**SECTION 1525**
**ROOFING HIGH-VELOCITY HURRICANE ZONES-UNIFORM PERMIT APPLICATION**

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:

<table>
<thead>
<tr>
<th>Roof System</th>
<th>Required Sections of the Permit Application Form</th>
<th>Attachments Required See List Below</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Slope Application</td>
<td>A,B,C</td>
<td>1,2,3,4,5,6,7</td>
</tr>
<tr>
<td>Prescriptive BUR-RAS 150</td>
<td>A,B,C</td>
<td>4,5,6,7</td>
</tr>
<tr>
<td>Asphalitic Shingles</td>
<td>A,B,D</td>
<td>1,2,4,5,6,7</td>
</tr>
<tr>
<td>Concrete or Clay Tile</td>
<td>A,B,D,E</td>
<td>1,2,3,4,5,6,7</td>
</tr>
<tr>
<td>Metal Roofs</td>
<td>A,B,D</td>
<td>1,2,3,4,5,6,7</td>
</tr>
<tr>
<td>Wood Shingles and Shakes</td>
<td>A,B,D</td>
<td>1,2,4,5,6,7</td>
</tr>
<tr>
<td>Other</td>
<td>As Applicable</td>
<td>1,2,3,4,5,6,7</td>
</tr>
</tbody>
</table>

**ATTACHMENTS REQUIRED:**

1. Fire Directory Listing Page
2. From Product Approval:
   - 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 of Product Approval
5. Municipal Permit Application
6. Owners Notification for Roofing Considerations (Reroofing Only)
7. Any Required Roof Testing/Calculation Documentation
High-Velocity Hurricane Zone Uniform Permit Application Form

Section A (General Information)
Master Permit No.___________________________________________________   Process No. ______________________
Contractor’s Name______________________________________________________________________________
Job Address__________________________________________________________________________________

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.
High-Velocity Hurricane Zone Uniform Permit Application Form

Section C (Low Slope Application)
Fill in specific roof assembly components and identify manufacturer
(If a component is not used, identify as “NA”)

System Manufacturer:______________________________

Product Approval No.:______________________________

Design Wind Pressures, From RAS 128 or Calculations:
P1:____________  P2:_____________  P3:_____________

Max. Design Pressure, from the specific product approval 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, Counterflash, 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.
High-Velocity Hurricane Zone Uniform Permit Application Form

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: _____________  P1: _____________  P1: _____________

Roof Slope: ____________  12

Ridge Ventilation? _________________________

Deck Type: ____________________________

Type Underlayment: ____________________________

Insulation: ____________________________

Fire Barrier: ____________________________

Fastener Type & Spacing: ____________________________

Adhesive Type: ____________________________

Type Cap Sheet: ____________________________

Mean Roof Height: _____________

Roof Covering: ____________________________

Type & Size Drip Edge: ____________________________
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”**

\[
\begin{align*}
(P1: & \quad \text{_____ x } \lambda \quad \text{_____ = _____} \quad - \quad \text{Mg: } \quad \text{_____ = } \quad \text{Mr}_1 \quad \text{_____} \\
(P2: & \quad \text{_____ x } \lambda \quad \text{_____ = _____} \quad - \quad \text{Mg: } \quad \text{_____ = } \quad \text{Mr}_2 \quad \text{_____} \\
(P3: & \quad \text{_____ x } \lambda \quad \text{_____ = _____} \quad - \quad \text{Mg: } \quad \text{_____ = } \quad \text{Mr}_3 \quad \text{_____}
\end{align*}
\]

**Method 2 “Simplified Tile Calculations Per Table Below”**

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

<table>
<thead>
<tr>
<th>M_r required Moment Resistance*</th>
<th>Mean Roof Height</th>
<th>15'</th>
<th>20'</th>
<th>25'</th>
<th>30'</th>
<th>40'</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:12</td>
<td>34.4</td>
<td>36.5</td>
<td>38.2</td>
<td>39.7</td>
<td>42.2</td>
<td></td>
</tr>
<tr>
<td>3:12</td>
<td>32.2</td>
<td>34.4</td>
<td>36.0</td>
<td>37.4</td>
<td>39.8</td>
<td></td>
</tr>
<tr>
<td>4:12</td>
<td>30.4</td>
<td>32.2</td>
<td>33.8</td>
<td>35.1</td>
<td>37.3</td>
<td></td>
</tr>
<tr>
<td>5:12</td>
<td>28.4</td>
<td>30.1</td>
<td>31.6</td>
<td>32.8</td>
<td>34.9</td>
<td></td>
</tr>
<tr>
<td>6:12</td>
<td>26.4</td>
<td>28.0</td>
<td>29.4</td>
<td>30.5</td>
<td>32.4</td>
<td></td>
</tr>
<tr>
<td>7:12</td>
<td>24.4</td>
<td>25.9</td>
<td>27.1</td>
<td>28.2</td>
<td>30.0</td>
<td></td>
</tr>
</tbody>
</table>

*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”**

\[
\begin{align*}
(P1: & \quad \text{_____ x } L \quad \text{_____ = _____ x w: } \quad \text{= _____} \quad - \quad \text{W: } \quad \text{_____ x cos } \quad \Theta \quad \text{_____ = } \quad \text{Fr}_1 \quad \text{_____} \\
(P2: & \quad \text{_____ x } L \quad \text{_____ = _____ x w: } \quad \text{= _____} \quad - \quad \text{W: } \quad \text{_____ x cos } \quad \Theta \quad \text{_____ = } \quad \text{Fr}_2 \quad \text{_____} \\
(P3: & \quad \text{_____ x } L \quad \text{_____ = _____ x w: } \quad \text{= _____} \quad - \quad \text{W: } \quad \text{_____ x cos } \quad \Theta \quad \text{_____ = } \quad \text{Fr}_3 \quad \text{_____}
\end{align*}
\]

Where to Obtain Information

<table>
<thead>
<tr>
<th>Description</th>
<th>Symbol</th>
<th>Where to find</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Pressure</td>
<td>P1 or P2 or P3</td>
<td>RAS 127 Table 1 or by an engineering analysis prepared by PE based on ASCE 7</td>
</tr>
<tr>
<td>Mean Roof Height</td>
<td>H</td>
<td>Job Site</td>
</tr>
<tr>
<td>Roof Slope</td>
<td>( \Theta )</td>
<td>Job Site</td>
</tr>
<tr>
<td>Aerodynamic Multiplier</td>
<td>( \lambda )</td>
<td>Product Approval</td>
</tr>
<tr>
<td>Restoring Moment due to Gravity</td>
<td>( M_g )</td>
<td>Product Approval</td>
</tr>
<tr>
<td>Attachment Resistance</td>
<td>( M_r )</td>
<td>Product Approval</td>
</tr>
<tr>
<td>Required Moment Resistance</td>
<td>( M_r )</td>
<td>Calculated</td>
</tr>
<tr>
<td>Minimum Attachment Resistance</td>
<td>( F' )</td>
<td>Product Approval</td>
</tr>
<tr>
<td>Required Uplift Resistance</td>
<td>( F_r )</td>
<td>Calculated</td>
</tr>
<tr>
<td>Average Tile Weight</td>
<td>W</td>
<td>Product Approval</td>
</tr>
<tr>
<td>Tile Dimensions</td>
<td>( L = \text{length} ) ( W = \text{width} )</td>
<td>Product Approval</td>
</tr>
</tbody>
</table>

All calculations must be submitted to the building official at the time of permit application.