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 units vertical in 12 units horizontal (167 percent slope), special methods of fastening are required. For roofs located where the basic wind speed per Figure R301.2(4) is 110 mph (49 m/s) or higher, special methods of fastening are required. Special fastening methods shall be tested in accordance with ASTM D 3161, Class F. Asphalt shingle wrappers shall bear a label indicating compliance with ASTM D 3161, Class F.

REFERENCED SECTION:

R905.1 Roof covering application. Roof coverings shall be applied in accordance with the applicable provisions of this section and the manufacturer’s installation instructions. Unless otherwise specified in this section, roof coverings shall be installed to resist the component and cladding loads specified in Table 301.2(2), adjusted for height and exposure in accordance with Table R301.2(3).

Q: In accordance with the provisions of Section 905.2.6 of the International Residential Code, does the “special method of fastening” specified for the attachment of asphalt shingles applied to roofs located where the basic wind speed is 110 mph or higher require the fasteners to be designed to resist component and cladding loads?

A: No. Where the code requires “special method of fastening”, testing is required that addresses the method of installation of the asphalt shingles which includes the method of fastening that is recommended by the manufacturer. Testing to achieve a Class F rating under ASTM D 3161 correlates with wind speeds of 110 mph and higher. The asphalt shingle wrappers are then labeled to indicate compliance with ASTM D 3161, Class F based on how the asphalt shingles were installed when tested, i.e. manufacturer’s installation instructions.