

Key Annual maintenance---Gutter and downspout

Henry Liu CPBC 53115 Canada Association of Home and Property Inspectors of BC

Although roof gutter and downspout are the small components of the property, they are critical of keeping the building in good condition and the key maintenance items which we pay more attention during the home inspection. You might not believe that the roof leaking, the basement or the crawlspace water intrusion are caused by the failed gutter or downspout. But fortunately the inspection and maintenance of gutter and downspout are relative visible and simple. The home owners can certainly do it by themselves if they want. This is the regular maintenance which should be done every year.

Normally, there are 2 kinds of gutters built-in or suspended. The former is a trough built behind the fascia board right on the roof overhang, then the metal or synthetic liner will be applied inside to collect the running down from roof, which drains away from downspouts. The common liner is EPDM, roll roofing or modified bitumen. The suspended gutter is the ready-made trough metal parts soldered or glued on site then nailed on the fascia boards. Downspout is the pass to drain off water either to the ground or underground. It is made of aluminum or PVC, which has been installed every 30 to 35 lineal roof lengths and at least one fastener to fix it on the wall in 2 story house height.



As the figures showing, the gutter was clogged with vegetation and debris, which was common and easy to clean. We suggested the home owner to check and clean gutter before the raining season every year. Otherwise the water running over the side of gutter soaked and deteriorated fascia boards. In the worse scenario, water washed down along the exterior wall and put not only the wall system but the basement/crawl in the risk of water intrusion. Also, the ponding water increased the chance of the roof materials failed of leaking. To the suspended gutter, because it was assembled by different metal parts on site and going through expansion and contraction by weather plus the water load, possibly there were open joints or aged adhesive which caused dripping or leaking. The service was necessary. Due to the age and earth movement, the gutter may deflect from the proper horizontal angle which again caused water ponding and has to be adjusted to drain off.

The downspout mismatched gutter outlet, shown in figure, which was a common condition and had to be fixed. If it was drained on the ground, a splash block should be placed under the downspout outlet to lead the water 4-6' away from the foundation. Many home owners do not like it for the blocking of traffic. We suggest using fabric hose instead. No matter which methods to apply we have to notice that leave the water far away to building is important. Speaking of the underground drain, the cleanliness was import to avoid the debris dropping into downspout and even clogging it. Once it happened on downspouts, the temporary repair is to cut it open and leave it drain on the ground instead. But if the clogs happened at the underground drain tile, the cost of inspection and cleaning of the drain tile was inevitable.

In a word, these 2 components often get into trouble but are easy to be maintained. Once they are regularly cared at least annually, there will not be any big expense for them.