



TECHNICAL BRIEF

Recommendations of Flashings at Tile Penetrations

When existing concrete and clay tiles roof systems are *altered for the installation of roof accessories*, there is confusion in the solar community as to what flashings may be required with tile roofs. It is critical to the long-term performance of a tile roof system that all penetrations or disruptions to the field tiles receive the appropriate deck/underlayment flashing at the penetration, and tile flashings, to ensure uninterrupted water flow on the surface of the roof system, with the secondary protection at the deck/underlayment level in case the tile or tile flashing is breached. The attachment of any accessory directly to an individual tile or tiles is prohibited.

In order to help provide greater clarity to solar panel contractors/installers, the following recommendation is provided by TRI:

In instances in which roofing contractors or third-party vendors must modify roof tiles in a manner that is inconsistent with the roofing industry based installation recommendations, it shall be noted that all penetrations require an approved deck/underlayment flashing and tile flashing.

A penetration for this purpose shall be defined as:

When an object is fastened to or through the roof sheathing and protrudes through or alters the underlayment and/or roof tile, that object is a penetration through the roof system and requires flashings.

This tile flashing recommendation is consistent with good roofing and flashing practices and roofing standard methods prescribed in the TRI/WSRCA Concrete and Clay Roof Tile Installation Manual on page 18, Detail MC-02, Note 2, which states: "All penetrations require a deck and tile flashing." The tile roofing industry also covers penetration-flashing recommendations in our Florida High Wind Concrete and Clay Tile Installation Manual in Drawing FHW-08.

The above recommendations are intended to reiterate roofing and flashing industry standards for the installation of accessories (e.g., solar panels, etc.) where roof tiles are affected. Please contact the accessory manufacturer for more information on how to comply with these recommendations or for other code-approved methods. As always, the local building officials will be the final authority.

For more information on tile roofing, please visit our website at tileroofing.org or email info@tileroofing.org for specific inquiries.