

ASK THE INSPECTOR COLUMN FOR APRIL 13, 2016
HEADLINE: UNDERSTANDING AGING SHINGLES

Now that spring has sort of arrived, I am getting questions like this one, “We bought our home four years ago and were told that the roof had 20 year shingles installed 10 years before we bought it. With the snow now gone, I was standing with a very handy neighbour and he commented that they are curling under at the edges and lifting in numerous places. He commented that they probably will need to be replaced this year or next, so what happened to 20 year shingles?”

I sympathize with our reader. The shingle manufacturer’s advertised 20 year, three tab shingles rarely last much more than 14 to 16 years. On the odd occasion, with a roof that has excellent ventilation, I have seen them last 17 to 18 years. In our climatic region, 25 year shingles last about 18 to 20 years and similar reduction in age applies to 30 year shingles. We now know that the majority of architectural design shingles are “advertised” as 30 to 40 year and some are even advertised as lifetime shingles. I am disappointed in these shingle manufacturers. They appear to be using this “life-time” marketing method, knowing full well that the homeowner who gets them installed will probably be long gone before the shingles fail, taking with him/her knowledge of any such warranty.

The shingle manufacturers use a controlled test setting to arrive at the age factor for shingles. Many factors affect age and weathering of shingles other than climate. Lack of ventilation, poor installation, pitch of the roof and installing over another layer of shingles are some of the contributing factors that can affect the life span. Shingle warranties are like the warranty on your car’s tires, the longer they are in use the lesser amount of warranty is applicable. If your shingles have been applied over an existing layer, forget any warranty. If they were applied over sawn lumber decking, which was common in older homes up until plywood was used in the 60’s, and your roof was not re-sheeted in plywood before the present layer was installed, forget any warranty.

If you can prove when they were installed and that they were installed “exactly” to manufacturer’s instructions and your 20 year shingles are worn out at 12 to 14 years old, you ‘might’ get “X” years of warranty credit, exclusive of labour. If you read your shingle warranty, you will see that they have very specific limitations for labour, materials and installation.

The shingle companies do have some manufacturing problems from time to time and they usually know which shingle is an issue. The situation is that most homeowners do not stay in their home for the life of the shingles and obtaining the documents to prove the make, age and installation is often difficult, if not impossible. The media is often the only way consumers hear about defective shingles.

How can you tell the age of shingles? This is almost impossible to accurately document to the actual year. The majority of homes up until the past 6 to 8 years, when architectural shingles took over in popularity, are shingled in a three-tab style with two slots and a notched end that makes them appear to be continuous when applied. At approximately 20 degrees C., the slot will be approximately 1/8 to 3/16” wide when they are new. A quick check that I use is to take a regular pen as a measurement. It will fit

comfortably into the slot then they are around ten years old. If the slot is about a ½” wide, the shingles are coming to their end. If the slot is close to ¾ of an inch, they are usually past due. There are other visual factors that lead a roofer to recommend replacement. The curling under of the shingles at their edges is a sign of advanced age. Lifting midway along the shingle is called “fishmouthing” and is often a sign of a lack of ventilation in the attic. Curling upwards is a similar venting symptom. The vast majority of homes I see are under ventilated by, either the lack of adequate soffit venting, and/or insufficient roof vents.

A trip to the attic is advised to confirm that your eave edges are not blocked by insulation. The best method to help the attic ventilate is to install foam baffles between the rafters/truss chords. The insulation will help keep them in place; every other space between the rafters or trusses should do. Aluminum soffit and fascia is common on newer homes and is usually fitted with baffles or sections of big “O” pipe located into this opening. Older homes with wooden soffits should have additional holes cut in the wood soffit and grills added. I often see older homes where the aluminum soffit has been put right over the wooden soffit and no additional vents installed. This is not recommended. Additional holes in the wood soffit should be cut in or the wooden portions removed. With the cost of replacing shingles on a roof today, every attempt to extend the life span should be investigated, starting with proper ventilation.

When it comes time to reshingle, the new architectural shingles have a fibreglass backing that is expected to last a lot longer than the older felt based backing. There are some new underlayments on the market that add an air space between the shingles and the roof. This, too, is expected to increase life span. The use of ice and water shield up at least two rows, and three is better, will help reduce any ice dam effects, especially on an older home. Most assuredly, all of this adds to the cost. However, if you are staying in the home, with a professionally applied roof covering, they should last a minimum of 30 years.

Questions or Comments: Cam Allen L.I.W. NHI ACI
E-mail: cam@alltechconsultinggroup.com