

HOW TO INSTALL OG GUTTERS & DOWNSPOUTS

PROTECT YOUR HOME FROM MOISTURE DAMAGE...



CITY SHEET METAL CO. LTD.

Gutters not only protect your home from needless water damage to the foundation, but also keep the inside of your home dry. The roof area collects large amounts of water, that is concentrated in a narrow strip around your home, affecting the foundation and walls.

SELECTING GUTTER MATERIALS

ALUMINUM GUTTERS and downspouts are literally maintenance free for many years of dependable service. Unlike many plastic materials, aluminum is impervious to ultraviolet rays, heat, and does not dry out, crack or peel in extreme weather changes. Aluminum has the added advantage of being corrosion resistant, and is lighter in weight than galvanized or pre-painted steel. It is also easy to cut and bend when necessary, and presents a beautifully finished appearance to your home.

PRE-PAINTED STEEL GUTTERS and downspouts are also maintenance free for many years and will not crack or peel in extreme weather changes. It is a heavier material than aluminum and only comes in two colours.

GALVANIZED GUTTERS and downspouts provide an economical solution to protecting your home from water runoff. Galvanized gutter can be maintained to last many years through a program of normal maintenance, and is specially coated with zinc to withstand the weather.



4" OG

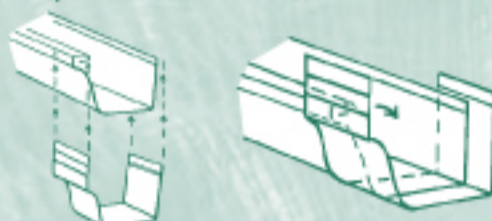


QUICK-PIC GUTTER PARTS GUIDE

Part Needed	Description	Amount
	OG Style Gutter 10' ft. length	
	Square / Round Corrugated Down Spout Available 10' length	
	Outside Mitre For outside turn in gutter	
	Inside Mitre For inside turn in gutter	
	OG Slip Joint Connector Used to connect joints of gutter	
	OG End Cap (Right) OG End Cap (Left) Used at ends of gutter run	
	OG Centre Drop Used where downspout connects	
	Rectangular Elbows Style A/B for diverting downspout in or out from wall to left or right	
	3" Corrugated Elbow for diverting downspout to left or right	
	Flip-Up Hinge for extension pipes	
	Spike & Ferrule or Hidden Hanger to hold gutter to eave of roof	
	Clincher Band or Pipe Strap used to hold downspout securely to wall	
	Wire Leaf Strainer of gutter system	
	Silicone (tube) for sealing joints	
	Hinged Gutter Guard to keep leaves out	

HOW TO ASSEMBLE CONNECTOR & CENTRE DROP (i.e. eavestrough)

1 Slip Joint Connector and Gutter



2 Partial with Connector Semifolds



3 Complete Assembly



4 Complete Assembly with Butyl



QUALITY FEATURES

Available in galvanized pre-painted steel and pre-painted aluminum.

Baked on enamel finish which requires minimum maintenance through years of use in aluminum or steel.

Pipe is rectangular or round corrugated.

Colours:
Ten colours in the aluminum.
- white - wedgewood blue
- brown - colonial red
- cream - sandalwood
- green - slate grey
- black - dover grey

Two colours in steel:
- white
- brown

Two installation alternatives:
- spike and ferrule
- hidden hangers

Quality Sealant:
- CSL (variety of colours)



INSTALLATION GUIDE

1.) General Information

- When installing eavestrough, you have to remember to slope the eavestrough slightly towards the outlet, so that the water will flow away freely.
- Centre drops for downspouts are usually placed near the end of the trough or at the centre of a long run. One downspout will carry water away efficiently from 40 ft. of trough. (i.e.: One down spout per 40 ft. of trough)
Do not install centre drops over doors, windows, or any other obstructions.

2.) Preparation:

Remove all old trough fittings. Replace fascia boards if necessary.

3.) Measuring Home For Gutters:

On a piece of paper sketch outline and dimensions of roof. Determine where you want your centre drops and footage of eavestrough you will need.

4.) Assembly

- Eavestrough (Gutter)**
To join 2 pieces of trough together you need a slip connector. Attach your first piece of trough to the building. On the second piece of trough slip the connector over the end to be connected. Slightly fold the front and back edges of the connector over the top edges of the trough just enough to keep it from slipping off. Butt the two ends of trough together. Slide the connector over the joint and fold the edges of the connector all the way down. From the inside place butyl tape over the joint to seal it. You can reinforce this by applying a couple of sheet metal screws to the bottom of the corner.
- Centre Drop:**
To attach a centre drop, follow the procedure in 4(a).
- Mitres:**
To attach a mitre, follow the procedure in 4(a).

5.) Methods of Installation

- Spike & Ferrule Method:**
With a chalk line, mark where the top edge of your trough should go. Make sure that you slope it slightly towards the centre drop. If your centre drop is at the end, you would lower it by 1 inch at the end provided that your trough is at least 40 ft. long, less if shorter. If your centre drop is located in the centre, you have to slope both sides to the middle where the centre drop is located.
- To determine where to place your spikes, you have to know where your roof studs are. To do this you lift the shingles and with a chalk, mark the location of each stud, usually every 24" or 16". In which case you would put your spikes every 24" or 32".
- Drive spike through the front face of trough at the top, through ferrule (which is placed horizontally inside the trough) and through the back of the trough into the fascia board and stud. **Do not** drive spike in all the way, leave one inch extruded until such time as you have tested the slope of the trough with a level or with water and are satisfied that everything is done properly. Then you go along and drive the spikes in the rest of the way. Do not drive them in too far, only until the head fits snugly against the trough. This allows for trough expansion and avoids the possibility of the trough buckling.
- Hidden Hanger Method:**
Place the hanger inside the trough. The hanger slips underneath the front lip and over the back edge of the trough. Space the hangers 24" apart. *Follow instructions 5(b).*
When you have done that, lift the trough to the desired position and screw to the fascia board with 1 1/2" screws. Do not screw in all the way until you have tested for slope, as described in 5(b). It is a good idea to use eavestrough flashing when using hangers. The flashing slips underneath the shingles and over the eavestrough to eliminate the gap between the trough and fascia.

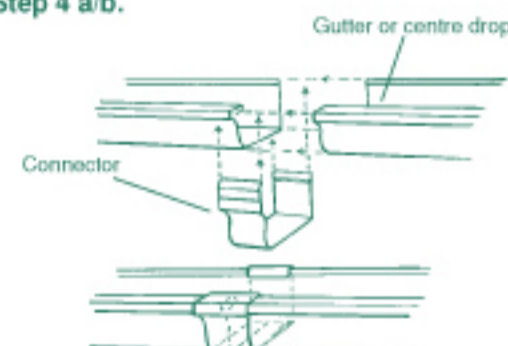
6.) Downpipe

If you want the downpipe to go straight down from the centre drop, attach an "A" elbow (which slips over outlet) with open end facing wall. Now attach another "A" elbow with open end facing down. You may need an extension in between the two elbows, depending on the distance between the outlet and the wall. Cut a piece of downpipe to the desired length and attach between the two elbows. If you have trouble fitting the extension into the elbow, you can make the end smaller by applying a pair of needle nose pliers to each corner and giving it an inward twist. Attach downpipes to second elbow and strap to wall with pipe straps and screws. Attach elbow at the bottom end of pipe to lead water away from house. To lead the pipe along side the building, you will need a "B" elbow.

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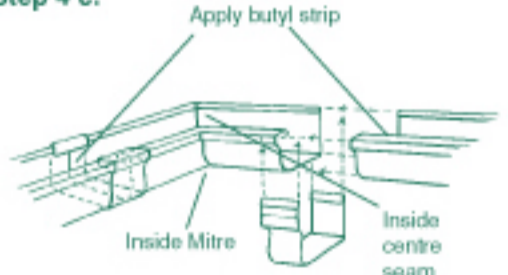
Do-it-Yourself Techniques for cutting and fitting gutters

Step 4 a/b.



To join two pieces of trough use a slip-joint connector and install as per instruction 4 a.

Step 4 c.



Step 5 a.



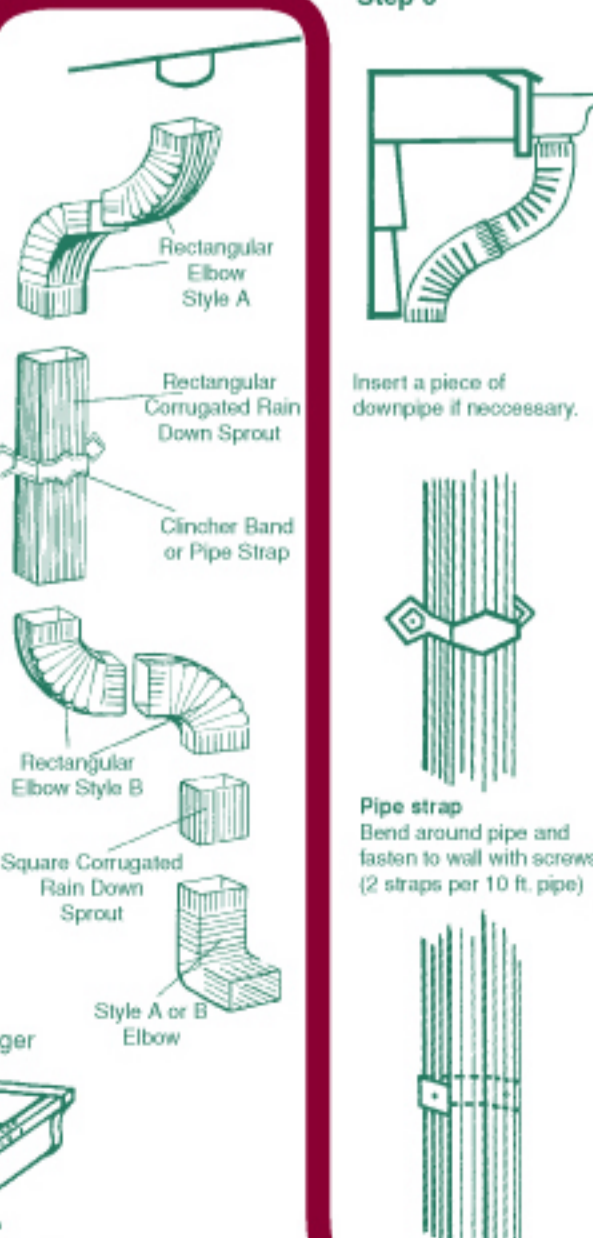
Spike and Ferrule
Insert ferrule into gutter and drive spike through gutter, ferrule and fascia board.

Step 5 b.



Hidden Hanger
Insert hanger underneath front lip and over back of trough and screw into fascia board.

Step 6



Insert a piece of downpipe if necessary.

Pipe strap
Bend around pipe and fasten to wall with screws (2 straps per 10 ft. pipe)

