

Eave protection under-lay specifications for Unicrete Roof Tile

All Unicrete Tile installations are to conform to the 2005 National Building Code or the Building Code having jurisdictional authority (e.g. 2006 Alberta Building Code). In addition the specific National Building Code document applying to concrete roof tile installation is the CSA-A220 Series-06. The relevant sections pertaining to eave protection are:

- 1) 2005 NBC – section 9.26.5 (Division B page 9-149)
- 2) 2006 ABC – section 9.26.5 (Division B page 9-147)
- 3) 2006 CSA-A220 Series-06 – sections 4.4.2.1.1 (Page 24), 6.2.1.1 (Page 33) and the Inspection No.1 checklist (Page 58)

There is a very detailed underlayment and eave and valley protection testing criteria established in the CSA-A220 Series-06 standard from pages 24 to 31. Table 1 “Underlayment Performance Requirements” on Page 25 summarizes the results a membrane manufacturer must test to in order to be used under tile in Canada. The CSA-A220 Series-06 also allows the choices of the NBC and ABC in section 9.26.5.2. These lists of approved eave protection materials are:

- a) No 15 lb. asphalt-saturated felt laid in two plies lapped 480 mm and cemented together with lap cement,
- b) Type M or S roll roofing laid with not less than 100mm head and end laps cemented together with lap cement,
- c) Glass fiber or polyester fiber coated base sheets, or
- d) Self-sealing composite membranes consisting of modified bituminous coated material.

Unicrete endorses the use of any polypropylene membranes that have completed the necessary testing for CSA-A220 Series-06 approval.

Regarding section 9.26.5.1 in both the NBC and ABC as there is no difference in the texts, the usual application methods shall be followed. Generally the minimum width of the eave underlay material will be 900mm (44”) and will go at least 300mm (12”) on to the side of the roof over the interior partitions. There are many exceptions for unheated roof areas, large overhangs, roof slopes greater than 7/12, high snow load areas, etc. and the NBC code should be followed in all of these cases.

Valley underlay material is usually a 36” wide (18” on each side of the valley center line) peel and stick membrane used under the valley flashing.

For additional information on Unicrete Concrete Roof Tiles please contact the Unicrete office.