

Florida Building Code 8th Edition (2023)
High Velocity Hurricane Zone Uniform Roofing Application Form

INSTRUCTION PAGE

COMPLETE THE NECESSARY SECTIONS OF THE UNIFORM ROOFING PERMIT APPLICATION FORM AND ATTACH THE REQUIRED DOCUMENTS 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
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 Product Approval
5.	Municipal Permit Application
6.	Owner's Notification for Roofing Considerations (Reroofing Only)
7.	Any Required Roof Testing/ Calculation Documentation

ROOF ASSEMBLIES AND ROOFTOP STRUCTURES

**Florida Building Code 8th Edition (2023)
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Section A (General Information)

Master Permit No. _____

Process No. _____

Contractor's Name _____

Job Address _____

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) __

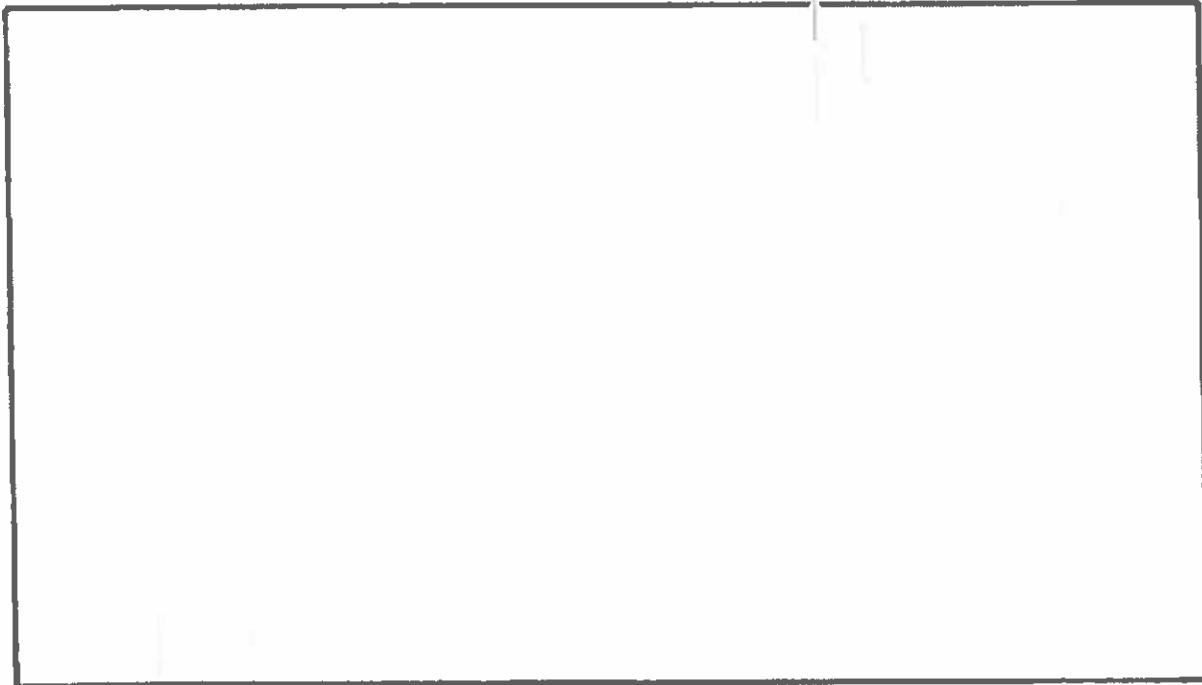
Steep Sloped Roof Area (SF) -

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.

Total Number Penetrations _____



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Section C (Low Sloped Roof Systems)

Fill in Specific Roof Assembly Components and Identify manufacturer
 (If a component is not used, identify as "NA")

System Manufacturer: _____

Product Approval# _____

Design Wind Pressures, from RAS 128 or Calculations:

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

Zone 3: _____

Max. Design Pressure, from the specific product approval system: _____

Deck Type: _____

Gauge/ Thickness: _____

Slope: _____

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

Anchor/ Base Sheet Fastener/ Bonding Material: _____

Insulation Base Layer: _____

Base Insulation Size and Thickness: _____

Base Insulation Fastener/ Bonding Material: _____

Top Insulation Layer: _____

Top Insulation Size and Thickness: _____

Top Insulation Fastener/Bonding Material: _____

Base Sheet(s) & No. of Ply(s): _____

Base Sheet Fastener/ Bonding Material: _____

Ply Sheet(s) and No. of Ply(s): _____

Ply Sheet Fastener/ Bonding Material: _____

Top Ply: _____

Top Ply Fastener/ Bonding Material: _____

Surfacing: _____

Fastener Spacing for Anchor/Base Sheet Attachment:

Zone 1' _____ " oc @ Laps, # Rows _____ @ _____ " oc

Zone 1 _____ oc @ Laps, # Rows _____ @ _____ " oc

Zone 2 _____ " oc @ Laps # Rows _____ @ _____ " oc

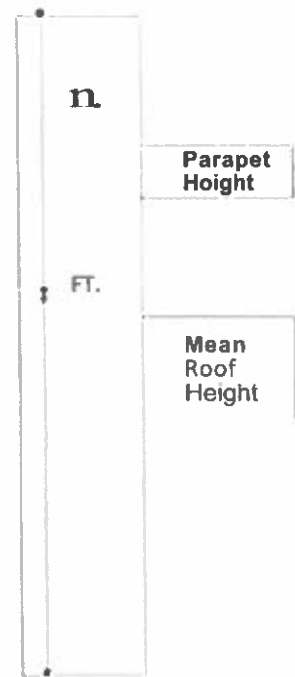
Zone 3 _____ " oc @ Laps, # Rows _____ @ _____ " oc

Number of Fasteners Per Insulation Board

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

Illustrated 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 Base Flashing,
 Component Material, Material Thickness, Fastener Type, Fastener
 Spacing or Submit Manufactures Details that Comply with RAS 111
 and Chapter 16.



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Section D (Steep Sloped Roof System)

Roof System Manufacturer: _____

Product Control Number: _____

Minimum Design Wind Pressures, From Applicable RAS 127 Table or Calculations:

Zone1: __ _ Zone2: __ _ Zone3: __ _

Slope Range: 2:12 to S 4:12 > 4:12 to S 6:12 > 6:12 to S 12:12

Roof Shape: All Hip Roof Gable Roof or Partial Gable/Hip Roof

Deck Type:

Underlayment Type:

Roof Slope:
____ :12

Insulation:

Fire Barrier:

Ridge Ventilation?

Fastener Type & Spacing:

Cap Sheet Type:

Mean Roof Height: _____

Cap Sheet Attachment:

Roof Covering:

Drip Edge Type & Size:

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Section E (Tile Calculations)

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

Method 1 • "Moment Based Tile Calculations per RAS 127"

Enter positive uplift pressures when using this table

(Zone 1: _____ xA _____ = _____) - Mg: _____ = M_{tn} _____ Product Approval M_f : _____
 (Zone 2: _____ xA _____ = _____) - Mg: _____ , M_{2e} _____ Product Approval M_f : _____
 (Zone 3: _____ xA _____ = _____) - Mg: _____ = M_{2n} _____ Product Approval M_f : _____

Tile attachment method:

Alternate Tile attachment method :

•Method 2 "Simplified Tile Calculations" only applicable in *Broward County*.

For Uplift Based tile systems use Method 3. Compare the values for F' with the values for F_r . If the F' values are greater than or equal to the F_r 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 = _____ x W = _____) - (w) x cos 9 _____) = F_{r1} _____ Product Approval F' : _____
 (Zone 2: _____ x L = _____ x W = _____) - (w) x cos 9 _____) = F_{r2} _____ Product Approval F' : _____
 (Zone 3: _____ x L = _____ x W = _____) - (w) x cos 9 _____) = F_{r3} _____ Product Approval F' : _____

<i>Where to obtain information</i>		
Description	Symbol	Where to Find
Design Pressure	Zones 1, 2, & 3	From the applicable Table in RAS- 127 or be an engineering analysis prepared by a PE based upon ASCE 7
Mean Roof Height	H	Job Site
Roof Slope	9	Job Site
Aerodynamic Multiplier	A	Product Approval / Notice of Acceptance
Restoring Moment due to Gravity	M_L	Product Approval / Notice of Acceptance
Attachment Resistance	M_t	Product Approval / Notice of Acceptance
Required Moment Resistance	M_r	Calculated
Minimum Attachment Resistance	F'	Product Approval/ Notice of Acceptance
Required Uplift Resistance	F_r	Calculated
Average Tile Weight	w	Product Approval/ Notice of Acceptance
Tile Dimensions	L=Length W= Width	Product Approval/ Notice of Acceptance
AU calculations must be submitted to the Building Official at the time of permit application.		

Section 1524 FBC

HIGH VELOCITY HURRICANE ZONES

REQUIRED OWNERS NOTIFICATION FOR ROOFING CONSIDERATIONS

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 form. The owner's initials in the designated space indicates that the item has been explained.

- 1. Aesthetics-workmanship:** 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 Florida Building Code. (The roof deck is usually concealed prior to removing the existing roof 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 to be 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 owner provides the option of maintaining this 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 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.
- 6. Overflow scuppers (wall outlets):** It is required 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 overflow scuppers (wall outlets) are not provided. It may be necessary to install overflow scuppers in accordance with the requirements of: Chapter 15 and 16 herein and the Florida Building Code, Plumbing.



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.



8. Existing Solar Systems: The re-installation of an existing roof mounted photovoltaic system requires a separate permit. Permit must be obtained in order to finalize the roofing permit.

Contractor's Signature

Date

Owner's/Agent's Signature

Date

Property Address: _____

City: _____ State: _____ Zip: _____

TABLE 3 — GABLE ROOFS
MINIMUM ASD DESIGN WIND UPLIFT PRESSURES IN PSF FOR ROOF SLOPE -
>6:12 to ≤12:12 RISK CATEGORY II EXPOSURE CATEGORY "C"

Roof Mean Height	Roof Pressure Zones		
	1, 2e and 2r	2n and 2r3r	3e
≤15'	-67	-74	-115
>15 to ≤20'	-71	-78	-122
>20' to ≤25'	-74	-82	-127
>25' to ≤30'	-78	-85	-132
>30 to ≤35'	-80	-88	-137
>35 to ≤40'	-82	-91	-141
>40' to ≤45'	-85	-93	-146
>45' to ≤50'	-86	-95	-147
>50' to ≤55'	-88	-97	-151
>55' to ≤60'	-89	-98	-153

TABLE 6 — GABLE ROOFS
MINIMUM ASD DESIGN WIND UPLIFT PRESSURES IN PSF FOR ROOF SLOPE -
>6:12 to ≤12:12 RISK CATEGORY II EXPOSURE CATEGORY "D"

Roof Mean Height	Roof Pressure Zones		
	1, 2e and 2r	2n and 2r3r	3e
≤15'	-82	-90	-140
>15 to ≤20'	-86	-94	-146
>20' to ≤25'	-87	-98	-151
>25' to ≤30'	-92	-101	-157
>30 to ≤35'	-94	-103	-161
>35 to ≤40'	-97	-106	-165
>40' to ≤45'	-99	-109	-168
>45' to ≤50'	-101	-111	-172
>50' to ≤55'	-102	-112	-174
>55' to ≤60'	-104	-114	-177

TABLE 8 — HIP ROOFS
MINIMUM ASD DESIGN WIND UPLIFT PRESSURES IN PSF FOR ROOF SLOPE -
>4:12 to ≤6:12 RISK CATEGORY II EXPOSURE CATEGORY "C"

Roof Mean Height	Roof Pressure Zones		
	1	2e, 2r and 3	3
≤15'	-71 54	-91 74	-111
>15 to ≤20'	-75 57	-97 78	-118
>20' to ≤25'	-79 59	-101 82	-124
>25' to ≤30'	-82 62	-105 85	-129
>30 to ≤35'	-84 64	-109 88	-133
>35 to ≤40'	-87 66	-112 90	-137
>40' to ≤45'	-89 67	-114 92	-140
>45' to ≤50'	-91 69	-117 95	-143
>50' to ≤55'	-93 70	-120 97	-146
>55' to ≤60'	-94 72	-122 99	-149

TABLE 12 — HIP ROOFS
MINIMUM ASD DESIGN WIND UPLIFT PRESSURES IN PSF FOR ROOF SLOPE -
>6:12 to ≤12:12 RISK CATEGORY II EXPOSURE CATEGORY "D"

Roof Mean Height	Roof Pressure Zones			
	1	2r2e	2e2r	3
≤15'	-69	-119	-123	-156
>15 to ≤20'	-73	-124	-129	-163
>20' to ≤25'	-75	-129	-133	-169
>25' to ≤30'	-78	-134	-138	-175
>30 to ≤35'	-80	-137	-142	-180
>35 to ≤40'	-82	-141	-145	-184
>40' to ≤45'	-84	-143	-148	-188
>45' to ≤50'	-85	-146	-151	-192
>50' to ≤55'	-87	-149	-154	-195
>55' to ≤60'	-88	-151	-156	-198

Broward County Fenestration Voluntary Wind Load Chart*

Per ASCE 7-16 Part 1 and FBC (2020) for Retrofitting in Accordance with Formal Interpretation #24

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** / $K_d = 0.85$ / $K_{zt} = 1.0$ / Pressures are in PSF / Not for use in Coastal (Exposure 'D' areas)

* Using Allowable Stress Design methodology ($P = 0.6w$) / ** Exposure C or D shall be determined according to ASCE 7-16 Section 26.7 (Exposure Categories)

Roof and Wall Zone Charts

Wall Pressure Chart	Flat Roof Uplift Chart	Gable Roof Uplift Chart	Hip Roof Uplift Chart

Instructions on how to use these Charts: Determine Mean Roof Height, h , which is top of roof for flat roofs or the mean roof height for pitched roofs. Find your least horizontal dimension for your building, not including a overhang if it occurs. Calculate the value of, a , = 10% of least horizontal dimension or $0.4 \cdot h$, whichever is smaller, but not less than either 4% of least horizontal dimension or 3 feet. If your roof height is less than 30 feet, but not exactly 15, 20, or 25 feet, you will need to go to the next higher roof height. If your Mean Roof Height is higher than 30 feet, these charts do not apply. Review the diagram which illustrate the wall and roof zones and determine the wind zone in which the component is located. Determine the tributary area of the component. If the tributary area falls in between values, use the value of the smaller tributary area. Select the positive and negative wind pressures corresponding to the wall or roof zone where your component is located. Door pressures shown are for the most common door sizes and are worst case for heights ≤ 30 Feet.

Wall Pressure For All Roof Types

Garage/Door Pressures

	15 Ft										20 Ft					Effective Wind Area		Positive	Negative
	10	20	35	50	100	500	10	20	35	50	100	500	Width	Height					
Mean Roof Height																			
Tributary Area	10	20	35	50	100	500	10	20	35	50	100	500							
Wall Positive Pressure	38.0	36.2	34.9	34.0	32.3	28.3	40.3	38.5	37.0	36.1	34.3	30.1	8	8	38.6	-48.2			
Zone 4 Negative Pressure	-41.2	-39.5	-38.1	-37.2	-35.5	-31.5	-43.7	-41.9	-40.5	-39.5	-37.7	-33.5	10	10	37.4	-45.7			
Zone 5 Negative Pressure	-50.8	-47.4	-44.6	-42.9	-39.5	-31.5	-54.0	-50.4	-47.4	-45.6	-41.9	-33.5	14	14	35.4	-41.8			
Mean Roof Height																			
Tributary Area																			
Wall Positive Pressure	10	20	35	50	100	500	10	20	35	50	100	500	9	7	38.7	-48.3			
Zone 4 Negative Pressure	42.3	40.4	38.8	37.8	35.9	31.5	43.9	41.9	40.3	39.3	37.3	32.8	16	7	37.0	-45.0			
Zone 5 Negative Pressure	-45.8	-43.9	-42.4	-41.4	-39.5	-35.1	-47.6	-45.7	-44.1	-43.1	-41.1	-36.5	3	7	41.8	-54.6			
Zone 5 Negative Pressure	-56.6	-52.8	-49.7	-47.8	-43.9	-35.1	-58.8	-54.7	-51.7	-49.6	-45.7	-36.5	6	7	39.8	-50.6			

SIMPLIFIED ROOF UPLIFT CHART FOR ROOFING APPLICATIONS

This simplified chart represents the worst case wind pressures for the various roof slopes and heights. This chart is based on a Tributary Area = 10 SF which is required for roofing applications. If the roof height is less than 30 feet, but not exactly 15, 20, or 25 feet, you will need to go to the next higher roof height. If your roof height is higher than 30 feet, these charts do not apply. Refer to Roof Chart Diagrams on Page 1 for Roof Zone Locations

Mean Roof Height = 15 Feet

Flat Roof		Gable Roof 1.51 to 4:12		Gable Roof 4.1 to 6:12		Gable Roof 6.1: to 12:12		Hip Roof 1.51 to 4:12		Hip Roof 4.1 to 6:12			
Positive*	15.4/38.0	Positive	23.2	Positive	23.2	Positive	34.7	Positive	28.3	Positive	28.3		
Zone		Zone	Roof Overhang	Roof Overhang	Roof Overhang	Roof Overhang	Roof Overhang	Roof Overhang	Roof Overhang	Roof Overhang	Roof Overhang		
1	-60.5	1, 2e	-70.1	-80.4	-54.0	-64.3	-63.7	-83.6	1	-63.7	-74.0	-50.8	-60.8
1'	-34.8	2n & 2r	-102	-113	-86.2	-96.5	-70.1	-90.1	2e	-89.4	-99.7	-70.1	-79.0
2	-79.8	3e	-102	-132	-86.2	-116	-86.7	-107	2r	-83.0	-93.3	-70.1	-79.0
3*	-109	3r	-122	-151	-102	-128	-70.1	-90.1	3	-89.4	-119	-70.1	-95.3

Mean Roof Height = 20 Feet

Flat Roof		Gable Roof 1.51 to 4:12		Gable Roof 4.1 to 6:12		Gable Roof 6.1: to 12:12		Hip Roof 1.51 to 4:12		Hip Roof 4.1 to 6:12			
Positive*	16.4/40.3	Positive	24.6	Positive	24.6	Positive	36.9	Positive	30.1	Positive	30.1		
Zone		Zone	Roof Overhang	Roof Overhang	Roof Overhang	Roof Overhang	Roof Overhang	Roof Overhang	Roof Overhang	Roof Overhang	Roof Overhang		
1	-64.2	1, 2e	-74.5	-85.4	-57.4	-68.3	-67.7	-88.9	1	-67.6	-78.6	-54.0	-64.6
1'	-36.9	2n & 2r	-109	-120	-91.5	-102	-74.5	-95.7	2e	-95.0	-106	-74.5	-84.0
2	-84.8	3e	-109	-140	-91.5	-123	-92.1	-113	2r	-88.1	-99.1	-74.5	-84.0
3*	-116	3r	-129	-161	-108	-136	-74.5	-95.7	3	-95.0	-126	-74.5	-101

Mean Roof Height = 25 Feet

Flat Roof		Gable Roof 1.51 to 4:12		Gable Roof 4.1 to 6:12		Gable Roof 6.1: to 12:12		Hip Roof 1.51 to 4:12		Hip Roof 4.1 to 6:12			
Positive*	17.2/42.3	Positive	25.8	Positive	25.8	Positive	38.7	Positive	31.5	Positive	31.5		
Zone		Zone	Roof Overhang	Roof Overhang	Roof Overhang	Roof Overhang	Roof Overhang	Roof Overhang	Roof Overhang	Roof Overhang	Roof Overhang		
1	-67.3	1, 2e	-78.1	-89.5	-60.2	-71.6	-70.9	-93.1	1	-70.9	-82.4	-58.6	-67.7
1'	-38.7	2n & 2r	-114	-125	-96	-107	-78.1	-100	2e	-99.6	-111	-78.1	-88.0
2	-88.8	3e	-114	-147	-96	-129	-96.6	-119	2r	-92.4	-104	-78.1	-88.0
3*	-121	3r	-135	-168	-113	-143	-78.1	-100	3	-99.6	-133	-78.1	-106

Mean Roof Height = 30 Feet

Flat Roof		Gable Roof 1.51 to 4:12		Gable Roof 4.1 to 6:12		Gable Roof 6.1: to 12:12		Hip Roof 1.51 to 4:12		Hip Roof 4.1 to 6:12			
Positive*	17.9/43.9	Positive	26.8	Positive	26.8	Positive	40.2	Positive	32.8	Positive	32.8		
Zone		Zone	Roof Overhang	Roof Overhang	Roof Overhang	Roof Overhang	Roof Overhang	Roof Overhang	Roof Overhang	Roof Overhang	Roof Overhang		
1	-70.0	1, 2e	-81.1	-93.1	-62.6	-74.5	-73.7	-96.8	1	-73.7	-85.6	-58.8	-70.4
1'	-40.2	2n & 2r	-118	-130	-99.8	-112	-81.1	-104	2e	-103	-115	-81.1	-91.4
2	-92.3	3e	-118	-153	-99.8	-134	-100	-123	2r	-96.0	-108	-81.1	-91.4
3*	-126	3r	-141	-175	-118	-148	-81.1	-104	3	-103	-138	-81.1	-110

* If Parapet >= 3 Ft occurs around entire building use the same Zone 2 pressure for Zone 3 and use the higher positive pressure shown

All roofing applications require this Rooftop Equipment Affidavit along with the Uniform Permit Application Form.

ROOFTOP EQUIPMENT AFFIDAVIT

Address: _____ Application #: _____

Subdivision: _____ Lot: _____ Block: _____

Company Name: _____

Job Address: _____

Name of Qualifier: _____ License #: _____

Is there any equipment on the rooftop? Yes No

If Yes: Is there an existing code-approved curb or stand? Yes No

If curb or stand is proposed, two (2) copies of plans sealed by an engineer showing the attachment of stand/curb to roof and to the equipment are required. These plans must be according to Florida Building Code Section 1525 in its entirety. Upon submittal of an alteration or addition of a curb or stand, the Planning Division may determine that alteration of an existing screening device or addition of a screening device may be required.

Is there any electrical work to be completed?

No Yes If Yes: An electrical permit application is needed.

Qualifier/Contractor Signature

Date

Print Name of person signing document _____

Sworn to (or affirmed) and subscribed before me this ____/____/____

Who is personally known _____ OR Produced ID _____

Notary Public Signature

Notary Seal