



Technical Bulletin #24

TILE SHUNT

The installation of interlocking concrete tile is a rather straightforward process that is relatively simple if proper attention is paid to the preparation and performance of the necessary tasks involved. Once the coursing has been measured and marked, the tiles tend to nestle quite nicely together, regardless of whether they are installed on battens or fastened directly to the roof deck.

There is, however, a bit of an art to the application that is sometimes lost to the applicator who does not pay attention or rushes the process without taking reasonable care. It can be easy sometimes to get carried away with just “slapping ‘em down” and giving the tile an occasional kick to keep them in line. The problem with this practice is that it will sometimes result in an application that forces the tiles together in a fashion that may damage the tile or jam them up in a manner contrary to the intention of the manufacturer’s design. The most common problem we see when this occurs is breakage of the bottom corner of the cover lock portion of the tile. By design, this is usually the thinnest portion of the tile and logically the most susceptible to breakage. When the tiles are forced tightly together longitudinally, the corners may not necessarily break from the contact created, but they will be more likely to break from foot traffic or even the expansion and contraction of the underlying roof deck.

It is for this reason that most manufacturers will design their tile with an intended shunt, which is the space that should be maintained between the bodies of adjacent tiles. This shunt is generally accomplished by designing the interlock feature of the tile to have a certain amount of vertical “play”. On most tiles this shunt will be approximately 1/16th of an inch but may be up to ¼-inch on some designs.

It is important that the applicator recognizes this aspect of the application and maintains the proper shunt while installing the tiles. It is also important that the roof framer provides a level roof deck for the roofer to work on since swales in the roofline can also play a part in the fit of the tile, particularly with profile tiles that require a straight vertical alignment.