



Technical Bulletin #23

CUT DUST REMOVAL

September, 2001

The most common method for cutting concrete roof tile is to use a hand held circular power saw with a carborundum or dry cut diamond blade. Wet saws may be used but rarely are since the cutwork is typically performed on the roof, near the position of the tile placement.

Dry cutting concrete tile can create a large amount of dust that will coat the area around where the cutting is done. Safety equipment such as eye protection and dust masks should always be used when cutting tile. To avoid dust accumulation, cutting should be done away from the finished roof surface.

It is recommended that cut dust be removed from the surface of the tile at the end of each workday to prevent the dust from sticking to the tile. Cut dust left on the surface of the tile is subject to activation and may bond to the surface if it becomes moist from dew or light rain.

Methods for removing cut dust include power blowing, water rinse or both. Usually, a well directed air jet will remove most of the dust from the tile although a thorough rinsing with water may also be effective. Caution must be exercised when washing tiles since they may become slippery when wet. Another precaution when washing cut dust from tile is to be thorough since residual dust may bond to the surface of the tile if it is not all removed. In some cases, it may be necessary to agitate the surface with a rough cloth or stiff brush. Power washing may also be used if necessary (1200 psi max.).

In the event that cut dust is not removed and does bond to the tile surface, it may be quite difficult to remove without extensive scrubbing. There are also no known chemical compounds that will clean the area without damage to the sealer coat. In these cases it is sometimes best to let the natural weathering process work to remove the resultant discoloration. Fortunately, the dust is normally only bonded to the sealer coat of the tile and does not stain the body of the tile or affect the integrity of the roof.

The sealer on the surface of the tile is a temporary coating that is applied during the manufacturing process to control the efflorescence that is a byproduct of the concrete forming chemical reaction. The sealer coat is not designed to be a permanent part of the tile and as it weathers, any dust that is stuck to it will disappear in time. How long this takes depends on a number of variables such as climate, tile type and severity of the condition.