

ASK THE INSPECTOR COLUMN FOR OCTOBER 21, 2015  
HEADLINE: GETTING YOUR ROOF READY FOR WINTER

Every year about this time I get a flurry of e-mails with questions related to “winter-proofing” shingled roofs. The first thing to understand is what to look for in the shingles, as they will tell you different things about your roof.

One misconception is that shingles are waterproof; they are not, rather they are designed to shed water. A shingle is a multiple layering of composition felt or fibreglass with a protective granular surface. The three most common shingle problems are caused by different conditions. If you find your roof has shingles that are buckling, this is a sure sign your attic is lacking in ventilation. It can also be caused by thinner than recommended plywood or some composition 4x8 materials that are affected by a build-up of heat.

When a shingle is curling upward, this is generally caused by a build-up of heat and moisture in the attic; again proper ventilation comes into the scope of the problem. This condition happens in older homes and homes of a storey and a half construction when there is little or no ventilation between the half storey walls and ceiling materials. Filling the rafter space with insulation and then covering in drywall was a quick solution with no regard for ventilation.

Some months ago, I inspected an older storey and a half home with this issue. The nails in the angular ceiling above the half wall were rusting; however the issue didn't show up anywhere else. We were able to get a partial look at the rafters inside a closet and they were very damp. I recommended the drywall be removed and they found the space filled with insulation that was soaking wet and over 75% of the rafters were rotted out.

When shingles are curling under or clawing, as it is known, this is actually part of the normal aging process for asphalt shingles. These shingles are in the later stage of their life span and it is probably a good idea to have a professional roofer look at the roof. There is one quick way to get an idea of how old your shingles are. Take a regular ballpoint pen and lay it in the slots in the shingles, as opposed to where the shingles join. If the pen is loose in the slot, you can bet these are over 10 years old. If the shingles are beginning to show the form of the shingle underneath and only the granular edge is showing bare, they are likely under 10 years old, but over 5 years old. It is truly impossible to gauge an exact year for shingles as there are far too many parameters that affect their aging process. The other problem is the “advertised” time frame for shingles. In most of Eastern Ontario where I reside, conventional shingles advertised as “20 year shingle” do well to get much past 14-16 years before replacement is needed. Architectural fibreglass shingles have only been around for ten years or so, but they are expected to go considerably longer. A life span of 30 years plus is expected from what we know right now.

A roof is best inspected by a walk-on visual review. A roof can be a dangerous place, especially if it is not in the best of shape. If you mount the roof, make sure it is dry. For best traction and to avoid damaging the shingles, I recommend you wear rubber-soled shoes. First take note of where there are missing shingles and repair them. Most building centres have broken bundles that allow you to purchase two or three shingles for repairs. After the shingles, the main area where leakage can happen is around the flashing areas. The word flashing is a general use term that applies to a number of products used to cover areas where different surfaces or materials join. Waterproof membranes like ice and water shield, rubber “boots” that are used around plumbing vents or metal, are all flashing materials. Metal, be it steel or aluminum, is used in the valleys of a roof, at wall abutments and around a chimney. Chimney flashings are generally a formed metal or individual step flashing. These should be properly sealed with the correct type of urethane caulking or tar.

The biggest mistake here is applying tar too thickly. When this is done, the excess tar shrinks and cracks over time; water seeps into the cracks, then into your home. Apply thin even coats annually for best results. Your roof vents should be reviewed to make sure the shingles are laying flat around them. Vents emit some amount of warm air and I have seen more than one where water is leaking around them into the attic in the spring of the year. If the roof is older and due for replacement in a year or two, a thin layer of tar around the metal or plastic vent is a good idea. Plumbing vents are generally covered in a rubber “boot” style flashing; older homes have cast vents and metal flashings. I try to stay away from tar over the rubber vent flashings as expansion happens here. If necessary, a good grade of exterior sealer under the rubber vent is recommended; try for at least an inch inside the flap area. Any exposed nails should have a dab of tar, too.

The last area to have a good look at is any valley areas; every roof, other than a simple gable, has some valley metal installed. Shingles tend to wear at the edges of the metal flashing and along the bottom where ice has possibly built up over the years. If the shingle edge at the metal flashing is worn, a bead of proper roof urethane caulking should be applied first or, if the worn areas are wider, a thin coat of roofing tar should be applied.

Take your time, remembering that a roof can be a dangerous place. If you are not in good physical condition or are uncomfortable in completing a review and making the necessary repairs, contact a reputable professional roofer.

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