

Gutters

Gutters have the specific function of directing rain water and letting snow away from roof and wall surfaces as quickly and efficiently as possible. In this manner, exterior materials are protected from water saturation, the most damaging of the natural elements. Metal hung gutters (or eaves troughs as they are also called), were typically of a half-round style up until the middle of the 20th century when the profile became more rectangular.

Galvanized metal, zinc, lead coated copper, or galvalume were all typical material used for gutters, although copper, a more expensive product, was used on more expensive houses and is more long-lasting. Gutters were hung under the eaves. This allowed the gutter to catch the water coming off the roof and still allowed snow to blow off.

A slope of $\frac{1}{8}$ - $\frac{1}{4}$ inch per foot of gutter insures positive drainage of water. The downspout, (also called leader), connects to the gutter and carries water down to the ground. At the discharge point, water is directed away by a splashblock. Downspouts should extend away from the building 6' if you can accommodate that condition without creating a trip hazard. Water deposited at the foundation wall can cause water intrusion issues in your basement.

The gutter should be 2 inches larger than the downspout for a good connection. Metal hangers or straps which hold the gutter in place should be placed a maximum of 2'-6" apart and be attached to the wood roof structure below the roofing.



Common Issues:

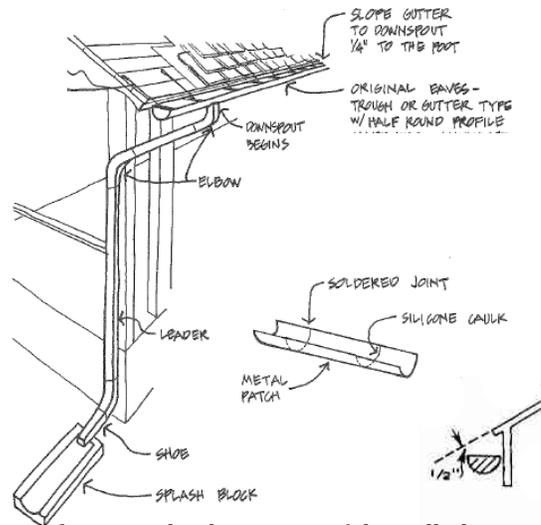
As with all gutters of various shapes, snow and ice build up in winter and add weight can break the straps, gutters or downspouts. Since the most common straps for these gutters were installed under the roofing, replacing or repairing a broken strap was a bit involved. Today fascia mounted hangers are available for easier repairs without involving removal of the roofing. For many years replacement parts for half-round gutters were not available at local home improvement stores leaving many home owners feeling that they had no option other than installing the more modern 'k' style gutter that were readily available. Today half-round gutters have come back into style and components are readily available.

Maintenance:

- Clean gutters and downspouts at least twice a year to prevent clogging and water back-up. Replace or install screens over downspout openings, optional.
- Trim tree limbs or vines to keep them from overhanging or touching gutters.
- Re-paint any marred surface of the metal to deter rust and corrosion.
- Regularly check for broken straps, split seams, falling gutters or displaced downspouts.
- Inspect gutters and downspouts in spring and fall.

Repairs:

- Replace any broken hanger straps with new hangers attached to the wood roof structure below the shingles when re-roofing is being undertaken. Replace broken hangers with fascia mounted brackets between re-roofing when roof removal is not practical.
- Replace badly dented, broken or missing gutters and downspouts. Make attachments to eaves 2'-6" apart and to wall 6'-0" apart.
- Repair seams which are broken to insure a water tight condition and avoid other more costly repairs.



Article Resources

- *Department of the Interior Preservation Brief 45 – Controlling Unwanted Moisture*
- www.builderconservation.com
- *Gutters 101* www.bobvila.com
- *Civic Park Home Preservation Manual*, THA Architects. 1981