

BUILDING CODE DIVISION | BUILDING PERMITTING

2307 West Broward Boulevard, Suite #300 • Fort Lauderdale, Florida 33312 • 954-765-4400 • Broward.org/Building

Section RR4402.13 HIGH VELOCITY HURRICANE ZONES – REQUIRED OWNERS NOTIFICATION FOR ROOFING CONSIDERATIONS

§RR4402.13 **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 Section RR4402 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 has been explained.

Aesthetics-Workmanship : The workmanship provisions of Section RR4402 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 own and the contractor.
Renailing Wood Decks : When replacing roofing, the existing wood roof deck may have to be renailed in accordance with the current provisions of Section RR4402. (The roof deck is usually concealed prior to removing the existing roof system.)
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 to be performed.
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. This provides the option of maintaining this appearance.
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 the 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.
Overflow Scuppers (wall outlets): It is required that rainwater flows 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 overflow scuppers (wall outlets) are not provided. It may be necessary to install scuppers in accordance with the requirements of RR4403 and RR4413.
Ventilation: Most roof structures should have some ability to vent natural air flow through the interior of the structura 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's Signature Date Contractor's Signature

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:

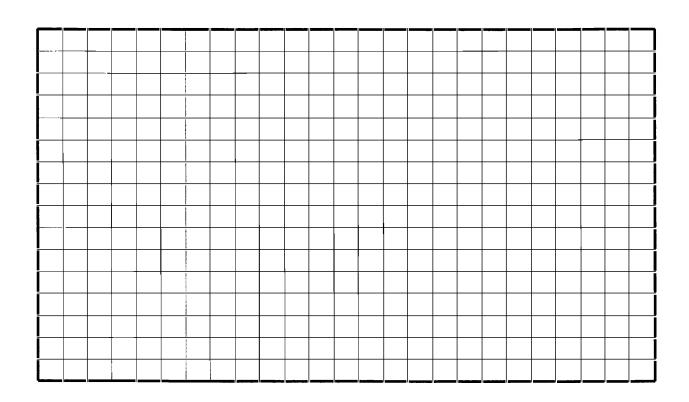
1.	Fire Directory Listing Page
2.	From Product Approval:
İ	Front Page
	Specific System Description
	Specific System Limitations
	General Limitations
	Applicable Detail Drawings
3.	Design Calculations per Chapter 16, or if applicable, RAS 127 or RAS 128
4.	Other Component of Product Approval
5.	Municipal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

Section A (General Information)

Master Permit No							Process No				
Cor	ntractor's Name										
Job	Address										
						ROOF CATEGORY					
	Low Slope				Med	hanically Fastened Tile			Mortar/Adhe	sive	e Set Tiles
	Asphaltic Shingles			☐ Metal Panel/Shingles					Wood Shing	jles/	Shakes
					Pres	scriptive BUR-RAS 150					
						ROOF TYPE					
	New roof		Repair			Maintenance		Reroof	ing		Recovering
					ROC	OF SYSTEM INFORMAT	TION				
Low Slope Roof Area (SF) S				Ste	ep Sl	loped Roof Area (SF)					Total (SF)

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.



Section C (Low Slope Application)	Surfacing:
Fill in specific roof assembly components and identify manufacturer	Fastener Spacing for Anchor/Base Sheet Attachment:
(If a component is not used, identify as "NA")	Zone 1':" oc @ Lap, # Rows @" oc
System Manufacturer:	Zone 1:" oc @ Lap, # Rows @" oc
Product Approval No.:	Zone 2:" oc @ Lap, # Rows @" oc
Design Wind Pressures, From RAS 128 or Calculations:	Zone 3:" oc @ Lap, # Rows @" oc
Zone 1': Zone 1: Zone 2: Zone 3:	Number of Fasteners Per Insulation Board:
Max. Design Pressure, from the specific product	Zone 1': Zone 1: Zone 2: Zone 3:
approval system: Deck: Type:	Illustrate Components Noted and Details as Applicable: Woodblocking, Gutter, Edge Termination, Stripping, Flashing Continuous Cleat, Cant Strip, Base Flashing, Counterflashing Coping, Etc.
Gauge/Thickness:	Indicate: Mean Roof Height, Parapet Height, Height of Bas Flashing, Component Material, Material Thickness, Fastene Type, Fastener Spacing or Submit Manufacturers Details the
Slope:	Comply with RAS 111 and Chapter 16.
Anchor/Base Sheet & No. of Ply(s):	
Anchor/Base Sheet Fastener/Bonding Material:	[
Insulation Base Layer:	
Base Insulation Size and Thickness:	FT.
Base Insulation Fastener/Bonding Material:	Parapet Height
Top Insulation Layer:	
Top Insulation Size and Thickness:	FT.
Top Insulation Fastener/Bonding Material:	Mean
Base Sheet(s) & No. of Ply(s):	Roof Height
Base Sheet Fastener/Bonding Material:	
Ply Sheet(s) & No. of Ply(s):	
Ply Sheet Fastener/Bonding Material:	
Top Ply:	
Top Ply Fastener/Bonding Material:	

Section D (Steep Sloped Roof System)

oof System Manufacturer						
otice of Acceptance Num						
linimum Design Wind Pre Zone 1:	ssures, if Applica Zone 2e:				Zone 3r:	
	Deck Type:					
	Type U	Inderlayment:				
Roof Slope:						
: 12	\ ln	sulation:				
		Fire Barrie	1			
Ridge Ventilation?		Faster	er Type & Spa	acing:		
		<i>A</i>	Adhesive Type	:		
			Type Cap	Sheet:		
Mean Roof Heig	ht:		Roof (Covering:		
				ype & Size Dri dge:	p	

Section E (Tile Calculations)

For Moment based tile systems, choose either Method 1 or 2. Compare the values for M_r , with the values from M_r . If the M_r values are greater than or equal to the M_r values, for each area of the roof, then the tile attachment method is acceptable.

Method 1 "Moment Based Tile Calculations Per RAS 127"

(Zone 1:>	λ =	=) – Mg:	_ = M _{r1}	Product Approval M _f
(Zone 2e:;	κλ:	=) – Mg:	_ = M _{r2e}	Product Approval M,
(Zone 2n:;	κλ=) – Mg:	_ = M _{r2n}	Product Approval M _f
(Zone 2r: >	‹ λ :	=) – Mg:	_ = M _{r2r}	Product Approval M _f
(Zone 3e: >	κλ=	=) – Mg:	_ = M _{r3e}	Product Approval M _f
(Zone 3r:	κλ =	=) — Ma:	= M ₂ ,	Product Approval M.

Method 2 "Simplified Tile Calculations Per Table Below"

Required Moment of Resistance (M,) From Table Below _____ Product Approval M, _____

	M, red	quired Moment F	lesistance*		
Mean Roof Height Roof Slope	15′	20′	25′	30′	40′
2:12	34.4	36.5	38.2	39.7	42.2
3:12	32.2	34.4	36.0	37.4	39.8
4:12	30.4	32.2	33.8	35.1	37.3
5:12	28.4	30.1	31.6	32.8	34.9
6:12	26.4	28.0	29.4	30.5	32.4
7:12	24.4	25.9	27.1	28.2	30.0

^{*}Must be used in conjunction with a list of moment based tile systems endorsed by the Broward County Board of Rules and Appeals.

For Uplift based tile systems use Method 3. Compare the values for F' with the values for F_. If the F' values are greater than or equal to the F, values, for each area of the roof, then the tile attachment method is acceptable.

Method 3 "Uplift Based Tile Calculations Per RAS 127"

(Zone 1: x L	=	_ × w: =) – W:	_ × cos r	_ = F _{r1}	Product Approval F'
(Zone 2e: × L	=_	× w: = _) – W:	× cos r _	= F _{r2e}	_ Product Approval F'
(Zone 2n: × L _	=_	× w: = _) – W:	× cos r	= F _{r2n}	Product Approval F'
(Zone 2r: x L	=_	× w: = _) – W:	× cos r	= F _{r2r}	Product Approval F'
(Zone 3e: × L _	=	× w: = _) – W:	× cos r _	= F _{r3e}	Product Approval F'
(Zone 3r: × L	=_	× w: = _) – W:	× cos r	= F _{r3r}	Product Approval F'

Where to Obtain Information						
Description	Symbol	Where to find				
Design Pressure	Zones 1, 2e, 2n, 2r, 3e, 3r	From applicable table in RAS 127 or by an engineering analysis prepared by PE based on ASCE 7				
Mean Roof Height	Н	Job Site				
Roof Slope	θ	Job Site				
Aerodynamic Multiplier	λ	Product Approval				
Restoring Moment due to Gravity	M _a	Product Approval				
Attachment Resistance	M _r	Product Approval				
Required Moment Resistance	M _q	Calculated				
Minimum Attachment Resistance	F	Product Approval				
Required Uplift Resistance	F,	Calculated				
Average Tile Weight	W	Product Approval				
Tile Dimensions	L = length W = width	Product Approval				
All calculations must be submitted	to the building official at the tir	ne of permit application.				



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Prescriptive Method: To comply with Section 706.8 Florida Existing Building Code Seventh Edition (2020), Roof- to-wall connections on an existing structure with a sawn lumber, wood plank or wood structural panel roof deck:

<u>Must be completed by</u>: Florida Professional Engineer, Registered Architect, Licensed General Contractor, Building Contractor, Residential Contractor, or persons certified in the structural discipline under FS468 excluding Standard Roofing Inspector and/or Roofing Contractor <u>prior to final building inspection.</u>

Where mandated retrofits are required pursuant to F.B.C. 2020 Seventh Edition Existing Building Section 706.8 and Broward County Amendments, the intersection of roof framing with wall below shall be improved as specified in Table 706.8.1. As an alternative to an engineered design, the prescriptive retrofit solutions provided in Sections 706.8.1.3 through 706.8.1.6 shall be accepted as meeting the mandated roof-to-wallretrofit requirements pending final inspection and after completion of Option 1 or verification of Option 2.

I	, Contractor/Qualifier do affirm and certify that the Hurricane
Mitigation Retrofits installed at	, meet at least one of the
following options (see option 1 or option 2). Please of	omplete appropriate option information.
Option 1 Hurricane Retrofit Mitigation B	uilding Permit NumberMetal
connectors, clips straps, fasteners were installed und	ler my supervision; and the Mitigation Retrofits are installed in compliance with
the prescriptive methods of 706.8.1.3 through 706.8	.1.6. Existing anchors werefound to have(#
of) fasteners and additional fasteners were instal	led to make a total of
per anchor. Photos are to be provided	with this affidavit for verification.
Additional anchors (Manufacturer and Model No.)	were installed
using (Quantity, Size & Type)	
Other methods of retrofit used (describe in detail or at	tach additional sheets)
	OR
fasteners are not required. Photo doc contractor/qualifier of inspection and by what fasteners, and his findings.	to have(# of)type of fasteners and additional sumentation shall be provided and a report addressing the t method they have inspected, existing metal connectors, clips straps,
· · · · · · · · · · · · · · · · · · ·	does affirm and certify that the above applicable information for Hurricane of roofing system atis true and accurate and this inspection and
Qualifier's Name (Print)	Qualifier's Signature
License #	
STATE OF FLORIDA – BROWARD COUNTY	
	me on thisby, 20by, as,
v	vho is
$\ \square$ Personally, known to me OR $\ \square$ Produced the fo	ollowing type of identification
(NOTARY SEAL) N	OTARY SIGNATURE
NO	TARY PRINTED NAME

NOTE: Structural Misc. Sub-Permit by a CGC, CBC, or CRC required if retrofit is deemed necessary.