



"Delivering Excellence Every Day"

SECTION 1524

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 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 build up 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. **Exception:** Attic spaces, designed by a Florida-licensed engineer or registered architect to eliminate the attic venting, venting shall not be required.

Owner's/Agent's Signature: Date: / /

Contractor's Signature: Permit Number:

Property Address:

Florida Building Code 2010 Edition
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 Notice of Acceptance: 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 Notice of Acceptances
5.	Municipal Permit Application
6.	Owners Notification for Roofing Considerations (Re-Roofing Only)
7.	Any Required Roof Testing/Calculation Documentation

Florida Building Code 2010 Edition
High Velocity Hurricane Zone Uniform Permit Application Form

Section A (General Information)

Master Permit No. _____ Process No. _____

Contractor's Name _____

Job Address _____

ROOF CATEGORY

- | | | |
|---|---|--|
| <input type="checkbox"/> Low Slope | <input type="checkbox"/> Mechanically Fastened Tile | <input type="checkbox"/> Mortar/Adhesive Set Tile |
| <input type="checkbox"/> Asphaltic Shingles | <input type="checkbox"/> Metal Panel/Shingles | <input type="checkbox"/> Wood Shingles/Shakes |
| <input type="checkbox"/> Prescriptive BUR-RAS 150 | | Are there Gas Vent Stacks?
Yes <input type="checkbox"/> No <input type="checkbox"/> |

ROOF TYPE

Type: Natural LPGX

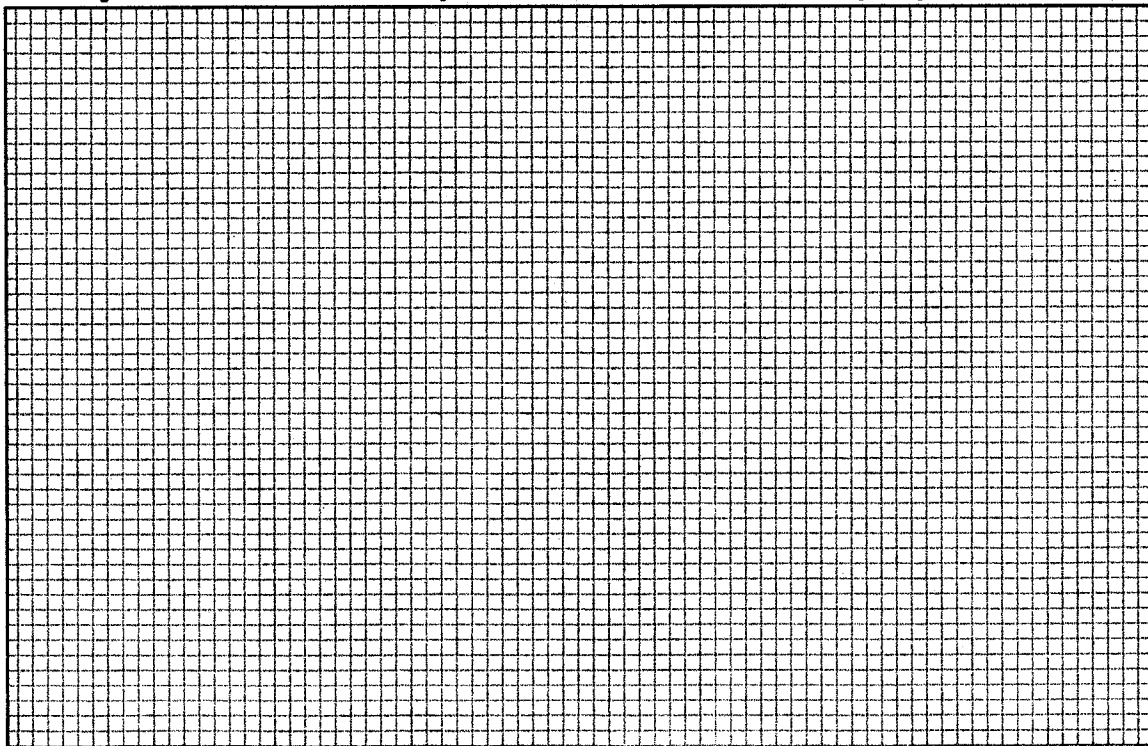
- New Roof Re-Roofing Recovering Repair Maintenance

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.



Florida Building Code 2010 Edition
High Velocity Hurricane Zone Uniform Permit Application Form

Section C (Low Sloped Roof System)

Fill in Specific Roof Assembly Components and Identify Manufacturer

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

System Manufacturer: _____

NOA No.: _____

Design Wind Pressures, From RAS 128 or Calculations:

Pmax1: _____ Pmax2: _____ Pmax3: _____

Max. Design Pressure, From the Specific NOA 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) & No. of Ply(s): _____

Ply Sheet Fastener/Bonding Material: _____

Top Ply: _____

Top Ply Fastener/ Bonding Material: _____

Surfacing: _____

Fastener Spacing for Anchor/Base Sheet Attachment

Field: _____" oc @ Lap, # Rows _____ @ _____" oc

Perimeter: _____" oc @ Lap, # Rows _____ @ _____" oc

Corner: _____" oc @ Lap, # Rows _____ @ _____" oc

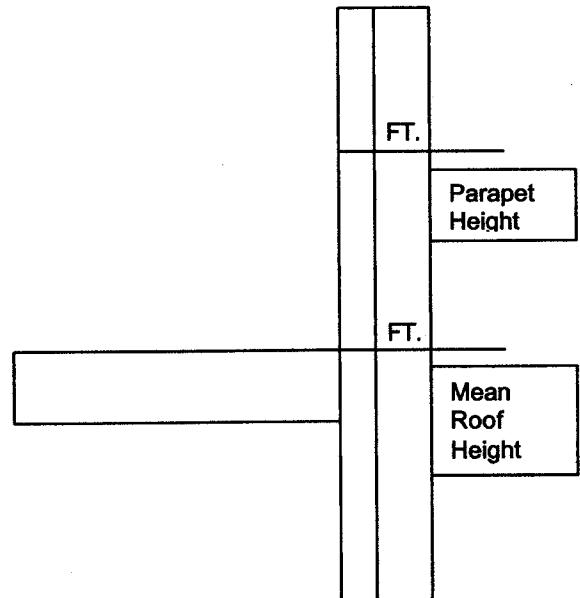
Number of Fasteners Per Insulation Board

Field _____ Perimeter _____ Corner _____

Illustrate Components Noted and Details as Applicable:

Woodblocking, Gutter, Edge Termination, Stripping, Flashing, Continuous Cleat, Cant Strip, Base Flashing, Counter- Flashing, 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.



Section D (Steep Sloped Roof System)

Roof System Manufacturer: _____
Notice of Acceptance Number: _____
Minimum Design Wind Pressures, If Applicable (From RAS 127 or Calculations): P1: _____ P2: _____ P3: _____
Maximum Design Pressure (From the NOA Specific System): _____
Method of tile attachment: _____

Step Sloped Roof System Description

Roof Slope: _____: 12	Deck Type: _____
Ridge Ventilation? _____	Type Underlayment: _____
Mean Roof Height: _____	Insulation: _____
	Fire Barrier: _____
	Fastener Type & Spacing: _____
	Adhesive Type: _____
	Type Cap Sheet: _____
	Roof Covering: _____
	Type & Size Drip Edge: _____

Florida Building Code 2010 Edition
High Velocity Hurricane Zone Uniform Permit Application Form

Section E (Tile Calculations)

For Moment based tile systems, choose either Method 1 or 2. Compared 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"

$(P_1: \text{_____} \times \lambda \text{_____} = \text{_____}) - Mg: \text{_____} = M_{r1} \text{_____}$ NOA M_r _____
 $(P_2: \text{_____} \times \lambda \text{_____} = \text{_____}) - Mg: \text{_____} = M_{r2} \text{_____}$ NOA M_r _____
 $(P_3: \text{_____} \times \lambda \text{_____} = \text{_____}) - Mg: \text{_____} = M_{r3} \text{_____}$ NOA M_r _____

Method 2 "Simplified Tile Calculation Per Table Below"

Required Moment of Resistance (M_r) From Table Below _____ NOA M_r _____

M_r Required Moment Resistance*						
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. Compared 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"

$(P_1: \text{_____} \times l: \text{_____} = \text{_____} \times w: \text{_____}) - W: \text{_____} \times \cos \theta: \text{_____} = F_{r1}: \text{_____}$ NOA F' _____
 $(P_2: \text{_____} \times l: \text{_____} = \text{_____} \times w: \text{_____}) - W: \text{_____} \times \cos \theta: \text{_____} = F_{r2}: \text{_____}$ NOA F' _____
 $(P_3: \text{_____} \times l: \text{_____} = \text{_____} \times w: \text{_____}) - W: \text{_____} \times \cos \theta: \text{_____} = F_{r3}: \text{_____}$ NOA F' _____

Where to Obtain Information

Description	Symbol	Where to find
Design Pressure	P1 or P2 or P3	RAS 127 Table 1 or by an engineering analysis prepared by PE based on ASCE 7
Mean Roof Height	H	Job Site
Roof Slope	θ	Job Site
Aerodynamic Multiplier	λ	NOA
Restoring Moment due to Gravity	M_g	NOA
Attachment Resistance	M_r	NOA
Required Moment Resistance	M_r	Calculated
Minimum Attachment Resistance	F'	NOA
Required Uplift Resistance	F_r	Calculated
Average Tile Weight	W	NOA
Tile Dimensions	l= length w= width	NOA

All calculations must be submitted to the Building Official at the time of permit application.