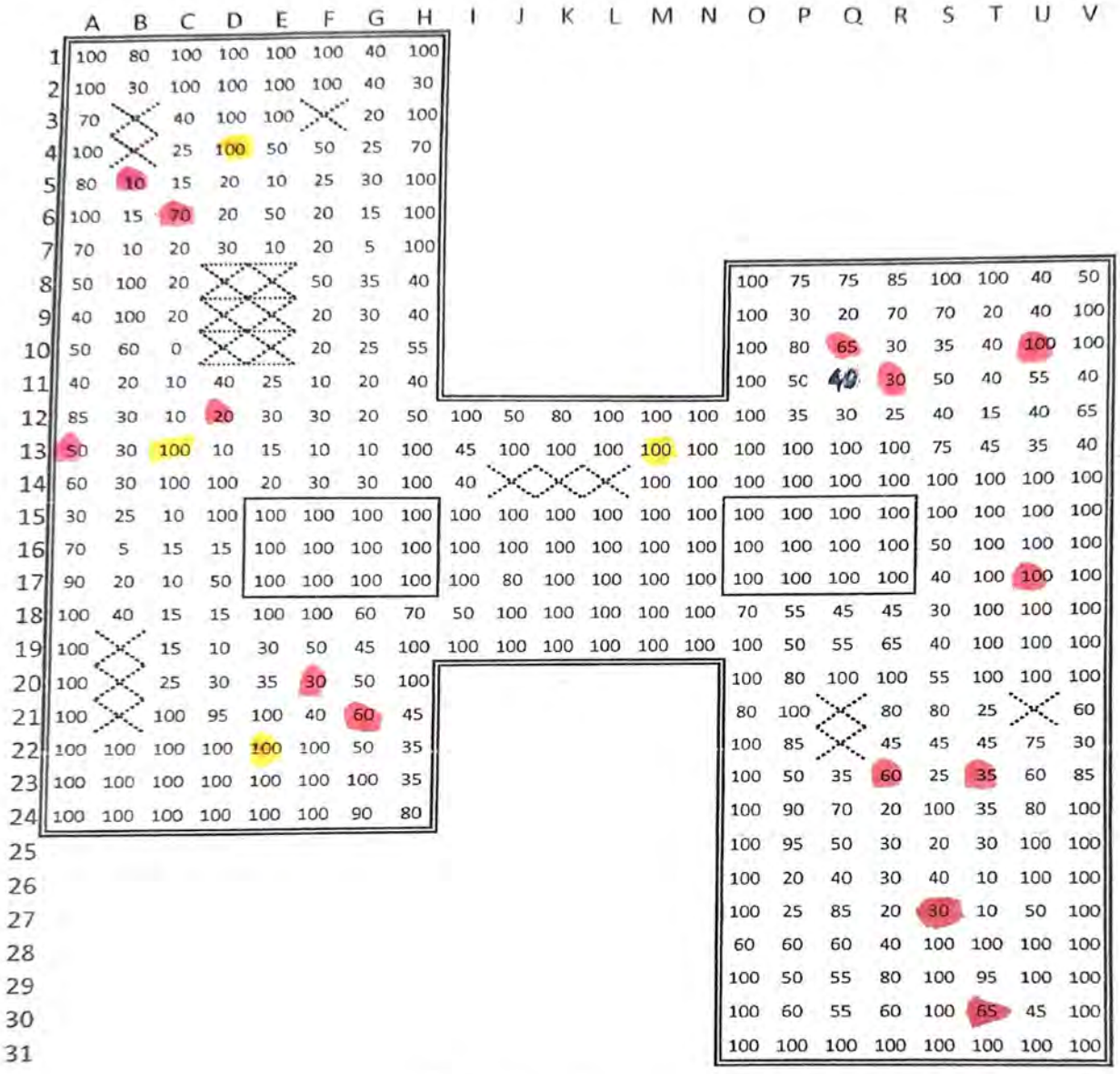
N:\CERTIFIC\LABORATO\CEBB04.doc



Legend: Ponding Water
Core Sample Location

(Not to scale)

Roof Moisture Survey (TAS 126)
Parker Plaza Estates
2030 S. Ocean Drive
September 3, 2009



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
1	100	80	100	100	100	100	40	100														
2	100	30	100	100	100	100	40	30														
3	70		40	100	100		20	100														
4	100		25	100	50	50	25	70														
5	80	10	15	20	10	25	30	100														
6	100	15	70	20	50	20	15	100														
7	70	10	20	30	10	20	5	100														
8	50	100	20			50	35	40							100	75	75	85	100	100	40	50
9	40	100	20			20	30	40							100	30	20	70	70	20	40	100
10	50	60	0			20	25	55							100	80	65	30	35	40	100	100
11	40	20	10	40	25	10	20	40							100	50	40	30	50	40	55	40
12	85	30	10	20	30	30	20	50	100	50	80	100	100	100	100	35	30	25	40	15	40	65
13	50	30	100	10	15	10	10	100	45	100	100	100	100	100	100	100	100	100	75	45	35	40
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15	30	25	10	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
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17	90	20	10	50	100	100	100	100	100	80	100	100	100	100	100	100	100	100	40	100	100	100
18	100	40	15	15	100	100	60	70	50	100	100	100	100	100	70	55	45	45	30	100	100	100
19	100		15	10	30	50	45	100	100	100	100	100	100	100	100	50	55	65	40	100	100	100
20	100		25	30	35	30	50	100							100	80	100	100	55	100	100	100
21	100		100	95	100	40	60	45							80	100		80	80	25		60
22	100	100	100	100	100	100	50	35							100	85		45	45	45	75	30
23	100	100	100	100	100	100	100	35							100	50	35	60	25	35	60	85
24	100	100	100	100	100	100	90	80							100	90	70	20	100	35	80	100
25															100	95	50	30	20	30	100	100
26															100	20	40	30	40	10	100	100
27															100	25	85	20	30	10	50	100
28															60	60	60	40	100	100	100	100
29															100	50	55	80	100	95	100	100
30															100	60	55	60	100	65	45	100
31															100	100	100	100	100	100	100	100

Legend: Ponding Water

Knob Sensibility : 1 from 10
Temperature: 90 F
Humidity: 60 %

10'x10' GRID PATTERN
Survey Date: September 1, 2009
(Not to scale)

GRAVIMETRIC ANALYSIS:

The core samples were placed in air tight containers at the job site, transported to our office laboratory facility, weighted as a wet sample, then oven dried for 24 hours at 220°F, then re-weighted as a dry sample. The percentage of moisture was then calculated.
Determination of moisture content has been done using the formula:
Where: Ww - wet weight
Dw - dry weight

$$\% \text{ Moisture} = \frac{Ww - Dw}{Dw} \times 100$$

CHART "A"
GRAVIMETRIC CORE ANALYSIS

	F20		D12		T30		U17		D4		A13	
	wet	dry	wet	dry	wet	dry	wet	dry	wet	dry	wet	dry
MEMBRANE	0.745	0.740	0.730	0.725	0.705	0.700	1.140	1.120	0.915	0.910	0.685	0.685
%	0.68		0.69		0.71		1.79		0.55		0.00	
1/2 WOODFIBER	0.400	0.385	0.685	0.670	0.145	0.140	0.475	0.455	0.895	0.830	0.545	0.530
%	3.90		2.24		3.57		4.40		7.83		2.83	

	C13		Q10		C6		B5		T23		R23	
	wet	dry	wet	dry	wet	dry	wet	dry	wet	dry	wet	dry
MEMBRANE	1.015	1.005	0.850	0.845	0.740	0.735	0.920	0.910	0.720	0.710	0.940	0.935
%	1.00		0.59		0.68		1.10		1.41		0.53	
1/2 WOODFIBER	0.660	0.510	0.515	0.505	0.590	0.580	0.560	0.550	0.470	0.460	0.595	0.585
%	29.41		1.98		1.72		1.82		2.17		1.71	

	M13		E22		R11		S27		G21		U10	
	wet	dry	wet	dry	wet	dry	wet	dry	wet	dry	wet	dry
MEMBRANE	1.170	1.120	1.000	0.980	0.835	0.835	0.655	0.645	0.740	0.735	0.750	0.740
%	4.46		2.04		0.00		1.55		0.68		1.35	
1/2 WOODFIBER	0.815	0.515	0.385	0.335	0.385	0.380	0.905	0.890	0.250	0.240	0.605	0.580
%	58.25		14.93		1.32		1.69		4.17		4.31	

CEBB
Engineering & Testing Co.
7450 Griffin Road, Suite 140, Davie, FL 33314
Phone: (954)581-7115, Fax: (954)581-2415
www.cebb.net

December 23, 2011

To: **Condominium Association of Parker Plaza Estates**
Donald Pinkus
2030 S. Ocean Drive
Hallandale Beach, FL 33009

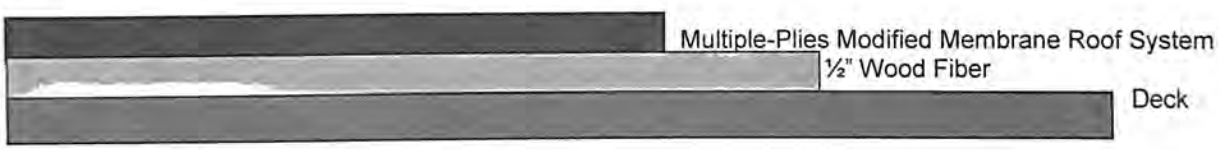
Re: **Roof Moisture Survey (TAS 126)**
Parker Plaza Estates
2030 S. Ocean Drive
Hallandale Beach, FL 33009

Pursuant to your request and authorization from the Director of the Condominium Association of Parker Plaza Estates, we have performed the enclosed roof moisture survey at the above referenced site.

CONSTRUCTION:

The tested flat roof system consists of a Modified Bitumen Roof System over a wood fiber insulation applied directly the structural concrete deck.

Roof Area



METHOD:

A roof moisture test in strict accordance with the Florida Building Code, testing Application Standard TAS – 126 was performed. Core samples were taken at twenty (20) locations, including the high, medium and low reading sites. The core samples were then gravimetrically tested to determine the percentage of moisture contained in each sample.

Roof Moisture Survey (TAS 126)
Parker Plaza Estates
2030 S. Ocean Drive

Equipment Types - Non-Destructive Testing: Impedance Testing
Equipment Used: Tramex Leak Seeker
Serial Number: 707342

GRAVIMETRIC ANALYSIS:

The core samples were placed in air tight containers at the job site, transported to our office laboratory facility, weighted as a wet sample, then oven dried for 24 hours at 220°F, then re-weighted as a dry sample. The percentage of moisture was then calculated.
Determination of moisture content has been done using the formula:
Where: Ww - wet weight
Dw - dry weight

$$\% \text{ Moisture} = \frac{Ww - Dw}{Dw} \times 100$$

CHART "A"
GRAVIMETRIC CORE ANALYSIS

High Readings

	B9		D21		C3		F7		V13		R12		P25		S23	
	wet	dry	wet	dry	wet	dry	wet	dry	wet	dry	wet	dry	wet	dry	wet	dry
MEMBRANE	0.720	0.715	0.805	0.800	0.715	0.705	1.230	1.225	0.750	0.745	0.995	0.990	0.735	0.705	0.735	0.730
%	0.70		0.63		1.42		0.41		0.67		0.51		4.26		0.68	
1/2 WOODFIBER	0.170	0.160	0.190	0.185	0.230	0.220	0.090	0.085	0.150	0.140	0.290	0.285	0.155	0.125	0.130	0.125
%	6.25		2.70		4.55		5.88		7.14		1.75		24.00		4.00	

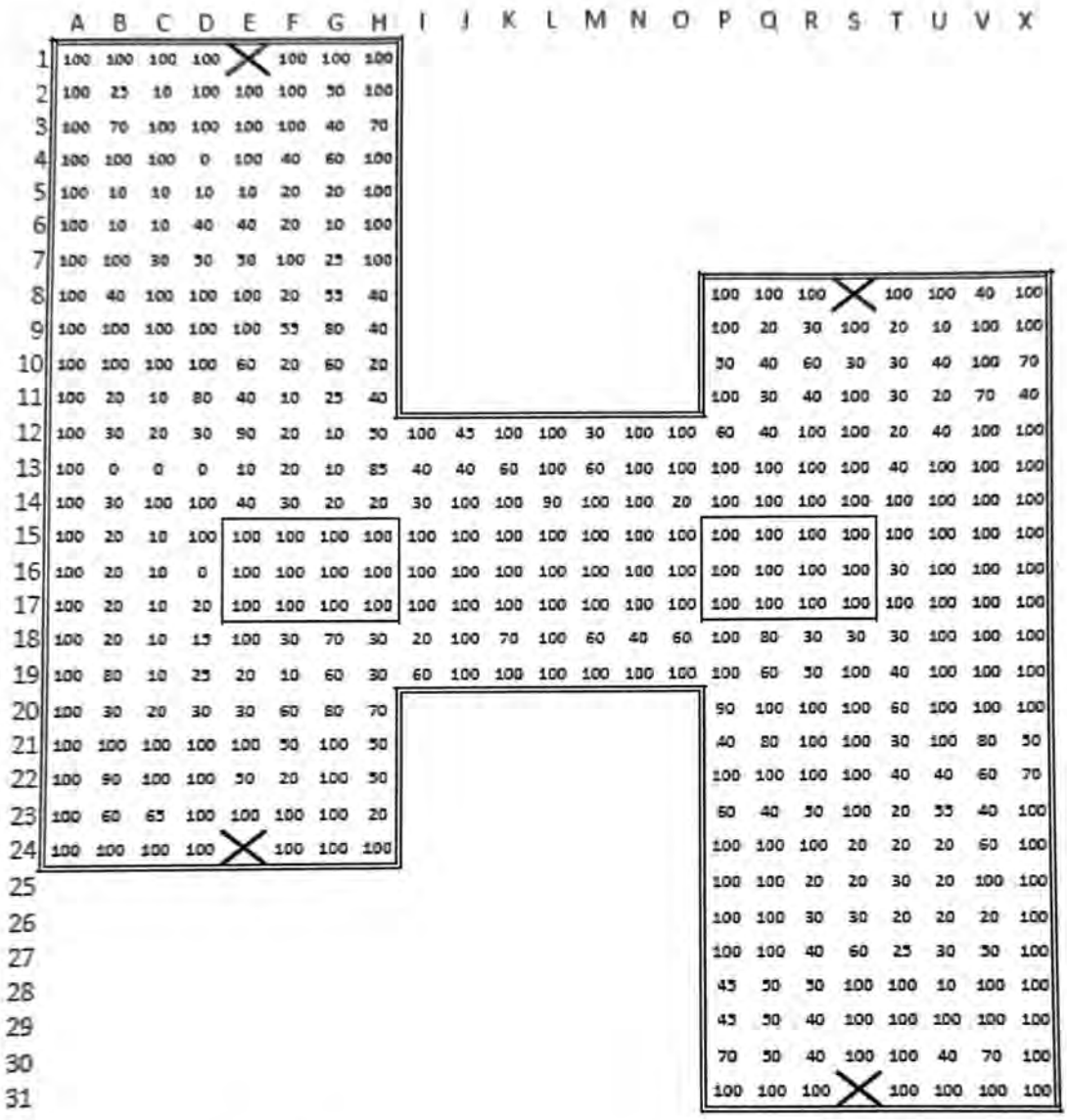
Medium Readings

	G3		G8		F20		P23		V27		P30	
	wet	dry	wet	dry	wet	dry	wet	dry	wet	dry	wet	dry
MEMBRANE	0.705	0.700	0.640	0.635	0.730	0.725	0.950	0.940	1.030	0.985	1.135	1.070
%	0.71		0.79		0.69		1.06		4.57		6.07	
1/2 WOODFIBER	0.160	0.155	0.150	0.145	0.095	0.085	0.360	0.355	0.620	0.485	0.800	0.530
%	3.23		3.45		11.76		1.41		27.84		37.93	

Low Readings

	F5		B12		D17		Q9		S24		U28	
	wet	dry	wet	dry	wet	dry	wet	dry	wet	dry	wet	dry
MEMBRANE	0.635	0.535	0.840	0.840	1.010	1.005	0.670	0.665	1.025	1.020	0.900	0.830
%	0.00		0.00		0.50		0.75		0.49		2.27	
1/2 WOODFIBER	0.185	0.175	0.135	0.130	0.210	0.205	0.205	0.200	0.350	0.345	0.085	0.065
%	5.71		3.85		2.44		2.50		1.45		30.77	

Roof Moisture Survey (TAS 126)
Parker Plaza Estates
2030 S. Ocean Drive



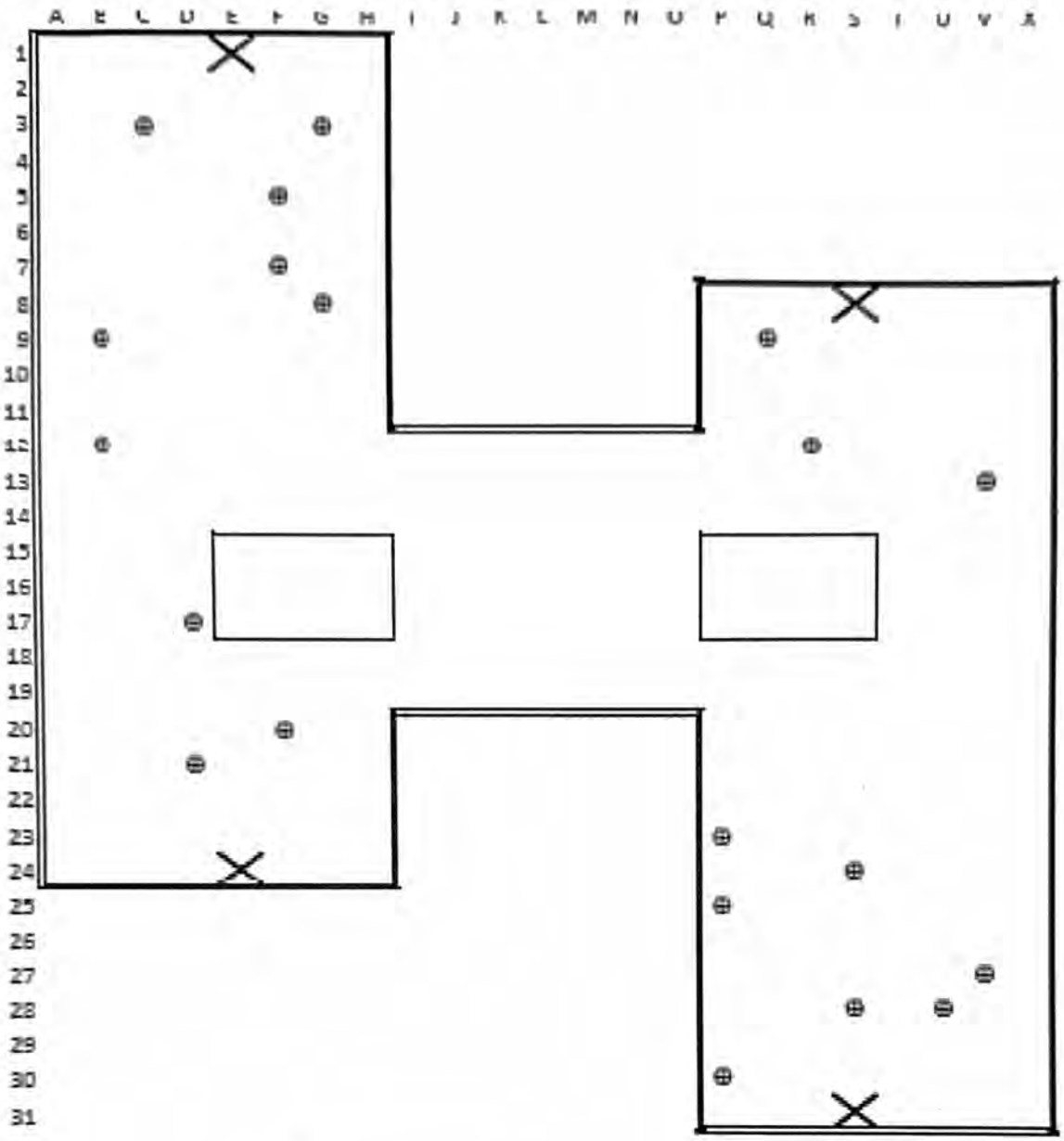
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	X
1	100	100	100	100	X	100	100	100															
2	100	25	10	100	100	100	50	100															
3	100	70	100	100	100	100	40	70															
4	100	100	100	0	100	40	60	100															
5	100	10	10	10	10	20	20	100															
6	100	10	10	40	40	20	10	100															
7	100	100	30	50	30	100	25	100															
8	100	40	100	100	100	20	55	40								100	100	100	X	100	100	40	100
9	100	100	100	100	100	55	80	40								100	20	30	100	20	10	100	100
10	100	100	100	100	60	20	60	20								30	40	60	30	30	40	100	70
11	100	20	10	80	40	10	25	40								100	30	40	100	30	20	70	40
12	100	30	20	30	90	20	10	50	100	45	100	100	30	100	100	60	40	100	100	20	40	100	100
13	100	0	0	0	10	20	10	85	40	40	60	100	60	100	100	100	100	100	100	40	100	100	100
14	100	30	100	100	40	30	20	20	30	100	100	90	100	100	20	100	100	100	100	100	100	100	100
15	100	20	10	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
16	100	20	10	0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	30	100	100	100
17	100	20	10	20	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
18	100	20	10	15	100	30	70	30	20	100	70	100	60	40	60	100	80	30	30	30	100	100	100
19	100	80	10	25	20	10	60	30	60	100	100	100	100	100	100	100	60	50	100	40	100	100	100
20	100	30	20	30	30	60	80	70								90	100	100	100	60	100	100	100
21	100	100	100	100	100	50	100	50								40	80	100	100	30	100	80	50
22	100	90	100	100	50	20	100	50								100	100	100	100	40	40	60	70
23	100	60	65	100	100	100	100	20								60	40	50	100	20	55	40	100
24	100	100	100	100	X	100	100	100								100	100	100	20	20	20	60	100
25																100	100	20	20	30	20	100	100
26																100	100	30	30	20	20	20	100
27																100	100	40	60	25	30	50	100
28																45	50	50	100	100	10	100	100
29																45	50	40	100	100	100	100	100
30																70	50	40	100	100	40	70	100
31																100	100	100	X	100	100	100	100

Legend:

Knob Sensibility : 1 from 10
Temperature: 72 F
Humidity: 70 %

10'x10' GRID PATTERN
Survey Date: December 20, 2011
(Not to scale)

Roof Moisture Survey (TAS 126)
Parker Plaza Estates
2030 S. Ocean Drive



Core Sample Locations
(Not to scale)

Roof Moisture Survey (TAS 126)
Parker Plaza Estates
2030 S. Ocean Drive

CONCLUSION:

The 2007 Florida Building Code sets an allowable maximum limit of moisture content of the existing roofing assembly of 5 percent by weight in the roofing membrane and 8 percent by weight in the insulation (Section 1521.12).

Based upon the Roof Moisture Survey the subject roof does exceed the maximum allowable limit (over 8%) at the highlighted locations ONLY as revealed by the Chart "A" on pages 2. Therefore, it is in our belief and professional judgment that the said roof system could remain in place, subject to repairs at the selected locations.

However, the subject roof is a "loaded" roof that reveals numerous penetrations and roof to wall terminations that are known to be the primary cause and leading source for water infiltrations and roof leaks. In addition to that improper repairs of previously discovered roof deficiencies have only exacerbated the problems.

Roof materials samples were inspected and visually classified by our personnel. Materials stratification, as shown on page 1 of this report, is based on examination of recovered samples and technician interpretation in the field. It indicates only the approximate boundaries between membrane layers. The actual transitions between the membrane layers may be gradual and indistinct.

Due to the fact that membrane layers are generally, installed under variable conditions, it must be understood that surface discontinuity may occur. It is unlikely that the tests (cores) used for this investigation revealed all surface conditions. Our office does not warrant or imply that the data collected on our cores locations are indicative for all the surface area, except the locations were cores were taken. If variant or unusual conditions are found during construction, please notify this office for further evaluation.

CeBB Engineering & Testing Co.
(NOA 08-0924.12 revises NOA 07-1002.07)

12/23/2014
Eduard C. Badiu, P.E.
#59997

TRAMEX Ltd, Station House,
Shankill Business Centre,
Shankill, County Dublin, Ireland
Tel: (353) 1-2823688 Fax: (353) 1-2827880

Email: sales@tramex.ie
Web Site: www.tramexltd.com

CALIBRATION CERTIFICATE

Instrument	*Serial Number*	*Date*
RWS	707342	21st Jun 2011

We confirm that the above Moisture Meter has been calibrated in accordance with our standard method of calibration.

TRAMEX
21 JUN 2011
CALIBRATED

For Tramex Ltd.

Miami-Dade County, Florida
Building Code Compliance Office
Suite 1603
140 West Flagler Street
Miami, Florida 33130-1563
(305) 375-2901
Fax (305) 375-2908

Laboratory Certificate

MIAMI-DADE COUNTY APPROVED

This certifies that CEBB Engineering & Testing Co., located at 7450 Griffin Road, Suite No. 140, Davie, FL 33314 is an approved Testing Laboratory in accordance with Miami-Dade County Building Code Compliance and Protocol TAS301-94, and is Certified to perform the following tests:

TAS105
TAS106
TAS124 (Bonded Pull Test)
TAS126 (Impedance Method Only)

Results of the above mentioned test shall be properly submitted to the Miami-Dade County Building Code Compliance Office per TAS301-94, along with all other documentation required for the approval of products. Approved engineer(s) for this laboratory:
Eduard C. Badiu, P.E., Pavel Peana, P.E.

This Certification and Registration Approved: **October 30, 2008**
This Certification and Registration Expires : **January 01, 2014**

Certification No. : **08-0924.12** *Revises: 07-1002.07*

Jaime D. Gascon, P.E.
Chief
Product Control Division

Americo Segura
Senior Quality Assurance Inspector
Product Control Division

The Miami-Dade County Building Code Compliance Office reserves the right to remove this certification for non-compliance with rules and regulations as set by Protocol TAS301-94.

Good Afternoon, Guest

Home Apply Today's Inspections Invoice Search Search

Permit Number: 2009-2280-NRPR-0

Permit Details | Tab Elements | Main Menu

Type:	Building Roofing - Combo	**Status:**	Finaled	**Project Name:**	
IVR Number:	660684	**Applied Date:**	09/29/2009	**Issue Date:**	10/08/2009
District:	Hallandale Beach	**Assigned To:**		**Expire Date:**	04/06/2010
Square Feet:	0.00	**Valuation:**	$60,000.00	**Finalized Date:**	09/04/2012
Description:	REPLACE ROOF				

Summary | Locations | Fees | Inspections | Attachments | Contacts | Sub-Records | More Info

Progress

100% Completed

- Completed
- In Progress
- Not Started

Fees

$0.00

View Details

Workflow

- ROOF IN PROGRESS - Approved Partial : 10/19/2009
- ROOF IN PROGRESS - Approved Partial : 10/21/2009
- ROOF IN PROGRESS - Rejected : 10/22/2009
- ROOF IN PROGRESS - Approved Partial : 10/26/2009
- ROOF IN PROGRESS - Approved : 10/27/2009
- ROOF IN PROGRESS - Approved : 10/29/2009
- ROOF, FINAL - Approved : 11/02/2009
- ROOF, FINAL - Cancelled : 11/05/2009

Available Actions

No Actions

ROOFING
& WATERPROOFING, INC.
2525 WEST 3 COURT, HIALEAH, FL 33010
OFFICE: (305) 623-7663 FAX: (305) 384-1209

TEL 305-623-ROOF – FAX 305-384-1209
WWW.ZROOFING.COM

CONTRACT

Date: 09/17/09

Proposal Submitted to:	Attention:	Job Name:
PARKER PLAZA	DON, JULIO, HERB	PARKER PLAZA
Address:		Job Location:
2030 SOUTH OCEAN DRIVE		2030 SOUTH OCEAN DRIVE
City: State: Zip Code		Job Phone:
HALLANDALE BEACH FLORIDA 33009		FAX: 954-458-3276: 954-458-5111

We hereby submit specifications and estimates for: REPAIR ROOF

1. SIX LEAKS WHERE REPORTED AT TIME OF INSPECTION AND SHALL BE REPAIRED.
2. CLEAN ENTIRE ROOF OF ALL DEBRI GRANULE ETC...
3. HAUL AWAY ALL ROOFING DEBRI, LEAVING PREMISES AND ROOF IN A CLEAN CONDITION.
4. REMOVE ANY AND ALL OBJECTS THAT MAY BE OBSTRUCTING THE DRAINAGE ON THE ROOF.
5. REMOVE AND REPLACE 72 FEET OF FLASHING AND COUNTERFLASHING AT PARAPET AREA.
6. CUT OPEN ALL AIR BUBBLES AND SEAL WITH MODIFIED MEMBRANE, TORCH DOWN.
7. CUT OPEN AND INSTALL (48) ONE WAY VENTS THROUGH OUT THE ROOF.
8. INSTALL MODIFIED TARGETS AT ONE WAY VENTS.
9. REMOVE AND REPLACE 1,210 SQ. FT. OF ROOF AREA WITH MODIFIED MEMBRANE, TORCH DOWN.
10. CONCRETE CRACKS WILL BE REPAIRED WITH HYDRAULIC CEMENT, INSTALL BASE SHEET, INSULATION, AND TORCH DOWN.
11. SEAL ALL LEAD STACKS AND ALL PENETRATIONS.
12. SEAL ALL PENETRATIONS ON EXISTING ROOF.
13. FILL ALL PITCH PANS ON ROOF WITH ROOF ASPHALT.
14. PROVIDE AND INSTALL TWO COATS OF G.A.F. TOP COAT 10 YR WARRANTY, WHITE COAT
15. PAINT ALL PENETRATIONS, LEAD STACKS, GRILLS, VENTS, ETC.
16. ALL WORK GAURANTEED FOR TWO (2) YEARS.
17. CONTACT PRICE INCLUDES ALL TAXES, PERMITS, AND INSPECTIONS.

	Proposed Price:
43,649 SQUARE FEET REPAIR ROOF ALL OF THE ABOVE AND COATING ROOF	$ 60,000.00

10 % @ SIGNING-	$ 6,000.00
20 % @ MATERIAL DELIVERED	$ 12,000.00
35 % @ MID-POINT	$ 21,000.00
35 % @ UPON COMPLETION	$ 21,000.00

X

Note:
This proposal may be withdrawn by us if not accepted with

Acceptance of Proposal: The above prices and specifications are

satisfactory and hereby accepted. You are authorized to do the work as specified. Payment will be made as outline above.

X

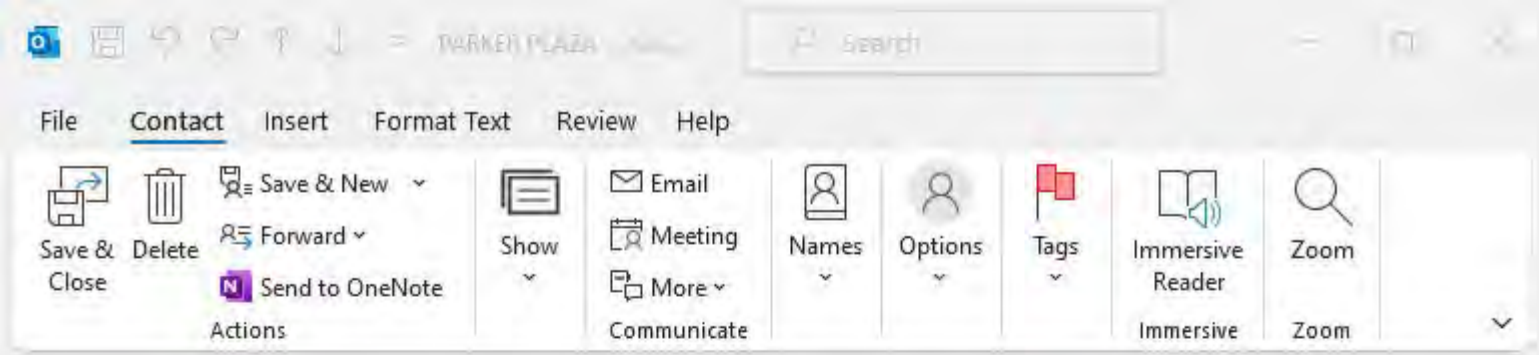
Date of Acceptance

X

Signature:

X

Signature:



REPAIR

Full Name... PARKER PLAZA

Company

Job title

File as PLAZA, PARKER

PARKER PLAZA

954-458-5111 Work

2030 S OCEAN DRIVE
HALLANDALE BEACH FL 33009

Internet

Email...

Display as

Web page address

IM address

Phone numbers

Business... 954-458-5111

Home...

Business Fax... 954-458-3276

Mobile...

Addresses

Business... 2030 S OCEAN DRIVE
HALLANDALE BEACH FL 33009

Map It

This is the mailing address

Notes

Coating
CONTRACT PRICE: 60,000
REPAIR: 11/4/2009 – 11/4/2011

* COMMERCIAL ROOF
*expired Bin

Alfredo M. Carbonell P.E. Inc.
CONSULTING ENGINEERS

12355 SW 129th Ct #04
Miami, FL 33186
Office: (305) 251-9177
Cell: (305) 608-8926
alfredo@acarbonell.com
www.acarbonell.com

Roof Assembly R-Value Evaluation

Project Address:	2030 S Ocean Dr, Hallandale Beach, FL 33009 – Parker Plaza Condo
Re:	Roof Assembly R-value evaluation
Calc. Made By:	Alfredo M. Carbonell, P.E.
License No.:	FL REG. P.E. 14170
Company:	Alfredo M. Carbonell, P.E., Inc.
Phone:	305-608-8926
Company Add:	12355 SW 129 Ct. Suite 4, Miami Fl.
Date:	June 19, 2023

If you have any questions or concerns, please contact us.

Alfredo M. Carbonell P.E.
P.E. #14170

June 19, 2023

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY ALFREDO M. CARBONELL, P.E. ON THE DATE ADJACENT TO THE SEAL.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Alfredo M. Carbonell P.E. Inc.
CONSULTING ENGINEERS

12355 SW 129th Ct #04
Miami, FL 33186
Office: (305) 251-9177
Cell: (305) 608-8926
alfredo@acarbonell.com
www.acarbonell.com

Building Information

Building Name: Parker Plaza Condo

Property Address: 2030 S Ocean Drive, Hallandale Beach, 33009

Property Use: 04 – Condominium

Effective Year: 1971

Year Built: 1970

Legal Description: PARKER PLAZA CONDO ESTATES UNIT 1001 PER CDO BK/PG:4318/273wh

Construction Building Code: The South Florida Building Code – 1970 Amended

Code review:

As per the Florida Building Code 2020th – Energy Conservation, Section C101.4.2.

C101.4.2Exempt buildings.

Buildings exempt from the provisions of the Florida Building Code, Energy Conservation, include existing buildings except those considered renovated buildings, changes of occupancy type or previously unconditioned buildings to which comfort conditioning is added. Exempt buildings include those specified in Sections C101.4.2.1 through C101.4.2.4.

The FBC-EC consider the building as existing unless one of the following is considered:

- **Renovated building:** the building roof is replaced for repairs only and a complete renovation of the building is not performed. As per section C202 a renovated building must undergo alterations or insulations changes, HVAC systems, water heating, provided the estimated cost of renovation exceeds 30 percent of the assessed value of the structure. Category does not apply.
- **Changes of Occupancy type:** scope of work does not modify the occupancy of the building or any of its areas. Category does not apply.
- **Previously Unconditioned building:** the building was conditioned before the roof repairs. There are no changes, no unconditioned spaces being conditioned on the scope of work. Category does not apply.

Therefore, none of the categories apply and the code does not require applicability of the energy efficiency to an existing building.

Alfredo M. Carbonell P.E. Inc.
CONSULTING ENGINEERS

12355 SW 129th Ct #04
Miami, FL 33186
Office: (305) 251-9177
Cell: (305) 608-8926
alfredo@acarbonell.com
www.acarbonell.com

Existing Roof Assembly

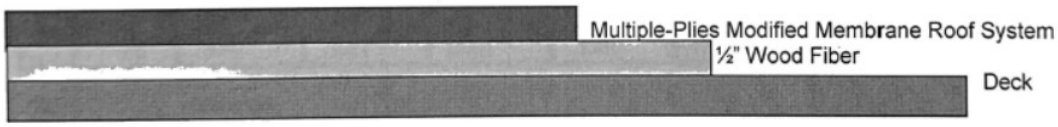
Built-up Roof System components as per existing assembly evaluated on the report by CeBB Engineering & Testing Co:

- Roof deck – concrete deck.
- Wood fiber insulation (1/2" thickness).
- Ply sheets.

CONSTRUCTION:

The tested flat roof system consists of a Modified Bitumen Roof System over a wood fiber insulation applied directly the structural concrete deck.

Roof Area



Roof deck

As per repor the concrete deck was made of normal-weight concrete and a thickness of eight (8) inches.

To be conservative with a 1970 construction we use the lowest value of the thermal conductivty k for a sand and gravel aggragate concrete as per the ASHRAE Fundamentals chapter 26.

Concretes[1]					
Sand and gravel or stone aggregate concretes	150	10.0 to 20.0	—	—	Valore (1988)
(concretes with >50% quartz or quartzite sand have	140	9.0 to 18.0	—	0.19 to 0.24	Valore (1988)
conductivities in higher end of range)	130	7.0 to 13.0	—	—	Valore (1988)
Lightweight aggregate or limestone concretes	120	6.4 to 9.1	—	—	Valore (1988)
expanded shale, clay, or slate; expanded slags; cinders;	100	4.7 to 6.2	—	0.2	Valore (1988)
pumice (with density up to 100 lb/ft^3); scoria (sanded	80	3.3 to 4.1	—	0.2	Valore (1988)
concretes have conductivities in higher end of range)	60	2.1 to 2.5	—	—	Valore (1988)
	40	1.3	—	—	Valore (1988)

$$R = \frac{t}{k} \; ; t = thickness\ of\ material\ ; k = thermal\ conductivity$$

$$R = \frac{8\ in}{10\ BTU\ in/\ h\ ft^{2\circ}F}$$

$$R1 = \ 0.8\ h\ ft^{2\circ}F/BTU$$

12355 SW 129th Ct #04
Miami, FL 33186
Office: (305) 251-9177
Cell: (305) 608-8926
alfredo@acarbonell.com
www.acarbonell.com

Wood fiber

As per samples taken and report there is a wood fiber board with a thickness of ½" above the concrete deck. A wood fiber board has an R value of 1.09 as per ASHRAE Fundamentals, chapter 26, table 1.

Description	Density, lb/ft³	Conductivity[b] k, Btu·in/h·ft²·°F	Resistance R, h·ft²·°F/Btu	Specific Heat, Btu/lb·°F	Reference[a]
Building Board and Siding					
Board					
Asbestos/cement board	120	4	—	0.24	Nottage (1947)
Cement board	71	1.7	—	0.2	Kumaran (2002)
Fiber/cement board	88	1.7	—	0.2	Kumaran (2002)
	61	1.3	—	0.2	Kumaran (1996)
	26	0.5	—	0.45	Kumaran (1996)
	20	0.4	—	0.45	Kumaran (1996)
Gypsum or plaster board	40	1.1	—	0.21	Kumaran (2002)
Oriented strand board (OSB) 7/16 in.	41	—	0.62	0.45	Kumaran (2002)
1/2 in.	41	—	0.68	0.45	Kumaran (2002)
Plywood (douglas fir) 1/2 in.	29	—	0.79	0.45	Kumaran (2002)
5/8 in.	34	—	0.85	0.45	Kumaran (2002)
Plywood/wood panels 3/4 in.	28	—	1.08	0.45	Kumaran (2002)
Vegetable fiber board					
sheathing, regular density 1/2 in.	18	—	1.32	0.31	Lewis (1967)
intermediate density 1/2 in.	22	—	1.09	0.31	Lewis (1967)
nail-based sheathing 1/2 in.	25	—	1.06	0.31	

$$R2 = 1.09\ h\ ft^{2}°F/BTU$$

Built-up roofing

As per the report the final component of the assembly consists of a typical 3/8" thick built-up roof. As per the as per ASHRAE Fundamentals, chapter 26, table 1 the Resistance or R-value of the built-up roof components is approximately 0.33.

Description	Density, lb/ft³	Conductivity[b] k, Btu·in/h·ft²·°F	Resistance R, h·ft²·°F/Btu	Specific Heat, Btu/lb·°F	Reference[a]
Metals (See Chapter 33, Table 3)					
Roofing					
Asbestos/cement shingles	120	—	0.21	0.24	
Asphalt (bitumen with inert fill)	100	2.98	—	—	CIBSE (2006)
	119	4.0	—	—	CIBSE (2006)
	144	7.97	—	—	CIBSE (2006)
Asphalt roll roofing	70	—	0.15	0.36	
Asphalt shingles	70	—	0.44	0.3	
Built-up roofing 3/8 in.	70	—	0.33	0.35	
Mastic asphalt (heavy, 20% grit)	59	1.32	—	—	CIBSE (2006)
Reed thatch	17	0.62	—	—	CIBSE (2006)
Roofing felt	141	8.32	—	—	CIBSE (2006)
Slate 1/2 in.	—	—	0.05	0.3	
Straw thatch	15	0.49	—	—	CIBSE (2006)
Wood shingles, plain and plastic-film-faced	—	—	0.94	0.31	

$$R3 = 0.33\ h\ ft^{2}°F/BTU$$

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Complete existing assembly R-Value

All the components of the roof assembly were transferring heat by conduction to the next component forms the exterior to the interior. The assembly is working on series as per the construction, and the resistance values can be added as per the equation below:

$$R_T = R1 + R2 + R3$$
$$R_T = 0.8 + 1.09 + 0.3$$

$$R_T = 2.19\ h\ ft^{2}°F/BTU$$

Therefore, the existing roof assembly has an approximate R-value of 2.19 as per reports provided.

Alfredo M. Carbonell P.E. Inc.
CONSULTING ENGINEERS

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Proposed Roof Assembly

Asphalt roll roof system components as per new assembly provided on the permited package plans:

- Roof deck – concrete deck (existing to remain)
- Asphalt roll roofing base sheet – Sopralene 250 Sanded.
- Asphalt roll roofing ply sheet – Sopralene 180 Sanded.
- Asphalt roll roofing base sheet – Sopralene 180 FR GR.

Roof deck

As per repor the concrete deck was made of normal-weight concrete and a thickness of eight (8) inches.

To be conservative with a 1970 construction we use the lowest value of the thermal conductivty k for a sand and gravel aggragate concrete as per the ASHRAE Fundamentals chapter 26.

Concretes[1]					
Sand and gravel or stone aggregate concretes	150	10.0 to 20.0	—	—	Valore (1988)
(concretes with >50% quartz or quartzite sand have	140	9.0 to 18.0	—	0.19 to 0.24	Valore (1988)
conductivities in higher end of range)	130	7.0 to 13.0	—	—	Valore (1988)
Lightweight aggregate or limestone concretes	120	6.4 to 9.1	—	—	Valore (1988)
expanded shale, clay, or slate; expanded slags; cinders;	100	4.7 to 6.2	—	0.2	Valore (1988)
pumice (with density up to 100 lb/ft³); scoria (sanded	80	3.3 to 4.1	—	0.2	Valore (1988)
concretes have conductivities in higher end of range)	60	2.1 to 2.5	—	—	Valore (1988)
	40	1.3	—	—	Valore (1988)

$$R = \frac{t}{k} \; ; t = thickness\ of\ material\ ; k = thermal\ conductivity$$

$$R = \frac{8\ in}{10\ BTU\ in/\ h\ ft^{2}°F}$$

$$R1 = \ 0.8\ h\ ft^{2}°F/BTU$$

Asphalt roll roofing

All the three layers of asphalt roll consist of the same material but with minor differences in thickness. Considering the first and second layers the rolls with the same conductivity of a roll roofing (R = 0.15).

The third layer could be considered as an asphalt shingle layer (R=0.44)

Description	Density, lb/ft³	Conductivity[b] k, Btu·in/h·ft²·°F	Resistance R, h·ft²·°F/Btu	Specific Heat, Btu/lb·°F	Reference[c]
Metals (See Chapter 33, Table 3)					
Roofing					
Asbestos/cement shingles	120	—	0.21	0.24	
Asphalt (bitumen with inert fill)	100	2.98	—	—	CIBSE (2006)
	119	4.0	—	—	CIBSE (2006)
	144	7.97	—	—	CIBSE (2006)
Asphalt roll roofing	70	—	0.15	0.36	
Asphalt shingles	70	—	0.44	0.3	
Built-up roofing 3/8 in.	70	—	0.33	0.35	

$$R2 = 0.15 * 2 + 0.44$$

$$R2 = \ 0.74\ h\ ft^{2}°F/BTU$$

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Complete proposed assembly R-Value

All the components of the roof assembly were transferring heat by conduction to the next component forms the exterior to the interior. The assembly is working on series as per the construction, and the resistance values can be added as per the equation below:

$$R_T = R1 + R2$$
$$R_T = 0.8 + 0.74$$

$$R_T = 1.54 h\, ft^{2\circ} F/BTU$$

Therefore, the proposed roof assembly has an approximate R-value of 1.54 as per proposed roofing assembly.

Conclusion

As per the code review the building is exempt from complying with the energy conservation code (see code review). The scope of work is limited to an alteration level 1 and there will not be any changes in occupancy. The components replaced on the roofing are not different from the originals and there was no thermal insulation before the repairs.

The theorical R-values calculated for existing and proposed does not varied significantly (R existing = 2.19 vs R proposed = 1.54). Thermal insulation was not required at the time of construction of the building and the current codes do not require to comply with energy conservation practices on an existing building.

NOTICE OF CANCELLATION, NONRENEWAL, RENEWAL PREMIUM, DECLINATION OF INSURANCE OR POLICY TRANSFER
(Florida)

NAME AND ADDRESS OF INSURANCE COMPANY

QBE Insurance Company (QBEIC)
One QBE Way
Sun Prairie WI 53596

NAME AND ADDRESS OF INSURED

Condominium Association of Parker Plaza Estates, Inc.
AKAM On-Site, Inc.
1815 Griffin Road, Suite 101
Dania Beach FL 33004

KIND OF POLICY: Commercial Property

POLICY/APPLICATION/BINDER NO.: QFW5984-06

EFFECTIVE DATE OF NOTICE: 6/1/2022 (DATE) 12:01 AM (HOUR-STANDARD TIME AT THE ADDRESS OF THE INSURED)

DATE OF MAILING: 1/26/2022

NAME AND ADDRESS OF AGENT/BROKER:
Florida Intracoastal Underwriters (FIU)
1600 Sawgrass Corporate Parkway
Suite 200
Sunrise FL 33323

(Applicable item marked "X")

CANCELLATION

☐ You are hereby notified in accordance with the terms and conditions of the above mentioned policy, and in accordance with law, that your insurance will cease at and from the hour and date mentioned above for the **reason(s)** stated in the **"Important Notices"** section.

See the **"Important Notices"** section for other information that may apply.

☐ You are hereby notified in accordance with the terms and conditions of the above mentioned policy, and in accordance with law, that your insurance will cease at and from the hour and date mentioned above for the **reason(s)** stated in the **"Important Notices"** section.

You are permitted by law to appeal this cancellation. An appeal must be filed no later than 20 days before the effective date of cancellation set forth in this Notice. Forms for such appeal and the regulations pertaining thereto may be obtained from the Office of Insurance Regulation. The Office of Insurance Regulation does not have the authority to extend the effective date of cancellation; therefore you should obtain replacement coverage prior to the effective date of cancellation. (Appeal is not permitted in the case of cancellation for nonpayment of premium.)

See the **"Important Notices"** section for other information that may apply.

PREMIUM ADJUSTMENT

☐ Gross unearned premium will be mailed to you within 15 days after the effective date of cancellation, except 90 days in the case of audit policies.

☐ Unearned premium will be mailed or electronically transferred to you within 15 days after the effective date of cancellation, except 90 days in the case of audit policies.

☐ Gross unearned premium will be mailed to you within 10 days of our receipt of your audit.

☐ Unearned premium will be refunded to you as soon as practicable.

☐ As the premium has not been paid, a bill for the premium earned to the time of cancellation will be forwarded in due course.

☐ Other: _____

NON-RENEWAL

☒ You are hereby notified in accordance with the terms and conditions of the above mentioned policy, and in accordance with law, that the above mentioned policy will expire effective at and from the hour and date mentioned above and the policy will NOT be renewed for the **reason(s)** stated in the **"Important Notices"** section.

☐ If this nonrenewal pertains to a policy of motor vehicle liability, personal injury protection, medical payments or collision insurance, or any combination thereof, and such policy is not being renewed because an operator insured under the policy was involved in a motor vehicle accident, Florida law provides that you may be entitled to the renewal of your policy under the conditions cited in this notice under the caption "Conditions for Renewing Your Motor Vehicle Policy". If any of the conditions apply, please contact us or your agent immediately.

See the **"Important Notices"** section for other information that may apply.

RENEWAL PREMIUM

☐ You are hereby notified in accordance with law, that the above mentioned policy, which will expire effective at and from the hour and date mentioned above, will be renewed for a premium of $ _____ .

DECLINATION OF INSURANCE

☐ Your unbound application for the kind of insurance coverage mentioned above has been declined and no insurance has become effective for the **reason(s)** stated in the **"Important Notices"** section.

See the **"Important Notices"** section for other information that may apply.

POLICY TRANSFER

☐ You are hereby notified in accordance with the terms and conditions of the above mentioned policy, and in accordance with law, that, instead of cancelling or nonrenewing your policy upon the expiration of the policy term mentioned above, we intend to transfer your policy to the following insurer, which is an insurer under the same ownership or management as this company:

_____.

The premium for the transferred policy will be $ _____ .

☐ The financial rating of the insurer to which the policy is being transferred, or other relevant information regarding this transfer, is provided herein or is enclosed with this notice:

_____

_____

The **specific reason** for any increase in premium is stated in the **"Important Notices"** section.

NOTICE OF CANCELLATION, NONRENEWAL, RENEWAL PREMIUM, DECLINATION OF INSURANCE OR POLICY TRANSFER
(Florida)

NAME AND ADDRESS OF INSURANCE COMPANY: QBE Insurance Company (QBEIC), One QBE Way, Sun Prairie, WI 53596

NAME AND ADDRESS OF INSURED: Condominium Association of Parker Plaza Estates, Inc., AKAM On-Site, Inc., 1815 Griffin Road, Suite 101, Dania Beach, FL 33004

KIND OF POLICY: Commercial Property

POLICY/APPLICATION/BINDER NO.: QFW5984-06

EFFECTIVE DATE OF NOTICE: 6/1/2022 (DATE) 12:01 AM (HOUR-STANDARD TIME AT THE ADDRESS OF THE INSURED)

DATE OF MAILING: 1/26/2022

NAME AND ADDRESS OF AGENT/BROKER: Florida Intracoastal Underwriters (FIU), 1600 Sawgrass Corporate Parkway, Suite 200, Sunrise, FL 33323

IMPORTANT NOTICES

☒ **Reason(s) for cancellation, nonrenewal, declination or transfer of policy (reason(s) stated only if this item is marked):**
Underwriting Reasons

☐ **IMPORTANCE TO YOU OF CONTINUITY OF MOTOR VEHICLE INSURANCE: IF THIS NOTICE PERTAINS TO THE CANCELLATION, NONRENEWAL OR DECLINATION OF MOTOR VEHICLE INSURANCE, PLEASE SEE THE "IMPORTANT INFORMATION" IN THIS NOTICE CONCERNING THE IMPORTANCE TO YOU OF OBTAINING AND CONTINUING TO HAVE MOTOR VEHICLE INSURANCE.**

☐ **Florida Automobile Joint Underwriting Association Information (applicable only to policies providing Personal Automobile Liability and/or Personal Injury Protection Coverage):** If the policy being cancelled or nonrenewed provides personal automobile liability and/or personal injury protection, you are possibly eligible for automobile insurance through another insurer or through the Florida Automobile Joint Underwriting Association. For further information regarding replacement insurance, either from another insurer or through the Association, please consult your agent or company representative. This notification of the availability of the Florida Automobile Joint Underwriting Association is given pursuant to the provisions of Section 627.728 of the Florida Statutes.

☐ **Consumer Report:** In compliance with the Fair Credit Reporting Act (FCRA), as amended, you are hereby informed that the action taken above is being taken wholly or partly because of information contained in a consumer report from the following consumer reporting agency:

(Name) _____ (Phone Number) _____

(Address) _____

Please see additional information for a disclosure of your rights under this federal law.

IMPORTANT INFORMATION
Concerning Your Motor Vehicle Insurance

If the motor vehicle insurance policy being cancelled or nonrenewed provides personal injury protection benefits and/or property damage liability insurance, Florida law requires that we report such action to the Department of Highway Safety and Motor Vehicles within 10 days after the processing date or effective date of the cancellation or nonrenewal.

Failure to maintain personal injury protection and property damage liability insurance on a motor vehicle when required by law may result in the loss of your motor vehicle registration and driving privileges in this state. Should your registration and driving privileges be suspended, the following fee will be charged for the reinstatement of your motor vehicle registration and/or driver's license (if both your registration and license are suspended, only one reinstatement fee shall be charged to reinstate the registration and license):

$ 150 — first reinstatement

$ 250 — second reinstatement

$ 500 — each subsequent reinstatement during 3 years following the first reinstatement

If you do not have a second reinstatement within 3 years after the initial reinstatement, the reinstatement fee will be $150 for the first reinstatement after that 3 year period.

NOTICE OF CANCELLATION, NONRENEWAL, RENEWAL PREMIUM, DECLINATION OF INSURANCE OR POLICY TRANSFER
(Florida)

NAME AND ADDRESS OF INSURANCE COMPANY	QBE Insurance Company (QBEIC) One QBE Way Sun Prairie	WI	53596
NAME AND ADDRESS OF INSURED	Condominium Association of Parker Plaza Estates, Inc. AKAM On-Site, Inc. 1815 Griffin Road, Suite 101 Dania Beach	FL	33004

KIND OF POLICY: Commercial Property

POLICY/APPLICATION/BINDER NO.: QFW5984-06

EFFECTIVE DATE OF NOTICE: 6/1/2022 (DATE) 12:01 AM (HOUR-STANDARD TIME AT THE ADDRESS OF THE INSURED)

DATE OF MAILING: 1/26/2022

NAME AND ADDRESS OF AGENT/BROKER:
Florida Intracoastal Underwriters (FIU)
1600 Sawgrass Corporate Parkway
Suite 200
Sunrise FL 33323

Conditions for Renewing Your Motor Vehicle Policy

We will renew your policy if you can demonstrate that the operator involved in the accident was:

(1) Lawfully parked;

(2) Reimbursed by, or on behalf of, a person responsible for the accident or has a judgment against such person;

(3) Struck in the rear by another vehicle headed in the same direction and was not convicted of a moving traffic violation in connection with the accident;

(4) Hit by a ''hit-and-run'' driver, if the accident was reported to the proper authorities within 24 hours after discovering the accident;

(5) Not convicted of a moving traffic violation in connection with the accident, but the operator of the other automobile involved in such accident was convicted of a moving traffic violation;

(6) Finally adjudicated not to be liable by a court of competent jurisdiction;

(7) In receipt of a traffic citation which was dismissed or nolle prossed; or

(8) Not at fault, as evidenced by a written statement from the insured establishing facts demonstrating lack of fault, which are not rebutted by information in the insurer's file from which the insurer in good faith determines that the insured was substantially at fault.

Additional Information regarding your rights under the federal Fair Credit Reporting Act (FCRA)

Pursuant to the FCRA, you are informed that:

The consumer reporting agency identified on this form did not make any decisions regarding the stated insurance policy. Therefore the consumer reporting agency would not be able to provide you with the specific reasons why the insurance company is taking the present action.

You have the right to obtain within 60 days of the receipt of this notice a free copy of your credit report from the consumer reporting agency which has been identified on this form.

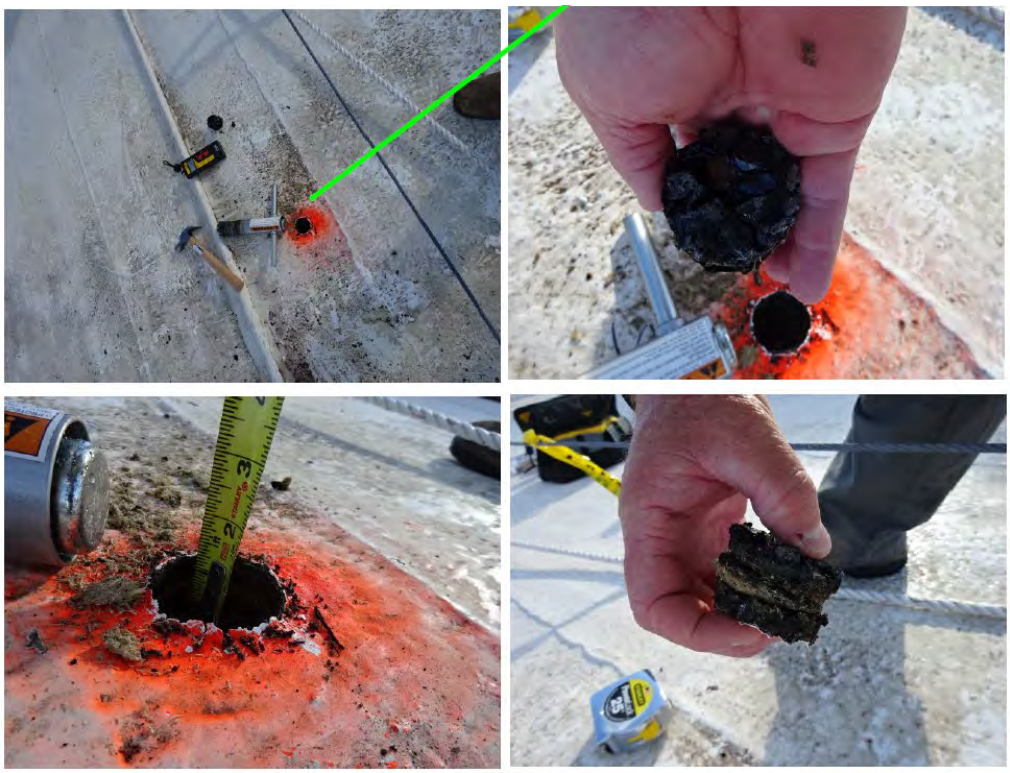
You have the right to dispute inaccurate information by contacting the consumer reporting agency directly. Once you have directly notified the consumer reporting agency of your dispute, the agency must, within a reasonable period of time reinvestigate and record the current status of the disputed information. If after reinvestigation, such information is found to be inaccurate or unverifiable, such information must be promptly deleted from your records. If the reinvestigation does not resolve the dispute, you may file a brief statement setting forth the nature of the dispute with the consumer reporting agency. Your filed statement will then be included or summarized in any subsequent consumer report containing the information in question.

For complete information regarding the FCRA, please refer to The Code of the Laws of the United States of America, Title 15, Chapter 41, Subchapter III, (15 U.S.C. §1681 et seq.).

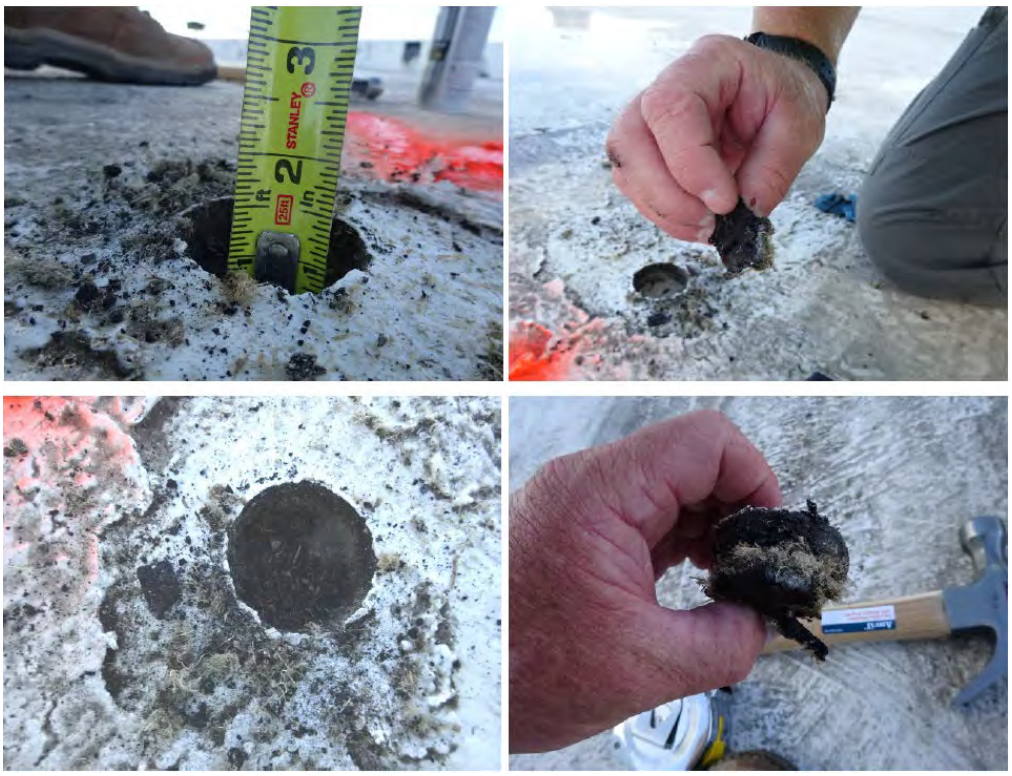
AUTHORIZED REPRESENTATIVE

Parker Plaza Estates - Roof Cores

Core # 1 – Thickness 1¼”



Core # 2 – Thickness 1½”



Core # 3 – Thickness 1½”

Core # 4 – Thickness 1”

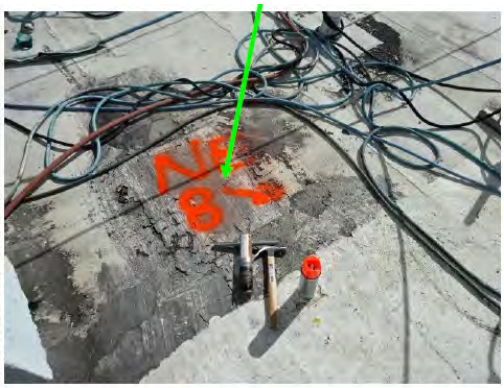
Core # 5 – Thickness 1¼”

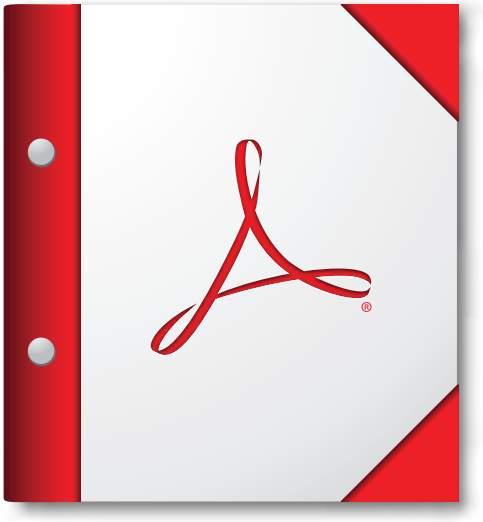
Core # 6 – Thickness ¾”

Core # 7 – Thickness 1½”



Core # 8 – Thickness 1¼”

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Get Adobe Reader Now!

ROOFING PROPOSAL/CONTRACT

To:	Andy Villarreal	**Job Name:**	Parker Plaza Condominium
Address:	2030 S Ocean Dr	**Address:**	2030 S Ocean Dr
City, State:	Hallandale Beach, FL.	**City, State:**	Hallandale Beach, FL.
Phone:	305.546.7862	**Buildings:**	One (1)

IT IS OF EXTREME IMPORTANCE THAT YOU READ AND REVIEW THIS PROPOSAL IN ITS ENTIRETY TO UNDERSTAND OUR SCOPE, WHAT WE CAN AND CANNOT DO AND WHAT WE PROPOSE AS SUBSTITUTIONS AND/OR ALTERNATES TO PLANS, DETAILS AND SPECIFICATIONS.

Flat Roof Scope:

Tear-off / Removal	Remove roofing material to a workable surface
Manufacturer's Warranty	20 Years No dollar limit
Roofing System	3 Plies *Cold Applied*
Base Ply	Soprema Sopralene 250 Sanded
Inter-Ply	Soprema Sopralene 180 Sanded
Cap Ply	Soprema Sopralene 180 FR GR
Surfacing	Gravel
Counter-flashing	Aluminum mill finish, surface mounted
Parapet flashing (standard)	All parapet/wall flashings will be terminated at 8" above the finished roof membrane, with termination bar and **Counter-flashing**, per manufacturer's details and specifications.
Drip Edge	Aluminum metal
Scupper	Aluminum metal
EXCLUSIONS	**Walk Pads, Coping Caps, Wood Nailers, Roof Hatch**
Penetrations flashings	Flashed per manufacturer's standard flashing details
Not to exceed these amounts	VTR (**60**), Electrical Conduits (**26**)

- There will be no adjustment in price if there are less than the numbers quoted above.
- All penetrations, curbs, walls, parapets and other flashings require a minimum of 8" clearance above the finished roof membrane, as per Florida Building Code.

Roof area See key plan

Price $1,461,807.00

Print Name

Owner Purchaser Signature

Print Name

Allied Roofing Ind, Inc.

Note: The construction industry has been facing many challenges as it navigates the shortages and cost increases to products/materials purchased. The past few months have seen steady growth in cost and all indications are the steady growth will continue. Placing an order for materials does not lock in pricing. Currently materials are taking anywhere from three to four months and sometimes longer. The cost of materials is when they ship not when the order is placed. Allied Roofing is making you aware that when we get confirmation the materials ship out and cost has increased those cost will be passed on the Owner.

Payment terms:

$1,461,807.00	Total Amount
$438,543	At contract signing
$438,543	At material loading
$438,543	At 50% completion
$146,178	At job completion

Key Plan:

Special notes:

* These roofs do not have overflow scuppers. Drainage calculations will reveal the size and locations of the overflow scuppers. The cost of overflow scuppers is not included in this proposal.

Rafael Collazo

Print Name

Owner Purchaser Signature

Print Name

Allied Roofing Ind, Inc.

Notes:

GENERAL

1. This proposal may be withdrawn by us if not accepted within 30 days.
2. Replacement and/or installation of Electrical, plumbing and HVAC penetrations shall be by others.
3. Allied Roofing has no control over material price increases, in the event of a natural disaster, Act of Terrorism, or an Act of God. As any additional cost, due to the aforementioned conditions will be passed on to the customer as they have been passed on to Allied Roofing.
4. Allied Roofing Ind, Inc disclaims any and all responsibility for pre-existing conditions including, but not limited to: structural damage or deficiencies, clogged drains, mold growth, excessive standing water, removal of hazardous material and interior damage as a result of existing leaks.

INCLUDED

1. Permit processing.
2. Permit Fees.
3. Roofing Licenses.
4. Allied Roofing's Standard insurance.
5. Applicable local and state sales tax.
6. Crane for hoisting and lowering of materials and equipment.
7. **5 years of Maintenance.**
8. **Cutting of temp. roof of remedial repairs**

EXCLUDED

1) All indicated in "EXCLUSIONS" of the scopes of work above.
2) Engineering calculations, other than the indicated above in inclusions.
3) Special permitting beyond the normal conditions for roofing.
4) Mechanical, Plumbing, Carpentry, Electrical, Masonry, and Painting work of any kind.
5) Unforeseen conditions not shown or indicated on the provided set of blueprints.
6) Unforeseen conditions implemented by the building department or building inspector.
7) All lightning protection is to be installed by others. Flashing of Lightning protection.
8) Payment & Performance Bond.
9) Certified payroll, DAVIS-BACON WAGES, MIAMI-DADE COUNTY RESPONSIBLE WAGES AND BENEFITS.

Print Name

Owner Purchaser Signature

Print Name

Allied Roofing Ind, Inc.

TERMS AND CONDITIONS OF CONTRACT

Prior to executing this contract, read it thoroughly and verify that it does not contain any blank spaces. Upon execution, you are entitled to an original duplicate of this contract.

NO GUARANTEES SHALL APPLY UNTIL THE CONTRACT IS PAID-IN-FULL. In the event that there is a lapse of time between completion of the work and final payment, the guarantee, when issued, shall be dated as of the date work was completed.

In the performance of this agreement ALLIED ROOFING hereafter referred to as ALLIED, will not be responsible and shall be relieved of any liability for any damage caused by hail, tempest, hurricanes, gale winds, unusual weather conditions, or inherent defects in the premises on which work is to be done.

~~ANY LEGAL EXPENSES INCURRED BY ALLIED FOR COLLECTION OF THE CONTRACT PRICE OR ANY INSTALLMENTS DUE THEREUNDER SHALL BE PAID BY THE OWNER WHETHER SUIT BE FILED OR NOT.~~ If money for work is lost on this project and/or location for work performed, under this contract where the lost results from specified violations of Florida Law by a State-Licensed Contractor, Allied Roofing may recover such funds from the Construction Industry Recovery Fund in accordance with Florida Construction Laws, Section 489.143.

All notices for guarantee work shall be made upon ALLIED in writing, by certified mail. ALLIED shall undertake any guarantee repairs within a reasonable time after written notice. Any work done or attempted to be done on the roof other than by ALLIED shall void the guarantee.

This contract only covers the work specifically set forth herein. The contract does not cover any additional work found necessary after commencement of the job. Owner agrees to execute any addendums to this contract necessary to cover the additional work.

~~ALLIED reserves the right to cease performing under this contract in the event that the owner fails to make any installment payment within 5 days its due date.~~

~~ALLIED shall be relieved of its obligation to timely perform under this contract in the event of material shortages, labor disputed or strikes beyond the control of ALLIED.~~

~~All payments due under this contract unless timely made shall bear interest at the maximum legal rate.~~

There are no representations either oral or written other than those set forth on this contract.

In the event that the owner notifies ALLIED that work can be commenced and ALLIED incurs expense by sending men to the job and it is determined that it is impossible for ALLIED to commence the work at that time, owner agrees in addition to the contract price, to compensate ALLIED at its current rate for the expenses incurred by ALLIED.

Prior to ALLIED commencing work, owner at owner's expense agrees to:

a. Provide a clean roof deck free of rubbish, chips, nails and other foreign debris which shall be loosened and swept up and removed therefrom.
b. All decks shall be properly graded to outlets and formed so as to drain all water from roof. In the event that it is necessary for ALLIED to provide any item stated above, owner agrees such shall be an extra and shall be paid for by the owner.

The contract pricing reflects ALLIED having access to eaves of roof for trucks and equipment, including cranes. Any work not specified is additional to the contract price.

If concealed or unknown physical conditions of an unusual nature (including asbestos) are encountered at any time, then ALLIED shall be entitled to an adjustment of the contract sum and time for any performance to the extent that the condition causes an increase in the cost, or time required for the completion of the work. Provided ALLIED promptly notifies the owner of the subject condition, it is agreed that ALLIED shall have no responsibility to correct the condition or complete any portion of the work dependent thereon, until an agreement regarding the equitable adjustment of the contract sum is reached by the parties.

No engineering calculations are included in the above contract price. If these are necessary to obtain permitting they are the responsibility of the property owner. If this changes the scope of the work, the price will be adjusted accordingly.

The removal and replacement of air conditioning units, ductwork and related electrical to facilitate replacement of this roof, is additional to the contract price and is the owner's responsibility.

All work is to be performed in a workman-like manner.

ALLIED will use caution when working; however, except for proven negligence, ALLIED cannot be held responsible and shall be relieved of any liability for interior or exterior damage to building, its contents or surrounding property including plaster (such as cracks, small pops, or water damage), paint, furnishings, personal belongings, lawns, shrubbery, sidewalks, driveways, sprinkler systems, water lines, septic tanks or lines, antennas, fiberglass or plastic roofs, screens or screen enclosures, pool, pool pumps, patios, washers, dryers, tools, vehicles, solar heaters, etc.

Except for the replacement of rotted or damaged wood which is performed under the woodwork clause above, ALLIED and the owner or its agent agree that this contract and price are based on the belief that the structure on which the work is to be performed is sound and built in accordance with local codes. Should work be needed for it to conform to the above, the owner will be given the option to stop the work and pay for work performed to that point or sign another agreement to perform the needed work before the work under this contract can be completed.

Please be advised, in the areas where you have open beam ceiling there may be light debris and small rocks sifting through the sheathing boards. Please take precautions to protect any items that you do not wish to be soiled. Any loose objects should be taken down or secured.

Vehicles should not be left in garage or driveways while work is in progress.

Should the owner or tenant not be present a phone number where he or she can be contacted in case of emergency, must be left with ALLIED.

RAFAEL 8/10/20

Print Name

Owner Purchaser Signature

Print Name

Allied Roofing Ind, Inc.

Owner will be responsible for painting or staining any new wood or metal.
We cannot assume responsibility for any damages done to the roof by plasterers, plumbers, electricians, air conditioning men, and/or any other tradesmen or persons.
Owner to be responsible for notifying ALLIED as to the location of septic tank.
In a re-roof or recover application of a Minimum Roof Covering or a Roof System Assembly, the new roof system shall be constructed in such a manner as to minimize ponding water. Should ponding water be present in the final application in an area greater that 5% of the total roof area,
Allied Roofing shall provide Owner and a copy to the Building Official advising of the existing ponding water.
This letter shall recommend a structural review and shall advise of the potential of premature deterioration of the roof membrane. Any alteration or deviation from the specification will become an extra charge and must be agreed to in writing by both parties.
If this agreement includes a guarantee you may assign said guarantee to a subsequent owner of this building for the remaining term only if: 1) The request is in writing within 180 days after ownership transfer; 2) You make any repairs to the roofing materials or building components that are identified by ALLIED after an inspection as necessary to preserve the integrity of the roofing materials; 3) You pay an assignment fee of $ 500.00. This Guarantee is NOT otherwise assignable, directly or indirectly.
~~This agreement constitutes the entire understanding of the parties and no other understanding shall be binding unless in writing and signed by both parties.~~

LUMBER CHARGES:

Furring Strip	$2.00 per lineal foot
Fascia Board 1" X 6"	$6.50 per lineal foot
Fascia Board 1" X 8"	$7.00 per lineal foot
Fascia Board 2" X 4"	$7.50 per lineal foot
Fascia Board 2" X 8"	$9.00 per lineal foot
Tongue & Groove 1" X 6" Sheathing	$3.50 per lineal foot
Plywood 5/8" Sheathing	$3.50 per square foot
Plywood 3/4" Sheathing	$4.50 per square foot
T - 111 1/2" Sheathing	$5.00 per square foot
T - 111 5/8" Sheathing	$5.50 per square foot
T - 111 Pressure Treated	$6.00 per square foot
Truss Reinforcement 2" X 4"	$6.50 per lineal foot
Truss Reinforcement 2" X 6"	$7.50 per lineal foot
Truss Reinforcement 2" X 8"	$9.50 per lineal foot

Note: all pressure treated fascia or trusses will be an additional $0.50 per lineal foot. All cedar wood will be an additional $3.00 per lineal foot.

CONSTRUCTION INDUSTRIES RECOVERY FUND:

PAYMENT MAY BE AVAILABLE FROM THE CONSTRUCTION INDUSTRIES RECOVERY FUND IF YOU LOSE MONEY ON A PROJECT PERFORMED UNDER CONTRACT, WHERE THE LOSS RESULTS FROM SPECIFIED VIOLATIONS OF FLORIDA LAW BY A STATE-LICENSED CONTRACTOR. FOR INFORMATION ABOUT THE RECOVERY FUND AND FILING A CLAIM, CONTACT THE FLORIDA CONSTRUCTION INDUSTRY LICENSING BOARD AT THE FOLLOWING TELEPHONE NUMBER AND ADDRESS:

Florida Construction Industry Licensing Board
7960 Arlington Expressway, Suite 300
Jacksonville, Florida 32211-7467
Phone: (904) 727-6530

Rafael Ochoa
Print Name

Owner Purchaser Signature

Print Name

Allied Roofing Ind, Inc.

713.015

ACCORDING TO FLORIDA'S CONSTRUCTION LIEN LAW_ (SECTION 713.001-713.37, FLORIDA STATUTES), THOSE WHO WORK ON YOUR PROPERTY OR PROVIDE MATERIALS AND ARE NOT PAID IN FULL, HAVE A RIGHT TO ENFORCE THEIR CLAIM FOR PAYMENT AGAINST YOUR PROPERTY.IF YOUR CONTRACTOR OR A SUBCONTRACTOR FAILS TO PAY SUBCONTRACTORS, SUB-SUBCONTRACTORS OR MATERIAL SUPPLIERS, THE PEOPLE WHO ARE OWED MONEY MAY LOOK TO YOUR PROPERTY FOR PAYMENT EVEN IF YOU ALREADY PAID YOUR CONTRACTOR IN FULL.IF YOU FAIL TO PAY YOUR CONTRACTOR, YOUR CONTRACTOR MAY ALSO HAVE A LIEN ON YOUR PROPERTY.THIS MEAN IF A LIEN IS FILED, YOUR PROPERTY COULD BE SOLD AGAINST YOU'RE YOUR WILL TO PAY FOR LABOR, MATERIALS OR OTHER SERVICES_THAT YOUR CONTRACTOR OR A SUBCONTRACTOR MAY HAVE FAILED TO PAY. TO PROTECT YOURSELF, YOU SHOULD STIPULATE IN THIS CONTRACT THAT BEFORE ANY PAYMENT IS MADE, YOUR CONTRACTOR IS REQUIRED TO PROVIDE YOU WITH A WRITTEN RELEASE OF LIEN FROM ANY PERSON OR COMPANY THAT HAS PROVIDED TO YOU A "NOTICE TO OWNER". FLORIDA'S ONSTRUCTION LIEN IS COMPLEX AND IT IS RECOMMENDED THAT YOU CONSULT AN ATTORNEY

Acceptance of Agreement- The above prices, specifications, and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined.

Print Name

Owner Purchaser Signature

Print Name

Allied Roofing Ind, Inc.

Broward County Board of Rules and Appeals- Policy # 05-05 Effective: 01/01/06

Building Safety Inspection Report Form Amended 03/15/12

STRUCTURAL

Building Information	
Building / Structure address	2030 SOUTH OCEAN DRIVE, HALLANDALE FL
Legal description	PARKER PLAZA ESTATES CONDO
Folio Number of Building /Structure	514226020210 (See attached sheets for additional unit folio numbers)
Owner's name	CONDOMINIUM ASSOCIATION OF PARKER PLAZA ESTATES INC.
Owner's mailing address	2030 SOUTH OCEAN DRIVE, HALLANDALE FL. 33009
Building Code Occupancy Classification	R-2 In Accordance with Building Code Edition 2010
Type of Construction	Type I and Type II In Accordance with Building Code Ed. 2010
Electrical Installation	Multi-Unit Residential-In accordance w/ National Electrical Code Ed.2012
Size (Square footage)	520 Units
Number of Stories	22 Story Building

Inspection Firm

Inspection Firm or Individual Address: G. Batista & Associates
Address: 10400 Griffin Road • Suite 201, Cooper City, FL 33328
Telephone Number: (954) 434-2053
Inspection Commencement Date: 11/13/2013 Inspection Completion Date 11/13/2013
Inspection made by: Gregorio Batista, P.E.

In accordance with Section 110.15 of the Broward County Administrative provisions of the Florida Building Code and the Broward County Board of Rules and Appeals Policy # 05-05 the required safety inspection has been completed.

☑ No Repairs required
☐ Repairs are required as outlined in the attached inspection report.

Licensed Professional Engineer / Architect: Gregorio Batista, P.E.

License #: 52349

"I am qualified to practice in the discipline in which I am hereby signing."

11-21-13

Seal

Signature and Date: 11-21-13

As a routine matter, and in order to avoid possible misunderstanding, nothing in this inspection Report Form, attached Minimum Inspection Guideline and our Non-Destructive Observations, should be construed directly, or indirectly, as guaranteed or warrantee for any portions of the structure. To the best of my knowledge and ability, this report represents an accurate appraisal of the present condition of the structure, based upon careful evaluation of observed conditions, to the extent reasonably possible.

5.83

MINIMUM INSPECTION GUIDELINES FOR BUILDING SAFETY INSPECTION STRUCTURAL

I. Masonry Walls

A. General Description

1. Concrete masonry units. These building walls are comprised of CMU. All components inspected and found in satisfactory condition.
2. Clay tile or terra cotta units. N/A
3. Reinforced concrete tie columns. In the areas where there were concrete tie columns, all components were inspected and found in Satisfactory condition
4. Reinforced concrete tie beams. In the areas where there were concrete tie beams, all components were inspected and found in satisfactory condition.
5. Lintels. N/A
6. Other type bond beams. N/A

B. Cracks: Identify crack size as HAIRLINE if barely discernable; FINE if less than 1 mm in width; MEDIUM if between 1 and 2 mm in width; WIDE if over 2 mm. Several hairline cracks were visible throughout the structure and none are of any remarkable structural significance.

1. Location- note beams, columns, other. N/A
2. Description. There were areas where hairlines cracks were noted on the building, but none of any remarkable structural significance.

C. Spalling:

1. Location- note beams, columns, other. N/A-None Noted
2. Description.

D. Rebar Corrosion:

1. None visible. (✓)
2. Minor. N/A
3. Significant- structural repairs required (describe). N/A

II. Floor and Roof Systems:

A. Roof:

1. Describe type of framing system (flat, slope, type roofing, type roof deck, condition.). The roof framing system on this property is composed of a concrete cast-in place system and in satisfactory condition.

2. Note water tanks, cooling towers, air conditioning equipment, signs, other heavy equipment and condition of supports. Roof exhaust fan support in satisfactory condition. Cooling tower support in satisfactory condition.
3. Note types of drains and scuppers and condition. The roof slope gradually towards roof drains located on the roof, in satisfactory condition.

B. Floor system(s):

1. Describe (type of system framing, material, condition.). The floor system is a typical concrete slab on grade. The other elevated slabs are also cast-in-place concrete.
2. Heavy equipment and conditions of support. Heavy equipment noted during the inspection; conditions and supported are acceptable.

C. Inspection- note to exposed areas available for inspection, and where it was found necessary to open ceilings, etc. for inspection of typical framing members. N/A The roof and floors are cast-in-place concrete slab.

III. Steel Framing Systems:

A. Description. N/A

B. Exposed Steel- Describe condition of paint & degree of corrosion. Exposed steel beams are supporting the cool tower; they are in good condition.

C. Concrete or other fireproofing- note any cracking or spalling and where any covering was removed for inspection. N/A

D. Elevator sheaves beams, connections, and machine floor beams- note condition. Elevators and their components are in good condition.

IV. Concrete Framing Systems:

A. Full description of structural system. Concrete slab-on-grade and foundation supporting 8" CMU concrete walls. Roof is comprised of a cast-in-place concrete structure system.

B. Cracking:

1. Not significant. (✓)
2. Location and description of members affected and type cracking. N/A

C. General Condition. Good

D. Rebar Corrosion :

1. None visible. (✓)
2. Minor. N/A
3. Significant- structural repairs required (describe). N/A

V. Windows:

A. Type (wood, steel, aluminum, jalousie, single hung, double hung, casement, awning, pivoted, fixed, other.). This property has a combination of single hung, aluminum, and fixed windows throughout. All windows are impact and recently installed. All in good condition.

B. Anchorage- type and condition of fasteners and latches. All in good condition.

C. Sealants- type and condition of perimeter sealants and at mullions. Acceptable

D. Interior Seals- type and condition at operable vents. Acceptable

E. General condition. Satisfactory

VI. Wood Framing:

A. Describe floor system. N/A

B. Note condition connector or stress. N/A

C. Note rotting or termite damage. N/A

D. Note alignment problems. N/A

E. Note bearing deficiencies. N/A

F. Note any significant damage that might affect safety. N/A

VII. Exterior Finishes/ Note any structural deficiencies in the following.

A. Stucco. Good Condition

B. Veneer. Good Condition

C. Soffits. Good Condition

D. Ceiling. Good Condition

E. Other.

Broward County Board of Rules and Appeals- Policy # 05-05 Effective: 01/01/06

Building Safety Inspection Report Form

Amended 03/15/12

ELECTRICAL

Building Information

Building / Structure address	2030 SOUTH OCEAN DRIVE, HALLANDALE FL
Legal description	PARKER PLAZA ESTATES CONDO
Folio Number of Building /Structure	514226020210 (See attached sheets for additional unit folio numbers)
Owner's name	CONDOMINIUM ASSOCIATION OF PARKER PLAZA ESTATES INC.
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Inspection Firm or Individual Address	G. Batista & Associates
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Inspection Commencement Date	11/13/2013 Inspection Completion Date 11/13/2013
Inspection made by	Gregorio Batista, P.E.

In accordance with Section 110.15 of the Broward County Administrative provisions of the Florida Building Code and the Broward County Board of Rules and Appeals Policy # 05-05 the required safety inspection has been completed.

☑ No Repairs required
☐ Repairs are required as outlined in the attached inspection report.

Licensed Professional Engineer / Architect Gregorio Batista, P.E.

License # 52349

" I am qualified to practice in the discipline in which I am hereby signing."

Signature and Date 11-21-13

11-21-13

Seal

As a routine matter, and in order to avoid possible misunderstanding, nothing in this inspection Report Form, attached Minimum Inspection Guideline and our Non-Destructive Observations, should be construed directly, or indirectly, as guaranteed or warrantee for any portions of the structure. To the best of my knowledge and ability, this report represents an accurate appraisal of the present condition of the structure, based upon careful evaluation of observed conditions, to the extent reasonably possible.

MINIMUM INSPECTION GUIDELINES FOR BUILDING SAFETY INSPECTION ELECTRICAL

I. Electrical Service:

A. Size, Amperage, Voltage: (4) 2000 AMP MAIN

A. Size, Amperage, Voltage: (2) 2500 AMP MAIN

B. Phase: 3 Phase (All 6 Mains)

C. Condition: Good Condition Code Compliant (✓) Requires Repair ( )

D. Comments: Mains are located inside electrical room by the garage on north-side on the first floor.

II. Meter and Electrical Rooms:

A. Clearances: Code Compliant (✓) Requires Repair ( )

B. Comments:

III. Switchboards/Meter/Motor Control Centers: Code Compliant (✓) Requires Repair ( )

Comments: New Switchboard.

IV. Grounding:

A. Service Code Compliant (✓) Requires Repair ( )

B. Equipment Code Compliant (✓) Requires Repair ( )

C. Comments:

V. Conductors: Code Compliant (✓) Requires Repair ( )

Comments: bus duct in satisfactory condition.

VI. Auxiliary Gutters/ Wireways/ Busways:

A. Location: Code Compliant (✓) Requires Repair ( )

B. Comments:

VII. Electrical Panels:

A. Location Code Compliant (✓) Requires Repair ( )

B. Clearance Code Compliant (✓) Requires Repair ( )

C. Identification Code Compliant (✓) Requires Repair ( )

D. Comments: Electrical panels are located throughout the premises and inside each individual unit. All in Satisfactory Condition.

VIII. Disconnects:

A. Location: Code Compliant (✓) Requires Repair ( )

B. Clearance Code Compliant (✓) Requires Repair ( )

C. Identification Code Compliant (✓) Requires Repair ( )

D. Comments:

IX. **Branch Circuits:**

A. Identification — Code Compliant (✓) Requires Repair ( )

B. Comments:

X. **Conduit/Raceways:** — Code Compliant (✓) Requires Repair ( )

Comments:

XI. **Low Voltage Wiring Methods** — Code Compliant (✓) Requires Repair ( )

Comments:

XII. **Building Illumination:**

A. Building Egress — Code Compliant (✓) Requires Repair ( )

B. Emergency — Code Compliant (✓) Requires Repair ( )

C. Exit Signs — Code Compliant (✓) Requires Repair ( )

D. Comments:

XIII. **Fire Alarm System:** — Code Compliant (✓) Requires Repair ( )

Comments: Panel checked and is acceptable (Premiere Fire Alarm)

XIV. **Smoke Detectors:** — Code Compliant (✓) Requires Repair ( )

Comments: Smoke detectors exist at the interior of the units and public areas, per code. All in Satisfactory Condition.

XV. **Generator:**

A. Emergency: Noted In Good Condition — Code Compliant (✓) Requires Repair ( )

B. Standby/Optional: N/A — Code Compliant ( ) Requires Repair ( )

C. Comments: Automatic transfer switch.

XVI. **Site Wiring:** — Code Compliant (✓) Requires Repair ( )

Comments:

XXIV. **Swimming Pool/Spa Wiring:** — Code Compliant (✓) Requires Repair ( )

Comments:

XXV. **Wiring to Mechanical Equipment:** — Code Compliant (✓) Requires Repair ( )

Comments:

XXVI. **General Additional Comments:** None

LORI PARRISH
BROWARD COUNTY
PROPERTY APPRAISER

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Folio Number	Owner Name	Property Address
514226BE2100	BRAVER,VITALY	2030 S OCEAN DRIVE 1001
514226BE2110	MORYOSEF,ELBA M	2030 S OCEAN DRIVE 1002
514226BE2120	PESIS,GALINA PESIS,OLEG	2030 S OCEAN DRIVE 1003
514226BE2130	MACALUSO,GUSTAVO & SOTUYO,MAIDENLY	2030 S OCEAN DRIVE 1004
514226BE2140	SHER,ISAAK H/E SHER,TATYANA	2030 S OCEAN DRIVE 1005
514226BE2150	GRUBER,JUDITH JUDITH & SAMUEL GRUBER REV TR	2030 S OCEAN DRIVE 1006
514226BE2160	BORYSOVA,NATALIA	2030 S OCEAN DRIVE 1007
514226BE2170	CONDOMINIUM ASSN OF PARKER PLAZA ESTATES INC % SPGH	2030 S OCEAN DRIVE 1008
514226BE2180	GIORDANO,PATRICK PETTINICCHIO,GRAZIELLA	2030 S OCEAN DRIVE 1009
514226BE2190	DI PALMA,JOANNE	2030 S OCEAN DRIVE 1010
514226BE2210	FISHER,ROBERT S & JULIE A	2030 S OCEAN DRIVE 1011
514226BE2220	WENGER,ADEK H/E WENGER,ALEXANDER ETAL	2030 S OCEAN DRIVE 1014
514226BE2230	CARLOS A & ESTER LAGO LIV TR LAGO,CAROLS & ESTER TRSTEE	2030 S OCEAN DRIVE 1015
514226BE2240	LEVINE,DANIEL H DANIEL H LEVINE REV TR	2030 S OCEAN DRIVE 1016
514226BE2250	LANG,ELIZABETH & MORRIS ARNOLD	2030 S OCEAN DRIVE 1017
514226BE2260	RESTO,GELSYS	2030 S OCEAN DRIVE 1018
514226BE2270	MARIA DZIEWINSKI REV TR	2030 S OCEAN DRIVE 1019
514226BE2280	SAMSON,GISELE	2030 S OCEAN DRIVE 1020
514226BE2290	ZITT,MYRON	2030 S OCEAN DRIVE 1021
514226BE2300	KUPPERMAN,LORETTA	2030 S OCEAN DRIVE 1022
514226BE2310	NAIK,SUDHIR & NALINI	2030 S OCEAN DRIVE 1023
514226BE2320	ROSEN,WENDY	2030 S OCEAN DRIVE 1024
514226BE2330	SINKEVYCH,IEVGEN & NADIIA	2030 S OCEAN DRIVE 1025
514226BE2340	AGRANOV,ALEXANDER	2030 S OCEAN DRIVE 1026
514226BE2350	PALMER,DORA	2030 S OCEAN DRIVE 1027
514226BE2360	HALAL,ZOYA & ELIK	2030 S OCEAN DRIVE 1101
514226BE2370	MANDL,ELIJAH	2030 S OCEAN DRIVE 1102
514226BE2380	LUPOVICH,GARRY LUPOVICH,MARINA	2030 S OCEAN DRIVE 1103
514226BE2390	ENCISO,ALVARO	2030 S OCEAN DRIVE 1104
514226BE2400	SHUTOV,DMITRIY	2030 S OCEAN DRIVE 1105
514226BE2410	4076991 CANADA INC	2030 S OCEAN DRIVE 1106
514226BE2420	CASTELLON,CARLOS M & CASTELLON,YVETTE L	2030 S OCEAN DRIVE 1107
514226BE2430	IVANOVA,NINA GOLDENBERG,MAIA	2030 S OCEAN DRIVE 1108
514226BE2440	BURMAN,ALEX	2030 S OCEAN DRIVE 1109
514226BE2450	SHLYAPOCHNIK,VALERY & ALLA	2030 S OCEAN DRIVE 1110
514226BE2460	ALVAREZ,ALBERTO J IUDCHAK,IRENE ROSANA	2030 S OCEAN DRIVE 1111
514226BE2470	RUTH LUSTIG REV LIV TR	2030 S OCEAN DRIVE 1112
514226BE2480	ROCHLIN,IRMA TR	2030 S OCEAN DRIVE 1114
514226BE2490	TOMASHPOLSKAYA,JENNY TOMASHPOLSKI,ALEXANDER ETAL	2030 S OCEAN DRIVE 1115
514226BE2500	LUCIA,PAUL	2030 S OCEAN DRIVE 1116
514226BE2510	LEYVA,BLANCA	2030 S OCEAN DRIVE 1117
514226BE2520	DOLGOV,SERGEY DOLGOVA,IRINA & DOLGOV,DMITRY	2030 S OCEAN DRIVE 1118
514226BE2530	EMMA TSEITLIN REV TR TSEITLIN,EMMA TRSTEE	2030 S OCEAN DRIVE 1119

514226BE2540	ISRAEL,JUDAH ISRAEL,RITA	2030 S OCEAN DRIVE 1120
514226BE2550	STRIPPOLI,VITO & FRANCA	2030 S OCEAN DRIVE 1121
514226BE2560	ROBINSON,BERTICA M ROBINSON,TIMOTHY J	2030 S OCEAN DRIVE 1122
514226BE2570	GROISMAN,LUDMILA	2030 S OCEAN DRIVE 1123
514226BE2580	AZMAN,ELIZABETH LE FINE,EVA	2030 S OCEAN DRIVE 1124
514226BE2590	GARFIELD,LILY C % COS BAR	2030 S OCEAN DRIVE 1125
514226BE2600	TYLIS,SIMON & GALINA	2030 S OCEAN DRIVE 1126

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BACK

LORI PARRISH
BROWARD COUNTY
PROPERTY APPRAISER

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Folio Number	Owner Name	Property Address
514226BE2610	WALMAN,ETTA ETTA WALMAN REV TR	2030 S OCEAN DRIVE 1127
514226BE2620	SPIVAK,ARIEL	2030 S OCEAN DRIVE 1201
514226BE2630	ROLO,ERNESTO & MELIDA	2030 S OCEAN DRIVE 1202
514226BE2640	SENTMIKHAI,TATIANA	2030 S OCEAN DRIVE 1203
514226BE2650	FERNANDEZ,JUAN G H/E FERNANDEZ,TERESITA	2030 S OCEAN DRIVE 1204
514226BE2660	RUBENSTEIN,ELSIE & KLEIN,CAROL RUBENSTEIN ETAL	2030 S OCEAN DRIVE 1205
514226BE2670	MILLER,BARBARA MILLER,RICHARD	2030 S OCEAN DRIVE 1206
514226BE2680	LEYZERENOK,GRIGORIY	2030 S OCEAN DRIVE 1207
514226BE2690	LEMM HOLDINGS LLC	2030 S OCEAN DRIVE 1208
514226BE2700	TUERK,SHELDON	2030 S OCEAN DRIVE 1209
514226BE2710	GOSSELIN,HUGUES	2030 S OCEAN DRIVE 1210
514226BE2720	RUBIN,DENNIS H/E RUBIN,M & RUBIN,E & RUBIN,A	2030 S OCEAN DRIVE 1211
514226BE2730	MONGE,PAMELA	2030 S OCEAN DRIVE 1212
514226BE2740	GRINBERG,FERNANDO	2030 S OCEAN DRIVE 1214
514226BE2750	BLEKHT,MICHAEL BLEKHT,RIMA	2030 S OCEAN DRIVE 1215
514226BE2760	ORISGEN CORP	2030 S OCEAN DRIVE 1216
514226BE2770	COLLAZO,RAFAEL & GAY	2030 S OCEAN DRIVE 1217
514226BE2780	TRUDEAU,MAURICE	2030 S OCEAN DRIVE 1218
514226BE2790	LEWIS,SANDRA M SANDRA M LEWIS REV TR	2030 S OCEAN DRIVE 1219
514226BE2800	PROVEDO,RAMON P & MARIA E	2030 S OCEAN DRIVE 1220
514226BE2810	HIGHTOWER PROPERTY TR NETSTAR HOLDINGS INC TRSTEE	2030 S OCEAN DRIVE 1221
514226BE2820	GADY CHETRIT LIV TR CHETRIT,GADY TRSTEE	2030 S OCEAN DRIVE 1222
514226BE2830	CASTRO,ALEIDA	2030 S OCEAN DRIVE 1223
514226BE2840	NEFT,DAVID H & NEFT,LYNETTA	2030 S OCEAN DRIVE 1224
514226BE2850	BENOWITZ,PHILIP & CAPPARO,PAULINE	2030 S OCEAN DRIVE 1225
514226BE2860	SARDINA,JOSE E & EMMA	2030 S OCEAN DRIVE 1226
514226BE2870	LEWI,IBRAHIM SAAD MELO,ELISA MARTINEZ	2030 S OCEAN DRIVE 1227
514226BE2880	BENJAMIN & MIRIAM SCHUMAN TR % ARBY SCHUMAN	2030 S OCEAN DRIVE 1401
514226BE2890	RENA BIRNBAUM TR	2030 S OCEAN DRIVE 1402
514226BE2900	KATZ,ABRAHAM & EDITH	2030 S OCEAN DRIVE 1403
514226BE2910	DIPEDE,ANNA DIPEDE,DOMENIC	2030 S OCEAN DRIVE 1404
514226BE2920	CASEY,BERNARD T	2030 S OCEAN DRIVE 1405
514226BE2930	TOBE,JOAN	2030 S OCEAN DRIVE 1406
514226BE2940	MAY,ALFRED ALFRED MAY REV TR	2030 S OCEAN DRIVE 1407
514226BE2950	DUQUE,HOMERO A DUQUE,MAIA DEL C	2030 S OCEAN DRIVE 1408
514226BE2960	DEUTSCH LIV TR DEUTSCH,NEIL & ANNETTE TRSTEE	2030 S OCEAN DRIVE 1409
514226BE2980	SARDINA,ALEXANDER J & ICE,MARY FRANCIS	2030 S OCEAN DRIVE 1411
514226BE2990	PAVEL KOGAN REV TR KOGAN,PAVEL TRSTEE	2030 S OCEAN DRIVE 1412
514226BE3000	GROSS,LISELOTTE	2030 S OCEAN DRIVE 1414
514226BE3010	ALVAREZ,IRINA	2030 S OCEAN DRIVE 1415
514226BE3020	ROJAS,JESUS & GLENIS	2030 S OCEAN DRIVE 1416

514226BE3030	THOMAS,DAVID & CHRISTINA	2030 S OCEAN DRIVE 1417
514226BE3040	FLEYSHMAN,FELIKS	2030 S OCEAN DRIVE 1418
514226BE3050	STAMLER,MENACHEM & MARSHA	2030 S OCEAN DRIVE 1419
514226BE3060	SCHNIDER,HOWARD GREEN,SHELLI	2030 S OCEAN DRIVE 1420
514226BE3070	FINKELSTEIN,FAY	2030 S OCEAN DRIVE 1421
514226BE3080	ENGEL,DONALD H	2030 S OCEAN DRIVE 1422
514226BE3090	ADORNATO,GIOVANNA CIRILLO,VITO	2030 S OCEAN DRIVE 1423
514226BE3100	ORTIZ,EVARISTO A	2030 S OCEAN DRIVE 1424
514226BE3110	WOHLMUTH,SAMUEL & IRENE & WOHLMUTH,MURRAY L	2030 S OCEAN DRIVE 1425

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514226BE3120	POLONSKY,GALINA	2030 S OCEAN DRIVE 1426
514226BE3130	KAUFF,HOWARD R & MARILYN K	2030 S OCEAN DRIVE 1427
514226BE3140	JACKSON,JOANNE	2030 S OCEAN DRIVE 1501
514226BE3150	BOGGS,NELLY H/E BOGGS,DANIEL	2030 S OCEAN DRIVE 1502
514226BE3160	CHIBISOV,ELKIYA CHIBISOV,SERGEY	2030 S OCEAN DRIVE 1503
514226BE3170	KOLTA,LASLO E	2030 S OCEAN DRIVE 1504
514226BE3180	YOUNG,EVE	2030 S OCEAN DRIVE 1505
514226BE3190	TERLETSKY,LUBOMIR TERLETSKY,VERA	2030 S OCEAN DRIVE 1506
514226BE3200	SFORZA,ANNA	2030 S OCEAN DRIVE 1507
514226BE3210	CONTE,CLAUDIA CONTE,SABRINA	2030 S OCEAN DRIVE 1508
514226BE3220	FISHMAN,ELIZABETH & SAM	2030 S OCEAN DRIVE 1509
514226BE3230	WASSERMAN,EVA LE EVA WASSERMAN AM RES REV TR	2030 S OCEAN DRIVE 1510
514226BE3240	FRUSTACI,GUISEPPE F	2030 S OCEAN DRIVE 1511
514226BE3250	INDECH,HANA & MICHAEL	2030 S OCEAN DRIVE 1512
514226BE3260	IADELUCA,LUCIA LOPEZ,PASQUALE	2030 S OCEAN DRIVE 1514
514226BE3270	M STAMLER HOLDINGS LLC	2030 S OCEAN DRIVE 1515
514226BE3280	GOLIKOV,SERGEY GOLIKOVA,TATIANA	2030 S OCEAN DRIVE 1516
514226BE3290	KERTESZ,RUTH & WEIDEN,ALINA	2030 S OCEAN DRIVE 1517
514226BE3300	NUNEZ,MARIO A	2030 S OCEAN DRIVE 1518
514226BE3310	CLARA MELEKSON TR	2030 S OCEAN DRIVE 1519
514226BE3320	DEUTSCH,ANNETTE & NEIL	2030 S OCEAN DRIVE 1520
514226BE3330	MARTINEZ,ELOISA & CARMELO D	2030 S OCEAN DRIVE 1521
514226BE3340	MELEKSON,CLARA CLARA MELEKSON TR	2030 S OCEAN DRIVE 1522
514226BE3350	WOHL,MICKIE	2030 S OCEAN DRIVE 1523
514226BE3360	ALBERT IGOLNIKOV TR OLGA IGOLNIKOV TR ETAL	2030 S OCEAN DRIVE 1524
514226BE3370	ROSALES,ARMANDO & BELKIS	2030 S OCEAN DRIVE 1525
514226BE3380	PORTNOVA,REGINA PORTNOV,STANISLAV	2030 S OCEAN DRIVE 1526
514226BE3390	RANNA,ABRAHAM S & CAMILLE V	2030 S OCEAN DRIVE 1527
514226BE3400	PARKER PLAZA 1601 LLC	2030 S OCEAN DRIVE 1601
514226BE3410	BOLKAS,CHRISTINA & LOI,ANDRONIKI	2030 S OCEAN DRIVE 1602
514226BE3420	MELVILLE,ELIZABETH C & MITTLER,RONALD N	2030 S OCEAN DRIVE 1603
514226BE3430	MARGULES HOLDINGS LLC	2030 S OCEAN DRIVE 1604
514226BE3440	WISNICKI,JOSEPH	2030 S OCEAN DRIVE 1605
514226BE3450	KRIEGER,HELEN LE JUBINSKI,MICHAEL	2030 S OCEAN DRIVE 1606
514226BE3460	UNIFIED CREDIT TR CHERNIKOWSKI,TOVA TRSTEE ETAL	2030 S OCEAN DRIVE 1607
514226BE3470	ORTIZ,EBERTO L & NANCY M ORTIZ TR	2030 S OCEAN DRIVE 1608
514226BE3480	GOSTFRAND,ROSE	2030 S OCEAN DRIVE 1609
514226BE3490	AVI INVESTMENTS LTD	2030 S OCEAN DRIVE 1610
514226BE3500	CASCUDO,SEGUNDO	2030 S OCEAN DRIVE 1611
514226BE3510	SAXE,LESLIE	2030 S OCEAN DRIVE 1612
514226BE3520	PARKER PLAZA 1614 LLC	2030 S OCEAN DRIVE 1614

514226BE3530	OSLON,LYUDMILA ZHELEZNYAK,ARKADY	2030 S OCEAN DRIVE 1615
514226BE3540	SUAREZ,JOSE & MARIA	2030 S OCEAN DRIVE 1616
514226BE3550	ERNESSTINE NAJMAN LAND TR NAJMAN,ERNESTINE TRSTEE	2030 S OCEAN DRIVE 1617
514226BE3560	BISELMAN,YEFIM & IRINA	2030 S OCEAN DRIVE 1618
514226BE3570	KISHINEVSKY,SAMUEL & ZINA	2030 S OCEAN DRIVE 1619
514226BE3580	GARCIA,BLANCA M	2030 S OCEAN DRIVE 1620
514226BE3590	EDISON,PAMELA	2030 S OCEAN DRIVE 1621
514226BE3600	KIFELL,Y J & PESSELL LE KIFELL,FEFFREY ETAL	2030 S OCEAN DRIVE 1622
514226BE3610	COPOLOFF,SIDNEY & COPOLOFF,LOTTIE	2030 S OCEAN DRIVE 1623

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514226BE3620	GONCHAR FAM TR VULAKH,ANNA TRSTEE	2030 S OCEAN DRIVE 1624
514226BE3630	WAINSTEIN,GRETA	2030 S OCEAN DRIVE 1625
514226BE3640	COSENTINI,LINA COSENTINI,PETER	2030 S OCEAN DRIVE 1626
514226BE3650	RICHARD PAYNE MEDICAL SVCS INC	2030 S OCEAN DRIVE 1627
514226BE3660	GORBATOV,LEONID LE LEONID GORBATOV REV PREMISES TR	2030 S OCEAN DRIVE 1701
514226BE3670	SAFONOV,VLADIMIR	2030 S OCEAN DRIVE 1702
514226BE3680	ESPINOSA,VICTORIA & ALVAREZ,MARIA VICTORIA	2030 S OCEAN DRIVE 1703
514226BE3690	MILLER,GARY F & MILLER,MALCOLM P ET AL	2030 S OCEAN DRIVE 1704
514226BE3700	MANUEL QUINONES REV TR MARIA P QUINONES REV TR	2030 S OCEAN DRIVE 1705
514226BE3710	NAYFELD,MARK	2030 S OCEAN DRIVE 1706
514226BE3720	BERLACH LIV TR BERLACH,LEONTYNE TRSTEE	2030 S OCEAN DRIVE 1707
514226BE3730	FISCHGRUND,MILTON	2030 S OCEAN DRIVE 1708
514226BE3740	MOROZ,BORIS & DOROTHY	2030 S OCEAN DRIVE 1709
514226BE3750	N SAMSON LLC	2030 S OCEAN DRIVE 1710
514226BE3760	GARCIA,DELIO ROQUE,NORMA B	2030 S OCEAN DRIVE 1711
514226BE3770	SAFFOURI,RAMSEY H	2030 S OCEAN DRIVE 1712
514226BE3780	LERNER,HARRY LE FISHMAN,MARCOS	2030 S OCEAN DRIVE 1714
514226BE3790	SQUILLANTE,RUTH M RUTH M SQUILLANTE REV LIV TR	2030 S OCEAN DRIVE 1715
514226BE3800	COLOCCHIO,NANCY	2030 S OCEAN DRIVE 1716
514226BE3810	GARDASHNIK,SVETLANA GARDASHNIK,MARK	2030 S OCEAN DRIVE 1717
514226BE3820	MEJIDO,RAMON & MAYRA E	2030 S OCEAN DRIVE 1718
514226BE3830	TARGINO,ABELARDO P AVE HIST RAIMUNDO	2030 S OCEAN DRIVE 1719
514226BE3840	WEINBERG,MICHAEL J SCHIFFER,LAURA	2030 S OCEAN DRIVE 1720
514226BE3850	ISEMONGER,LEONARD	2030 S OCEAN DRIVE 1721
514226BE3860	MINEN,MAURICE & MINEN,INAGAIL	2030 S OCEAN DRIVE 1722
514226BE3870	CHAIKEN,WILLIAM	2030 S OCEAN DRIVE 1723
514226BE3880	774871 ONTARIO LTD	2030 S OCEAN DRIVE 1724
514226BE3890	9063-0716 QUEBEC INC	2030 S OCEAN DRIVE 1725
514226BE3900	AZMAN,IRWIN AZMAN,DONNA T	2030 S OCEAN DRIVE 1726
514226BE3910	WAINSTEIN,MARK WAINSTEIN,GRETA	2030 S OCEAN DRIVE 1727
514226BE3920	KURIS,MARIA	2030 S OCEAN DRIVE 1801
514226BE3930	CASTIGLIONE,DIANE H/E CASTIGLIONE,ROSEANN ETAL	2030 S OCEAN DRIVE 1802
514226BE3940	ABISSIDAN,SIMON & MADELEINE	2030 S OCEAN DRIVE 1803
514226BE3950	HELEN COHEN REV LIV TR COHEN,HELEN TRSTEE	2030 S OCEAN DRIVE 1804
514226BE3960	MARES,GRETA LE CHUSID,HILDA E	2030 S OCEAN DRIVE 1805
514226BE3970	KESSLER,BLOSSOM LE WEXLER,ANDREA	2030 S OCEAN DRIVE 1806
514226BE3980	KILIC,HAGOP & SILVA KILIC,SELIN	2030 S OCEAN DRIVE 1807
514226BE3990	SILSTON,HOWARD	2030 S OCEAN DRIVE 1808
514226BE4000	SAVARD,MANON SAVARD,SERGE	2030 S OCEAN DRIVE 1809
514226BE4010	TIMLICHMAN,SIMON & TIMLICHMAN,SVETLANA	2030 S OCEAN DRIVE 1810
514226BE4020	CIOFFI,PETER TECCE,JOE	2030 S OCEAN DRIVE 1811
514226BE4030	WEINER,HELEN TR	2030 S OCEAN DRIVE 1812
514226BE4040	MANDL,VERA LE MANDL,ELIJAH	2030 S OCEAN DRIVE 1814

514226BE4050	TYLBOR,LOUISE	2030 S OCEAN DRIVE 1815
514226BE4060	INDECH,MICHAEL & HANA	2030 S OCEAN DRIVE 1816
514226BE4070	PUPKOVA,LYUDMILA S RYAZANKIN,VYACHESLAV P	2030 S OCEAN DRIVE 1817
514226BE4080	LEVIN,MICHAEL & RITA	2030 S OCEAN DRIVE 1818
514226BE4090	MIRENSKY,MICHAEL & ALISA LE FRANKEL,YELENA MIRENSKY	2030 S OCEAN DRIVE 1819
514226BE4100	FLORA Y MARTINEZ REV TR MARTINEZ,F Y & GUILLERMO TRSTEE	2030 S OCEAN DRIVE 1820
514226BE4110	M & S PROPERTY MANAGEMENT CORP	2030 S OCEAN DRIVE 1821

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514226BE4120	BEULAH ZUKOR REV LIV TR SKLAR,ERICA R TRSTEE	2030 S OCEAN DRIVE 1822
514226BE4130	EFMAN,FYODOR & ANNA	2030 S OCEAN DRIVE 1823
514226BE4140	ISRAEL,JUDA & RITA	2030 S OCEAN DRIVE 1824
514226BE4150	FEDERAL NATIONAL MORTGAGE ASSN	2030 S OCEAN DRIVE 1825
514226BE4160	TENENBAUM,JULIA LE TENENBAUM,VICTOR L	2030 S OCEAN DRIVE 1826
514226BE4170	PERLMAN,STANLEY & MARILYN STANLEY & MARILYN PERLMAN REV TR	2030 S OCEAN DRIVE 1827
514226BE4180	GONZALEZ,JUAN & GONZALEZ,ANA	2030 S OCEAN DRIVE 1901
514226BE4190	LOEWY,VERONICA	2030 S OCEAN DRIVE 1902
514226BE4200	LITOVCHENKO,NATALIYA	2030 S OCEAN DRIVE 1903
514226BE4210	GOES,MARIA H MARTINS DA SILVEIRA GOES,ALINE MARTINS ETAL	2030 S OCEAN DRIVE 1904
514226BE4220	ROTHSCHILD,HANA & ROTHSCHILD,KAREN	2030 S OCEAN DRIVE 1905
514226BE4230	NOVA,ALLA & NOVA,DMITRY	2030 S OCEAN DRIVE 1906
514226BE4240	M & S PROPERTY MGMT CORP	2030 S OCEAN DRIVE 1907
514226BE4250	MELNIKOVA,NINA	2030 S OCEAN DRIVE 1908
514226BE4260	SNYDER,PHILIP & SARA	2030 S OCEAN DRIVE 1909
514226BE4270	614179 ONTARIO LTD	2030 S OCEAN DRIVE 1910
514226BE4280	JULIO CESAR TRUTNER REV TR TRUTNER,JULIO CESAR TRSTEE	2030 S OCEAN DRIVE 1911
514226BE4290	MOSER,MARK M NELSON-MOSER,LAURIE K	2030 S OCEAN DRIVE 1912
514226BE4300	COLICCHIO,NANCY DECELLE TR	2030 S OCEAN DRIVE 1914
514226BE4310	LINERO,AURELIO R JR & WANDA T B	2030 S OCEAN DRIVE 1915
514226BE4320	LINERO,AURELIO R JR & BENDER-LINERO,WANDA	2030 S OCEAN DRIVE 1916
514226BE4330	FARIAN,MICHAEL	2030 S OCEAN DRIVE 1917
514226BE4340	FERRARA,ANNE-MARIE FERRARA,JONATHAN ETAL	2030 S OCEAN DRIVE 1918
514226BE4350	SPIEGEL,ESSER & SHARON	2030 S OCEAN DRIVE 1919
514226BE4360	RAIDER,DORIS	2030 S OCEAN DRIVE 1920
514226BE4370	FEINGOLD,NEIL FEINGOLD,NICOLE	2030 S OCEAN DRIVE 1921
514226BE4380	VORDERMIER,ARLINE LE HOLZHAUER,STEVEN & HOLZHAUER,R	2030 S OCEAN DRIVE 1922
514226BE4390	ARSHANKLY,VLADIMIR	2030 S OCEAN DRIVE 1923
514226BE4400	MIZRAHI,JOSEPH & REGINA	2030 S OCEAN DRIVE 1924
514226BE4410	RIVERO,GASTON	2030 S OCEAN DRIVE 1925
514226BE4420	ERRICO,ALEXANDRA OCHAKOVSKAYA,IRENE	2030 S OCEAN DRIVE 1926
514226BE4430	FLORIO,CAROLE FLORIO,DANIEL	2030 S OCEAN DRIVE 1927
514226BE4440	PLIKH,EDWARD & ALLA	2030 S OCEAN DRIVE 2001
514226BE4450	LAPOINTE,DENIS	2030 S OCEAN DRIVE 2002
514226BE4460	STROMFELD,ADAM LE STROMFELD,STUART LE	2030 S OCEAN DRIVE 2003
514226BE4470	SHAMAYEVA,STELLA SHAMAYEV,ROBERT	2030 S OCEAN DRIVE 2004
514226BE4480	REISKIN,MARGE TR	2030 S OCEAN DRIVE 2005
514226BE4490	KURILOV,VASILY & LUDMELA LE MEYDMAN,DANIELLE	2030 S OCEAN DRIVE 2006
514226BE4500	GORAN,ALAN N ALAN N GORAN REV LIV TR	2030 S OCEAN DRIVE 2007
514226BE4510	ROCHMAN,TOVA LE ROCHMAN,RAMMY ETAL	2030 S OCEAN DRIVE 2008
514226BE4520	FISHMAN,MARINA FISHMAN,MARK	2030 S OCEAN DRIVE 2009
514226BE0020	DAVIDZON,ARON	2030 S OCEAN DRIVE 201
514226BE4530	BOKOBZA,HUBERT	2030 S OCEAN DRIVE 2010
514226BE4540	CASTANO FAM REV LIV TR DIEGO & JULIETA CASTANO TRSTEE	2030 S OCEAN DRIVE 2011
514226BE4550	MITTLER,RONALD & JEANETTE B	2030 S OCEAN DRIVE 2012
514226BE4560	ALVARDO,ANNA & FROWISS,FRANK	2030 S OCEAN DRIVE 2014
514226BE4570	TASIOPOULOS,DANKA TASIOPOULOS,TOM	2030 S OCEAN DRIVE 2015
514226BE4580	MORALES,RENE L	2030 S OCEAN DRIVE 2016
514226BE4590	LEVINE,SHERRILL ANNE	2030 S OCEAN DRIVE 2017
514226BE4600	POGREBITSKY,GENNADY	2030 S OCEAN DRIVE 2018

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514226BE4610	DELIMA,SELMA LE SELMA DELIMA REV LIV TR	2030 S OCEAN DRIVE 2019
514226BE0030	WEITZMAN,HANNA H/E WEITZMAN,ELENA	2030 S OCEAN DRIVE 202
514226BE4620	SILVERMAN,ELI FRIEDLANDER,ENID	2030 S OCEAN DRIVE 2020
514226BE4630	JOAN L OPPENHEIMER TR MARIANNE LAWTON TR	2030 S OCEAN DRIVE 2021
514226BE4640	SHAPIRO,ALBERT	2030 S OCEAN DRIVE 2022
514226BE4650	ORLOWSKI,JOSEPH LE CUKIERWAR,HELENE & HOLZSAGER,D	2030 S OCEAN DRIVE 2023
514226BE4660	MARK & ESFIR SIKAR LIV TR SIKAR,ESFIR & MARK TRSTEE	2030 S OCEAN DRIVE 2024
514226BE4670	CABRERA,YISBEL & CABRERA,JOSE L & DOLORES R	2030 S OCEAN DRIVE 2025
514226BE4680	MATASAR,KENNETH & JUDITH	2030 S OCEAN DRIVE 2026
514226BE4690	CLOCKWORK ORANGE INC	2030 S OCEAN DRIVE 2027
514226BE0040	ANCHIA,RAMON A PICHARDO-ALVAREZ,ZAYDA	2030 S OCEAN DRIVE 203
514226BE0050	ANIBAL J MORENO PEREZ REV LIV TR PEREZ,ANIBAL JAVIER MORENO TRSTE	2030 S OCEAN DRIVE 204
514226BE0060	MARTIN,EVARISTO B	2030 S OCEAN DRIVE 205
514226BE0070	SKEVIN,ANNA	2030 S OCEAN DRIVE 206
514226BE0080	SAGER,ROBERT CODAS,SHERYLL	2030 S OCEAN DRIVE 207
514226BE0090	RUIZ,ELISA M	2030 S OCEAN DRIVE 208
514226BE0100	MILNE,RUTH	2030 S OCEAN DRIVE 209
514226BE0110	MALEVSKY,MICHAEL LURIE,ANNA	2030 S OCEAN DRIVE 210
514226BE4700	GALGANOV,GITTA GOLD,RONA	2030 S OCEAN DRIVE 2101
514226BE4710	IOUNATANOV,IGOR	2030 S OCEAN DRIVE 2102
514226BE4720	MEISLER,MIKE & FREIDA WEIDER,ESTHER MULLER	2030 S OCEAN DRIVE 2103
514226BE4730	COPOLOFF,WILLIAM LE COPOLOFF,SHARON	2030 S OCEAN DRIVE 2104
514226BE4740	FIGHTER EXPRESS INC % HSBC PRIVATE BANK/BILL PAY	2030 S OCEAN DRIVE 2105
514226BE4750	SHEININ,EDWARD SHEININ,GALINA	2030 S OCEAN DRIVE 2106
514226BE4760	DAVIS,EVELYN K EVELYN K DAVIS REV TR	2030 S OCEAN DRIVE 2107
514226BE4770	LEVINSON,HAYA LE LEVINSON,MORDECHAI & DAVID,M	2030 S OCEAN DRIVE 2108
514226BE4780	KATZ,A DAVID & PHYLLIS	2030 S OCEAN DRIVE 2109
514226BE0120	ALONSO,SUSANNA J H/E ALONSO,WILLIAM D & IRAIDA M	2030 S OCEAN DRIVE 211
514226BE4790	GOLDMAN,DANIEL	2030 S OCEAN DRIVE 2110
514226BE4800	MENDEZ,JORGE A	2030 S OCEAN DRIVE 2111
514226BE4810	MAGER,RUTH LE KATZ,ROSANNE MAGER	2030 S OCEAN DRIVE 2112
514226BE4820	HORNSTEIN,CALVIN P & JOAN L CALVIN & J HORNSTEIN REV LIV TR	2030 S OCEAN DRIVE 2114
514226BE4830	PINKUS,DONALD PINKUS,EVELYN	2030 S OCEAN DRIVE 2115
514226BE4840	KRAVETS,YAKOV & RAISSA & KRAVETS,GRIGORY	2030 S OCEAN DRIVE 2116
514226BE4850	RIKSHPUN,ALEKSANDR	2030 S OCEAN DRIVE 2117
514226BE4860	GUREVICH,YAN LAGUN,JULIA & LAGUN,ROMAN	2030 S OCEAN DRIVE 2118
514226BE4870	PEREZ,MARIA TERESA	2030 S OCEAN DRIVE 2119
514226BE0130	1221716 ONTARIO INC	2030 S OCEAN DRIVE 212
514226BE4880	MOREIRA,ADRIANA	2030 S OCEAN DRIVE 2120
514226BE4890	ANDRADE,RAFAEL & MARIA DEL P & ANDRADE,VIOLETA ET AL	2030 S OCEAN DRIVE 2121
514226BE4900	SARNA,TAKSHILA	2030 S OCEAN DRIVE 2122
514226BE4910	SHAROW,BARRY SHAROW,ELIZABETH	2030 S OCEAN DRIVE 2123
514226BE4920	CASPI,IEHUDIT & MARK	2030 S OCEAN DRIVE 2124
514226BE4930	BRILON,JACOB & BUDMAN,EVA	2030 S OCEAN DRIVE 2125
514226BE4940	MORGANSTEIN,MARSHALL	2030 S OCEAN DRIVE 2126
514226BE4950	PAMELA GOLDSTEIN TR GOLDSTEIN,PAMELA	2030 S OCEAN DRIVE 2127
514226BE0140	MARCH,MICHAEL	2030 S OCEAN DRIVE 214
514226BE0150	KALIKHMAN,ABRAM & ROSALIA LE KALIKHMAN,D & KALIKHMAN,S	2030 S OCEAN DRIVE 215
514226BE0160	DIAZ,MANUEL E SR & DULCE	2030 S OCEAN DRIVE 216
514226BE0170	GARCIA,GILBERTO & BLANCA	2030 S OCEAN DRIVE 217

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514226BE0180	STEINBERG,RUTH	2030 S OCEAN DRIVE 218
514226BE0190	ROZENBAUM,MIRIAM	2030 S OCEAN DRIVE 219
514226BE0200	COHEN,BASIL & GLORIA GRUBER	2030 S OCEAN DRIVE 220
514226BE4960	NANCY DECELLE COLICCHIO REV TR COLICCHIO,NANCY DECELLE TRSTEE	2030 S OCEAN DRIVE 2201
514226BE4970	KOLMYKOV,VICTOR KOLMYKOVA,INNA	2030 S OCEAN DRIVE 2202
514226BE4980	MILSTEIN,FRANCES MILSTEIN,MAX EST	2030 S OCEAN DRIVE 2203
514226BE4990	BENADIBA,MICHAEL MENAHEM	2030 S OCEAN DRIVE 2204
514226BE5000	MALKA,MICHAEL H S	2030 S OCEAN DRIVE 2205
514226BE5010	TOLEDANO,SARAH E	2030 S OCEAN DRIVE 2206
514226BE5020	NEFT,BERNICE	2030 S OCEAN DRIVE 2207
514226BE5030	RUBIN,HANA	2030 S OCEAN DRIVE 2208
514226BE5040	RENE CROCHETIERE LIV TR PAULETTE B CROCHETIERE LIV TR	2030 S OCEAN DRIVE 2209
514226BE0210	IGLESIAS FAM REV LIV TR IGLESIAS,PEDRO E TRSTEE ETAL	2030 S OCEAN DRIVE 221
514226BE5050	COHEN,RITA S	2030 S OCEAN DRIVE 2210
514226BE5060	FISCHER,LEA	2030 S OCEAN DRIVE 2211
514226BE5070	NICKIN,LEAH	2030 S OCEAN DRIVE 2212
514226BE5080	BRACCO,CAROLE	2030 S OCEAN DRIVE 2214
514226BE5090	PORTNOY,ROCHELLE M ROCHELLE M PORTNOY REV TR	2030 S OCEAN DRIVE 2215
514226BE5100	IADELUCA,LUCIA LOPEZ,PASQUALE	2030 S OCEAN DRIVE 2216
514226BE5110	PINO,VICTORIA	2030 S OCEAN DRIVE 2217
514226BE5120	PHILBRICK,WALTER	2030 S OCEAN DRIVE 2218
514226BE5130	2030 SOUTH OCEAN DRIVE TR	2030 S OCEAN DRIVE 2219
514226BE0220	ESTEVEZ,GUILLERMO & FLORENTINA	2030 S OCEAN DRIVE 222
514226BE5140	BIEBER,SANDER M & ROSENZWEIG,LINDA E	2030 S OCEAN DRIVE 2220
514226BE5150	VERXAGIO,RYAN	2030 S OCEAN DRIVE 2221
514226BE5160	KOMAROVSKAYA,GALINA	2030 S OCEAN DRIVE 2222
514226BE5170	GAYER,SARA	2030 S OCEAN DRIVE 2223
514226BE5180	DRAZNIN,GENIA H/E FELDMAN,ESTHER DRAZNIN	2030 S OCEAN DRIVE 2224
514226BE5190	ROZET,ANNA	2030 S OCEAN DRIVE 2225
514226BE5200	KOENIG,ANNIE & LEHRER,JUDY KOENIG	2030 S OCEAN DRIVE 2226
514226BE5210	MOUNTAINTOP INVEST LTD % ROSS H MANELLA PA	2030 S OCEAN DRIVE 2227
514226BE0230	HRASKA,CARI HEATHER HRASKA,ROBERT P	2030 S OCEAN DRIVE 223
514226BE0240	HECHT,DONALD & RODIS,LINDA	2030 S OCEAN DRIVE 224
514226BE0250	TROMBETTA,SANTO	2030 S OCEAN DRIVE 225
514226BE0260	CONDO ASSN OF PARKER PLAZA EST INC %SAAVEDRA PELOSI GOODWIN	2030 S OCEAN DRIVE 226
514226BE0270	SHERMAN,LYUBA & SHERMAN,SIMON	2030 S OCEAN DRIVE 227
514226BE0280	PALMISANO,DOREEN SCHISANI,LOUIS	2030 S OCEAN DRIVE 301
514226BE0290	RIPEPI,ANTHONY & ROSARIA	2030 S OCEAN DRIVE 302
514226BE0300	PEREZ,GRISELDA	2030 S OCEAN DRIVE 303
514226BE0310	BURDAEVA,NATALIYA	2030 S OCEAN DRIVE 304
514226BE0320	FELDMAN,EARL J & MARION M	2030 S OCEAN DRIVE 305
514226BE0330	RICHMAN,MARK & RICHMAN,LISA % JOSEPH & FRANCES RICHMAN	2030 S OCEAN DRIVE 306
514226BE0340	IVANYUTA,GRIGORY IVANYUTA,VERA NIKOLAYEVNA ETAL	2030 S OCEAN DRIVE 307
514226BE0350	1031998 ONTARIO LTD	2030 S OCEAN DRIVE 308
514226BE0360	GETSELIS,ARKADY GETSELIS,SVETLANA	2030 S OCEAN DRIVE 309
514226BE0370	FERNANDEZ,CAROLINA	2030 S OCEAN DRIVE 310
514226BE0380	RIVERO,ROLANDO & LINA	2030 S OCEAN DRIVE 311
514226BE0390	RUTH A DEUTSCH TR DEUTSCH,STEPHEN S TRSTEE	2030 S OCEAN DRIVE 312
514226BE0400	LEMBO,GERMAN SARACHO LE H/E SCORZA,CRISTINA ETAL	2030 S OCEAN DRIVE 314
514226BE0410	CARL SCHLESINGER FAM TR SCHLESINGER,DAVID A TRSTEE	2030 S OCEAN DRIVE 315

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Folio Number	Owner Name	Property Address
514226BE0420	GOLDSMITH,MORTY & BECCA LE GOLDSMITH,DAVID S ETAL	2030 S OCEAN DRIVE 316
514226BE0430	CONDOMINIUM ASSN OF PARKER PLAZA ESTATES INC	2030 S OCEAN DRIVE 317
514226BE0440	KASIAN,EKATERINA	2030 S OCEAN DRIVE 318
514226BE0450	LAGONIKOS,MINAS & YUDITH	2030 S OCEAN DRIVE 319
514226BE0460	LAS INFANTAS LLC	2030 S OCEAN DRIVE 320
514226BE0470	MOERDLER,C G & PEARL	2030 S OCEAN DRIVE 321
514226BE0480	MOERDLER,CHARLES G & MOERDLER,PEARL	2030 S OCEAN DRIVE 322
514226BE0490	MOERDLER,CHARLES G & PEARL	2030 S OCEAN DRIVE 323
514226BE0500	MOSSA,RALPH & ANGELA & MOSSA,NICOLA & MARINA	2030 S OCEAN DRIVE 324
514226BE0510	KUDRYTSKI,ALEN	2030 S OCEAN DRIVE 325
514226BE0520	ZILLAN,JOSEPH & LUCY	2030 S OCEAN DRIVE 326
514226BE0530	DOYLE,SHERLY YVONNE	2030 S OCEAN DRIVE 327
514226BE0540	JAKUBOV,EDWARD & LARISA JAKUBOV,NEKADAM	2030 S OCEAN DRIVE 401
514226BE0550	BALDA,MARIO X	2030 S OCEAN DRIVE 402
514226BE0560	CIB GROUP LLC	2030 S OCEAN DRIVE 403
514226BE0570	ABRAMOV,EDUARD ISKHAKOVA,NELLYA	2030 S OCEAN DRIVE 404
514226BE0580	HURVITZ,ELIZABETH	2030 S OCEAN DRIVE 405
514226BE0590	HURVITZ,JEAN JEAN HURVITZ REV TR	2030 S OCEAN DRIVE 406
514226BE0600	KOVAC,PETER KOVAC,JOHN & KOVAC,STEVEN	2030 S OCEAN DRIVE 407
514226BE0610	SASSON,JAKLINE	2030 S OCEAN DRIVE 408
514226BE0620	VALKO FAMILY LLC	2030 S OCEAN DRIVE 409
514226BE0630	ROITER,HOWARD & ROITER,HILDA OSMO	2030 S OCEAN DRIVE 410
514226BE0640	SHELTON,SUSANA E	2030 S OCEAN DRIVE 411
514226BE0650	HAZAN,ALBERT & DALILA	2030 S OCEAN DRIVE 412
514226BE0660	GALUTEN,HORTENSE ROBERT GALUTEN REV TR	2030 S OCEAN DRIVE 414
514226BE0670	MENDOZA,JOSE & MENDOZA,HAYDEE	2030 S OCEAN DRIVE 415
514226BE0680	ROSA,ROGUER RODRIGUEZ,DIANE	2030 S OCEAN DRIVE 416
514226BE0690	SPIRA,BERNARD	2030 S OCEAN DRIVE 417
514226BE0700	JOSEPH TRESSER TR GRABOIS,ANNE TRSTEE ETAL	2030 S OCEAN DRIVE 418
514226BE0710	SHIMABUKURO,OSCAR & E K H/E OIE,KENNY A & ZAMORA,KELLY	2030 S OCEAN DRIVE 419
514226BE0720	RODRIGUEZ,JOSE ALBERTO GARCIA SALINAS,NILA M SICILIA	2030 S OCEAN DRIVE 420
514226BE0730	SHAMLIAN,LINDA	2030 S OCEAN DRIVE 421
514226BE0740	ETIENNE,DECIUS & CAROL	2030 S OCEAN DRIVE 422
514226BE0750	GILCHRIST,GEORGE A BACKUS-GILCHRIST,DEBORAH A	2030 S OCEAN DRIVE 423
514226BE0760	KALMANOVICH,AYZIK & TAMARA	2030 S OCEAN DRIVE 424
514226BE0770	POKHIS,LEV & OLGA	2030 S OCEAN DRIVE 425
514226BE0780	KRAMER,NAUM & SOFIA ROSENFIELD,SUSANNA & EDWARD	2030 S OCEAN DRIVE 426
514226BE0790	KALUSIN,LIJA TUNIS LIJA TUNIS KALUSIN TR	2030 S OCEAN DRIVE 427
514226BE0800	GABOR,STEVEN & GABOR,JUDITH & LUTERMAN,A & GABOR,RONALD M	2030 S OCEAN DRIVE 501
514226BE0810	SIERRA,NELSON & CARMEN	2030 S OCEAN DRIVE 502
514226BE0820	GOLDSTEIN,PAMELA LIPPEL,ARLENE	2030 S OCEAN DRIVE 503
514226BE0830	FOGEL,ELENA LE ELENA FOGEL IRREV LIV TR	2030 S OCEAN DRIVE 504
514226BE0840	GOLDMAN,CECELIA & GOLDMAN,DMITRY	2030 S OCEAN DRIVE 505
514226BE0850	LICHENSTEIN-MARROCCO,JUDITH A	2030 S OCEAN DRIVE 506
514226BE0860	BENZAQUEN,BRUNO	2030 S OCEAN DRIVE 507
514226BE0870	ROTRAND,MARVIN	2030 S OCEAN DRIVE 508
514226BE0880	FONTANILLES,ANA M	2030 S OCEAN DRIVE 509
514226BE0890	NANCY DE CELLE COLICCHIO TR COLICCHIO,NANCY DE C TRSTEE	2030 S OCEAN DRIVE 510
514226BE0900	SANCHEZ,WILLIAM & GLADYS M	2030 S OCEAN DRIVE 511

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Folio Number	Owner Name	Property Address
514226BE0920	ROITMAN,RITA H/E ROITMAN,ABRAHAM	2030 S OCEAN DRIVE 514
514226BE0930	DI GIOVANNI,ANGELA	2030 S OCEAN DRIVE 515
514226BE0940	GOMEZ,JOSE R RAURELL-GOMEZ,GABRIELLA M	2030 S OCEAN DRIVE 516
514226BE0950	DU QUESNE,JORGE I	2030 S OCEAN DRIVE 517
514226BE0960	HOROWITZ,STELLA STELLA HOROWITZ TR	2030 S OCEAN DRIVE 518
514226BE0970	SHEER,MARCEL M,SHEER,LUDMILA BLOCK,GISELLE F,SHEER,JOHN L	2030 S OCEAN DRIVE 519
514226BE0980	IOVINO,ANTHONY V ANTHONY V IOVINO REV TR	2030 S OCEAN DRIVE 520
514226BE0990	VELIS,NICK VELIS,POTA	2030 S OCEAN DRIVE 521
514226BE1000	ANNA ALVARADO LIV TR ALVARADO,ANNA TRSTEE	2030 S OCEAN DRIVE 522
514226BE1010	MARCHANDO,BARBARA W H/E PRITCHARD,GLORIA ETAL	2030 S OCEAN DRIVE 523
514226BE1020	ROSILLO,FRANK	2030 S OCEAN DRIVE 524
514226BE1030	ALEONG,PHILLIP & ALEONG,PAMELA	2030 S OCEAN DRIVE 525
514226BE1040	SENZON,SOPHIE LE SENZON,LESLIE	2030 S OCEAN DRIVE 526
514226BE1050	BATELMAN,IGOR & BATELMAN,MERA	2030 S OCEAN DRIVE 527
514226BE1060	ALFONSI,DANIELE ALFONSI,TANIA	2030 S OCEAN DRIVE 601
514226BE1070	SUDESTADA LLC	2030 S OCEAN DRIVE 602
514226BE1080	GUGUETTI,EDWARD JOSEPH SERGNESE,EVANGELINA	2030 S OCEAN DRIVE 603
514226BE1090	OLIVEROS,ALDO & PEREZ,YVONNE	2030 S OCEAN DRIVE 604
514226BE1100	LIPPEL,ARLENE J	2030 S OCEAN DRIVE 605
514226BE1110	MONGE,ARLENE MONGE,PAMELA	2030 S OCEAN DRIVE 606
514226BE1120	MELAMED,SOFIA	2030 S OCEAN DRIVE 607
514226BE1130	PALMA,VITO & LORADANA	2030 S OCEAN DRIVE 608
514226BE1140	LEGON,MARY	2030 S OCEAN DRIVE 609
514226BE1150	ALAN J MEYER TR KEY PRIVATE BANK TRSTEE	2030 S OCEAN DRIVE 610
514226BE1160	PIVOVAROVA,JANET TSIRKIN,JACOB M	2030 S OCEAN DRIVE 611
514226BE1170	GALASSO,FRANK L & LUZZI,MARY-LYNN ETAL	2030 S OCEAN DRIVE 612
514226BE1180	LEVIN,DAVID & ROBIN	2030 S OCEAN DRIVE 614
514226BE1190	SPERDUTI,BRUNO & DEBORAH	2030 S OCEAN DRIVE 615
514226BE1200	HERNANDEZ FAM LIV TR HERNANDEZ,PEDRO & CONNIE TRSTEES	2030 S OCEAN DRIVE 616
514226BE1210	KOGAN,PAVEL & IRINA	2030 S OCEAN DRIVE 617
514226BE1220	BEER,RITA	2030 S OCEAN DRIVE 618
514226BE1230	GORDON,BELLA BLAUSHIELD,EDWARD & ROSLYN	2030 S OCEAN DRIVE 619
514226BE1240	COEN,JOHN & PIPITONE,ANGEL	2030 S OCEAN DRIVE 620
514226BE1250	PARKER PLAZA 621 LLC %SCANZANO,FRANCESCO	2030 S OCEAN DRIVE 621
514226BE1260	MAYER,TAMAR	2030 S OCEAN DRIVE 622
514226BE1270	MEHANI,DAVID & ODETTE	2030 S OCEAN DRIVE 623
514226BE1280	LAGO,ESTER LE CARLOS & ESTER LAGO TR	2030 S OCEAN DRIVE 624
514226BE1290	VICTOR CASTING INC	2030 S OCEAN DRIVE 625
514226BE1300	TSUDEK,SHEILA & ABRAM H/E GARBER,ELLEN & VLADIMIR	2030 S OCEAN DRIVE 626
514226BE1310	BOKK,ALEKSANDER GELLER,ANETTA	2030 S OCEAN DRIVE 627
514226BE1320	ASATURYAN,ROBERTINO	2030 S OCEAN DRIVE 701
514226BE1330	MIKHAYLOV,OLGA	2030 S OCEAN DRIVE 702
514226BE1340	ARKER,DINA BRASS,ALAN	2030 S OCEAN DRIVE 703
514226BE1350	SPINRAD,SHULA	2030 S OCEAN DRIVE 704
514226BE1360	LEON,HENILDO & LEON,MAYDA	2030 S OCEAN DRIVE 705
514226BE1370	MURRAY ZUCKERMAN LIV TR PHYLLIS ZUCKERMAN LIV TR	2030 S OCEAN DRIVE 706
514226BE1380	EILEY,SHARON & EILEY,STANLEY	2030 S OCEAN DRIVE 707
514226BE1390	MANSBACH,BARRY & NATALIE	2030 S OCEAN DRIVE 708

514226BE1400	FLANAGAN,SAMUEL JONES	2030 S OCEAN DRIVE 709
514226BE1410	PRESS,LUCY & ROMAN J	2030 S OCEAN DRIVE 710

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514226BE1420	N SAMSON LLC	2030 S OCEAN DRIVE 711
514226BE1430	BARTH,BARRY BARTH,MARLENE	2030 S OCEAN DRIVE 712
514226BE1440	KLEIN,AITANA	2030 S OCEAN DRIVE 714
514226BE1450	ROSLYN SCHRANK TR SCHRANK,ROSLYN TRSTEE	2030 S OCEAN DRIVE 715
514226BE1460	FRANTS,VLAD LIKHOLETOVA,TAMARA	2030 S OCEAN DRIVE 716
514226BE1470	DANIES,EDGAR H/E DANIES,ARMINTA	2030 S OCEAN DRIVE 717
514226BE1480	ROSENBERG,HARRY & HELEN	2030 S OCEAN DRIVE 718
514226BE1490	LUSTIG,BARRY & LINDA	2030 S OCEAN DRIVE 719
514226BE1500	PINKUS,DONALD C & PINKUS,EVELYN R	2030 S OCEAN DRIVE 720
514226BE1510	HORAN,MICHAEL & VELAZQUEZ,LYDIA	2030 S OCEAN DRIVE 721
514226BE1520	BASOV,SOFIA BASOV,DANIEL & ARNOLD	2030 S OCEAN DRIVE 722
514226BE1530	FERNANDEZ,ALINA H/E VALDES,JORGE	2030 S OCEAN DRIVE 723
514226BE1540	LERMAN,DMITRY LERMAN,TAMARA	2030 S OCEAN DRIVE 724
514226BE1550	SABLE SEA LLC	2030 S OCEAN DRIVE 725
514226BE1560	LERNER,MARC E & EMILY B	2030 S OCEAN DRIVE 726
514226BE1570	GARCIA,NANCY L	2030 S OCEAN DRIVE 727
514226BE1580	TILLMAN,GISELA & PEREZ,SOL	2030 S OCEAN DRIVE 801
514226BE1590	CABANILLAS,ALFREDO & CABANILLAS,JULIA	2030 S OCEAN DRIVE 802
514226BE1600	SAMOILOVICH,ALEX SAMOILOVICH,MARIA	2030 S OCEAN DRIVE 803
514226BE1610	KONOV,ALEXEI KONOVA,IRINA	2030 S OCEAN DRIVE 804
514226BE1620	RUBINSON,CHANA	2030 S OCEAN DRIVE 805
514226BE1630	PARIS,RENEE H/E ROSA,MICHAEL	2030 S OCEAN DRIVE 806
514226BE1640	LEHRER,HELENA	2030 S OCEAN DRIVE 807
514226BE1650	BENOWITZ,PHILIP CAPPARO,PAULINE	2030 S OCEAN DRIVE 808
514226BE1660	CAPLAN,ROSALIE KLEIN	2030 S OCEAN DRIVE 809
514226BE1670	SYNECTIC SERVICES INC GENNARO,WILLIAM D & BETTY J	2030 S OCEAN DRIVE 810
514226BE1680	GREEN,MICHAEL	2030 S OCEAN DRIVE 811
514226BE1690	ARMANDO C & L LEYVA REV LIV TR LEYVA,ARMANDO C TRSTEE ETAL	2030 S OCEAN DRIVE 812
514226BE1700	LUSTIG,BARRY LUSTIG,LINDA	2030 S OCEAN DRIVE 814
514226BE1710	GN REALTY INVESTMENTS LLC	2030 S OCEAN DRIVE 815
514226BE1720	AARON,WILLIAM & SHARON M	2030 S OCEAN DRIVE 816
514226BE1730	SLOVES,SYLVIA S % TOLEDANO	2030 S OCEAN DRIVE 817
514226BE1740	WEINTRAUB,ELAINE & WEINTRAUB,STANLEY	2030 S OCEAN DRIVE 818
514226BE1750	SCHORER,CLARA	2030 S OCEAN DRIVE 819
514226BE1760	PEREZ-PASCUAL,MIGUEL & MARIBEL	2030 S OCEAN DRIVE 820
514226BE1770	MURTHY,HALLEGERE & MYETRAIE MURTHY,RASHMI	2030 S OCEAN DRIVE 821
514226BE1780	CAPOTE,NANCY CARCACHE,HIRAIDA	2030 S OCEAN DRIVE 822
514226BE1790	KON,FREDA & SILVER,ROSE LILY & SILVER,NARIN	2030 S OCEAN DRIVE 823
514226BE1800	DAVIDOV FAM TR DAVIDOV,THEODORE & CORINNE TRS	2030 S OCEAN DRIVE 824
514226BE1810	GLENSE,DOREEN	2030 S OCEAN DRIVE 825
514226BE1820	YUROVITSKY,ANATOLY & GETA	2030 S OCEAN DRIVE 826
514226BE1830	LERNER,EMILY B	2030 S OCEAN DRIVE 827
514226BE1840	PUTTERMAN,BURTON M & PUTTERMAN,HELEN L	2030 S OCEAN DRIVE 901
514226BE1850	DONATINI,MARIA MARINO,JUAN CARLOS	2030 S OCEAN DRIVE 902
514226BE1860	MADRAZO,JOSE A & MADRAZO,DAISY M	2030 S OCEAN DRIVE 903
514226BE1870	PEKATS,JOHNNY P LE JOHNNY P & SYLVIA PEKATS REV TR	2030 S OCEAN DRIVE 904
514226BE1880	GOLUMB,ERIC G	2030 S OCEAN DRIVE 905
514226BE1890	GINDES,LEONID LE BECKERMAN,ALEXANDRA ETAL	2030 S OCEAN DRIVE 906

514226BE1900	MAGLA	2030 S OCEAN DRIVE 907
514226BE1910	POLICAR,ELISA LE POLICAR,ALBERTO & POLICAR,DAVID	2030 S OCEAN DRIVE 908

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514226BE1920	COSTINO,MARALEE A MARALEE A COSTINO REV TR	2030 S OCEAN DRIVE 909
514226BE1930	MONTES DE OCA,JOSE & ALIETTE	2030 S OCEAN DRIVE 910
514226BE1940	DE ARMAS,JORGE	2030 S OCEAN DRIVE 911
514226BE1950	GONZALEZ,ANTONIO P & ALBA L	2030 S OCEAN DRIVE 912
514226BE1960	GINCHERMAN,VLADIMIR & MARINA	2030 S OCEAN DRIVE 914
514226BE1970	MASSIF CENTRAL LLC	2030 S OCEAN DRIVE 915
514226BE1980	SEDKYH,MAKSIM SEDYKH,EKATERINA	2030 S OCEAN DRIVE 916
514226BE1990	MILLER,EDWARD	2030 S OCEAN DRIVE 917
514226BE2000	GOLDEN,MARTHA LE MARTHA GOLDEN REV TR	2030 S OCEAN DRIVE 918
514226BE2010	SHUSTER,BELLA G LE SHUSTER,SAVIK	2030 S OCEAN DRIVE 919
514226BE2020	TRENT,JONATHAN XISTRIS,KATHRYN	2030 S OCEAN DRIVE 920
514226BE2030	FRUCHTER,HOWARD	2030 S OCEAN DRIVE 921
514226BE2040	STRAITMAN FAM TR PERLOW,JEFFREY M TRSTEE	2030 S OCEAN DRIVE 922
514226BE2050	NAIMAN,DANIEL & KAREN	2030 S OCEAN DRIVE 923
514226BE2060	LITSAKIS,EFTIHIOS & MARIA	2030 S OCEAN DRIVE 924
514226BE2070	POLINA TSILLER TR TSILLER,POLINA TRSTEE	2030 S OCEAN DRIVE 925
514226BE2080	PERELSTEIN,ALEXANDER	2030 S OCEAN DRIVE 926
514226BE2090	PIZZOLO,NORMAN C H/E PIZZOLO,OLGA R H/E ETAL	2030 S OCEAN DRIVE 927

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CITY OF HALLANDALE BEACH

BUILDING PERMIT

PERMIT No.: BRFG-22-01085 **ISSUED DATE:** April 11, 2022

PERMIT/WORKCLASS: **Building Roofing / Built-Up**

JOB SITE ADDRESS: **2030 S Ocean Dr, HALLANDALE BEACH, FL 33009**

CONTRACTOR: ALLIED ROOFING IND INC / ALEXANDER GARCIA

OWNER: CONDOMINIUM ASSOCIATION OF PARKER PLAZA ESTATES INC. / GEORGE

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

It is the responsibility of permit holder of each phase of work to procure inspections as required and to verify approvals prior to proceeding to next phase.

No inspections will be performed unless permit card is displayed and approved plans are readily available.

Online Inspections/results at www.cohb.org/building

Development Services Department | Building Division | 400 S. Federal Hwy. Hallandale Beach, FL 33009 | 954-457-1383

THIS PERMIT CARD MUST BE POSTED IN A VISIBLE LOCATION AT ALL TIMES.

(See Back of Permit Card for Important Information)

OFFICE INFORMATION

Main: (954) 457-1383 | Fax: (954) 457-1488
Website: www.cohb.org/building

Counter Hours: 8:00 a.m. to 4:00 p.m.

NOISE ORDINANCE NOTICE!

City Ordinance allows construction activity between the hours of 8:00 a.m. and 6:00 p.m. Monday through Saturday. See City of Hallandale Code of Ordinance Section 9-103(a) (10) for further details.

List of Required Inspections for this Permit

Building Roof In Progress
Building Final

IMPORTANT INFORMATION REQUESTING INSPECTION

Online: www.cohb.org/building
Automated Inspection Line: 954-457-1312
Automated Inspection Line Access Code: 47161

Inspection Request Hours: 8:00 a.m. to 4:00 p.m.
Inspectors Available by Phone: 7:30 a.m. to 8:00 a.m.

List of Required Sub Permits for this Permit

Additional Sub Permits

List of Required Reports and Certifications for this Permit

Certification Reports Required

Documents Required

Shop Drawings Required

SECTION 1525
HIGH-VELOCITY HURRICANE ZONES—UNIFORM PERMIT APPLICATION

Florida Building Code 7th Edition (2020)
High-Velocity Hurricane Zone Uniform Permit Application Form

INSTRUCTION PAGE

COMPLETE THE NECESSARY SECTIONS OF THE UNIFORM ROOFING PERMIT APPLICATION FORM AND ATTACH THE REQUIRED DOCUMENTS AS NOTED BELOW:

Roof System	Required Sections of the Permit Application Form	Attachments Required See List Below
Low Slope Application	A,B,C	1,2,3,4,5,6,7
Prescriptive BUR-RAS 150	A,B,C	4,5,6,7
Asphaltic Shingles	A,B,D	1,2,4,5,6,7
Concrete or Clay Tile	A,B,D,E	1,2,3,4,5,6,7
Metal Roofs	A,B,D	1,2,3,4,5,6,7
Wood Shingles and Shakes	A,B,D	1,2,4,5,6,7
Other	As Applicable	1,2,3,4,5,6,7

ATTACHMENTS REQUIRED:

1.	Fire Directory Listing Page
2.	From Product Approval: Front Page Specific System Description Specific System Limitations General Limitations Applicable Detail Drawings
3.	Design Calculations per Chapter 16, or if applicable, RAS 127 or RAS 128
4.	Other Component of Product Approval
5.	Municipal Permit Application
6.	Owners Notification for Roofing Considerations (Reroofing Only)
7.	Any Required Roof Testing/Calculation Documentation

SECTION 1524 (FLORIDA BUILDING CODE)
HIGH VELOCITY HURRICANE ZONES – REQUIRED OWNERS NOTIFICATION FOR ROOFING CONSIDERATIONS

1524.1 Scope: As it pertains to this section, it is the responsibility of the roofing contractor to provide the owner with the required roofing permit, and to explain to the owner the content of this section. The provisions of Chapter 15 of the Florida Building Code, Building govern the minimum requirements and standards of the industry for roofing system installations. Additionally, the following items should be addressed as part of the agreement between the owner and the contractor. The owner's initial in the designated space indicates that the item was explained.

1. ____ **Aestherics-Wormanship:** The workmanship provisions of Chapter 15 (High Velocity Hurricane Zone) are for the purpose of providing that the roofing system meets the wind resistance and water intrusion performance standards. Aesthetics (appearance) are not a consideration with respect to workmanship provisions. Aesthetic issues such as color or architectural appearance, that are not part of a zoning code, should be addressed as part of the agreement between the owner and the contractor.
2. ____ **Renailing Wood Decks:** When replacing roofing, the existing wood roof deck may have to be renailed in accordance with the current provisions of Chapter 16 (High Velocity Hurricane Zones) of the (Code) (the roof deck is usually concealed prior to removing the existing system).
3. ____ **Common Roofs:** Common roofs are those which have no visible delineation between neighboring units (i.e. townhouses, condominiums, etc.) In buildings with common roofs, the roofing contractor and/or owner should notify the occupants of adjacent units of roofing work performed.
4. ____ **Exposed Ceilings:** Exposed, open beam ceilings are where the underside of the roof decking can be viewed from below. The owner may wish to maintain the architectural appearance; therefore, roofing nail penetrations of the underside of the decking may not be acceptable. [The code] provides [an alternate for] maintaining its appearance.
5. ____ **Ponding Water:** The current roof system and/or deck of the building may not drain well and may cause water to pond (Accumulate) in low-lying areas of the roof. Ponding can be an indication of structural distress and may require review of a professional structural engineer. Ponding may shorten the life expectancy and performance of the new roofing system. Ponding conditions may not be evident until the original roofing system is removed. Ponding conditions should be corrected.
6. ____ **Overflow Scuppers (Wall Outlets):** It is require that rainwater flow off so that the roof is not overloaded from a buildup of water. Perimeter/edge walls or other roof extensions may block this discharge if overflown scuppers (Wall outlets) are not provided. It may be necessary to install overflow scuppers in accordance with the requirements of [Chapter 16].
7. ____ **Ventilation:** Most roof structures should have some ability to vent natural airflow through the interior of the structural assembly (the building itself). The existing amount of attic ventilation shall not be reduced; it may be beneficial to consider additional venting which can result in extending the service life of the roof.

Owner's/ Agent Signature — Date: 03/16/22

Contractor's Signature — Date: 03/16/22

Review for Code Compliance Building
Hallandale Beach
04/06/2022

Florida Building Code 7th Edition (2020)
High-Velocity Hurricane Zone Uniform Permit Application Form

Section A (General Information)

Master Permit No._____ Process No. _____

Contractor's Name ALLIED ROOFING IND INC

Job Address 2030 S OCEAN DRIVE HALLANDALE BEACH

ROOF CATEGORY

- ☑ Low Slope
- ☐ Asphaltic Shingles
- ☐ Mechanically Fastened Tile
- ☐ Metal Panel/Shingles
- ☐ Prescriptive BUR-RAS 150
- ☐ Mortar/Adhesive Set Tiles
- ☐ Wood Shingles/Shakes

ROOF TYPE

- ☐ New roof
- ☐ Repair
- ☐ Maintenance
- ☑ Reroofing
- ☐ Recovering

ROOF SYSTEM INFORMATION

Low Slope Roof Area (SF) 42,198 Steep Sloped Roof Area (SF) N/A Total (SF) 42,198

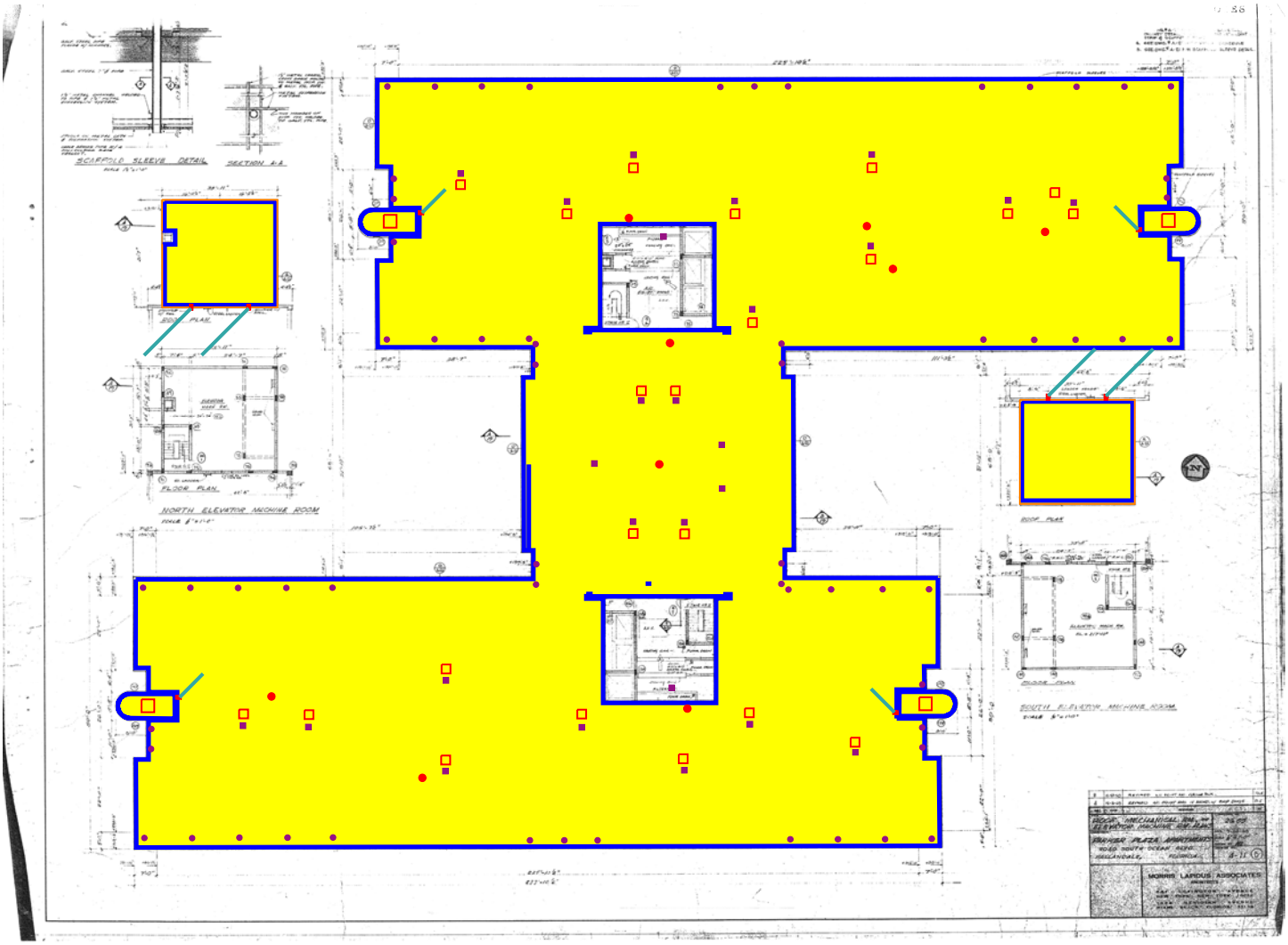
Section B (Roof Plan)

Sketch Roof Plan: Illustrate all levels and sections, roof drains, scuppers, overflow scuppers and overflow drains. Include dimensions of sections and levels, clearly identify dimensions of elevated pressure zones and location of parapets.

SEE ATTACHED

Parker Plaza Cond - 2022-01-27

Section: Entire
Job Page: Soprema Modified Bitumen
Roof System



Parker Plaza Cond - 2022-01-27

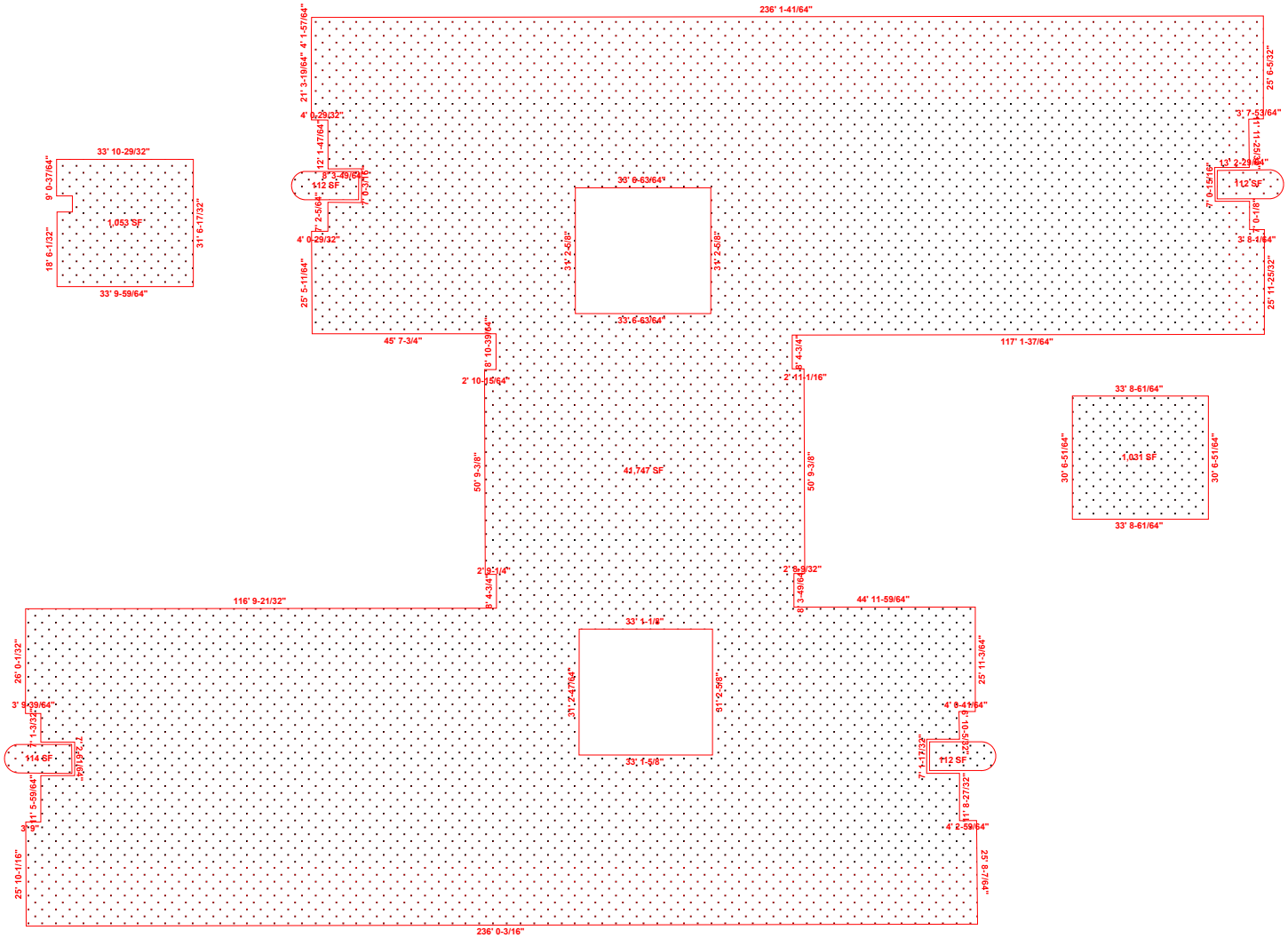
Section: Entire
Job Page: Soprema Modified Bitumen Roof System

Legend	Pitch	Description	SF	LF
		Tear Off (Height = Thickness of Roof)	42,197.18	2,059.20
		Conc, SOPREMA 3Ply SBS FA,	42,197.18	2,059.20
		OlyBond Wall (no adhesive)		1,871.92
		Wall wrap 1'		245.12
		Curb (no adhesive)		289.69
		Edge (20 Year)		255.46
		Wood Nailer		259.45
		Drain		
		Scupper		
		Penetration - P. Pocket - Elect. Conduit		
		Penetration - Liquid -		
		Leaderhead		
		Downspout Boot/Elbow		
		Downspout		117.38

Drawing Report

Parker Plaza Cond - 2022-01-27

Section: Entire
Job Page: Soprema Modified Bitumen
Roof System



Florida Building Code 7th Edition (2020)
High-Velocity Hurricane Zone Uniform Permit Application Form

Section C (Low Slope Application)

Fill in specific roof assembly components and identify manufacturer
(If a component is not used, identify as "NA")

System Manufacturer: SOPREMA

Product Approval No.: FL23301-R8

Design Wind Pressures, From RAS 128 or Calculations:

Zone 1′: -101.5 Zone 1: -101.5 Zone 2: -163.3 Zone 3: -225.0

Max. Design Pressure, from the specific product approval system: - 270 psf

Deck:

Type: CONCRETE

Gauge/Thickness:

Slope: 1/4:12

Anchor/Base Sheet & No. of Ply(s): N/A

Anchor/Base Sheet Fastener/Bonding Material: N/A

Insulation Base Layer: N/A

Base Insulation Size and Thickness: N/A

Base Insulation Fastener/Bonding Material: N/A

Top Insulation Layer: N/A

Top Insulation Size and Thickness: N/A

Top Insulation Fastener/Bonding Material: N/A

Base Sheet(s) & No. of Ply(s): SOPRALENE 250 SANDED

Base Sheet Fastener/Bonding Material:
COLPLY EF ADHESIVE APPLIED @ 1.5-2.5 GAL PER SQ

Ply Sheet(s) & No. of Ply(s): SOPRALENE 180 SANDED

Ply Sheet Fastener/Bonding Material:
COLPLY EF ADHESIVE APPLIED @ 1.5-2.5 GAL PER SQ

Top Ply: SOPRALENE 180 FR GR

Top Ply Fastener/Bonding Material:
COLPLY EF ADHESIVE APPLIED @ 1.5-2.5 GAL PER SQ

Surfacing: GRAVEL

Fastener Spacing for Anchor/Base Sheet Attachment: N/A

Zone 1′: ____" oc @ Lap, # Rows ____ @ ____" oc

Zone 1: ____" oc @ Lap, # Rows ____ @ ____" oc

Zone 2: ____" oc @ Lap, # Rows ___ @ ____" oc

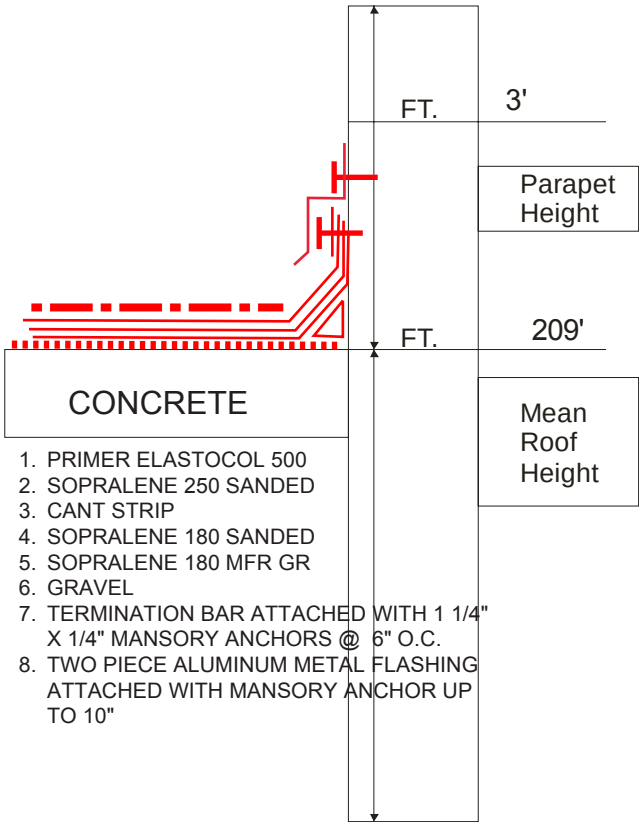
Zone 3: ____" oc @ Lap, # Rows ____ @ ____" oc

Number of Fasteners Per Insulation Board: N/A

Zone 1′:_____ Zone 1:_____ Zone 2:_____ Zone 3:_____

Illustrate Components Noted and Details as Applicable:
Woodblocking, Gutter, Edge Termination, Stripping, Flashing, Continuous Cleat, Cant Strip, Base Flashing, Counterflashing, Coping, Etc.

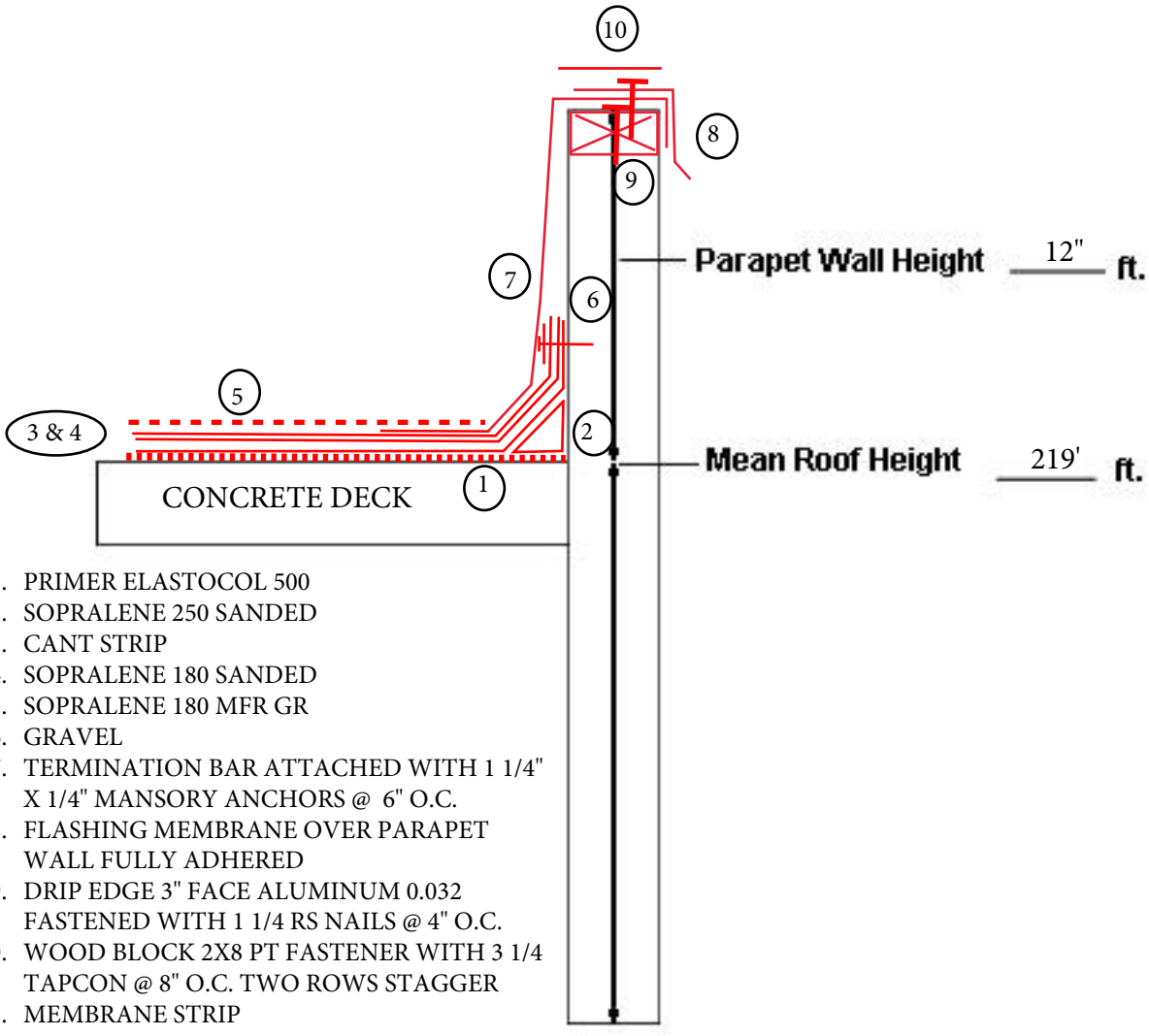
Indicate: Mean Roof Height, Parapet Height, Height of Base Flashing, Component Material, Material Thickness, Fastener Type, Fastener Spacing or Submit Manufacturers Details that Comply with RAS 111 and Chapter 16.



1. PRIMER ELASTOCOL 500
2. SOPRALENE 250 SANDED
3. CANT STRIP
4. SOPRALENE 180 SANDED
5. SOPRALENE 180 MFR GR
6. GRAVEL
7. TERMINATION BAR ATTACHED WITH 1 1/4" X 1/4" MANSORY ANCHORS @ 6" O.C.
8. TWO PIECE ALUMINUM METAL FLASHING ATTACHED WITH MANSORY ANCHOR UP TO 10"

PARKER PLAZA CONDO

PARAPET WALL DETAIL
AT UPPER ROOFS ONLY



1. PRIMER ELASTOCOL 500
2. SOPRALENE 250 SANDED
3. CANT STRIP
4. SOPRALENE 180 SANDED
5. SOPRALENE 180 MFR GR
6. GRAVEL
7. TERMINATION BAR ATTACHED WITH 1 1/4" X 1/4" MANSORY ANCHORS @ 6" O.C.
8. FLASHING MEMBRANE OVER PARAPET WALL FULLY ADHERED
9. DRIP EDGE 3" FACE ALUMINUM 0.032 FASTENED WITH 1 1/4 RS NAILS @ 4" O.C.
10. WOOD BLOCK 2X8 PT FASTENER WITH 3 1/4 TAPCON @ 8" O.C. TWO ROWS STAGGER
11. MEMBRANE STRIP

Review for Code Compliance Building
Florida Building
04/06/2022

Broward County Asbestos Certificate of Submittal

Issue Date: 04/01/2022

Asbestos SRRA ID: 0000120788

Project Name: Parker Plaza Condominium

Project Address: 2030 S OCEAN DR Hallandale Beach, FL 33009

Facility/Activity: Residential with more than four dwelling units / Renovation

Facility Owner/Operator: GEORGE LANDAU

Phone: 305-477-7810

Mailing Address:

Email: GRACIELA@ALLIEDROOFING.COM

Contractor Performing Work:

Phone:

Email:

Estimated Start Date: 05/02/2022

Estimated Finish Date: 05/20/2022

We have reviewed the above project and concluded that it meets the federal, state and county asbestos program requirements.

Be advised that the proposed project may still be subject to Occupational Safety and Health Administration (OSHA) and Florida Building Code requirements.

Statement of Responsibilities Regarding Asbestos was electronically signed by:

ALLIEDROOF	**03/08/2022**
Applicant	Date

Received by: ALLIEDROOF 04/01/2022

CITY OF HALLANDALE BEACH
BUILDING INSPECTIONS DIVISION
400 South Federal Highway
Hallandale Beach, FL 33009
Office 954-457-2220 ● Fax 954-457-1343

Governing Law. The Undersigned understands that the electronic signing and sealing of documents is governed by Florida law, specifically but not limited to Florida Statute Section(s) 471.025, 481.221 and 471.025, The Electronic Signature Act of 1996 (F.S. 668.01-668.006) and Florida Administrative Code sections 61G1-16.005 and 61G15-23.003. Hallandale Beach has attempted to create an electronic signature process in compliance with Florida law but shall not be liable in any manner for any violations of professional licensure regulations. It is the Undersigned's responsibility to ensure compliance with all laws, regulations, and ordinances that govern his/her professional license. By signing this document, you are not only agreeing to the foregoing but certifying that: Any willful falsification of any information contained herein is grounds for disqualification.

Joseph Bret Taylor

APPLICANT NAME (please print)

Taylor Forensics + Engineering, LLC

COMPANY NAME

JOSEPH BRET TAYLOR LICENSE No. 073499 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by J. Bret Taylor, PE SE 073499 State of Florida
Date: 2022.03.31 09:35:50 -04'00'

JOSEPH BRET TAYLOR LICENSE No. 73499 STATE OF FLORIDA PROFESSIONAL ENGINEER

3/31/22

ELECTRONIC SIGNATURE WITH CERTIFICATION NUMBER VISABLE (PE / AA / RA / ETC.)

CC B8 65 CF 4C 2F 1C 25 BB 83

ELECTRONIC SIGNATURE SERIAL NUMBER

PL-OMNI-22-01089

CITY OF HALLANDALE BEACH APPLICATION NUMBER

SKYCIV LOAD CALCULATION REPORT

PROJECT DETAILS

Project Name:	Parker Plaza Restoration
Project Units:	Imperial
Project ID:	2103
Project Company:	Taylor Forensics + Engineering, LLC
Project Designer:	J. Bret Taylor
Project Client:	Parker Plaza
Project Notes:	Component and Cladding design pressures for mechanical roof.

SITE DETAILS

Code Selected:	ASCE7-16
Risk Category:	Risk Category II
Exposure:	D
Site Location:	2030 S Ocean Dr, Hallandale Beach, FL 33009, USA
Site Wind Speed:	169 mph
Site Elevation:	3.21 ft
Ground Elevation Factor K_e:	1.00
Ground Snow Load, p_g:	psf

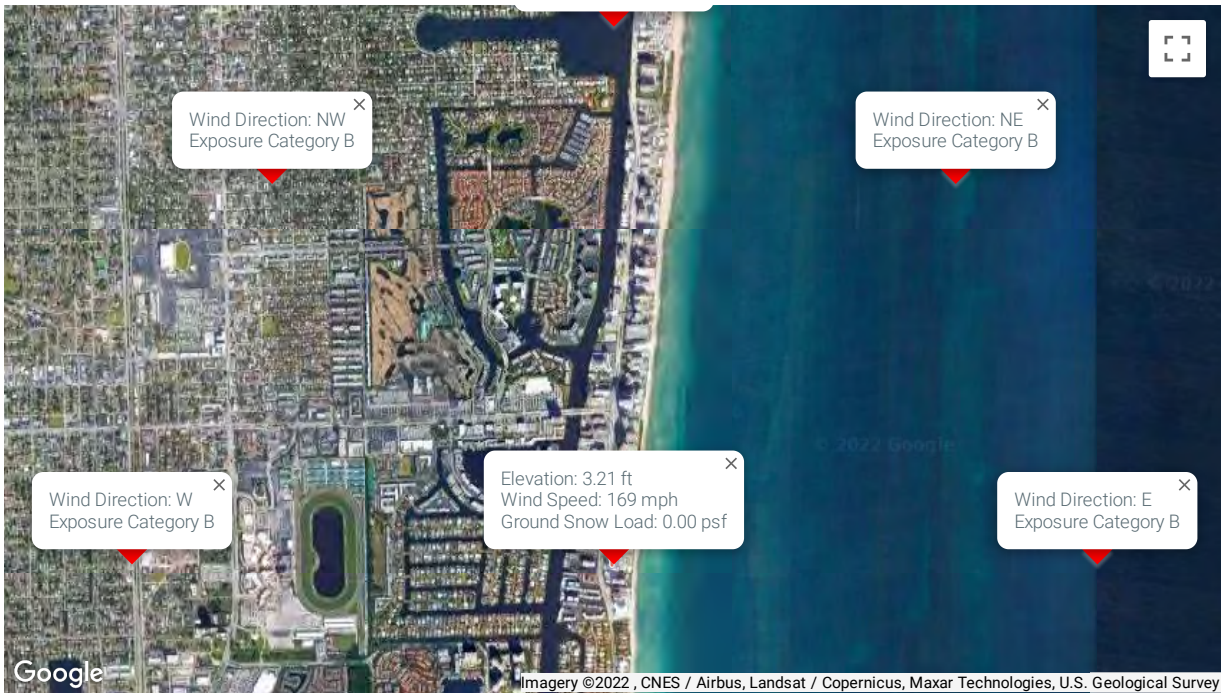
WIND SPEED MAP

Triangular Interpolation Network (TIN) was used to interpolate the wind speed values between ASCE 7 wind contour with known values. The discrepancy from the code is subject to the discretion of the user.

View Map Contours

JOSEPH BRET TAYLOR LICENSE No. 073499 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by J. Bret Taylor, PE SE 073499 State of Florida Date: 2022.03.10 09:50:43 -05'00'

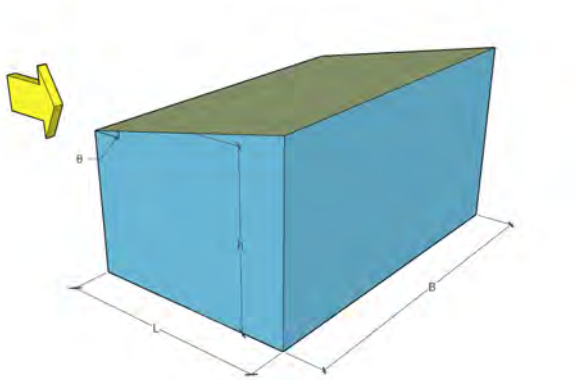


Note: To change Exposure Category of a direction, click the sector on the map and click "Select Worst Case Wind Source Direction" button to update.

Wind Direction	Exposure Category	Velocity Pressure Exposure Coefficient K_z @ 15 ft	Topographic factor K_{zt}@ z = 0 ft	Wind Directionality factor K_d	Ground Elevation factor K_e	Basic Wind Speed V, mph	Velocity Pressure q_h, psf
N	B	0.57	1.000	0.850	1.000	169.000	35.421
NE	B	0.57	1.000	0.850	1.000	169.000	35.421
E	B	0.57	1.000	0.850	1.000	169.000	35.421
SE	B	0.57	1.000	0.850	1.000	169.000	35.421
S	B	0.57	1.000	0.850	1.000	169.000	35.421
SW	B	0.57	1.000	0.850	1.000	169.000	35.421
W	B	0.57	1.000	0.850	1.000	169.000	35.421
NW	B	0.57	1.000	0.850	1.000	169.000	35.421

STRUCTURE DATA

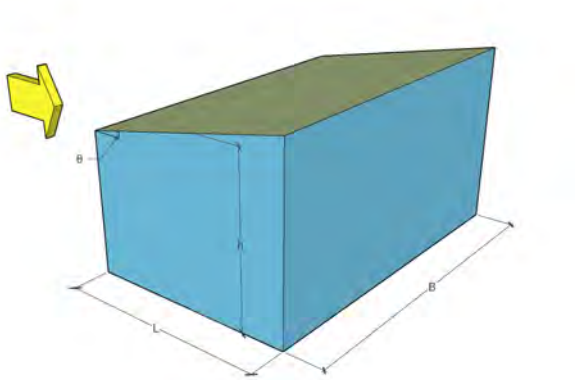
Parameter	Value
Roof Profile	Monoslope/Monopitch
Building Length	228 ft
Building Width	310 ft
Roof Pitch Angle	0 °
Mean Roof Height	226.75 ft



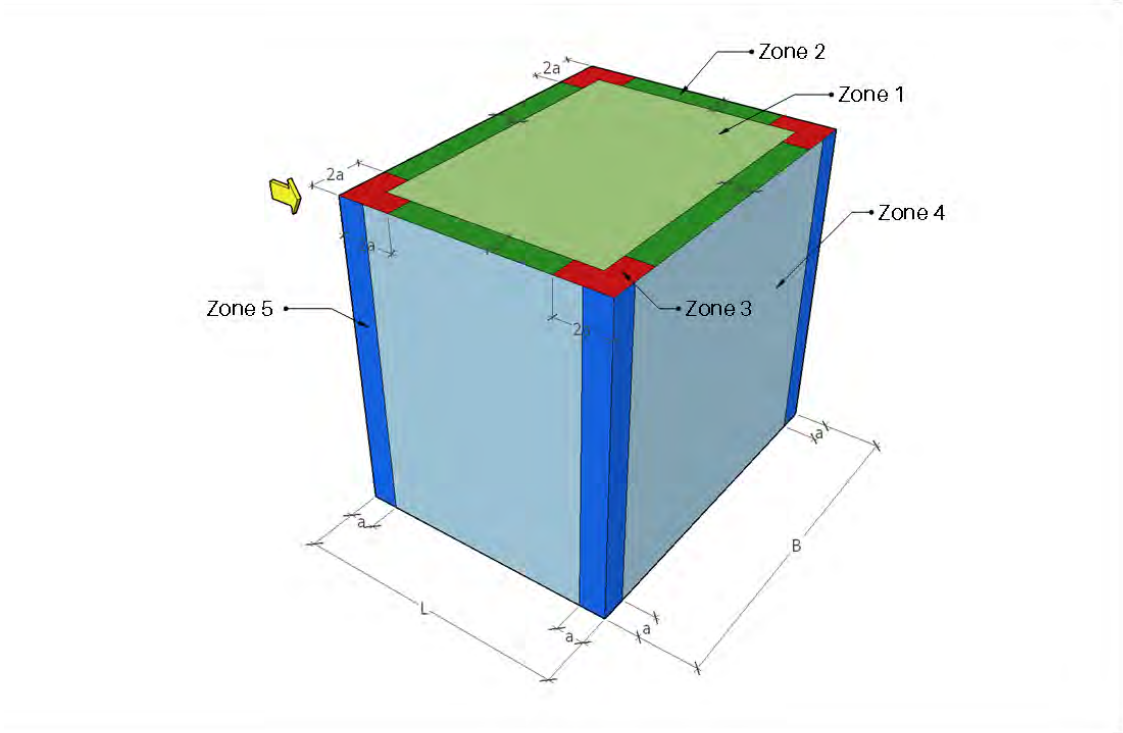
Monoslope Roof

WIND INPUT PARAMETERS

Parameter	Value
Structure Type	ASCE 7-16 - Buildings - Components and Cladding
Enclosure Classification	Enclosed Buildings
Area of Wall Cladding	25 ft^2
Area of Roof Cladding	100 ft^2
Parapet Height, h_p	3 ft



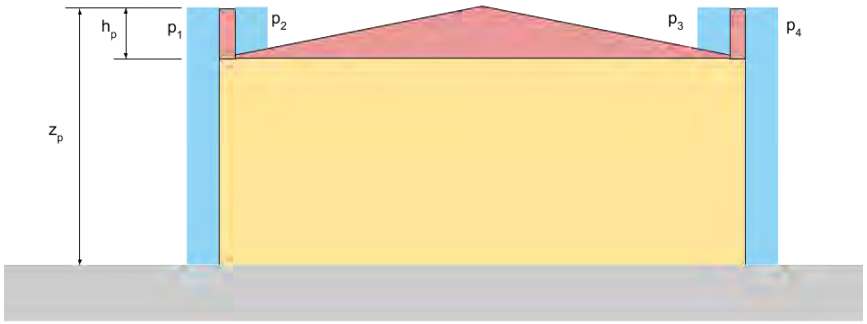
Monoslope Roof



Where: a = 22.800 ft

Wind Pressure for Components and Cladding - Chapter 30 of ASCE 7-16 (Parts 1 and 3)

Type of Cladding	Area of Cladding ft^2	Floor Level	Elevation ft	Case	Design Pressure psf				
					Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
Wall Cladding	25.000	Roof	226.75	Max	-	-	-	108.604	108.604
				Min	-	-	-	-109.315	-197.330
Roof Cladding	100.000	Roof	226.75	Max	-94.920	-175.130	-255.340	-	-
				Min	-131.830	-212.040	-292.250	-	-



Wind Pressure on Parapet

Location of Parapet	Design Pressure psf			
	Pressure 1, p_1	Pressure 2, p_2	Pressure 3, p_3	Pressure 4, p_4
Zone 4 for wall, Zone 2 for roof	90.69	-194.75	0.00	-91.41
Zone 5 for wall, Zone 3 for roof	90.69	-275.45	0.00	-179.96

TAYLOR FORENSICS & ENGINEERING, LLC

EXISTING ROOF DRAINAGE CALCULATIONS
And
ADDITIONAL DRAINAGE REQUIREMENTS

For the

CONCRETE ROOF DECK REPAIR AND ROOF REPLACEMENT PROJECT

At

Condominium Association of Parker Plaza Estates, Inc.
2030 S. Ocean Drive
Hallandale Beach, Florida 33009

Engineer's Job Number 2103

J. Bret Taylor, PE SE
FL PE 073499

JOSEPH BRET TAYLOR
LICENSE
No. 073499
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Digitally signed by J. Bret Taylor, PE SE 073499
State of Florida
Date: 2022.03.08 14:37:01 -05'00'

Prepared By:

Taylor Forensics & Engineering, LLC.
11161 E SR 70, #110-316
Lakewood Ranch, Florida 34202
FL License No: 73499
Registry #34991

March 4, 2022

Table of Contents

PROJECT DESCRIPTION:

NARRATIVE:

Due to the age of the roof, 50-year re-certification, and insurance requirements, the Condominium Association of Parker Plaza is replacing the existing roof. Given that the roof system is completely saturated analysis of the concrete roof slab is required. Parker Plaza intends to phase the work to allow for the removal of the old roof, evaluation of the underlying concrete roof deck, and drying in of the roof with the first layer of the new roof system. Due to the size of the roof, weather considerations, engineering evaluation for concrete delamination/deterioration, chloride content analysis, and rebar corrosion mapping, this work must be phased and done in sections such that the new work can be dried in each day.

This is not a typical roof replacement in that the underlying concrete conditions are unknown and concrete repair may, or may not, be required. As such, concrete condition mapping will be done during application of the dry in layer and any concrete repairs can be done segmentally after the dry in layer is in place and, weather permitting, before the final roof system is installed. Further, and a more detailed, description of the work to be performed and phasing will be provided in the roof repair and replacement plan set.

Despite the existing roof being flat, the existing drainage system is, and has been, draining adequately at the 2020 Florida Plumbing Code prescribed rainfall flow rate. Due to the capacity of the existing drainage system, lack of redundancy, and a need for a secondary drainage system, TF+E recommends augmenting the drainage system to include scuppers at the north and south elevations. This improvement will be specified and detailed in the forthcoming roof replacement plans.

APPLICABLE BUILDING AND PLUMBING CODE:

2020 Florida Building Code:

2020 Florida Plumbing Code:

EXISTING ROOF DRAINAGE INFORMATION:

The existing system consists of flush roof drains centered in the interior hallways of the building. There are eight (8) 5-inch drains and one (1) 3-inch drain for the 42,355 SF main roof area. The stair towers are drained by scuppers feeding downspouts spilling onto the main roof area. The mechanical rooms are drained by scuppers feeding downspouts spilling onto the main roof area. No other drainage appears to exist or would be consistent with normal roof drainage.

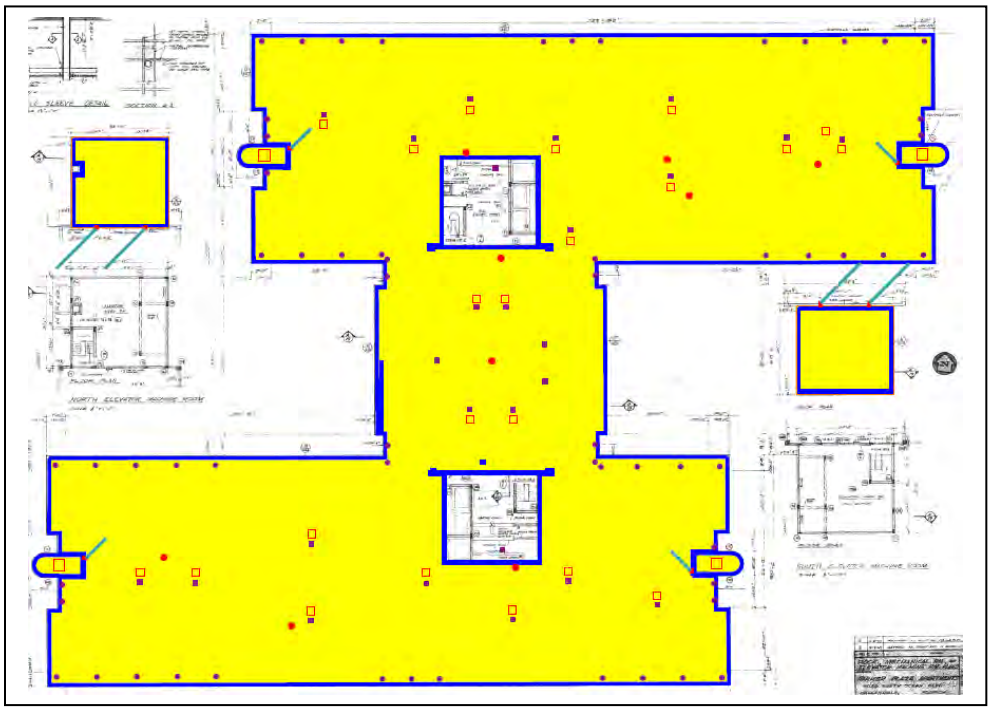
NEW ROOF DRAINAGE:

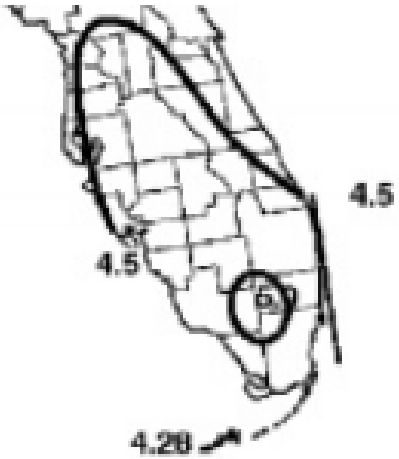
A total of sixteen (16) new scuppers will be added through the roof parapet wall. Eight (8) on the south elevation and eight (8) on the north elevation. Scuppers on the east or west elevations are not practical and pose possible health risks to occupants as these elevations have high human traffic flow and these elevations would be prone to property damage of landscaped areas.

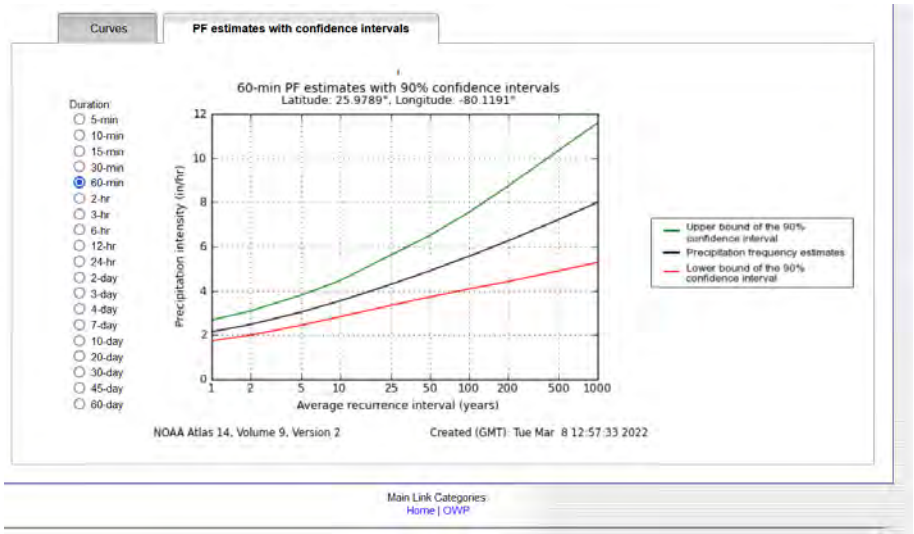
RAINFALL ANALYSIS:

DESIGN RAINFALL RATE AND SUPPORTING DOCUMENTATION:

- IIBEC - Per Roof Drainage, 2nd Ed. Page 143 - 100 Yr., 60 Min. rainfall intensity for Miami, Florida I = 5.2 in./hr.
- Code - Per 2020 Florida Plumbing Code Figure 1106.1, 100 Yr., 60 Min. rainfall intensity for Hallandale Beach, Florida I = 4.6 in./hr.
- NWS - Per National Weather Service, 100 Yr., 60 Min. rainfall intensity for Hallandale Beach, Florida I = 5.56 in./hr.
- Per the estimates above the design intensity is the larger value and is I = 5.56 in./hr.
- However, as shown below the existing drainage system is evaluated with the Code required rainfall intensity.







ROOF AND WALL AREA ANALYSIS:

ROOF AND WALL AREA ANALYSIS:

- Main Roof Area (A): 42,355 SF
- Stair Tower Roof Area (Typical X4) (B): 122 SF
- North Mechanical Room Roof Area (C): 982 SF
- South Mechanical Room Roof Area (D): 996 SF
- Wall Area from Parapet (E): 4,430 SF/2 = 2215 SF
- Wall Area from Stair Towers (F): 252 SF/2 = 126 SF
- Wall Areas from North Mechanical Room (G): 2834 SF/2 = 1417 SF
- Wall Areas from South Mechanical Room (H): 2840 SF/2 = 1420 SF
- Total Roof Drainage Area to Main Roof (I):
    - TRDA = A+B+C+D+E+F+G+H = 42,355+4*122+982+996+2215+126+1417+1420 = 49,999 SF

TOTAL ROOF WATER FLOW ANALYSIS:

TOTAL ROOF WATERFLOW ANAYLSIS USING IIBEC:

IIBEC - Q_{Roof} = 0.01039 (AI) = 0.01039 * 49,999 SF * 5.2 in./hr. = 2701 GPM

TOTAL ROOF WATERFLOW ANAYLSIS USING FLORIDA PLUMBING CODE:

Code - Q_{Roof} = 0.01039 (AI) = 0.01039 * 49,999 SF * 4.6 in./hr. = 2390 GPM

TOTAL ROOF WATERFLOW ANAYLSIS USING NWS:

NWS - Q_{Roof} = 0.01039 (AI) = 0.01039 * 49,999 SF * 5.56 in./hr. = 2888 GPM

OVERALL DESIGN HEAD ANALYSIS:

OVERALL DESIGN HEAD ANALYSIS

- Roof is flat and will be analyzed as such
- Roof ponding load is assumed to be 20 PSF and consistent with typical roof live construction load. At 5.2 lb/sf/in gives a ponding depth of 3.8 inches
- Therefore, the estimated head is 3.8” above drain level
- The existing drain analysis using 3.8” was performed and found to be insufficient and the hydraulic head is maximized for the largest drain size and is set to 4.5”

EXISTING PRIMARY ROOF DRAIN CAPACITY ANALYSIS:

EXISTING PRIMARY ROOF DRAIN CAPACITY ANALYSIS

- Existing roof drains are:
  - From above, assume a 4.5" head at primary drains
  - 8 drains with 5" O.D.
    - At a 10.5" bowl diameter and 2" bowl depth with a 4.5" head the discharge capacity is Q_{Drain} = 300 GPM.
  - 1 drain with 3" diameter
    - At a 10.5" bowl diameter and 2" bowl depth with a 4.5" head the discharge capacity is Q_{Drain} = 100 GPM.
- Total estimated existing primary drainage capacity is therefore $Q_{Drain\ Total}$ = 8*300 GPM + 1*100 GPM = 2500 GPM.
- This is less than IIBEC and NWS estimated Q_{Roof} values.
- However, Florida Plumbing Code estimated Q_{Roof} = 2375 GPM is less than the estimated $Q_{Drain\ Total}$ = 2500 GPM
- Therefore, the capacity is sufficient per Code.
- At higher estimated Q_{Roof} values the system may become siphonic.

EXISTING SECONDARY ROOF DRAIN CAPACITY ANALYSIS:

EXISTING SECONDARY ROOF DRAIN CAPACITY ANALYSIS

- Existing secondary roof drains are:
  - There do not appear to be secondary roof drains on this project. However, there are 2" I.D. scaffold sleeves positioned around the perimeter that are approximately 6" above the finished roof deck. However, these possible secondary roof drains are above the estimated ponding water height.
- Total estimated drainage capacity of the existing secondary drainage system is therefore 0.0 GPM.

NEW SECONDARY ROOF DRAIN CAPACITY ANALYSIS:

NEW SECONDARY ROOF DRAIN CAPACITY ANALYSIS

- Given the layout of the existing roof drains, the practical solution is to add overflow scuppers
- Per the above analysis the NWS recommends a rainfall intensity of I = 5.56 in./hr.
- Per above the TRDA = 49,999 SF
- Q_{Roof} = 2888 GPM per NWS
- Scupper Design:
  - Assume L=24" and Height 6"
  - Hydraulic Head is 4.5"-2.5" = 2"
  - Therefore, discharge per scupper is $Q_{Scupper} = 2.9 * L * H^{1.5} = 2.9 * 24 * 2^{1.5}$ = 197 GPM
  - Therefore, 2888 GPM/197 GPM/Scupper = 15 scuppers. Say 16 for symmetry.
- Front and back elevation installation of scuppers is not practical. Therefore, install on north and south elevation parapet walls. Any spillage will only impact the parking deck. Location and installation details will be provided in the project plan submittal to follow.

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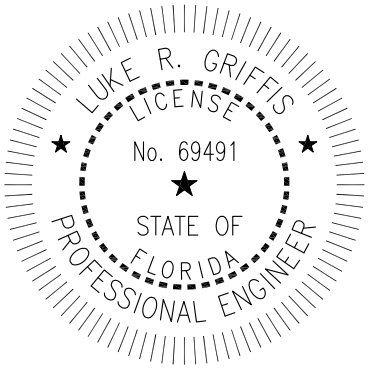
STRUCTURAL CALCULATIONS

Scaffold Trash Chute

2030 S. Ocean Drive

Hallandale Beach, FL



LUKE R. GRIFFIS, P.E. FLORIDA LICENSE #69491
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FL COA NO. 27238

Luke Griffis

Digitally signed by Luke Griffis
DN: E=luke@charlesengineering.com, CN=Luke Griffis, O="D.H. Charles Engineering, Inc.", L=Santa Rosa, S=California, C=US
Date: 2022.03.16 17:22:04-07'00'

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Overhead Protection Design

This calculation outlines the adequacy of a 5'-5"'x9'-3"x200'-0" max tall trash chute support scaffold. The trash chute is by others, and shall be secured to at least (2) legs of the scaffold. The 3'-10" bay of the scaffold may be planked and support up to (2) levels of live load at a time.

P_{design} = 25 psf

Check Scaffold Plank

$P_{max} = P_{design}$ = 25 psf

Per the attached data sheet a Sunbelt Modular scaffold plank has the following allowable capacity.

P_{allow} = 75 psf

P_{allow} = 75.0 psf > P_{max} = 25.0 psf OK

★★Scaffold plank is adequate

Check Scaffold Ledger

$W_{max} = (P_{design} + 6\ psf) \times 5.42\ ft = 168\ plf$

Per the attached data sheet a 3'-10" Truss Ledger has the following allowable load rating including a 4 factor of safety:

W_{allow} = 425 plf

W_{allow} = 425 plf > W_{max} = 168 plf OK

★★Ledgers are adequate

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Check Scaffold Post

N = 31	# of Levels
DL1 = 3.5 plf × 200 ft = 700 lbs	Leg
DL2 = 3.0 plf × (5.42 ft / 2 + 3.8 ft / 2 + 5.42 ft / 2) × N	
DL2 = 681 lbs	Ledgers
DL3 = 19.5 lb × N = 605 lbs	Braces
DL4 = 3.8 ft / 2 × 5.42 ft / 2 × 3 × 6 psf = 93 lbs	Deck
DL5 = 3000 lbs / 2 = 1500 lbs	Trash Chute
LL1 = 3.8 ft / 2 × 5.42 ft / 2 × 2 × 25 psf = 257 lbs	Live load

P_{DL} = DL1 + DL2 + DL3 + DL4 + DL5 = 3578 lbs

P_{LL} = LL1 = 257 lbs

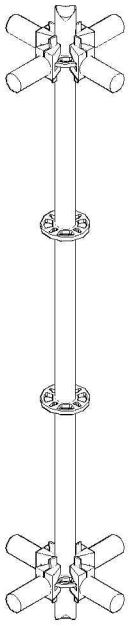
Per the attached data sheet a Sunbelt Modular Scaffold Post has the following allowable compression load with a 4:1 factor of safety:

$C_{max} = P_{DL} \times 2 + P_{LL} \times 4 = 8.2$ kips

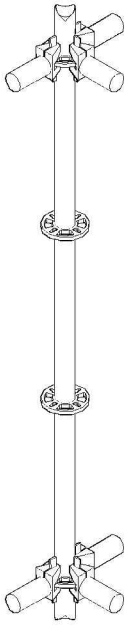
$C_{allow} = 3.8 \text{ kips} \times 4 = 15.2 \text{ kips}$ > $C_{max} = 8.2$ kips OK

★★Posts are adequate

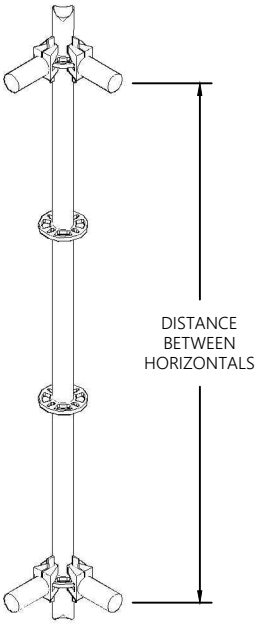
-END-



4 MEMBERS AT
EACH ROSETTE



3 MEMBERS AT
EACH ROSETTE



2 MEMBERS AT
EACH ROSETTE

ALLOWABLE LOADS WHEN USED AS SCAFFOLD (4:1 SAFETY FACTOR)

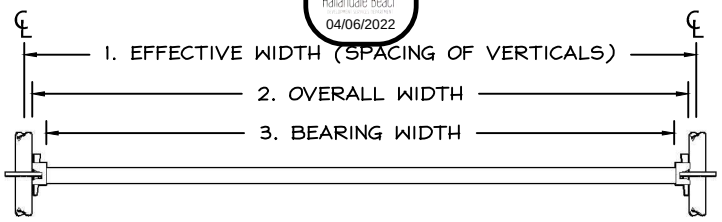
DISTANCE BETWEEN HORIZ.	4 MEMBERS	3 MEMBERS	2 MEMBERS
6'-6"	4625 LBS	4200 LBS	3800 LBS
4'-11"	5175 LBS	4725 LBS	4275 LBS
3'-3"	5925 LBS	5375 LBS	4875 LBS
1'-7"	6000 LBS	5550 LBS	5025 LBS

ALLOWABLE LOADS WHEN USED AS SHORING (2.5:1 SAFETY FACTOR)

DISTANCE BETWEEN HORIZ.	4 MEMBERS	3 MEMBERS	2 MEMBERS
6'-6"	7400 LBS	6700 LBS	6000 LBS
4'-11"	8200 LBS	7500 LBS	6800 LBS
3'-3"	9400 LBS	8500 LBS	7800 LBS
1'-7"	9600 LBS	8800 LBS	8000 LBS

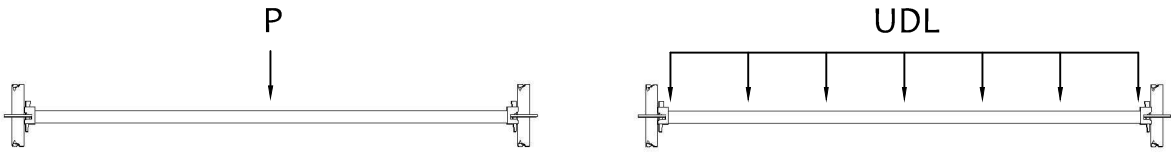
* ALL CAPACITIES ARE BASED ON COMPONENTS BRACED IN ALL DIRECTIONS
* SYSTEMS SHOULD BE CONTINUALLY BRACED

5



* INDICATES BAY SPACINGS USED FOR SYSTEM STAIR UNITS, HL36 USED FOR 7'-0" STAIRTOWERS HL43 USED FOR 8'-6" STAIRTOWERS

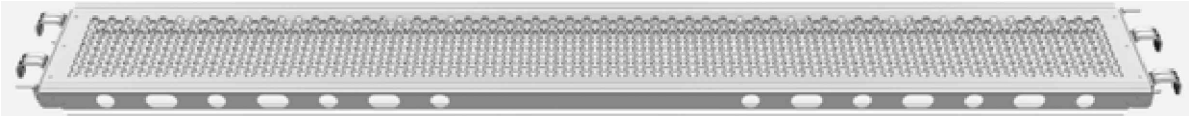
PT NO.	DESCRIPTION	1.	2.	3.	WEIGHT
HL21	2'-1" HORIZONTAL	2'-1 5/8"	1'-11 5/8"	1'-7 5/8"	7 LB
HL25	2'-5" HORIZONTAL	2'-4 1/2"	2'-2 1/2"	1'-10 1/2"	7.5 LB
HL210	2'-10" HORIZONTAL	2'-10 3/4"	2'-8 3/4"	2'-4 3/4"	8.5 LB
HL36*	3'-6" HORIZONTAL	3'-6"	3'-4"	3'-0"	10 LB
HL37	3'-7" HORIZONTAL	3'-7"	3'-5"	3'-1"	10.5 LB
HL310	3'-10" HORIZONTAL	3'-9 3/8"	3'-7 3/8"	3'-3 3/8"	11 LB
HL43*	4'-3" HORIZONTAL	4'-2 11/16"	4'-0 11/16"	3'-8 11/16"	12 LB
HL52	5'-2" HORIZONTAL	5'-2"	5'-0"	4'-8"	14 LB
HL55	5'-5" HORIZONTAL	5'-5"	5'-3"	4'-11"	15 LB
HL69	6'-9" HORIZONTAL	6'-9"	6'-7"	6'-3"	17.5 LB
HL7	7'-0" HORIZONTAL	7'-0"	6'-10"	6'-6"	18 LB
HL86	8'-6" HORIZONTAL	8'-5 3/8"	8'-3 3/8"	7'-11 3/8"	21.5 LB
HL10	10'-0" HORIZONTAL	10'-0"	9'-10"	9'-6"	25.5 LB



PT NO.	DESCRIPTION	POINT LOAD	UNIFORM LOAD	WEIGHT
HL21	2'-1" HORIZONTAL	1480	1069	7 LB
HL25	2'-5" HORIZONTAL	1477	1320	7.5 LB
HL210	2'-10" HORIZONTAL	1220	800	8.5 LB
HL36	3'-6" HORIZONTAL	800	565	10 LB
HL37	3'-7" HORIZONTAL	967	565	10.5 LB
HL310	3'-10" HORIZONTAL	700	425	11 LB
HL43	4'-3" HORIZONTAL	823	417	12 LB
HL52	5'-2" HORIZONTAL	550	235	14 LB
HL55	5'-5" HORIZONTAL	620	256	15 LB
HL69	6'-9" HORIZONTAL	460	150	17.5 LB
HL7	7'-0" HORIZONTAL	438	125	18 LB
HL86	8'-6" HORIZONTAL	385	90	21.5 LB
HL10	10'-0" HORIZONTAL	300	60	25.5 LB
		(LB)	(LB/FT)	

LOADS SHOWN INCLUDE 4 : 1 SAFETY FACTOR

6



PT NO.	DESCRIPTION	1.	WEIGHT
MP25	2'-5" METAL PLANK	2'-4 ½"	16.5 LB
MP36	3'-6" METAL PLANK	3'-6"	22.5 LB
MP37	3'-7" METAL PLANK	3'-7"	22.5 LB
MP310	3'-10" METAL PLANK	3'-9 ⅜"	23.5 LB
MP43	4'-3" METAL PLANK	4'-2 11⁄16"	25 LB
MP52	5'-2" METAL PLANK	5'-2"	30 LB
MP55	5'-5" METAL PLANK	5'-5"	32 LB
MP69	6'-9" METAL PLANK	6'-9"	38 LB
MP7	7'-0" METAL PLANK	7'-0"	39.5 LB
MP86	8'-6" METAL PLANK	8'-5 ⅜"	42 LB
MP10	10'-0" METAL PLANK	10'-0"	51 LB

PT NO.	DESCRIPTION	1.	WEIGHT
MP43N	4'-3" METAL PLANK - 7"	4'-2 11⁄16"	22 LB
MP69N	6'-9" METAL PLANK - 7"	6'-9"	25.5 LB
MP86N	8'-6" METAL PLANK - 7"	8'-5 ⅜"	29 LB

* MAXIMUM ALLOWABLE LOAD ON METAL PLANKS IS 75 PSF DISTRIBUTED EQUALLY.

18

LOADS SHOWN INCLUDE 4 : 1 SAFETY FACTOR

SCAFFOLD DESIGN PLAN

2030 S OCEAN DRIVE
HALLANDALE BEACH, FL

SUNBELT RENTALS

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4706 HOEN AVENUE SANTA ROSA, CA 95405

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NO.	DATE

11x17 SHEET
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SCAFFOLD DESIGN PLAN
2030 S OCEAN DRIVE
HALLANDALE BEACH, FL

NOTES:

1. TRASH CHUTE SUPPORT SCAFFOLD DESIGNED TO SUPPORT MAXIMUM 200'–TALL DURACHUTE TRASH CHUTE SYSTEM WEIGHING A MAXIMUM 3,000 LBS. TRASH CHUTE SYSTEM SHALL BE SECURED TO SCAFFOLD POSTS IN ACCORDANCE WITH REQUIREMENTS OF THE MANUFACTURER. TRASH CHUTE SHALL BE USED IN STRICT ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS. SCAFFOLD DESIGNED TO SUPPORT A MAXIMUM LIVE LOAD OF 25 PSF, ON A MAXIMUM OF (2) LEVELS AT ANY ONE TIME IN THE 3'–10" BAY ONLY.
2. TRASH CHUTE SHALL BE DISMANTLED IF WIND SPEEDS ARE FORECASTED TO EXCEED 45 MPH AT ANY TIME.
3. WORKERS MUST VACATE SCAFFOLD FOR SUSTAINED WIND SPEEDS OF 30 MPH, OR GUSTS OF 35 MPH.
4. REGULATE ACCESS/USE OF SCAFFOLD, AND MONITOR WIND SPEEDS TO ENSURE COMPLIANCE WITH RESTRICTIONS OUTLINED ABOVE.
5. SCAFFOLD STRUCTURE MAY NOT BE ENCLOSED WITH SCRIM, NETTING, SHRINK WRAP OR ENCLOSURE OF ANY KIND.
6. THE 3'–10" BAY MAY BE DECKED WITH STEEL SCAFFOLD PLANK ON A MAXIMUM OF (3) LEVELS AT ONE TIME. CONTRACTOR IS RESPONSIBLE FOR ADEQUATELY WIRING OR OTHERWISE SECURING PLANKS TO SCAFFOLD FOR WIND SPEEDS IN EXCESS OF 35 MPH.
7. PROVIDE OSHA COMPLIANT ACCESS TO AND FROM SCAFFOLD STRUCTURE, AS WELL AS GUARDRAILS OR FALL PROTECTION ON ALL LEVELS DURING INSTALLATION.
8. MODULAR SCAFFOLD COMPONENTS SHALL BE BY SUNBELT, OR APPROVED EQUAL, AND SHALL BE INSTALLED AND BRACED PER THE REQUIREMENTS OF THE MANUFACTURER. SCAFFOLD POSTS SHALL HAVE A MINIMUM ALLOWABLE LOAD RATING OF 3,800 LBS WHEN INSTALLED WITH LEDGERS IN PERPENDICULAR DIRECTIONS AT A MAXIMUM SPACING OF 2m.
9. RIGHT–ANGLE CLAMPS SHALL HAVE A MINIMUM ALLOWABLE SLIP LOAD RATING OF 1,300 LBS AND A MINIMUM ALLOWABLE BREAK LOAD RATING OF 4,000 LBS, INCLUDING A 4 FACTOR OF SAFETY. CLAMPS MUST BE INSTALLED AND TORQUED PER THE REQUIREMENTS OF THE MANUFACTURER.
10. SWIVEL CLAMPS SHALL HAVE A MINIMUM ALLOWABLE SLIP LOAD RATING OF 2,200 LBS AND A MINIMUM ALLOWABLE BREAK LOAD RATING OF 4,000 LBS, INCLUDING A 4 FACTOR OF SAFETY. CLAMPS MUST BE INSTALLED AND TORQUED PER THE REQUIREMENTS OF THE MANUFACTURER.
11. SCAFFOLD TUBES FOR TUBE AND CLAMP BRACING SHALL BE MINIMUM 1.9" O.D. x 0.09"–THICK 50 KSI STEEL PIPE.
12. PROVIDE SCAFFOLD PLANKS OR MUD SILLS UNDER EACH SCAFFOLD LEG BEARING ON EVEN AND LEVEL CONCRETE SURFACES. FOR BEARING ON SOIL OR SLOPED SURFACES, PROVIDE BEARING PAD OF SUFFICIENT SIZE AND STRENGTH TO SPREAD LOADS OVER ADEQUATE BEARING AREA. PROVIDE EVEN, LEVEL AND STABLE BEARING CONDITIONS FOR ALL LEGS.
13. SCAFFOLD LEGS SHALL BE INSTALLED WITH COUPLING PINS.
14. SCREW JACKS SHALL BE LIMITED TO A MAXIMUM EXTENSION OF 12" AND SHALL BE INSTALLED TIGHT.
15. ALL ANCHORS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE MANUFACTURER.
16. D.H. CHARLES ENGINEERING, INC. WILL NOT SUPERVISE, DIRECT, CONTROL OR HAVE AUTHORITY OVER OR BE RESPONSIBLE FOR CONTRACTOR'S MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OF CONSTRUCTION, OR THE SAFETY PRECAUTIONS AND PROGRAMS INCIDENT THERETO, OR FOR ANY FAILURE OF CONTRACTOR TO COMPLY WITH LAWS AND REGULATIONS APPLICABLE TO THE FURNISHING OR PERFORMANCE OF WORK.
17. VERIFY THAT REQUIRED CLEARANCES ARE OBTAINED PRIOR TO COMMENCEMENT OF THE WORK. VERIFY THE ACCURACY OF ALL DIMENSIONS FOR BOTH EXISTING AND PROPOSED WORK.
18. ADEQUACY OF EXISTING STRUCTURE TO SUPPORT LOADS IMPOSED UPON IT BY SCAFFOLD SYSTEM HAS NOT BEEN VERIFIED BY, NOR IS THE RESPONSIBILITY OF D.H. CHARLES ENGINEERING, INC., AND MUST BE APPROVED BY BUILDING ENGINEER OF RECORD PRIOR TO SYSTEM ERECTION.

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SCAFFOLD SERVICES
1001 NW 58TH COURT FT. LAUDERDALE, FL 33309
PHONE: (954) 757–0531
www.sunbeltrentals.com

DHC
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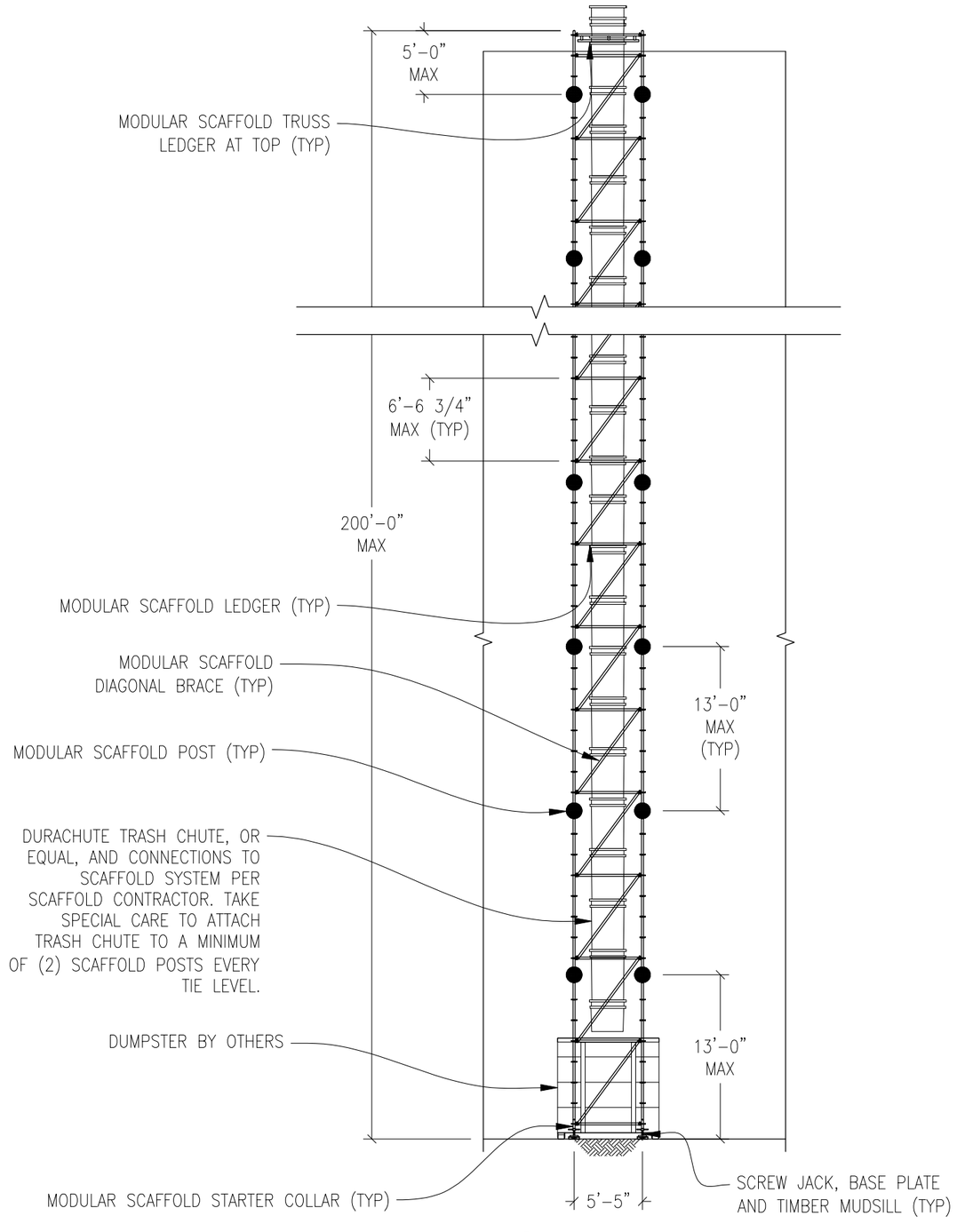
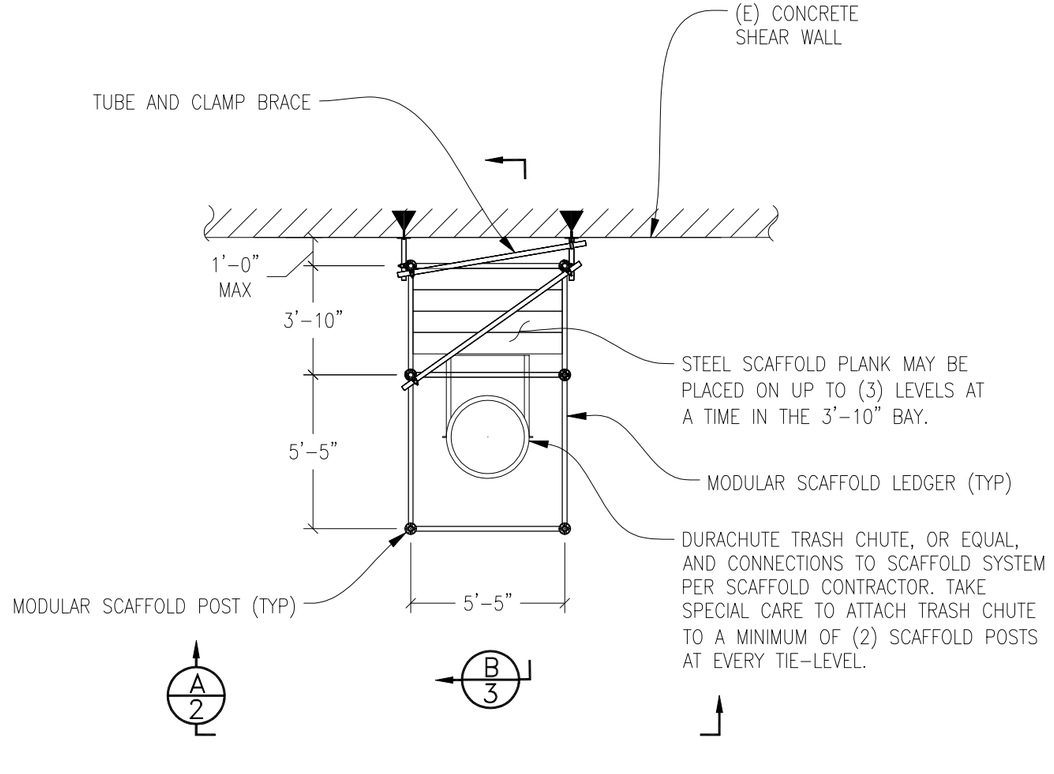
4706 Hoen Avenue
Santa Rosa, CA 95405
(707) 537-8282 www.charlesengineering.com
FL COA NO. 27238

DATE:	3–7–22
DRAFTER:	CRE
CHECKED BY:	SAC
SHEET	1 OF 3
DRAWING NO.:	22–0377A
REV	0



A/2 *SECTION*
SCALE: 3/32"=1'-0"

▼ –DENOTES SCAFFOLD TIE TO
● (E) STRUCTURE, SEE DETAIL 1/3



PLAN VIEW
SCALE: 3/16"=1'-0"

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Luke Griffis
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Date: 2022.03.16 17:32:20 -07'00'

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HALLANDALE BEACH, FL

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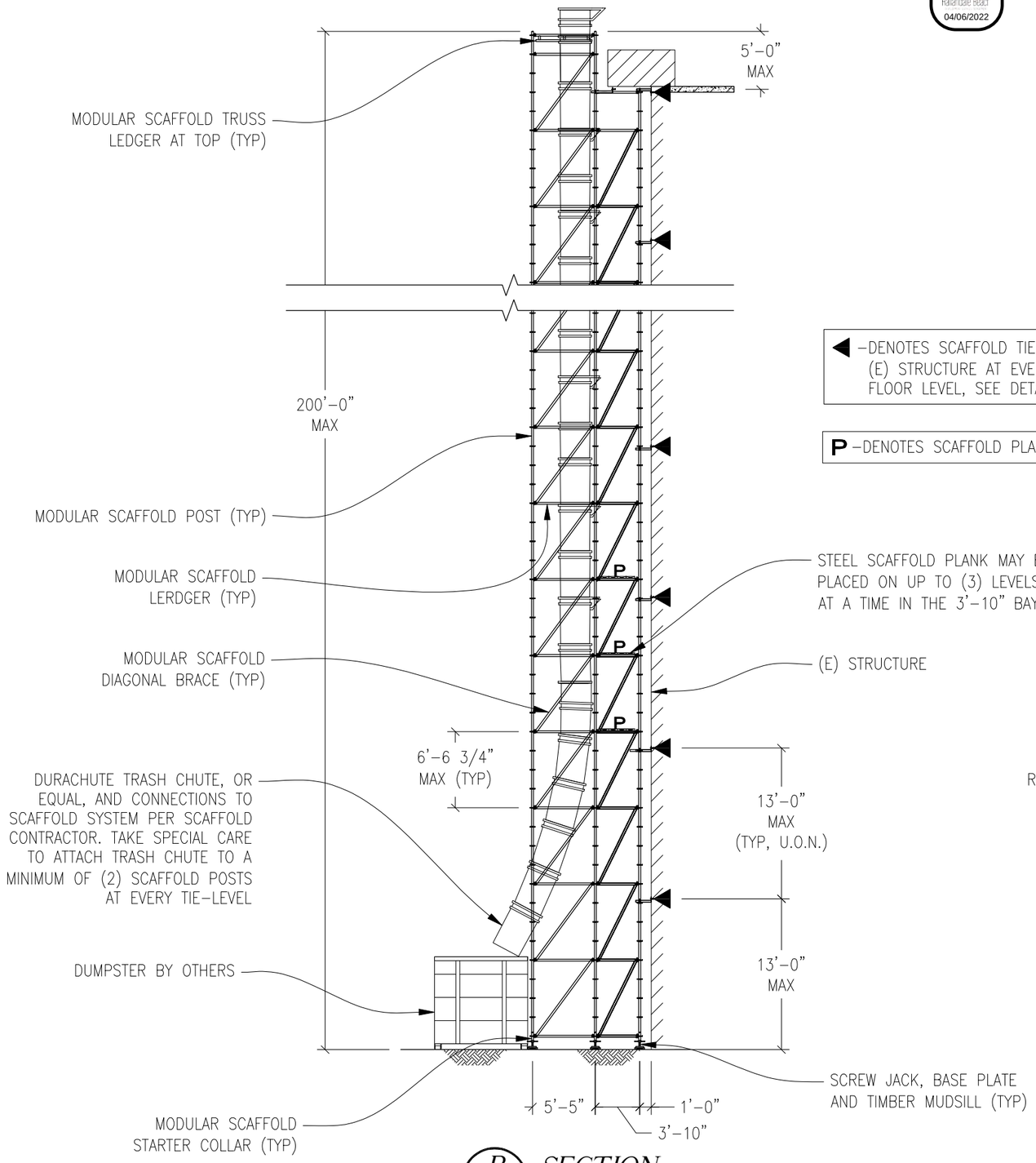
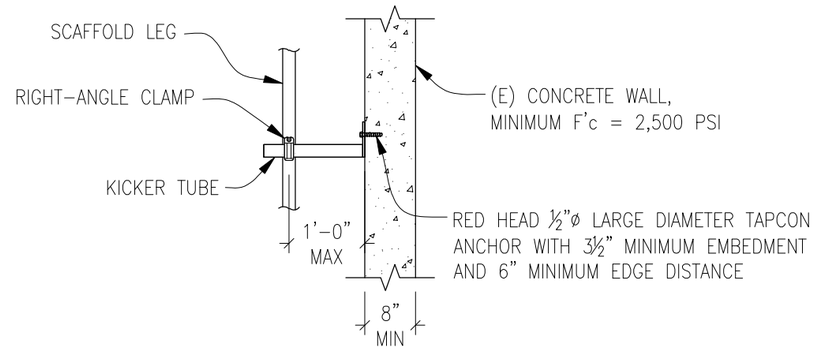
SHEET 2 OF 3
DRAWING NO.: 22-0377A
REV 0



B/3 SECTION
SCALE: 3/32"=1'-0"

◀ -DENOTES SCAFFOLD TIE TO (E) STRUCTURE AT EVERY FLOOR LEVEL, SEE DETAIL 1/3

P -DENOTES SCAFFOLD PLANK



1/3 DETAIL
SCALE: 1/2"=1'-0"

LUKE R. GRIFFIS LICENSE No. 69491 STATE OF FLORIDA PROFESSIONAL ENGINEER

Luke Griffis
Digitally signed by Luke Griffis
DN: E=luke@charlesengineering.com, CN=Luke Griffis, O=D.H. Charles Engineering, Inc., L=Santa Rosa, S=California, C=US
Date: 2022.03.16 17:32:39-07'00'

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SHEET 3 OF 3
DRAWING NO.: 22-0377A
REV 0

FL #	FL23301-R8
Application Type	Revision
Code Version	2020
Application Status	Approved
Comments	
Archived	☐
Product Manufacturer	Soprema, Inc.
Address/Phone/Email	310 Quadral Drive Wadsworth, OH 44281 (800) 356-3521 dperry@soprema.us
Authorized Signature	Darren Perry dperry@soprema.us
Technical Representative	Darren Perry, P.E., RRC
Address/Phone/Email	310 Quadral Drive Wadsworth, OH 44281 (800) 356-3521 dperry@soprema.us
Quality Assurance Representative	
Address/Phone/Email	
Category	Roofing
Subcategory	Modified Bitumen Roof System
Compliance Method	Evaluation Report from a Florida Registered Architect or a Licensed Florida Professional Engineer ☐ Evaluation Report - Hardcopy Received
Florida Engineer or Architect Name who developed the Evaluation Report	Robert Nieminen
Florida License	PE-59166
Quality Assurance Entity	UL LLC
Quality Assurance Contract Expiration Date	04/02/2022
Validated By	John W. Knezevich, PE ☑ Validation Checklist - Hardcopy Received
Certificate of Independence	FL23301_R8_COI_2021_01_COI_NIEMINEN.pdf

Referenced Standard and Year (of Standard)

Standard	Year
ASTM D2178	2015
ASTM D4601	2012
ASTM D4897	2009
ASTM D6162	2015
ASTM D6163	2015
ASTM D6164	2011
ASTM D6298	2013
TAS 110	2000
TAS 114	2011

Equivalence of Product Standards
Certified By

Sections from the Code

Product Approval Method	Method 1 Option D
Date Submitted	12/16/2021
Date Validated	12/20/2021
Date Pending FBC Approval	12/23/2021
Date Approved	02/08/2022

Summary of Products

FL #	Model, Number or Name	Description
23301.1	Soprema Modified Bitumen Roof Systems for use in FBC HVHZ jurisdictions	SBS modified bitumen roof systems
Limits of Use **Approved for use in HVHZ:** Yes **Approved for use outside HVHZ:** No **Impact Resistant:** N/A **Design Pressure:** +N/A/-650 **Other:** 1.) The design pressure noted pertains to one assembly. Refer to ER Appendix for all assemblies and maximum allowable design pressures. 2.) Refer to ER Section 5 for Limits of Use. 3.) Refer to FL3915 for non-HVHZ.		**Installation Instructions** FL23301_R8_II_2021_12_15_FINAL2_A1_ER_SOPREMA_MB_HVHZ_FL23301-R8.pdf Verified By: Robert Nieminen PE-59166 Created by Independent Third Party: Yes **Evaluation Reports** FL23301_R8_AE_2021_12_15_FINAL2_ER_SOPREMA_MB_HVHZ_FL23301-R8.pdf Created by Independent Third Party: Yes

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353 Christian Street, Unit #13
Oxford, CT 06478
(203) 262-9245

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EVALUATION REPORT

Soprema, Inc.
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Evaluation Report 15920.09.17-R8
FL23301-R8
Date of Issuance: 09/27/2017
Revision 8: 12/15/2021

SCOPE:
This Evaluation Report is issued under **Rule 61G20-3** and the applicable rules and regulations governing the use of construction materials in the State of Florida. The documentation submitted has been reviewed by Robert Nieminen, P.E. for use of the product under the Florida Building Code. The product described herein has been evaluated for compliance with the **7th Edition (2020) Florida Building Code, High Velocity Hurricane Zone** sections noted herein.

DESCRIPTION: Soprema Modified Bitumen Roof Systems for use in FBC HVHZ jurisdictions

LABELING: Labeling shall be in accordance with the requirements of the Accredited Quality Assurance Agency noted herein.

CONTINUED COMPLIANCE: This Evaluation Report is valid until such time as the named product(s) changes, the referenced Quality Assurance or production facility location(s) changes, or Code provisions that relate to the product(s) change. Acceptance of our Evaluation Reports by the named client constitutes agreement to notify NEMO ETC, LLC of any changes to the product(s), the Quality Assurance or the production facility location(s). NEMO ETC, LLC requires a complete review of its Evaluation Report relative to updated Code requirements with each Code Cycle.

ADVERTISEMENT: The Florida Product Approval Number (FL#) preceded by the words "**NEMO Evaluated**" may be displayed in advertising literature. If any portion of the Evaluation Report is displayed, then it shall be done in its entirety.

INSPECTION: Upon request, a copy of this entire Evaluation Report shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This Evaluation Report consists of pages 1 through 6, plus a 148-page Appendix.

Prepared by:

Robert J.M. Nieminen, P.E.
Florida Registration No. 59166, Florida DCA ANE1983

The facsimile seal appearing was authorized by Robert Nieminen, P.E. on 12/15/2021. This does not serve as an electronically signed document.

CERTIFICATION OF INDEPENDENCE:

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NEMO|etc.

ROOFING SYSTEMS EVALUATION:

1. SCOPE:

Product Category: Roofing
Sub-Category: Modified Bitumen Roof Systems
Compliance Statement: **Soprema Modified Bitumen Roof Systems**, as produced by **Soprema, Inc.**, have demonstrated compliance with the following sections of the **7th Edition (2020) Florida Building Code, HVHZ** through testing in accordance with the following Standards. Compliance is subject to the Installation Requirements and Limitations / Conditions of Use set forth herein.

2. STANDARDS:

Section	Property	Standard	Year
TAS 110	Resistance to Foot Traffic	TAS 114, Section 8.9	2011
TAS 110	Wind resistance	TAS 114, Appendix C, D or J	2011
TAS 110	Susceptibility to Hail Damage	TAS 114, Appendix F	2011
TAS 110	Susceptibility to Leakage	TAS 114, Appendix G	2011
TAS 110	Material standard	ASTM D2178	2015
TAS 110	Material standard	ASTM D4601	2012
TAS 110	Material standard	ASTM D4897	2009
TAS 110	Material standard	ASTM D6162	2015
TAS 110	Material standard	ASTM D6163	2015
TAS 110	Material standard	ASTM D6164	2011
TAS 110	Material standard	ASTM D6298	2013

3. REFERENCES:

Entity	Exam	Reference	Date	Entity	Exam	Reference	Date
ERD (TST6049)	ASTM D6163	S35860.05.12-1-R1	05/04/12	FM (TST1867)	FM 4470/4474	3028631	08/09/07
ERD (TST6049)	ASTM D6163, G155	S35860.05.12-1-R1	05/04/12	FM (TST1867)	FM 4470/4474	3029098	10/25/07
ERD (TST6049)	ASTM D6164	S35860.05.12-2-R3	05/08/12	FM (TST1867)	FM 4470/4474	797-03385-267	01/23/08
ERD (TST6049)	ASTM D6164	S35860.05.12-3-R1	05/08/12	FM (TST1867)	FM 4470/4474	3032109	07/21/08
ERD (TST6049)	ASTM D6164, G155	S35860.05.12-2-R3	05/08/12	FM (TST1867)	FM 4470/4474	3032172	06/12/09
ERD (TST6049)	ASTM D6163	S39970.07.12-1B	07/12/12	FM (TST1867)	FM 4470/4474	3036182	07/31/09
ERD (TST6049)	ASTM D6164, G155	S43400.08.14-7-R1	08/08/14	FM (TST1867)	FM 4470/4474	797-05952-267	10/15/10
ERD (TST6049)	ASTM D6163	S43400.08.14-4-R1	08/26/14	FM (TST1867)	FM 4470/4474	3042559	06/28/11
ERD (TST6049)	ASTM D6163, G155	S43400.08.14-5-R1	08/26/14	FM (TST1867)	FM 4470/4474	3042905 (released)	01/10/12
ERD (TST6049)	ASTM D6164	S43400.08.14-6	08/26/14	FM (TST1867)	FM 4470/4474	797-07067-267	02/01/12
ERD (TST6049)	ASTM D6164, G155	S43400.09.14-9	09/02/14	FM (TST1867)	FM 4470/4474	3043007	02/09/12
ERD (TST6049)	ASTM D4601	S44110.09.14-7A	09/08/14	FM (TST1867)	FM 4470/4474	3044630	02/10/12
ERD (TST6049)	ASTM D6163, G155	S44110.09.14-3	09/08/14	FM (TST1867)	FM 4470/4474	3044801	02/27/12
ERD (TST6049)	ASTM D6298	S43400.09.14-10	09/08/14	FM (TST1867)	FM 4470/4474	797-07177-267	02/27/12
ERD (TST6049)	ASTM D6164	S43400.12.14-8	12/10/14	FM (TST1867)	FM 4470/4474	3044004	03/16/12
ERD (TST6049)	ASTM D6164	S44110.01.15-4A-R3	01/12/15	FM (TST1867)	FM 4470/4474	3045734	04/04/12
NEMO (TST6049)	ASTM D6163, G155	4-SOP-18-001.05.18-1	05/11/18	FM (TST1867)	FM 4470/4474	797-07300-267	05/01/12
NEMO (TST6049)	ASTM D4601	4-SOP-18-001.05.18	05/18/18	FM (TST1867)	FM 4470/4474	797-07330-267	05/09/12
NEMO (TST6049)	ASTM D6164	4S-SOP-18-001.08.18-3	09/26/18	FM (TST1867)	FM 4470/4474	797-07436-267	06/11/12
NEMO (TST6049)	ASTM D6164	4S-SOP-18-001.03.19.A	03/05/19	FM (TST1867)	FM 4470/4474	797-07582-267	08/15/12
NEMO (TST6049)	ASTM D4601	4q-SOP-19-SSMBB-01.A	03/11/19	FM (TST1867)	FM 4470/4474	3046328 (released)	09/13/12
NEMO (TST6049)	ASTM D4601	4q-SOP-19-SSMBB-01.B	03/11/19	FM (TST1867)	FM 4470/4474	3041769 (released)	09/27/12
NEMO (TST6049)	ASTM D4601	4q-SOP-19-SSMBB-01.C	03/11/19	FM (TST1867)	FM 4470/4474	3045363 (released)	10/12/12
NEMO (TST6049)	ASTM D6163	4q-SOP-20-SSMBB-01.A	11/05/20	FM (TST1867)	FM 4470/4474	797-07782-267	10/23/12
NEMO (TST6049)	ASTM D6164	4q-SOP-20-SSMBB-01.B	11/05/20	FM (TST1867)	FM 4470/4474	3045101	11/05/12
NEMO (TST6049)	ASTM D6164	4q-SOP-20-SSMBB-01.C	11/05/20	FM (TST1867)	FM 4470/4474	797-07866-267	11/21/12
NEMO (TST6049)	ASTM D6164, G155	4q-SOP-20-SSMBB-01.D	11/05/20	FM (TST1867)	FM 4470/4474	3046765	02/15/13
NEMO (TST6049)	ASTM D6163	4q-SOP-21-SSMBB-01.A	05/04/21	FM (TST1867)	FM 4470/4474	797-08179-267	03/25/13
NEMO (TST6049)	ASTM D6164, G155	4q-SOP-20-SSMBB-02.A	05/04/21	FM (TST1867)	FM 4470/4474	797-08292-267	04/22/13
NEMO (TST6049)	ASTM D6163, G155	4q-SOP-21-SSMBB-02.A	10/04/21	FM (TST1867)	FM 4470/4474	797-08332-267	06/04/13
PRI (TST5878)	ASTM D2178, IV	SOP-040-02-01	02/27/12	FM (TST1867)	FM 4470/4474	797-08475-267	06/25/13
PRI (TST5878)	ASTM D2178, VI	SOP-041-02-01	02/27/12	FM (TST1867)	FM 4470/4474	3047439	07/22/13
PRI (TST5878)	ASTM D4897	MSA-006-02-01	06/17/15	FM (TST1867)	FM 4470/4474	797-08591-267	08/14/13
ACRC (TST4671)	TAS 114	15-032	12/15/15	FM (TST1867)	FM 4470/4474	3051109	12/29/13
ACRC (TST4671)	TAS 114	15-033	12/15/15	FM (TST1867)	FM 4470/4474	3049322	01/17/14
ACRC (TST4671)	TAS 114	15-034	12/16/15	FM (TST1867)	FM 4470/4474	797-09031-267	01/24/14
ACRC (TST4671)	TAS 114	15-035	12/16/15	FM (TST1867)	FM 4470/4474	797-09183-267	02/17/14
ACRC (TST4671)	TAS 114	15-036	12/17/15	FM (TST1867)	FM 4470/4474	797-09280-267	04/01/14
ACRC (TST4671)	TAS 114	15-048	01/04/16	FM (TST1867)	FM 4470/4474	797-09311-267	04/14/14

Entity	Exam	Reference	Date
ACRC (TST4671)	TAS 114	15-049	01/08/16
ACRC (TST4671)	TAS 114	19-003	06/11/19
Air-Ins (TST6679)	Physicals	AS-00561-A	10/29/12
CTL (TST1577)	TAS 114	CTLA 101R	09/23/08
CTL (TST1577)	TAS 114	CTLA 101R-A	09/23/08
ERD (TST6049)	FM 4470/4474	2738.10.00-1	10/20/00
ERD (TST6049)	FM 4470/4474	2109.08.02	08/06/02
ERD (TST6049)	FM 4470/4474	2761.09.03	09/02/03
ERD (TST6049)	FM 4470/4474	2764.09.03	09/16/03
ERD (TST6049)	FM 4470/4474	2761.10.03-2	10/03/03
ERD (TST6049)	FM 4470/4474	2766.12.03	12/01/03
ERD (TST6049)	FM 4470/4474	2760.12.04-R1	12/23/04
ERD (TST6049)	FM 4470/4474	2760.01.05-3	02/22/05
ERD (TST6049)	FM 4470/4474	02848.04.05	04/26/05
ERD (TST6049)	FM 4470/4474	2778.07.05	07/15/05
ERD (TST6049)	FM 4470/4474	2759.11.05	11/07/05
ERD (TST6049)	FM 4470/4474	2774.04.05-R1	04/18/07
ERD (TST6049)	FM 4470/4474	2779.11.05-R1	04/18/07
ERD (TST6049)	FM 4470/4474	S14000.08.09-R2	10/09/09
ERD (TST6049)	FM 4470/4474	S30440.03.10-2-R2	06/01/10
ERD (TST6049)	FM 4470/4474	S39320.01.12-R1	05/24/12
ERD (TST6049)	FM 4470/4474	S43200SC	10/21/12
ERD (TST6049)	FM 4470/4474	S45070.08.13	08/13/13
ERD (TST6049)	FM 4470/4474	S45340.10.13	10/02/13
ERD (TST6049)	FM 4470/4474	S47170SC	12/19/13
ERD (TST6049)	FM 4470/4474	S47160.01.14	02/07/14
ERD (TST6049)	FM 4470/4474	7075.06.14	06/25/14
ERD (TST6049)	FM 4470/4474	S47300.08.14-2	08/19/14
ERD (TST6049)	FM 4470/4474	SC6620.10.14	10/06/14
ERD (TST6049)	FM 4470/4474	S45340.10.14	10/15/14
ERD (TST6049)	Criticality	S43210.11.14	11/10/14
ERD (TST6049)	FM 4470/4474	7075.11.14	11/20/14
ERD (TST6049)	FM 4470/4474	NG-SC9815.11.15	11/06/15
ERD (TST6049)	Criticality	SOP-SC12130.09.16	09/14/16
ERD (TST6049)	FM 4470/4474	SOP-SC11825.16	10/19/16
ERD (TST6049)	FM 4470/4474	SOP-SC13130.10.16	10/25/16
ERD (TST6049)	FM 4470/4474	CEL-SC12910.11.16	11/02/16
ERD (TST6049)	FM 4470/4474	SOP-SC14555.07.17	07/24/17
ERD (TST6049)	Criticality	ICP-SC16225.09.17	09/06/17
ERD (TST6049)	Criticality	SOP-SC14545.10.17	10/24/17
ERD (TST6049)	FM 4470/4474	SOP-SC14560.12.17	12/15/17
ERD (TST6049)	FM 4474	SOP-SC16600.12.17-2	12/18/17
ERD (TST6049)	Criticality	S11440.11.10-3-R3	12/16/10
FM (TST1867)	FM 4470/4474	1W8A1.AM	02/04/94
FM (TST1867)	FM 4470/4474	3X3A7.AM	09/08/94
FM (TST1867)	FM 4470/4474	2B8A4.AM	07/02/97
FM (TST1867)	FM 4470/4474	1D7A4.AM	11/09/98
FM (TST1867)	FM 4470/4474	3011494	08/22/01
FM (TST1867)	FM 4470/4474	3009610	10/15/01
FM (TST1867)	FM 4470/4474	3002351	02/28/03
FM (TST1867)	FM 4470/4474	3014751	08/27/03
FM (TST1867)	FM 4470/4474	3018579	10/09/03
FM (TST1867)	FM 4470/4474	3008411	11/03/03
FM (TST1867)	FM 4470/4474	3010173	02/24/04
FM (TST1867)	FM 4470/4474	3017614	02/27/06
FM (TST1867)	FM 4470/4474	3022038	04/05/06
FM (TST1867)	FM 4470/4474	3024594	05/19/06
FM (TST1867)	FM 4470/4474	3026028	05/25/06
FM (TST1867)	FM 4470/4474	3023458	07/18/06
FM (TST1867)	FM 4470/4474	3023749	09/28/06
FM (TST1867)	FM 4470/4474	3024311	11/01/06
FM (TST1867)	FM 4470/4474	3025185	05/22/07
FM (TST1867)	FM 4470/4474	3026964	07/25/07
FM (TST1867)	FM 4470/4474	3030926	08/07/07

Entity	Exam	Reference	Date
FM (TST1867)	FM 4470/4474	797-09314-267	04/21/14
FM (TST1867)	FM 4470/4474	3049890	06/20/14
FM (TST1867)	FM 4470/4474	3047351	10/09/14
FM (TST1867)	FM 4470/4474	3053841	12/02/14
FM (TST1867)	FM 4470/4474	3053933	03/17/15
FM (TST1867)	FM 4470/4474	3055384	03/27/15
FM (TST1867)	FM 4470/4474	3051831	04/14/15
FM (TST1867)	FM 4470/4474	3051109	05/11/15
FM (TST1867)	FM 4470/4474	RR203007	12/14/15
FM (TST1867)	FM 4470/4474	3054633	12/18/15
FM (TST1867)	FM 4470/4474	3057342 (data)	12/23/15
FM (TST1867)	FM 4470/4474	RR203472	02/05/16
FM (TST1867)	FM 4470/4474	3056207	02/09/16
FM (TST1867)	FM 4470/4474	3055167	02/10/16
FM (TST1867)	FM 4470/4474	3053475	02/11/16
FM (TST1867)	FM 4470/4474	3059307	12/13/16
FM (TST1867)	FM 4470/4474	3057888	01/16/17
FM (TST1867)	FM 4470/4474	3057578	12/07/17
FM (TST1867)	Criticality	3063970	09/14/18
FM (TST1867)	FM 4470/4474	3063320	07/11/19
FM (TST1867)	FM 4470/4474	PR456300 (data)	03/11/20
FM (TST1867)	Criticality	PR454634	02/08/21
IRT (TST5296)	TAS 114	02-017	04/16/02
IRT (TST5296)	TAS 114	02-022	06/07/02
IRT (TST5296)	TAS 114	02-031	09/05/02
NEMO (TST6049)	FM 4474	4-SOP-18-005; C-1B	03/27/18
NEMO (TST6049)	FM 4474	4-SOP-18-005.04.18-2	04/04/18
NEMO (TST6049)	Criticality	4S-SOP-18-001.08.18-5	08/31/18
NEMO (TST6049)	Criticality	4S-SOP-18-004.09.18	09/19/18
NEMO (TST6049)	FM 4474	4L-SOP-18-005.09.18-2	09/20/18
NEMO (TST6049)	FM 4474	4L-SOP-18-005.07.18-3	09/26/18
NEMO (TST6049)	FM 4474	4L-SOP-18-005.08.18-2	09/26/18
NEMO (TST6049)	FM 4474	NG-SC16705.10.18	10/29/18
NEMO (TST6049)	Criticality	4i-SOPC-19-SSCRT-02	10/16/19
NEMO (TST6049)	FM 4474	4L-SOP-18-005.08.18-1	01/25/19
NEMO (TST6049)	FM 4474	4L-SOP-18-005.02.19-A	02/12/19
NEMO (TST6049)	FM 4474	4a-SOP-19-LSWUS-02.A	04/25/19
NEMO (TST6049)	Criticality	4i-SOP-19-SSCRT-02.A	09/16/19
NEMO (TST6049)	Criticality	4i-SOP-19-SSCRT-01.A	10/22/19
NEMO (TST6049)	FM 4474	4a-SOP-19-LSWUS-05.A	10/23/19
NEMO (TST6049)	FM 4474	4a-ICP-19-LSWUS-01.A	11/08/19
NEMO (TST6049)	FM 4474	4a-SOP-19-LSWUS-07.A	11/20/19
NEMO (TST6049)	FM 4474	4a-SOPC-19-LSWUS-01.A	03/10/20
NEMO (TST6049)	FM 4474	4a-SOP-19-LSWUS-08.A	05/13/20
NEMO (TST6049)	FM 4474	4a-SOP-19-LSWUS-09.A	05/15/20
NEMO (TST6049)	Criticality	4p-ICP-19-SSLAP-04	05/28/20
NEMO (TST6049)	FM 4474	4a-SOPC-20-LSWUS-01.A	09/15/20
NEMO (TST6049)	FM 4474	4a-NG-20-LSWUS-02.A	12/03/20
NEMO (TST6049)	Criticality	4i-SOP-20-SSCRT-01.A	03/03/21
NEMO (TST6049)	FM 4474	4a-SOP-21-LSWUS-05.A	06/01/21
NEMO (TST6049)	FM 4474	4a-SOP-21-LSWUS-03.A	09/10/21
NEMO (TST6049)	Criticality	4i-SOP-21-SSCRT-03	12/13/21
NEMO (TST6049)	FM 4474	4a-SOP-21-LSWUS-06	12/15/21
NRC-CNRC	Wind Uplift	NRCC-45988	02/28/03
PRI (TST5878)	FM 4474	SOP-012-02-01	05/08/12
PRI (TST5878)	FM 4474	SOP-012-02-02	05/08/12
PRI (TST5878)	FM 4474	SOP-033-02-01	05/10/12
PRI (TST5878)	FM 4474	SOP-074-02-01	04/19/16
PRI (TST5878)	FM 4474	SOP-089-02-01	07/22/16
PRI (TST5878)	Criticality	SOP-080-02-02	12/16/16
PRI (TST5878)	FM 4470	SOP-082-02-01	12/16/16
PRI (TST5878)	FM 4474	SOP-126-02-01	05/18/17
PRI (TST5878)	FM 4474	PRS-076-02-01	02/21/18
PRI (TST5878)	Criticality	SOP-147-02-01	11/01/18
PRI (TST5878)	FM 4474	410T0004	03/13/20
UL (QUA9625)	Quality Control	Service Confirm	04/02/19

4. PRODUCT DESCRIPTION:

4.1 This Evaluation Report covers **Soprema Modified Bitumen Roof Systems** installed in accordance with **Soprema** published installation instructions and the Limitations / Conditions of Use herein.

TABLE 1: EVALUATED MEMBRANES

Type	Product	Material Standard			Plant(s)
		Reference	Type	Grade	
Base Sheets	MODIFIED SOPRA G	ASTM D4601	2	N/A	MS, OH
	SOPRABASE S	ASTM D4601	2	N/A	OH
	SOPRABASE TG	ASTM D4601	2	N/A	MS, OH
	ULTRA-STICK NAILBASE	ASTM D4601	2	N/A	OH*
	SOPRA 4897	ASTM D4897	N/A	N/A	AL
Ply Sheets	SOPRA IV	ASTM D2178	4	N/A	AL
	SOPRA VI	ASTM D2178	6	N/A	AL
Mechanically Attached, Smooth SBS Membranes	SOPRAFIX Base 611	ASTM D6164	1	S	MS*, OH
	SOPRAFIX Base 612	ASTM D6164	1	S	MS*, OH
	SOPRAFIX Base 613	ASTM D6164	1	S	MS*, OH
	SOPRAFIX Base 622	ASTM D6164	1	S	MS*, OH
	SOPRAFIX Base 614	ASTM D6164	2	S	MS*, OH
Base Ply and Ply Membranes	ELASTOPHENE Flam HS	ASTM D6162	3	S	MS*
	ELASTOPHENE HS Sanded	ASTM D6162	3	S	MS*
	COLVENT TG	ASTM D6163	1	S	OH
	ELASTOPHENE Flam 2.2	ASTM D6163	1	S	MS, OH
	ELASTOPHENE Flam 3.0	ASTM D6163	1	S	MS*, OH
	ELASTOPHENE Flam Stick	ASTM D6163	1	S	QC
	ELASTOPHENE PS 2.2	ASTM D6163	1	S	OH
	ELASTOPHENE PS 3.0	ASTM D6163	1	S	OH
	ELASTOPHENE Sanded 2.2	ASTM D6163	1	S	MS*, OH
	ELASTOPHENE Sanded 3.0	ASTM D6163	1	S	OH
	ELASTOPHENE SP 2.2	ASTM D6163	1	S	OH
	ELASTOPHENE SP 3.0	ASTM D6163	1	S	MS*, OH
	ELASTOPHENE Stick	ASTM D6163	1	S	OH
	ELASTOPHENE ULTRA-STICK	ASTM D6163	1	S	OH*
	COLVENT 180 TG	ASTM D6164	1	S	OH
	COLVENT Flam 180 TG	ASTM D6164	1	S	OH
	SOPRALENE 180 PS 2.2	ASTM D6164	1	S	MS, OH
	SOPRALENE 180 PS 3.0	ASTM D6164	1	S	MS, OH
	SOPRALENE 180 Sanded	ASTM D6164	1	S	MS, OH
	SOPRALENE 180 Sanded 2.2	ASTM D6164	1	S	MS*, OH
	SOPRALENE 180 SP 3.0	ASTM D6164	1	S	MS*, OH
	SOPRALENE 180 SP 3.5	ASTM D6164	1	S	MS, OH
	SOPRALENE Flam 180	ASTM D6164	1	S	MS*, OH
	SOPRALENE Flam Stick	ASTM D6164	1	S	MS*, OH
	SOPRALENE Stick	ASTM D6164	1	S	MS*, OH
	SOPRALENE ULTRA-STICK	ASTM D6164	1	S	OH
	SOPRALENE 250 Sanded	ASTM D6164	2	S	OH
	SOPRALENE 250 SP	ASTM D6164	2	S	OH
	SOPRALENE Flam 250	ASTM D6164	2	S	MS*, OH

**Indicates membrane/plant combination is Certified by ISO/IEC 17065 Certification Entity; NEMO|cert. to the noted standard. Refer to www.nemocert.com for details.*

TABLE 1: EVALUATED MEMBRANES					
Type	Product	Material Standard			Plant(s)
		Reference	Type	Grade	
Cap Ply Membranes	ELASTOPHENE Flam HS FR GR	ASTM D6162	3	G	MS*
	ELASTOPHENE HS FR GR	ASTM D6162	3	G	MS*
	ELASTOPHENE Flam FR GR	ASTM D6163	1	G	MS, OH
	ELASTOPHENE Flam LS FR GR	ASTM D6163	1	G	MS, OH
	ELASTOPHENE FR GR	ASTM D6163	1	G	MS, OH
	ELASTOPHENE LS FR GR	ASTM D6163	1	G	MS, OH
	ELASTOPHENE Stick FR GR	ASTM D6163	1	G	OH
	ELASTOPHENE ULTRA-STICK FR GR	ASTM D6163	1	G	OH*
	SOPRALENE 180 FR GR	ASTM D6164	1	G	MS*, OH
	SOPRALENE Flam 180 FR GR	ASTM D6164	1	G	MS*, OH
	SOPRALENE Flam 180 GR	ASTM D6164	1	G	MS, OH
	SOPRALENE ULTRA-STICK FR GR	ASTM D6164	1	G	OH*
	SOPRALENE 250 FR GR	ASTM D6164	2	G	OH
	SOPRALENE Flam 250 FR GR	ASTM D6164	2	G	OH
	UNILAY	ASTM D6164	2	G	OH
	SOPRALAST 50 TV Alu	ASTM D6298	1	N/A	OH
	SOPRALAST 50 TV Alu Sanded	ASTM D6298	1	N/A	OH

**Indicates membrane/plant combination is Certified by ISO/IEC 17065 Certification Entity; NEMO|cert. to the noted standard. Refer to www.nemocert.com for details.*

5. LIMITATIONS:

5.1 This is a Building Code Evaluation. Neither NEMO ETC, LLC nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.

5.2 This Evaluation Report is not for use in Non-High Velocity Hurricane Zone jurisdictions.

5.3 The evaluation herein pertains to above-deck roof components; deck-attachment details pertain to 'as-tested' conditions under **Testing Application Standard TAS 114, Appendix J**. Roof decks shall be in accordance with **FBC HVHZ** requirements to the satisfaction of the Authority Having Jurisdiction.

5.4 This Evaluation Report does not include evaluation of fire classification. Refer to **FBC HVHZ 1516** for requirements and limitations regarding roof assembly fire classification. Refer to **FBC 2603** for requirements and limitations concerning the use of foam plastic insulation.

5.5 This Evaluation Report does not include evaluation of roof edge termination. Refer to **Roofing Application Standard RAS 111** for requirements and limitations regarding edge securement for low-slope roofs.

5.6 Refer to **FBC HVHZ 1521** for requirements and limitations regarding recover installations.

5.6.1 For mechanically attached components over existing roof decks, fasteners shall be tested in the existing deck for withdrawal resistance. A qualified design professional shall review the data for comparison to the minimum requirements for the system. Testing shall be in accordance with **Testing Application Standard TAS 105**.

5.6.2 For bonded insulation or membrane over existing substrates in a re-roof (tear off) or recover installation, the existing deck or existing roof surface shall be examined for compatibility with the adhesive to be installed. If any surface conditions exist that bring system performance into question, field uplift testing in accordance with **Testing Application Standard TAS 124** shall be conducted on mock-ups of the proposed new roof assembly.

5.6.3 For bonded insulation or membrane over existing substrates in a recover installation, the existing roof system shall be capable of resisting project design pressures on its own merit to the satisfaction of the Authority Having Jurisdiction, as documented through field uplift testing in accordance with **Testing Application Standard TAS 124**.

5.7 Refer to Appendix 1 for system attachment requirements for wind load resistance.

5.7.1 "MDP" = Maximum Design Pressure is the result of testing for wind load resistance based on allowable wind loads, and reflects the ultimate passing pressure divided by 2 (the 2 to 1 margin of safety per **Testing Application Standard TAS 114** has already been applied). Refer to **FBC HVHZ 1620** and **Roofing Application Standard RAS 128** for determination of design wind loads.

5.7.2 For mechanically attached components, the maximum design pressure for the selected assembly shall meet or exceed at least the Zone 1 PRIME design pressure determined in accordance with **FBC HVHZ 1620** or **Roofing Application Standard RAS 128**. Elevated pressure zones shall employ an attachment density designed by a qualified design professional to resist the elevated pressure criteria. Analysis shall be in accordance with **Roofing Application Standard RAS 117** or **Roofing Application Standard RAS 137**. ***This extrapolation is not permitted for systems marked with an asterisk****.

5.7.3 For assemblies marked with an asterisk*, the maximum design pressure (MDP) limitation shall be applicable to all roof pressure zones. Rational analysis is not permitted.

5.8 All components in the roof assembly shall have quality assurance audit in accordance with **F.A.C. Rule 61G20-3**. Refer to the Product Approval of the component manufacturer for components listed in Appendix 1 that are produced by a Product Manufacturer other than the report holder on Page 1 of this Evaluation Report.

6. INSTALLATION:

Soprema Modified Bitumen Roof Systems shall be installed in accordance with **Soprema** published installation instructions, subject to the Limitations / Conditions of Use herein.

7. BUILDING PERMIT REQUIREMENTS:

As required by the Building Official or Authority Having Jurisdiction to properly evaluate the installation of this product.

8. MANUFACTURING PLANTS:

Contact the named QA entity for manufacturing facilities covered by **F.A.C. Rule 61G20-3** QA requirements. Refer to Section 4 herein for products and production locations having met codified material standards.

9. QUALITY ASSURANCE ENTITY:

UL LLC – QUA9625; (360) 817-5512; Vinycia.Seman@ul.com

- THE 148-PAGES THAT FOLLOW FORM PART OF THIS EVALUATION REPORT -

NEMO|etc.

APPENDIX 1: ATTACHMENT REQUIREMENTS FOR WIND UPLIFT RESISTANCE

NEMO|etc.

The following notes apply to the systems outlined herein:

1. The roof system evaluation herein pertains to above-deck roof components. Roof decks and structural members shall be in accordance with FBC HVHZ requirements to the satisfaction of the Authority Having Jurisdiction. Deck-attachment details pertain to 'as-tested' conditions under Testing Application Standard TAS 114, Appendix J.

2. Unless otherwise noted, fasteners and stress plates shall be as follows. Fastener shall be of sufficient length for the following engagements:
   - Wood Deck: OMG #14 Roofgrip with Flat Bottom Plate (Accutrac), OMG HD with OMG 3 in. Galvalume Steel Plate, Dekfast #14 with Hex Plate or 3" Round Insulation Plate, Trufast #14 HD or Soprema #14 MP Fastener with Trufast 3" Metal Insulation Plate or Soprema 3" Metal Insulation Plate or Soprema #14 Fastener with Soprema 3 in. Insulation Plate. Minimum 0.75-inch plywood penetration or minimum 1-inch wood plank embedment.
   - Steel Deck: OMG #12 or #14 Roofgrip with Recessed or Flat Bottom Plate (Accutrac), OMG #12 Standard or HD with OMG 3 in. Galvalume Steel Plate, Dekfast #12 or #14 with Hex Plate or 3" Round Insulation Plate, Trufast #12 DP, Soprema #12 DP Fastener or Trufast #14 HD or Soprema #14 MP Fastener with Trufast 3" Metal Insulation Plate or Soprema 3" Metal Insulation Plate or Soprema #12 or #14 Fastener with Soprema 3 in. Insulation Plate. Minimum 0.75-inch steel penetration and engage the top flute of the steel deck.
   - Structural Concrete: OMG #14 Roofgrip with Recessed or Flat Bottom Plate (Accutrac), OMG HD or CD-10 with OMG 3 in. Galvalume Steel Plate, Dekfast #14 with Hex Plate or 3" Round Insulation Plate, Trufast #14 HD, Trufast Fluted Concrete Nail or Soprema #14 MP Fastener with Trufast 3" Metal Insulation Plate or Soprema 3" Metal Insulation Plate or Soprema #14 Fastener with Soprema 3 in. Insulation Plate. Minimum 1.25-inch embedment. Fastener installed with a pilot hole in accordance with the fastener manufacturer's published installation instructions.

3. Unless otherwise noted, insulation may be any one layer or combination of FBC Approved (Local or Statewide) board(s) that meet FBC HVHZ 1516 and, for foam plastic, FBC Chapter 26, when installed with the roof cover.

4. If mechanical attachment to the structural deck through lightweight insulating concrete is proposed, field withdrawal resistance testing shall be performed to confirm equivalent or determine enhanced fastening patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 117 and/or RAS 137. Calculations shall be prepared, signed and sealed by a qualified design professional.

5. Preliminary insulation attachment for System Type D: Minimum four fasteners per 4 x 8 ft board or minimum two fasteners per 4 x 4 ft board.

6. Unless otherwise noted, insulation adhesive application rates are as follows. Ribbon or bead width is at the time of application; the ribbons/beads shall expand as noted in the manufacturer's published instructions.

Adhesive	Rate
Hot asphalt:	Full coverage at 25-30 lbs/square
DUOTACK:	Continuous 0.5 to 0.75-inch wide ribbons, max. 12-inch o.c. *Note: DUOTACK 365 may be used anywhere DUOTACK is referenced.*
DUOTACK 365:	Continuous 0.5 to 0.75-inch wide ribbons, max. 12-inch o.c.
DUOTACK SPF:	Continuous 2.5-inch wide ribbons, max. 12-inch o.c. *Note: DUOTACK SPF may be used for insulation securement anywhere DUOTACK is referenced, except directly to existing gypsum decks, in recover applications over existing smooth-surfaced asphaltic built-up roof (BUR) or when used to adhere expanded polystyrene*.
ICP "Polyset CR-20":	Continuous 2.5-3.5-inch wide ribbons, max. 12-inch o.c.
Trufast Roofing Adhesive	Continuous 0.75 to 1-inch wide ribbons, max. 12-inch o.c.

Note: When multiple layers(s) of insulation and/or coverboard are installed in ribbon-applied adhesive, boards shall be staggered from layer-to-layer.
Note: The maximum edge distance from the adhesive ribbon to the edge of the insulation board shall be not less than one-half the specified ribbons spacing.

7. Unless otherwise noted, all insulations are flat stock or taper board of the minimum thickness noted. Tapered polyisocyanurate at the following thickness limitations may be substituted with the following Maximum Design Pressure (MDP) limitations.. In no case shall these values be used to 'increase' the MDP listings in the tables; rather if MDP listing below meets or exceeds that listed for a particular system in the tables, then the thinner board listed below may be used as a drop-in for the equivalent thicker material listed in the table.

Adhesive	Min. Tapered Thick (in.)	MDP (psf)
DUOTACK, DUOTACK 365 or DUOTACK SPF:	0.5	-157.5
ICP "Polyset CR-20":	1.0	-117.5

8. Bonded polyisocyanurate insulation boards shall be maximum 4 x 4 ft.

9. For mechanically attached components, the maximum design pressure for the selected assembly shall meet or exceed at least the Zone 1 PRIME design pressure determined in accordance with FBC HVHZ 1620 or Roofing Application Standard RAS 128. Elevated pressure zones shall employ an attachment density designed by a qualified design professional to resist the elevated pressure criteria in accordance with Roofing Application Standard RAS 117 or Roofing Application Standard RAS 137. ***This extrapolation is not permitted for systems marked with an asterisk****.

10. For assemblies marked with an asterisk*, the maximum design pressure for the selected assembly shall meet or exceed critical design pressure determined in accordance with FBC Chapter 16. No rational analysis is permitted for these systems.

11. For mechanically attached components over existing decks, fasteners shall be tested in the existing deck for withdrawal resistance in accordance with Testing Application Standard TAS 105. A qualified design professional shall review the data for comparison to the minimum requirements for the system. Should the fastener resistance be less than that required, a revised fastener spacing – prepared, signed and sealed by a qualified design professional in accordance with Roofing Application Standard RAS 117 or Roofing Application Standard RAS 137 – may be submitted to the Building Official for review and acceptance.
For systems using Trufast Versa-Fast, the number of Versa-Fast Fasteners installed through the Versa-Fast Plate may be increased from the minimum noted in order to yield minimum required withdrawal resistance.

12. Refer to FBC HVHZ 1521 for requirements and limitations regarding recover installations. For bonded insulation or membrane over existing substrates in a re-roof (tear off) or recover installation, the existing deck or existing roof surface shall be examined for compatibility with the adhesive to be installed. If any surface conditions exist that bring system performance into question, field uplift testing shall be conducted on mock-ups of the proposed new roof assembly. For bonded insulation or membrane over existing substrates in a recover installation, the existing roof system shall be capable of resisting project design pressures on its own merit to the satisfaction of the Authority Having Jurisdiction, as documented through field uplift testing in accordance with Testing Application Standard TAS 124.

13. For Structural Concrete Deck or Recover Applications using System Type C-1, C-2, D-1 or D-2, the insulation is optional. Alternatively, an FBC HVHZ Approved insulation board or coverboard may be used as a separation layer. Board products shall be preliminarily attached prior to roof cover installation (Note 5 herein). The separator component shall be documented as meeting FBC HVHZ 1516 and, for foam plastic, FBC Chapter 26, when installed with the roof cover in Recover applications.

14. Lightweight insulating concrete (LWIC) shall be cast in accordance with FBC Section 1917 to the satisfaction of the Authority Having Jurisdiction. For systems where specific LWIC is referenced, refer to current LWIC FBC HVHZ Product Approval for specific deck construction and limitations. Unless otherwise noted, for systems where specific LWIC is not referenced, the minimum design mix shall be 300 psi. In all cases, the minimum top-coat thickness is 2-inches. For LWIC over structural concrete, reference is made to FBC Section 1917.4.1, Point 1. For "pre-existent" LWIC references, listings were established through testing over lightweight concrete cast using only foaming agent (ASTM C896), water and Portland cement (ASTM C150), with no proprietary additives, in accordance with procedures adopted by Miami-Dade BCCO (FBC CER1592). Use of these listings in new construction or re-roof (tear-off) applications is at the discretion of the Designer or Record and Authority Having Jurisdiction.

15. For bonded membrane applications, unless otherwise noted, refer to the following.

MEMBRANE / ADHESIVE COMBINATIONS

REFERENCE	LAYER	MATERIALS	APPLICATION
SBS-CA2	Base:	ELASTOPHENE HS Sanded, ELASTOPHENE Sanded, ELASTOPHENE Sanded 3.0, ELASTOPHENE PS 2.2✧, ELASTOPHENE PS 3.0✧, SOPRALENE 180 Sanded 2.2, SOPRALENE 180 Sanded, SOPRALENE 180 PS 2.2✧, SOPRALENE 180 PS 3.0✧, SOPRALENE 250 Sanded	0.5 to 1-inch wide ribbons **COLPLY EF Adhesive** spaced as noted
	Cap:	ELASTOPHENE HS FR GR, ELASTOPHENE LS FR GR, ELASTOPHENE FR GR, SOPRALENE 180 FR GR, SOPRALENE 250 FR GR	
SBS-CA3	Base/ Ply:	ELASTOPHENE HS Sanded, ELASTOPHENE Sanded, ELASTOPHENE Sanded 3.0, ELASTOPHENE PS 2.2✧, ELASTOPHENE PS 3.0✧, SOPRALENE 180 Sanded 2.2, SOPRALENE 180 Sanded, SOPRALENE 180 PS 2.2✧, SOPRALENE 180 PS 3.0✧, SOPRALENE 250 Sanded	**COLPLY EF Adhesive** at 1.5 – 2.5 gal/square
	Cap:	ELASTOPHENE HS FR GR, ELASTOPHENE LS FR GR, ELASTOPHENE FR GR, SOPRALENE 180 FR GR, SOPRALENE 250 FR GR	
SBS-CA4	Base/ Ply:	ELASTOPHENE HS Sanded, ELASTOPHENE Sanded, ELASTOPHENE Sanded 3.0, ELASTOPHENE PS 2.2✧, ELASTOPHENE PS 3.0✧, SOPRALENE 180 Sanded 2.2, SOPRALENE 180 Sanded, SOPRALENE 180 PS 2.2✧, SOPRALENE 180 PS 3.0✧, SOPRALENE 250 Sanded	**COLPLY Adhesive** at 1.5 - 2 gal/square
	Cap:	ELASTOPHENE HS FR GR, ELASTOPHENE GR, ELASTOPHENE LS FR GR, ELASTOPHENE FR GR, SOPRALENE 180 FR GR, SOPRALENE 250 FR GR	
BP-AA	Base/ Ply:	One or more MODIFIED SOPRA-G, SOPRABASE S, SOPRA IV, SOPRA VI	**Hot asphalt** at 20-40 lbs/square
SBS-AA	Base/ Ply:	ELASTOPHENE HS Sanded, ELASTOPHENE Sanded, ELASTOPHENE Sanded 3.0, ELASTOPHENE PS 2.2✧, ELASTOPHENE PS 3.0✧, SOPRALENE 180 Sanded 2.2, SOPRALENE 180 Sanded, SOPRALENE 180 PS 2.2✧, SOPRALENE 180 PS 3.0✧, SOPRALENE 250 Sanded	
	Cap:	ELASTOPHENE HS FR GR, ELASTOPHENE LS FR GR, ELASTOPHENE FR GR, SOPRALENE 180 FR GR, SOPRALENE 250 FR GR	
SBS-AA2	Base/ Ply:	ELASTOPHENE HS Sanded, ELASTOPHENE Sanded, ELASTOPHENE Sanded 3.0, ELASTOPHENE PS 2.2✧, ELASTOPHENE PS 3.0✧, SOPRALENE 180 Sanded 2.2, SOPRALENE 180 Sanded, SOPRALENE 180 PS 2.2✧, SOPRALENE 180 PS 3.0✧, SOPRALENE 250 Sanded	**SOPRASPHALT M** at 25 lbs/square
	Cap:	ELASTOPHENE HS FR GR, ELASTOPHENE LS FR GR, ELASTOPHENE FR GR, SOPRALENE 180 FR GR, SOPRALENE 250 FR GR	
SBS-TAP	Base:	COLVENT TG, COLVENT 180 TG, COLVENT Flam 180 TG✧	**Torch-applied**, Partial Bond
SBS-TAF	Base/ Ply:	ELASTOPHENE Flam HS✧, ELASTOPHENE Flam 2.2✧, ELASTOPHENE Flam 3.0✧, ELASTOPHENE SP 2.2, ELASTOPHENE SP 3.0, SOPRALENE Flam 180✧, SOPRALENE 180 SP 3.0, SOPRALENE 180 SP 3.5, SOPRALENE Flam 250✧, SOPRALENE 250 SP	**Torch-Applied**, Full Bond
	Cap:	ELASTOPHENE Flam HS FR GR, ELASTOPHENE Flam LS FR GR, ELASTOPHENE Flam FR GR, SOPRALENE Flam 180 GR, SOPRALENE Flam 180 FR GR, SOPRALENE Flam 250 FR GR, SOPRALAST 50 TV Alu	

MEMBRANE / ADHESIVE COMBINATIONS			
REFERENCE	**LAYER**	**MATERIALS**	**APPLICATION**
SBS-SA1	Base/ Ply:	ELASTOPHENE Stick, ELASTOPHENE Flam Stick ✧; SOPRALENE Stick, SOPRALENE Flam Stick✧	**Self-adhering**, Full Bond
	Cap:	ELASTOPHENE Stick FR GR, ELASTOPHENE Stick HR FR GR	
SBS-SA2	Base Ply:	ELASTOPHENE ULTRA-STICK, SOPRALENE ULTRA-STICK	**Self-adhering**, Full Bond
	Cap:	ELASTOPHENE ULTRA-STICK FR GR, SOPRALENE ULTRA-STICK FR GR	
Note:	Base / Ply membranes marked with an asterisk (✧) have a poly-film top surface, and require installation of a torch-applied membrane overtop.		
Note:	Top surfaces of Soprema membranes having a sand finish shall be primed with ELASTOCOL 500, ELASTOCOL Stick or ELASTOCOL Stick Zero at 1 gal/sq. (0.6 l/m2) prior to application of subsequent self-adhering (SBS-SA1) membranes.		
Note:	Top surfaces of Soprema membranes having a sand finish may be (optional) primed with ELASTOCOL 500 1 gal/sq. (0.6 l/m2) prior to application of subsequent cold-adhesive-applied (SBS-CA3) or torch-applied (SBS-TAF) membranes.		

16. Thermal barrier / vapor barrier combination options for use over **wood decks** followed by bonded insulation and/or coverboard carry the following MDP limitations. The lesser of the MDP listings below vs. that for the selected assembly from **TABLE 2A** applies:

THERMAL BARRIER / VAPOR BARRIER OPTIONS FOR WOOD DECKS; FOLLOWED BY BONDED INSULATION PER TABLE 1A									
OPTION #	**DECK (NOTE 1)**	**THERMAL BARRIER**			**PRIMER**	**VAPOR BARRIER (NOTE 15)**		**ADHESIVE PER TABLE 2A (NOTES 6,7&8)**	**MDP (PSF)**
		TYPE	**FASTEN (NOTE 11)**	**ATTACH**		**BASE PLY**	**CAP PLY (GRANULE)**		
W-TB/VB-1.	Min. 19/32-inch APA rated CDX plywood	Min. 0.5-inch DensDeck Prime or DEXcell FA Glass Mat Roof Board, min. 7/16-inch DEXcell Cement Roof Board or min. 0.5-inch SECUROCK Cement Roof Board.	Trufast Versa-Fast Plate with minimum one (1) Versa-Fast Fastener installed into the center-hole of the Versa-Fast Plate.	1 per 2.7 ft^2	None	SBS-CA3 (sanded top surface)	None	DUOTACK	-45.0*
W-TB/VB-2.	Min. 19/32-inch APA rated CDX plywood	Min. 0.5-inch DensDeck Prime or DEXcell FA Glass Mat Roof Board, min. 7/16-inch DEXcell Cement Roof Board or min. 0.5-inch SECUROCK Cement Roof Board.	Trufast Versa-Fast Plate with minimum one (1) Versa-Fast Fastener installed into the center-hole of the Versa-Fast Plate.	1 per 2.7 ft^2	None	(Optional) SBS-CA3	SBS-CA3	DUOTACK 365	-45.0*
W-TB/VB-3.	Min. 19/32-inch APA rated CDX plywood	Min. 0.5-inch DensDeck Prime or DEXcell FA Glass Mat Roof Board, min. 7/16-inch DEXcell Cement Roof Board or min. 0.5-inch SECUROCK Cement Roof Board.	Trufast Versa-Fast Plate with minimum one (1) Versa-Fast Fastener installed into the center-hole of the Versa-Fast Plate.	1 per 2.7 ft^2	(Optional) ELASTOCOL 500	SBS-AA or SBS-TAF (sanded top surface)	None	DUOTACK	-45.0*
W-TB/VB-4.	Min. 19/32-inch APA rated CDX plywood	Min. 0.5-inch DensDeck Prime or DEXcell FA Glass Mat Roof Board, min. 7/16-inch DEXcell Cement Roof Board or min. 0.5-inch SECUROCK Cement Roof Board.	Trufast Versa-Fast Plate with minimum one (1) Versa-Fast Fastener installed into the center-hole of the Versa-Fast Plate.	1 per 2.7 ft^2	(Optional) ELASTOCOL 500	(Optional) SBS-AA or SBS-TAF	SBS-AA or SBS-TAF	DUOTACK 365	-45.0*
W-TB/VB-5.	Min. 19/32-inch APA rated CDX plywood	Min. 0.5-inch DensDeck Prime or DEXcell FA Glass Mat Roof Board, min. 7/16-inch DEXcell Cement Roof Board or min. 0.5-inch SECUROCK Cement Roof Board.	Trufast Versa-Fast Plate with minimum one (1) Versa-Fast Fastener installed into the center-hole of the Versa-Fast Plate.	1 per 2.7 ft^2	ELASTOCOL Stick or ELASTOCOL Stick Zero	SOPRAVAP'R or SBS-SA1 (sanded top surface)	None	DUOTACK	-45.0*
W-TB/VB-6.	Min. 19/32-inch APA rated CDX plywood	Min. 0.5-inch DensDeck Prime or DEXcell FA Glass Mat Roof Board, min. 7/16-inch DEXcell Cement Roof Board or min. 0.5-inch SECUROCK Cement Roof Board.	Trufast Versa-Fast Plate with minimum one (1) Versa-Fast Fastener installed into the center-hole of the Versa-Fast Plate.	1 per 2.7 ft^2	ELASTOCOL Stick or ELASTOCOL Stick Zero	(Optional) SBS-SA1	SBS-TAF	DUOTACK 365	-45.0*

THERMAL BARRIER / VAPOR BARRIER OPTIONS FOR WOOD DECKS; FOLLOWED BY BONDED INSULATION PER TABLE 1A									
OPTION #	DECK (NOTE 1)	THERMAL BARRIER			PRIMER	VAPOR BARRIER (NOTE 15)		ADHESIVE PER TABLE 2A (NOTES 6,7&8)	MDP (PSF)
		TYPE	FASTEN (NOTE 11)	ATTACH		BASE PLY	CAP PLY (GRANULE)		
W-TB/VB-7.	Min. 19/32-inch (new) or 15/32-inch (existing) APA rated CDX plywood; 2 ft span; 0.113" x 2-3/8" ring shank nails, 6" o.c.	Min. 0.5-inch DensDeck Prime or DEXcell FA Glass Mat Roof Board, min. 7/16-inch DEXcell Cement Roof Board or min. 0.5-inch SECUROCK Cement Roof Board.	Soprema #12 DP with Soprema 3" Metal Insulation Plate	1 per 1.6 ft^2	None	SBS-CA3 (sanded top surface)	None	DUOTACK	-67.5
W-TB/VB-8.	Min. 19/32-inch (new) or 15/32-inch (existing) APA rated CDX plywood; 2 ft span; 0.113" x 2-3/8" ring shank nails, 6" o.c.	Min. 0.5-inch DensDeck Prime or DEXcell FA Glass Mat Roof Board, min. 7/16-inch DEXcell Cement Roof Board or min. 0.5-inch SECUROCK Cement Roof Board.	Soprema #12 DP with Soprema 3" Metal Insulation Plate	1 per 1.6 ft^2	None	(Optional) SBS-CA3	SBS-CA3	DUOTACK 365	-67.5
W-TB/VB-9.	Min. 19/32-inch (new) or 15/32-inch (existing) APA rated CDX plywood; 2 ft span; 0.113" x 2-3/8" ring shank nails, 6" o.c.	Min. 0.5-inch DensDeck Prime or DEXcell FA Glass Mat Roof Board, min. 7/16-inch DEXcell Cement Roof Board or min. 0.5-inch SECUROCK Cement Roof Board.	Soprema #12 DP with Soprema 3" Metal Insulation Plate	1 per 1.6 ft^2	(Optional) ELASTOCOL 500	SBS-AA or SBS-TAF (sanded top surface)	None	DUOTACK	-67.5
W-TB/VB-10.	Min. 19/32-inch (new) or 15/32-inch (existing) APA rated CDX plywood; 2 ft span; 0.113" x 2-3/8" ring shank nails, 6" o.c.	Min. 0.5-inch DensDeck Prime or DEXcell FA Glass Mat Roof Board, min. 7/16-inch DEXcell Cement Roof Board or min. 0.5-inch SECUROCK Cement Roof Board.	Soprema #12 DP with Soprema 3" Metal Insulation Plate	1 per 1.6 ft^2	(Optional) ELASTOCOL 500	(Optional) SBS-AA or SBS-TAF	SBS-AA or SBS-TAF	DUOTACK 365	-67.5
W-TB/VB-11.	Min. 19/32-inch (new) or 15/32-inch (existing) APA rated CDX plywood; 2 ft span; 0.113" x 2-3/8" ring shank nails, 6" o.c.	Min. 0.5-inch DensDeck Prime or DEXcell FA Glass Mat Roof Board, min. 7/16-inch DEXcell Cement Roof Board or min. 0.5-inch SECUROCK Cement Roof Board.	Soprema #12 DP with Soprema 3" Metal Insulation Plate	1 per 1.6 ft^2	ELASTOCOL Stick or ELASTOCOL Stick Zero	SOPRAVAP'R or SBS-SA1 (sanded top surface)	None	DUOTACK	-67.5
W-TB/VB-12.	Min. 19/32-inch (new) or 15/32-inch (existing) APA rated CDX plywood; 2 ft span; 0.113" x 2-3/8" ring shank nails, 6" o.c.	Min. 0.5-inch DensDeck Prime or DEXcell FA Glass Mat Roof Board, min. 7/16-inch DEXcell Cement Roof Board or min. 0.5-inch SECUROCK Cement Roof Board.	Soprema #12 DP with Soprema 3" Metal Insulation Plate	1 per 1.6 ft^2	ELASTOCOL Stick or ELASTOCOL Stick Zero	(Optional) SBS-SA1	SBS-TAF	DUOTACK 365	-67.5
W-TB/VB-13.	Min. 19/32-inch (new) or 15/32-inch (existing) APA rated BCX plywood; 2 ft span; #10x3" wood screws, 4" o.c.	Min. 0.5-inch DensDeck Prime or DEXcell FA Glass Mat Roof Board, min. 7/16-inch DEXcell Cement Roof Board or min. 0.5-inch SECUROCK Cement Roof Board.	Trufast Versa-Fast Plate with minimum two (2) Versa-Fast Fasteners, Trufast #14 HD or Soprema #14 MP Fasteners installed 180° into the holes of the Versa-Fast Plate	1 per 1.8 ft^2	None	SBS-CA3 (sanded top surface)	None	DUOTACK	-67.5
W-TB/VB-14.	Min. 19/32-inch (new) or 15/32-inch (existing) APA rated BCX plywood; 2 ft span; #10x3" wood screws, 4" o.c.	Min. 0.5-inch DensDeck Prime or DEXcell FA Glass Mat Roof Board, min. 7/16-inch DEXcell Cement Roof Board or min. 0.5-inch SECUROCK Cement Roof Board.	Trufast Versa-Fast Plate with minimum two (2) Versa-Fast Fasteners, Trufast #14 HD or Soprema #14 MP Fasteners installed 180° into the holes of the Versa-Fast Plate	1 per 1.8 ft^2	None	(Optional) SBS-CA3	SBS-CA3	DUOTACK 365	-67.5

THERMAL BARRIER / VAPOR BARRIER OPTIONS FOR WOOD DECKS; FOLLOWED BY BONDED INSULATION PER TABLE 1A									
OPTION #	DECK (NOTE 1)	THERMAL BARRIER			PRIMER	VAPOR BARRIER (NOTE 15)		ADHESIVE PER TABLE 2A (NOTES 6,7&8)	MDP (PSF)
		TYPE	FASTEN (NOTE 11)	ATTACH		BASE PLY	CAP PLY (GRANULE)		
W-TB/VB-15.	Min. 19/32-inch (new) or 15/32-inch (existing) APA rated BCX plywood; 2 ft span; #10x3" wood screws, 4" o.c.	Min. 0.5-inch DensDeck Prime or DEXcell FA Glass Mat Roof Board, min. 7/16-inch DEXcell Cement Roof Board or min. 0.5-inch SECUROCK Cement Roof Board.	Trufast Versa-Fast Plate with minimum two (2) Versa-Fast Fasteners, Trufast #14 HD or Soprema #14 MP Fasteners installed 180° into the holes of the Versa-Fast Plate	1 per 1.8 ft^2	(Optional) ELASTOCOL 500	SBS-AA or SBS-TAF (sanded top surface)	None	DUOTACK	-67.5
W-TB/VB-16.	Min. 19/32-inch (new) or 15/32-inch (existing) APA rated BCX plywood; 2 ft span; #10x3" wood screws, 4" o.c.	Min. 0.5-inch DensDeck Prime or DEXcell FA Glass Mat Roof Board, min. 7/16-inch DEXcell Cement Roof Board or min. 0.5-inch SECUROCK Cement Roof Board.	Trufast Versa-Fast Plate with minimum two (2) Versa-Fast Fasteners, Trufast #14 HD or Soprema #14 MP Fasteners installed 180° into the holes of the Versa-Fast Plate	1 per 1.8 ft^2	(Optional) ELASTOCOL 500	(Optional) SBS-AA or SBS-TAF	SBS-AA or SBS-TAF	DUOTACK 365	-67.5
W-TB/VB-17.	Min. 19/32-inch (new) or 15/32-inch (existing) APA rated BCX plywood; 2 ft span; #10x3" wood screws, 4" o.c.	Min. 0.5-inch DensDeck Prime or DEXcell FA Glass Mat Roof Board, min. 7/16-inch DEXcell Cement Roof Board or min. 0.5-inch SECUROCK Cement Roof Board.	Trufast Versa-Fast Plate with minimum two (2) Versa-Fast Fasteners, Trufast #14 HD or Soprema #14 MP Fasteners installed 180° into the holes of the Versa-Fast Plate	1 per 1.8 ft^2	ELASTOCOL Stick or ELASTOCOL Stick Zero	SOPRAVAP'R or SBS-SA1 (sanded top surface)	None	DUOTACK	-67.5
W-TB/VB-18.	Min. 19/32-inch (new) or 15/32-inch (existing) APA rated BCX plywood; 2 ft span; #10x3" wood screws, 4" o.c.	Min. 0.5-inch DensDeck Prime or DEXcell FA Glass Mat Roof Board, min. 7/16-inch DEXcell Cement Roof Board or min. 0.5-inch SECUROCK Cement Roof Board.	Trufast Versa-Fast Plate with minimum two (2) Versa-Fast Fasteners, Trufast #14 HD or Soprema #14 MP Fasteners installed 180° into the holes of the Versa-Fast Plate	1 per 1.8 ft^2	ELASTOCOL Stick or ELASTOCOL Stick Zero	(Optional) SBS-SA1	SBS-TAF	DUOTACK 365	-67.5
W-TB/VB-19.	Min. 19/32-inch APA rated CDX plywood; 2 ft span; 8d ring shank nails, 6" o.c.	Min. 0.5-inch DensDeck Prime or DEXcell FA Glass Mat Roof Board, min. 7/16-inch DEXcell Cement Roof Board or min. 0.5-inch SECUROCK Cement Roof Board.	Trufast Versa-Fast Plate with minimum one (1) Soprema #14 MP Fastener or Trufast #14 HD installed into the center hole of the Versa-Fast Plate	1 per 1.8 ft^2	None	SBS-CA3 (sanded top surface)	None	DUOTACK	-67.5
W-TB/VB-20.	Min. 19/32-inch APA rated CDX plywood; 2 ft span; 8d ring shank nails, 6" o.c.	Min. 0.5-inch DensDeck Prime or DEXcell FA Glass Mat Roof Board, min. 7/16-inch DEXcell Cement Roof Board or min. 0.5-inch SECUROCK Cement Roof Board.	Trufast Versa-Fast Plate with minimum one (1) Soprema #14 MP Fastener or Trufast #14 HD installed into the center hole of the Versa-Fast Plate	1 per 1.8 ft^2	None	(Optional) SBS-CA3	SBS-CA3	DUOTACK 365	-67.5
W-TB/VB-21.	Min. 19/32-inch APA rated CDX plywood; 2 ft span; 8d ring shank nails, 6" o.c.	Min. 0.5-inch DensDeck Prime or DEXcell FA Glass Mat Roof Board, min. 7/16-inch DEXcell Cement Roof Board or min. 0.5-inch SECUROCK Cement Roof Board.	Trufast Versa-Fast Plate with minimum one (1) Soprema #14 MP Fastener or Trufast #14 HD installed into the center hole of the Versa-Fast Plate	1 per 1.8 ft^2	(Optional) ELASTOCOL 500	SBS-AA or SBS-TAF (sanded top surface)	None	DUOTACK	-67.5
W-TB/VB-22.	Min. 19/32-inch APA rated CDX plywood; 2 ft span; 8d ring shank nails, 6" o.c.	Min. 0.5-inch DensDeck Prime or DEXcell FA Glass Mat Roof Board, min. 7/16-inch DEXcell Cement Roof Board or min. 0.5-inch SECUROCK Cement Roof Board.	Trufast Versa-Fast Plate with minimum one (1) Soprema #14 MP Fastener or Trufast #14 HD installed into the center hole of the Versa-Fast Plate	1 per 1.8 ft^2	(Optional) ELASTOCOL 500	(Optional) SBS-AA or SBS-TAF	SBS-AA or SBS-TAF	DUOTACK 365	-67.5
W-TB/VB-23.	Min. 19/32-inch APA rated CDX plywood; 2 ft span; 8d ring shank nails, 6" o.c.	Min. 0.5-inch DensDeck Prime or DEXcell FA Glass Mat Roof Board, min. 7/16-inch DEXcell Cement Roof Board or min. 0.5-inch SECUROCK Cement Roof Board.	Trufast Versa-Fast Plate with minimum one (1) Soprema #14 MP Fastener or Trufast #14 HD installed into the center hole of the Versa-Fast Plate	1 per 1.8 ft^2	ELASTOCOL Stick or ELASTOCOL Stick Zero	SOPRAVAP'R or SBS-SA1 (sanded top surface)	None	DUOTACK	-67.5

THERMAL BARRIER / VAPOR BARRIER OPTIONS FOR WOOD DECKS; FOLLOWED BY BONDED INSULATION PER TABLE 1A									
OPTION #	DECK (NOTE 1)	THERMAL BARRIER			PRIMER	VAPOR BARRIER (NOTE 15)		ADHESIVE PER TABLE 2A (NOTES 6,7&8)	MDP (PSF)
		TYPE	FASTEN (NOTE 11)	ATTACH		BASE PLY	CAP PLY (GRANULE)		
W-TB/VB-24.	Min. 19/32-inch APA rated CDX plywood; 2 ft span; 8d ring shank nails, 6" o.c.	Min. 0.5-inch DensDeck Prime or DEXcell FA Glass Mat Roof Board, min. 7/16-inch DEXcell Cement Roof Board or min. 0.5-inch SECUROCK Cement Roof Board.	Trufast Versa-Fast Plate with minimum one (1) Soprema #14 MP Fastener or Trufast #14 HD installed into the center hole of the Versa-Fast Plate	1 per 1.8 ft²	ELASTOCOL Stick or ELASTOCOL Stick Zero	(Optional) SBS-SA1	SBS-TAF	DUOTACK 365	-67.5

17. Thermal barrier / vapor barrier combination options for use over **steel decks** followed by bonded insulation and/or coverboard carry the following MDP limitations. The lesser of the MDP listings below vs. that for the selected assembly from **TABLE 2A OR 2B** applies:

THERMAL BARRIER / VAPOR BARRIER OPTIONS FOR STEEL DECKS; FOLLOWED BY BONDED INSULATION PER TABLE 2A OR 2B:									
OPTION #	THERMAL BARRIER				PRIMER	VAPOR BARRIER (NOTE 15)		ADHESIVE PER TABLE 2A OR 2B (NOTES 6,7&8)	MDP (PSF)
	DECK (NOTE 1)	TYPE	FASTEN (NOTE 11)	ATTACH		BASE PLY	CAP PLY (GRANULE)		
S-TB/VB-1.	Min. 22 ga., type B, Grade 33 steel	Min. 0.5-inch DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 4.0 ft²	None	SBS-CA3, SBS-CA4 or SBS-AA (sanded top surface)	None	DUOTACK	-45.0*
S-TB/VB-2.	Min. 22 ga., type B, Grade 33 steel	Min. 0.5-inch DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 4.0 ft²	None	(Optional) SBS-CA3	SBS-CA3	DUOTACK 365	-45.0*
S-TB/VB-3.	Min. 22 ga., type B, Grade 33 steel	Min. 0.5-inch DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 4.0 ft²	None	(Optional) SBS-CA4	SBS-CA4	DUOTACK 365	-45.0*
S-TB/VB-4.	Min. 22 ga., type B, Grade 33 steel	0.25-inch DEXcell FA Glass Mat Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 4.0 ft²	None	SBS-CA3 (sanded top surface)	None	DUOTACK	-45.0*
S-TB/VB-5.	Min. 22 ga., type B, Grade 33 steel	0.25-inch DEXcell FA Glass Mat Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 4.0 ft²	None	(Optional) SBS-CA3	SBS-CA3	DUOTACK 365	-45.0*
S-TB/VB-6.	Min. 22 ga., type B, Grade 33 steel	Min. 0.5-inch DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 4.0 ft²	ELASTOCOL 500	SBS-TAF (sanded top surface)	None	DUOTACK	-45.0*
S-TB/VB-7.	Min. 22 ga., type B, Grade 33 steel	Min. 0.5-inch DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 4.0 ft²	ELASTOCOL 500	(Optional) SBS-TAF	SBS-TAF	DUOTACK 365	-45.0*
S-TB/VB-8.	Min. 22 ga., type B, Grade 33 steel	0.25-inch DEXcell FA Glass Mat Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 4.0 ft²	None	SBS-TAF (sanded top surface)	None	DUOTACK	-45.0*
S-TB/VB-9.	Min. 22 ga., type B, Grade 33 steel	0.25-inch DEXcell FA Glass Mat Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 4.0 ft²	None	(Optional) SBS-TAF	SBS-TAF	DUOTACK 365	-45.0*
S-TB/VB-10.	Min. 22 ga., type B, Grade 33 steel	Min. 0.5-inch DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 4.0 ft²	ELASTOCOL Stick or ELASTOCOL Stick Zero	SOPRAVAP'R or SBS-SA1 (sanded top surface)	None	DUOTACK	-45.0*

THERMAL BARRIER / VAPOR BARRIER OPTIONS FOR STEEL DECKS; FOLLOWED BY BONDED INSULATION PER TABLE 2A OR 2B:									
OPTION #	THERMAL BARRIER				PRIMER	VAPOR BARRIER (NOTE 15)		ADHESIVE PER TABLE 2A OR 2B (NOTES 6,7&8)	MDP (PSF)
	DECK (NOTE 1)	TYPE	FASTEN (NOTE 11)	ATTACH		BASE PLY	CAP PLY (GRANULE)		
S-TB/VB-11.	Min. 22 ga., type B, Grade 33 steel	Min. 0.5-inch DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 4.0 ft²	ELASTOCOL Stick or ELASTOCOL Stick Zero	(Optional) SBS-SA1	SBS-TAF	DUOTACK 365	-45.0*
S-TB/VB-12.	Min. 22 ga., type B, Grade 33 steel	0.25-inch DEXcell FA Glass Mat Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 4.0 ft²	ELASTOCOL Stick or ELASTOCOL Stick Zero	SOPRAVAP'R or SBS-SA1 (sanded top surface)	None	DUOTACK	-45.0*
S-TB/VB-13.	Min. 22 ga., type B, Grade 33 steel	0.25-inch DEXcell FA Glass Mat Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 4.0 ft²	ELASTOCOL Stick or ELASTOCOL Stick Zero	(Optional) SBS-SA1	SBS-TAF	DUOTACK 365	-45.0*
S-TB/VB-14.	Min. 22 ga., type B, Grade 33 steel; 6 span; Teks/5 screws, 6" o.c.	0.5-inch DEXcell FA Glass Mat Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 2.0 ft²	None	SBS-CA3 (sanded top surface)	None	DUOTACK	-75.0
S-TB/VB-15.	Min. 22 ga., type B, Grade 33 steel; 6 span; Teks/5 screws, 6" o.c.	0.5-inch DEXcell FA Glass Mat Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 2.0 ft²	None	SBS-TAF (sanded top surface)	None	DUOTACK	-75.0
S-TB/VB-16.	Min. 22 ga., type B, Grade 33 steel; 6 span; Teks/5 screws, 6" o.c.	0.5-inch DEXcell FA Glass Mat Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 2.0 ft²	None	(Optional) SBS-TAF	SBS-TAF	DUOTACK 365	-75.0
S-TB/VB-17.	Min. 22 ga., type B, Grade 40 steel; 6 span; Teks/5 screws, 6" o.c.	Min. 0.5-inch DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 2.0 ft²	None	SBS-CA3, SBS-CA4 or SBS-AA (sanded top surface)	None	DUOTACK	-82.5
S-TB/VB-18.	Min. 22 ga., type B, Grade 40 steel; 6 span; Teks/5 screws, 6" o.c.	Min. 0.5-inch DEXcell FA Glass Mat Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 2.0 ft²	None	SBS-AA (sanded top surface)	None	DUOTACK	-82.5
S-TB/VB-19.	Min. 22 ga., type B, Grade 40 steel; 6 span; Teks/5 screws, 6" o.c.	Min. 0.5-inch DensDeck, DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Gypsum-Fiber Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 2.0 ft²	ELASTOCOL 500	SBS-TAF (sanded top surface)	None	DUOTACK	-82.5
S-TB/VB-20.	Min. 22 ga., type B, Grade 40 steel; 6 span; Teks/5 screws, 6" o.c.	Min. 0.5-inch DensDeck, DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Gypsum-Fiber Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 2.0 ft²	ELASTOCOL 500	(Optional) SBS-TAF	SBS-TAF	DUOTACK 365	-82.5
S-TB/VB-21.	Min. 22 ga., type B, Grade 40 steel; 6 span; Teks/5 screws, 6" o.c.	Min. 0.5-inch DensDeck, DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Gypsum-Fiber Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 2.0 ft²	ELASTOCOL Stick or ELASTOCOL Stick Zero	SOPRAVAP'R or SBS-SA1 (sanded top surface)	None	DUOTACK	-82.5
S-TB/VB-22.	Min. 22 ga., type B, Grade 40 steel; 6 span; Teks/5 screws, 6" o.c.	Min. 0.5-inch DensDeck, DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Gypsum-Fiber Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 2.0 ft²	ELASTOCOL Stick or ELASTOCOL Stick Zero	(Optional) SBS-SA1	SBS-TAF	DUOTACK 365	-82.5

THERMAL BARRIER / VAPOR BARRIER OPTIONS FOR STEEL DECKS; FOLLOWED BY BONDED INSULATION PER TABLE 2A OR 2B:									
OPTION #	THERMAL BARRIER				PRIMER	VAPOR BARRIER (NOTE 15)		ADHESIVE PER TABLE 2A OR 2B (NOTES 6,7&8)	MDP (PSF)
	DECK (NOTE 1)	TYPE	FASTEN (NOTE 11)	ATTACH		BASE PLY	CAP PLY (GRANULE)		
S-TB/VB-23.	Min. 22 ga., type B, Grade 40 steel; 6 ft span; Teks/5 screws with ¾" washers, 6" o.c.	Min. 0.5-inch DEXcell FA Glass Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	DUOTACK 365	6-inch o.c.	None	SBS-AA or SBS-TAF (sanded top surface)	None	DUOTACK	-127.5
S-TB/VB-24.	Min. 22 ga., type B, Grade 40 steel; 6 ft span; Teks/5 screws with ¾" washers, 6" o.c.	Min. 0.5-inch DEXcell FA Glass Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	DUOTACK 365	6-inch o.c.	None	(Optional) SBS-TAF	SBS-TAF	DUOTACK 365	-127.5
S-TB/VB-25.	Min. 22 ga., type B, Grade 40 steel; 6 ft span; Teks/5 screws with ¾" washers, 6" o.c.	Min. 0.5-inch DEXcell FA Glass Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	DUOTACK 365	6-inch o.c.	ELASTOCOL Stick or ELASTOCOL Stick Zero	SOPRAVAP'R or SBS-SA1 (sanded top surface)	None	DUOTACK	-127.5
S-TB/VB-26.	Min. 22 ga., type B, Grade 40 steel; 6 ft span; Teks/5 screws with ¾" washers, 6" o.c.	Min. 0.5-inch DEXcell FA Glass Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	DUOTACK 365	6-inch o.c.	ELASTOCOL Stick or ELASTOCOL Stick Zero	(Optional) SBS-SA1	SBS-TAF	DUOTACK 365	-127.5

18. Vapor barrier options for use over **structural concrete deck** followed by bonded insulation carry the following MDP limitations. The lesser of the MDP listings below vs. that for the selected assembly from **TABLE 3A** applies:

ONE-PLY VAPOR BARRIER OPTIONS; STRUCTURAL CONCRETE DECK; FOLLOWED BY BONDED INSULATION PER TABLE 3A:				
OPTION #	PRIMER	VAPOR BARRIER	ADHESIVE PER TABLE 3A (NOTES 6,7&8)	MDP (PSF)
C-VB-1.	none	SOPRASMART XP HD 180 Sanded applied in DUOTACK, ribbons 12-inch o.c. (laps are torched or sealed with a hot air gun)	DUOTACK	-52.5
C-VB-2.	ASTM D41	SBS-CA4 (granule top surface)	DUOTACK	-97.5
C-VB-3.	ASTM D41	SBS-CA4 (sanded top surface)	DUOTACK	-120.0
C-VB-4.	none	SBS-CA2 (sanded- or granule-top-surface), ribbons 6-inch o.c.	DUOTACK	-120.0
C-VB-5.	(Optional) ASTM D41, ELASTOCOL 500	SBS-CA3 (granule top surface)	DUOTACK	-195.0
C-VB-6.	ASTM D41	SBS-AA (granule top surface)	DUOTACK	-195.0
C-VB-7.	ASTM D41	SBS-TAF (granule top surface)	DUOTACK	-195.0
C-VB-8.	ELASTOCOL Stick, ELASTOCOL Stick Zero	SBS-SA1 (granule top surface)	DUOTACK	-195.0
C-VB-9.	none	SBS-CA2 (sanded- or granule-top-surface), ribbons 6-inch o.c.	DUOTACK *(ribbons shall be applied perpendicular to vapor barrier adhesive ribbons)*	-207.5
C-VB-10.	ASTM D41	SBS-TAP (sanded top surface)	DUOTACK	-232.5
C-VB-11.	ELASTOCOL Stick Zero	SOPRAVAP'R, self-adhering	DUOTACK	-240.0
C-VB-12.	none	SBS-CA3 (sanded top surface)	DUOTACK	-255.0
C-VB-13.	ASTM D41, ELASTOCOL 500	SBS-CA3 (sanded top surface)	DUOTACK	-270.0
C-VB-14.	ASTM D41	SBS-AA (sanded top surface)	DUOTACK	-270.0
C-VB-15.	ELASTOCOL Stick, ELASTOCOL Stick Zero	SBS-SA1 (sanded top surface)	DUOTACK	-315.0
C-VB-16.	ASTM D41	SBS-TAF (sanded top surface)	DUOTACK	-382.5

ONE-PLY VAPOR BARRIER OPTIONS; STRUCTURAL CONCRETE DECK; FOLLOWED BY BONDED INSULATION PER TABLE 3A:				
OPTION #	PRIMER	VAPOR BARRIER	ADHESIVE PER TABLE 3A (NOTES 6,7&8)	MDP (PSF)
C-VB-17.	none	SBS-CA2 (sanded- or granule-top-surface), ribbons 6-inch o.c.	DUOTACK, 6-inch o.c.	-445.0
C-VB-18.	ASTM D41	SBS-CA4 (granule top surface)	Polyset CR-20	-97.5
C-VB-19.	ASTM D41	SBS-CA4 (sanded top surface)	Polyset CR-20	-120.0
C-VB-20.	(Optional) ASTM D41, ELASTOCOL 500	SBS-CA3 (granule top surface)	Polyset CR-20	-195.0
C-VB-21.	ASTM D41	SBS-AA (granule top surface)	Polyset CR-20	-195.0
C-VB-22.	ASTM D41	SBS-TAF (granule top surface)	Polyset CR-20	-195.0
C-VB-23.	ELASTOCOL Stick, ELASTOCOL Stick Zero	SBS-SA1 (granule top surface)	Polyset CR-20	-195.0
C-VB-24.	(Optional) ASTM D41, ELASTOCOL 500	SBS-CA3 (sanded top surface)	Polyset CR-20	-222.5
C-VB-25.	ASTM D41	SBS-AA (sanded top surface)	Polyset CR-20	-222.5
C-VB-26.	ASTM D41	SBS-TAP or SBS-TAF (sanded top surface)	Polyset CR-20	-222.5
C-VB-27.	ELASTOCOL Stick, ELASTOCOL Stick Zero	SBS-SA1 (sanded top surface)	Polyset CR-20	-222.5
C-VB-28.	ELASTOCOL Stick Zero	SOPRAVAP'R, self-adhering	Polyset CR-20	-392.5
C-VB-29.	ASTM D41	SBS-AA (sanded top surface)	hot asphalt	-210.0
C-VB-30.	ASTM D41	SOPRA IV, SOPRA VI, MODIFIED SOPRA G applied in hot asphalt	hot asphalt	-270.0
C-VB-31.	none	SBS-CA2 (sanded-top-surface), ribbons 6-inch o.c.	hot asphalt	-367.5
C-VB-32.	ASTM D41	SBS-TAF (sanded top surface)	hot asphalt	-367.5

MINIMUM TWO-PLY VAPOR BARRIER OPTIONS; STRUCTURAL CONCRETE DECK; FOLLOWED BY BONDED INSULATION PER TABLE 3A:					
OPTION #	PRIMER	VAPOR BARRIER		ADHESIVE PER TABLE 3A (NOTES 6,7&8)	MDP (PSF)
		BASE PLY	CAP PLY		
C-VB-33.	ASTM D41	SBS-CA4	SBS-CA4, SBS-AA or SBS-TAF (granule top surface)	DUOTACK	-97.5
C-VB-34.	ASTM D41	SBS-CA4	SBS-CA4 (sanded top surface)	DUOTACK	-120.0
C-VB-35.	none	SBS-CA2, ribbons 6-inch o.c.	SBS-CA3 or SBS-TAF (sanded- or granule-top-surface)	DUOTACK	-120.0
C-VB-36.	(Optional) ASTM D41, ELASTOCOL 500	SBS-CA3	SBS-CA3, SBS-CA4, SBS-AA, SBS-TAF or SBS-SA1 (granule top surface)	DUOTACK	-195.0
C-VB-37.	ASTM D41	SBS-AA or SBS-TAF	SBS-CA3, SBS-CA4, SBS-AA, SBS-TAF or SBS-SA1 (granule top surface)	DUOTACK	-195.0
C-VB-38.	ELASTOCOL Stick, ELASTOCOL Stick Zero	SBS-SA1	SBS-CA3, SBS-CA4, SBS-AA, SBS-TAF or SBS-SA1 (granule top surface)	DUOTACK	-195.0
C-VB-39.	none	SBS-CA2, ribbons 6-inch o.c.	SBS-CA3 or SBS-TAF (sanded- or granule-top-surface)	DUOTACK *(ribbons shall be applied perpendicular to vapor barrier adhesive ribbons)*	-207.5
C-VB-40.	ASTM D41	SBS-TAP	SBS-TAF (sanded top surface)	DUOTACK	-232.5
C-VB-41.	None	SBS-CA3	SBS-CA3 (sanded top surface)	DUOTACK	-255.0
C-VB-42.	ASTM D41, ELASTOCOL 500	SBS-CA3	SBS-CA3 (sanded top surface)	DUOTACK	-270.0
C-VB-43.	ASTM D41	BP-AA	BP-AA	DUOTACK	-270.0
C-VB-44.	ASTM D41	SBS-AA	SBS-AA (sanded top surface)	DUOTACK	-270.0
C-VB-45.	ELASTOCOL Stick, ELASTOCOL Stick Zero	SBS-SA1	SBS-SA1 (sanded top surface)	DUOTACK	-315.0
C-VB-46.	ASTM D41	SBS-TAF	SBS-TAF (sanded top surface)	DUOTACK	-382.5
C-VB-47.	none	SBS-CA2, ribbons 6-inch o.c.	SBS-CA3 (sanded- or granule-top-surface)	DUOTACK, 6-inch o.c.	-382.5

Minimum Two-Ply Vapor Barrier Options; Structural Concrete Deck; Followed by Bonded Insulation per Table 3A:					
Option #	Primer	Vapor Barrier		Adhesive per Table 3A (Notes 6,7&8)	MDP (psf)
		Base Ply	Cap Ply		
C-VB-48.	none	SBS-CA2, ribbons 6-inch o.c.	SBS-TAF (sanded- or granule-top-surface)	DUOTACK, 6-inch o.c.	-445.0
C-VB-49.	ASTM D41	SBS-AA	SBS-AA (sanded top surface)	hot asphalt	-210.0
C-VB-50.	ASTM D41	BP-AA	BP-AA	hot asphalt	-270.0
C-VB-51.	none	SBS-CA2, ribbons 6-inch o.c.	SBS-CA3 or SBS-TAF (sanded-top-surface)	hot asphalt	-367.5
C-VB-52.	ASTM D41	SBS-TAF	SBS-TAF (sanded top surface)	hot asphalt	-367.5

Note: ***Top surfaces of membranes having a sand finish shall be primed with ELASTOCOL 500, ELASTOCOL Stick or ELASTOCOL Stick Zero prior to application of subsequent self-adhering membranes.***

19. Optional dry-in / temporary roof options for use over **structural concrete deck** followed by **Lightweight Concrete** carry the following Maximum Design Pressure (MDP) limitations. The lesser of the MDP listings below vs. that for the selected assembly from the Lightweight Concrete tables applies.

Dry-In / Temporary Roof Options; Structural Concrete Deck followed by LWC per LWC System Tables:				
Option #	Primer	Dry-In / Temporary Roof to Structural Concrete (Note 15)		MDP (psf)
		Base Ply	Cap Ply	
LWC-VB-1.	None	SBS-CA3 (sanded-top-surface)	None	-255.0
LWC-VB-2.	None	(Optional) SBS-CA3	SBS-CA3 (sanded- or granule-top-surface)	-255.0
LWC-VB-3.	ASTM D41, ELASTOCOL 500	SBS-CA3 (sanded-top-surface)	None	-270.0
LWC-VB-4.	ASTM D41, ELASTOCOL 500	(Optional) SBS-CA3	SBS-CA3 (sanded- or granule-top-surface)	-270.0
LWC-VB-5.	ASTM D41, ELASTOCOL 500	SBS-TAF (sanded-top-surface)	None	-367.5
LWC-VB-6.	ASTM D41, ELASTOCOL 500	(Optional) SBS-TAF	SBS-TAF (sanded- or granule-top-surface)	-367.5
LWC-VB-7.	None	SBS-CA2, ribbons 6-inch o.c.	SBS-CA3 (sanded- or granule-top-surface)	-382.5
LWC-VB-8.	None	SBS-CA2 (sanded- or granule-top-surface), ribbons 6-inch o.c.	None	-445.0
LWC-VB-9.	None	SBS-CA2, ribbons 6-inch o.c.	SBS-TAF (sanded- or granule-top-surface)	-445.0

20. Vapor barrier options for use over **existing gypsum decks** followed by bonded insulation carry the following MDP limitations. The lesser of the MDP listings below vs. that for the selected assembly from **Table 3A** or **Table 6A** applies:

Vapor Barrier Options; Existing Gypsum Decks; Followed by Bonded Insulation per Table 3A or 6A:				
Option #	Vapor Barrier (Note 15)		Insulation Adhesive per Table 3A or 6A (Notes 6,7&8)	MDP (psf)
	Base Ply	Cap Ply		
GYP-VB-1.	SBS-CA2 (sanded- or granule-top-surface), ribbons 6-inch o.c.	None	DUOTACK	-120.0
GYP-VB-2.	SBS-CA2, ribbons 6-inch o.c.	SBS-CA3 or SBS-TAF (sanded- or granule-top-surface)	DUOTACK	-120.0
GYP-VB-3.	SBS-CA2 (sanded- or granule-top-surface), ribbons 6-inch o.c.	None	DUOTACK *(ribbons shall be applied perpendicular to vapor barrier adhesive ribbons)*	-207.5
GYP-VB-4.	SBS-CA2, ribbons 6-inch o.c.	SBS-CA3 or SBS-TAF (sanded- or granule-top-surface)	DUOTACK *(ribbons shall be applied perpendicular to vapor barrier adhesive ribbons)*	-207.5
GYP-VB-5.	SBS-CA2, ribbons 6-inch o.c.	SBS-CA3 (sanded- or granule-top-surface)	DUOTACK, 6-inch o.c.	-382.5
GYP-VB-6.	SBS-CA2 (sanded- or granule-top-surface), ribbons 6-inch o.c.	None	DUOTACK, 6-inch o.c.	-445.0
GYP-VB-7.	SBS-CA2, ribbons 6-inch o.c.	SBS-TAF (sanded- or granule-top-surface)	DUOTACK, 6-inch o.c.	-445.0

21. The following surfacing may be applied to the Cap Ply without adverse effect on the system wind load performance. Refer to current NOA or FBC HVHZ Approval for approved SOPREMA roof coatings and the Roofing Materials Directory for fire ratings associated with coating usage.

SURFACING OPTIONS FOR SOPREMA MODIFIED BITUMEN ROOF SYSTEMS		
OPTION #	**SURFACING**	**NOA**
SURF-1.	ALSAN RS 230 Field, ALSAN Trafik RS 730 Field or ALSAN RS 260 LO Field liquid-applied, reinforced membrane, or ALSAN RS 230 Flash, ALSAN Trafik RS 730 Flash or ALSAN RS 260 LO Flash liquid-applied flashing membrane	21-0511.07
SURF-2.	ALSAN Coating AC401 acrylic roof coating (to granule surface only)	FL9779 (NOA pending)
SURF-3.	ALSAN SIL 402 silicone roof coating (to granule surface only)	17-1221.04
SURF-4.	Flood coat of hot asphalt at 60 lbs/square followed by embedded gravel at 400 lbs/square.	N/A
SURF-5.	COLPLY Adhesive at 4 gal/square followed by embedded gravel at 400 lbs/square.	20-0902.15

22. SOPRAFIX INSTALLATIONS:
    - For steel deck applications, SOPRAFIX base sheet shall be run with its length perpendicular to the steel deck flutes.
    - SOPRAFIX Base 611, SOPRAFIX Base 612, SOPRAFIX Base 613, SOPRAFIX Base 614 and SOPRAFIX Base 622 laps are heat or hot air welded. Welding is limited to hot air when using Polymer Batten Bars.
    - Insulation is required in New Construction or Re-Roof (Tear-Off), Steel Deck applications. Insulation is optional in New Construction or Re-Roof (Tear-Off), Wood, Structural Concrete or CWF applications or Recover applications. Insulation shall not be installed atop New Construction, Lightweight Insulating Concrete Decks.
    - Top layer of insulation shall be preliminarily attached (Note 5).

23. For System Types B-1, B-2, C-1, C-2, D-1 or D-2, SOPRAVAP'R may be installed atop the roof deck prior to installation of the insulation and roof cover. Refer to FM Loss Prevention Data Sheet 1-29 (February 2020) for design and installation recommendations.

24. The following products are interchangeable within the scope of this Evaluation Report:

ACCEPTABLE ALTERNATES		
Manufacturer	**Listed Product**	**Alternate**
SOPREMA	SOPRAFIX BASE 611	SOPRAFIX BASE 612, SOPRAFIX BASE 613, SOPRAFIX BASE 614, SOPRALENE FLAM 180, SOPRALENE FLAM 250
SOPREMA	SOPRAFIX BASE 612	SOPRAFIX BASE 614, SOPRALENE FLAM 180, SOPRALENE FLAM 250
SOPREMA	SOPRAFIX BASE 613	SOPRAFIX BASE 612, SOPRAFIX BASE 614, SOPRALENE FLAM 180, SOPRALENE FLAM 250
SOPREMA	SOPRAFIX BASE 614	SOPRALENE FLAM 250
SOPREMA	SOPRAFIX BASE 622	SOPRALENE 180 Sanded, SOPRALENE 180 SP 3.0, SOPRALENE 180 SP 3.5, SOPRALENE 250 Sanded, SOPRALENE 250 SP
Georgia-Pacific Gypsum, LLC	"DensDeck Prime"	"DensDeck StormX Prime Roof Board"

25. "SG" granules are an acceptable alternate granule color for all granule-surfaced Soprema cap membranes.

26. "MDP" = Maximum Design Pressure is the result of testing for wind load resistance based on allowable wind loads. Refer to FBC (HVHZ) 1620 and Roofing Application Standard RAS 128 for determination of design wind loads.

TABLE 3C: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE D-2: INSULATED, MECHANICALLY ATTACHED SOPRAFIX, BONDED ROOF COVER								
System No.	Deck (Note 1)	Insulation and/or Thermal Barrier (Note 13)	Base Membrane			Roof Cover (Note 15)		MDP (psf)
			Base (Note 22)	Fastener (Note 11)	Spacing	Ply	Cap	
C-160.	Min. 2,500 psi structural concrete	Min. 1.5-inch, One or more layers, any combination	SOPRAFIX Base 614	Trufast #14 HD, Trufast Fluted Concrete Nail or Soprema #14 MP with SOPRAFIX MBB-R	18-inch o.c. within 5-inch wide, heat-welded laps	ELASTOPHENE SP or SOPRALENE 180 SP, torch-applied	SBS-CA3, SBS-CA4	-45.0*
C-161.	Min. 2,500 psi structural concrete	Min. 1.5-inch, One or more layers, any combination	SOPRAFIX Base 614	Trufast #14 HD, Trufast Fluted Concrete Nail or Soprema #14 MP with SOPRAFIX MBB-R	18-inch o.c. within 5-inch wide, heat-welded laps	(Optional) SBS-TAF	SBS-TAF	-45.0*
C-162.	Min. 2,500 psi structural concrete	Min. 1.5-inch, One or more layers, any combination	SOPRAFIX Base 612 or 614 or SOPRAFIX Base 622	Trufast #14 HD, Trufast Fluted Concrete Nail or Soprema #14 MP with SOPRAFIX MBB-R	18-inch o.c. within 5-inch wide, heat-welded laps	(Optional) SBS-TAF	SBS-SA1	-45.0*
C-163.	Min. 2,500 psi structural concrete	Min. 1.5-inch, One or more layers, any combination	SOPRAFIX Base 612, 622	Trufast #14 HD, Trufast Fluted Concrete Nail or Soprema #14 MP with SOPRAFIX MBB-R	12-inch o.c. within 5-inch wide, heat-welded laps	ELASTOPHENE SP or SOPRALENE 180 SP, torch-applied	SBS-CA3, SBS-CA4	-75.0
C-164.	Min. 2,500 psi structural concrete	Min. 1.5-inch, One or more layers, any combination	SOPRAFIX Base 612, 622	Trufast #14 HD, Trufast Fluted Concrete Nail or Soprema #14 MP with SOPRAFIX MBB-R	12-inch o.c. within 5-inch wide, heat-welded laps	(Optional) SBS-TAF	SBS-TAF	-75.0

TABLE 3D: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF) SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER						
System No.	Deck (Note 1)	Primer	Roof Cover (Note 15)			MDP (psf)*
			Base	Ply	Cap	
COLD APPLIED BASE:						
C-165.	Structural Concrete	ASTM D41, ELASTOCOL 500	SBS-CA4	(Optional) SBS-CA4	SBS-CA4	-97.5
C-166.	Structural Concrete	None	SBS-CA2, 6-inch o.c.	(Optional) SBS-CA3, SBS-CA4, SBS-AA or SBS-TAF	SBS-CA3, SBS-CA4, SBS-AA or SBS-TAF	-180.0
C-167.	Structural Concrete	None	SBS-CA3	(Optional) SBS-CA3	SBS-CA3	-255.0
C-168.	Structural Concrete	ASTM D41, ELASTOCOL 500	SBS-CA3	(Optional) SBS-CA3	SBS-CA3	-270.0
HOT OR TORCH APPLIED BASE:						
C-169.	Structural Concrete	ELASTOCOL 500, ELASTOCOL Stick	SBS-TAP	(Optional) BP-AA or SBS-AA	SBS-AA	-267.5
C-170.	Structural Concrete	ELASTOCOL 500, ELASTOCOL Stick	SBS-TAP	(Optional) SBS-TAF	SBS-TAF	-295.0
C-171.	Structural Concrete	D41	SBS-TAF	(Optional) SBS-TAF	SBS-TAF	-367.5
ELASTOPHENE STICK, ELASTOPHENE FLAM STICK, SOPRALENE STICK OR SOPRALENE FLAM STICK BASE:						
C-172.	Structural Concrete	ELASTOCOL Stick, ELASTOCOL Stick Zero	SBS-SA1	(Optional) SBS-CA4 or SBS-SA1	SBS-CA4 or SBS-SA1	-67.5
C-173.	Structural Concrete	ELASTOCOL 500, ELASTOCOL Stick, ELASTOCOL Stick Zero	SBS-SA1	(Optional) BP-AA or SBS-AA	SBS-AA	-242.5
C-174.	Structural Concrete	ELASTOCOL 500, ELASTOCOL Stick, ELASTOCOL Stick Zero	SBS-SA1	(Optional) SBS-TAF	SBS-TAF	-272.5
ELASTOPHENE ULTRA-STICK OR SOPRALENE ULTRA-STICK BASE:						
C-175.	Structural Concrete	ELASTOCOL Stick, ELASTOCOL Stick Zero	SBS-SA2	(Optional) SBS-SA2	SBS-SA2	-304.0

SP 3.0" or "Sopralene 180 SP 3.5" or "Colphene 180 SP 3.5" or "Sopralene 250 SP", heat fused; or "Elastophene Sanded" or "Colphene Sanded" or "Elastophene Sanded 3.0" or "Elastophene HD" or "Elastophene HR 2.2" or "Elastophene HS" or "Elastophene HS 62" or "Elastophene HS FR" or "Sopralene 180 Sanded 2.2" or "Colphene 180 Sanded" or "Sopralene 180 Sanded" or "Sopralene 250 Sanded" adhered with "Colply EF Adhesive" applied at 2 gal/100 ft^2 or hot asphalt or "Soprasmart Board" or "Soprasmart Board 180" or "Soprasmart Board Sanded" or "Soprasmart Board 180 Sanded" adhered with "Duotack" or "Duotack 365" adhesive or hot asphalt or mechanically fastened.
NOTE: When "Soprasmart Board", "Soprasmart Board 180", "Soprasmart Board Sanded" or "Soprasmart Board 180 Sanded" is used Barrier Board is optional.

When Ply Sheet is applied directly to Thermal Barrier Barrier Board is optional.

Membrane Base Coat: — "Alsan RS 230 Field" or "Alsan RS 260 LO Field", applied at 3.91 lb/100 ft^2.
Reinforcement: — While the base coat of "Alsan RS 230 Field" or "Alsan RS 260 LO Field", is wet, a layer of nonwoven, needled punched polyester reinforcement fabric maximum weight 125 g/m^2 is applied and rolled so that air bubbles are removed.
Membrane Top Coat: — "Alsan RS 230 Field" or "Alsan RS 260 LO Field", applied at 1.95 lb/100 ft^2 (1.0 kg/m^2).
Finish Coat (Optional): — "Alsan RS 287 Color Finish Base" applied at 0.4 kg/m^2.

SINGLE PLY ROOFING SYSTEMS (MODIFIED BITUMEN MEMBRANES)

Unless otherwise indicated, "Sopraboard" minimum thickness 1/8 in. may be used as a cover board over insulation in the systems below.

Unless otherwise indicated, the roof insulation is mechanically fastened, adhered with hot roofing asphalt or urethane insulation adhesive.

"Elastophene Flam FR Granular," heat fused in place, is an acceptable alternate to "Elastophene FR Granular," adhered with hot roofing asphalt, in applicable Classifications.

Unless otherwise indicated, "SOPRACOLL E" or "FM Adhesive" -membrane cold adhesive may be used as an alternate to hot mopping asphalt in systems limited to inclines not exceeding 1-1/2 in. to the horizontal ft.

Unless otherwise indicated, "Colply Adhesive Brush Grade", "FM Adhesive (VOC)", "Colply Modified Adhesive", "Soprastar Adhesive" or "High Velocity Membrane Adhesive" cold membrane adhesive may be used as an alternate to hot mopping asphalt in systems limited to inclines not exceeding 1/2 in. to the horizontal ft.

Unless otherwise indicated, "Colply Adhesive N", cold membrane adhesive may be used as an alternate to hot mopping asphalt in noncombustible systems limited to inclines not exceeding 3-1/2 in.

Unless otherwise indicated, "Colply EF Adhesive", cold membrane adhesive may be used as an alternate to hot mopping asphalt in all noncombustible systems.

Unless otherwise indicated SOPRACOLLE "E" modified asphalt hot mopping adhesive may be used as an alternate to hot mopping asphalt in systems limited to inclines not exceeding l in. to the horizontal ft.

Unless otherwise indicated, on all noncombustible deck systems vapor retarders or ply sheets are optional beneath roof insulation on all systems.

Type G3 fiberglass reinforced cap sheet may be used in lieu of the Type G2 base sheet specified below.

"Elastophene Flam HP" is an acceptable alternate to "Sopralene Flam180" in all applicable Classifications.

"Elastophene HP FR GR" in an acceptable alternate to "Sopralene 180 FR GR" in all applicable Classifications. "Elastophene Flam HP FR GR" is an acceptable alternate to Sopralene Flam 180 FRGR"

"Colphene Sanded" is an acceptable alternate to "Elastophene Sanded" in all applicable Classifications.

"Colphene 180 Sanded" is an acceptable alternate to "Elastophene 180 Sanded" in all applicable Classifications.

"Colphene 180 GR" is an acceptable alternate to "Sopralene 180 GR" in all applicable Classifications.

"Colphene Flam 180" is an acceptable alternate to "Sopralene Flam 180" in all applicable Classifications.

"Colphene Flam 180 GR" is an acceptable alternate to "Sopralene Flam 180 GR" in all applicable Classifications.

"Colphene Stick" is an acceptable alternate to "Sopralene Stick" in all applicable Classifications.

"Colphene Stick GR" is an acceptable alternate to "Colphene HR FR GR" in all applicable Classifications.

"Colphene 180 FR GR" is an acceptable alternate to "Sopralene 180 FR GR" in all applicable Classifications.

"Colphene 250 FR GR" is an acceptable alternate to "Sopralene 250 FR GR" in all applicable Classifications.

"Colphene Flam 180 FR GR" is an acceptable alternate to "Sopralene Flam 180 FR GR" in all applicable Classifications.

"Colphene Flam 250 FR GR" is an acceptable alternate to "Sopralene Flam 250 FR GR" in all applicable Classifications.

"Colphene 180 PS" is an acceptable alternate to "Elastophene 180 PS" in all applicable Classifications.

"Colphene 180 SP 3.5" is an acceptable alternate to "Sopralene 180 SP 3.5" in all applicable Classifications.

"Colphene SP 3.0" is an acceptable alternate to "Elastophene SP 3.0" in all applicable Classifications.

"Colphene SP 2.2" is an acceptable alternate to "Elastophene SP 2.2" in all applicable Classifications.

"Soprastar HD FR GR" is an acceptable alternate to "Sopralene 250 FR GR" in all applicable Classifications.

"Soprastar Flam HD FR GR" is an acceptable alternate to "Sopralene Flam 250 FR GR" in all applicable Classifications.

"Soprastar HD FR+ GR" is an acceptable alternate to "Sopralene 250 FR+ GR" in all applicable Classifications.

"Soprastar Flam HD FR+ GR" is an acceptable alternate to "Sopralene Flam 250 FR+ GR" in all applicable Classifications.

"Elastohene Stick FR GR" is an acceptable alternate to "Colphene FR GR" in all applicable Classifications.

"Elastohene Stick HR FR GR" is an acceptable alternate to "Colphene HR FR GR" in all applicable Classifications.

"Soprafix Base 622" is an acceptable alternate to "Soprafix" in all applicable Classifications.

"Soprafix Base 641" is an acceptable alternate to "Soprafix E" in all applicable Classifications.

"Soprafix Base 613" is an acceptable alternate to "Soprafix F" in all applicable Classifications.

"Soprafix Base 612" is an acceptable alternate to "Soprafix S" in all applicable Classifications.

"Soprafix Base 614" is an acceptable alternate to "Soprafix X" in all applicable Classifications.

"Elastohene Stick" is an acceptable alternate to "Sopraflash Stick" in all applicable Classifications.

"Elastohene Flam Stick" is an acceptable alternate to "Sopraflash Flam Stick" in all applicable Classifications.

“Sopralene Ultra-Stick FR GR” is an acceptable alternate to “Sopralene Stick FR GR” in all applicable Classifications.

“ELASTOPHENE Sanded 2.2” is an acceptable alternate to “ELASTOPHENE Sanded” in all applicable Classifications.

"Sopralene 250 FR GR HC" is an acceptable alternate to "Sopralene 250 FR GR" in all applicable non-combustible systems or combustible roof deck systems where minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck ® Roofboard" or "DensDeck Prime® Roofboard" or "DensDeck Prime 2™ Roofboard" or "DensDeck DuraGuard® Roofboard" or Certainteed Gypsum Inc.. "GlasRoc", United States Gypsum Co. SECUROCK® Glass-Mat Roof Board (Type SGMRX)" or National Gypsum Co "DEXcell Glass Mat Roof Board" or "DEXcell FA Glass Mat Roof Board" is used as a barrier board.

Only UL Classified roof insulation's (excluding polystyrenes) are to be utilized in the insulated systems described below in any thickness or combination or as noted in individual Classifications, mechanically fastened or either adhered with hot roofing asphalt or UL Classified urethane insulation adhesive.

Any noncombustible roof deck Classification incorporating polyisocyanurate insulation may substitute the polyisocyanurate with EPS covered by a layer of minimum 1/2 in. thick wood fiber board or minimum 3/4 in. thick perlite board.

Minimim 1/2 in. thick gypsum board or or minimum 1/4 in. thick , Georgia-Pacifc Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" or "DensDeck DuraGuard™ Roofboard" or Owens Corning 1/4-in. thick (min) "Strataguard", may be used in any existing noncombustible roof deck Classification. When this is done, the resulting roof covering system is acceptable for use over combustible (15/32 in. thick minimum) roof decks (if used, EPS must be placed under the Georgia-Pacifc Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" or "DensDeck DuraGuard™ Roofboard") or "Strataguard". The joints in the gypsum board and overlayment board are offset 6-in. with the joints in the plywood roof deck.

Unless otherwise indicated, a suitable alternate to membrane (cap sheet) surfacing (limited to inclines not exceeding 2:12 in. to the horizontal ft) is gravel or crushed stone at 400 lbs/sq or slag at 300 lbs/sq embedded into hot roofing asphalt or concrete pavers, 10 lb/sq min.

Unless otherwise indicated, "Elastophene Sanded" is an acceptable alternate for the first base sheet in any of the following Classifications.

Unless otherwise indicated, "Soprastar Flam 180", "Soprastar 180 Sanded" can be used in lieu of "Soprastar Flam" and "Soprastar Sanded", respectively, limited to a 1-1/2:12 incline, and restricted to non-combustible systems or combustible systems where 1/4" Securock, DensDeck, DensDeck Prime or DensDeck DuraGuard is required as a barrier board.

Unless otherwise indicated, "Soprastar 180 Stick" can be used in lieu of "Soprastar Stick", limited to 1:12 incline, and restricted to non-combustible systems or combustible systems where 1/4" Securock, DensDeck, DensDeck Primer or DensDeck DuraGuard is required as a barrier board.

NOTE: Polystyrene insulation must be covered with minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck ® Roofboard" or "DensDeck Prime® Roofboard" or "DensDeck Prime 2™ Roofboard" or "DensDeck DuraGuard® Roofboard" or Certainteed Gypsum Inc.. "GlasRoc" or United States Gypsum Co. SECUROCK® Glass-Mat Roof Board (Type SGMRX)" or National Gypsum Company "DEXcell Glas Mat Roof Board" or DEXcell FA Glas Mat Roof Board".

Barrier Board (Optional): — "Sopraboard" (min 1/8 in.), perlite (min 1/2 in.), gypsum or gypsum fiber (min 1/4 in.) or wood fiberboard (min 1/2 in.) mechanically fastened, hot mopped or adhered with any UL Classified insulation adhesive.
Base Sheet (Optional): — One or more plies Type G1 or Type G2; "Sopra IV", "Sopra VI", "Sopraglass 40", "Sopraglass 100", "Sopra G" or "Modified Sopra G", any combination mechanically fastened or adhered with hot asphalt.
Ply Sheet (Optional): — One or more plies "Elastophene Sanded", "Elastophene HD", "Elastophene HR 2.2", "Elastophene HS FR", "Elastophene HP", "Elastophene 180 Sanded", "Sopralene 180 Sanded 2.2", "Sopralene 180 Sanded", "Sopralene 250 Sanded", "Elastophene PS 2.2", "Elastophene 180 PS", "Sopralene 180 PS 2.2", "Sopralene 180 PS 3.0", "Sopralene 250 PS", "Elastophene HS", "Elastophene HS 62"or "Soprabase S" adhered with hot asphalt or mechanically fastened; or "Elastophene Flam", "Elastophene Flam 2.2", "Elastophene Flam HD", "Elastophene Flam HR", "Elastophene Flam HS FR", "Elastophene Flam HP", "Sopralene Flam 180", "Sopralene Flam 250", "Elastophene Flam HS," "Elastophene Flam HS HD," "Colvent TG" or "Soprabase TG" heat welded or mechanically fastened; or "Soprafix", "Soprafix X" or "Soprafix E" mechanically fastened; or "ELASTOPHENE Stick", "ELASTOPHENE Flam Stick", "ELASTOPHENE SURE-STICK", "ELASTOPHENE ULTRA-STICK", "SOPRALENE ULTRA-STICK", "SOPRALENE Stick", "SOPRALENE Flam Stick", "SOPRALENE SURE-STICK", "Colvent SA" or "EPS Flam Stick self-adhered; or "Soprasmart Board", "Soprasmart Board 180", "Soprasmart ISO HD", "Soprasmart ISO HD 180", "Soprasmart Board Sanded", "Soprasmart Board 180 Sanded", "Soprasmart ISO HD Sanded", or "Soprasmart ISO HD 180 Sanded" adhered with "Duotack" or "Duotack 365" adhesive or hot asphalt or mechanically fastened.
Cap Sheet: — "Elastophene FR GR", "Elastophene HD FR GR", "Elastophene HR FR GR", "Elastophene HS FR GR", "Elastophene HP FR GR", "Elastophene LS FR GR", "Sopralene 180 FR GR", "Sopralene 180 FR GR 3.5" or "Sopralene 250 FR GR" adhered with hot asphalt; or "Elastophene Flam FR GR", "Elastophene Flam HD FR GR", "Elastophene Flam HR FR GR", "Elastophene Flam HS FR GR", "Elastophene Flam HP FR GR", "Elastophene Flam LS FR GR", "Sopralene Flam 180 FR GR", "Sopralene Flam 180 FR GR 3.5" or "Sopralene Flam 250 FR GR" heat welded; or "Colphene FR GR", "Elastophene Stick FR GR", "ELASTOPHENE SURE-STICK FR GR" or "ELASTOPHENE ULTRA-STICK FR GR", self-adhered.

89. **Deck:** NC **Incline:** 1
Primer (Optional): — AQUAFIN "VAPORTIGHT COAT-SG3" (not UL Classified), applied at 1 gal/100 ft^2.
Thermal Barrier (Optional): — Gypsum or gypsum fiber (min 1/4 in.), perlite or mineral wool (min 3/4 in.), cement board (min 1/4 in.) or wood fiberboard (min 1/2 in.) mechanically fastened or adhered with any UL Classified insulation adhesive.
Vapor Retarder (Optional): — Any UL Classified or Soprema base sheet, ply sheet or Sopravap'r, mechanically fastened or adhered.
Base Sheet (Optional): — One or more plies Type G1 or Type G2; "Sopra IV", "Sopra VI", "Sopraglass 40", "Sopraglass 100", "Sopra G", "Modified Sopra G", or "SURESTICK™ Nail Base", any combination mechanically fastened or adhered with hot asphalt.
Insulation (Optional): — Polyisocyanurate, polystyrene (EPS, XPS), glass fiber, mineral wool, perlite, wood fiber or cellular glass insulation, any thickness, any combination, mechanically fastened, loose laid or adhered with hot asphalt or insulation adhesive.
NOTE: Polystyrene insulation must be covered with minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck ® Roofboard" or "DensDeck Prime® Roofboard" or "DensDeck Prime 2™ Roofboard" or "DensDeck DuraGuard® Roofboard" or Certainteed Gypsum Inc. "GlasRoc" or United States Gypsum Co. SECUROCK® Glass-Mat Roof Board (Type SGMRX)".

Barrier Board (Optional): — "Sopraboard" (min 1/8 in.), perlite (min 1/2 in.), gypsum or gypsum fiber (min 1/4 in.) or wood fiberboard (min 1/2 in.) mechanically fastened, hot mopped or adhered with any UL Classified insulation adhesive.
Base Sheet (Optional): — One or more plies Type G1 or Type G2; "Sopra IV", "Sopra VI", "Sopraglass 40", "Sopraglass 100", "Sopra G" or "Modified Sopra G", any combination mechanically fastened or adhered with hot asphalt.
Ply Sheet (Optional): — One or more plies "Elastophene Sanded", "Elastophene HD", "Elastophene HR 2.2", "Elastophene HS FR", "Elastophene HP", "Elastophene 180 Sanded", "Sopralene 180 Sanded 2.2", "Sopralene 180 Sanded", "Elastophene PS 2.2", "Elastophene 180 PS", "Sopralene 180 PS 2.2", "Sopralene 180 PS 3.0", "Sopralene 250 PS", "Elastophene HS", "Elastophene HS 62" or "Soprabase S" adhered with hot asphalt or mechanically fastened; or "Elastophene Flam", "Elastophene Flam 2.2", "Elastophene Flam HD", "Elastophene Flam HR", "Elastophene Flam HS FR", "Elastophene Flam HP", "Sopralene Flam 180", "Elastophene Flam HS", "Elastophene Flam HS HD", "Colvent TG" or "Soprabase TG" heat welded or mechanically fastened; or "Soprafix", "Soprafix X" or "Soprafix E" mechanically fastened; or "ELASTOPHENE Stick", "ELASTOPHENE Flam Stick", "ELASTOPHENE SURE-STICK", "ELASTOPHENE ULTRA-STICK", SOPRALENE ULTRA-STICK", "SOPRALENE Stick", "SOPRALENE Flam Stick", "SOPRALENE SURE-STICK", "Colvent SA" or "EPS Flam Stick self-adhered; or "Soprasmart Board", "Soprasmart Board 180", "Soprasmart ISO HD", "Soprasmart ISO HD 180", "Soprasmart Board Sanded", "Soprasmart Board 180 Sanded", "Soprasmart ISO HD Sanded", or "Soprasmart ISO HD 180 Sanded" adhered with "Duotack" or "Duotack 365" adhesive or hot asphalt or mechanically fastened.
Cap Sheet: — "Sopralene 180 FR GR", "Sopralene 180 FR GR 3.5" or "Sopralene 250 FR GR" adhered with hot asphalt; or "Sopralene Flam 180 FR GR", "Sopralene Flam 180 FR GR 3.5" or "Sopralene Flam 250 FR GR" heat welded; or Unilay FR mechanically fastened.

SOPRALENE®
250 SANDED

PRODUCT DATA SHEET

DESCRIPTION & FEATURES

SOPRALENE 250 Sanded is an SBS-modified bitumen base ply for use in approved multi-ply membrane and flashing assemblies. SOPRALENE 250 Sanded is composed of a proprietary formulation of elastomeric styrene-butadiene-styrene (SBS) polymer modified bitumen and is reinforced with tough, dimensionally stable non-woven polyester mat. The topside and underside are surfaced with fine mineral aggregate to facilitate cold adhesive application.

STORAGE

Store rolls on end and maintain in an upright position to prevent damage. Store rolls in a clean dry location and cover as necessary to protect rolls from environmental damage such as extreme cold, heat, or moisture. Monitor varying environmental conditions during storage, handling and application of SOPRALENE 250 Sanded.

APPLICATION

Prior to installation, unroll SOPRALENE 250 Sanded onto the roof surface and allow to relax. Place SOPRALENE 250 Sanded in desired position and back roll the product. Apply approved cold adhesive following manufacturer specifications. SOPRALENE 250 Sanded is then rolled into the cold adhesive and subsequently rolled with a weighted roller. Subsequent approved inter-ply or cap ply membranes are applied to SOPRALENE 250 Sanded via cold adhesive. Refer to the SOPREMA SBS Roofing Guide for additional application guidelines.

APPLICATION

COLD ADHESIVE

QUICK FACTS

ASTM STANDARD	LENGTH (ft)	WIDTH (in)	COVERAGE* (ft^2)	THICKNESS (mils)	ROLL WEIGHT (lb)	ROLLS/ PALLET
D6164 Type 2, Grade S	32.8 (10.0 m)	39.4 (1.0 m)	97.9 (9.1 m^2)	154 (3.9 mm)	108 (49.0 kg)	25 2,750 lb/ 1247 kg

* Coverage rate as reported assumes installation using side and end lap recommendations.

SOPREMA®
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SOPRALENE®
180 SANDED

PRODUCT DATA SHEET

DESCRIPTION & FEATURES

SOPRALENE 180 Sanded is an SBS-modified bitumen base ply for use in approved multi-ply membrane and flashing assemblies. SOPRALENE 180 Sanded is composed of a proprietary formulation of elastomeric styrene-butadiene-styrene (SBS) polymer modified bitumen and is reinforced with a tough, dimensionally stable non-woven polyester mat. The topside and underside are surfaced with fine mineral aggregate to facilitate cold adhesive application.

STORAGE & HANDLING

Store rolls on end and maintain in an upright position to prevent damage. Store rolls in a clean dry location and cover as necessary to protect rolls from environmental damage such as extreme cold, heat, or moisture. Monitor varying environmental conditions during storage, handling and application of SOPRALENE 180 Sanded.

APPLICATION

Prior to installation, unroll SOPRALENE 180 Sanded onto the roof surface and allow to relax. Place SOPRALENE 180 Sanded in desired position and back roll the product. Apply approved cold adhesive following manufacturer's guidelines. SOPRALENE 180 Sanded is then rolled into the cold adhesive subsequently rolled with a weighted roller. Subsequent approved inter-ply or cap ply membranes are applied to SOPRALENE 180 Sanded via cold adhesive. Refer to the SOPREMA® SBS Roofing Guide for additional application guidelines.

APPLICATION

COLD ADHESIVE

QUICK FACTS

ASTM STANDARD	LENGTH (ft)	WIDTH (in)	COVERAGE* (ft^2)	THICKNESS (mils)	ROLL WEIGHT (lb)	ROLLS/PALLET (pallet weight)
D6164 Type 1, Grade S	32.8 (10.0 m)	39.4 (1.0 m)	97.9 (9.1 m^2)	120 (3.0 mm)	84 (38.1 kg)	30 (2,570 lb/ 1,166 kg)

* Coverage rate as reported assumes installation using side and end lap recommendations.

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TECHNICAL INFORMATION & TESTING

SHEET PROPERTIES	
Reinforcement	Non-woven polyester
Elastomeric bitumen	Proprietary blend of bitumen and SBS polymers
Surfacing	Sanded
Back surfacing	Sanded
Side lap, in (mm)	3 (76)
End lap, in (mm)	6 (152)

DIMENSIONS & MASS		
PROPERTY		TEST METHOD
Thickness, mils (mm)	120 (3.0)	ASTM D5147
Thickness @ selvage, mils (mm)	120 (3.0)	ASTM D5147
Net mass per unit area, lb/100ft^2 (g/m^2)	78 (3808)	ASTM D5147

PHYSICAL PROPERTIES			
PROPERTY	MD	XMD	TEST METHOD
Peak load @ 0°F (-18°C), lbf/in (kN/m)	115 (20.1)	90 (15.8)	ASTM D5147
Elongation at peak load @ 0°F (-18°C), %	35	40	ASTM D5147
Peak load @ 73.4°F (23°C), lbf/in (kN/m)	85 (14.9)	65 (11.4)	ASTM D5147
Elongation at peak load @ 73.4°F (23°C), %	55	60	ASTM D5147
Ultimate elongation @ 73.4°F (23°C), %	65	80	ASTM D5147
Tear strength @ 73.4°F (23°C), lbf (N)	125 (556)	85 (378)	ASTM D5147
Low temperature flexibility, °F (°C)	-15 (-26)	-15 (-26)	ASTM D5147
Dimensional stability, %	< 0.5	< 0.5	ASTM D5147
Compound stability, °F (°C)	240 (116)	240 (116)	ASTM D5147

** Data is represented by average values, unless noted otherwise.*

TESTING & APPROVALS

FM APPROVED · CLASSIFIED UL · FLORIDA BUILDING CODE · MIAMI-DADE COUNTY APPROVED

SOPREMA®

SOPRALENE®
180 FR GR

PRODUCT DATA SHEET

DESCRIPTION & FEATURES

SOPRALENE 180 FR GR (fire retardant, granulated) is an SBS-modified bitumen cap ply for use in approved multi-ply membrane and flashing assemblies. SOPRALENE 180 FR GR is composed of a proprietary formulation of elastomeric styrene-butadiene-styrene (SBS) polymer modified bitumen and is reinforced with a tough, dimensionally stable non-woven polyester mat. The topside is surfaced with ceramic coated granules and the underside is surfaced with fine mineral aggregate to facilitate cold adhesive application.

SOPRALENE 180 FR GR includes the standard white granules. Contact SOPREMA® Customer Service or your sales representative for other granule color options and special order requirements.

STORAGE & HANDLING

Store rolls on end and maintain in an upright position to prevent damage. Store rolls in a clean dry location and cover as necessary to protect rolls from environmental damage such as extreme cold, heat, or moisture. Monitor varying environmental conditions during storage, handling and application of SOPRALENE 180 FR GR.

APPLICATION

Prior to installation, unroll SOPRALENE 180 FR GR onto the roof surface and allow to relax. Place SOPRALENE 180 FR GR in desired position and back roll the product. Apply approved cold adhesive following manufacturer specifications. SOPRALENE 180 FR GR is then rolled into the cold adhesive and subsequently broomed in. Refer to the SOPREMA SBS Roofing Installation Guide for additional application guidelines.

APPLICATION

COLD ADHESIVE

COOL ROOF RATING						
PRODUCT	SOLAR REFLECTANCE		THERMAL EMITTANCE		SRI	
SOPRALENE 180 FR GR Standard white granules (WH)	0.26 initial	0.23 3 year	0.87 initial	0.90 3 year	25 initial	23 3 year
SOPRALENE 180 FR GR Highly reflective white granules (SG)	0.70 initial	0.62* 3 year	0.90 initial	0.90* 3 year	86 initial	75 3 year
SOPRALENE 180 FR GR Smog reducing granules (ECO_3)	0.10 initial	N/A	0.89 initial**	N/A	6 initial**	N/A

** CRRC Rapid Ratings. Refer to Cool Roof Ratings Council (CRRC).*
***Calculated using internal testing*

QUICK FACTS

ASTM STANDARD	LENGTH (ft)	WIDTH (in)	COVERAGE* (ft^2)	THICKNESS (mils)	ROLL WEIGHT (lb)	ROLLS/ PALLET (pallet weight)
D6164 Type 1, Grade G	32.8 (10.0 m)	39.4 (1.0 m)	97.9 (9.1 m^2)	160 (4.0 mm)	117 (53.1 kg)	25 (2,977 lb/ 1,350 kg)

* Coverage rate as reported assumes installation using side and end lap recommendations.

SOPREMA®
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TECHNICAL INFORMATION & TESTING

SHEET PROPERTIES	
Reinforcement	Non-woven polyester
Elastomeric bitumen	Proprietary blend of bitumen and SBS polymers
Surfacing	Ceramic coated granules
Back surfacing	Sanded
Selvage surface	Sanded
Side lap, in (mm)	3 (76)
End lap, in (mm)	6 (152)

DIMENSIONS & MASS		
PROPERTY		TEST METHOD
Thickness, mils (mm)	160 (4.0)	ASTM D5147
Thickness @ selvage, mils (mm)	130 (3.3)	ASTM D5147
Net mass per unit area, lb/100ft^2 (g/m^2)	109 (5322)	ASTM D5147

PHYSICAL PROPERTIES			
PROPERTY	MD	XMD	TEST METHOD
Peak load @ 0°F (-18°C), lbf/in (kN/m)	115 (4.0)	90 (15.8)	ASTM D5147
Elongation at peak load @ 0°F (-18°C), %	35	40	ASTM D5147
Peak load @ 73.4°F (23°C), lbf/in (kN/m)	85 (14.9)	65 (11.4)	ASTM D5147
Elongation at peak load @ 73.4°F (23°C), %	55	60	ASTM D5147
Ultimate elongation @ 73.4°F (23°C), %	65	80	ASTM D5147
Tear strength @ 73.4°F (23°C), lbf (N)	125 (556)	85 (378)	ASTM D5147
Low temperature flexibility, °F (°C)	-15 (-26)	-15 (-26)	ASTM D5147
Dimensional stability, %	< 0.5	< 0.5	ASTM D5147
Compound stability, °F (°C)	240 (116)	240 (116)	ASTM D5147
Granule embedment, g	1.5 avg; 2.0 max for SG		ASTM D5147
Cyclic fatigue, condition 5	Pass		ASTM D5849

** Data is represented by average values, unless noted otherwise.*

TESTING & APPROVALS

CRRC RATED PRODUCT · FM APPROVED · CLASSIFIED UL · FLORIDA BUILDING CODE · MIAMI-DADE COUNTY APPROVED

SOPREMA®

TECHNICAL INFORMATION & TESTING

SHEET PROPERTIES	
Reinforcement	Non-woven polyester
Elastomeric bitumen	Proprietary blend of bitumen and SBS polymers
Surfacing	Sanded
Back surfacing	Sanded
Selvage surface	Sanded
Side lap, in (mm)	3 (76)
End lap, in (mm)	6 (152)

DIMENSIONS & MASS		
PROPERTY		TEST METHOD
Thickness, mils (mm)	154 (3.9)	ASTM D5147
Net mass per unit area, lb/100ft^2 (g/m^2)	100 (4882)	ASTM D5147

PHYSICAL PROPERTIES			
PROPERTY	MD	XMD	TEST METHOD
Peak load @ 0°F (-18°C), lbf/in (kN/m)	160 (28.0)	110 (19.3)	ASTM D5147
Elongation at peak load @ 0°F (-18°C), %	30	35	ASTM D5147
Peak load @ 73.4°F (23°C), lbf/in (kN/m)	135 (23.6)	100 (17.5)	ASTM D5147
Elongation at peak load @ 73.4°F (23°C), %	55	60	ASTM D5147
Ultimate elongation @ 73.4°F (23°C), %	70	80	ASTM D5147
Tear strength @ 73.4°F (23°C), lbf (N)	165 (734)	120 (534)	ASTM D5147
Low temperature flexibility, °F (°C)	-15 (-26)	-15 (-26)	ASTM D5147
Dimensional stability, %	<0.5	<0.5	ASTM D5147
Compound stability, °F (°C)	240 (116)	240 (116)	ASTM D5147

** Data is represented by average values, unless noted otherwise.*

TESTING & APPROVALS

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SOPREMA®

COLPLY®
EF ADHESIVE

PRODUCT DATA SHEET

DESCRIPTION & FEATURES

COLPLY EF Adhesive is a high performance, single-component polymeric adhesive for use with SBS-modified bitumen membrane systems. Due to its polymer composition, once cured, COLPLY EF Adhesive provides an additional layer of elastomeric waterproofing protection beneath or between membrane plies. COLPLY EF (environmentally friendly) Adhesive is unique in that it is a solvent-free and ultra-low VOC material allowing for application flexibility on job sites where exposure to VOC's or odor may be a concern.

STORAGE

Store pail on end and maintain in an upright position to prevent damage. Store in a clean dry location and cover as necessary to protect from environmental damage such as extreme cold, heat, or moisture. Monitor varying environmental conditions during storage, handling and application of COLPLY EF Adhesive.

APPLICATION

COLPLY EF Adhesive is applied to approved, compatible substrates using ¼" inch notched neoprene squeegees or trowels. Apply COLPLY EF Adhesive at 1.5 to 2 gallons per 100 square feet for sand-surfaced interply applications. When the ambient temperature is below 50°F (10°C), material should be warmed to a temperature of 70°F (24°C) at the time of application. Refer to the SOPREMA SBS Roofing Manual for additional application guidelines.

QUICK FACTS

			RIBBON APPLICATION
ASTM STANDARD	CONTAINER (gal)	COVERAGE* (gal/100 ft^2)	COVERAGE 6" O.C. (gal/100ft^2)
D3019	5.0 (18.9 L)	1.5-2.0 (interply)	2.0 (7.0 L)

* Coverage rate as reported assumes installation using side and end lap recommendations.

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TECHNICAL INFORMATION & TESTING

PRODUCT INFORMATION	
Description	Polymer-modified, membrane adhesive
Installation	Brush, roller or squeegee applied
Packaging, gal (L) Cartridge Pail Drum	 0.4 (1.5) 5 (18.9) 50 (189.3
Application rate, gal/100ft^2 (absorptive surface)	1.5 - 2.0 (2.0 - 2.5)
Application rate, gal/100ft^2 (L/100ft^2) 6” O.C. Ribbons	2.0 (7.6)

TESTING & APPROVALS

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FLORIDA BUILDING CODE
MIAMI-DADE COUNTY APPROVED

SOPRACANT® MB

MODIFIED BITUMEN CANT STRIP

PRODUCT DATA SHEET

DESCRIPTION & FEATURES

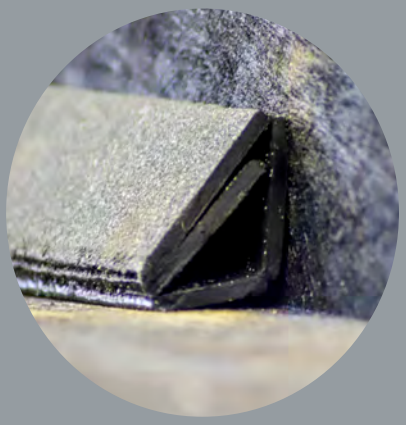
SOPRACANT MB cant strips are triangular shaped, modified bitumen cant strips designed to enhance the transition from horizontal to vertical surfaces in modified bitumen roof assemblies. The unique composition of SOPRACANT MB cant strips is ideal for direct heat-welding application (unlike cant strips composed of foam insulation, perlite, wood fiber, or wood that require an additional separator layer), and they are also compatible with cold adhesive and hot asphalt applications.

STORAGE & HANDLING

SOPRACANT MB cant strips are designed to resist damage from typical storage and handling. They are also resistant to exposure to various weather conditions and moisture, however it is recommended to follow good roofing practice and store in a clean, dry location prior to installation. SOPRACANT MB cant strips are packaged in cardboard boxes.

ADVANTAGES

- Strong, dimensionally stable cant strip that resists damage and breakage on the jobsite
- Available in two sizes: Small for low flashing heights and Large for standard flashing heights
- Compatible with a variety of roofing systems and roof decks
- Provides a superior bonding surface compared to other cants strip options
- Enhances roof drainage at horizontal to vertical transitions
- Designed with application versatility in mind, can be installed by heat-welding, mechanically fastening or adhered in COLPLY™ Adhesive or SBS Elastic Cement*



Small Application Shown

QUICK FACTS

PRODUCT	DIMENSIONS (in)	LENGTH (in)	WEIGHT (lb)	PIECES / BOX (box weight)	COVERAGE / BOX (LINEAR FT)	BOX / PALLET (pallet weight)
SMALL	1 1/4" x 1 1/4" x 2" (3.2 x 3.2 x 5 cm)	39.4 (1.0 m)	2 (0.9 kg)	24 (48 lb)	78.7 (24.0 M)	30 (1490 LB)
LARGE	2 1/4" x 2 1/4" x 3 1/4" (5.7 x 5.7 x 8.3 cm)	39.4 (1.0 m)	4 (1.8 kg)	12 (48 lb)	39.3 (12.0 M)	30 (1490 LB)

*Do not use with SOPREMA self adhered membranes or adhere in COLPLY EF™ Adhesive

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ELASTOCOL® 500

TO BE USED AT FLASHINGS

PRODUCT DATA SHEET PD10136-Rev. 220203

DESCRIPTION:

ELASTOCOL 500 is an asphalt based primer for use in approved multi-ply membrane and flashing assemblies. ELASTOCOL 500 is composed of a proprietary blend of asphalt, solvents and additives used to increase adhesion when using heat welding, cold adhesive or hot asphalt application methods.

STORAGE:

Store in pail and maintain in an upright position to prevent damage. Store in a clean dry location and cover as necessary to protect pails from environmental damage such as extreme cold, heat, or moisture. Monitor varying environmental conditions during storage, handling and application of ELASTOCOL 500.

APPLICATION:

Mix prior to application. **ELASTOCOL 500** is applied to the approved area via brush, roller or spray equipment. ELASTOCOL 500 is applied at a rate of 0.35 to 0.6 gallon per 100 square feet over non porous substrate. Refer to the SOPREMA SBS Roofing Manual for additional application guidelines.

QUICK FACTS

ASTM STANDARD	CONTAINER (gal)	COVERAGE RATE (gal/100ft²)
D41 TYPE 1	5.0 (18.9 L)	0.35-0.6 (0.15 - 0.25 L/m²)

PRODUCT INFORMATION	
Description	Proprietary blend of asphalt and solvents
Installation	Spray, brush or roller
Packaging	5 gallon (18.9 L) pail

FM APPROVED
FLORIDA BUILDING CODE
MIAMI-DADE COUNTY APPROVED

SOPREMA®

SOPRAMASTIC®
SBS ELASTIC CEMENT

PRODUCT DATA SHEET

DESCRIPTION & FEATURES

SOPRAMASTIC SBS Elastic Cement is a modified bitumen mastic for use in approved multi-ply membrane and flashing assemblies. SOPRAMASTIC SBS Elastic Cement is composed of a proprietary formulation of elastomeric modified bitumen and solvents. SOPRAMASTIC SBS Elastic Cement may be used as an adhesive for drain leads, pipe flanges, metal gravel stops, and more.

STORAGE

Store in original packaging and maintain in an upright position to prevent damage. Store in a clean dry location and cover as necessary to protect from environmental damage such as extreme cold, heat, or moisture. Monitor varying environmental conditions during storage, handling and application of SOPRAMASTIC SBS Elastic Cement.

APPLICATION

SOPRAMASTIC SBS Elastic Cement is applied to the approved area via caulking gun or trowel. Refer to the SOPREMA SBS Roofing Manual for additional application guidelines.

PHYSICAL PROPERTIES	
Physical Property	ASTM D4586
Description	elastomeric bitumen general adhesive
Installation	trowel or caulking gun
Packaging	5 gallon pail (18.9 L) & 310 ML tubes
Application	70 to 140 ft²/gal. (0.28 to 0.57 L/m²), depending on surface

** Data is represented by average values, unless noted otherwise.*

TESTING & APPROVALS

FLORIDA BUILDING CODE

MIAMI-DADE COUNTY APPROVED

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SOPRAMASTIC® SP1

Review for Code Compliance Building
Hallandale Beach
04/06/2022

PRODUCT DATA SHEET

DESCRIPTION & FEATURES

SOPRAMASTIC SP1 is a moisture cured polyether sealant for use in approved multi-ply membrane and flashing assemblies. SOPRAMASTIC SP1 is composed of a polyether designed to be highly elastic to accommodate dynamic movement. SOPRAMASTIC SP1 used as a general purpose adhesive and sealant for various applications.

STORAGE

Store in box and maintain in an upright position to prevent damage. Store in a clean dry location and cover as necessary to protect box from environmental damage such as extreme cold, heat, or moisture. Monitor varying environmental conditions during storage, handling and application of SOPRAMASTIC SP1.

APPLICATION

SOPRAMASTIC SP1 is applied to the approved area via a pneumatic cartridge applicator. Refer to the SOPREMA SBS Roofing Manual for additional application guidelines.

QUICK FACTS

QUANTITY (oz)	PACKAGING (carton/box)
10.1 tube	24 tubes

SOPREMA®
www.soprema.us
310 Quadral Drive, Wadsworth, Ohio 44281
Toll Free: (800) 356-3521 | Tel: (330) 334-0066

TECHNICAL INFORMATION

PHYSICAL PROPERTIES		
PROPERTY	UNIT	TEST METHOD
Gun grade	Zero slump	ASTM C679
Viscosity (cp)	750,000 ± 150,000	Brookfield RVF TF Spindle, 4 RPM, 73°F (23°C)
Density (lb per gallon)	11.0 ± 0.2	ASTM D 1475
Elongation at break (%)	750 - 800	ASTM D 412
Peel strength (psi)	25 -30	ASTM C794
Tensile strength (psi)	250 - 300	ASTM D412
Hardness Shore A	17 - 23	ASTM C661
Lap shear strength (psi)	150 - 175	ASTM D1002
Low temperature flex (-10°F (-23°C) 1/4 inch mandrel)	Pass	ASTM D816
Shrinkage	No visible shrinkage after 14 days	-
Service temperature °F (°C)	-40 to 200 (-40 to 93)	-
Weathering	No cracking or chalking, slight matte finish after 2000 hours QUV “A” bulb. Durometer gain of 5 points	-

** Data is represented by average values, unless noted otherwise.*

SOPRAMASTIC BLOCK

COMPLEMENTARY PRODUCT
WATERPROOFING

APPLICATIONS

ROOFS

TECHNICAL DATA SHEET 151112SCANF (supersedes)

DESCRIPTION

SOPRAMASTIC BLOCK precast blocks are made with polyester. They are offered in three (3) variable sizes to be adapted to various configurations. Their ends are bevelled.

They are designed to hold, contain and protect the **SOPRAMASTIC SP2** sealant and adhesive and the **SOPRAMASTIC PF** sealing mastic around roofing details where penetrations represent a technical challenge.

They are used in conjunction with the **SOPRAMASTIC SP2** sealant and adhesive product and the **SOPRAMASTIC PF** sealing mastic on roofs covered with SBS modified bitumen membranes with a granular or sanded surface, on organic felt and on oxidized bitumen membranes, such as **SOPRAGLASS 100** (multiply roof). They can be applied to horizontal and vertical walls.

SURFACE PREPARATION

Surfaces must be clean, dry and free of debris, dust, non-adhered particles, oil, corrosion, rust, condensation or other contaminants.

Metal surfaces and PVC pipes must be cleaned with non-greasy solvents, such as acetone or methyl ethyl ketone (MEK).

INSTALLATION

The **SOPRAMASTIC BLOCK** system should not be exposed to temperatures above 60 °C (140 °F) for extended periods.

Lay out the **SOPRAMASTIC BLOCK** precast blocks on the desired location and trace the outline for reference. **SOPRAMASTIC BLOCK** precast blocks must be placed so as to ensure a minimum gap of 25 mm (1 in) between the block inner wall and the penetrations.

Using a standard cartridge extruder, seal the base of each penetration with the **SOPRAMASTIC SP2** sealant and adhesive. Cover the penetration with sealant at least 25 mm (1 in) above the height of the **SOPRAMASTIC BLOCK** precast blocks.

Under and at the ends of the precast blocks, on the flat surface, apply a 6 mm (1/4 in) bead around the perimeter and at the centre of the surface. Place and align the precast blocks on the roof outline. Apply pressure on the **SOPRAMASTIC BLOCK** precast blocks until product overflows from all sides of the precast blocks to avoid any water infiltration between granules and precast blocks. Install all precast blocks required to achieve the desired configuration.

Apply a bead of the **SOPRAMASTIC SP2** sealing product to the block joints and at the outer perimeter of the structure made of **SOPRAMASTIC BLOCK** precast blocks. Using the tip of a trowel, bond the **SOPRAMASTIC SP2** sealant and adhesive to the membrane.

Horizontal surfaces: completely fill the configuration with **SOPRAMASTIC PF** sealing mastic.
Vertical surfaces: completely fill the configuration with **SOPRAMASTIC SP2** sealant and adhesive.

For more information on the product installation, please contact a **SOPREMA** representative.

SOPRAMASTIC BLOCK

TECHNICAL DATA SHEET 151112SCANF (supersedes)

COMPLEMENTARY PRODUCT
WATERPROOFING

APPLICATIONS

ROOFS

PACKAGING

SPECIFICATIONS	SOPRAMASTIC BLOCK
*Dimensions	
Round block 5	Inside diameter: 125 mm (5 in)
Round block 7.5	Inside diamet: 190 mm (7.5 in)
Straight block 6	Length: 150 mm (6 in)
Straight block 12	Length: 300 mm (12 in)
Corner block	Radius: 50 mm (2 in)
Surface	Polyester
Colour	White

*The width and height of the **SOPRAMASTIC BLOCK** precast blocks are 50 mm (2 in).
(All values are nominals)

CLEANING

Tools can be cleaned with solvents, such as mineral spirits, Varsol or xylene.

STORAGE AND HANDLING

SOPRAMASTIC BLOCK precast blocks must be stored on a flat surface.

For more information, please read the instructions on the container label and the relevant Material Safety Data Sheet (MSDS).

SOPRAMASTIC PF

COMPLEMENTARY PRODUCT
WATERPROOFING

APPLICATIONS

ROOFS

TECHNICAL DATA SHEET 190204SCANF (supersedes 151120SCANF)

DESCRIPTION

SOPRAMASTIC PF is a polyether-based resin, single-component, moisture cure elastomer sealing mastic. It is also odourless and has low VOC content.

SOPRAMASTIC PF sealing mastic is designed to waterproof around roofing details where penetrations represent a technical challenge. It is also used to fill the cavity inside the SOPRAMASTIC BLOCK precast blocks.

It is used in conjunction with SOPRAMASTIC BLOCK precast blocks and the SOPRAMASTIC SP2 sealant and adhesive on roofs covered with SBS modified bitumen membranes with a granular or sanded surface, on organic felt and on oxidized bitumen membranes, such as SOPRAGLASS 100 (multiply roof). It can be applied on horizontal surfaces.

SURFACE PREPARATION

Surfaces must be clean, dry and free of debris, dust, non-adhered particles, oil, corrosion, rust or other contaminants.

Metal surfaces and PVC pipes must be cleaned with non-greasy solvents, such as acetone or methyl ethyl ketone (MEK).

INSTALLATION

Minimum application temperature: > 0 °C (32 °F) Service temperature: -40 to 93 °C (-40 to 200 °F)

The SOPRAMASTIC BLOCK system should not be exposed to temperatures above 60 °C (140 °F) for extended periods.

Curing time depends on relative humidity and temperature. However, the product is waterproof once it is dry to touch. Avoid using the product if there is a chance of rain in the next four (4) hours.

Lay out the SOPRAMASTIC BLOCK precast blocks on the desired location and trace the outline for reference. SOPRAMASTIC BLOCK precast blocks must be placed so as to ensure a minimum gap of 25 mm (1 in) between the block inner wall and the penetrations.

Using a standard cartridge extruder, seal the base of each penetration with the SOPRAMASTIC SP2 sealant and adhesive product. Cover the penetration with sealant at least 25 mm (1 in) above the height of the SOPRAMASTIC BLOCK precast blocks.

Under and at the ends of the precast blocks, on the flat surface, apply a 6 mm (1/4 in) bead around the perimeter and at the centre of the surface. Place and align the precast blocks on the roof outline. Apply pressure on the SOPRAMASTIC BLOCK precast blocks until product overflows from all sides of the precast blocks to avoid any water infiltration between granules and precast blocks. Install all precast blocks required to achieve the desired configuration.

Apply a bead of the SOPRAMASTIC SP2 sealant and adhesive to the block joints and at the outer perimeter of the structure made of SOPRAMASTIC BLOCK precast blocks. Using the tip of a trowel, bond the SOPRAMASTIC SP2 sealant and adhesive to the membrane.

Horizontal surfaces: completely fill the configuration with SOPRAMASTIC PF sealing mastic.

For more information on the product installation, please contact a SOPREMA representative.

SOPRAMASTIC PF

COMPLEMENTARY PRODUCT
WATERPROOFING

APPLICATIONS

ROOFS

TECHNICAL DATA SHEET 190204SCANF (supersedes 151120SCANF)

PACKAGING

Specifications	SOPRAMASTIC PF
Physical state	Liquid
Colour	White
Content	Pocket of 2 L (0.5 US gallon)

(All values are nominals)

PROPERTIES

Properties	Standards	SOPRAMASTIC PF
VOC content	-	> 15 g/L
Brookfield viscosity @ 21 °C (70 °F)	-	40 000 cP
Density	ASTM S1475	1.1 kg/L (8.9 lb/US gal)
Solids content	-	100 %
Hardness Shore A	ASTM C661	15
Shrinkage	-	No visible shrinkage after 14 days
Skin over	ASTM C679	20 minutes

(All values are nominals)

CLEANING

Tools can be cleaned with solvents, such as mineral spirits, Varsol or xylene.

STORAGE AND HANDLING

SOPRAMASTIC PF may be kept for a period of 12 months when properly stored in original container. It should be kept at a minimum temperature of 0 °C (32 °F) just before and during the application. Store in a ventilated place, away from heat, moisture and sunlight.

For more information, please read the instructions on the container label and the relevant Material Safety Data Sheet (MSDS).

ALSAN® FLASHING

PRODUCT DATA SHEET

DESCRIPTION & FEATURES

ALSAN Flashing is a proprietary polyurethane bituminous resin specifically formulated for high performance liquid-applied flashings, complex geometric details and maintenance applications.

STORAGE

Store containers in a cool, well-ventilated area, out of direct sunlight and away from humidity, heat and ignition sources. Keep storage areas clear of combustible materials. No smoking near storage area. Tightly seal all partially used containers.

APPLICATION

For flashing applications, apply at a rate of 2.0 gallons per 100 ft^2 onto prepared substrate. Immediately center and embed ALSAN Polyfleece reinforcement at the transition change into wet ALSAN Flashing. Apply a second application of ALSAN Flashing at a rate of 2.0 gallons per 100 ft^2, ensuring that the Polyfleece is completely embedded, covered and watertight. Allow to dry. Apply a final finish coat of ALSAN Flashing at a rate of 2.0 gallons per 100 ft^2 within 2-3 hours. When applying the finish coat more than 24 hours after original application, the surface may need to be cleaned using acetone or MEK to ensure satisfactory surface adhesion. ALSAN Flashing can be left exposed or ceramic granules can be broadcast into the final ALSAN Flashing coat prior to the skinning over of the product. ALSAN Flashing is applied with rollers, brushes and squeegees. The applicator is responsible for ensuring conditions are appropriate to proceed with proper application methods. Refer to the SOPREMA SBS Roofing Guide for additional application guidlelines.

APPLICATION

BRUSH

ROLLER

SQUEEGEE

QUICK FACTS

WEIGHT (lb)	COVERAGE (gal)	AMBIENT TEMP (°F)	POT LIFE (hours)	RE-COAT (hours)	RAIN PROOF* (hours)
33.1 (15 kg)	2.0 per 100 ft^2 per layer (9.3 m^2)	40-95 (4 to 35°C)	>2 at 68°F (20°C)	2-3 at 68°F (20°C)	2-12 at 68°F (20°C)

*Do not use if rain or snow is predicted within 12 hours of application.

SOPREMA®
www.soprema.us
310 Quadral Drive, Wadsworth, Ohio 44281
Toll Free: (800) 356-3521 | Tel: (330) 334-0066

ALSAN®
FLASHING

TECHNICAL INFORMATION & TESTING

COVERAGE RATES	
FLASHING SYSTEM APPLICATION	
Base layer, g/100 ft²	2.0
Reinforcement	ALSAN Polyfleece
Reinforcement embedment layer, g/100 ft²	2.0
Wet thickness per layer, mils (mm)	30 (0.8)
Dry thickness per layer, mils (mm)	24 (0.6)
Top layer, g/100 ft²	2.0
Granules	Optional granule embedment
RECOVERY SYSTEM APPLICATION	
Base layer, g/100 ft²	2.0
Top layer, g/100 ft²	2.0
Granules	Granule disbursement

PHYSICAL PROPERTIES		
PROPERTY	VALUE	TEST METHOD
Peak Load, psi (MPa)	368 (2.5)	ASTM D 412
Elongation at peak load, %	67.2	ASTM D 412
Tear resistance, lbf (N)	23.0 (102.3)	ASTM D 903
Water Vapor Permeance, perms	0.25	ASTM E 96 (Procedure A)
Shore A hardness	74	ASTM D 2240
Low temperature flexibility, °F (°C)	-15 (-26)	ASTM D 5147
Solids Content, %	80	-
Drying Time, hours	Recoat after: 2-3 Dry after (remaining tacky to touch): 12	-
Fully Cured, days	3	-

** Data is represented by average values, unless noted otherwise.*

TESTING & APPROVALS

CLASSIFIED UL | FLORIDA BUILDING CODE | MIAMI-DADE COUNTY APPROVED

SOPREMA®

SOPRAMASTIC PF

COMPLEMENTARY PRODUCT
WATERPROOFING

APPLICATIONS

ROOFS

TECHNICAL DATA SHEET 190204SCANF (supersedes 151120SCANF)

DESCRIPTION

SOPRAMASTIC PF is a polyether-based resin, single-component, moisture cure elastomer sealing mastic. It is also odourless and has low VOC content.

SOPRAMASTIC PF sealing mastic is designed to waterproof around roofing details where penetrations represent a technical challenge. It is also used to fill the cavity inside the SOPRAMASTIC BLOCK precast blocks.

It is used in conjunction with SOPRAMASTIC BLOCK precast blocks and the SOPRAMASTIC SP2 sealant and adhesive on roofs covered with SBS modified bitumen membranes with a granular or sanded surface, on organic felt and on oxidized bitumen membranes, such as SOPRAGLASS 100 (multiply roof). It can be applied on horizontal surfaces.

SURFACE PREPARATION

Surfaces must be clean, dry and free of debris, dust, non-adhered particles, oil, corrosion, rust or other contaminants.

Metal surfaces and PVC pipes must be cleaned with non-greasy solvents, such as acetone or methyl ethyl ketone (MEK).

INSTALLATION

Minimum application temperature: > 0 °C (32 °F) Service temperature: -40 to 93 °C (-40 to 200 °F)

The SOPRAMASTIC BLOCK system should not be exposed to temperatures above 60 °C (140 °F) for extended periods.

Curing time depends on relative humidity and temperature. However, the product is waterproof once it is dry to touch. Avoid using the product if there is a chance of rain in the next four (4) hours.

Lay out the SOPRAMASTIC BLOCK precast blocks on the desired location and trace the outline for reference. SOPRAMASTIC BLOCK precast blocks must be placed so as to ensure a minimum gap of 25 mm (1 in) between the block inner wall and the penetrations.

Using a standard cartridge extruder, seal the base of each penetration with the SOPRAMASTIC SP2 sealant and adhesive product. Cover the penetration with sealant at least 25 mm (1 in) above the height of the SOPRAMASTIC BLOCK precast blocks.

Under and at the ends of the precast blocks, on the flat surface, apply a 6 mm (1/4 in) bead around the perimeter and at the centre of the surface. Place and align the precast blocks on the roof outline. Apply pressure on the SOPRAMASTIC BLOCK precast blocks until product overflows from all sides of the precast blocks to avoid any water infiltration between granules and precast blocks. Install all precast blocks required to achieve the desired configuration.

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Horizontal surfaces: completely fill the configuration with SOPRAMASTIC PF sealing mastic.

For more information on the product installation, please contact a SOPREMA representative.

SYSTÈME QUALITÉ ISO 9001 QUALITY SYSTEM

SYSTÈME ENVIRONNEMENT ISO 14001 ENVIRONMENT SYSTEM

SOPREMA®

SOPRAMASTIC PF

COMPLEMENTARY PRODUCT
WATERPROOFING

APPLICATIONS

ROOFS

TECHNICAL DATA SHEET 190204SCANF (supersedes 151120SCANF)

PACKAGING

Specifications	SOPRAMASTIC PF
Physical state	Liquid
Colour	White
Content	Pocket of 2 L (0.5 US gallon)

(All values are nominals)

PROPERTIES

Properties	Standards	SOPRAMASTIC PF
VOC content	-	> 15 g/L
Brookfield viscosity @ 21 °C (70 °F)	-	40 000 cP
Density	ASTM S1475	1.1 kg/L (8.9 lb/US gal)
Solids content	-	100 %
Hardness Shore A	ASTM C661	15
Shrinkage	-	No visible shrinkage after 14 days
Skin over	ASTM C679	20 minutes

(All values are nominals)

CLEANING

Tools can be cleaned with solvents, such as mineral spirits, Varsol or xylene.

STORAGE AND HANDLING

SOPRAMASTIC PF may be kept for a period of 12 months when properly stored in original container. It should be kept at a minimum temperature of 0 °C (32 °F) just before and during the application. Store in a ventilated place, away from heat, moisture and sunlight.

For more information, please read the instructions on the container label and the relevant Material Safety Data Sheet (MSDS).

ALSAN ALL-PURPOSE CLEANER

1.800.356.3521
www.soprema.us

ORDER NO.: A807

TECHNICAL DATA SHEET

QUANTITY (gal)	COVERAGE	AMBIENT TEMP
5 (18.9 L)	2000-2500 ft² per container	95°F 40°F (5 - 35°C)

DESCRIPTION

Alsan All-Purpose Cleaner is a proprietary water-based surface cleaner designed to dissolve and remove heavy accumulations of hard-to-remove dirt,oil and grease without the use of harsh solvents. Alsan All-Purpose Cleaner may be used to clean numerous surfaces, including, but not limited to, aluminum, galvanized metal and polyvinyl chloride (PVC).

PREPARATION

In most instances, Alsan All-Purpose Cleaner may be reduced two or three times with clean water. Test cleaning a small area can be used to determine proper dilution levels and to insure compatibility with a given surface.

APPLICATION

Apply Alsan All-Purpose Cleaner with a brush, mop or low pressure spray. Moderate scrubbing will aid in performance and cleaning of surface. If surface is hot, wet prior to application of cleaner. Allow cleaner to remain for five to ten minutes, but do not allow surface to dry. Rinse area with large amounts of clean water. For large areas, rinsing with a power washer (1500 psi minimum) is recommended. All of the cleaner must be removed via rinsing of the surface. Allow surface to dry thoroughly before applying any coatings.

PACKAGING

Alsan All-Purpose Cleaner is available in five (5) gallon pails.

STORAGE & HANDLING

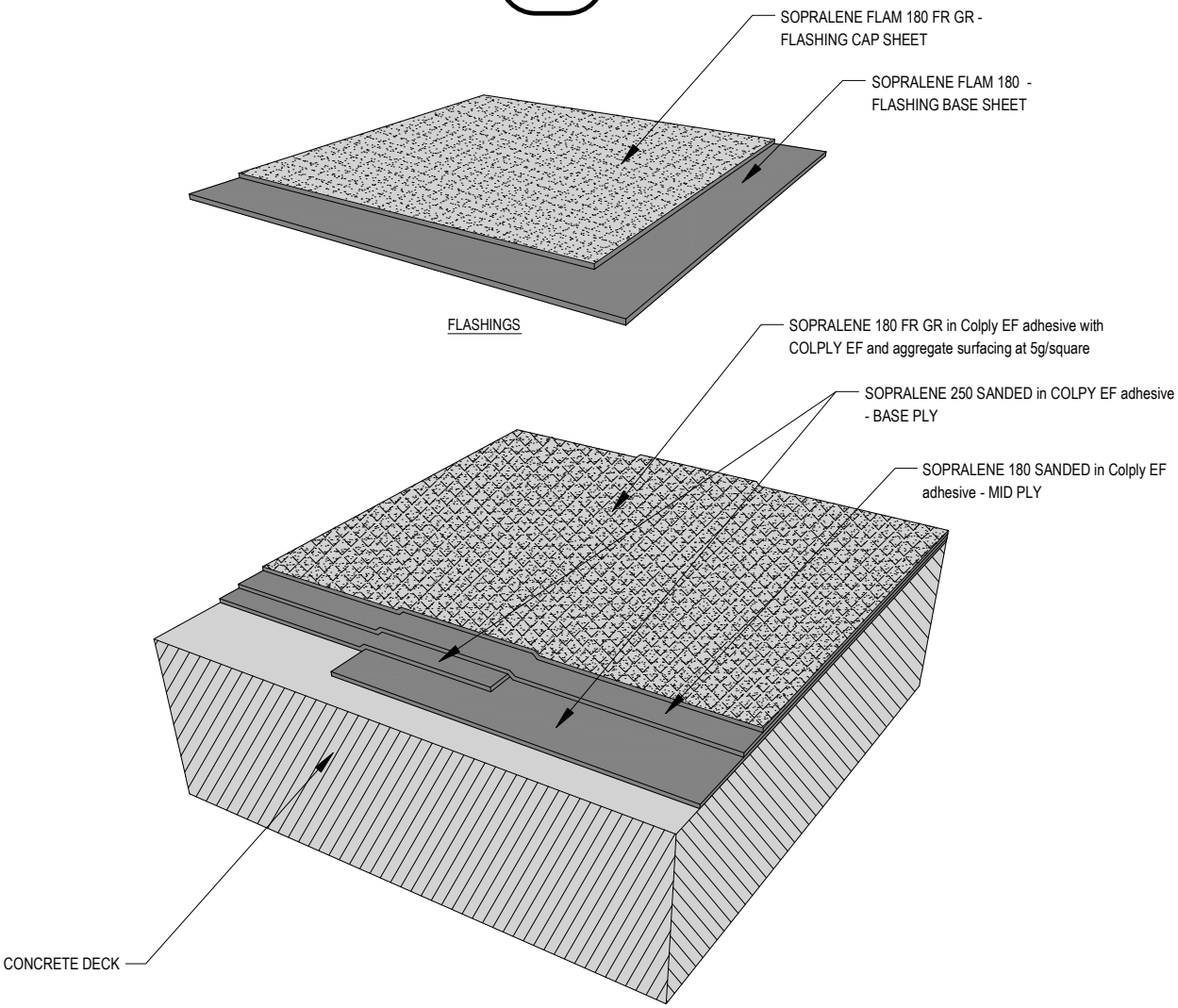
Shelf life: 24 months in original unopened containers when stored at 77°F (25°C). Keep from freezing. For more information, refer to instruction on the label of the can and to relevant Material Safety Data Sheet (MSDS).

ALSAN ALL-PURPOSE CLEANER

1.800.356.3521
www.soprema.us

TECHNICAL DATA SHEET

PHYSICAL PROPERTIES	
Product weight	8.6 lb/gal (1.03 kg/L)
VOC (EPA 24)	0.0 lb/gal (0 g/L)
Minimum dry time	do NOT allow to dry
pH level	11.0 - 13.5
Clean up solution	water

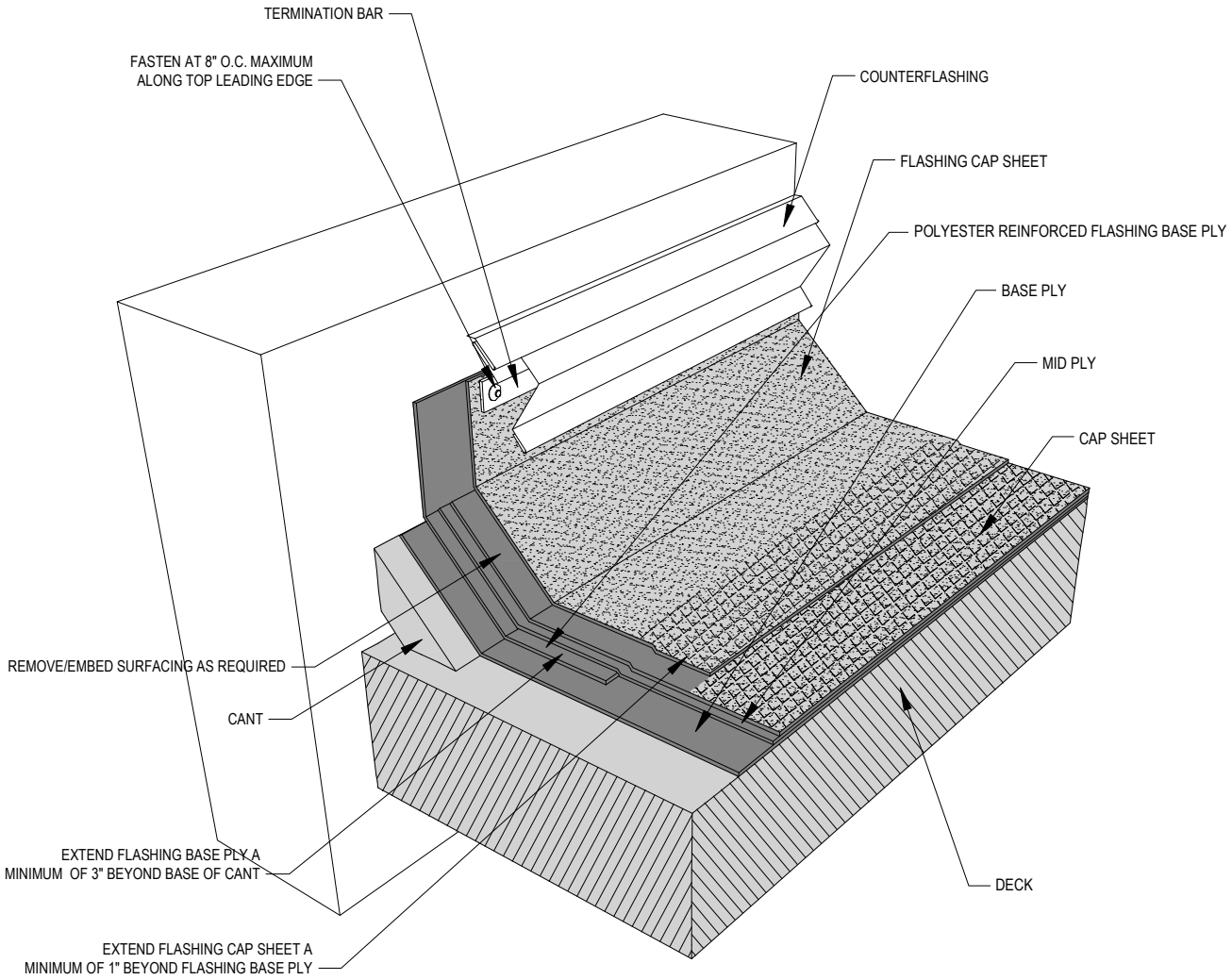


FLASHINGS

ASSEMBLY

NOTES:
1. SOPREMA DETAIL DRAWINGS: REFER TO SOPREMA AND OTHER RELATED PUBLISHED DOCUMENTATION, PRODUCT DATA SHEETS (PDS) AND SAFETY DATA SHEETS (SDS) FOR ADDITIONAL INFORMATION. ALL DETAIL DRAWINGS AND RELATED INSTALLATION GUIDELINES ARE PROVIDED BY SOPREMA FOR THE SOLE PURPOSE OF ISSUING A SOPREMA WARRANTY. ACCORDINGLY, THE DETAIL DRAWINGS ARE NOT OFFERED, AND SHOULD NOT BE CONSIDERED, AS A SUBSTITUTE FOR PROFESSIONAL DESIGN SERVICES.
2. HOT WORK: THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING APPROPRIATE CONDITIONS TO UTILIZE HEAT-WELDING EQUIPMENT. REFER TO THE NRCA CERTA RECOMMENDATIONS, LOCAL CODES AND BUILDING OWNER'S REQUIREMENTS FOR HOT WORK OPERATIONS.
3. PRIMER: WHERE NOT SHOWN OR INDICATED ON DETAIL DRAWINGS, REFER TO MATERIAL PRODUCT DATA SHEETS FOR PRIMER APPLICATION REQUIREMENTS.

Parker Plaza - Field detail



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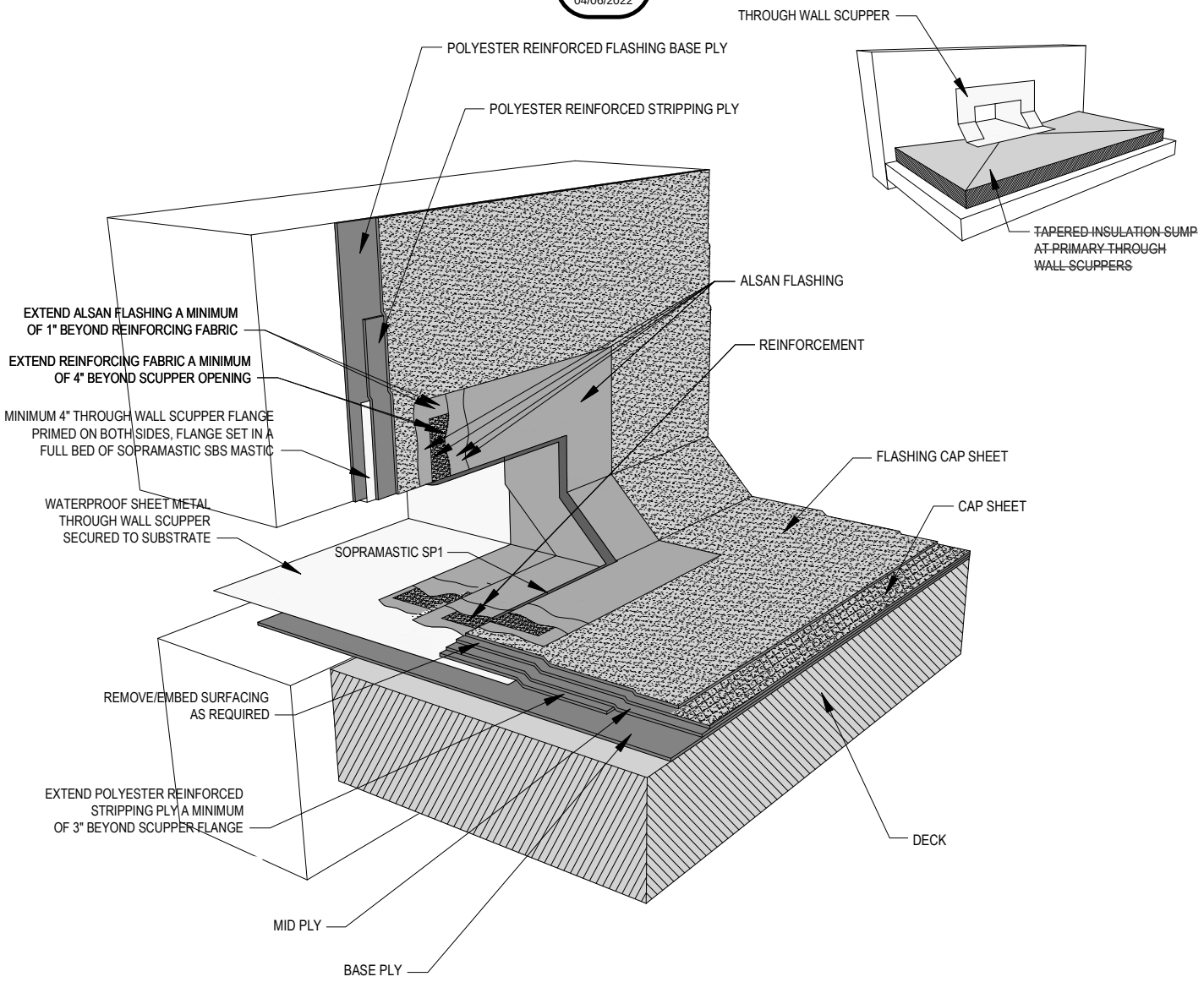
3. PRIMER: WHERE NOT SHOWN OR INDICATED ON DETAIL DRAWINGS, REFER TO MATERIAL PRODUCT DATA SHEETS FOR PRIMER APPLICATION REQUIREMENTS
4. FLASHING PLIES MUST EXTEND VERTICALLY A MINIMUM OF 8" FROM ROOF SURFACE. FLASHING PLIES EXTENDING VERTICALLY MORE THAN 24" FROM ROOF SURFACE MUST BE ADHERED AND MECHANICALLY FASTENED ALONG THE TOP LEADING EDGE. REFER TO PUBLISHED DOCUMENTATION.
5. FOR 90° TRANSITIONS, FLASHING PLIES MUST MEET THE FOLLOWING REQUIREMENTS: HEAT WELD POLYESTER REINFORCED FLASHING BASE PLIES. HEAT WELD POLYESTER REINFORCED GRANULE FLASHING CAP SHEET, OR HEAT WELD FOIL/FILM CLAD FLASHING CAP SHEET.

Parker Plaza- wall flashing



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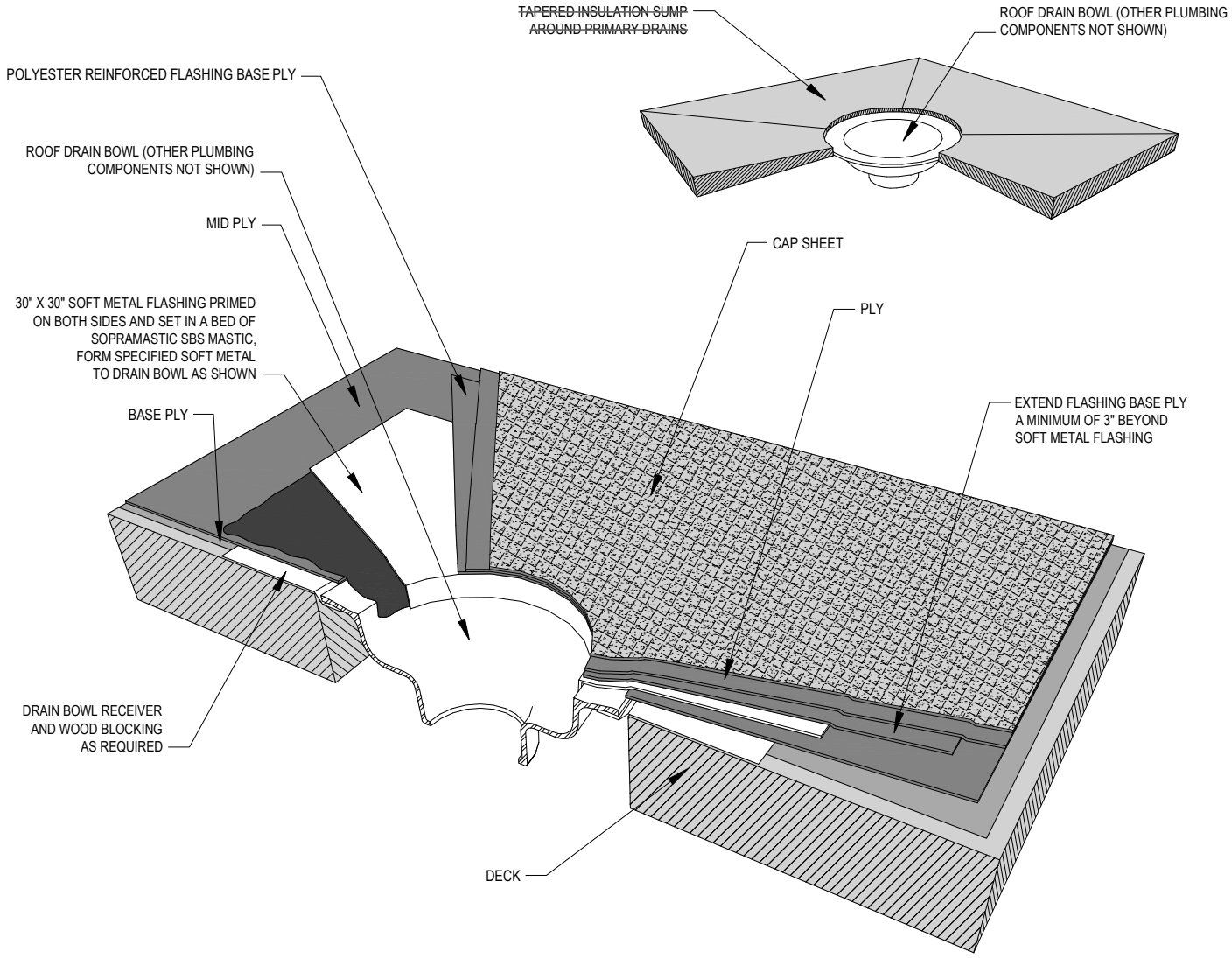
6. FOR 90° TRANSITIONS, FLASHING PLIES MUST MEET THE FOLLOWING REQUIREMENTS: HEAT WELD POLYESTER REINFORCED FLASHING BASE PLIES. HEAT WELD POLYESTER REINFORCED GRANULE FLASHING CAP SHEET, OR HEAT WELD FOIL/FILM CLAD FLASHING CAP SHEET.
7. DO NOT APPLY ALSAN RS LIQUID APPLIED SYSTEMS OVER SBS MODIFIED BITUMEN MATERIALS ADHERED USING COLPLY OR COLPLY MODIFIED ADHESIVES OR CEMENTS.

Parker Plaza- Scupper detail



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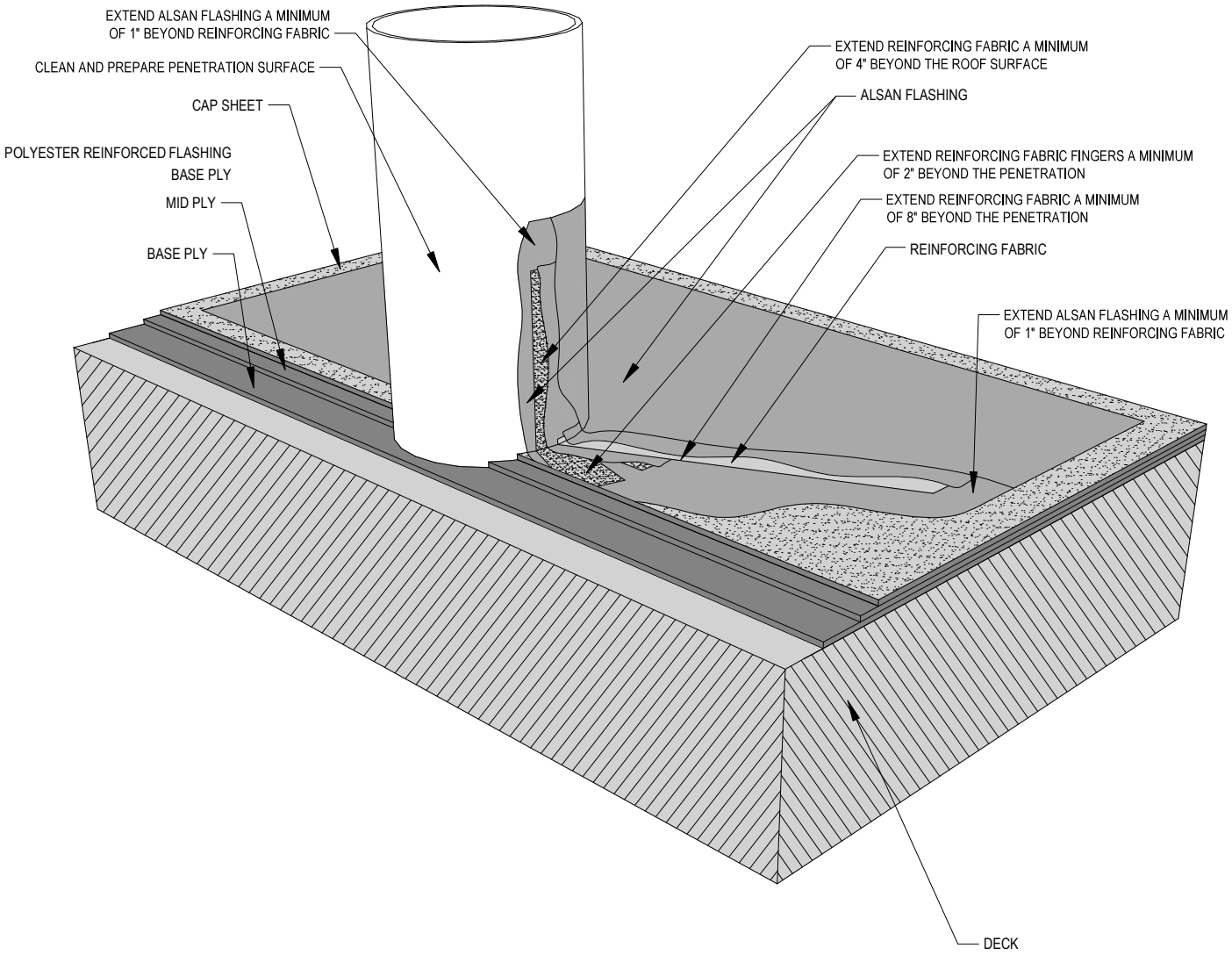
2. HOT WORK: THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING APPROPRIATE CONDITIONS TO UTILIZE HEAT-WELDING EQUIPMENT. REFER TO THE NRCA CERTA RECOMMENDATIONS, LOCAL CODES AND BUILDING OWNER'S REQUIREMENTS FOR HOT WORK OPERATIONS.
3. PRIMER: WHERE NOT SHOWN OR INDICATED ON DETAIL DRAWINGS, REFER TO MATERIAL PRODUCT DATA SHEETS FOR PRIMER APPLICATION REQUIREMENTS.

Parker Plaza- Drain detail



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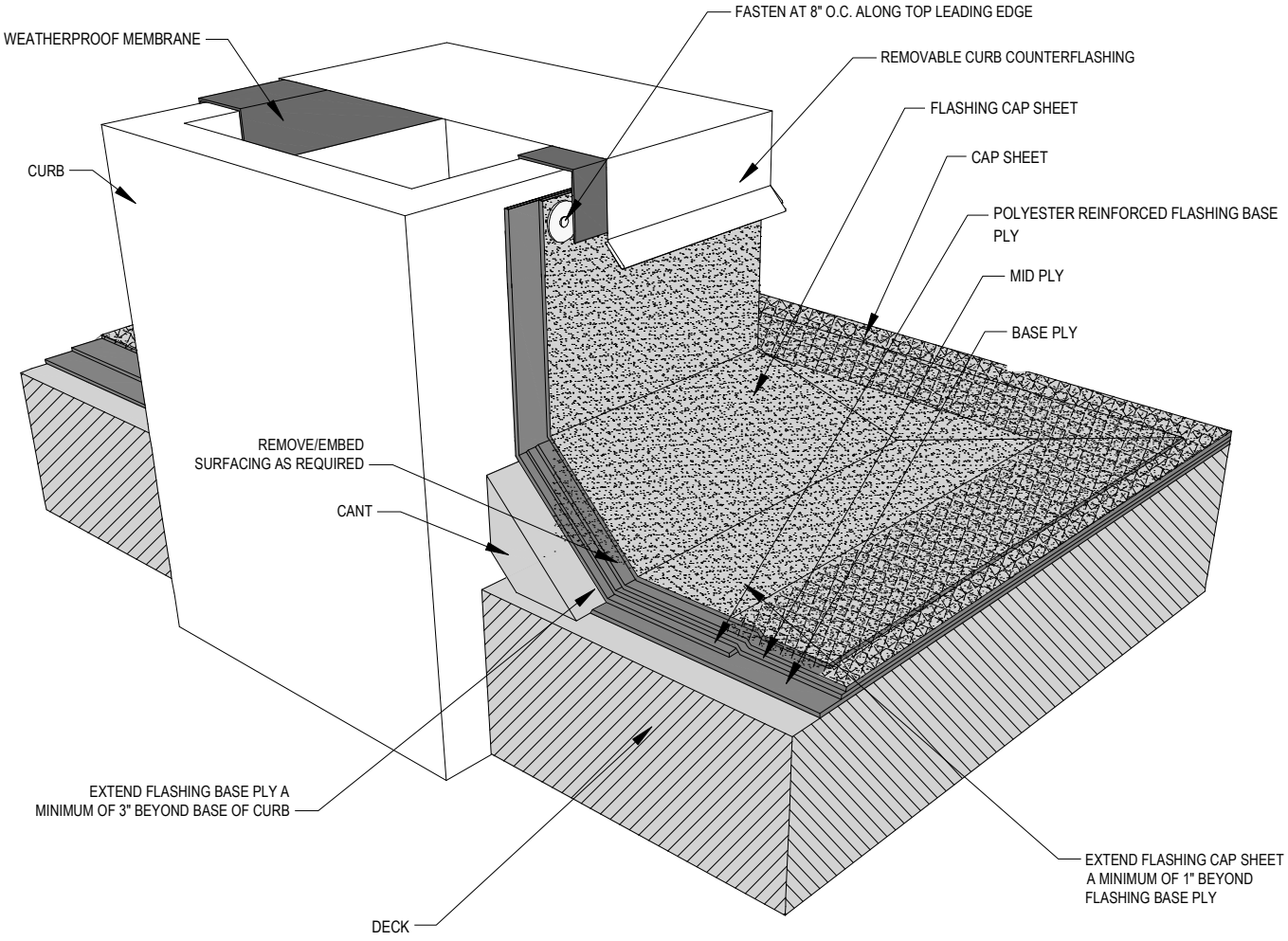
3. PRIMER: WHERE NOT SHOWN OR INDICATED ON DETAIL DRAWINGS, REFER TO MATERIAL PRODUCT DATA SHEETS FOR PRIMER APPLICATION REQUIREMENTS.
4. SOPREMA RECOMMENDS 8 INCH VERTICAL FLASHING HEIGHTS. FLASHING DETAILS SHOWN INCLUDE MINIMUM DIMENSIONS TO MEET WARRANTY REQUIREMENTS. CONTACT SOPREMA FOR ADDITIONAL REQUIREMENTS.
5. DO NOT APPLY ALSAN RS LIQUID APPLIED SIYSTEMS OVER SBS MODIFIED BITUMEN MATERIALS ADHERED USING COLPLY OR COLPLY MODIFIED ADHESIVES OR CEMENTS. SELF ADHERE, HOT AIR WELD OR TORCH APPLY THE SBS MODIFIED BITUMEN MEMBRANE AND FLASHINGS IN ALL AREAS WHERE ALSAN RS WILL BE APPLIED.

Parker Plaza- Penetration detail



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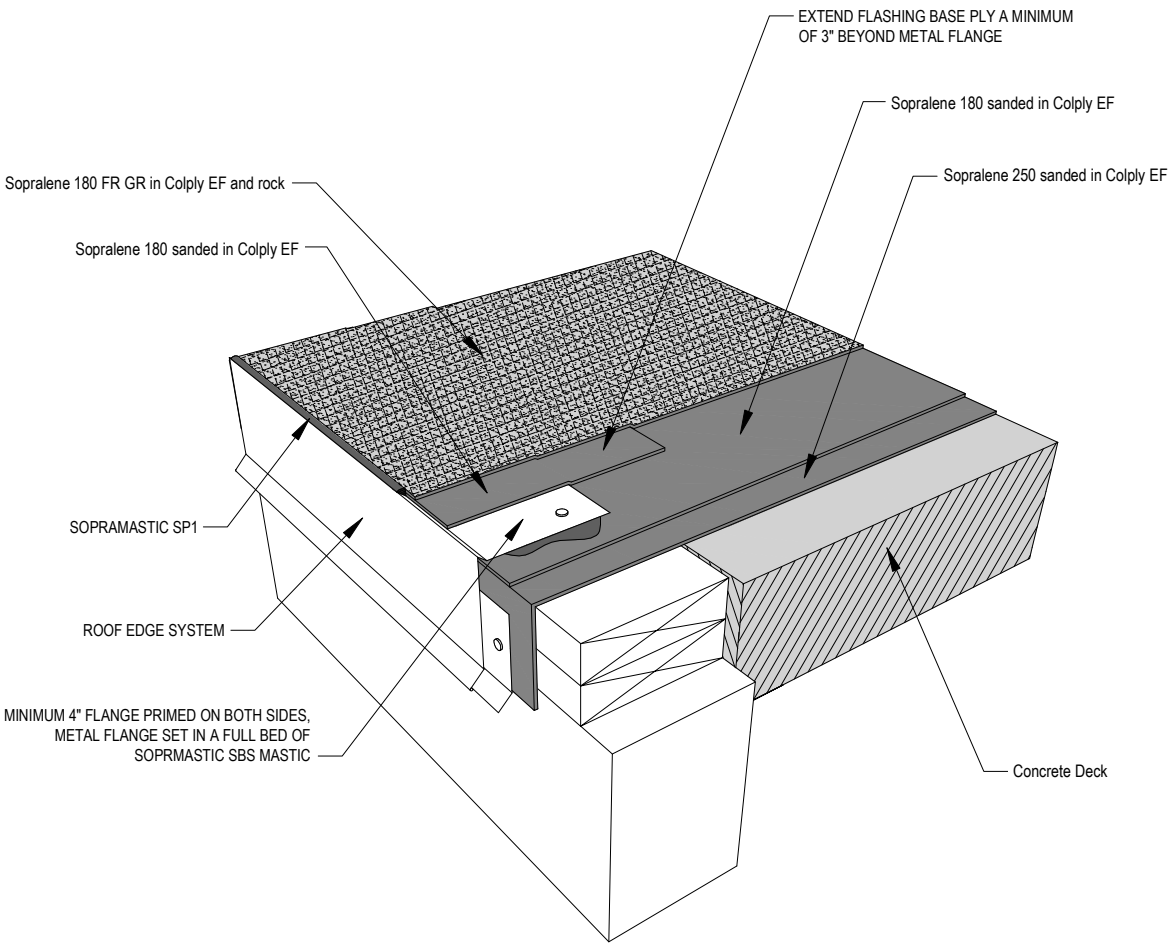
2. HOT WORK: THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING APPROPRIATE CONDITIONS TO UTILIZE HEAT-WELDING EQUIPMENT. REFER TO THE NRCA CERTA RECOMMENDATIONS, LOCAL CODES AND BUILDING OWNER'S REQUIREMENTS FOR HOT WORK OPERATIONS.
3. PRIMER: WHERE NOT SHOWN OR INDICATED ON DETAIL DRAWINGS, REFER TO MATERIAL PRODUCT DATA SHEETS FOR PRIMER APPLICATION REQUIREMENTS
4. FLASHING PLIES MUST EXTEND VERTICALLY A MINIMUM OF 8" FROM ROOF SURFACE. FLASHING PLIES EXTENDING VERTICALLY MORE THAN 24" FROM ROOF SURFACE MUST BE ADHERED AND MECHANICALLY FASTENED ALONG THE TOP LEADING EDGE. REFER TO PUBLISHED DOCUMENTATION.
5. FOR 90° TRANSITIONS, FLASHING PLIES MUST MEET THE FOLLOWING REQUIREMENTS: HEAT WELD POLYESTER REINFORCED FLASHING BASE PLIES. HEAT WELD POLYESTER REINFORCED GRANULE FLASHING CAP SHEET, OR HEAT WELD FOIL/FILM CLAD FLASHING CAP SHEET.

Parker Plaza- Curb detail

EDGE DETAIL FOR UPPER ROOF



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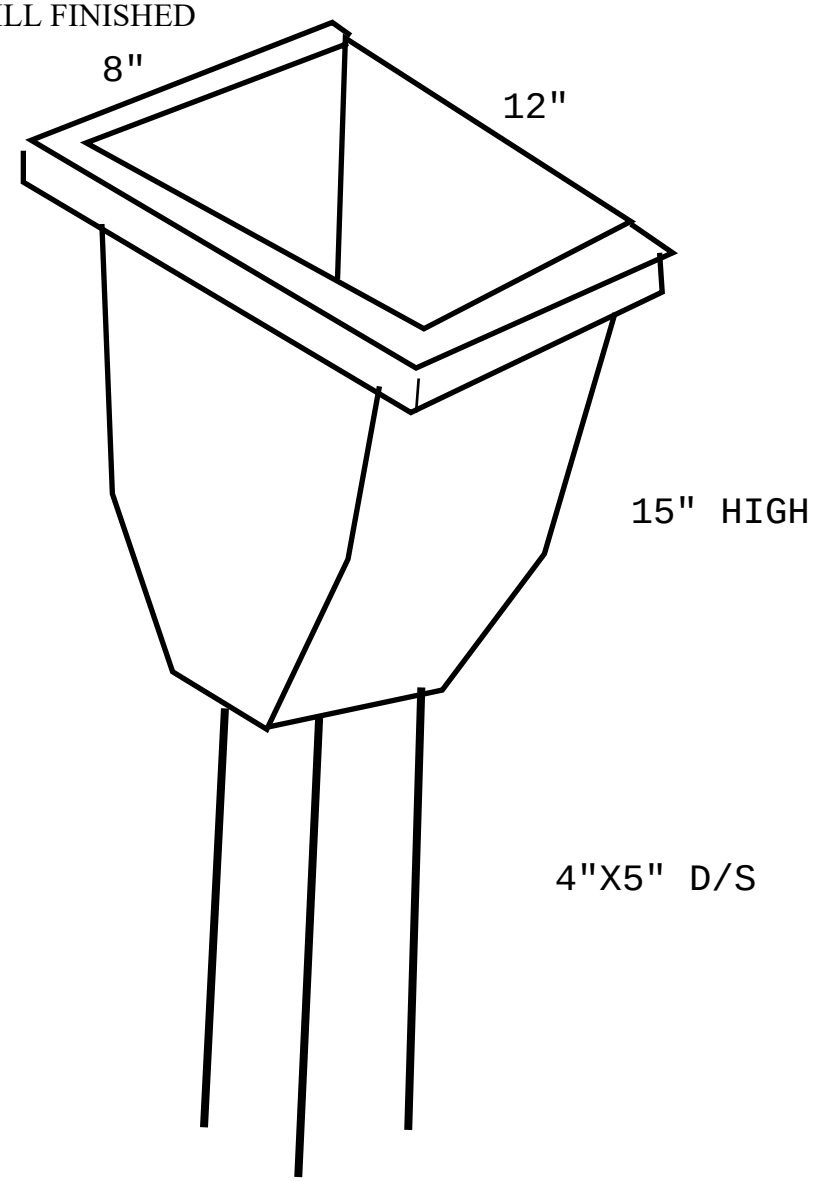


GUTTER AND DOWNSPOUT COLOR OPTIONS.

From:	J. Taylor
To:	J. Taylor
Subject:	FW: Parker Plaza Roof Project Permit No.: BRFG-22-01085
Date:	Wednesday, June 14, 2023 7:09:26 PM
Attachments:	image003.png Weekly Report - 2103 - 06132022 to 06172022 SS by TF+E.pdf
Importance:	High

J. Bret Taylor, PE SE
Principal/Manager

TAYLOR FORENSICS + ENGINEERING, LLC
HELPING PEOPLE FIND SOLUTIONS

11161 E SR 70, 110-316
Lakewood Ranch, FL 34202
Registry #34991

From: J. Taylor
Sent: Wednesday, August 10, 2022 12:59 PM
To: Jackson, Shellie <srjackson@hallandalebeachfl.gov>; Michael Fagan <michaelfagan@mac.com>
Cc: Parker Plaza Board of Directors <bod@parkerplaza.org>; Andres Villarreal <ownersrep@parkerplaza.org>; Giovani Alonso <galonso@alliedroofing.com>; Sonny Hogue (sonny@taylorforensicsandengineering.com) <sonny@taylorforensicsandengineering.com>; Michael Ruma <michael@taylorforensicsandengineering.com>
Subject: RE: Parker Plaza Roof Project Permit No.: BRFG-22-01085 [Filed 10 Aug 2022 12:58]
Importance: High

Hi Shellie,

Please find attached the weekly report which describes and addresses the reported and over exaggerated leakage. The spin coming from the troublemakers is not grounded in reality as usual. The issues were not related to the roof installation and were addressed. When one “is a hammer, everything looks like a nail”.

We will be submitting full plans soon for the roof replacement and concrete restoration of the roof deck. It is my understanding that the COHB has communicated with Mr. Andy Villareal, owners’ rep, that a new permit is required for the roof deck concrete work. Can we role that into the current roof replacement permit? I believe this would be best for all parties if possible and the current situation if feasible.

As you are aware, this roof is flat, had no insulation, and all interior drainage that has worked find for 50 years. As we discussed when on site, it is technically/economically not feasible to add secondary interior drainage as new piping would have to run to ground level. As such we will be requiring

secondary drainage scuppers despite no history of drainage issues. We will also be keeping the original “scaffolding sleeves” as additional drainage as we believe that these were serving as overflow drainage whether designed as such or not.

As far as the insulation, I have communicated “ad nauseum” with Mr. Moreff and to the membership, and lately Mayor Cooper, on the many issues and complications with insulating on top of the roof. Per the code(s), I don’t not believe that insulation is required based on the following:

Existing Building Code :
302.3Existing materials.

Materials already in use in a building in compliance with requirements or approvals in effect at the time of their erection or installation shall be permitted to remain in use unless determined by the building official to be unsafe.

302.4New and replacement materials.

Except as otherwise required or permitted by this code, materials permitted by the applicable code for new construction shall be used. Like materials shall be permitted for repairs and alterations, provided no unsafe condition is created. Hazardous materials shall not be used where the code for new construction would not permit their use in buildings of similar occupancy, purpose and location.

402.1New and replacement materials.

Except as otherwise required or permitted by this code, materials permitted by the applicable code for new construction shall be used. Like materials shall be permitted for repairs provided no dangerous or unsafe condition, as defined in Chapter 2, is created. Hazardous materials, such as asbestos and lead-based paint, shall not be used where the code for new construction would not permit their use in buildings of similar occupancy, purpose and location.

Exception: Repairs to a historic building shall be permitted using original or like materials. Materials shall comply with Sections 402.1, 402.2 and 402.3.

602.1 Scope.

Level 1 alterations include the removal and replacement or the covering of existing materials, elements, equipment, or fixtures using new materials, elements, equipment, or fixtures that serve the same purpose.
602.2Application.

Level 1 alterations shall comply with the provisions of Chapter 7.

702.6 Materials and methods.

All new work shall comply with the materials and methods requirements in the Florida Building

Code, Building; Florida Building Code, Energy Conservation; Florida Building Code, Mechanical; and Florida Building Code, Plumbing, as applicable, that specify material standards, detail of installation and connection, joints, penetrations, and continuity of any element, component, or system in the building.

[BS]706.1General.

Materials and methods of application used for recovering or replacing an existing roof covering shall comply with the requirements of Chapter 15 of the Florida Building Code, Building, or Chapter 9 of the Florida Building Code, Residential. Roof repairs to existing roofs and roof coverings shall comply with the provisions of this code.

Exception: Reroofing shall not be required to meet the minimum design slope requirement of one-quarter unit vertical in 12 units horizontal (2-percent slope) in Section 1507 of the Florida Building Code, Building for roofs that provide positive roof drainage (High-Velocity Hurricane Zones shall comply with Sections 1515.2.2.1 and 1516.2.4 of the Florida Building Code, Building).

708.1Minimum requirements.

Alteration subject to this chapter shall comply with the requirements of the Florida Building Code, Energy Conservation.

Energy Conservation :
C101.4.2Exempt buildings.
Buildings exempt from the provisions of the Florida Building Code, Energy Conservation, include existing buildings except those considered renovated buildings, changes of occupancy type or previously unconditioned buildings to which comfort conditioning is added.

Therefore, Parker Plaza is exempt from upgrading to new roof insulation requirements as we are existing, we are not renovating, changing occupancy, or conditioning previously un-conditioned space.

Regarding the materials, the product and submittals meet code and have been reviewed and approved as you are aware.

In addition, we recently had pull tests done to test the adhesion and passed with additional capacity as you saw in the reporting submitted to you yesterday. With respect to Mr. Moreff's concern over the use of gravel, the gravel will be embedded in a flood coat (50%) of the same material that is used to anchor the base ply of the roof. Specifically, the base ply is anchored with ribbons of (Colply) at 6" inches on center and exceeded uplift pressures…… the gravel will be embedded 50%!

TF+E, Soprema, Allied Roofing, and Mr. Villareal spent many hours addressing the challenges of replacing the roof on this building applying 100+ years of supporting knowledge to find the solution that fits the needs of the client.

So, as you can see, Mr. Moreff's lack of comprehension of the facts and the totality of the circumstances clouds his reason, while apparently simultaneously offending his confirmation bias, leaving him, despite many attempts to educate him, with recalcitrant opinions that are wholly unsolicited, unfounded, and abusive.

Hopefully, this addresses any concerns and I look forward to speaking to you soon as I would appreciate any assistance you can offer when I have the roof repair plans and specifications ready.

J. Bret Taylor, PE SE
Principal/Manager

TAYLOR FORENSICS + ENGINEERING, LLC
HELPING PEOPLE FIND SOLUTIONS

11161 E SR 70, 110-316
Lakewood Ranch, FL 34202
Registry #34991

From: Jackson, Shellie <srjackson@hallandalebeachfl.gov>
Sent: Wednesday, August 3, 2022 12:38 PM
To: Michael Fagan <michaelfagan@mac.com>; J. Taylor <bret@taylorforensicsandengineering.com>
Subject: FW: Parker Plaza Roof Project Permit No.: BRFG-22-01085
Importance: High

Good afternoon Michael,

Please reply to the email with the steps taken by the Board and Engineer in regards to the roof replacement.

Shellie Ransom-Jackson, MPA, CBO | Building Offical
City of Hallandale Beach Community Enhancement and Sustainability Development Department
400 South Federal Highway | Hallandale Beach, FL 33009 | (954) 457-1385
www.coHB.org | Follow us on Twitter | Facebook | Instagram | LinkedIn
Report a Concern via the MyHB app
Progress, Opportunity, Innovation

Hallandale Beach

From: Cooper, Joy <jcooper@hallandalebeachfl.gov>
Sent: Wednesday, August 3, 2022 12:21 PM
To: Jackson, Shellie <srjackson@hallandalebeachfl.gov>
Subject: Fwd: Parker Plaza Roof Project Permit No.: BRFG-22-01085

Hi are you aware of this issue with Parker Plazas roof ?

Sent from my iPhone

Begin forwarded message:

> **From:** Pavel Moreff <pmoreff.pp@gmail.com>
> **Date:** August 3, 2022 at 9:59:56 AM EDT
> **To:** "Cooper, Joy" <jcooper@hallandalebeachfl.gov>
> **Subject: Fwd: Parker Plaza Roof Project Permit No.: BRFG-22-01085**
>
> Dear Ms. Mayor Joy Cooper,
>
> In light of preparation for today's town hall meeting at Parker Plaza, please see and review the email below and attached files.
>
> That note was previously sent to multiple officials at Hallandale Building Division back in June but there was just no reply.
>
> I would like to respectfully ask for your comments on that roof project in tonight's meeting.
>
> Thank you very much,
>
> Pavel Moreff
>
> ---------- Forwarded message ---------
> From: **Pavel Moreff** <pmoreff.pp@gmail.com>
> Date: Wed, Jun 8, 2022 at 11:07 AM
> Subject: Parker Plaza Roof Project Permit No.: BRFG-22-01085
> To: <buildingsafety@cohb.org>, <srjackson@cohb.org>, <eleonhardt@cohb.org>, <gcorcuera@cohb.org>, <rstewart@cohb.org>, <jgraham@cohb.org>, <eagbenohevi@cohb.org>, <ljaniszewski@cohb.org>, <malexander@cohb.org>, <tjackson@cohb.org>, <jfaris@cohb.org>, <sdixon@cohb.org>, <stillman@cohb.org>
>
> ## June 8, 2022
>
> ## To: Hallandale Beach Building Division

From: Pavel Moreff

Address: Parker Plaza, 2030 S. Ocean Drive, Hallandale Beach, FL 33009

To whom it may concern

I am Pavel Moreff, a member of the Parker Plaza HOA. Several recent events related to the ongoing Parker Plaza Roof Replacement project (Permit No.: BRFG-22-01085, issued April 11, 2022) forced me to share with you some shocking facts and disturbing findings regarding that project.

Initially I shared my detailed review (see attached) with the Board of Directors (BOD) as well as Engineer of Record and Owner Representative. Result was **TOTAL SILENCE**. I tried again to raise these important issues during the last May Board meeting and posted direct questions to the Board President Mr. Collazo. Same result – **SILENCE**.

On Saturday, June 4, the newly installed roof exhibited multiple water leaks caused by the first of the season average tropical storm. (Photos and videos are available.) Water from the roof damaged ceilings, hallways, and apartments on 22nd floor and, what is more dangerous - water penetrated the electrical room and elevators. It is difficult to estimate the scale of damage that the upcoming hurricane season may bring to our building due to the failure of the new roof. **How well the Building Division's team conducted the inspections, if the very first rain flooded the whole building?**

I was left with no choice but to file an official complaint with the Department of Business and Professional Regulation (DBPR) and now directly approach the Building Division of Hallandale Beach.

I would respectfully request the Hallandale Building Division to review the issues outlined below and respond accordingly:

1. **ROOF INSULATION LAYER.** One of Florida State's major requirements which was **NOT** met during the filing. (No insulation layer provisioned in the design.)

   The latest contract, signed by the President of the BOD and the Contractor, does not include an insulating layer **required by the State of Florida** that can save not only energy on the air conditioning, but also help in achieving the required slope for water runoff towards the roof drains. Instead, our BOD

promised to install insulation from the 22nd floor apartments' ceilings. Such method has serious disadvantages:

- It is extremely expensive but **inefficient**.
- May lead to destruction of multiple residential units, hallways, elevator shafts, and other common spaces. In turn that will lead to huge renovation of the destroyed areas.
- In the end this inadequate method will not protect the building from heat penetration down through the concrete columns, walls, and slabs.
- It will result in extra electricity costs and seriously affect the building's central HVAC system.

2. SAFETY.

The project involves the installation of the top layer of the roof in the form of pebbles (gravel) that may present real danger to the pedestrians, vehicles, and neighboring buildings. Due to the weather conditions, the gravel stones sooner or later get loose, and with serious winds (hurricanes and other storms) they can fly like bullets, damage cars, windows, and injure (or even kill) people outside caught in a storm. Parker Plaza liability for any such event can be catastrophic including multi million lawsuits.

3. PHYSICAL INTEGRITY and QUALITY OF BUILDING DIVISION INSPECTIONS.

The past weekend's water leaks demonstrated the poor engineer/contractor performance, which will keep destroying the physical (structural, electrical, plumbing, AC, elevators, etc.) integrity of our building. Constant repairs will take time and will cost our association a lot of money. This roof project also missed an opportunity to really improve our roof infrastructure, including the permanent roof anchors (offered as an option by another bidding contractor but not the one selected by BOD) as a very effective way to speed up any in the event of façade damages from future hurricanes and more.

4. MATERIALS.

I have some valid concerns if the contractor used the right materials according to the design and filed permit because the Board has manipulated the contract twice and changed the roof membrane materials type.

I think the Building Division of Hallandale Beach should all be aware of what's going on with the Parker Plaza roof replacement project. Please, review the

attached files and photos and make your own conclusions. It's coming down to the enforcement of regulations and better close supervision of this failed project.

Feel free to come back with any questions related to my complaint. I am ready for a conference call to review the above at any time. I am also available for a personal meeting with a representative of the Building Division of Hallandale Beach during my next trip to Florida between June 23 - July 1.

Sincerely,
Pavel Moreff
pmoreff@gmail.com
917-596-2325

INDEX TO
CLOSING BINDER

LENDER:	**VALLEY NATIONAL BANK, a National Banking Association**
BORROWER:	**CONDOMINIUM ASSOCIATION OF PARKER PLAZA ESTATES, INC., A Florida not-for-profit corporation**
AMOUNT OF LOAN:	**$27,000,000.00**
DATE:	**NOVEMBER 14, 2022**
PREPARED BY:	**NORMAN I. WEIL, ESQ. FOWLER WHITE BURNETT P.A. 1395 BRICKLL AVENUE, 14TH FLOOR MIAMI, FL 33131**

1. Closing Statement and Loan Disbursement Approval.
2. Payoff Letter of Loans to Condominium Association of Parker Plaza Estates Inc.
3. Loan and Security Agreement between Valley National Bank and Condominium Association of Parker Plaza Estates, Inc.
4. Promissory Note in the principal amount of $27,000,000.00.
5. Collateral Assignment of Right to Collect Assessments and Assignment of Lien Rights.
6. UCC-1 Financing Statement.
7. Loan Payment Auto Debit Authorization.
8. Affidavit of No Pending Lawsuits.
9. Agreement to Cooperate.
10. Borrower's Consent to Lender's Inspection Rights.
11. Borrower's Affidavit
12. Corporate Resolutions of Condominium Association of Parker Plaza Estates, Inc.
13. Opinion of Borrower's Counsel.

Section 3

Broward County
Board of Rules and Appeals
1 N. University Drive Suite, 3500B, Plantation, FL 33324
Phone: 954-765-4500 | Fax: 954-765-4504
broward.org/CodeAppeals

TO: Members of the Board of Rules and Appeals

FROM: Chief Fire Code Compliance Officer

DATE: July 13, 2023

RE: First reading of proposed revisions to the Florida Fire Prevention Code, Section F-103.3.7

Recommendation
It is recommended that the Board of Rules and Appeals approve the new code section, F-103.3.7 Assistant Fire Marshal, as recommended by the Fire Code Committee who approve the proposed new code section F-103.3.7 by a vote of 13 to 0 in favor.

Reason
As presented to the Boards Fire Code Committee, the Fire Chief Association of Broward County believes that this would allow individuals who might be qualified to be Fire Marshals within a fire prevention bureau to have experience in assisting in managing the bureau, while the fire marshal is away or needs assistance in everyday activities. The new code section sets up the requirements for becoming an assistant fire marshal if appointed by the Fire Chief. This code section is in line with what is being currently done on the building side as they have assistant building officials.

Proposed New Code Section F-103.3.7

F-103.3.7 Certification of Assistant Fire Marshal. The Assistant Fire Marshal shall be certified by BORA, be a state certified Firefighter as defined by69A-37 as referenced to collectively [69A-37.055(2)(a)(b) Firefighter curriculum requirements] as the "Minimum Standards Course", be a State certified Fire Inspector, and shall meet one or more of the following qualifications:

F-103.3.7.1 An Engineer and/or a Degree in Fire Science and/or a Degree in Fire Prevention and shall have been employed as a County or City Fire Inspector for three (3) years within the State of Florida and shall possess a Broward County Certification.

F-103.3.7.2 A County or City Fire Plans Examiner with at least four (4) years of experience within the State of Florida and shall possess a Broward County Certification.

F-103.3.7.3 Seven (7) years' experience as a Fire Inspector, employed in a County or City within the State of Florida with at least five (5) years of experience within the jurisdiction of the FFPC and be a Broward County Certified Fire Inspector.

F-103.3.7.4 Have been fulfilling the duties of an Assistant Fire Marshal with three (3) years continuous service as such within a County or City in the State of Florida and shall possess a Broward County Certification.

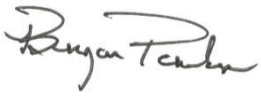
F-103.3.7.5 Possesses a certification issued by the State Fire Marshal as a Fire Code Manager/Administrator in accordance with NFPA 1030 with a total of (5) years' experience with a County or City as fire plans examiner and inspector in Florida and shall possess a Broward County Certification.

F-103.3.7.6 Two (2) years' experience as a Broward County Certified Plans Examiner and nationally

certified as an NFPA Certified Fire Inspector 1 (CFI-1), NFPA Certified Fire Plans Examiner (CFPE), and NFPA Certified Fire Protection Specialist (CFPS).

F-103.3.7.7 Any Assistant Fire Marshal currently employed by a Broward County Fire Service Provider, prior to the effective date of this code section will receive a certification once the Fire Service Provider submits a letter indicating the date the individual was assigned as Assistant Fire Marshal and the name of the individual.

Sincerely,



Bryan Parks

Broward County Local Amendments to the Florida Fire Prevention Code

SECTION F-101
GENERAL

F-101.1— Title. These regulations shall be known as the Broward County Local Fire Code Amendments to the Florida Fire Prevention Code (FFPC).

F- 101.2 - Scope. The provisions of this Chapter shall govern the administration and enforcement the FFPC and the Fire Protection Provisions of this Code and shall apply countywide in both incorporated and unincorporated areas of Broward County, Florida. The provisions of this code shall apply to new and existing buildings or structures, equipment, installations, construction, alteration, movement, enlargement, replacement, repair, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings.

F-101.2.1 Appendices or Annexes: Provisions in the appendices or Annexes shall not apply unless specifically adopted by Florida Statute 633.

F-101.2.2 Definitions:

A. **AHJ** means Authority Having Jurisdiction shall be a federal, state, local organization, office or individual responsible for enforcing the requirements of this code as found in Chapter 1, Broward Administrative Provisions.
B. **BCFCC** means Broward County Fire Code Committee
C. **BORA** means the Broward County Board of Rules and Appeals
D. **Engineer** means licensed professional engineer, licensed in the State of Florida
E. **FBC** means the Florida Building Code
F. FFPC means the Florida Fire Prevention Code including the Broward County Local Fire Amendments to the Florida Fire Prevention Code
G. State means State of Florida
H. **Fire Code Manager/Administrator** means a person certified by the State Fire Marshal Office as meeting the provisions found in NFPA 1037 and means Fire Marshal/ Fire Code Official.
I. Fire Service Provider means Fire Department
J. **Door / Door Assembly;** when used for fire service provider access as referred to in this code or the FFPC, except in chapters where other configurations are specifically permitted, shall mean a side-hinged, swinging type egress exterior door/door assembly that can be opened from the outside and that provides access to the interior of the dwelling unit or building.
K. AHCA: Agency for Health Care Administration
L. APD: Agency for Persons with Disabilities.
M. Class: The class defines the minimum time, in hours, for which the EPSS is designed to operate at its rated load without being refueled or recharged.
N. Board and Care Occupancy. An occupancy used for lodging and boarding of residents, not related by blood or marriage to the owners or operators, for the purpose of providing personal care services.
O. Legally Required Standby Generator: Those systems required and so classed as legally required standby secondary power sources by municipal, state, federal, or other codes or by any governmental agency having jurisdiction. These systems are intended to automatically supply power to selected loads (other than those classed as emergency systems) in the event of failure of the normal source.
P. Emergency Generators Systems: Those systems legally required and classed as emergency by municipal, state, federal, or other codes, or by any governmental agency having jurisdiction. Those systems are intended to automatically supply illumination, power, or both, to designated areas and equipment in the event of failure of the normal supply or in the event of accident to elements of a system intended to supply, distribute, and control power and illumination essential for safety to human life.
Q. EPS: **Emergency Power Supply**. The source of electric power of the required capacity and quality for an emergency power supply system (EPSS).
R. EPSS: **Emergency Power Supply System**. A complete functioning EPS system coupled to a system of conductors, disconnecting means and overcurrent protective devices, transfer switches, and all control, supervisory, and support devices up to and including the load terminals of the transfer equipment needed to operate as a safe and reliable source of electric power.
S. Permit: A document issued by the AHJ for the purpose of authorizing performance of a specified activity.
T. Plans: Plans are required for new construction, modification, or rehabilitation, construction documents and shop drawings and shall be submitted, reviewed and approved prior to the start of such work. Plans shall be prepared by a licensed Florida professional engineer.
U. Qualified Person: One who has skills and knowledge related to the operation, maintenance, repair, and testing of the EPSS equipment and installations and has received safety training to recognize and avoid the hazards involved.
V. External Defibrillator (AED)
(a) Is commercially available in accordance with the Federal Food, Drug, and Cosmetic Act,
(b) Is capable of recognizing the presence or absence of ventricular fibrillation and is capable of determining without intervention by the user of the device, whether defibrillation should be performed; and

(c) Upon determining that defibrillation should be performed, is able to deliver an electrical shock to an individual.

W. Bleeding Control Kit (BCK)
(a) Capable of stopping severe bleeding through clotting, pressure, tourniquets, and other proven effective means of stopping blood loss; and
(b) Upon a blood loss emergency, is able to stem blood loss rapidly to prevent massive blood loss.

F-101.3 - Intent. The purpose of the FFPC is to establish the minimum requirements to safeguard the public health, safety and general welfare through structural strength, means of egress, facilities, stability, sanitation, adequate light and ventilation, energy conservation, and safety to life and property from fire and other hazards attributed to the built environment including alteration, repair, removal, demolition, use and occupancy of buildings, structures or premises, and by regulating the installation and maintenance of all electrical, gas, mechanical and plumbing systems, which may be referred to as service systems and to provide safety to fire fighters and emergency responders during emergency operations.

F-101.4 Violations and Penalties. Any person, firm or corporation, who shall violate a provision of the FFPC or a Fire Protection Provision of this Code or fail to comply therewith, or with any of the requirements thereof, shall be guilty of a misdemeanor. Each such person shall be deemed guilty of a separate offense for each and every day or portion thereof during which any violation of any of the provisions of the FFPC or any Fire Protection Provisions of this Code is committed or continued, and upon conviction of any such violation, such person shall be punishable by a fine of not less than fifty ($50) nor more than five hundred ($500) dollars, or by imprisonment not exceeding sixty days, or by both such fine and imprisonment.

F-101.5 Quality control. Quality control of materials and workmanship is not within the purview of the FFPC or this Code except as it relates to the purposes stated herein.

F-101.6 Referenced Codes. The other codes listed in and referenced elsewhere in the FFPC, all Fire Codes, and the Fire Protection Provisions of this Code shall be considered part of the requirements of the FFPC to the prescribed extent of each such reference.

F-101.6.1 Fire prevention. For provisions related to fire prevention, refer to the FFPC as referenced in Florida Statute 633, Broward County Local FFPCs as adopted and the Fire Protection Provisions of this Code as referenced above. The FFPC shall apply to matters affecting or relating to structures, processes and premises from the hazard of fire and explosion arising from the storage, handling or use of structures, materials or devices; from conditions hazardous to life, property or public welfare in the occupancy of structures, or premises; and from the construction, extension, repair, alteration or removal of fire suppression and alarm systems or fire hazards in the structure or on the premises from occupancy or operation.

SECTION F-102
Applicability

F-102.1 General. Where, in any specific case, different sections of this Code specify different materials, methods of construction or other requirements, the most restrictive shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.

F-102.1.1 FFPC and the Fire Protection Provisions of this Code, does not apply to, and no code enforcement action shall be brought with respect to, zoning requirements, land use requirements and owner specifications or programmatic requirements which do not pertain to and govern the design, construction, erection, alteration, modification, repair or demolition of public or private buildings, structures or facilities or to programmatic requirements that do not pertain to enforcement of, FFPC and Fire Protection Provisions of this Code.

SECTION F-103
Fire Chief, Bureau of Fire Prevention, Fire Marshal, Fire Code Official, Fire Plans Examiner, and Fire Inspector

F-103 Bureau of Fire Prevention: A Bureau of Fire Prevention shall be established within the Fire Service Provider/Fire Department, under the direction of the Fire Chief, which shall consist of such Fire Service Provider/Fire Department personnel as may be assigned thereto, by the Fire Chief, in accordance with the requirements prescribed herein. The function of this bureau shall be to assist the Fire Chief in the administration and enforcement of the FFPC, Fire Protection Provisions of this Code, and the Fire Protection Provisions of this Chapter. Personnel assigned to the bureau as the Fire Marshal / Fire Code Official, Fire Plans Examiner, and/or Fire Inspector shall be certified by BORA.

F-103.1 Appointment of Fire Marshal/ Fire Code Official: There shall be appointed by the Fire Chief certain fire prevention personnel to be qualified as set forth in this Chapter as part of the FFPC to be qualified as Fire Marshal / Fire Code Official. The Fire Chief may also appoint an Assistant Fire Marshal within the bureau and must meet qualifications listed below if implemented. Personnel assigned to the bureau as Fire Marshal / Fire Code Official or Assistant Fire Marshal, Fire Plans Examiner, and / or Fire Inspector shall be State Certified Firefighters, State Certified Fire Inspectors, and certified by BORA. For state certification and recertification refer to Florida State Statute 633.

F-103.2 Powers and Duties of a Fire Marshal /Fire Code Official: The Fire Chief shall duly authorize their representative of the Fire Service Provider/Fire Department to exercise the powers and perform the duties of the Chief. They shall also be known as Fire Marshal/Fire Code Official. The Fire Marshal/Fire Code Official shall be authorized and directed to enforce the Fire Protection Provisions of this Code and the FFPC, and the sole authority to render interpretations of the Fire Protection Provisions of this Code and the FFPC, and to adopt policies and procedures in order to clarify the application of its provisions and shall have responsibility for the administration and enforcement of the FFPC and Fire Protection Provisions of this Code. Such interpretations, policies, and procedures shall be in compliance with the intent and purpose of the Fire Protection Provisions of this Code and

the FFPC. Such policies and procedures shall not have the effect of waving requirements specifically provided for in the Fire Protection Provisions of this Code and FFPC. It shall be their duty and responsibility to enforce and coordinate the work of all subordinates Assistant Fire Marshal such as Fire Plans Examiners and Fire Inspectors. Based on current technology that the Fire Marshal/Fire Code Official does not have to be personally present at the Fire Service Provider/Fire Department as long as they are available by telephone/computer etc. and can perform their duties. In the event that the Fire Marshal/Fire Code Official is not available to perform his/her duties, the Fire Chief may appoint the Assistant Fire Marshal to undertake the supervisory responsibilities, if the Assistant Fire Marshal and Fire Marshal are not able to perform their duties the Fire Chief may appoint an interim Fire Marshal/Fire Code Official provided such person is qualified as set forth in Section F-103.3 of this Code and the FFPC. The Fire Chief or Fire Service Provider/Fire Department shall notify in writing BORA of the starting date and period of time that the Interim Fire Marshal/Fire Code Official will assume the Fire Marshal/Fire Code Official's duties. The name of the Interim Fire Marshal/Fire Code Official will be recorded by BORA but they will not be issued a certification card as a Fire Marshal/Fire Code Official. The Fire Marshal/Fire Code Official shall be subject to the powers vested by Florida State Statute 633 and BORA in this Code. If there is one Fire Plans Examiner or Fire Inspector hired by an inspection authority, that Plans Examiner or Inspector shall be a Fire Marshal/ Fire Code Official.

F-103.2.1 Under the Fire Chief's direction, the Fire Service Provider/Fire Department shall enforce the Fire Protection Provisions of this Code and the FFPC and all Fire Codes pertinent to the prevention of fires, suppression or extinguishing of fires, storage, use and handling of explosive, flammable, combustible, toxic, corrosive and other hazardous gaseous, and solid and liquid materials. These inspections shall include, but are not limited to:

F-103.2.1.1 The inspection of equipment and maintenance of automatic, manual and other fire alarm systems and fire extinguishing equipment;

F-103.2.1.2 The maintenance and regulation of fire escapes;

F-103.2.1.3 The maintenance of fire protection and the elimination of fire hazards on land and in buildings, structures and other property, including those under construction;

F-103.2.1.4 The means and adequacy of each exit in the event of fire or similar emergency, from factories, schools, hotels, lodging houses, asylums, hospitals, churches, halls, theaters, amphitheaters and all other places in which people work, live or congregate from time to time for any purpose; and

F-103.2.1.5 The investigation of the origin, cause, and circumstances of fires.

F-103.2.3 No enforcing agency may issue any permit for construction, erection, alteration, repair, or demolition until the Building Official/Fire Code Official, in conjunction with the appropriate fire plans examiner, has reviewed the plans and/or specifications for such proposal and both officials have found the plans and/or specifications to be in compliance with the FFPC and the applicable fire safety standards as determined by the local authority in accordance with the FFPC and Chapter 633, Florida Statutes. Plans shall be reviewed within 30 working days from the date of submission or specifications are received. In the event that agreement cannot be reached between the Building and Fire Officials, the dispute shall be referred to the BCFCC for review and recommendation to BORA.

F-103.2.4 It shall be the duty of the Fire Chief of the Fire Service Provider/Fire Department to inspect or cause to be inspected by their duly authorized representatives of the Fire Prevention Bureau, as often as may be necessary, but not less than annually, during normal business hours, for the establishment in question, all buildings and premises, including common or public areas ~~a~~s well as all public aisles, corridors, halls, rooms, storage areas, or other nonresidential areas of such buildings, for the purpose of ascertaining and causing to be corrected, any condition liable to cause fire or any violation of the provisions or intent of the FFPC, by providing written notice of the code sections violated, and to otherwise enforce any violation of the Fire Protection Provisions of this Code and the FFPC. Whenever the Fire Chief or their duly authorized representatives of the Fire Service Provider/Fire Department determines that a violation exists, the person responsible for maintaining the building or area where such violation exists, shall be given reasonable written notice of such violation, and if the violation continues, a presumption of a violation of the Fire Protection Provisions of this Code and the FFPC, shall be created against the person responsible for maintaining the building or area where such violation exists. Rejections shall include specific reference to the Code Section upon which rejection is based in writing.

F-103.2.5 Right of Entry. Upon presentation of proper credentials, the Fire Chief, Fire Marshal/Fire Code Official, or their duly authorized representative may enter, at any reasonable time, any building, structure or premises for the purpose of making any inspection or investigation, which under the Fire Protection Provisions of this Code and the FFPC.

F-103.2.6 Stop-Work Orders. If the Fire Chief becomes aware of a hazardous condition, which presents immediate danger to life, work being done contrary to this code or FFPC, work without permit, they shall be authorized to order the hazard removed or remedied immediately, and shall be empowered to order the closing of the building or place where such danger to life violation exists, until such time as same has been corrected. Any failure of immediate compliance shall empower the Fire Chief, or their duly authorized representative finding such hazardous condition creating immediate danger to life, to close such building or cause same to be closed and the people herein evacuated and barred from reentering until such time as such immediate danger to life, work being done contrary to this code or FFPC, work without permit, has been corrected. The Fire Chief, or their duly

authorized representative is given the authority to order any gas company, power company, or other utility company, to disconnect its service to any building or buildings containing gas or power installations, where such installations, in the opinion of the Fire Chief, or their duly authorized representative creates an immediate danger to life, work being done contrary to this code or FFPC, work without permit, and to otherwise close or evacuate such building and to bar reentry thereto, until such installation is repaired or replaced and such hazard to life ceases to exist. Rejections shall include specific reference to the Code Section upon which rejection is based in writing.

F-103.2.7 The Fire Chief or their duly authorized representative upon the complaint of any person or whenever they shall deem it necessary, shall inspect any buildings and premises within their jurisdiction.

F-103.2.8 Approval of the Fire Service Provider/Fire Department accessibility and all tests of fire alarm detection and suppression systems, smoke evacuation systems and life safety systems shall be conducted prior to final structural inspection and issuance of Certificate of Occupancy.

F-103.2.9 Orders To Eliminate Dangerous Or Hazardous Conditions: Whenever the Fire Chief or their duly authorized representative shall find in any building or upon any premises, dangerous or hazardous conditions or materials, including, but not limited to violations of the requirements encompassed in Chapter 633, Florida Statutes, or the following Paragraphs they shall order such violations and dangerous conditions or materials removed or remedied.

F-103.2.9.1 Dangerous or unlawful amounts of combustible or explosive or otherwise hazardous materials.

F-103.2.9.2 Hazardous conditions arising from defective or improperly installed equipment for handling or using combustible or explosive or otherwise hazardous materials.

F-103.2.9.3 Dangerous accumulation of rubbish, wastepaper, boxes, shavings, or other flammable materials.

F-103.2.9.4 Accumulations of dust or waste material in air conditioning or ventilation systems or of grease in kitchen or other exhaust ducts.

F-103.2.9.5 Hurricane Protection Devices
After the termination of such periods of time that had been designated by the National Weather Service as being a hurricane watch or warning, hurricane protective devices installed on occupied buildings which impede required egress or required light and ventilation shall be removed within 15 days.

F-103.2.9.6 Obstructions to, on, or under fire escapes, stairs, passageways, or doors, liable to interfere with the operations of the Fire Service Provider/Fire Department or egress of occupants; locked exits shall constitute an unsafe condition.

Exception: *unless permitted by the Fire Protection Provisions of this Code and the FFPC.*

F-103.2.9.7 Obstruction to windows. Where windows are required to provide the second means of escape from a room or area, the following are prohibited.

F-103.2.9.7.1 Bars that cannot be opened from the inside.

F-103.2.9.7.2 Other obstructions such as security grill.

Exception: *Only one (1) window is required to meet the above where two (2) windows are in the same room or area.*

F-103.2.9.8 Reserved

F-103.2.9.9 Reserved

F-103.2.9.10 Any building or other structure which, for want of repairs, lack of adequate exit facilities, automatic or other fire alarm apparatus or fire extinguishing equipment, or by reason of age or dilapidated condition, or from any other cause, create a hazardous condition.

F-103.2.9.11 Reserved

F-103.2.9.12 The improper storage, transporting or handling of all classes of flammable or combustible liquids or otherwise hazardous substances any place within the enforcing jurisdiction.

F-103.3 Certification of Fire Marshal/Fire Code Official. The Fire Marshal/Fire Code Official shall be certified by BORA as a Fire Code Official, be a state certified Firefighter as defined by 69A-37 as refereed to collectively (parts 1 and 2) as the "Minimum Standards Course", be a State certified Fire Inspector, and shall meet one or more of the following qualifications:

F-103.3.1 An Engineer and/or a Degree in Fire Science and/or a Degree in Fire Prevention and shall have been employed as a County or City Fire Inspector for three (3) years within the State of Florida and shall possess a Broward County Certification.

F-103.3.2 A County or City Fire Plans Examiner with at least five (5) years of experience within the State of Florida and shall possess a Broward County Certification.

F-103.3.3 Ten (10) years' experience as a Fire Inspector, employed in a County or City within the State of Florida with at least five (5) years of experience within the jurisdiction of the FFPC and be a Broward County Certified Fire Inspector.

F-103.3.4 Have been fulfilling the duties of a Fire Marshal/Fire Code Official with five (5) years continuous service as such within a County or City in the State of Florida and shall possess a Broward County Certification.

F-103.3.5 Possesses a certification issued by the State Fire Marshal as a Fire Code Manager/Administrator in accordance with NFPA 1037 with a total of six (6) years' experience with a County or City as ~~a~~an fire plans examiner and inspector in Florida~~.~~ and shall possess a Broward County Certification.

F-103.3.6 Three (3) years' experience as a Broward County Certified Plans Examiner and nationally certified as an NFPA Certified Fire Inspector 1 (CFI-1), NFPA Certified Fire Plans Examiner (CFPE) and NFPA Certified Fire Protection Specialist (CFPS).

F-103.3.7 Certification of Assistant Fire Marshal. The Assistant Fire Marshal shall be certified by BORA, be a state certified Firefighter as defined by 69A-37 as referenced to collectively [69A-37.055(2)(a)(b) Firefighter curriculum requirements] as the "Minimum Standards Course", be a State certified Fire Inspector, and shall meet one or more of the following qualifications:

F-103.3.7.1 An Engineer and/or a Degree in Fire Science and/or a Degree in Fire Prevention and shall have been employed as a County or City Fire Inspector for three (3) years within the State of Florida and shall possess a Broward County Certification.

F-103.3.7.2 A County or City Fire Plans Examiner with at least four (4) years of experience within the State of Florida and shall possess a Broward County Certification.

F-103.3.7.3 Seven (7) years' experience as a Fire Inspector, employed in a County or City within the State of Florida with at least five (5) years of experience within the jurisdiction of the FFPC and be a Broward County Certified Fire Inspector.

F-103.3.7.4 Have been fulfilling the duties of an Assistant Fire Marshal with three (3) years continuous service as such within a County or City in the State of Florida and shall possess a Broward County Certification.

F-103.3.7.5 Possesses a certification issued by the State Fire Marshal as a Fire Code Manager/Administrator in accordance with NFPA 1030 with a total of (5) years' experience with a County or City as a fire plans examiner and inspector in Florida and shall possess a Broward County Certification.

F-103.3.7.6 Two (2) years' experience as a Broward County Certified Plans Examiner and nationally certified as an NFPA Certified Fire Inspector 1 (CFI-1), NFPA Certified Fire Plans Examiner (CFPE) and NFPA Certified Fire Protection Specialist (CFPS).

F-103.3.7.7 Any Assistant Fire Marshal currently employed by a Broward County Fire Service Provider, prior to the effective date of this code section will receive a certification once the Fire Service Provider submits a letter indicating the date the individual was assigned as Assistant Fire Marshal and the name of the individual.

AF-103.4 Fire Plans Examiner. As set forth herein:

F-103.4.1 Appointment of a Fire Plans Examiner. There shall be appointed by the Fire Chief of each Fire Service Provider/Fire Department certain fire prevention personnel to be qualified as set forth in this Chapter as part of the FFPC to serve as a Fire Plans Examiner. To be eligible for appointment as a Fire Plans Examiner, such person shall be certified by BORA.

F-103.4.2 Powers and Duties of the Fire Plans Examiner. Such employee shall have the duties and powers as delegated by the Fire Chief except that the Fire Chief may not delegate authority to subordinates to interpret provisions of the Fire Protection Provisions of this Code, FFPC, and all Fire Codes which authority is assigned to the Fire Marshal/Fire Code Official. A Fire Plans Examiner, if properly qualified, may be certified and assigned duties in more than one category. Prior to the issuance of any permit for construction, erection, alterations, repair, or demolition, the Fire Plans Examiner shall review all plans and/or specifications in conjunction with the Building Department. One and two family detached residential dwelling units shall not be subject to provisions found in NFPA 101 during plan review by the Fire Plans Examiner as described in this section or inspection by the Fire Plans Examiner as described in F.S. 633. When approvals by other agencies having authority may logically be required to be affixed to the plans and/or specifications before approval by the Fire Plans Examiner, such approval shall be affixed to the plans and/or specifications before examination by the Fire Plans Examiner. If the application or plans and/or specifications do not conform to the requirements of all pertinent laws or regulations, the Fire Plans Examiner shall reject such application in writing, stating the reasons therefore and citing the relevant code section(s) of the FFPC. Plans and/or specifications that are rejected, as stated herein above, shall be returned for correction. Pen notations on mechanically reproduced plans and/or specifications may be accepted for only minor corrections. If the applications, plans and/or specifications, upon examination, are found to comply with the requirements of the Fire Protection Provisions of this Code, the FFPC, and all Fire Codes, the plans and/or specifications shall be signed and marked approved. Fire Service Provider/Fire
Department acceptance of fire and life safety features in buildings after performance objectives are met is required, prior to certificate of occupancy being issued.
Nothing in this section shall be construed to provide an exemption from fire plan review for one and two family detached residential dwelling units which undergo a change in use or occupancy classification.

F-103.4.3 Certification of a Fire Plans Examiner. The Fire Plans Examiner shall be certified by BORA as a Fire Plans Examiner, shall be a certified Firefighter as defined by 69A-37 as refereed to collectively (parts 1 and 2) as the "Minimum Standards Course", be a State certified Fire Inspector, and shall meet one or more of the following qualifications:

F-103.4.3.1 An Engineer and/or a Degree in Fire Science, and/or a Degree in Fire Prevention and having a minimum of three (3) years as a fire plans examiner with a County or City within the state of Florida and shall be Broward County Certified.

F-103.4.3.2 Five (5) years of experience as a Fire Inspector employed with a County or City in the State of Florida and shall be ~~a~~ Broward County certified.

F-103.4.3.3 Ten (10) years of experience as a firefighter, four (4) years as a state certified fire inspectors~~.~~ employed with a County or City having fulfilled the duties of a fire inspector and shall be ~~a~~ Broward County certified.

F-103.4.3.4 Have been fulfilling the duties of a Fire Plans Examiner with five (5) years continuous service within the State of Florida and be Broward County certified.

F-103.4.3.5 Three (3) years' experience as a Broward County and State of Florida Certified Fire Inspector and nationally certified as an NFPA Certified Fire Inspector (CFI-1) and NFPA Certified Fire Plans Examiner (CFPE) and be Broward County certified.

F-103.5 Fire Inspector. As set forth herein:

F-103.5.1 Appointment of a Fire Inspector. There shall be appointed by the Fire Chief of each Fire Service Provider/Fire Department certain fire prevention personnel to be qualified as set forth in this Chapter as part of the FFPC to serve as a Fire Inspector. To be eligible for appointment as a Fire Inspector, such person shall be certified by BORA.

F-103.5.2 Powers and Duties of the Fire Inspector. Such employee shall have the duties and powers as delegated by the Fire Chief except that the Fire Chief may not delegate authority to subordinates to interpret the Fire Protection provisions of this Code, the FFPC, and all Fire Codes which authority is assigned to the Fire Marshall/Fire Code Official. A Fire Inspector, if properly qualified, may be certified and assigned duties in more than one category. Under the Fire Chief's direction, the Fire Inspector shall enforce all local ordinances of the jurisdiction pertinent to the prevention of fires, suppression or extinguishing of fires, storage, use and handling of explosive, flammable, combustible, toxic, corrosive and other hazardous gaseous, solid and liquid materials. The inspection of equipment and maintenance of automatic, manual, other fire alarm systems, fire extinguishing equipment, and the maintenance and regulation of fire escapes. The maintenance of fire protection and the elimination of fire hazards on land and in buildings, structures and other property, including those under construction. The means and adequacy of each exit in the event of fire or similar emergency, from factories, schools, hotels, lodging houses, asylums, hospitals, churches, halls, theaters, amphitheaters and all other places in which people work, live or congregate from time to time for any purpose. The investigation of the origin, cause, and circumstances of fire(s). If defects, omissions or violations exist on any other part of the system relating to work for which approval is requested, the issuance of the Approval shall be withheld until corrections have been made to the defective portion of the system, and the same are made to comply with this Fire Code. The Fire Inspector shall serve notice to the Fire Contractor/representative or owner/representative in writing, stating the reasons therefore and citing the relevant code section(s).

F-103.5.3 Certification of a Fire Inspector. Application for certification shall be on a form containing such pertinent information as is considered relevant to BORA. To be eligible for appointment as Fire Inspector, such person shall be certified by BORA and shall meet the following qualifications:

F-103.5.3.1 Be a certified Firefighter as defined by 69A-37 as refereed to collectively (parts 1 and 2) as the "Minimum Standards Course" and shall be a state certified Fire Inspector.

Exception: At Fire Chief's discretion, a person may be given up to eighteen (18) months to become a Florida Certified Firefighter, from the date of hire.

F-103.5.3.2 Pass a written competency examination approved by BORA, to be given in May and November (only one (1) required) of each year. Other than the mandated dates as provided above, the test may be given when requested by at least three (3) applicants. If the candidate is unsuccessful after three (3) attempts, a remedial class developed and provided by FCABC, Fire Prevention Subcommittee shall be taken. Upon completion of the remedial class the candidate will be permitted three (3) additional attempts. If the candidate is still unsuccessful the candidate shall wait a mandatory period of no less than twelve (12) months from their last test before being able to retest.

F-103.5.3.3 Retention;
Individuals currently certified under this code may, at their separation date from a local fire department as an inspector place their certification in a non-active status for one FFPC code cycle or a period of four (4) years whichever is longer, by notifying the Board of Rules and Appeals in writing of their selection. During this period the individual shall maintain continuing educational credits in Fire Prevention in the amount of 60 hours as required for renewal. At the conclusion of the code cycle or four (4) year period, as stated above the individual previously holding a certification in a non-active statues will become null and void unless the previsions for recertification are met at the conclusion of the code cycle or four (4) year period.

F-103.6 Certification. All Fire Service Provider/Fire Department Inspection Personnel shall be certified by BORA.

F-103.6.1 Certification Fee: If applicable, each application shall be accompanied by a check in the amount appropriate for each discipline according to the BORA Fee Schedule for Certification, payable to "Broward County Commissioners."

F-103.6.2 Broward County Certification is valid for a period of four years and shall expire on the same date as their State of Florida Fire Inspector Certification.

F-103.6.3 The certification of Fire Service Provider/Fire Department Inspection Personnel may be revoked, for cause, by BORA. BORA may deny, refuse to renew, suspend, or revoke the BORA certificate of a Fire Marshal/Fire Code Official, Fire Plans Examiner, or Fire Inspector if it finds that any of the following grounds exist:

a. Any cause for which issuance of a certificate could have been refused had it then existed and been known to BORA.
b. Violation of Florida Statutes 633 or any local fire code amendments.

c. Falsification of records relating to the certificate.
d. Having been found guilty of or having pleaded guilty or nolo contendere to a felony, whether or not a judgment of conviction has been entered.
e. Failure to meet any of the renewal requirements.
f. Having been convicted of a crime in any jurisdiction which directly relates to the practice of the fire code inspection, plan review, or administration.
g. Making or filing a report or record that the certificate holder knows to be false, or knowingly inducing another to file a false report or record, or knowingly failing to file a report or record required by the state or local law, or knowingly impeding or obstructing such filings, or knowingly inducing another person to impede or obstruct such filing.
h. Failure to properly enforce applicable fire codes or permit requirements within this state which the certificate holder knows are applicable by committing willful misconduct, gross negligence, gross misconduct, repeated negligence, or negligence resulting in a significant danger to life or property.
i. Accepting labor, service, or materials at no charge or at a noncompetitive rate from any person who performs work that is under the enforcement authority of the certificate holder and who is not an immediate family member of the certificate holder. For the purpose of this paragraph, the term "immediate family member" means a spouse, child, parent, sibling, grandparent, aunt, uncle, or first cousin of the person or the person's spouse or any person who resides in the primary residence of the certificate holder.

BORA upon verification of the above grounds, shall immediately notify the Fire Marshal, Fire Code Official, Fire Plans Examiner, and/ or Fire Inspector involved, who, upon notification from BORA, shall appear before the Board to explain why their certification should not be revoked.

F-103.6.4 Personnel assigned to the bureau as Fire Inspectors shall be State of Florida Certified Firefighters *(see 18 month exception*), State of Florida Certified Fire Inspectors. For certification refer to Florida State Statute 633. Individuals being considered for appointment will be required to complete an affidavit of compliance with 71-575 (see Board policy 14-02)

F-103.7 Recertification. All Fire Service Provider/Fire Department Inspection Personnel shall be recertified by BORA.

F-103.7.1 To be recertified all Fire Marshal/Fire Code Officials, Fire Plans Examiners, Fire Inspectors or a combination thereof who are presently certified by BORA, shall meet the following criteria:

F-103.7.1.1 Be presently employed by a governmental fire entity within Broward County.

F-103.7.1.2 Recertification shall have the same anniversary date as provided in Florida Statutes, Chapter 633, with the completion of sixty (60) contact hours in continuing education every four (4) consecutive years on Fire Protection and Fire Safety, which are approved by BORA.

F-103.7.1.3 Personnel assigned to the bureau as Fire Inspectors shall be State of Florida Certified Firefighters, and State of Florida Certified Fire Inspectors. For certification or recertification refer to Florida State Statute 633.

F-103.7.2 If certification is not renewed and allowed to lapse, application for recertification shall be accompanied with proof that (15) contact hours per year, in the preceding 4 years in continuing education has been met. Attendance at the BORA meetings and/or the BORA committee meetings shall be counted as one (1) hour for a maximum of fifteen (15) county required contact hours within a four (4) year renewal period. If the certification is not renewed within 8 years, the individual must retake the state fire safety inspectors training and take the local fire exam and shall be on a form containing such pertinent information as is considered relevant to BORA. Individuals being considered for recertification will be required to complete an affidavit of compliance with 71-575 (see Board policy 14-02)

F-103.7.3 Recertification Fee: If applicable, each application shall be accompanied by a check in the amount appropriate for each discipline according to the BORA Fee Schedule for Recertification, payable to "Broward County Commissioners."

SECTION F-104
Broward County Board of Rules and Appeals

F-104 Broward County Board of Rules and Appeals.

F-104.1 The Broward County Board of Rules and Appeals shall maintain a staff position to coordinate the enforcement of the Fire Protection Provisions of this Code, the FFPC, and all Fire Codes thereto. This person shall be known as the Chief Fire Prevention Code Compliance Officer and shall be certified as Fire Marshal/Fire Code Official. It is recommended that the individual under consideration for Fire Code Compliance Officer have at a minimum four years documented as a Fire Code Official / Fire Marshal.

F104.2 The Fire Code Compliance Officer shall have the authority to make inspections in the discipline and shall be responsible to see that the Fire Protection Provisions of this Code, the FFPC, and all Fire Codes are being uniformly enforced by all AHJs (building and Fire Service Provider/Fire Department in Broward County.

SECTION F-105
Broward County Fire Code Committee

F-105 Broward County Fire Code Committee:

F-105.1 In order to determine the suitability of alternate materials and type of construction, to provide for reasonable interpretations of the Fire Protection Provisions of this Code, the FFPC, and all Fire Codes, and to assist in the control of the

life/safety in buildings and structures, there is hereby created a Broward County Fire Code Committee, to make recommendations to BORA.

F-105.2 Membership: The BCFCC shall consist of:
<u>One Mechanical Engineer, Florida P.E.</u>

1) One Architect, Florida Registered
2) One Fire Sprinkler Contractor
3) One Representative of Persons with disabilities
4) One Master Electrician
5) Four Fire Service (Florida Certified Fire Inspectors)
6) One Fire Service Member of the Board of Rules and Appeals
7) One Contractor, Certified to Install Fire Alarms
8) One General Contractor
9) One Florida P.E., Electrical Discipline
10) One Mechanical Contractor
11) One Consumer Advocate
12) One Florida P.E., Structural Discipline,
13) One Chief Plumbing Inspector

F-105.3 Membership, such as membership of the BCFCC, will be for one year (with members being able to succeed themselves through reappointment by BORA Chairperson). The Chairperson of BORA will select all members, including the Chairperson of the BCFCC. The Chairperson of the BCFCC shall be a Fire Service member of BORA.

F-105.4 Appeals from the Decisions of the Fire Chief and/or Building Official:

F-105.4.1 The BCFCC shall review all appeals from the decisions of the Fire Chief and/or Building Official wherein such decision is on matters regulated by the Fire Protection Provisions of this Code, the FFPC, and all Fire Codes. Appeals can be submitted by any person who has reason to believe they have been subjected to unreasonable enforcement of the Fire Protection Provisions of this Code, the FFPC, and all Fire Codes.

F-105.4.2 Procedures for Appeals: The BCFCC shall review the appeal prior to hearing by BORA and shall make recommendations to BORA for resolution of the appeal. BORA shall then hear the appeal and make a final ruling. F-105.4.3 Decisions by the BOARD related to an appeal of the FFPC can be challenged by submitting a request for a Declaratory Statement to the State Fire Marshal's Office.

F-105.5 Procedures in County Court /Code Enforcement Board: When charges are filed based upon a violation under this code, such charges, prepared under the direction of the city, state, or county attorney and shall be heard by a county judge or Code Enforcement Board, within the time prescribed under county court procedures or Code Enforcement Board. Such conditions shall constitute an immediate danger to life.

SECTION F-106
Authority Fire Chief, Fire Marshal/Fire Code Official, or his/her duly authorized representative

F-106 Authority:

F-106.1 The Fire Chief, Fire Marshal/Fire Code Official, or their duly authorized representative shall investigate the origin, cause, and circumstances of every fire occurring within their AHJ. Such investigation shall begin immediately upon the occurrence of a fire, and the Fire Chief, Fire Marshal/Fire Code Official, or their duly authorized representative shall be immediately notified of the facts. The Fire Chief, Fire Marshal/Fire Code Official, or their duly authorized representative shall take charge immediately of the physical evidence and shall notify the proper authorities designated by law to pursue the investigation of such matters. The Fire Chief, Fire Marshal/Fire Code Official, or their duly authorized representative shall further cooperate with the authorities in the collection of evidence and in the prosecution of the case.

F-106.2 Notices and Orders. The Fire Chief, Fire Marshal/Fire Code Official or Fire Code Manager/Administrator, or their duly authorized representative shall issue all necessary notices or orders to ensure compliance with the Fire Protection Provisions of this Code, the FFPC, and all Fire Codes.

F-106.2.1 A building, structure, occupancy, premises, or vehicle shall not be used when in violation of the Fire Protection Provisions of this Code, the FFPC, and all Fire Codes.

F-106.2.2 Unlawful Continuance of Fire/Life Safety Hazard: Any person or persons operating or maintaining any occupancy, premises or vehicle subject to this Code who shall permit any fire and/or life safety hazard to exist on premises or property under their control, and who shall fail to take immediate action to abate such hazards, when ordered or notified to do so by the Fire Chief, Fire Marshal/Fire Code Official, or their duly authorized representative, shall be guilty of a second degree misdemeanor. Criminal enforcement of the Fire Protection Provisions of this Code, the FFPC, and all Fire Codes shall remain with local law enforcement departments and officials charged with enforcement of the criminal laws of the State.

F-106.2.3 Concealed Work: The Building Official or his/her duly authorized representative and/or Fire Marshal/Fire Code Official or their duly authorized representative may order portions of the structure frame of a building and/or structure to be exposed for inspection when, in his/her opinion, there is a good reason to believe that a building or portion thereof is in an unsafe or dangerous condition or that there is willful or negligent concealment of a violation of this Code, the Fire Protection Provisions of this Code, the FFPC, and all Fire Codes.

F-106.3 Removal or Destruction of Signs or Tags:

F-106.3.1 It shall be unlawful to remove or tamper with any

seal, warning tag, or lock placed on an article, appliance, vehicle, meter, tank, or building by the building department or the Fire Service Provider/Fire Department, without first obtaining permission to do so by the AHJ

F-106.3.2 It shall be unlawful for any person to tamper with or change the position of any utility valve, switch, wiring, piping, meter, or connection, or alter any utility service in any way, unless properly authorized to do so.

SECTION F-107
Standby Fire Watch

F-107 Standby Fire Watch:

F-107.1 Whenever in the opinion of the Fire Chief, Fire Marshal/Fire Code Official, or their duly authorized representative, when a potentially hazardous condition or a reduction in life safety features, due to the number of persons, or the nature of the performance, exhibition, display, contest or activity, the Fire Chief or their duly authorized representative may require the owner, agent or lessee to employ one or more certified Fire Inspectors or Firefighters, as required and approved by the Fire Chief, to be on duty at such place. Said Fire Inspectors/Firefighters shall be subject to the Fire Chief's and/or their duly authorized representative orders at all times, when so employed, and remain on duty during the times such places are open to the public, or when such activity is being conducted. The Fire Chief may allow the use of other trained individuals to serve as an alternative to a Fire inspector / Fire Fighters requirement. Before each performance or the start of such activity, said Fire Inspector/Firefighter or others allowed by the Fire Chief shall inspect all required fire/life safety equipment, to insure that such equipment is in proper working order, and shall keep diligent watch for any emergency that should arise. Should any emergency arise, the Fire Inspector/Firefighter or others allowed by the Fire Chief shall take whatever action necessary to protect the occupants and public from injury or any life-threatening condition.

SECTION F-108

Tents, Membrane Structures, Temporary Structures and Uses

F-108 Tents and Membrane Structures

F-108.1 For the purpose of this Section, a place of assembly shall include any circus, sideshow, carnival, tent show, theater, skating rink, dance hall or any other exhibition, production, engagement or offering, or other place of assembly in or under which 50 or more persons may gather for any purpose.

F-108.1.1 General. The Building Official or Fire Code Official is authorized to issue a permit for the erection of temporary structures such as seats, canopies, tents and fences used in construction work or for temporary purposes such as reviewing stands. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. Such structures shall be completely removed upon the expiration of permit.

a) Temporary structures, such as tents with sides, exceeding 100 sq./ft., and canopies without sides exceeding 225 sq./ft., containing occupancy or operations that could present a life safety hazard to occupants and/or the general public based on the opinion of the Fire Code Official, shall be required to have a permit issued in conformance with permitting section of Chapter 1 and this code and be in conformance with the Life Safety provisions of this code and the Florida Building Code.

F-108.1.2 Reserved

F-108.1.3 Conformance.
Temporary structures and uses shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of this Code and the FFPC as necessary to ensure public health, safety and general welfare.

F-108.2 Parking of Vehicles: Automotive equipment that is not necessary to the operation of the tent show performance shall not be parked within 20 feet of the tent or membrane structure. No other automotive equipment or internal combustion engines shall be located within 50 feet of the tent except upon a public street.

F-108.3 Smoking and Open Flame:

F-108.3.2 An approved receptacle for the disposal of lighted smoking materials shall be provided at all entrances to tents and membrane structures.

F-108.4 Fire Extinguishers and other Fire-Protection Equipment: Fire extinguishers and other fire protection equipment shall be provided in every tent or membrane structure as follows:

F-108.4.1 A minimum of one 4A-10B:C type extinguisher shall be provided in every tent or air supported structure having a floor area less than 2,000 square feet and also one in each additional 2,000 square feet or fraction thereof.

F-108.4.2 At least one 40-B:C type fire extinguisher shall be provided for each power generator or transformer and at locations where flammable or combustible liquids are used, stored or dispensed.

F-108.5 Storage of Flammable or Combustible Liquids: Flammable or combustible liquid shall not be stored in a tent or membrane structure nor less than 50 feet from any tent or membrane structure.

F-108.6 Housekeeping: Hay, straw, trash and other flammable material shall not be stored less than 35 feet from any tent or membrane structure, except as authorized by the authority having jurisdiction.

F-108.7 Seating Arrangements:

F-108.7.1 Bonding of chairs. All loose seats, folding chairs or similar seating facilities that are not fixed to the floor shall be bonded together in groups of not less than six. Exceptions:

(1) When not more than 500 such seats, chairs or facilities are provided, bonding thereof may be deleted.

(2) The bonding of chairs shall not be required when tables are provided, as when the occupancy is used for dining or similar purposes.

F-108.7.2 Securing of chairs, folding and telescoping seat seating, reviewing stands, grandstands, and bleachers shall be in accordance with NFPA 102.

F-108.8 Awnings, Tents and Canopies:

F-108.8.1 Awnings, tents, canopies, and similar products whether attached or detached from a building shall have a flame spread rating of 25 or less.

F-108.9 Vehicular Access:

F-108.9.1 Fire access roads shall be surfaced with solid pavement, grass turf reinforced by concrete grids, or by similar type surfaces approved by the authority having jurisdiction, designed to accommodate fire apparatus weighing a minimum of 32 tons.

F-108.9.2 Buildings having ramps and/or elevated roadways shall have posted weight limit signs showing maximum load capacity.

F-108.9.3 All new and existing automatic entry gates installed in either commercial or multifamily communities shall be provided with a universal access system, approved by the Fire Prevention subcommittee of the Fire Chiefs Association of Broward County, to allow rapid entry. Existing applications may be provided up to one (1) year to complete as approved by the AHJ.

F-108.10 Vehicles on Display:

F-108.10.1 When vehicles are on display ~~or stored~~ inside any occupancy group other than an automobile show room it shall comply with the provisions listed in NFPA 1, 20.1.5.5.4.12

SECTION F-109 RESERVED

SECTION F-110 Reserved

SECTION F-111
Test Criteria for Mechanical Smoke Control Systems

F-111 Initial Acceptance Test Criteria and Periodic Testing of Mechanical Smoke Control Systems:
Test Criteria for Mechanical Smoke Control Systems shall be stated on the mechanical plans.

F-111.1 The following shall receive notice from the Mechanical Contractor so that they may witness the system's performance test:

F-111.1.1 Fire Service AHJ.

F-111.1.2 Building Department (Mechanical) AHJ.

F-111.1.3 Periodic Testing:
All smoke control systems shall be retested as per the provisions found in the FFPC by a firm (test and balance) possessing a certificate of competency as a test and balance contractor for smoke control systems as required in Broward County Ordinances, Chapter 9 and Broward Local Administrative Provisions Chapter 1of the FBC and shall be approved by the local AHJ. The smoke control system shall be retested without smoke, in both the manual and automatic modes per the sequence of operation. The annual periodic testing and balancing results shall be provided in a certified test and balance report to the Fire Service Provider/Fire Department AHJ, who shall consult with the Chief Mechanical Inspector

At a minimum the annual periodic test report shall contain the following information;

1) All smoke control system air movement equipment and if operating as intended.
2) Retest voltage.
3) Retest amperage.
4) Retest RPM if applicable.
5) All smoke control system control dampers shall be identified and if operating as intended.
6) All smoke zone differential pressures at egress exit doors (egress doors shall have no more than 30 lbf on break and 15 lbf on swing.

SECTION F-112
Automatic Sprinklers Required
F-112 Automatic Sprinklers Required:

F-112.1 Fire flow testing of a water supply for an Automatic Fire Protection Systems (AFPS) and/or Standpipe System using water as an extinguishing agent for new and existing buildings and structures shall be in accordance with NFPA

291, Recommended Practice for Fire Flow Testing and Marking of Hydrants, Florida Administrative Code (FAC) 69A-60.

F-112.2 The following occupancies shall be protected throughout by an approved automatic sprinkler system installed in accordance with NFPA 13.

F-112.2.1 Storage.
In existing storage occupancies (other than parking garages and high-piled combustible storage) used for the storage of combustible goods or merchandise and exceeding 20,000 square feet per floor.

F-112.2.4 2 Industrial Occupancies:
All existing industrial occupancies exceeding 15,000 square feet per floor.

F-112.3 Reserved

F-112.4 Where automatic fire sprinkler systems are installed, the location of the Fire Service Provider/Fire Department connection shall be approved by the Fire Service Provider/Fire Department having jurisdiction.

F-112.5 Limited Access Structures

F-112.5.1 Where automatic fire sprinklers are installed in new Mini Storage Buildings, fire department emergency access openings acceptable to the AHJ shall also be provided. The emergency access openings shall not be less than the dimensions referenced in the Life Safety Code for Underground and Limited Access Structures.

SECTION F-113 Corridors

F-113 Corridors.
Where exterior corridors or exterior balconies serving as a required means of egress are enclosed on both sides and above, and the length of the enclosure along the long axis is twenty-five (25) feet or more, fire-resistivity of walls and the protection of openings therein shall be required as if such corridors or balconies were enclosed interior corridors.

SECTION F-114 Reserved

SECTION F-115 RESERVED

SECTION F-116
Flammable and Combustible Liquids

F-116 Flammable and Combustible Liquids.

F-116.1 Underground Storage and Dispensing of Flammable/Combustible Liquids:

Underground tanks used to store flammable liquids shall bear an Underwriters' label or equivalent testing agency. Tank capacity for underground installations shall be limited to thirty thousand (30,000) gallons or less. Any tank to be installed shall be jointly approved in writing by the Fire Chief, Building Official, the director of zoning, and/or their duly authorized representative, after an appropriate review has been conducted. Such review includes, but is not limited to, an analysis of the proposed installation, location, distance separations, types of occupancies in the vicinity, tank corrosion protection and construction, and applicable zoning restrictions. The maximum storage capacity in any one location shall not exceed an aggregate total of one hundred thousand (100,000) gallons unless approved by the local Fire Code Official. Any property or facility requesting installation of tanks exceeding an aggregate capacity of sixty thousand (60,000) gallons of flammable liquids shall comply with the following additional requirements:

1) The property must be of suitable size, shape and topography to allow for the safe installation of the proposed tanks and be in compliance with location requirements identified in other sections of the NFPA, state and local fire codes; and
2) The facility must have an attendant on site during hours of operation; and
3) The facility must be continuously monitored, either by an on-site attendant or a third party when the facility is not in operation; and
4) The operator must provide evidence of an employee training program for on-site attendants that educates concerning all on-site equipment, including life safety equipment and emergency response procedures; and
5) The facility must provide additional emergency shut-off stations for ready accessibility by on-site attendants and the public; and
6) Station operator shall submit an emergency response plan for review and approval prior to issuance of permits for operations of the facility. The emergency response plan shall, at a minimum, provide emergency contact information and notification requirements, fire prevention and control equipment employed at the site, monitoring requirements and plans and procedures for mitigating release of hazardous materials, as well as all other information required by applicable governing and permitting agencies.

When flammable liquids are stored in more than one location, tanks shall not be interconnected between locations.

Exception*:* Broward County Office of Transportation's Transit Operations and municipal, county, and special districts having underground bulk fuel storage facilities shall comply with the provisions of NFPA 30. Aggregate Limitations of Flammable and Combustible Liquids as

per the F- 116.1 shall not apply. Permit shall be reviewed for compliance by the local Fire Service Provider/Fire Department having Jurisdiction.

F-116.1.1 Underground tanks out of service for a period of one year shall be removed. Underground tanks may be abandoned in place only if approved by the Fire Service Provider/Fire Department having jurisdiction.

F-116.2 Storage and Use on Site of Combustible Liquids Used for Fixed Equipment Shall Be Under the Following Requirements:

F-116.2.1 Aboveground installation of single-wall tanks shall comply with NFPA 30 and the following additional requirements:

F-116.2.1.1 Above ground tanks having a capacity in gallons greater than 10,000 shall be approved by zoning and local AHJ.

Exception: Municipal, County and Special Districts installing aboveground fuel storage tanks for fixed equipment for providing governmental services. Permit shall be reviewed for compliance by the local Fire Service Provider/Fire Department AHJ.

F-116.2.1.2 Tanks shall be surrounded with an embankment or impervious dike not less than four feet high and capable of holding not less than one- and one-half times the capacity of the tank surrounded. Embankments or dikes shall be continuous, with no opening for piping or roadways.

F-116.2.2 All aboveground storage tanks shall be identified by a suitable sign which will state type of fuel and capacity of the tank.

F-116.2.3 Tanks used for stationary combustion engines and gas turbines shall comply with NFPA 37, as adopted in FAC 69A-60, Standard for the
Installation and Use of Stationary Combustion Engines and Gas Turbines.

F-116.2.4 Distance separation between aboveground storage tanks and property lines and buildings shall be as specified in Table F-116.2.4 below:

Table F-116.2.4

Capacity in Gallons	To line of adjoining unprotected building or property which may be built upon	To line of adjoining protected buildings	To line of existing frame buildings
1,000	12 feet	8 feet	20 feet
2,000	20 feet	15 feet	40 feet
3,000	20 feet	15 feet	40 feet
10,000	30 feet	20 feet	50 feet

F-116.3 Aboveground Storage for Dispensing of Flammable and Combustible Liquids from UL listed 142 (double wall), 2085 or Equivalent Tanks:

F-116.3.1 Aboveground storage of flammable and combustible liquids shall be approved by the Fire Chief, Building Official, and/or their duly authorized representative after an appropriate review has been conducted. Such review includes, but is not limited to, an analysis of the proposed installation, location, distance separations, types of occupancies in the vicinity, tank corrosion protection and construction, and applicable zoning restrictions. The maximum storage capacity in any one location shall not exceed an aggregate total of 12,000 gallons. Aboveground storage of flammable and combustible liquids shall comply with the following regulations:

Exception: Municipal, county, and special districts, and airports (when approved by the Airport Aviation Authority, that the services of a Fixed Base Operation (FBO), supplying fuel to the general aviation community and emergency operations is needed) having aboveground fuel storage facilities shall comply with the provisions of NFPA 30. Aggregate Limitations of Flammable and Combustible Liquids as per F116.3.1 shall not apply. The permit shall be reviewed for compliance by the local Fire Service Provider/Fire Department AHJ.

F-116.3.1.1 The provisions in this Section shall not supersede any zoning standard that might regulate or eliminate the use of aboveground storage tanks.

F-116.3.1.2 Aboveground Tanks containing flammable and combustible liquids shall be in approved fire resistive tank enclosure assemblies.

F-116.3.1.2.1 A fire resistive tank enclosure assembly storing flammable liquids shall consist of a tank bearing an Underwriters' label 142, 2085 or an equivalent testing criterion by an approved testing agency. A single tank or combination of tanks shall not exceed 12,000 gallons at one site.

F-116.3.1.3 The tank assembly shall be installed upon a minimum four-inch (4") slab, meeting requirements of the manufacturer's specifications. Each tank assembly shall be anchored to withstand uplifting by flooding or storm surges, including when the tank is empty.

F-116.3.1.4 Area around tank assembly shall be maintained free of combustible waste, debris and all types of storage. Any tank assembly exposed to vehicular traffic shall have collision barrier posts installed on all corners and sides so exposed and shall not be spaced more than four feet (4') apart, center to center. Fire Marshal/Fire Code Official, or their duly

authorized representative, may require the installation of collision barrier posts, even if the clearance guidelines can be achieved.

F-116.3.1.5 Dispensing devices are allowed to be installed on top of the tank enclosure assembly. Any such device dispensing Class 1 liquids shall have installed on the fill hose, a UL listed emergency breakaway device designed not to lose liquid from either side of the breakaway point. All product piping attached to the tank enclosure assembly shall be double walled, contain a sheer valve or equivalent, and shall be installed by an authorized pollutant storage system specialty contractor. External piping leading away from the tank shall have a valve located within six inches (6") to the shell of the tank. Approved antisiphon devices shall be installed at each connection of piping to a tank when such piping extends below the level of the top of such tanks both internally and externally. All underground pipe work shall be uncovered until inspected by building and Fire Service Provider/Fire Departments, and other regulatory agencies.

Exception: Factory installed piping does not have to be installed by an authorized pollutant storage system specialty contractor.

F-116.3.1.6 Aboveground tank assemblies temporarily out-of-service for a period not exceeding ninety (90) days shall immediately have the fill, gauge openings and pump suction capped and secured against tampering. The vent lines shall be left open. Aboveground tank assemblies out-of-service for a period exceeding ninety (90) days, shall be removed. The property owner or agent shall notify the Fire Service Provider/Fire Department of any tanks out-of-service greater than 90 days.

F-116.4 Only Labeled and Listed Pumps Shall Be Used; Gravity Flow Pumps Are Prohibited. Fuel shall be drawn from aboveground storage tanks by pumps bearing the label of an Approved Testing Laboratory, such as Underwriters Laboratories, Inc. The use of pressure systems or gravity flow type pump systems is prohibited.

SECTION F-117
Dispensing Areas

F-117.1 Dispensing areas shall be provided with a vehicular driveway constructed of reinforced concrete. It shall be sloped to allow any accidental discharge from the dispensing of fluid to flow away from the dispenser or any building and shall be subject to the approval of the Fire Marshal/Fire Code Official, or their duly authorized representative. This driveway shall be a minimum of twelve feet (12') wide and twenty feet (20') long, minimum. In every case, this driveway shall be large enough that the fuel hose, when fully extended, does not reach the far edge of the driveway.

F-117.2 A fire extinguisher with a minimum classification 4A-60BC shall be provided and so located that it will be not more than one hundred feet (100') from any pump, dispenser, or fill-pipe opening.

SECTION F-118
Flammable Liquid Storage at Port Everglades and the Fort Lauderdale-Hollywood International Airport

F-118.1 Aboveground storage of flammable liquids shall be permitted at Port Everglades and the Fort Lauderdale-Hollywood International Airport ("Airport"). All tank locations at the Airport shall be approved by the Broward County Fire Marshal/Fire Code Official, or their duly authorized representative, prior to the issuance of a permit to erect or install a tank.

F-118.2 All flammable liquid storage tanks at Port Everglades shall be constructed, installed and maintained in accordance with the Port Everglades Tariff Number 12 amendments thereto and reissues thereof.

SECTION F-119
Liquefied Petroleum Gases

F-119.1 Scope. This Section shall apply to the storage, handling and transportation of liquefied petroleum gas and the installation of all equipment pertinent to systems for such uses in addition to the requirements stated in NFPA-58, Storage and Handling of Liquefied Petroleum Gases.

F-119.2 Definition. Distributing Plant: A facility, the primary purpose of which is the distribution of gas, and which receives LP-Gas in tank car, truck transport or truck lots, distributing this gas to the end user by portable container (packaged) delivery, by tank truck or through gas piping. Such plants have bulk storage (2,000 gallons water capacity or more) and usually have container filing and truck loading facilities on the premises. Bulk plants are considered as being in this category. Normally no person other than plant management or plant employees shall have access to these facilities. Additionally, definitions contained in NFPA 58 shall apply.

F-119.4 Location of Containers and Limits:

F-119.4.1 All new liquefied petroleum gas storage installation and handling shall be in accordance with NFPA-58, the laws of the State of Florida, and all applicable rules, regulations, and ordinances of the AHJs.

F-119.4.2 Within the limits established by law restricting the storage of liquefied petroleum gas for the protection of heavily populated or congested commercial areas, the aggregate capacity of any one installation shall not exceed 2,000 gallons

water capacity, except that in particular installations this capacity limit may be altered by the approval of the Fire AHJ after consideration of special features such as topographical conditions, nature of occupancy and proximity to buildings, capacity of proposed tanks, degree of private fire protection to be provided and facilities of the local Fire Department. The storage of liquefied petroleum gas shall conform to the provisions of the local zoning ordinance.

F-119.4.3 Where a distributing point is allowed, there shall be in attendance a qualified person to make the transfer of liquefied petroleum gas. This person shall have been trained by a licensed gas company and be in possession of documents certifying such training. The owner of the distributing point shall be licensed by Florida Department of Agriculture and Consumer Services – Visions of Consumer Services.

F-119.4.4 All plans for installations at distributing points shall be submitted to the AHJs for permits and approval. In addition, plans for locations at distributing points for fixed (stationary) installations of

1) 2,000 gallons individual water capacity, or
2) with the aggregate water capacity exceeding 4,000 gallons, or
3) Any installation, regardless of size, which will be used for resale to the public, shall be submitted to the Florida Department of Agriculture and Consumer Services – Visions of Consumer Services for approval and proper licensing, and be approved before the installation is started. Other safety precautions shall be adhered to as designated by the Fire Code Official/Fire Marshal, or their duly authorized representative.

F-119.4.5 An LP Gas storage tank shall not be installed on the same island used for gasoline or diesel fuel dispensing. A minimum distance of 25 feet shall be maintained between the LP gas storage tank and the flammable liquid dispensing devices.

F-119.4.6 A distributing plant, as defined in F-119.2 shall be prohibited unless approved by the Fire Code Official/Fire Marshal or their duly authorized representative, of the jurisdiction.

F-119.4.7 Multiple container installations with a total storage water capacity of more than 180,000 gallons (150,000 gallons LP-gas capacity) shall be subdivided into groups containing not more than 180,000 gallons in each group. Such groups shall be separated by a distance of not less than 50 feet, unless the tanks are:

1) Buried or mounted in an approved manner, or
2) Protected with approved insulation on such areas that may be subject to impingement of ignited gas from pipelines or other leakage, or
3) Protected by firewalls of approved construction, or
4) Protected by an approved system for application of water, or
5) Protected by other approved means, where one of these forms of protection is provided, the separation shall not be less than 25 feet between such container groups.

F-119.4.8 The storage and transportation of liquefied petroleum gas and the installation of all pertinent equipment shall be installed and maintained in accordance with NFPA-58, and subject to the approval of the Fire Chief, or their duly authorized representative~~,~~ These orders shall apply to all persons and places within the jurisdiction except as herein provided.

F-119.5 Parking and Garaging: Vehicles containing cylinders of liquefied petroleum gases 20 lbs or greater in size are prohibited in public parking garages, this includes LP gas delivery vehicles. Vehicles that are powered by LP gas and meet NFPA 54 for fuel systems are permitted.

F-119.6 Prohibited Use of Liquefied Petroleum Gas:

F-119.6.1 Liquefied petroleum gas shall not be used for the purpose of operating any device or equipment unless such equipment or device is approved for use with a liquefied petroleum gas.

F-119.6.2 Liquefied petroleum gas shall not be released to the atmosphere except through an approved liquid level gauge or other approved device.

F-119.7 Dispensing and Overfilling.

F-119.7.1 The dispensing of liquefied petroleum gases shall be performed by a qualified attendant.

a. It shall be illegal for any person, firm, corporation, association, club or organization to operate a self-service liquefied petroleum gas dispensing operation which is open to the public.

F-119.7.2 A person shall not fill or maintain a liquefied petroleum gas container with liquefied petroleum gas in excess of the fixed outage gauge installed by the manufacturer or the weight stamped on the tank.

F-119.8 Safety Devices.

F-119.8.1 A person shall not tamper with or make ineffective the safety devices of any liquefied petroleum gas container.

F-119.9 Abandonment of Liquefied Petroleum Gas Equipment:

F-119.9.1 At the discretion of the Authority Having Jurisdiction, whenever the use of liquefied petroleum gas equipment has been discontinued, it may be abandoned in an approved manner within a period of 30 days. However, after 90 days, F-119.9.4 applies.

F-119.9.2 The following procedures may be used when approved by the Fire Chief or their duly authorized representative.

F-119.9.2.1 Removal of all liquefied petroleum equipment.

F-119.9.2.2 Burn-off content of container.

F-119.9.3 All service openings shall be capped or plugged after contents have been removed from container.

F-119.9.4 All LP tanks, abandoned or out of service in excess of ninety (90) days, shall be removed and properly disposed of.
F-119.9.5 Combustible Gas Detection; In all facilities where combustible gases are piped to an appliance, a combustible gas detection system with an external notification device shall be installed in accordance with NFPA 72. The external notification device shall provide audio and visual notification and have a sign not less than 14" x 14" stating "combustible gas detected, call 911".

F-119.10 Hydrogen Fuel for Emergency Power Systems.
Hydrogen stationary fuel cell power systems shall be installed in accordance with NFPA 853 of the current edition. Storage shall be in compliance with NFPA 55 (Storage, Use and Handling of Compressed Gases Cryogenic Fluids in Portable or Stationary Containers, Cylinders and Tanks) for installation.

SECTION F-120
Fireworks and Sparkler/Novelty Items
F-120.1 General Requirements.

F-120.1.1 The manufacturing of fireworks, sparklers and pyrotechnic materials is prohibited.

F-120.1.2 The storage of fireworks and pyrotechnic materials is prohibited except as permitted in NFPA 1, Section 65.

F-120.1.3 Except as hereafter provided, it shall be unlawful for any person, firm, co-partnership or corporation to store, to offer for sale, expose to store, expose for sale, sell at retail, or use or explode any fireworks and/or pyrotechnic materials.
F-120.1.3.1 Consumer fireworks can be utilized as per FS 791 on specified holidays.

F-120.1.4 Approved sparklers per F. S. 791.013 and any wholesaler registered in accordance with Florida Statute 791.015 as of July 1, 1996, who has obtained all applicable governmental licenses and permits to operate from a permanent structure within Broward County as of July 1, 1996, are exempt from this subsection.

F-120.1.5 Wholesale exemption sales of fireworks pursuant to F.S.791.04 shall be prohibited at temporary or seasonal sales sites, and sales sites located in tents, canopies and stands.

F-120.1.6 Permit Requirements and Operator Qualifications.

F-120.1.6.1. Application for permit to operate a display of fireworks or use of pyrotechnics before a proximate audience shall be made in writing on forms provided by the Authority Having Jurisdiction to the Fire Chief, or their duly authorized representative, at least 15 days in advance of the date of the display. Except as specifically modified within this Code, outdoor display of fireworks shall be as specified in NFPA 1123. See Section F 120.2 for additional requirements for Outdoor Display of Fireworks on Private Residential Property. See Section F- 120.3 for additional requirements for Offshore and Barge Fireworks Displays. Except as specifically modified within provisions of the Fire Protection Provisions of this Code, the FFPC, and all Fire Codes, use of pyrotechnics before a proximate audience shall be as specified in NFPA 1126.

F-120.1.6.1.1 Before any permit for a pyrotechnic display shall be issued, the person or organization making application shall furnish proof of financial responsibility to satisfy claims for damages to property or personal injuries arising out of any act or omission on the part of such person or any agent or employee thereof, in such amount, character, and form as the Fire Chief, or his/her duly authorized representative, determines to be necessary for the protection of the public.

F-120.1.6.1.1.1 A copy of the certificate of insurance naming the permitting agency as additional insured is required.

F-120.1.6.1.1.2 Minimum required amount of certificates of insurance for permit issuance is as follows: $1,000,000 for bodily injury, and $50,000 for property damage, per occurrence.

F-120.1.6.2 Permit application shall be set forth and contain the following:

F-120.1.6.2.1 The name, address and telephone number of the organization sponsoring the display, the supplier of the fireworks, the operator (pyrotechnician) and all assistants.

F-120.1.6.2.2 Application shall be signed by the sponsoring organization representative~~,~~ and the operator (pyrotechnician) and approved by Fire Chief or his/her designee.

F-120.1.6.2.3 References for the most recent three firework displays supervised and discharged by the designated operator shall be required for review by the AHJ. Said referenced displays shall be similar in size and complexity and will provide contact persons and telephone numbers.

F-120.1.6.2.4 The date and time of day at which the display is to be held and the duration time for said display. Permits shall not be issued for displays between the hours of 11:00 pm and 7:30 am.

F-120.1.6.2.4.1 Time restrictions stated above may not be applicable on January 1, July 4, and December 31, or any other date where specific permission to operate a display of fireworks is granted by the AHJ.

F-120.1.6.2.5 The exact location address for the display, event or production.

F-120.1.6.2.6 A copy of a location site plan with dimensions indicating the exact location planned for the display site and all grounds and facilities at which the event will be held. This plan shall include the location of all structures, audience viewing areas, roads, trees and utilities.

F-120.1.6.2.7 Operator and assistant qualifications shall comply with the provisions of NFPA 1123 and NFPA 1126.

F-120.1.6.2.7.1 The operator shall be responsible for ensuring that a sufficient number of assistants are available on site for the safe storage and conduct of the fireworks display.

F-120.1.6.2.7.2 Operators shall be at least 21 years of age and all assistants shall be at least 18 years of age. A copy of a valid driver's license or other valid picture I.D. acceptable to the AHJ shall be provided for all operators and assistants.

F-120.1.6.2.8 The type and number of fireworks to be discharged.

F-120.1.6.2.8.1 Aerial displays: Size and number of each type of burst (single, multiple, etc.)

F-120.1.6.2.8.1.1 All aerial shells, regardless of size, shall be fired using approved electrical ignition unless alternate method of ignition is approval by the AHJ.

F-120.1.6.2.8.1.2 All electrically fired displays shall provide a solid barrier located at least 100 feet from the mortar location from which all operators (pyrotechnicians) shall control the display with the exception of displays on barges.

F-120.1.6.2.8.2 Fixed displays. Size, type and description of displays.

F-120.1.6.2.8.3 The manner and place of storage of fireworks prior to display. The date, time and travel route from the point the fireworks enter Broward County.

F-120.1.6.2.9 Standby Firewatch Requirements.

F-120.1.6.2.9.1 The Fire Chief, or his/her duly authorized representative, shall require one or more standby firewatch personnel employed by the Fire Service Provider/Fire Department, to be on-duty for each display or performance. When deemed necessary the Fire Chief, or their duly authorized representative, additional fire rescue apparatus may be required for the display or performance. The expense of such personnel services and apparatus shall be borne by the permit holder and shall be paid prior to issuance of the permit.

F-120.1.6.2.9.2 The standby firewatch personnel shall be on duty from the time of display set up, during the display, and until termination of the display and removal of all fireworks, debris, pyrotechnical materials and devices from the site.

F-120.1.6.2.9.3 In the case of indoor displays or performances, standby firewatch personnel shall be maintained until total restoration of normal function of the fire safety systems has been verified.

F-120.1.6.2.9.4 At a minimum, at least one of the assigned standby firewatch personnel shall be a BORA Certified Fire Inspector.

F-120.2 Additional Requirements for Outdoor Display of Fireworks on Private Residential Property:

F-120.2.1 Written approval from the property owners located adjacent the proposed display site property is required prior to approval of a permit for outdoor fireworks display.

F-120.2.2 The display site shall have at least a 100 foot per inch radius of internal mortar diameter of the largest shell to be fired.

F-120.2.3 Minimum distance separation shall be no less than 300 feet from the nearest dwelling, building, or structure. This includes canopies, chickee huts, or similar structures, bulk storage areas, public highways, railroads or other means of travel.

F-120.2.4 Not within 1,000 feet of a school, theater, church, hospital, nursing home, assisted living facility, livestock/animal storage site, or similar structures or institutions.

F-120.2.5 No less than 50-foot radius from the nearest aboveground utility, telephone or telegraph line, tree, or other overhead obstruction.

F-120.2.6 The audience shall be restricted behind an approved barrier, location no less than 200 feet from the outside of the required display site distance separations.

F-120.2.7 Reserved

F-120.3 Offshore and Barge Fireworks Displays.

F-120.3.1 Firework displays shall only be permitted on approved barges. Barge means a non-self-propelled vessel and shall meet the requirements of NFPA 1123 for construction and sizing requirements of the discharge site.

F-120.3.2 A valid copy of a current U.S. Coast Guard permit of operation shall be provided for each barge display, if required by the U.S. Coast Guard.

F-120.3.3 At least two chase boats shall be provided to maintain a clear separation distance of at least 1,000 feet radius around the barge from other vessels, structures and the beach. Chase boats shall also provide transportation of fire rescue personnel when required.

F-120.3.4 Two-way compatible communication shall be provided for use by fire rescue and law enforcement personnel, chase boats and barge crew.

F-120.3.5 Ladder access shall be provided to allow immediate access for inspection and emergency response.

F-120.3.5.1 Stabilization shall be provided to secure the barge and prevent rotation from wind, water current and firing angle.

F-120.3.5.2 Inspection of the barge by the Fire Service Provider/Fire Department shall occur at least one to two hours prior to the scheduled departure for sea.

F-120.4 Safety Precautions for Outdoor fireworks.

F-120.4.1 If in the opinion of the Fire Chief, or his/her duly authorized representative, any unsafe or hazardous condition exists, the fireworks display shall be postponed until such time as said conditions are corrected.

F-120.4.2 If high winds, precipitation or other adverse weather conditions prevail, such that in the opinion of the Fire Chief, or his/her duly authorized representative, a significant hazard exists, the fireworks display shall be postponed until weather conditions improve to an acceptable level to allow discharge.

F-120.4.2.1 No discharge of a fireworks display shall be permitted to take place when the wind velocity is 17 knots (20 mph) or greater.

F-120.4.3 Immediately upon delivery to the display site, all fireworks shall be properly secured and shall not be left unattended at any time. When deemed necessary, the Fire Chief, or their duly authorized representative, may require the operator or employ special security measures to ensure the proper security of the stored fireworks.

F-120.4.4 A minimum of two, two and one-half gallon pressurized water fire extinguishers shall be available in the discharge area. Additional extinguishers or equipment may be required if conditions warrant. In addition, adequate water supply for fire protection shall be available at the discharge site.

F-120.5 Requirements for the Sale, Display, Merchandising, Storage and Handling of Approved Sparklers and Novelty Items within buildings, Structures, Canopies and Outdoor Sites.

F-120.5.1 No person shall be in possession of a lighted cigarette, cigar, or pipe, or any open flame, within 50 feet of any sales, display, merchandising, storage, or handling area. Proper receptacles for disposal of smoking materials shall be provided at all entrances to such areas (i.e. water filled or sand filled buckets).

F-120.5.2 A minimum of two approved two and one-half gallon pressurized water fire extinguishers shall be available within the sales, display, and handling areas; additional fire extinguishers or fire protection equipment may be required by the authority having jurisdiction.

F-120.5.3 Precautions shall be taken to protect against fire or spread of fire in all sites located within fields or lots with ground cover such as brush, grass or other overgrowth of vegetation.

F-120.5.4 Durable and readily visible signs to read “Caution Sparklers—No Smoking” shall be posted on the exterior of each entrance way into and throughout all sparkler sales, storage, and handling areas within the interior of any building, structure, canopy, or outdoor site. These signs shall be readily visible in all directions.

F-120.5.5 The use, ignition or discharge of any approved sparklers or novelty items is prohibited within buildings or structures where sparklers or novelty items are offered for sale, displayed, or stored, and within 100 feet of any outdoor sales storage or handling sites.

F-120.5.6 Buildings or structures used in whole or in part for sales (retail or wholesale), display, merchandising, handling, or storage of sparklers and/or novelty items shall be fully protected throughout with an automatic sprinklers system in accordance with NFPA 13, the edition in 69A-60, Florida Administrative Code.

F-120.5.7 No storage of sparklers or novelty items shall be permitted in vehicles.

Exception: Transportation purposes only, to and from the site or at a permitted site, if approved by the authority having jurisdiction.

F-120.5.8 Sales, display and merchandising shall be conducted in an approved and safe manner in order to control handling by the general public.

F-120.5.9 Amounts of sparklers and related novelty items displayed within the sales area shall not exceed those amounts approved by the Fire Chief, or their duly authorized representative. Note: Where the primary business of the occupancy is not sale of sparklers, the sale areas of sparklers or novelty items shall not exceed two percent of the net floor space of the building or structure.

F-120.5.10 Storage of approved sparklers and novelty items shall comply with the following.

F-120.5.10.1 Sparklers shall not be stored or kept in any area

F-120.5.10.1.1 In which paints, oils, or varnishes are manufactured or kept for use or sale, unless the paints, oils or varnishes are in unbroken (sealed) containers.

F-120.5.10.1.2 In which resin, turpentine gasoline or flammable substances which may generate vapors are used, stored, or offered for sale unless the resin, turpentine, gasoline, or substance is in unbroken (sealed) containers.

F-120.5.10.1.3 In which there is not at least one 2A10BC fire extinguisher available in the area used for storage.

F-120.5.10.2 Storage of sparklers shall be in an approved manner, remote from the public, and separated from all other merchandise by at least one hour fire protection and an approved automatic sprinkler system.

Exception: Canopies and approved steel storage vaults or containers when used outdoors.

F-120.5.10.3 Approved storage facilities shall be labeled with an approved Explosion placard complying with the Department of Transportation (DOT) Standard.

F-120.5.11 Outdoor sites for sale, storage, and/or handling of approved sparklers shall comply with the following distance requirements: The minimum distance between a storage site and any building or structure shall be 50 feet.

F-120.6 Separation.

F-120.6.1 The minimum distance required between a site and any fuel storage/dispensing area or device shall be 50 feet.

F-120.6.2 Storage areas shall be separated from sales and handling areas by a minimum of 25 feet.

F-120.6.3 Any building or structure used as storage facilities for sparklers and novelty items in conjunction with outdoor sites shall comply with the one-hour protection separation and automatic sprinkler system requirements as required for storage areas within building and structures.

Exception: Canopies and approved steel storage vaults or containers.

F-120.6.4 When a canopy can be used in conjunction with an outdoor site operation, the following shall apply:

F-120.6.4.1 No sides of any kind are permitted on the canopy at any time. Provide copy of Building Permit for canopy.

F-120.6.4.2 The canopy shall comply with the flame-retardant requirement. Proper flame retardant certificate required.

F-120.6.4.3 Proper exit and exit access shall be maintained at all times within the interior of the canopy. No obstruction to egress from any portion of the canopy is permitted.

F-120.6.4.4 Provide and maintain a minimum of one 2A40BC dry chemical fire extinguisher, with properly updated service tag for each 2,500 sq. ft. of canopy area. Not less than one fire extinguisher for each canopy.

F-120.6.5 If the site is to operate after daylight hours, the site shall be properly illuminated. If electricity powered and/or electrical equipment is used, the following shall apply:

F-120.6.5.1 All electrical equipment and associated wiring shall comply with NFPA 70, the National Electrical Code, edition as adopted in 69A-60, Florida Administrative Code. Provide copy of permit for electrical service and equipment.

F-120.6.5.2 If fuel powered generator is to be used to supply power for the site, the following shall apply.

F-120.6.5.2.1 Generator shall be kept a minimum distance of twenty feet (20') from sales, storage, or handling area.

F-120.6.5.2.2 Precautions against fire or fire spread shall be taken when generator sites are located within fields or grassed lots.

F-120.6.5.2.3 Only an approved metal five-gallon safety container shall be used to store fuel for the generator. Fuel containers shall be properly stored with a maximum of ten gallons per site.

F-120.6.5.2.4 Approved fuel containers shall not be stored in sales, storage, handling areas or vehicles.

F-120.6.5.3 Durable sign to read "NO SMOKING" shall be posted at the generator site.

F-120.7 Pyrotechnics Before Proximate Audience

F-120.7 The requirements for the use of pyrotechnics before a proximate audience shall be in accordance with the standards as set forth in the FFPC. In addition, the following local amendments shall apply:

F-120.7.1 Application for permit to operate a display of pyrotechnics before a proximate audience shall be made in writing on forms provided by the Authority Having Jurisdiction to the Fire Chief, or their duly authorized representative, at least 15 days in advance of the date of the display.

F-120.7.2 The local Fire Marshal/Fire Code Official, or their duly authorized representative at their discretion, shall require standby fire watch personnel employed by the AHJ of the Fire Service Provider/Fire Department, to be on duty for each display or performance. When deemed necessary by the local Fire Marshal/Fire Code Official, or his/her duly authorized representative, additional fire and rescue apparatus may be required for the display or performance. Any and all expense(s) of standby personnel services and apparatus shall be borne by the permit holder.

F-120.7.2.1 Standby fire watch personnel shall be on duty from the time of display setup, during the display, and until termination of the display and removal of all pyrotechnic materials, debris, and devices from the site.

F-120.7.2.2 In the case of indoor displays or performances, standby fire watch personnel shall be maintained until total restoration of normal functioning of the fire safety systems has been verified.

F-120.7.2.3 At a minimum, at least one of the assigned standby fire watch personnel shall be a BORA Certified Fire Inspector.

F-120.7.3 Any indoor use of pyrotechnics shall not be permitted in buildings or any portion thereof unless protected by an approved automatic sprinkler system.

F-120.7.3.1 Indoor use of pyrotechnics shall be prohibited in temporary structures such as tents, canopies,

F-120.8 Rooftop Pyrotechnics: In addition to the aforementioned code requirements, the following shall apply to rooftop pyrotechnic displays:

F-120.8.1 Only NFPA 1126 approved pyrotechnics shall be permitted for all rooftop displays.

F-120.8.1.1 If a rooftop display is being proposed, the pyrotechnician shall identify a debris fallout area on the submitted plan.

F-120.8.1.2 The pyrotechnician shall provide the local Fire Marshal/Fire Code Official, or their duly authorized representative with an approved, written notice from the FAA acknowledging receipt of the time frame of the display, the pyrotechnic material used, and approval from the FAA representative to proceed with the event.

F-120.8.1.3 Such an approved written notice shall be a part of the permit application submitted at least 15 working days prior to the event.

F-120.8.1.4 Failure to provide approved, written notice from the FAA to the local Fire Marshal/Fire Code Official, or their duly authorized representative, shall be cause for denial to display rooftop pyrotechnics.

F-120.8.1.5 At the discretion of the local Fire Marshal/Fire Code Official, or their duly authorized representative, the pyrotechnician may be required to post all, or part of the following:

F-120.8.1.5.1 Additional insurance policy in the amount of one million dollars indemnifying the local AHJ.

F-120.8.1.5.2 Post a refundable clean-up bond with the local AHJ holding the pyrotechnician responsible for post-event clean up from pyrotechnic debris fallout.

F-120.8.1.5.3 If the pyrotechnician is not directly responsible for post event cleanup of debris, the pyrotechnician shall furnish written proof from the party responsible for post event cleanup of pyrotechnic debris.

F-120.8.1.6 The pyrotechnician shall be held responsible for the cleanup of any NFPA 1126 pyrotechnic material fallout on any structure, vehicles, and/or part thereof in the fallout area unless otherwise advised in writing, to the fire code official, as to the contracted party responsible for such cleanup.

F-121 Automatic External Defibrillator (AED) and Bleeding Control Kit (BCK)

F-121.1.1 All new and existing buildings needing to comply with the following sections, shall be provided a maximum of eighteen (18) months from the date approved by the Broward County Board of Rules and Appeals to comply.

F-121.2 AED(S) and BCKs shall be installed in the following occupancies as defined in NFPA 101, Life Safety Code.

F-121.2.1 Assembly occupancy:

a. Fitness centers, gymnasiums, and indoor recreational centers in excess of one thousand five hundred (1,500) square feet.
b. Any assembly occupancy with a capacity of one hundred (100) or greater.
c. Places of worship with a capacity of one hundred (100) or greater.
d. F-121.2.1.1 Assemblies exceeding 30,000 square feet and multi-story assemblies shall require additional devices where the travel distance exceeds fire hundred (500) feet between AEDs

F-121.2.2 ***Business occupancy****:*

a. Office buildings/business occupancies with a square footage greater than twenty thousand (20,000) square feet.
b. All Dental offices in accordance with Florida Administrative Code 64B5-17.015.

F-121.2.3 ***Day Care occupancy****:*

a. All adult day care facilities

F-121.2.4 Educational occupancy:

a. All Charter and Private Schools.

F-121.2.5 ***Healthcare occupancy:***

a. Assisted living facilities as defined by section 429.021(5) Florida Statute as amended from time to time.
b. Ambulatory surgical centers as defined by section 395.002 (3) Florida Statute as amended from time to time.
c. Walk in medical care facilities.
d. Hospitals providing emergency services, including freestanding facilities, shall be excluded.

F-121.2.6 ***Mercantile occupancy****:*

a. Commercial and retail spaces with a square footage greater than thirty-five thousand (35,000) square feet.

F-121.2.6.1 Mercantile Class A and multistory occupancies shall require additional devices where the travel distance exceeds fire hundred (500) feet between BCK'S.

F-121.2.7 Residential occupancy:

a. All hotels and motels.
b. Multi-story residential buildings five (5) floors or more. Residential elevators supplying services to an independent dwelling unit only, shall be exempt from this requirement.

F-121.2.7.1 Multi-story residential occupancies listed above shall place an AED and BCK at every building entrance lobby no further than 15 feet from any elevator. The AHJ can modify the requirements of F-121.2.7 requirements based on the footprint of the residential building.

F-121.3 ***Installation and Operation***.

F-121.3.1 The Authority Having Jurisdiction (AHJ) shall verify all AED devices and BCK'S for operation prior to being placed in service or available for use, and on an annual basis.

F-121.3.2 AED(S) devices and Bleeding Control Kit <u>BCK(S)</u> shall be:

a. Conspicuously located in plain view of the primary public entrance or by the elevator lobby with unobstructed access.
b. Readily accessible and immediately available when needed for on-site employees and the general public, including disabled persons.
c. The AED(S) and BCK(S) shall be housed in a cabinet with a clear window in the door, an audible alarm signaling the opening of the door, permanently affixed to a wall, and whose top is no more than forty-eight (48) inches above the floor to prevent tampering, theft, or damage.
d. The AED shall be located below a sign having a minimum area of seventy (70) square inches and containing the letters "AED" and the universally recognizable symbol, which should be placed no more than sixty (60) inches, on center, above the floor.

e. The BCK shall be located below a BCK sticker. The ~~SBK~~ BCK sticker may also be placed on the cabinet containing the BCK.
f. If there is more than one entrance or exit in the building, or if the building is multiple stories, the business owner shall place a sign at each entrance, exit, or elevator indicating the location of the automated external defibrillator device.

F-121.3.3 AED devices shall contain adult pads and pediatric pads as required by the AHJ.

F-121.3.4 BCK(S) with the exception of large occupancy BCK(S), shall minimally contain:
a. Two (2) commercially manufactured tourniquets; and
b. Two sets of gloves; and
c. One (1) scissor; and
d. Two (2) 3-inch gauze rolls; and
e. Two (2) gauze combine pads.

F-121.3.5 Places of occupancy that hold 500 or more persons, regardless of occupancy classification, shall have a large occupancy BCK, which minimally contain:
a. Eight (8) commercially manufactured tourniquets; and
b. Four (4) Sets of gloves; and
c. Two (2) scissors; and
d. Eight (8) 3-inch gauze rolls; and
e. Eight (8) gauze combine pads.

F-121.3.6 The AED(S) devices and BCK(S) shall be used in accordance with the manufacturer's guidelines.

F-121.3.7 It shall be the responsibility of the owner/occupant to:
a. Install the AED device and BCK;
b. Provide all necessary training and appropriate use; and
c. Maintain AED devices and BCK in accordance with manufacture recommended maintenance requirements and as required herein.

F-121.3.8 If an AED device or BCK is removed for repair, a replacement shall be provided by the owner/occupant or by the manufacturer.

F-121.3.9 *Requirements and procedures.* The following shall be the requirements and procedures for use, training, and data collection of the AED and BCK program:

F-121.3.9.1 The implementation of an AED and/or BCK shall occur only after a written notification is made to the Fire Chief or designee by the individual, entity, organization, or company acquiring an AED. The written notification must contain the facility or business name, street address, specific location of the AED and/or BCK, the number employees at the facility or business, the total number of persons trained or to be trained in the use of the AED and BCK, and name of manufacturer and model number of each AED.

F-121.3.9.2 Prior to implementation of an AED or BCK, in any non-residential occupancy, the individual, organization or company will obtain and send to the AHJ, proof of standardized training for all intended users of the AED and BCK. The training shall consist of a class provided by a nationally recognized organization, or locally approved by the AHJ, including, but not limited to, the American Heart Association, the American Red Cross, and the National Safety Council, and shall follow a standardized curriculum. The standardized curriculum shall include, at a minimum:
a. Signs and symptoms of sudden cardiac arrest.
b. Cardiopulmonary resuscitation (CPR); and
c. Proper use, maintenance, and inspection of AEDs.

F-121.3.9.3 The training for the BCK shall consist of a class provided by a nationally recognized organization or locally approved by the AHJ. The standardized curriculum shall include, at a minimum:
a. Tourniquet application and use

F-121.3.9.4 The owner of the AED will ensure that the use of the AED follows the policies and procedures developed and authorized by the AHJ, and the provision of F.S. § 401.2915, as may be amended.

F-121.3.9.5 Recertification of users, maintenance, and inspection of the AED and BCK is the responsibility of the owner/occupant and shall be done on a periodic basis, as prescribed by the manufacturer and/or certifying agency. Recertification of users will consist of a class, which will review the techniques for using the AED and BCK and follow a standardized curriculum. Recertification training shall be provided as in section F-121.2 and F-121.3 above. Maintenance of the AED device and BCK shall be in accordance with the manufacturer's recommendations.

F-121.3.9.6 The AHJ may conduct a quality assurance review after the use of an AED or BCK that includes gathering clinical data and information from the person that used the AED or BCK and from the AED itself.

F-121.3.9.7 Any person who uses an AED is required to contact the AHJ by calling 9-1-1 immediately prior to, or immediately upon use of the AED (F.S. § 401.2915 (c)).

F-121.3.9.8 The owner and user of the AED or BCK will not withhold consent for a quality assurance review by the AHJ

after the use of an AED or to the retrieval of clinical data from the device itself.

F-121.3.9.9 The AHJ shall verify the presence of the AED device and/or BCK and may inspect any maintenance records and documentation of training to ensure compliance with the community AED and stop the bleed program.

F-121.3.9.10 The AHJ is not liable for any damages experienced by the AED and by the BCK, or any person or entity arising as a result of:

a. Business's use or misuse of the equipment or supplies.
b. Business's failure to provide services pertaining to the equipment supplies
c. Any defects in the equipment or supplies.

Immunity from civil liability provisions. The provisions of F.S.768.1325, and specifically the immunity from civil liability for any harm resulting from the use or attempted use of an automated external defibrillator (AED) device as found in F.S. 768.1325(3) as may be amended from time to time are hereby adopted and incorporated into the ordinance.

F-122 Mobile and Temporary Cooking Operations

F-122.1 The following section shall be a minimum life safety requirement but can be modified if deemed necessary by the local AHJ.

F-122.1.1 Mobile or Temporary Cooking. Any cooking facility, apparatus or equipment, being operated on a one time or interim basis, or for less than 90 days in the same location, other than at a fixed location, building or structure which has been inspected and permitted under another section of this code, regulation or statute, inclusive of self-propelled trucks and vehicle, trailered units, push carts, equipment located under cover of awnings, canopies or pop-up tents, or other structures for which a building permit has not been issued.

F-122.1.2 All current licensing, semiannual / annual fire suppression system inspections reports and a cleaning report with related documents shall be placed in a binder and accessible to the AHJ at all times.

F-122.1.3 Prior to operating within Broward County, each Mobile Food Dispensing Vehicle shall be inspected and approved.

a. Inspection and approval by the AHJ shall not relieve the mobile food vendor's owner of the responsibility of compliance with the design, construction, installation, alteration, repairs, equipment maintenance, process and relocation of the mobile food truck.
b. Inspection and approval shall not hold the AHJ responsible for the enforcement of regulations of such other regulatory agencies unless specifically mandated to enforce those agencies regulations.

F-122.1.4 Cooking equipment that produces grease-laden vapors shall be protected by a fire-extinguishing system. Automatic fire-extinguishing systems shall comply with ANSI/UL300 or other equivalent standards and shall be installed in accordance with the terms of their listing, the manufacturer's instructions, and NFPA 17A.

F-122.2 Cleaning

F-122.2.1 The entire exhaust system, appliances, floor underneath and wall behind appliances, shall be inspected and cleaned for grease buildup by a properly trained, qualified, and certified person(s) acceptable to the AHJ and in accordance with Table 11.4 in NFPA 96 and in accordance with

F-122.3 Fire Extinguishers

F-122.7.1 There shall be a quarter-turn valve installed within the LP- gas piping for emergency shut-off use, shall be installed on the exterior of the vehicle and readily assessable.

F-122.7.2 A "PROPANE EMERGENCY SHUT-OFF" sign and a "NO SMOKING" sign shall be installed directly next to or above the gas cylinder and shall be a highly visible, permanent weatherproof sign with a minimum of 2" lettering.

F-122.7.3Cylinders shall be retested every 5-12 years in accordance with the manufacturer's recommendations and 49 CFR 180.205.

a. No letter after the requalification date means the cylinder must be retested within 12 years.
b. An "S" after the requalification date means the cylinder must be retested within 7 years.
c. An "E" after the requalification date means the cylinder must be retested within 5 years.

F-122.8 Leak Detection

F-122.8.1 A test gauge shall be installed at or before the regulator for means of leak detection. Pressure shall be observed for a minimum of 3 minutes with no drop in pressure. Propane tanks, hoses and fittings shall be free of leaks. Documentation that the system is free of leaks shall be kept in a binder and readily assessable for the AHJ upon request.

F-123 Permanently Installed Cooking Exhaust Systems

F-123.1 Cooking Exhaust Systems: Cleaning of Cooking Exhaust Systems shall be in compliance with NFPA 96 and the following.

F-123.2 Cooking ventilation systems shall be inspected for grease buildup by a person meeting the training requirements as set forth by International Kitchen Exhaust Cleaning Association (IKECA) or other nationally recognized exhaust system cleaning association acceptable to the AHJ in accordance with NFPA 96, Section 11.6.1.

F-123.3 Certification of training shall be submitted to the Local AHJ prior to cleaning operations taking place.

F-123.4 The completed inspection or cleaning report as found in NFPA 96, 11.6.14 shall be provided to the owner and a copy along with photos taken prior to cleaning and after cleaning shall be submitted to the local AHJ.

F-124 Uniform Generator Code

F-124.1 Scope The purpose of this document is to provide uniform procedures for the AHJs' in Broward County as it pertains to secondary power sources. Any occupancy as defined by the provisions of the Florida Fire Prevention Code (FFPC) as requiring emergency or legally required standby power, as per Florida State Statute or the Florida Administrative Code, shall comply with the provisions of this code.

F-124.2 Referenced Publications:

NFPA 1, *Fire Code*
NFPA 30, *Flammable and Combustible Liquids Code*
NFPA 37, *Standard for the Installation of and Use of Stationary Combustion Engines and Gas Turbines*
NFPA 54, *National Fuel Gas Code*
NFPA 58, *Liquefied Petroleum Gas Code*
NFPA 70, *National Electrical Code*
NFPA 72, *National Fire Alarm and Signaling Code*
NFPA 110, *Standard for Emergency and Standby Power Systems*
NFPA 111, *Standard on Stored Electrical Energy Emergency and Standby Power Systems*
NFPA 720, *Standard for the Installation of Carbon Monoxide (CO) Detection and Warning Equipment*
Florida Administrative Code 58A-5.036 for Assisted Living Facilities
Florida Administrative Code 59A-4.1265 for Nursing Homes
Florida Building Code

F-124.3 General:

F-124.3.1 Existing approved, non-conforming installations shall be deemed compliant with this code unless the AHJ determines that nonconformity presents a distinct hazard to life.

F-124.3.2 All facilities shall store a minimum of seventy-two (72) hours of fuel onsite and be able to show proof (such as a fuel service contract) of a reliable method to obtain the additional twenty-four (24) hours of fuel within forty-eight (48) hours of a declared State of Emergency. Piped natural gas is an allowable fuel source.

F-124.3.3 If local ordinances or other regulations limit the amount of onsite fuel storage at the location of the facility, then the owner/operator shall develop a plan that includes maximum onsite fuel storage allowable by the ordinance or regulation and a reliable method to obtain the maximum additional fuel at least 24 hours prior to the depletion of the onsite fuel.

F-124.3.4 Storage of any fuels shall be compliant with the applicable National Fire Protection Association's (NFPA) codes and standards.

F-124.3.5 Other fuel sources shall be permitted in conformance with the NFPA 54 and 58 as currently adopted.

F-124.4 Minimum Permit Submittal Requirements:

F-124.4.1 The following is a list of the minimum required information that shall be submitted to the AHJ for review:

a. Plans shall be submitted for permitting, with details and manufacturer specifications that demonstrate compliance with all applicable NFPA codes and standards. The submittal shall be made by a qualified and licensed contractor.
b. All generators shall be NFPA 110 compliant.
c. Plans shall clearly identify the class, type, and level of the generator.
d. A site plan shall be provided indicating the location of the emergency generator in relation to the building openings as well as adjacent building openings, exit discharges, the fuel source type, and the automatic transfer switch.
e. The location of the manual emergency shut off shall be clearly identified on the plans. The emergency shut off shall be readily accessible at all times, identified with permanent weatherproof signage, shall be readily visible to emergency responders, and the location shall be approved by the AHJ.
f. Plans shall demonstrate that the fuel supply can accommodate the specific EPS class and time duration identified on the plans.
g. Physical protection of the fuel source and generator when located in areas subject to vehicular traffic shall be clearly identified.
h. A remote generator annunciator shall be installed at a continuously attended location and indicated on the plans, approved by the AHJ.

i. A signed generator maintenance contract shall be submitted, maintained, and made available to the AHJ upon request.
j. Carbon monoxide protection shall be installed in accordance with NFPA 720. The location(s) of Carbon Monoxide Alarms shall be indicated on the plans.

F-124.5 Inspection and Testing

a. Emergency Power Supply Systems' (EPSS), including all appurtenant components, shall be inspected weekly and exercised under load at least monthly.
b. The facility owner shall ensure that the EPSS is properly maintained and serviced not less than annually by a qualified person or contractor in accordance with the manufacturer's specifications.

F-124.6 Records Retention

a. Each facility shall provide a binder which contains a log of weekly inspections and monthly load exercise. The owner or their agent is responsible for the proper recording of this information.
b. The binder shall also include a copy of the annual service agreement as well as the most current annual service report.
c. This binder shall be made readily accessible to the AHJ upon request.

Section 4

Broward County
Board of Rules and Appeals
1 N. University Drive Suite, 3500B, Plantation, FL 33324
Phone: 954-765-4500 | Fax: 954-765-4504
broward.org/CodeAppeals

TO: Members of the Board of Rules and Appeals

FROM: Administrative Director

DATE: July 13, 2023

RE: Fiscal Year 2024 Budget (October 1, 2023 – September 30, 2024)

Recommendation

The Administrative Director recommends that the Board of Rules and Appeals authorize, by motion, an operating budget for the fiscal year (FY) 2024 for $2,879,900. The operating budget allocates funding for personnel services, operational expenses, and capital outlay. In comparing the FY 2023 adopted budget of $2,514,860 with the FY 2024 requested budget of $2,879,900, there is an increase of $365,040 or 14.52%.

Reasons

As of June 2023, the Board of Rules and Appeals has a fund balance (reserves) of $11,447,666. We anticipate an increase this year of $1,380,854, making our fund balance $12,828,520 or about 12.06% by September 30, 2023. In addition, we expect to earn $80,475 in interest earnings for the fiscal year 2023, which would increase the fund balance to $12,908,995.

The recommended budget includes adequate funding for operating expenses and substantial reserves.

Additional Information

Revenue Overview

Revenues remain sufficient to cover the expenses associated with each fiscal year. There is no anticipated rate increase in the next fiscal year. The rate recommendation decision is due to our financial reserves and will be evaluated by the Board each year.

A recent history of municipal fees received and projected is listed below:

FY 2021	Actual	$2,721,841
FY 2022	Actual	$3,140,143
FY 2023	Estimated	$2,446,000
FY 2024	Projected	$2,900,000

The FY 2024 projected revenues increase by 18.56% compared to FY 2023 based on a continued strong economy and the number of construction projects throughout the County.

Expenses Overview

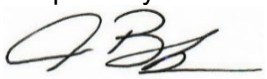
Personnel Services, including salaries and employee benefits, are $2,049,870 in FY 2024 compared to $1,765,960 in the FY 2023 adopted budget. The additional monies include adding a staff member, an operations manager, a cost-of-living Increase, and an annual performance pay increase (1%-4%). The total increase in FY 2024 is $283,910, or 16.08%

Operating expenses in FY 2024 will be $700,300 compared to $682,620 in the FY 2023 adopted budget, an increase of $17,410 or 2.55%, primarily reflecting a software system to enable us to transition to a paperless system and legal services.

The requested Capital Outlay expense in FY 2024 is $130,000 compared to $118,800 in FY 2023, an increase of $11,200, or 9.43%. This increase is for additional books due to the three-year cycle of the Florida Building Code (ASHRAE Standards, National Electric Code Handbooks, ICC Code references, and Standards) and replacement electric vehicles. Broward County requires all replacement vehicles to be electric, which is costly compared to gas cars.

Forms and the Budgeting Process
Attached are a budget summary and performance measures reported to the Broward County Budget Office as part of the County's annual budget development process.

Respectfully Submitted,



Ana C. Barbosa, DBA

Fiscal Year 2024

BOARD OF RULES AND APPEALS	FY22 Actuals	FY 23 Budget	FY24 Budget
Fund Balance	$10,267,829.00	$10,597,000.00	$12,980,000.00

REVENUES	FY22 Actuals	FY 23 Budget	FY24 Budget
Permits Fees Special Assessment	$3,140,143.63	$2,351,600.00	$2,900,000.00
Interest and Other Earnings	$13,181.46	$50,000.00	$80,475.00
Less Five Percent	-$112,810.00	-$120,080.00	-$149,024.00
Total	**$3,040,515.09**	**$2,281,520.00**	**$2,831,451.00**

EXPENSES	FY22 Actuals	FY 23 Budget	FY24 Budget
Personnel Services	$1,598,224.98	$1,765,960.00	$2,049,870.00
Operating Expenses	$428,849.83	$682,620.00	$700,300.00
Capital Outlay	$79,980.00	$118,800.00	$130,000.00
Total	**$2,107,054.81**	**$2,567,380.00**	**$2,880,170.00**

Total Positions	**12**	**12**	**13**

PERFORMANCE MEASURE	FY19 Actuals	FY20 Actuals	FY21 Actuals	FY22 Actuals	FY23 Target	FY24 Proposed
Number of appeals filed	1	3	1	4	5	3
Number of code changes approved by the Broward County Board of Rules and Appeals	398	40	13	15	12	400
Number of code interpretations approved by the Broward County Board of Rules and Appeals and staff	8,980	9,000	6,468	7,336	6,483	8500
Number of training seminars and training sessions presented	86	100	76	114	114	120
Number of certifications	685	1,036	924	950	924	1000
Number of technical advisory committee and subcommittee/workgroup sessions of the Florida Building Commission attended as a voting member	34	30	18	35	18	18
Number of regularly scheduled certification visits by full Broward County Board of Rules and Appeals staff to building departments	18	21	21	21	21	21
Number of call outs for building code compliance review requested by either building officials or chiefs for Broward County Board of Rules and Appeals code compliance staff	346	225	425	425	425	450
Number of training sessions attended by Board of Rules and Appeals staff	280	320	265	378	300	300
Number of complaints received leading to investigations	2	5	2	5	3	2