



CITY OF Boca Raton

BUILDING DEPARTMENT

SUPPLEMENTAL ROOFING INFORMATION PACKAGE

SUMMARY

COMPLETE THE NECESSARY SECTIONS OF THIS FORM FOR A BOCA RATON ROOFING PERMIT. **A COPY OF THIS FORM WITH ORIGINAL SIGNATURES MUST BE ATTACHED TO THE ROOFING PERMIT APPLICATION, WITH ALL THE REQUIRED DOCUMENTS AS NOTED BELOW.**

Roof system	Required sections of the Permit application Form	Attachments required See list below
Built-up or modified	A,B,D	1,2,3,4,5,6
Asphalt Shingles	A,B,C	1,2,4,5
Concrete or Clay Tile	A,B,C	1,2,3,4,5
Metal Roofs	A,B,C	1,2,3,4,5
Wood Shingles or Shakes	A,B,C	1,2,4,5
Other	As Applicable	As Applies : 1,2,3,4,5,6

ATTACHMENTS REQUIRED

1. Building Permit Application
2. Product Approval information
 - Product Approval, Cover Sheet
 - Product Approval, **Specific** System Description
 - Product Approval, **Specific** System limitations
 - Product Approval, General Limitations of use
3. Design calculations per chapter 16, or if applicable, RAS 127, RAS 128 or Fastening requirements from FRSA/TRI 5th Edition Revised.
4. Roofing Accessories Product Approvals (ridge vents, turbines, mechanical stands, etc.)
5. Mating detail (tie-in) for partial re-roof installations (if applicable)
6. Enhanced nailing details for flat roofs per RAS 150 or engineered, unless a single family accessory roof of 400 square feet or less.
7. Skylight replacements
 - Indicate size, location, zone, and windload on roof sketch (Section B) of the proposed skylight
 - Provide current NOA or Florida Product approval including installation instructions and maximum design pressure of the proposed skylight.

Any other additional data required for the integrity of the roofing system to be determined.



SUPPLEMENTAL ROOFING INFORMATION PACKAGE (Cont)

Section A (General Information)

Application Number _____

Contractor's Name: _____ License #: _____
(required)

Owner's Name: _____ Job Address _____

Use Of Building:

1 or 2 Family Multi-Family (3 or more units) Non-Residential

Exposure Category: C D Existing Roofing Type (Mat'l): _____

Roof Type: Hip Gable Monoslope
 New Roof Re-Roofing/ Re-Covering -Attach Mitigation Package Repair _____(% of Roof)

Roof Slope: ____/12 Deck Type _____ Roof Height: _____

Roofing Covering (Check all that are applicable to this permit application):

Flat roof Mechanically Fastened Tile Mortar/Foam Set tile
 Asphalt Shingles Metal Panel/shingle Wood Shingles/shakes
 Other: _____

Area of roofing work by slope (Complete all that apply):

Flat Roof Area ($\leq 2^\circ/12^\circ$) _____ sf Steep Slope Roof Area ($\geq 4^\circ/12^\circ$) _____ sf

*Low Slope Roof Area ($> 2^\circ - 4^\circ/12^\circ$) _____ sf Total Roof Area, This Perm _____ sf

* For Shingle or Metal Roof 19" head lap is required per Table R905.1.1 FBC 6th Edition (2017), Residential

CERTIFICATION:

All information supplied on any or all of the six pages of this form, or supplied by any other means, is true and correct.

Qualifier's Name (Print) _____ Signature _____ Date _____

Owners Name (Print) _____ Signature _____ Date _____

STATE OF FLORIDA
COUNTY OF PALM BEACH

The foregoing instrument was acknowledged before me this _____ (Date)

By Who is personally known to me _____ or has produced ID _____
(Name of Person Acknowledging) (Type of ID)

STAMP:

(Signature and Seal of person taking Acknowledgment)



SUPPLEMENTAL ROOFING INFORMATION PACKAGE (Cont)

Section B

Sketch Roof Plan: Illustrate all levels and sections. Include dimensions of sections and levels; clearly identify dimensions of elevated pressure zones and location of parapets and expansion joints. If applicable, identify size, location, zone, and windload of skylight.

For flat roof, Perimeter width (a''): Corner size (a' x a')

A large, empty rectangular box with a thin black border, intended for the student to draw a sketch of the roof plan. The box is currently blank.



SUPPLEMENTAL ROOFING INFORMATION PACKAGE (Cont)

Section C

(Low & Steep Sloped Roof System)
(L.S.=>2" to 4" in 12") (S.S. = >4" in 12")

ROOF COVERING MANUFACTURER: _____

Product Approval # (System or Roof Covering): _____

Specify System # _____

UNDERLAYMENTS:

Indicate Secondary Water Barrier Method: _____ N/A

Base Sheet: _____

Product Approval #: _____
(if required)

Head lap in inches: _____

Fasteners:
Lap @ _____ o.c. Field _____ Rows @ _____ o.c.

Cap Sheet: _____

Product Approval # : _____

Other: _____

Product Approval # : _____

ROOF COVERING ATTACHMENT METHOD:

Mechanically Fastened Tile:

(Type & number of fasteners per tile)

Asphalt Shingles:

(Number of fasteners per shingle)

If tile is proposed, specify hip & ridge support attachments. _____

Mortar/Foam Set Tile:

Metal Panel/Shingle:

Manufacturer: _____

Clip or fastener spacing for metal roof panels

Tile Profile: _____

Field: _____ Perimeter: _____ Corners: _____

Patty size: _____

Hook strip/cleat Ga. Or Weight _____

Drip Edge : (Size & Fastener Spacing) : _____

Skylight : (Size, Manufacturer, NOA &/or Product Approval: _____

Ridge Vent Product Approval # _____



SUPPLEMENTAL ROOFING INFORMATION PACKAGE (Cont)

Section D Flat Roof Information (Built-up or Modified ≤ 2.12)

Fill in the specific roof assembly components. If a component is not required, state not applicable (N/A) on the line.

Roof system Manufacturer: _____ System Type : _____

System # : _____ Product Approval # : _____

Wind Uplift Pressures : (P1) Field: _____ psf (P2) Perimeters: _____ psf (P3) Corners: _____ psf

Maximum Design Pressure from the specific product approval system: _____ psf (If less than above Wind Uplift Pressures provide enhanced fastener detail)

Deck Type : _____ & Support Spacing: _____

Wood Nailer : _____ & Nailer Fastener Type and Spacing : _____

Fire or Vapor Barrier : _____

Insulation Base Layer size & Thickness: _____ & Fastener/Bonding Mat'l _____

Insulation Top Layer Size & Thickness: _____ & Fastener/Bonding Mat'l _____

Number of Fasteners Per Insulation Board : Field: _____ Perimeter: _____ Corner: _____

Fastener Type: _____ Alternate Fastener: _____

Ply Sheet(s) & # of Ply(s): _____ & Fastener/Bond'g Mat'l: _____

Anchor/Base Sheet & # of Ply(s): _____ & Fastener/Bond'g Mat'l: _____

Fastener Spacing for Base Sheet Attachment : (1) Field: _____ "o/c @ laps & _____ rows @ _____ "o/c

(2) Perim: _____ "o/c @ laps & _____ rows @ _____ "o/c (3) Corners _____ @laps & _____ rows @ _____ "o/c

Top Ply : _____ & Fastener/Bond'g Mat'l _____

Drip Edge : (Size & Fastening Spacing) _____



SUPPLEMENTAL ROOFING INFORMATION PACKAGE (Cont)

Section E (Tile Calculations)

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

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

Method 2 "simplified Tile Calculations Per Table Below"

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

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	29.0	29.4	30.5	32.4
7:12	24.4	25.9	27.1	28.2	30.0

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 "Moment Based Tile Calculations Per RAS 127"

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

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	Product Approval
Restoring Moment due to Gravity	M_g	Product Approval
Attachment Resistance	M_f	Product Approval
Required Moment Resistance	M_g	Calculated
Minimum Attachment Resistance	F'	Product Approval
Required Uplift Resistance	F_r	Calculated
Average Tile Weight	W	Product Approval
Tile Dimenstons	L=length W = width	Product Approval
All calculations must be submitted to the building official at the time of permit application.		