

CDR BULLETIN

ROOFING BASICS

March 2008

Volume 2, Issue 1



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There are many types of roofs and just as many types of roofing materials to cover those roofs. In general, there are steep slope roofs with a pitch of 2:12 or greater, and low slope roofs under 2:12 pitch. Steep slope roofing materials include wood shakes and shingles, stone, slate or concrete tiles, architectural metals and asphalt shingles. For many steep slope products a minimum slope of 4:12 is required. These materials and installations use gravity and slope to shed water. Low slope roofing such as bituminous, PVC, TPO, soldered metal or spray foam membranes provide a non-permeable barrier relying on a fully watertight installation with fully sealed laps and seams.

Whether for a family home or commercial building, roofs provide protection for the interior of the building and must be installed correctly and maintained to provide the greatest benefit. Failure to do so can lead to costly repairs. Roofing manufacturers typically have installation instructions available for their products, and some require that their products be installed by certified/trained installers knowledgeable in the use of the products. The installer and manufacturer often offer material and workmanship warranties for a roofing installation. If incorrectly installed, the manufacturer may not honor its warranty.

Some common installation failures:

Steep slope roofing:

- Improper attachment and/or incorrect fasteners causing roof to loosen or dislodge
- Insufficient head lap between courses of roofing
- Poor seal around penetrations
- Poor sequencing of roofing materials and flashings around penetrations and at edges
- Improper or poorly installed underlayment

Low slope roofing:

- Inadequate slope causing long duration pooling of water
- Incomplete sealing of seams and laps
- Non-permanent seal at penetrations
- Insufficient integration with adjacent building claddings such as siding, flashings, access hatches, etc at the tops of walls.

We suggest that all roofs be inspected annually by a roofing expert, and a maintenance program established to identify and repair damage, wear and tear. A proactive approach to understanding your roof and its proper care will go a long way toward protecting you from costly repairs or a prematurely failed roof system.

