VALLEY FLASHING INSTALLATION

Figure 4–10 illustrates a method of flashing a valley for shingle, slate, or tile roofs. The valley shown is of an open type, where some of the flashing is exposed to view.

The open portion of the valley should be a minimum of 5 in. (127 mm) and the shingles should lap the flashing a minimum of 5 in. (127 mm). The edges of the valley should be formed with a hook edge and cleated on 24 in. (610 mm) centers.

On roof pitches over 6:12 and on dissimilar pitches, increase the inverted vee ("V" Crimp) in the valley to 2 in. (50 mm) height.

Flashings are generally formed in 10 ft (3 m) sections. Sections should be lapped 8 in. (203 mm) in the direction of flow. The top of each section should be fastened with nails of material compatible with the flashing. A 30 in. (760 mm) wide felt is placed in the valley. In heavy snow and ice areas, an adhered membrane, the width of the typical roll (nominally 36 in. (914 mm)) is installed to the substrate down the entire valley, before the metal valley flashing. After the outside edges of the the metal valley are secured, a minimum of an 8 in. strip of adhered membrane is installed over the valley flange and fasteners.

In heavy snow areas, low sloped areas may require additional width of adhered membrane.

FIGURE 4-10

Ice damming occurs after snow has thawed and refrozen so that during subsequent thaws water accumulates behind a dam of snow and ice. As the water level rises, it begins to seep in through seams or above flashing. This problem typically occurs where snow accumulates such as near the roof's eave, in valleys, behind obstructions to direct drainage such as equipment, chimneys, snow retention systems, skylights and dormers, large penetrations, rising walls, and in roof areas with low pitch. In colder regions a continuous water proof sheet should extend up the entire valley. Continuous water proofing is installed first and is a minimum of 8 in beyond the edges of the metal valley flashing.

Then a cover strip should be applied over the edge of the metal valley a minimum of 8 in. (203 mm). Distance should be specified. *See* Figure 6-16C and associated text.

The felt in the valley should lap 6 in. (152 mm) over the cleated edges. The roofing felt should lap over the cleated edges of the flashing.

Copper (minimum 16 oz. (0.55 mm)), or stainless steel (minimum 0.018 in. (0.457 mm)) is recommended for valley flashings. Where the expected life of the roof is less than 15 years, galvanized steel (minimum 24 ga (0.607 mm)) may be used but it must be painted.

Coverage. From the top, down.

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FIGURE 4-10 VALLEY FLASHING INSTALLATION

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