

► INTRODUCTION

The primary purpose of a roof is to keep the building and its occupants protected from rain, snow, sun, wind, and all the combinations of these. Roofs may also add to or detract from the appearance of a building. Roofs provide some mechanical protection against falling objects, although anyone who has seen the damage done by a large tree falling on a house, knows their strength is limited. Contrary to what many think, roof coverings are not intended to keep out the cold. The majority of roofs are extremely poor insulators.

► 1.0 ROOFING

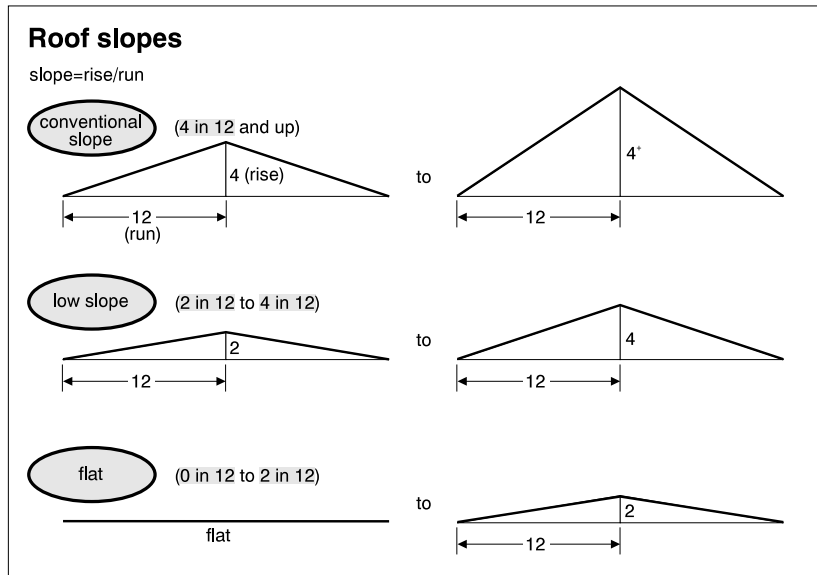
*Sloped and Flat*

There are two main categories of roofing systems: sloped roofs and flat roofs. Sloped roofing systems are not watertight, per se. They shed water much like a pyramid of umbrellas. Flat roofs, on the other hand, are watertight membranes which are designed to be impervious to water penetration. Flat roofing is actually a misnomer as these roofing systems should never be perfectly flat. They should slope enough to allow water to drain properly, since water standing on the roof for long periods of time will accelerate deterioration of the membrane. Good practice includes a secondary drain for flat roofs.

*Drainage*

*Pitch*

Before discussing roofing materials, two common roofing expressions should be defined. The first is “pitch”. The pitch of a roof is really the slope of the roof. Convention dictates that the slope is defined as a ratio of rise over run. For uniformity, the run is always defined as twelve feet. Therefore, a six in twelve roof would have a vertical rise of six feet over a horizontal distance of twelve feet.



Roofs with a pitch greater than four in twelve are considered conventional roof systems. Roofs with a slope between four in twelve and two in twelve are considered to be low slope roofs, and roofs with a pitch less than two in twelve are considered to be flat roofs.

