

## Re-roofing Info Bulletin

All re-roofing projects present the possibility of some minor cosmetic drywall cracking appearing on the ceiling and wall finishes of the home being re-roofed. Although the number of homes this occurs in is small statistically, it is an attendant risk with any re-roofing project, no matter what roofing material is being used, which no roofing contractor will accept responsibility for. It is more prevalent in homes with large truss spans and scissor truss (cathedral ceiling) type construction, but can occur in any home.

There are many pre-existing conditions that can contribute to this issue such as the degree of difficulty encountered in removing the old roofing material, (generally more difficult to remove wood roofs than asphalt); the method and quality of attachment of the roof trusses at the exterior loading walls; the length of clear spans of the existing trusses. . .

Always remove valuable pictures, ornaments etc. from your walls and fragile ornaments from wall shelves during the re-roofing project, and protect special plants etc.

The first step in a re-roofing project is the removal of the old roofing material. The unloading of the old roof material from the trusses that have carried this weight since before the interior drywall was installed, can cause some decompression of the bottom chord carrying the ceiling drywall, and the resulting movement can occasionally cause a small tear in the drywall tape at a joint, resulting in a small crack. Although this crack will then be put back into compression when the new roofing material is installed, a very small but visible cosmetic crack will be left. In addition the trusses are subjected to deflection movement stresses due to the unavoidable actions of the workers removing the old roof and installing the new one. These stresses can occasionally cause minor cracks.

These cracks would be considered cosmetic only and have no bearing on the structural integrity of the home. However should they occur, and should the homeowner wish to repair them, they may require feathering in or replacement of some ceiling stipple and some amount of re-painting to repair. Repairs should obviously never be attempted until the new roof is completely finished and all roofing work is completed.

It should be understood that these cracks are a possibility with any re-roofing project and that the type of new roofing material being installed will have no bearing upon the likelihood of their appearance. Occasionally a homeowner may suspect that the weight of the new roof material is causing these cracks. The error of this line of thinking is clearly shown by the fact that these cracks typically occur before the new roofing material is even delivered on tile jobs. In addition, the trusses and structure of every home are always designed to include the heaviest weight that could occur during a record snow fall. The minimum roof snow load that can be factored into the truss is 1 Kpa or about 21 Lbs. per sq. ft. This would mean that it is likely that every home being re-roofed has already withstood a total roof weight of 21 lbs. per sq. ft., plus the weight of the previous roof covering (between 2.1 lbs. and 5 lbs. depending upon roofing material) for a total roof loading weight of between 23 and 26 lbs. - without cracking in the past. Even the heaviest new roofing materials such as heavy weight Slate concrete or clay roof tiles at 12 lbs. per sq. ft. or real Slate roofing at 16 lbs. per sq. ft. will be considerably less in weight than this, until a large snow fall is added to the load. Lightweight tile at 7 lbs. adds less than 10% to the design load. Therefore if structural cracks appear as a result of the added weight of a new roofing material, they will not appear during the roofing project, but only appear after the weight of a large snow load has been experienced. For further info contact the Unicrete office.

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