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APPLYING SHINGLES ON STEEP SLOPES AND MANSARD ROOFS

With the advancements and changes in architectural design, steep slope (including mansard) roof shingle applications are becoming more common. Unfortunately, steep slopes can reduce the effectiveness of standard nailing patterns and the ability of factory applied sealing strips to perform their desired function.

Occasionally, there could be associated problems when asphalt shingles are applied on a steep slope using “normal” installation practices. Thus, it is prudent to enhance the installation requirements to ensure a functional, long lasting and water shedding roof.

A steep slope roof is defined as a slope of 21”:12” or greater (60 degrees). If the slope meets or exceeds a 21”: 12” slope, the following recommendations should be followed.

- Secure the shingle to the roof using an enhanced fastening pattern. Often, this is a 6 nail pattern as opposed to the traditional 4 nail pattern*.
- Seal down each shingle, at the time of application, with three 1”diameter (approximately the size and thickness of a quarter) spots of asphalt plastic cement placed above the bottom edge of the shingle and equally spaced across the shingle*.

On every roof installation, the fasteners should be placed according to the shingle manufacturer’s installation instructions. On steep slope roofs, correct placement of nails on laminated (two-piece) shingles is even more critical as the nails will penetrate both shingle layers when placed correctly. If the nails are placed too high on the shingle, it is possible that, over time, the bottom layer, which will be held in place only by the factory applied adhesive, will delaminate and slide off the roof.

*Check with the shingle manufacturers regarding the type and quantity of nails/adhesive.