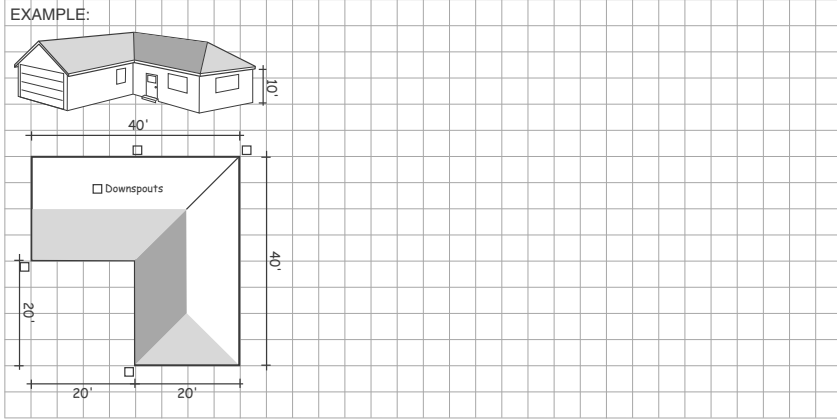


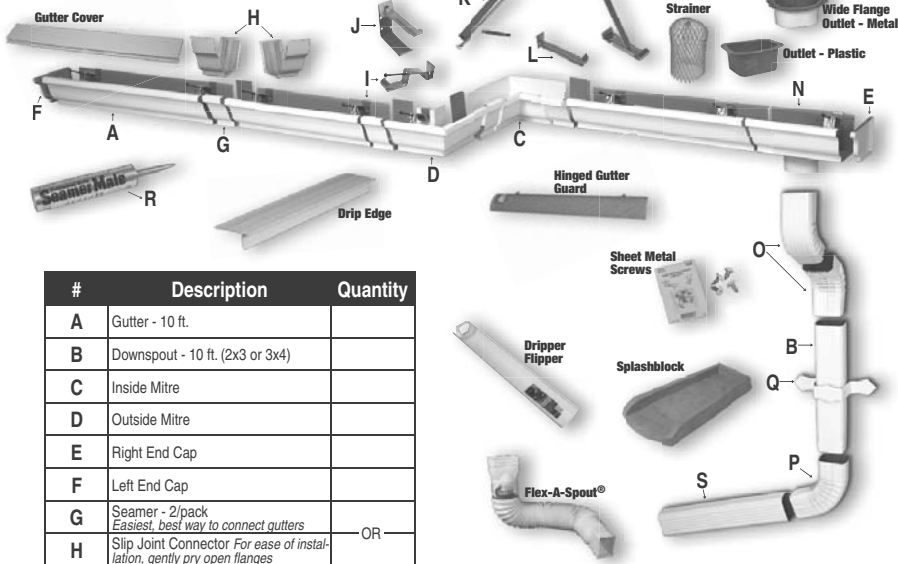
INSTALLING METAL GUTTER SYSTEMS

PLANNING - Measure Roof Line and Locate Downspouts

Use chart to fill in quantity of each item needed to complete your job. (Note: Stores may not stock every item listed below)



GUTTER MATERIAL SELECTION GUIDE



#	Description	Quantity
A	Gutter - 10 ft.	
B	Downspout - 10 ft. (2x3 or 3x4)	
C	Inside Mitre	
D	Outside Mitre	
E	Right End Cap	
F	Left End Cap	
G	Seamer - 2/pack Easiest, best way to connect gutters	
H	Slip Joint Connector For ease of installation, gently pry open flanges	OR
I	Hidden Hanger with Screw	
J	Fascia Bracket or Snap Lok Fascia Bracket	OR
K	Screw or Spike & Ferrule	OR
L	Hidden Hanger	
M	Hidden Hanger with Roof Strap	OR
N	End Drop	
O	Front "A" Elbow (2x3 or 3x4)	
P	Side "B" Elbow (2x3 or 3x4)	
Q	Downspout Band Metal or Plastic	
R	SeamerMate™	
S	Downspout Extension	

#	Description	Quantity
	Wide Flange Outlet Metal or Plastic	
	Strainer	
	Hinged Gutter Guard	
	Gutter Guard and Cover 3 ft. & 4 ft.	OR
	Drip Edge - 10 ft.	
	Splashblock	
	Dripper Flipper	OR
	FLEX-A-SPOUT® - Extends to 55 in.	OR
	Sheet Metal Screws - 8 pack	

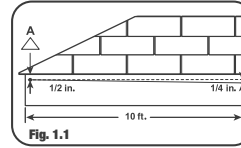
TOOLS REQUIRED

Eye protection, pencil, tape measure, string, level, hack saw, drill, screwdriver, hammer, pliers, ladder, tin snips and gloves.



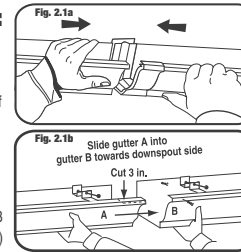
1 MEASURE:

REMOVE old gutters and inspect fascia board. REPLACE IF NEEDED. Tack a string to fascia board and level (A). Lower string approximately 1/4 in. for every 10 ft. of gutter and retack string. This is sloped toward downspout. If your house has drip edge, slip gutter under drip edge. (Fig. 1.1)



2 ASSEMBLE GUTTER:

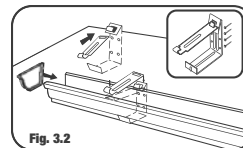
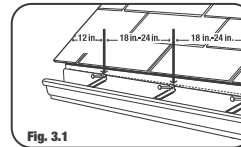
5 inch Gutter: Begin at end of gutter run, opposite downspout end. Apply SeamerMate™ to end cap. Attach to end of gutter. Join gutter lengths using Seamers - (directions printed on bag) or Slip Joint Connectors (for ease of installation, gently pry open flanges) (Fig. 2.1a)



6 inch Gutter: Gutters connect by cutting 3 in. off top lip and sliding together. (Fig. 2.1b)

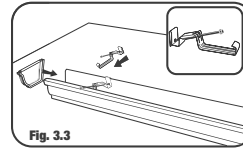
3 INSTALLING HANGERS:

Use one hanger every 24 in. or every 18 in. for heavy ice & snowload areas. (Fig. 3.1)



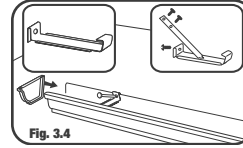
Fascia Bracket or Snap Lok Bracket

Fascia Bracket: 4 per pack, includes hanging nails. Nail along guide string every 24 in. Snap Lok Fascia Bracket: 4 per pack, Nails or screws required. (Fig. 3.2)



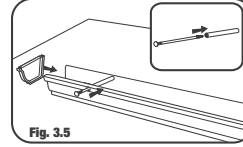
Hidden Hanger with Screw

Power drive 1/4 in. hex head screw into fascia board. (Fig. 3.3)



Hidden Hanger or Hidden Hanger with Roof Strap

Hidden Hanger: Requires nails or screws. Hidden Hanger with Roof Strap: Only use when no fascia board exists. (Fig. 3.4)

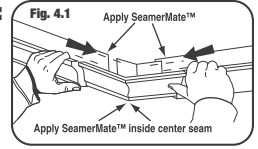


Screw or Spike and Ferrule

Insert ferrule into gutter and fasten screw or spike through gutter, ferrule and fascia board. (Fig. 3.5)

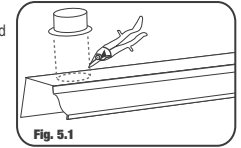
4 ATTACHING MITRES:

For a corner, use a mitre attached to gutter with seamers or slip joints. Apply SeamerMate™ to inside mitre joint and all connecting points as illustrated. (Fig. 4.1)

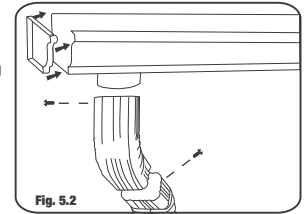


5 ATTACHING DOWNSPOUTS:

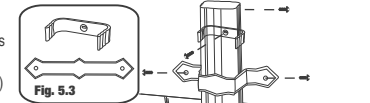
To connect the gutter to the downspout use either an outlet or an end with drop. For the end with drop, connect to the gutter with a Seamer or slip joint connector. Apply SeamerMate™ to end with drop and joint as instructed. If at the end of a run, seal with SeamerMate™ and an end cap. To use an outlet, first make a hole in the gutter for the outlet. Trace the opening of the outlet on the outside of the gutter, drill a hole and cut with tin snips (Fig. 5.1).



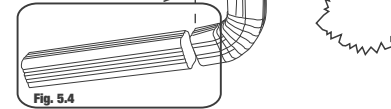
Each downspout and elbow has one end crimped. Parts are joined by fitting the larger end of one over the smaller end of the other, forcing them together tightly. Downspouts should fit snug against the wall. Use sheet metal screws to secure downspouts and elbows. Attach a front or side elbow at the downspout's bottom to direct water away from the foundation. (Fig. 5.2)



Fasten downspouts against wall with 2 bands per 10 ft. section using nails or screws. (Fig. 5.3)



Use a Downspout Extension, Splashblock, Dripper Flipper, or Flex-A-Spout® to get water further away from the foundation. (Fig. 5.4)



NOTE:

- 2" x 3" downspouts drain 186 gallons per minute
 - 3" x 4" downspouts drain 434 gallons per minute
- Increasing the size of downspouts or number of downspouts is recommended for wide roof areas, heavy downpour areas, and for gutter systems that overflow.

6 INSTALLING DRIP EDGES:

Help direct roof run-off into gutters. To install, lift shingles and insert drip edge under shingles. Push back until drip edge projects approx. 1/2 in. beyond fascia. Nail under shingles every 5 ft. (Fig. 6.1)

