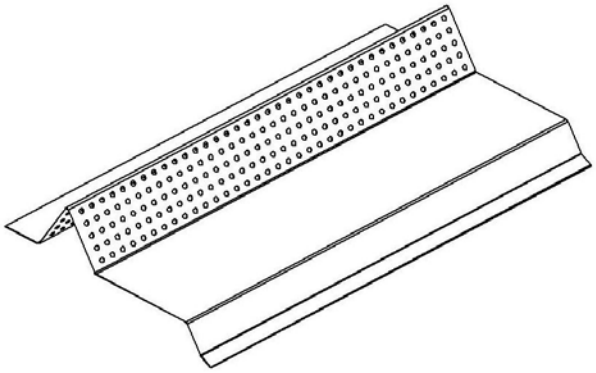
Using New Unicrete Metal Flashings

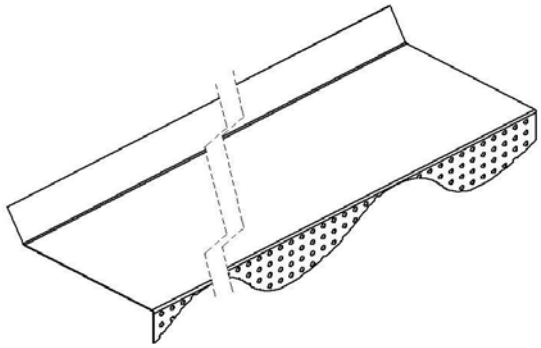
In response to questions that have come up regarding usage of the new flashings recently introduced to our tile roofing contractors, the following information will deal with some of the details for using them. It is not meant to be a complete guide and experienced roofers will themselves develop many variations. As long as good roofing principles are followed this is encouraged, as field methods that can help improve the roof tile industry in quality and efficiency are always welcome. Please feel free to share your experience with us here at Unicrete.

NEW - Vented Slate Starter and Edge Support Flashing (Replaces O2A and O2C)



This flashing replaces the standard slate starter flashing and the typical 2”x2” eave edge support while adding a great deal of increase under-tile venting capacity. Of course combining both the 2”x2” and flashing installation into one step should increase efficiency.
The installation method is similar to installing the 2”x2” at the eave in that you snap a chalk line to line up the top part of the flashing at the proper distance from the eave edge. The measurement from the eave edge for the chalk line is: 5 ½” or 14 cm. To install the actual flashing, it is important that two fasteners be used at each counter-strapping location (one in the bottom edge and one in the top edge above the first fastener) so that the vented support is stable and can properly support the first row of tiles.

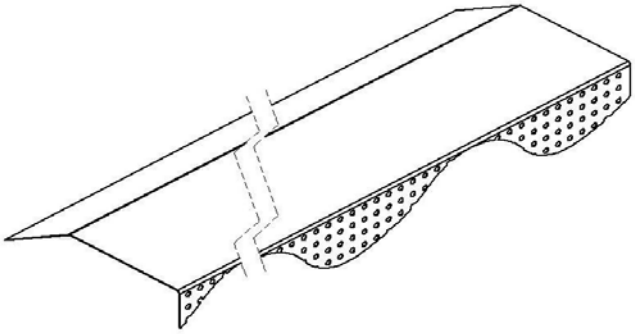
NEW - Vented Estate Wall Flashing Filler (Formerly O10A)



This flashing is meant to both fill in the voids under the typical wall flashing which floats on top of the tile, and to provide the double caulking seal required on all re-roofing wall

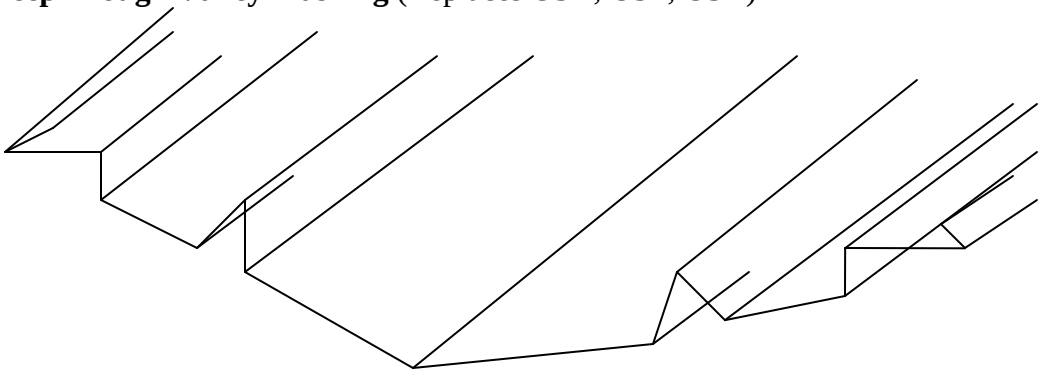
or channel type applications where the flashing can not be worked under the cladding material (always the better option). It will be fastened through the top 1" lip into the wall and then caulked on the top of the flashing (against the wall). A second typical wall flashing will then be installed over it which will also be fastened into the wall and caulked. In addition it is recommended that the two flashings be joined together by either sheet metal screws and/or a bead of caulking, to lessen the possibility of chattering in the wind and to give a better visual appearance. Using this flashing will both keep the birds out of the top of the tiles and allow good ventilation.

NEW - Vented Estate Ridge Filler Flashing (Formerly O10A)



This flashing is another alternative for ridges only to either mortar or flex vent. Mortar is seldom used any more due to the ongoing problems with pieces of mortar falling out, efflorescence blooms in the mortar, and most importantly the losing of much of the under-tile ventilation benefit by blocking the top ventilation passage. Flex Vent has largely replaced the use of mortar and is still the only Unicrete recommended non-mortar solution for hips. However with the introduction of this new flashing, there is a more economical non-mortar solution for ridges with the advantages of flex vent. The flashing is designed to simply be nailed at the top bend on to the top of the 2"x2" ridge build up board with a 10' piece being installed from each side. It is important to ensure the metal is over bent so as to keep pressure on where the flashing meets the tile. Five pieces of the new vented eestate ridge filler flashing will replace a 25' roll of flex vent.

NEW - Deep Trough Valley Flashing (Replaces O3A; O3F; O3N)



The new valley flashing is designed to help support the smaller tile valley pieces while giving an extra layer of protection from water getting past the valley into the underlay. It is not meant to replace the standard method of supporting the smaller cut tile pieces in the valley, (pushing tiles up above the top of the tile line, using nail supports, drilling and

fastening, urethane caulking or tile foam, etc.) but rather is meant to be an extra layer of protection and support. It is very straight forward to work with in typical straight valley situations where you would usually simply run the 1”x4” valley support 6” away from the valley center line, install the valley flashing fastening it on this 1”x4” and then install the second 1”x4” on the other side of the center line against the opposite valley edge and attach. Of course fasteners should never penetrate the valley flashing anywhere except at the edge on top of the 1”x4” valley support board.

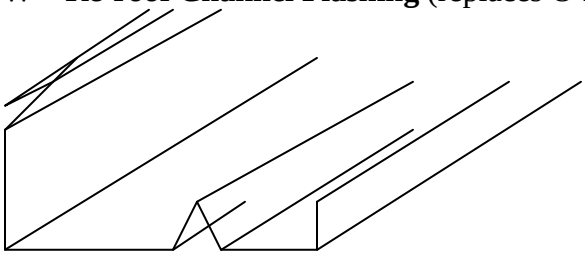
The new valley metal is a little trickier to work with in situations when the valley changes course and is not a straight line down the roof, and when joining the valley metal at the top of third gables and saddles.

It is recommended that a metal cutting blade in a small side grinder or power shears be used for more accurate cuts at these joins and for working with this flashing in general.

All the valley metal profile matches should be joined a closely as possible, and then a saddle or transition piece should be used on top of the valley metal, projecting down into the sides of the valley 6” at the top of third gable joins. This has always been a code requirement as per the Concrete Roof Tiles A-200 Series-06 page 46 section 9.3.3 “A flashing saddle shall be installed across the joint at the intersection of two valley heads” Unfortunately field inspections have revealed that this code requirement is often overlooked; and there have been many leak problems associated with the overlooking of this simple code requirement.

At valley angle changes a transition flashing should go between the two valley pieces and project at least 6” under the top valley flashing and 6” over the bottom valley flashing. For cosmetic purposes a 6” center cut from a valley piece may also be used to cover the transition flashing in the exposed center part of the valley, projecting just a couple of inches under the lip of the top valley flashing and covering the exposed part of the transition piece on the bottom valley flashing. It should of course be nailed under the top part of the flashing and caulked to the bottom transition piece. One additional note is that at the bottom of the flashing the V’s should have a 1” snip cut at the top of the V and then the sides should be bend into each other to close of the hole.

NEW – Re-roof Channel Flashing (replaces O4E, O4F, and 06A)



This flashing has also been designed to give some extra support to small cut tile pieces and also to create better water protection from spill over by using a double channel system. Again, it is not meant to replace the standard methods of drilling and nailing, urethane adhesives, using proper lay out methods where possible to start with full pieces etc. It will be helpful for support with Slate profile tile and in many cases with Estate style tile – although there will be instances with Estate where the hollow of the tile will keep this support feature from helping and the only advantage will then be the double channel water protection. As always, it will be necessary to knock the interfering portion of the tile lug off. Please remember to always knock off the bottom tile lug at the bottom

of a channel flashing run as otherwise this lug will collect debris over time and will dam up the water flow resulting in potential problems. As with the ends of the V's on the valley flashing, the V at the end of the channel flashing should have a 1"snip cut into the top and then the sides should be folded down to close off the hole.
There is one additional note regarding working with the new double channel flashing. When you are extending the channel flashing up above the top of a corner and either a Backpan or a wall flashing will be going on top of it, the V should be flattened out at the top 6"to 8" so the back pan or the wall flashing will sit down properly and not end up suspended on the V. The easiest way to do this is simply to use a Malco hand Seamer tool or else to simply use your roofing hammer to fold the V into the body of the channel flashing.
For further information regarding Unicrete roof tile please contact our Calgary office.

Brent Applegate (Technical Manager) 2009