

COLUMN FOR JULY 2, 2005.
HEADLINE; ROOF GOOF'S!!

A few weeks ago I wrote a column of 5 major building errors and I was inundated with requests for more info. The largest issue was roof shingles and installations. So here goes with the top five roofing errors I see.

- 1) The top pick goes to roof flashings and their installation. Flashings around chimneys, usually brick, are the worst. When the chimney is built the mason is supposed to set the flashing into the mortar line of the brick. Properly done it is stepped up the roof. Lack of care by the roofing contractor when new shingles are installed is common. If the flashing comes loose or is rusted, it should be replaced. A fresh slot cut in the mortar with a grinder and mortared in. It should be bent with a machine called a brake, this gives a nice clean "L" shaped bend to the metal. Once correctly set, application of good quality urethane sealant is recommended. They make sealants especially for this type of application. Flashings around plumbing stacks, insulated chimney's and roof vents are next on the list. I often see where the tar looks like it has been layered on with a shovel. The thick build-up has shrunk and cracked and many times when I push on the dried tar, water squeezes out of the cracks. Roof tar is meant to be applied in thin even coats and if it gets thick from build-up, scrape it off and start fresh or install a new vent or flashing. When I see a satellite dish you can almost bet the installer never sealed the bolts or the pattern from the holes in the base is there, minus any sealant.
- 2) Improper starter course and lack of starter strip ranks as number two. I often see the decking rotted at the edges and find that the roofer has reversed the first course, only to match the butt joint for the first row of shingles. Water leaks in thru the butt joint, rots the decking and decay's the shingles. Shingles are not waterproof, they are designed to deflect water. They are generally manufactured using layers of felt that are treated in an asphalt-based dip and then layered in granular. Bare felt absorbs water, simply put. Shingle manufacturers generally set a specification for over-hang; commonly it is ½ inch on the first layer. I constantly see where the shingles overhang the roof decking more than an inch, sometimes as much as two inches. With no support the shingles sag, crack and water has a new place to get in. Metal starter strip should be used and I commonly see "budget roofers" skip this step.
- 3) Lack of knowledge or just plain laziness in nailing takes the number three spot. The vast majority of roof shingles I see are the three-tab style. The nails are meant to position just above the slot in the tabs, slightly below the seal down strip. Every day I see exposed nails or shingles with only two or three nails installed. Some roofers use air staplers and while I am not a fan of these they are popular. If the staples are installed vertical to the shingle instead of horizontal to the shingle I know of cases where entire sections of shingles have blown off a roof. Improper air pressure on the staplers can drive the staples too deep with similar results. I prefer nails, either by hand or with a properly set shingle nail gun.
- 4) Improper valley installations are next and these can cause grief, as they are difficult to fix without removing a large portion of the shingles. The majority of homes have what is called open valley where the metal flashing is exposed. Done right they should be about 4" wide at the top and fan out to 8" at the roof edge. Check your subdivision and see how often that is done! The use of self-adhesive membrane under a valley is a good idea and here when a half weave or full weave shingle job is done, sometime these are installed without the metal flashings, not a good idea. If the valley is done in the half weave style which I personally like there can be issues here too. Often I see where the under-laid side shingle is not extended far enough onto the adjacent roof. Done right the seal half should have its corners clipped and this is rarely done.
- 5) The last one has got to be just plain dumb! So many times when a roof is being shingled, I see shingles stacked on the ridge of the roof. By folding the bundles over the ridge they won't slide off, but what they will do is cause severe stress fractures and lamination failures in the new shingles. I recently saw a roof that was six years old and had failed. The shingle manufacturer refused the warranty, sometimes they

can tell if this has been done.

Now the answer to last week's question. What is an areaway? The answer was A) a means or access to a floor level below grade. Now this week's question. What is an Astragal? Is it A) a type of decorative plastering B) a method of applying parge work to a stone or block wall. C) A small decorative moulding, sometimes part of a built up set.

The answer in next week's column.

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