



Technical Bulletin #5

TILE FASTENING PER UBC

July, 2001

Since we have recently received the latest update of our ICBO product approvals, I want to take this opportunity to clarify an issue that seems to generate a large number of calls to our sales force. In recent years, you may have noticed that our ICBO approvals no longer contain Table No. 1 which used to prescribe the fastening requirements for our tile. In its place is a statement that says that tiles must be fastened in accordance with Tables 15-D-1 and 15-D-2 of the Uniform Building Code (UBC). This was done because the ICBO staff felt that there was no real difference between Table No. 1 and the UBC Tables except that the UBC contained more detail for a broader range of conditions.

While the fastening requirements for concrete and clay roof tiles have not significantly changed during this transition, it seems that there are certain items in the tables that have been overlooked in industry practice but have recently caught some of our contractors unawares. Most significantly, is the requirement stated in both Tables 15-D-1 and 15-D-2 that fasteners shall be 11 gauge corrosion resistant nails with a minimum 5/16 inch head size. I've attached to this bulletin some information on nail specifications to help clarify what this requirement means. In essence, either an 8d or a 10d nail satisfies the requirement for an 11 gauge shank size, but only the 10d satisfies the requirement for the 5/16 inch head.

While many of our contractors have routinely used 8d fasteners to attach our tiles, particularly on batten installations, they would be better served to use roofing nails that do have the proper head size. Roofing nails are usually 11 gauge corrosion resistant steel and can be purchased in lengths sufficient to provide the 3/4 inch penetration into the deck or batten that is required by code.

Another potential transgression is the use of nail guns for the attachment of roof tile. Typically, the collated nails used in air guns have a clipped or reduced head size that may not meet the code requirement. Coil nails will generally hold roofing nails with the proper head size but it is important to ensure that the length is sufficient to satisfy the code requirements.

We are currently in the process of evaluating the fastening requirements for our products and there is strong evidence that shows that other fasteners than those currently prescribed by code may be adequate to attach our tile to the roof.