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**Board Administrative Director** James DiPietro

-Established 1971-

# **BROWARD COUNTY** BOARD OF RULES AND APPEALS

## FBC 6<sup>th</sup> Edition (2017) **FORMAL INTERPRETATION (#5)**

**DATE: October 12, 2017** 

All Building Officials TO:

FROM:

James DiPietro, Administrative Director

**SUBJECT:** Retrofit of Windows, Doors, Garage Doors, Shutters and Skylights FBC Existing Building, Alteration Level I

At its meeting of October 12th, 2017 the Board approved an interpretation of Retrofit of Windows, Doors, Garage Doors, Shutters and Skylights, for detached one and two family dwellings, and multiple single family dwellings, (townhouses) with common roof height < 30feet.

1. A Florida Professional Engineer or Architect may modify the buck or fasteners as specified in a Notice of Acceptance. Such modification must be documented with a signed and sealed letter or drawing.

2. To obtain the required design pressure for a specific opening at a specific site, an individual must utilize one of the following and submit documentation as indicated.

a) A site-specific plan (signed and sealed) by a Florida Professional Engineer or Architect, indicating the location of all retro openings and the required design pressures.

b) A site-specific plan (not sealed) indicating the location of all retro openings accompanied by a worst case design pressure chart (signed and sealed) prepared by a Florida P.E. or Architect.

c) A site-specific plan (not sealed) indicating the location of all openings and indicating the required design pressures based on the Broward County Fenestration Voluntary Wind Load Chart. (see attached chart).

3. Buildings with a (height) > 30 feet or more shall have a site-specific design (signed and sealed) by a Florida Professional Engineer or Architect, indicating the location of all retro openings and the required design pressures for each opening.

NOTE: Generic charts, graphs alone, etc. are not acceptable for buildings above 30 feet.

ORIGINAL DATE:	September 12, 2012
<b>RE-ISSUED</b> :	October 12, 2017
EFFECTIVE DATE:	January 1, 2018

## **\*\*\*\*PLEASE POST AT YOUR PERMIT COUNTER\*\*\*\*** Page 1 of 2 F.I. #5

## **Broward County Fenestration Voluntary Wind Load Chart\***

### Per ASCE 7-10 Method 1, Part 1 and FBC (2017) for Retrofiting in Accordance with Formal Interpretation #5

### For Detached One-and Two family dwellings and Multiple Single-Family Dwellings (Townhouses) with Mean Roof Height ≤ 30 feet

Wind 170 mph (3-second gust) / Exposure C\*\* / Kd = 0.85 / Kzt = 1.0 / Pressures are in PSF / Not for use in Coastal (Exposure 'D' areas)

\* Using Allowable Stress Design methodology (P = 0.6w) / \*\* Exposure shall be determined according to ASCE 7-10 Section 26.7.3 (Exposure Categories)

Wind Area         Gable or High         Gable or High         Image: High	Effective	Location:		Mean R	loof He	ight of	f 15 feet Mean Roof Height of 20 feet							Mean Roof Height of 25 feet							Mean Roof Height of 30 feet						
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10       Gable/Hip Rof***       21.8       34.6       21.8       -60.2       21.8       89.0       23.1       -68.6       23.1       -94.6       24.3       -85.5       24.3       67.1       22.2       40.0       25.2       40.0       25.2       40.0       25.2       40.0       25.2       40.0       25.2       40.0       25.2       40.0       25.2       40.0       25.2       40.0       25.2       40.0       25.2       40.0       25.2       40.0       25.2       40.0       25.2       40.0       25.2       40.0       25.2       40.0       25.2       40.0       25.2       40.0       25.0       40.0	50	θ ≤ 7°	16.0	-35.6	16.0	-47.7	16.0	-57.4	16.0	-37.8		-50.7	16.0		16.0		16.0	-53.2		-63.9	16.0	-41.1		-55.2	16.0	-66.4	
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Area (ft <sup>2</sup> )         Location         4         5         Lot e         Lot e <thlot e<="" th="">         Lot e         <thlot e<="" th=""> <t< th=""><th></th><th></th><th></th><th>Mean R</th><th>loof He</th><th>eight of</th><th>15 fee</th><th colspan="7">15 feet Mean Roof Height of 20 feet</th><th colspan="6">Mean Roof Height of 25 feet</th><th colspan="6">Mean Roof Height of 30 feet</th></t<></thlot></thlot>				Mean R	loof He	eight of	15 fee	15 feet Mean Roof Height of 20 feet							Mean Roof Height of 25 feet						Mean Roof Height of 30 feet						
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Design is based on the 3-second gust (wind velocity) for Risk Category II (general residential & commercial construction) per FBC 1620.2 Broward. These tables not for use with essential facilities or assembly occupancies	16	7	deg	rees	36.8	-41.0		Ident	tify the	zone p	er the	figure o	r infor	mation	by oth	ers. Any	quest	ionable	zone is	s to be c	conside	ered the	e more	critical	zone.		
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