NOTES:
1 AVAILABLE IN MILL FINISH, AND BRONZE ANODIZED FINISH
2 STAINLESS STEEL LAG SCREWS INCLUDED WITH ANODIZED FINISH

QBase® Universal Tile Mount | QMUTM

**Ultimate Load Capacity**

Average values based on failure tests results in Douglas Fir

<table>
<thead>
<tr>
<th>Test Setup</th>
<th>Ultimate Load Capacity (lbf)</th>
<th>Rafter moisture content (%)</th>
<th>Rafter specific gravity</th>
<th>Failure Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pullout</td>
<td>3031</td>
<td>20.9</td>
<td>0.436</td>
<td>Lag Bolt Pulled Out</td>
</tr>
<tr>
<td>Shear Parallel to Rafter</td>
<td>803</td>
<td>13.8</td>
<td>0.438</td>
<td>Lag Bolt Pulled Out</td>
</tr>
<tr>
<td>Shear Perpendicular to Rafter</td>
<td>583</td>
<td>16.5</td>
<td>0.451</td>
<td>Plywood buckled/ Lag Bolt Pulled Out</td>
</tr>
</tbody>
</table>

Source: AME Report 111316C, 7/5/2011

Please note:
1) The ultimate load is NOT the same as allowable load. Ultimate load is the load at the point of failure. Since point of failure is usually heavily dependent on the roof itself, allowable load should be calculated by the responsible engineer using the appropriate factor of safety for that job.
2) Thread must be embedded in a rafter or other structural roof member.
3) See IBC for required edge distances.

**WARNING**: Quick Mount PV products are NOT designed and should NOT be used to anchor fall protection equipment.
Remove tile. Locate and mark center of rafter. Use a straight edge and measure up 6 5/8” from bottom of tiles to center of the mount over the center of rafter.

Align QBase over rafter center and drill two 7/32” pilot holes. Fill pilot holes with sealant compatible with roofing material. Place grade-8 cap screw under QBase in hex slot, threads pointing up. Lag QBase into rafter through pilot holes.

Install subflashing. Waterproof at underlayment level according to roofing manufacturer instructions and Tile Roofing Institute Guidelines.

With a diamond blade on a grinder or skill-saw, cut tile to allow post to pass through. Place cut tile back in position. Insert post and tighten into place.

Install the 18”x 18” flashing. Pre-bend the flashing to follow the contour of the tile if curved. Apply sealant where post and flashing meet, and install EPDM counter flashing collar. Seal off the post from weather exposure with the racking hardware in the interim before racks are installed.

Another acceptable method is to notch the tile and install the 18”x18” flashing under the tiles. This is very common in standard roofing.

You are now ready for the rack of your choice. Follow all the directions of the rack manufacturer as well as the module manufacturer.

All roofing manufacturers’ written instructions must also be followed by anyone modifying a roof system. Please consult the roof manufacturer’s specs and instructions prior to touching the roof.

Follow the same steps to install the the QBase Universal Tile Mount on both curved and flat tile roofs.