

AROUND THE HOUSE

DID YOU KNOW? ***Shingles and Roof Penetrations***

Asphalt shingles are the most common roofing material used.

The weight of a square of shingles (square of shingles is $10' \times 10' = 100$ sq. ft.).

Shingles that weigh 225-235 lbs. have an average life expectancy of 15 - 20 years.

Shingles that have higher weight per square can last in excess of 25 years.

Warranty offered by the manufacturer can vary from 10 - 35 years depending upon the weight of the shingles. Always check with the manufacturer for the length of warranty and life expectancy of the shingles you are installing.

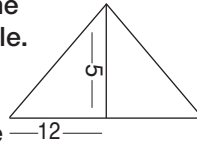
Ask if the manufacturer guarantees the shingle if it is installed over another layer of shingles (ie. second layer). Some manufacturers do not, some do.

A second layer of shingles will not always have the same life expectancy as the first set. It is better to strip the old roofing. Some cities will not issue a permit unless the old roofing material is removed.

Sunlight is the biggest enemy of asphalt roofs. Lack of proper ventilation can cause shingles to buckle or curl which is the next biggest enemy of asphalt roofs.

The granular material protects the shingles from ultra-violet light. As this material wears off the shingles dry and become brittle leading to cracking, curling and buckling.

The pitch or slope of a roof is defined as a ratio of the rise over run. The run is always defined as twelve (12) feet, the bottom of the angle. A five in twelve roof would have a vertical rise of five feet over a horizontal distance of twelve feet. ($5 \times 12 = 60 = 5'$).



Ice damming problems normally occur after periods of heavy snowfall when temperatures are above freezing during the day time while night time temperatures are below freezing.

Some of the solutions to ice damming are to increase attic insulation and to install additional vents in the attic.

If you don't have eave protection you should install a waterproof membrane of at least 36" beyond the interior walls of the house.

The steeper the pitch of the roof, the longer the shingles will last.

Areas of weak spots on the roof:

1. valley flashing
2. roof to wall flashing
3. chimney flashing
4. plumbing stack
5. electrical mast

6. exhaust fan flashing
7. skylight flashing
8. solarium flashing

After severe storms or the end of winter home owners should check the preceding areas with a good pair of binoculars, as well as the attic for any leaks.

A chimney should extend at least 3 feet above the point of penetration and 2 feet above anything within 10 feet of it.

Insufficient height of chimneys are prone to down drafts. The best solution is to extend the chimney upward. An alternative solution would be to install a wind cap and/or adding glass doors to a fireplace.

Tar around chimneys or other roof penetrations should always be a temporary repair until you can make a permanent repair or replacement. Tar has a life expectancy of approximately 18-24 months.

Tar, because of its chemical composition, will destroy metal flashing over a period of time. Then the cost of replacement will not only be shingles but also any flashing the tar destroys plus any leakage to the interior.

If you strip off your old shingles you should not have to use tar between the shingles and flashing. The tar is used so that rain and snow cannot get in between the

first layer of shingles and the new layer on top. The rain and snow will cause leakage with damage to the sheathing over a period of time and take away the life expectancy of the new layer of shingles.

When re-roofing it is best to remove a chimney that is no longer in use above the roof line. This will eliminate future repairs and risk of roof flashing leakage.

The purpose of a chimney cap is to prevent water from penetrating the top of a masonry chimney.

A cap normally overhangs the side of the chimney by one or two inches to provide some protection from water and deterioration to the masonry part of the chimney.

A rain cap covers the tops of chimney flues to prevent rain-water from running down the flues.

Chimneys with insufficient height will also cause fireplaces to smoke and furnaces to back-up causing improper burning of fuel (ie. oil, propane or natural gas).

A chimney screen may be required when birds and animals nest in chimneys to take advantage of the warmth.

Tree branches should be trimmed away from the roof shingles to prevent damage to the roof system. Tree branches may also shorten the life expectancy of the shingles.

Compliments of:

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