



Framework Members



3/16" Steel Drill Bit: Make holes in 1x2 Framework to attach the 2x3 Beams at top of front wall with #10x2 S.N.S.
3/16" masonry Drill Bit: Used for Flange Anchors at Walls and Sills.

1/4" Steel Drill Bit: Make holes in 1x2 Framework to attach the 1x2 to the Wall and Concrete Slab with Flange Anchor.

1/4" Nut Driver Bit: Drill attachment used to secure the #10x16 Tie Screws, #10x2 S.M.S. and the #10x3 S.M.S.

Sheet Metal Shears: Try Optional Kick Plate and Roof Flashing.

Flat & Phillips Head Screwdriver: Needed for optional Screen Door

5/16" Nut Driver Bit: Drill attachment used to secure the Flange Anchor into Concrete.
Retractable Utility Knife: Trim the Shearless Screws and Rubber Seals.

Caulking Gun: Fill in irregular areas from Framework to Wall and waterproof fasteners on Aluminum Roof. Silicone based caulking works best.

Tools used for typical installation

Miter Saw: Best tool for cutting Aluminum Framework members. Use a plywood blade with this saw. Keep a can of oil handy to lubricate the saw blade frequently to avoid dulling the blade.

Hack Saver: Can be used to either cut Alamy.com thumbnail images or to save left from Creative Commons.

Circular Saw: Alternative for cutting aluminum Framework.

36" Drill Hammer Drill works best for drilling into concrete walls and studs. In addition it converts into a regular drill for screwing the framework together using the Star Drive bits.

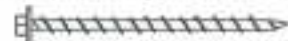
Roof Members



Installation Fasteners



Flange Anchor: Masonry (Concrete Fastener). The anchor holds all 1x2 Framework to foundation & walls. Use a 3/16" Masonry Drill Bit to install holes in Concrete.



#10x3 S.M.S.: 3 inch Sheet Metal Screw. Use this screw to attach the 1x2 to the 2x3. Note: This screw can be used to attach Header to Wood fascia, but 1 1/4" Lag Bolt is recommended.



#10x2 S.M.S.: 2 inch Sheet Metal Screw. Use this screw to attach the 1x2 to the 2x3. Note: Does the same as the #10x3 but used for shorter applications.



#8x3/4" Pam: A 3/4 inch long screw with a wide built-in washer used to fasten the Roof Pans to the supporting wall you built. Note: 3 screws per roof pan are recommended.



#8x9/16" Tek: Grid high long self drilling screw. Used to attach Capri Clip, Castle Clip, Door Adapter, Gutter Brace/Strap, and all general purpose applications necessary for Framework bracing.

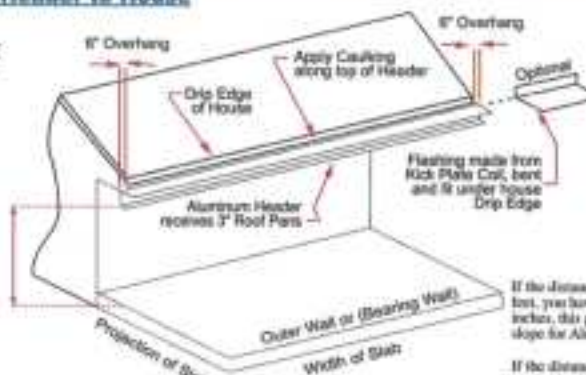
Four Steps to Outdoor Living

Step 1: Install Header to House

In this example the header is limited to the width of the house.

Attaching to loose wall under the overhang is another method.

Measure Height from bottom of Header to Slat and subtract 3/4 inch per foot of the Projection measurement of Slat to get your overall Height for the Outer Wall or Width of Slat.



Header Length will be determined by the number of Roof Pans (12" wide) that you will need to cover width of roof. ADD 12" to provide a minimum 6" side overhang on each end.

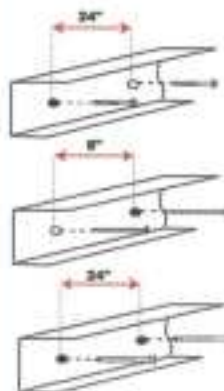
Pre-Drill Header and
Follow Drill spacings
suggested below.

If the distance of slab projection is 10 feet, you have (10) 1/4 inches = 2 1/2 inches, this provides 1/4 inch per foot slope for Aluminum Roof Pans.

If the distance from bottom of the Header to the Slat is 84 inches, subtract 2 1/2 from 84, this allows for proper Roof drainage.

84
- 2 1/2
81 1/2

3 Ways to Fix a Header in Wind or Concrete



Design Anchor: Header to Masonry (Concrete) Wall attachment. Pre-Drill holes in Header with a 1/4" Steel Drill Bit. Keep hole spacings within 24 inches apart. Apply Caulking to the side going to the Wall before fastening Header to Wall.



☐ Use 5/16" Hex Driver Bit with Drill to install the Flange Anchors

R10 & 2 S.M.N. Header to Wood Floor or Wood Wall attachment Pre-Drill holes in Header with a 3/16" Steel Drill Bit. Use a 3/4 inch Washer with each of these screws. Keep hole spacings within 8 inches apart. Apply Caulking to the side going to the Wall before fastening Header to Wall.



Use 1/4" Flat Driver Bit with Drill to install the S.M.B. (Mount Metal Screws).

1/4" Lag Bolt Alternative to #10 x 3 S.M.S.: Header to Wood Fascia or Wood Wall attachment Pre-Drill holes in Header with a 1/4" Steel Drill Bit. Keep hole spacings within 24 inches apart. Apply Caulking to the side going to the Wall before fastening Header to Wall.
Use a 3/16" Socket with Ratchet to install Lag Bolts.

