



SECTION 1524 (FLORIDA BUILDING CODE)
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 was 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 (Code) (the roof deck is usually concealed prior to removing the existing 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 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 code] provides [an alternate for] maintaining its 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 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 require 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 16].
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 Signature

Date

Contractor's Signature

Date



Calvin, Giordano & Associates, Inc.
EXCEPTIONAL SOLUTIONS



Roof to Wall Connection Affidavit

Complete and provide one (1) copy signed and sealed at submittal if Applicable

Permit No: _____ **Job Address:** _____

Owner's Name: _____ **Lot:** _____ **Block:** _____

Owner's Phone #: _____ **Subdivision:** _____

Company Name: _____

Company Address: _____

City: _____ **State:** _____ **Zip Code:** _____

Name of Qualifier: _____ **License Number:** _____

Contact Number: _____

I, _____, do hereby affirm:

That I have personally inspected the roof to wall connections as required by the Florida Existing Building Code section 101.2 for the roofing permit referenced above and further state that the connections comply with one or more of the following prescriptive methods. Initial one or all that apply:

- _____ Roof complies, no alterations needed
- _____ Connections by engineered design, sealed copy attached
- _____ 201.3.1 Prescriptive method for gable roofs on a wood frame wall
- _____ 201.3.2 Prescriptive method for gable roofs on a masonry wall
- _____ 201.3.3 Prescriptive method for hip roofs on a wood frame wall
- _____ 201.3.4 Prescriptive method for hip roofs on a masonry wall

101.2 When a roof covering is replaced on a building that is located in the wind borne region as defined in s. 1609.2 of the Florida Building code, and that has an insured value of \$300,000 or more or, if the building is uninsured or for which documentation of insured value is not present, has a just valuation for the structure for purpose of ad valorem taxation of \$300,000 or more:

- a) Roof to wall connections shall be improved as required by 201.3.
- b) Mandated retrofits of roof-to-wall connection shall not be required beyond 15% of the cost of the roofing.
- c) Where complete retrofits of all the roof-to-wall connections as prescribed in Section 201.3 would exceed 15% of the cost of the re-roofing project, the priorities outlines in Section 201.3.5 shall be used to limit the scope of work to the 15% limit.

Inspection for this purpose shall only be done by a licensed General, Residential, or Building Contractor, or may be done by a registered Architect or Engineer, or persons certified under FS 468.

 Qualifier/Contractor Signature

 Date

State of _____ County of _____

Sworn to (or affirmed) and subscribed before me this _____ day of _____, 20_____

By: _____

Type of Identification Produced: _____

 Notary Signature

 Notary Seal





Roof to Wall Connections for Site-Built Single Family Residential Structures Guidelines

201.3 Where required by Section 101.2, the intersection of roof framing with the wall below shall be strengthened by adding metal connectors, clips, straps, and fasteners such that the performance level equals or exceeds the uplift capacities as specified in Table 201.3. As an alternative to an engineered design, the prescriptive retrofit solutions provided in Section 201.3.1 through 201.3.4 below shall be accepted as meeting the mandated roof-to-wall retrofit requirements.

201.3.1 Prescriptive method for gable roofs on a wood frame wall. Sufficient eave sheathing shall be removed to expose a minimum of 6-feet of framing members, measured from the corner, along the exterior wall on each side of each gable end. The anchorage of each of the exposed rafters or truss shall be inspected. Wherever a strap is missing or an existing strap has less than 4 fasteners on each end, approved straps, ties or right angle gusset brackets with a minimum uplift capacity of 500 lbs. shall be installed that connect each rafter or truss to the top plate below. Adding fasteners to existing straps shall be allowed in lieu of adding a new strap providing the strap is manufactured to accommodate at least 4 fasteners. Wherever access makes it possible (without damage to the wall or soffit finishes), both top plate members shall be connected to the stud below using a stud to plate connector with a minimum uplift capacity of 500 lbs.

201.3.3 Prescriptive method for hip roofs on a wood frame wall. Sufficient corner eave sheathing shall be removed from the side of the hip ridge parallel to the roof ridge to provide access to a minimum 6-foot length of the exterior wall. The hip ridge board and any exposed rafters that are not anchored with a strap having at least 4 fasteners on each end, shall be connected to the top plate below using a strap or right angle gusset bracket having a minimum uplift capacity of 500 lbs. Adding fasteners to existing straps shall be allowed in lieu of adding a new strap providing the strap is manufactured to accommodate at least 4 fasteners. Wherever access makes it possible (without damage to the wall or soffit finishes), both top plate members shall be connected to the stud below using a stud to plate connector with a minimum uplift capacity of 500 lbs.

201.3.4 Prescriptive method for hip roofs on a masonry wall. Sufficient corner eave sheathing shall be removed from the side of the hip ridge parallel to the roof ridge to provide access to a minimum 6-foot length of the exterior wall. The hip ridge board and any exposed rafters that are not anchored with a strap having at least 4 fasteners on each end, shall be connected to the concrete wall below using a strap or right angle gusset bracket having a minimum uplift capacity of 500 lbs. Adding fasteners to existing straps shall be allowed in lieu of adding a new strap providing the strap is manufactured to accommodate at least 4 fasteners at each end. The straps or right angle gusset bracket shall be installed such that they connect each rafter or truss to the top plate below or directly to the masonry wall using approved masonry screws that will provide at least 2 ½ inch embedment into the concrete or masonry. When the straps or right angle gusset brackets are attached to a wood sill plate, the sill plate shall be anchored to the concrete masonry wall below. This anchorage shall be accomplished by installing ¼ inch diameter masonry screws, each with supplementary ¼ inch washer, having sufficient length to develop a 2 ½ inch embedment into the concrete or masonry. These screws shall be installed within 4 inches of the truss or rafter on both sides of each interior rafter or truss and on the accessible wall side of the truss or rafter.

201.3.5 Priorities for mandated roof to wall retrofit expenditures. For houses with both hip and gable roof ends, the priority shall be to retrofit the gable end roof-to-wall connections unless the width of the hip end is more than 1.5 times greater than the width of the gable end. Priority shall be given to connection the corners of roofs to walls below where the spans of the roofing members are greatest.





All roofing applications require this Rooftop Equipment Affidavit along with the High Velocity Hurricane Zone 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 1522.3 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.

Will the unit be raised or will it be a change out? Raised Change Out

If Raised: A mechanical sub-application is needed.

If Change Out: A separate mechanical application is needed.

Is there any electrical work to be completed? Yes No

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



Florida Building Code 6th Edition (2017)
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 6th Edition (2017)
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

- New Roof Re-Roofing Recovering Repair Maintenance

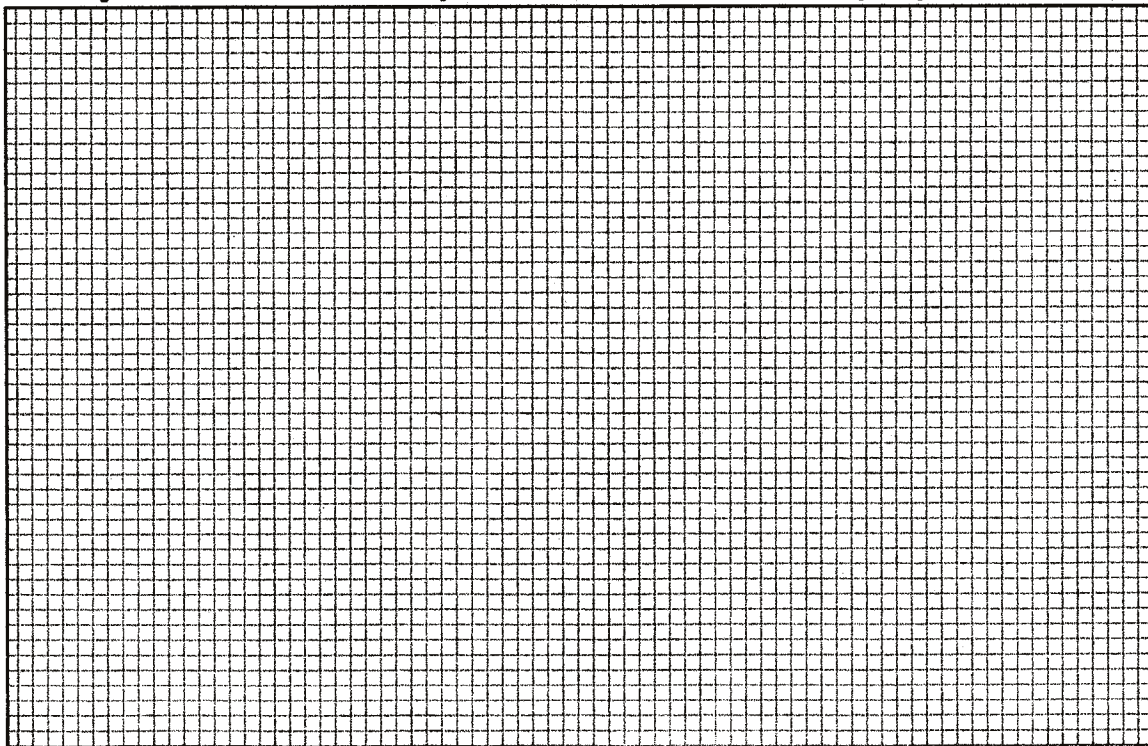
Type: Natural LPGX

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.



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

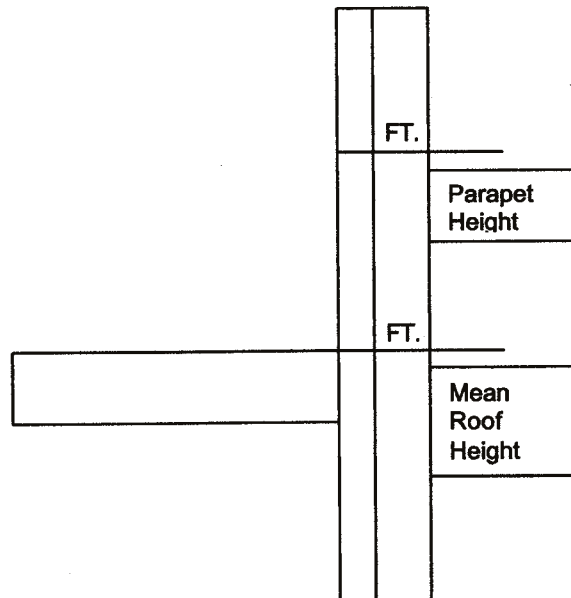
Number of Fasteners Per Insulation Board

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.

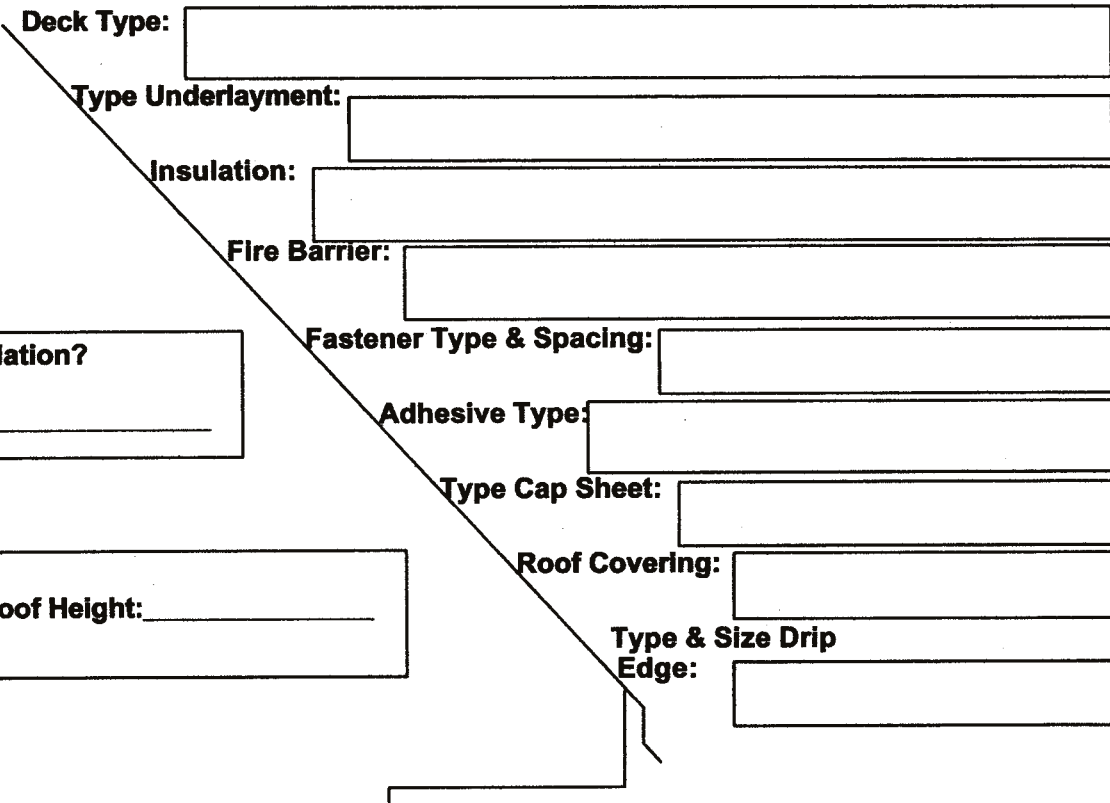


Section D (Steep Sloped Roof System)

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: _____



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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.