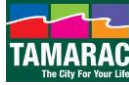


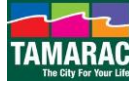
FBC1516.2.1 States that all roofs that have FLAT & SLOPE structure within 20' of another structure requires a UL CLASS A roof.



FLORIDA BUILDING CODE – ROOFING

- 1. For Re-Roofing – Sheathing is required to be nailed to meet Florida Building code 2322.2. (Re-nail inspection no longer required by code.)**
- 2. Florida Building Code 1517.3 Requires the use of Asbestos Free Roofing Cement.**
- 3. All Roofing components shall have a valid product control approval (NOA) – Skylights, Turbines, ETC. (Must be part of Permit Package)**
- 4. Structures separated by less than 20ft. from an adjacent building must have Class A Fire Rated Roof Systems, which must be specified on Permit Applications – FBC 1516.2.1**
- 5. Tile and Shingle installations are required to follow the appropriate Roof Application Standard (RAS) for the system being used – FBC 1518.7 & 1518.8.1.**

NOTE: Mandatory Tile/Shingle In-Progress Inspection: 20-60% of the Tile/Shingles are to be installed at the time of inspection so that Valley, HIP, Starter areas ETC... Can be inspected.



Florida Building Code Edition 2020 High Velocity Hurricane Zones Uniform Permit

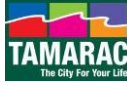
INSTRUCTION PAGE

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
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
2.	From Product Approval: (NOA) 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 (Skylights, Turbines, Ridge Vents, etc...)
5.	Municipal Permit Application
6.	Owner's Notification for Roofing Considerations (Reroofing Only)
7.	Any Required Roof Testing / Calculation Documentation



Florida Building Code Edition 2020 High Velocity Hurricane Zones Uniform Permit Section A (General Information)

Permit Number: _____

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 | | |

ROOF TYPE

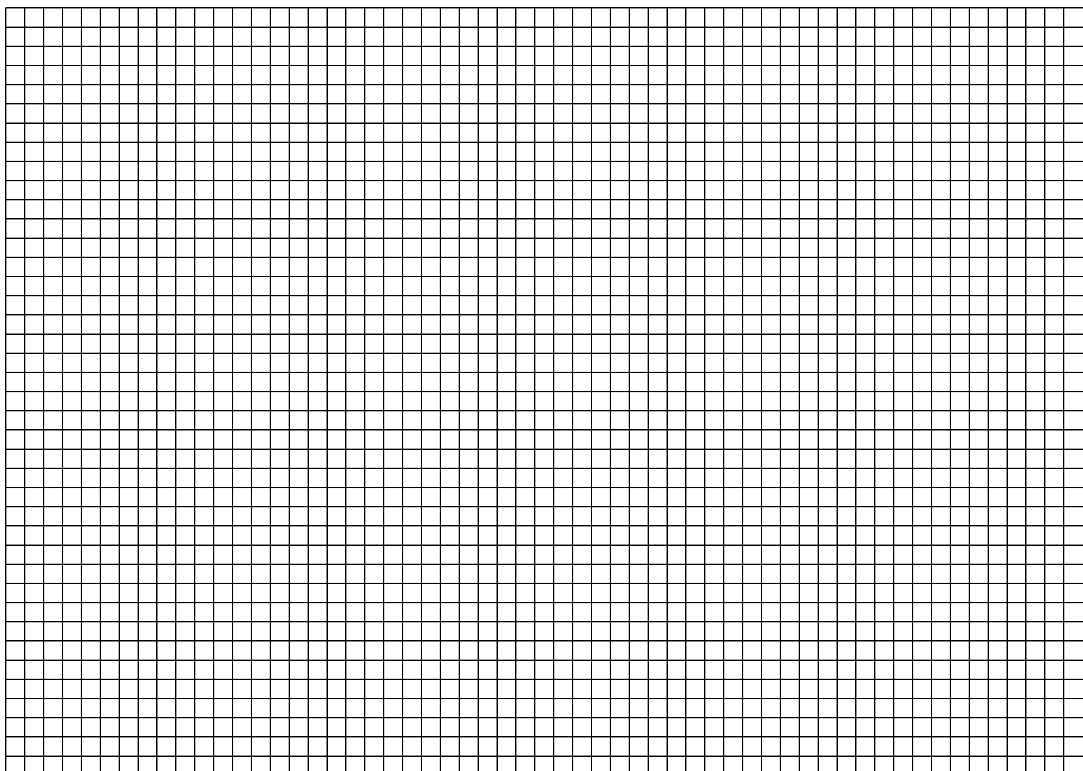
- | | | | | |
|-----------------------------------|-------------------------------------|-------------------------------------|---------------------------------|--------------------------------------|
| <input type="checkbox"/> New Roof | <input type="checkbox"/> Re-Roofing | <input type="checkbox"/> Recovering | <input type="checkbox"/> Repair | <input type="checkbox"/> Maintenance |
|-----------------------------------|-------------------------------------|-------------------------------------|---------------------------------|--------------------------------------|

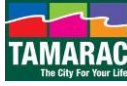
ROOF SYSTEM INFORMATION

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 Edition 2020
High Velocity Hurricane Zones Uniform Permit
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

*Pmax1: _____ Pmax2: _____ Pmax3: _____

*Max: Design Pressure, From the Specific Product Approval System _____

***Not required for prescriptive RAS 150 systems.**

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 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

Field _____ "oc@LAP#Rows_____ @
_____ "oc

Perimeter _____ "oc@LAP.#Rows_____ @
_____ "oc

Corner _____ "oc@LAP.#Rows_____ @
_____ "oc

**Number of Fasteners Per Insulation Board
(From N.O.A. or R.A.S. 150 Table 2)**

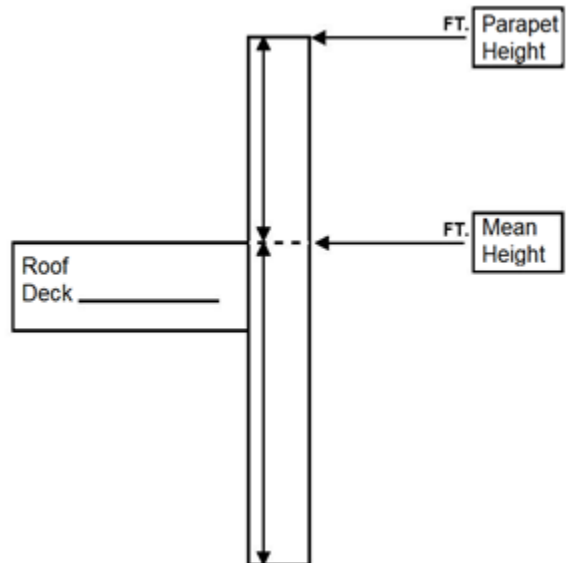
Field: _____ Perimeter: _____

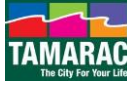
Corner: _____

Illustrated Components Noted and Details as applicable

Wood blocking, Gutter, Edge Termination, Stripping, Flashing, Continuous Cleat, Cant Strip, Base Flashing, Counter- Flashing, 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





**Florida Building Code Edition 2020
High Velocity Hurricane Zones Uniform Permit**

Section D (Steep Sloped Roof System)

NOTE: Items 3 & 4 are not required for shingles with NOA

1. Roof System Manufacturer: _____

2. Notice of Acceptance Number: _____

3. Minimum Design Wind Pressures, If Applicable (From RAS 127 or Calculations * Method1 or M_R From Section E, Method 2):

Pmax1: _____

Pmax2: _____

Pmax3: _____

4. Maximum Design Pressure(from the NOA Specific System)

Steep Sloped Roof System Description

Deck Type: _____

Type Underlayment: _____

Insulation: _____

Fire Barrier: _____

Fastener Type & Spacing: _____

Adhesive Type: _____

Type Cap Sheet: _____

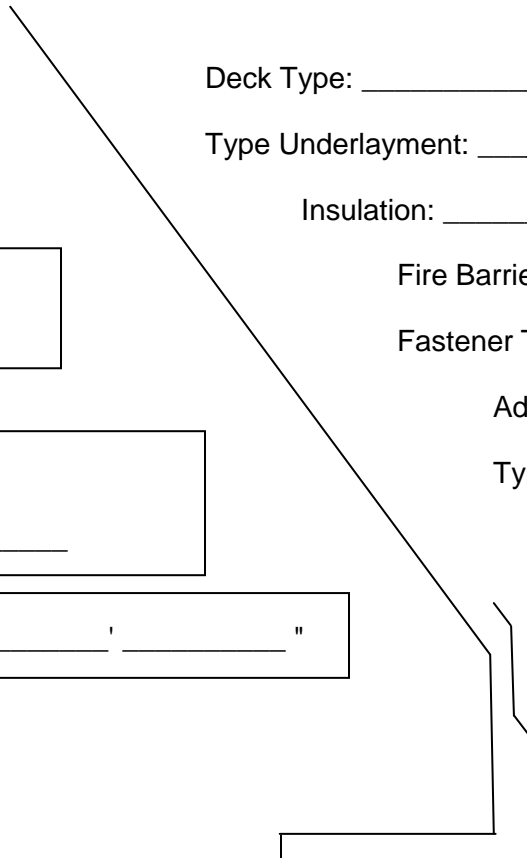
Roof Covering: _____

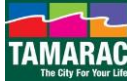
Type & Size Drip Edge: _____

Roof Slope:
_____ " : 12"

Ridge Ventilation?

Mean Roof Height _____' _____"





**Florida Building Code Edition 2020
High Velocity Hurricane Zones Uniform Permit
Section E (Tile Calculations)**

For Moment based tile systems, choose either Method 1 or 2. Compare the values of M_r with the values from M_f . If 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"

$(P_1: \text{_____} \times \lambda \text{_____} = \text{_____}) - M_g: \text{_____} = M_{r1} \text{_____}$ (Product App M_f Product) M_f _____

$(P_2: \text{_____} \times \lambda \text{_____} = \text{_____}) - M_g: \text{_____} = M_{r2} \text{_____}$ (Product App M_f Product) M_f _____

$(P_3: \text{_____} \times \lambda \text{_____} = \text{_____}) - M_g: \text{_____} = M_{r3} \text{_____}$ (Product App M_f Product) M_f _____

Method 2 "Simplified Tile Calculation Per Table Below"

Required Moment of Resistance (M_r) From Table Below: _____ M_f Product Approval _____

M_r Required Moment Resistance *					
Mean Roof Height →	15'	20'	25'	30'	40'
Roof Slope ↓					
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_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 Title Calculations per RAS 127"

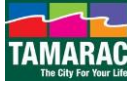
$(P_1: \text{_____} \times l: \text{_____} = \text{_____} \times w: \text{_____}) - W: \text{_____} \times \cos \Theta: \text{_____} = F_{r1}: \text{_____}$ (Product App) F' _____

$(P_2: \text{_____} \times l: \text{_____} = \text{_____} \times w: \text{_____}) - W: \text{_____} \times \cos \Theta: \text{_____} = F_{r2}: \text{_____}$ (Product App) F' _____

$(P_3: \text{_____} \times l: \text{_____} = \text{_____} \times w: \text{_____}) - W: \text{_____} \times \cos \Theta: \text{_____} = F_{r3}: \text{_____}$ (Product App) F' _____

Where to obtain Information		
Description	Symbol	Where to Find
Design Pressure	P_1 or P_2 or P_3	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	Product Approval
Restoring Moment due to Gravity	M_g	Product Approval
Attachment Resistance	M_f	Product Approval
Required Moment Resistance	M_r	Calculated
Minimum Attachment Resistance	F'	Product Approval
Required Uplift Resistance	F_r	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 time of permit application.



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 the 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 appearances that are not part of a zoning code should be addressed as part of the agreement between the owner and the contractor.

- _____ 2. **Re-Nailing wood decks:** When replacing roofing, the existing wood roof deck may have to be re-nailed 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 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 correct.

- _____ 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.

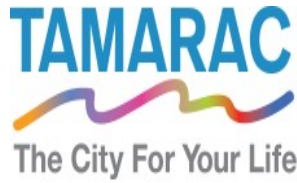
- _____ 7. **Ventilation:** Most roof structures should have some ability to vent natural airflow through the interior of the structural assembly (the building itself). The existing amount of attic ventilation shall not be reduced. It may be beneficial to consider additional venting which can result in extending the service life of the roof.

Owner's / Agent's Signature

Date

Contractor's Signature

Date



ROOF MITIGATION STRUCTURE EVALUATION FORM

For Single Family Residential Re-Roof only

Check One

- Value of home does not exceed \$300,000 based on insured value or structure's value shown on Broward County Property Appraiser's site. Provide Supporting Documents (no further documentation required).
- Value does exceed \$300,000 per the above. Provide additional roof mitigation Form #2 and supporting documents.

Note: Regardless of the value of the structure the roof decking attachment shall conform to Section 201.1. and, a secondary water barrier shall be provided as per Section 201.2 as shown below:

**Table 201.1 _ (HVHZ)
Supplement Fasteners at Panel Edges and Intermediate Framing**

Existing Fasteners	Existing Spacing	Wind speed greater than 110 mph supplemental fastening shall be no greater than:
Staples or 6d - (<i>*No Credit</i>)	Any	6" o.c. ^b
8d clipped head, round head, or ring shank (<i>*Take credit for all nails</i>)	6" o.c. or less	None necessary
8d clipped head or round head - (<i>*No Credit</i>)	Greater than 6" o.c.	6" o.c. ^b
8 round head ring shank (<i>*Take credit for all nails</i>)	Greater than 6" o.c.	6" o.c. ^a

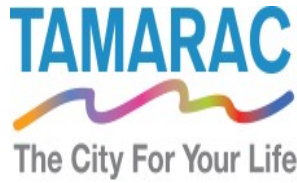
City Notation

- a. Maximum spacing determined based on existing fasteners and supplemental Fasteners
- b. Maximum spacing determined based on supplemental fasteners only

201.2 Roof secondary water barrier for site-built single family residential structures.

A secondary water barrier shall be installed using one of the following methods when roofing replacement when reroofing.

- a) All joints in roof sheathing or decking shall be covered with a minimum 4 in. wide strip of self-adhering polymer modified bitumen tape applied directly to the sheathing or decking. The deck and self-adhering polymer modified bitumen tape shall be covered with one of the underlayment systems approved for the particular roof covering to be applied to the roof, **OR check one below**



Check one or more

- 30# base sheet nailed per HVHZ typical fastening requirement **(newly amended)** deemed to comply.
- Peel and stick modified 4" strips over plywood joints. Minimum 40 mil. Polymer bitumen. (flat or slope)
- Hot mop or use peel & stick modified over **30#, 43#, and 75#**. (flat)

I hereby certify to follow the re-nail and secondary water proofing as prescribed and understand that a re-nailing affidavit and a secondary waterproofing affidavit are both required prior to tin-cap inspection.

(Notarized Signature of Contractor)

(Printed Name of Contractor)

(Date)

State of Florida
County of Broward

Sworn to (or affirmed) and subscribed before me by means of Physical Presence or Online Notarization,

this ____ day of _____, _____, by _____
Day Month Year Name of Person Swearing or Affirming

Signature of Notary Public – State of Florida

Name of Notary Typed, Printed or Stamped

- Personally Known
 - Produced Identification
- Type of Identification Produced: _____

Place Notary Seal Stamp Above