

## Roofing Products



### Asphalt Shingles

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Asphalt shingles cover more homes in North America than any other roofing material. This roofing material is easy to install, provides excellent protection and it is often the least expensive roofing choice. Valley Exteriors offers a wide variety of asphalt shingle styles and colors that are an affordable option for your Colorado Home.

An asphalt shingle consists of a fiberglass or organic mat coated with asphalt, then covered with colored mineral granules for protection against the elements. Composition shingles come in different styles with the 3-tab shingle being the least expensive and the most common. The next level up would be the laminated or dimensional shingle, this shingle is thicker than the 3-tab shingle and are made to look like wood shingles. Another type of composition roofing is the hail resistant shingle. All of these shingles have a Class A fire rating and can protect your home for decades. They are available in a range of grades, the better the grade, the longer the life expectancy, which can range anywhere from 20 to 50 years.

#### **Architectural (laminated) or Dimensional Shingles:**

This is a multi-layer, laminated shingle which gives more varied, contoured visual effect to a roof surface and add more resistance for water. These shingles are designed to avoid repetitive patterns in the shingle appearance and are made to look like wood. Special shingles are needed for the eaves starter course and ridge caps. Laminated shingles are heavier and more durable than traditional 3-tab shingle designs.

#### **Impact Resistant Shingles:**

IR shingles incorporate a rubberized SBS polymer that creates a more durable and longer lasting shingle that can withstand extreme weather conditions. To get a better idea of their stability, shingles are ranked into four classes based on their strength and overall durability. Class 1 is the least durable and Class 4 is the most resistant to damage. (see chart)

These four different testing classes are denoted by four different steel ball sizes, ranging from 1¼” to 2”. The steel balls are dropped at a range of 12-20 feet to impact the shingles at high speed, replicating the force of actual documented hail. The back of the shingle is then inspected for any cracking or visible signs of distress from the impact of the steel ball. The UL 2218 Class 4 impact resistance is currently the highest rating in impact resistance.

Hail storms can damage asphalt shingles. Impact Resistance Class 4 are the best for preventing this. However, it must be said that NOTHING IS HAIL PROOF! A hail storm can destroy even the best roofs. Given all of the testing, there is no accounting for the size, shape, velocity or direction of hailstones impacting your roof. Class 4 increases survivability from hail storms but all shingles become more susceptible to hail damage with age.

#### **Wind Damage:**

Asphalt shingles come in varying resistance to wind damage. Shingles with the highest fastener pull through resistance, bond strength of the self seal adhesive, properly nailed will resist wind damage the best. Extra precautions can be taken in high wind areas to fasten a durable underlayment and/or seal the plywood seams in the event the shingles are blown off.

#### **Fire Resistance:**

Forest fires and other exterior fires risk roofs catching on fire. Fiberglass shingles have a better, Class A, flame spread fire rating. Organic shingles have a Class C fire rating.

**Durability:**

Shingle durability is ranked by warranted life, and range anywhere from 20 years to a lifetime warranty. However, a stated warranty is not a guarantee of durability. A shingle manufacturer's warranty may pro-rate repair costs, cover materials only, have different warranty periods for different types of damage, and transfer to another owner.

Shingles tend to last longer where the weather stays consistent, either consistently warm, or consistently cool. Thermal shock can damage shingles, when the ambient temperature changes dramatically within a very short period of time. Over time, the asphalt becomes oxidized and becomes brittle. Roof orientation and ventilation can extend the service life of a roof by reducing temperatures. In general, shingles should not be applied when temperatures are below 10° C (50° F), as each shingle must seal to the layer below it to form a monolithic structure.

Other advantages of asphalt shingles include;

- Easy to install.
- Low-maintenance.
- Aesthetically pleasing.
- Lightweight.
- Affordable.