

ASPHALT SHINGLE INSTALLATION BASED ON THE 2009 INTERNATIONAL BUILDING CODE

R905.1 ROOF COVERING - Roof coverings shall be applied in accordance with manufacturer's installation instructions.

R905.2.2 SLOPE - Asphalt shingles shall be used only on roof slopes of 2:12 or greater. For roof slopes from 2:12 up to 4:12, continuous ice and water application is required in accordance with Section R905.2.7.

R905.2.3 UNDERLAYMENT - Unless otherwise noted, required underlayment shall conform to ASTM D 226 Type I, ASTM D 4869 Type I, or ASTM D 6757. Self-adhering polymer modified bitumen sheet shall comply with ASTM D 1970.

R905.2.4.1 WIND RESISTANCE - Asphalt shingles packages shall bear a label indicating compliance with ASTM D7158 or D3161.

R905.2.5 FASTENERS - Fasteners for asphalt shingles shall be galvanized steel, stainless steel, aluminum or copper roofing nails, minimum 12 gage shank with a minimum 3/8" diameter head, ASTM F 1667, of a length to penetrate through the sheathing. Fasteners shall comply with ASTM F 1667.

R905.2.6 ATTACHMENT - Asphalt shingles shall have the minimum number of fasteners required by the manufacturer. For normal application, asphalt shingles shall be secured to the roof with not less than four fasteners per strip shingle or two fasteners per individual shingle. Where the roof slope exceeds 20:12 or where the basic wind speed is 110 mph or greater, asphalt shingles shall be secured to the roof in accordance with the manufacturer's special installation instructions or, in the absence of such instructions, with not less than six fasteners per strip shingle or three fasteners per individual shingle.

Shingles classified using ASTM D 3161 are acceptable for use in wind zones less than 110 mph. Shingles classified using ASTM D 3161 Class F are acceptable for use where the basic wind speed per Appendix M is 110 mph or greater and in all cases where special fastening is required. **The basic wind speed for Windsor Locks is 100 MPH, therefore 4 nails per shingle meets code requirements.**

R905.2.7.1 ICE BARRIER - Ice and water barrier shall extend from the lowest edges of all roof surfaces to a point at least 24 inches inside the exterior wall line of the building. (See illustration below)

R905.2.8.2 VALLEYS - Valley shall have a 36" wide strip of ice and water barrier installed per manufacturer's instructions.

R905.2.8.4 FLASHING - Apply step, chimney, wall, & vent flashing installed per manufacturer's instructions.

R905.2.8.5 EDGING - Install drip and rake metal edging at eaves and gables per manufacturer's instructions.

