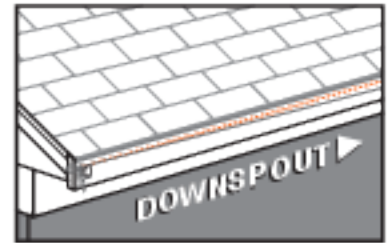


1. Preparation: Measure and mark with a chalk line

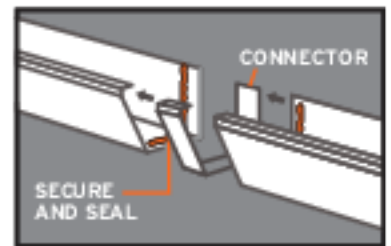
Remove old gutters and inspect fascia board and metal drip edge, repair or replace the fascia/drip edge if needed. Tack a string to the fascia board 4 or 5 inches below the roofline so that it is straight, level and taut. Drop one end of the string 1/4 inch per 10 ft, sloping toward downspout.



2. Assemble Gutter Sections

Begin assembling your gutter system on the ground starting at end furthest from the downspout. Adhere an end cap to the first piece of gutter, then join gutter sections using slip connectors secured with screws or pop rivets.

Waterproof all joints with sealant, and secure with screws or pop rivets.

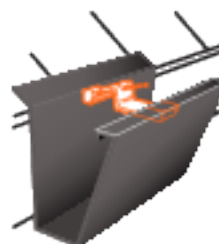


3. Hang Gutters onto the Fascia

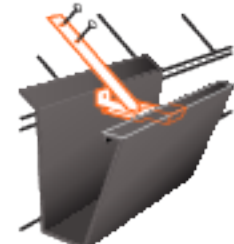
Locate and mark the end of each rafter on the fascia board (Typically 24 inches). Use one of the following methods to hang your gutter. Be sure that the drip edge hangs into the gutter and not behind it.



Spike & Ferrule Insert ferrule into gutter lined up with a rafter; hammer spike through gutter and ferrule into the fascia.



Hidden Hanger Hook the hanger under the front lip of the gutter. Drive a nail or screw through the hole in the hanger into the fascia.



Strap Hanger Hook the hanger under the front lip of the gutter. Carefully lift shingles then nail into the roof deck.

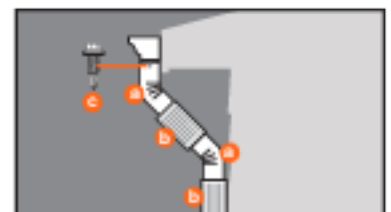
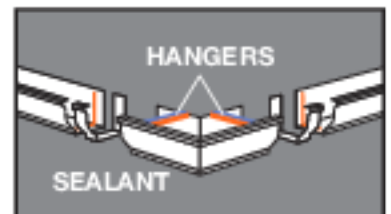
4. Attach Mitres, Drop Outlets and Downspouts

Attach mitres to fascia board at the corners. Connect mitres to gutter with slip connectors. Secure with screws or pop rivets. Apply sealant to the inside seams to protect against leaks.

Connect elbows (a) and downspout (b) with the crimped ends pointing down. Secure the joints with screws (c). Attach the downspout to the outlet then attach an elbow at the bottom to direct rainwater away from the foundation.

Fasten downspout snugly to the wall with downspout bands.

Use 2 downspout bands for each 8-10 foot section of downspout.



Gutter material has sharp edges. Always use leather gloves and eye protection. Working above grade is inherently dangerous, observe OSHA Regulations, Fall Protection Systems Criteria and Practices (1926.502).

These basic installation guidelines are for use with typical or standard applications. It is always recommended to seek advice from a licensed professional, and to check with your local building inspector or building permit office for approvals and possible variations that may apply.