

Roof Quandaries

by Henry Spies

Q. We are getting a lot of jobs with Mansard-type roofs. The roof covering is concrete tile, but much of the roof has a slope of only 2:12. What precautions should we take?

A. According to the National Roofing Contractors Association, the minimum slope for a concrete one-piece barrel tile or interlocking flat-ribbed tile is 4:12. For flat shingle tile, it is 5:12. The CABO One and Two Family Dwelling Code prohibits the installation of any concrete tile on slopes less than 3:12, except with the permission of the building official.

The best precaution is to use some other type of roofing on the low slopes. However, if a uniform appearance is desired, a double-layer of 30-pound roofing felt, set in mastic or hot asphalt, must be laid over the sheathing and under the tiles. This effectively forms a waterproofing membrane. The concrete tile would then be cosmetic and would protect the membrane from the sun.

Reroofing Over Asphalt Shingles

Q. Are there any drawbacks to reroofing over asphalt shingles? How many layers can accumulate before you should tear them off?

A. There are no problems with

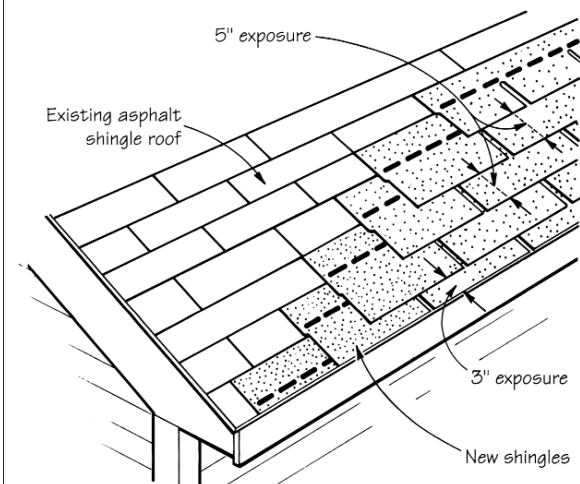
adding a second layer of shingles over conventional asphalt shingles, if they are properly installed. To keep the second layer flat and avoid a wavy pattern in the new roof, cut the tabs off the new shingles for the starter course, as shown below. Nails, not staples, should be used to fasten the new shingles.

I would not recommend more than two layers of shingles, although many codes permit three. There are three reasons for not going past two layers: 1) the combined weight of the layered shingles would be very heavy and might exceed the design load of the roof structure; 2) the deep layers would give inadequate lateral support for the nails and there would be a greater chance of a blowoff; and 3) the roof would retain more heat, which would reduce the life expectancy of the shingles.

I would also not recommend a second layer over textured (architectural-style) asphalt roof shingles, because of the added weight and the difficulty of producing an even surface. ■

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Second-Layer Asphalt Roofing



When installing a second layer of asphalt shingles, cut the tabs off the starter course and butt each course against the end of the old tabs. This will keep the roof surface smooth.