- 17. Where saddles or crickets are formed in back of chimneys, curves or similar vertical surfaces, they shall be carried not less than 254mm under the Certi-label shakes/shingles.
- 18. Step flashing shall be used where vertical surfaces occur in connection with slopes. They shall be formed of separate pieces. Flashing shall extend horizontally not less than 76mm and up the vertical wall so that they shall be lapped by the counter flashing not less than 102mm. It shall be installed in step fashion and each piece shall lap not less than 76mm (one flashing installed on each course concealed under the covering course). If other than masonry is used the flashing shall extend up the wall not less than 76mm behind the sheathing paper.
- 19. Dormer flashings shall run 76mm up under the sheathing paper and not less than 76mm horizontally.
- 20. Window caps and all other projections at points where rain water accumulates must be provided with flashings, such flashings must extend a distance of at least 76mm up the wall behind the sheathing paper.
- Soil pipes: Metal shall extend no less than 152mm in all directions and shall be installed to lap and shed water to the Certi-label shakes or shingles below.

Hips and Ridges

22. All Certi-label shake/shingle hips and ridges shall be of alternate overlap type applied at the same exposure as field of roof and with nails long enough to penetrate into sheathing at least 19mm. Install a strip of felt, eave protection material or metal over hip or ridge under the ridge or hip cap. If longer or shorter ridge cap is used, adjust exposure accordingly.

Valleys

- Certi-label shakes/shingles extending into the valley shall be sawed to the proper miter.
- 24. Do not lay shakes or shingles with grain parallel with the centerline of valleys.
- 25. All valleys shall be installed with Certi-label shakes/shingles lapping the valley flashing not less than 178mm on each side.
- 26. On Certi-label shingle roofs of less than 27° slope, flashing should extend at least 279mm on each side.
- 27. For Certi-label shakes, metal valley sheets shall be center-crimped; of 508mm minimum width; underlayed with a strip of No. 30 ASTM D226 Type II or No. 30 ASTM D4869 Type IV roofing felt over the sheathing, and coated with a metal paint.
- 28. Valley metals that have proved reliable in a particular geographic region should be selected. Copper flashing: check with local authorities on the durabilities of copper valleys in your area.

Fasteners

29. **For projects within 15 miles of salt** water – Certi-label roof shakes and shingles shall be secured with two (2) fasteners stainless steel Type 316 nails.

For locations outside the 15 mile range of salt water – Certi-label roof shakes and shingles shall be secured with two (2) fasteners: stainless steel Type 304, Type 316, or hot-dipped galvanized with a coating weight of ASTM A153 Class D (0.028 kg/0.093 m²).

For Pressure Impregnated Products – Fasteners used with fire-retardant-treated (Certi-Guard®) or preservative-treated (Certi-Last®) shakes or shingles must be stainless steel Type 316. For specifics on installation, accessory building materials (flashing, etc.), finishes and maintenance please contact the treatment company directly.

Fasteners shall be long enough to penetrate into the solid wood sheathing at least 19mm or all the way through.

30. Nails shall be driven flush but not so that the nail head crushes the wood. They shall be placed approximately 19mm to 25mm from the side edges of the shakes/shingles and approximately 38mm above the butt line of the following course.

- 31. Each Certi-label roof shake/shingle shall be secured with two full-driven, corrosion-resistant fasteners. (Specify size and type.)
- 32. Ensure that fasteners used are accepted by your local Building Official.

Shingles:

- 33. Use 3d "box" nails for new roofs with 406mm and 457mm shingles.
- 34. Use 4d "box" nails for new roofs with 610mm shingles.
- 35. Use 5d "box" nails for over-roofing with 406mm and 457mm shingles, and for hips and ridges.

Shakes:

- 36. Use 5d "box" nails for new roofs with 457mm straight-split shakes.
- 37. Use 6d "box 2" nails for new roofs with 457mm and 610mm handsplit-and-resawn shakes.
- 38. Use 5d 2 nails for new roofs with 610mm tapersplit.
- 39. Use 6d "box 2" nails for new roofs with 457mm and 610mm tapersawn.
- 40. 6d nails are usually adequate for Certi-label shakes, but longer nails shall be used as Certi-label shake or shingle thickness or weather exposure dictates.