2023 HVHZ Electronic Permit Form
Tile Roof System

MIAMIBEACH
BUILDING DEPARTMENT

Section A (General Information)

Master Permit No: _____ **Process No:** _____

Contractor's Name: _____

Job Address: _____

Roof Type

- ☐ Low Slope
- ☐ Asphalt Shingles
- ☐ Sprayed Polyurethane Foam
- ☐ Mechanically Fastened Tile
- ☐ Metal Panel - Shingles
- ☐ Other: _____
- ☐ Mortar/Adhesive Set Tile
- ☐ Wood Shingles/Shakes

☐ New Roof ☐ Re-roofing ☐ Recovering ☐ Repair ☐ Maintenance

Are there Gas Vent Stacks located on the roof? ◯ Yes ◯ No **If yes, what type?** ◯ Natural ◯ LPGX

Roof System Information

Low Sloped Roof Area: _____ (ft^2) **Steep Sloped Area:** _____ (ft^2) **Total Area** _____ (ft^2)

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.

Low slope perimeter width .6(h): _____ ft
Steep slope perimeter width .4(h): _____ ft
Low slope corner length .6 (h): _____ ft
Low slope corner width .2 (h): _____ ft
Separate roof plan provided: Yes ◯ No ◯

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Section D (System Page)

Roof System Manufacturer: _____

Florida Approval (PA) or MDC Notice of Acceptance (NOA) Number: _____

Roof Slope: _____ **:12** **Roof Mean Height:** _____ **ft** **Perimeter Width:** _____ **ft**

Roof Shape: **All Hip** ◯ **Gable** ◯

Exposure Category: **C** ◯ **D** ◯

Minimum Design Wind Pressures (psf) from 2023 RAS-127 or Calculations per ASCE 7-20

P(1) Field: _____ ***psf*** **P(2) Perimeter:** _____ ***psf*** **(P3) Corner:** _____ ***psf***

Deck Type:

-- Select Deck Type --

Optional insulation:

_____

Optional insulation attachment:

_____

Optional nailable substrate:

_____

Optional nailable substrate attachment:

_____

Basesheet Type:

_____

Fastener type & spacing for basesheet attachment:

_____

Drip edge type, size & gauge:

_____

Drip edge fastener & attachment spacing:

_____

Drip edge continuous cleat:

_____

Optional ply sheet:

_____

Optional ply sheet attachment method:

_____

Tile cap sheet type:

_____

Cap sheet attachment method:

_____

Self Adhered (SA) tile underlayment:

_____

PA or NOA SA approval number:

_____

Tile profile:

_____

Tile attachment method:

_____

Additional tile attachment method:

_____

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Section E (Calculations Page)

Enter positive uplift pressures in the Zone Fields when using these methods of calculating attachment.

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

Method 1 " Moment Based Tile Calculations per RAS 127-23"

P(1) Field: _____ x λ _____ = _____ - Mg: _____ = Mr1 : _____ ≤ _____ NOA Mf:

P(2) Perimeter: _____ x λ _____ = _____ - Mg: _____ = Mr2: _____ ≤ _____ NOA Mf:

P(3) Corner: _____ x λ _____ = _____ - Mg: _____ = Mr3: _____ ≤ _____ NOA Mf:

Tile attachment method: _____ **Alternate attachment method**: _____

For Uplift Based tile systems use **Method 3**. Compare the values for F' with the values for Fr. If the F' values are greater than or equal to the Fr 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): _____ x L: _____ = _____ x W: _____ = _____ - w: _____ = _____ x cos θ _____ = Fr1 _____ NOA F' _____

P(2): _____ x L: _____ = _____ x W: _____ = _____ - w: _____ = _____ x cos θ _____ = Fr2 _____ NOA F' _____

P(3): _____ x L: _____ = _____ x W: _____ = _____ - w: _____ = _____ x cos θ _____ = Fr3 _____ NOA F' _____

Where to obtain information		
Description	**Symbol**	**Where to Find**
Design Pressure	Zones 1, 2e, 2n, 2r,3e, 3r	From the applicable Table in RAS- 127 or by an engineering analysis prepared by a PE based upon ASCE 7
Mean Roof Height	h	Job site
Roof Slope	θ	Job Site
Aerodynamic Multiplier	λ	Product Approval / Notice of Acceptance
Restoring Moment due to Gravity	Mg	Product Approval / Notice of Acceptance
Attachment Resistance	Mf	Product Approval / Notice of Acceptance
Required Moment Resistance	Mr	Calculated
Minimum Attachment Resistance	F'	Product Approval / Notice of Acceptance
Required Uplift Resistance	Fr	Calculated
Average Tile Weight	w	Product Approval / Notice of Acceptance
Tile Dimensions	L=Length W= Width	Product Approval / Notice of Acceptance
All calculations must be submitted to the Building Official at the time of permit application.		

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