

## Inspecting and Maintaining Unicrete Tile Roofs

Unicrete Concrete Roof Tile comes with a 50 year non-pro-rated warranty and concrete roof tile has been known to last in actual historically demonstrated situations between 60 to 80 years. Because of this well known durability, common sense roof maintenance is sometimes overlooked or even considered to be not needed with a Unicrete tile roof. While concrete and clay roof tile is considered to be a very **low**-maintenance roof covering, no roof covering qualifies as **no**-maintenance roofing material. With any roof, a maintenance inspection schedule will save dollars by catching small items before they become expensive problems and add years to the service life of the roof. A 2-year follow up inspection should be negotiated with your roofing contractor or a roof inspector as part of the bid package for your new or re-roof project. This should catch items such as improperly secured or damaged tile, poorly supported transition flashing junctions, etc. before they can cause serious problems. Once the 2- year follow up inspection has been completed, an inspection should be done every 5 years for the duration of the roof life. While this may seem to be excessive to many, as it will be very seldom that anything will need to be attended to, it is very inexpensive peace of mind to confirm everything is in good shape and an extremely good investment if damage is found and quickly repaired while it is still of a minor nature. On roofs with easily walkable slopes, the roofs should be accessed for this inspection, and on steeper sloped roofs, much of the roof can be inspected from the ground or from a ladders edge with binoculars.

A partial list of some items that should be inspected for on Tile Roofs is:

- Does the tile comply with the Canadian tile quality requirements for freeze/thaw, etc? This is usually evidenced by having a CCMC compliance number.
- Broken or cracked tile. Small corner pieces that have still left the underlying tile in place would be considered to be only cosmetic, but cracks that would expose the underlay material or in the main body of the tile should be replaced.
- Unsecured tile pieces are often only caught once they have slipped down out of place. Any cut tile should be fastened to the roof, so pay special attention to tile pieces around hips, valleys, and vents.
- Closure materials under ridge and hip tile caps. The two most common materials would be metal Flex Vent closure metal or mortar. See Technical Bulletin # 3 “Weather Blocking on Unicrete Concrete Tile Roofs in the Ridge and Hip Cavities”.
- Ridge and hip tiles properly caulked and fastened, especially if using Flex Flash. Ridge and hip tiles should rest properly on the ridge board build up, and not on field tile. Rake tile should be installed securely with two fasteners; not riding up onto the field tile row at the top.
- A minimum of 4” (10cm) head lap on the under-tile underlay. Underlay must be a minimum of ¾” (20mm) overhang or else a sheathing level drip edge flashing at the eave. (The underlay can be easily accessed by simply pushing a tile or two straight up the roof about 4” to 6” above the level it is sitting at. Try to push up on a tile and if it does not move, try the row above it, as two rows of tile in a row are seldom nailed off. You can generally lift most of the pressure off the tile being moved by lifting up the tile that is to

the immediate left and covering the rain seal. See Technical bulletin #7 “Walking on Unicrete Concrete Roof Tiles”.

- A minimum of a 3” tile head lap should be covering tile rows. Again this can be checked by pushing up a tile to ensure that it is covering at least 3” of the tile below it, or you can simply measure the exposed tile surface and ensure that it is no more than 13.5 (345mm) from the bottom of the tile to the next row tile bottom.
- Under-tile vent screening or some other appropriate method of venting attic air into under-tile space, and then Flex Vent or through-tile air vents to vent to the atmosphere. (See Technical Bulletin #4 “Venting Requirements for Unicrete Roof Tile Applications”)
- All tile side vent flashings should be proper tile vents with malleable (usually lead) bases that have been caulked to the tile and proper 4” rubberneck collars around the 4” vent stacks – not a lead piece with caulking around it.
- Proper flashings in place and all lead or Flex Flash transition flashings properly installed and supported. Flashings properly counter-flashed by either the siding material or a re-roofing counter-flashing and caulked.
- Bottom row of tile not projecting past the edge of the starter flashing so as to maximize distance to eavestrough.
- Valley cuts at least 2” (5cm) from valley center line and all valley pieces secured and properly supported. Top ridge tile at top valley intersection properly fit into field tile and caulked or mortared to divert water from field tile above draining under cap.

These are some of the more common areas of inspection to consider, but all inspections should be carried out by inspectors that are experienced with tile installation and the Canadian Concrete Roof Tile standard the CAN/CSA A-220 Series 06 which regulates all tile installations in Canada.

For further information regarding Unicrete roof tile please contact our Calgary office.

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