



Gutter and Downspout Maintenance

The regular care of the roof drainage system is a key component of any maintenance plan. The basis of the system is for water to move unimpeded along the gutter, down the downspout and away from the building and therefore all components should be inspected regularly for operability. Gutters should be cleaned of debris regularly and then treated, if appropriate, to encourage material longevity. Clogged or improperly installed gutters lead to pooling or overflows, which can affect a building and site in many ways including advanced deterioration of painted surfaces, increased chance of water penetration into the building, pooling of water at the foundation, erosion of the ground, and wet basements.

Guidelines for Gutter and Downspout Maintenance

- Clean existing troughs, outlets and downspouts of all major debris and blockages. The two major times of year to consider cleaning gutters are late spring after any tree seeds have dropped and throughout the fall for leaf removal.
- Strainers set into the outlet (the gutter/downspout junction) may help keep leaves and debris from clogging the downspout, but can also be clogged themselves if the gutters are not routinely cleaned.
- Use a hose to wash out any loose debris from the system when you are finished. Watch how the water moves and identify if there are any pitch issues, pooling, or clogs. Address them if able.
- For wooden gutters: After the removal of all fungal growth lightly brush out/scrape the trough with wire brush.
 - Wooden gutters are sometimes lined (e.g, copper, lead, tar). The lining or material should be inspected every year to ensure it is intact.
 - Check the fasteners and seals on outlets and joint flashing.
 - Seal any cracks and open joints as appropriate.
 - The gutter should be dry before applying the preservative treatment.
 - Apply wood preservative until wood is saturated. Coat all interior portions of the gutter.
 - Wait twenty-four hours and apply a second coat.
- Inspect all components of the roof drainage system for signs of deterioration or failure. Ideally, inspections should include observing during a rain event to see where there might be active issues. If that is not possible, look for staining on the face of the gutter, which will indicate which sections of the gutter are being overwhelmed during storms. The staining is a warning sign they might be clogged, improperly pitched, or undersized.
- Many downspouts have extensions, or runouts, at the bottom to route water away from the foundation. These are often removed when mowing but they can also become detached, broken, or split for other reasons. Extensions should be cleaned of debris on a regular basis. If the extensions are removed or not functioning, then the water can pool at the foundation of the structure and directly impact the building.
- Some downspouts route into underground drainage systems. These systems should be mapped and periodically checked to ensure that they have not failed or become clogged. (see the white papers on Site Drainage Maintenance).
- Snow and ice caught in gutters can exacerbate ice dams.

Property Care White Papers
Roof Drainage Systems: Gutter and Downspout Maintenance

- While ice dams are principally caused by heat loss through the roof, consider the implementation of de-icing cables (heat tape) in the gutter and downspouts that can be turned on seasonally to keep the water in a liquid state and flowing.
- Refer to the Heat Tape Installation White Paper for more details.
- If the gutter system is not functioning as designed or if deterioration is identified in the system, they may need maintenance, repair or even replacement.

Cleaning gutters can be an intimidating and dangerous process. They are usually high off the ground requiring the need to work off tall ladders with awkward movements, and extra equipment (like a hose, trowel) with nothing to hang onto. There are contractors who specialize in cleaning gutters but there are also an array of other trades, including window cleaners/washers, arborists, and painting companies, that have the equipment and the potential interest to perform this work.