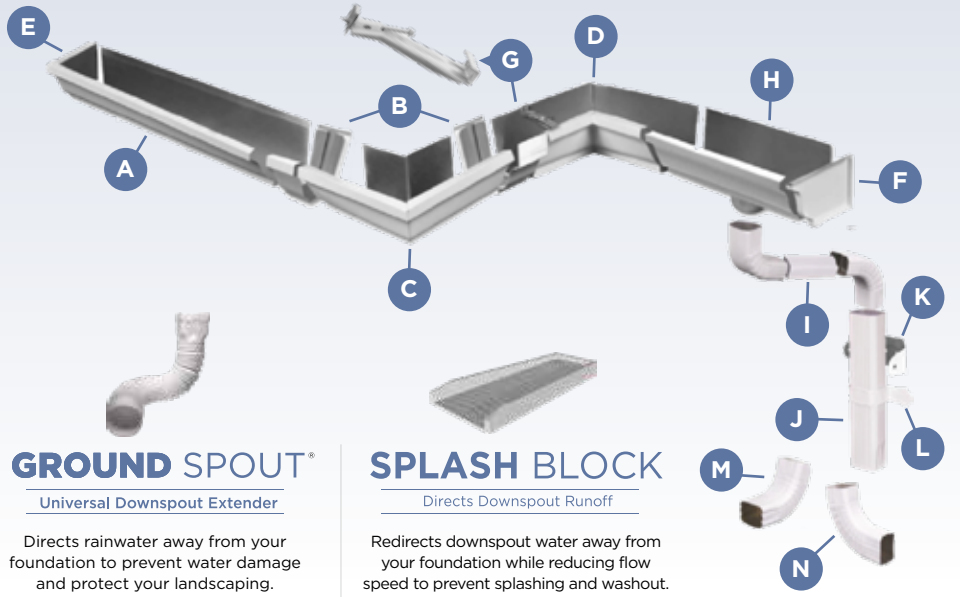




### MATERIALS

- A Gutter
- B Slip Joint Connector
- C Outside Corner
- D Inside Corner
- E Left End Cap
- F Right End Cap
- G Hidden Hanger
- H Drop Outlet
- I Downspout Extension
- J Downspout
- K Downspout Clip
- L Downspout Band
- M Downspout Elbow A
- N Downspout Elbow B



### TIPS

- Always wear safety gear and use ladders safely
- Check local codes for drainage requirements
- Add Splash Block or Ground Spout® at the base of downspouts to prevent erosion



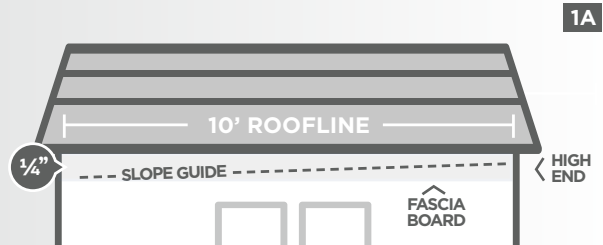
### TOOLS / ACCESSORIES REQUIRED

- Tin Snips
- Drill/Driver
- Gutter Sealant (Seamer)
- Hacksaw
- Screws
- Ladder
- Tape Measure
- Chalk Line
- Level or Laser Level

**Gutter System Materials:** Gutter Hangers, Inside and Outside Corners, Left and Right End Caps, Slip Joint Connectors, Downspout Bands, Downspout Elbows, Downspout Clips, Ground Spout®, Splash Block, Zip Screws, and Drop Outlet

## 1

### MEASURE THE ROOFLINE



- Remove old gutters, inspect fascia board and replace if necessary
- Use a tape measure for total roofline length and mark downspout location(s). Downspout is placed at end of slope.
- **Determine the slope:** add 1/4" of drop for every 10 feet of gutter toward the downspout (See Diagram 1A), and slide gutter under drip edge if present.

## 2

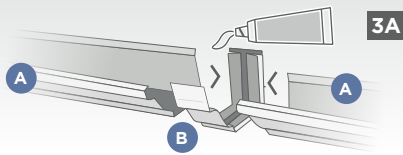
### MARK THE SLOPE

- Snap a chalk line between the two marks for your slope guide (See Diagram 1A)
- Measure down and mark the correct slope distance (1/4" per 10 ft) at end where the downspout will go
- Snap a chalk line between these two points to create a **slope guide** (See Diagram 1A)

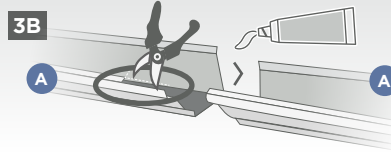
### 3 CONNECTOR & JOINT OPTIONS



### SEALANT TIP

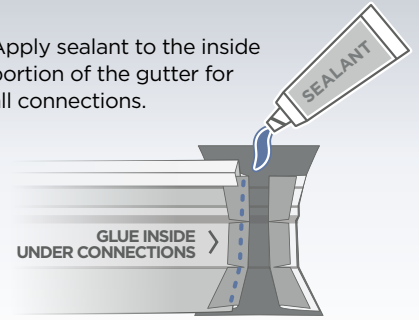


**3A. Slip Joint:** Slide gutter (A) into slip joint flange (B) on both sides. Use rivets or screws to secure the connection. Apply sealant to the inside seams of the splice and around any rivets or screws used.



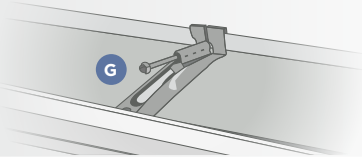
**3B. Splice Gutter:** Trim 3" off the top lip of one section and slide the next piece inside. Use rivets or screws to secure the connection. Apply sealant to the inside seams of the splice and around any rivets or screws used.

Apply sealant to the inside portion of the gutter for all connections.



Overhead Connection View

### 4 MOUNT GUTTERS



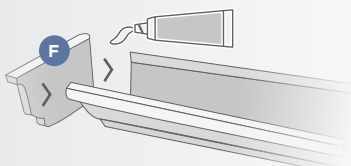
- Start at the high end, place the hangers (G) inside gutters every 24" along the chalk line (18" for heavy ice and snow load areas)
- Attach with screws (not nails) into the fascia board. Use a level line to verify the slope toward the downspout
- Place additional hangers near ends and joints

### 5 CORNERS & DROP OUTLETS



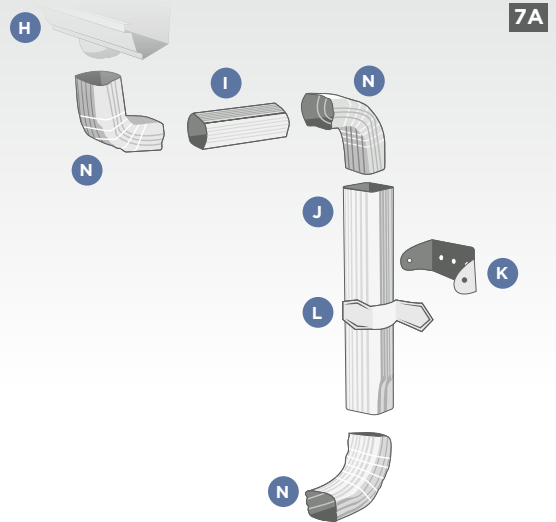
- 5A.** For corners: Use an inside or outside corner (C or D) and attach using connection methods from **Step 3**. Apply sealant to the inside seams of the splice and around any rivets or screws used.
- 5B.** For drop outlets: Line up the outlet (H) opening with downspout location. Connect using methods from **Step 3**. Apply sealant to the inside seams of the splice and around any rivets or screws used.

### 6 END CAPS



- Attach end caps (E or F) to all open gutter ends using rivets or screws
- Apply sealant to the inside seams of the splice and around any rivets or screws used.

### 7 INSTALL DOWNSPOUTS



- Connect downspout / elbow to drop outlets (H)
- Attach elbows (M / N) and downspout extensions (I) to transition from outlet to wall surface
- Assemble downspout sections by fitting the crimped end into the larger end of the next section, pressing tightly
- Mount to wall with Downspout Clips (K) or Bands (L): use 2 fasteners for every 10 feet of downspout
- At the bottom, install a front or side elbow (M / N) to direct water away from foundation
- Position a Splash Block or Ground Spout® at the elbow outlet to manage water drainage

### 8 CHECK & TEST

- Pour water into the gutter to test for leaks and flow
- Check all joints and connections for leaks
- Verify water flows to downspouts and drains away from foundation

