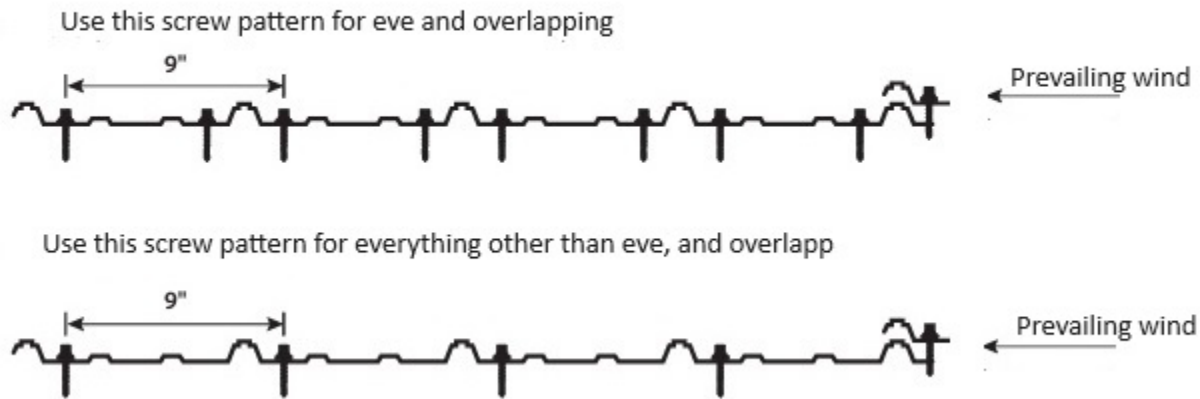


ROOF PREPARATION



Screw placement up the panel should be 2' to 3'.

Make sure before starting the project to check the direction of prevailing wind and run your laps away from the prevailing wind.

PREPARATION ON A TEAR-OFF OR NEW CONSTRUCTION

If your roof job dictates a “tear off”, make sure that all nails and screws are flush with the substrate and the roof is swept and void of debris. Check the roof for squareness and the gable/fascia for straightness. Use Ice and Water Shield or Titanium underlayment before installing the metal. Replace any lumber that might be rotten or damaged.

PREPARATION FOR OVERLAYING SHINGLES

Check the roof for squareness and the gable/fascia for straightness. Remove roof boots. Clean surface for installation. Use Ice and Water Shield or Titanium underlayment as a moisture barrier.

If your roof is uneven, you can apply 1x4's every 2 feet from the eve to ridge. Do not use treated lumber as it can be corrosive to the metal in which case it would void the warranty.

When using 1x4's be sure to have a row across the eve, up the rake and across the ridgeline. When screwing down the ridge cap be sure to use 2" screws. Screw placement should be through the screw flange of the ridge cap through the rib and into the 1x4.

INSTALLATION OF PANELS

Once the roof is ready for panel installation, finding square is the first order of business. Begin by installing the eve trim using pan head screws or roofing nails to fasten.

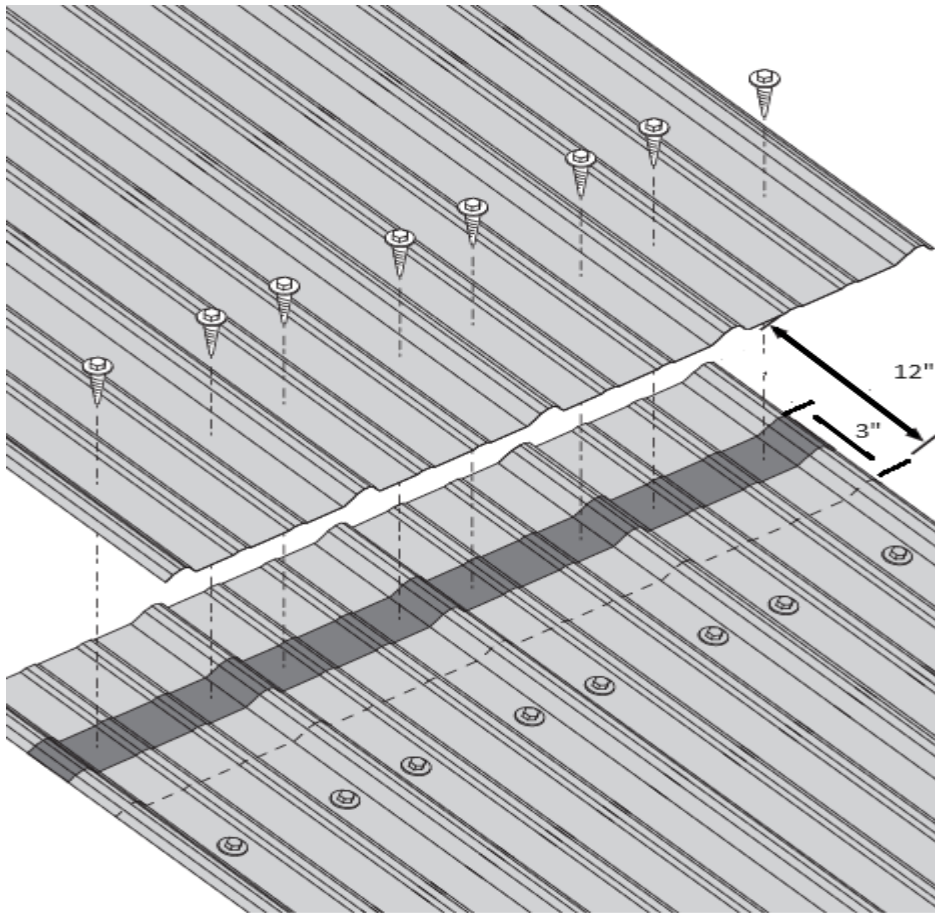
Measure the roof length and width. Using the panel width and length to understand the placement of the first roof panel. The first sheet should NOT overhang the gable but rather be flush with the face of the gable.

A 3” overhang across the eve is preferred if no gutter is installed, 1 1/2” overhang is advised otherwise.

To gauge accuracy of panel installation across the span of the roof you may want to run a tape measure across the ridgeline and one across the eve. This will allow you to see how the panels are lining up top to bottom across the span. Always screw in the flat next to the overlap. At the eve screw on each side of the rib.

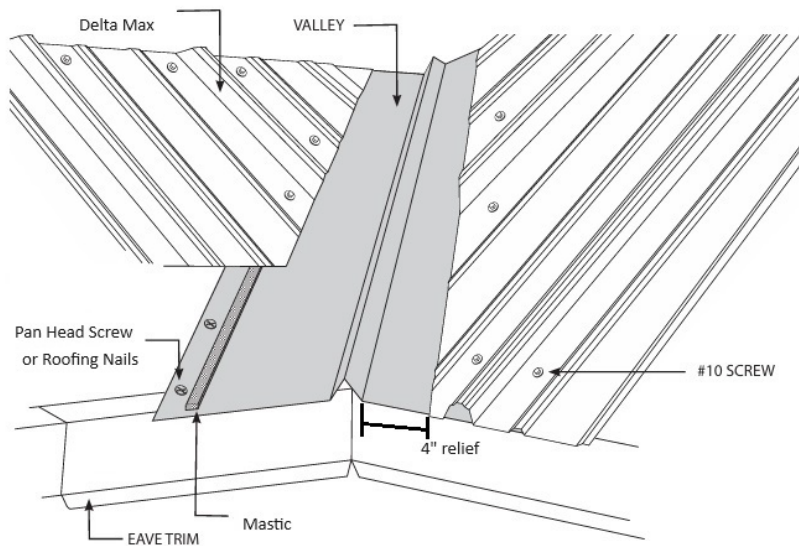
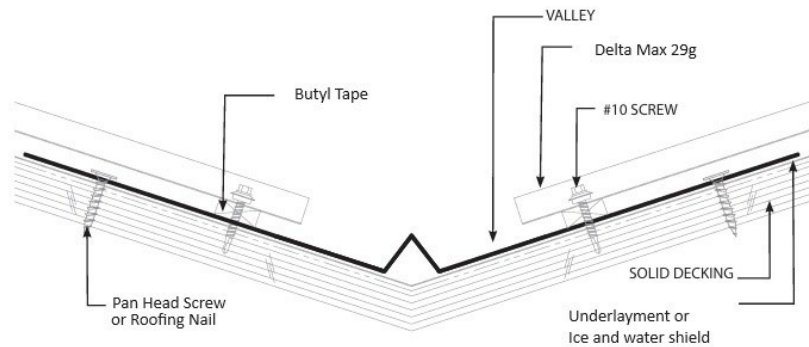
Next install the inside closure strips. Snapping a chalk-line for installing the closure strips will greatly increase the accuracy of this step.

PANEL OVERLAP When overlapping a roof, we recommend at minimum 12” overlap.



Using a row of butyl tape within the first three inches of the overlap, screw through the lap, butyl tape, underlap panel and into the substrate. Use the screw pattern that was used at the eave.

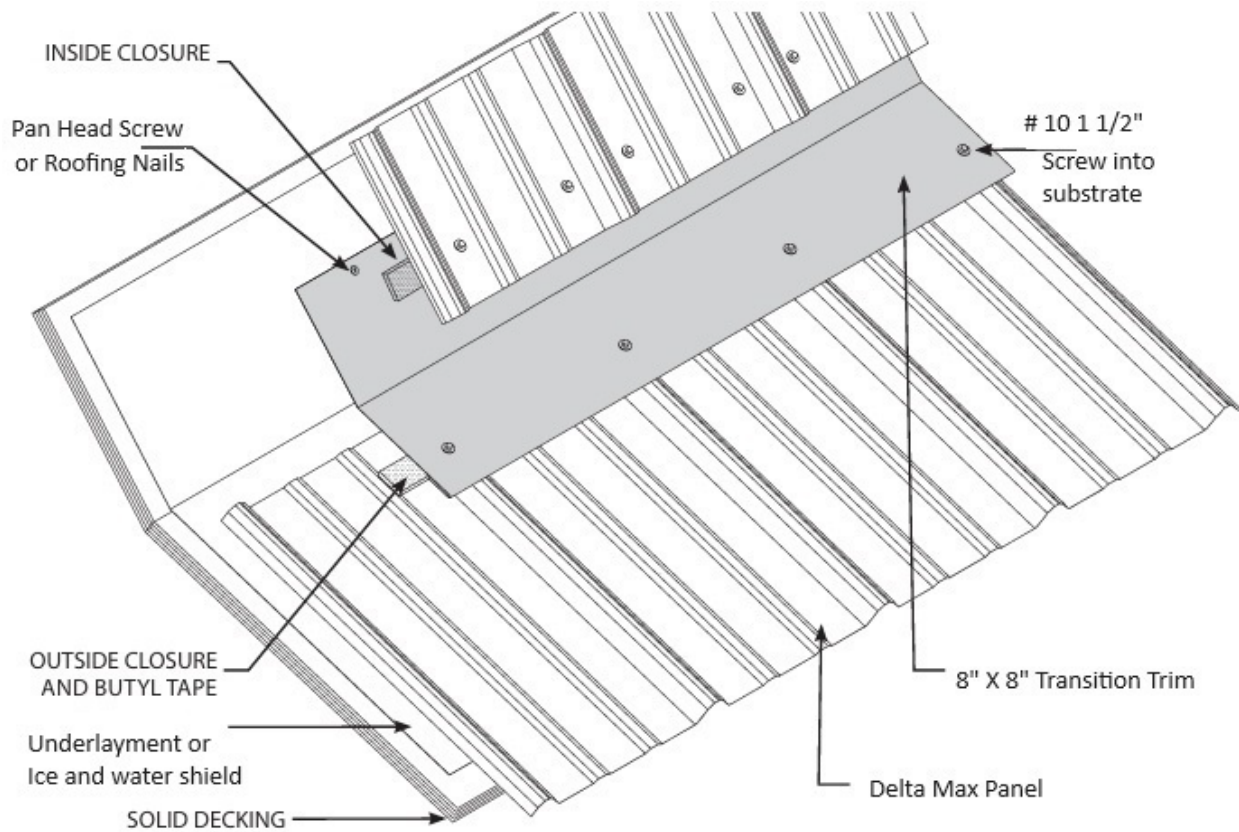
VALLEY APPLICATION



Understanding the pitch of the valley before ordering the metal is recommended. If no pitch is specified W valleys will default to a 3/12 pitch when manufactured. **Any other pitch MUST be specified.** When installing a valley, the point of the “V” should line up the center of the

substrate roof valley. From the edge of the valley profile, make a mark 4" up, snap a line and use this line as your "stop line" leaving 4" relief and 4 3/4" as an underlap. Use mastic tape as a sealer in between the panel and w-valley.

TRANSITION TRIM



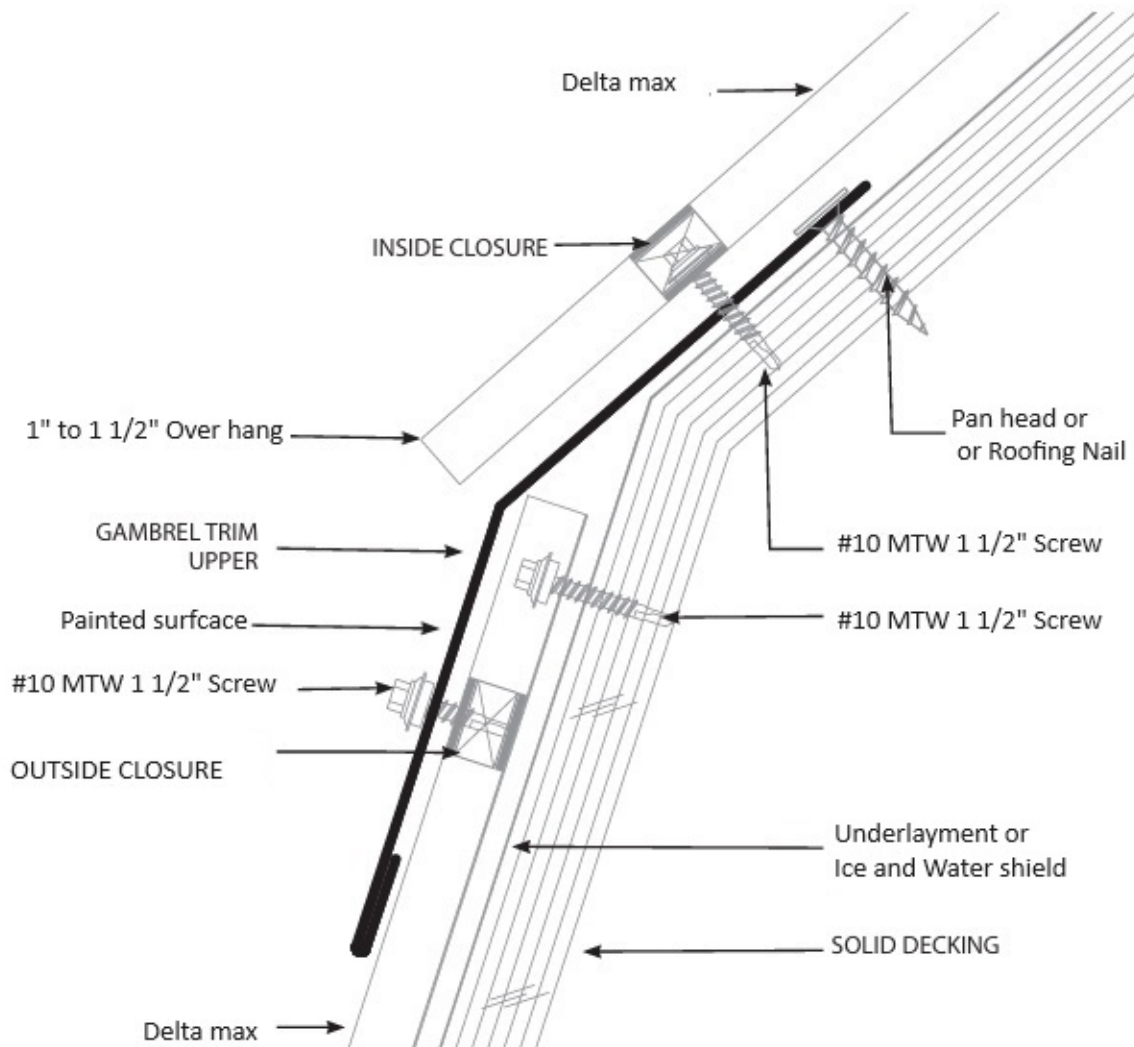
When installing transition trim make sure you understand the pitch of both roofs. Any pitches other than 3/12 **MUST** be specified.

Using pan head/ wafer screws, or roofing nails, fasten the transition trim to the upper roof deck. Snapping a chalk line to ensure the accuracy and straightness of the transition trim. Make sure to leave a 2" relief from the bend to the bottom of the panel.

Place a strip of inside closures to help seal off the rib pattern of the upper panel. Screw down the transition trim on the top side of the lower panels, with in a 1 1/2 "to 3" of the edge of the trim.

Use outside closure strips to seal the space between the transition trim and the lower panels. Screw through the transition trim, the outside closure, and the rib on the lower panels, to secure the trim.

UPPER GAMBREL TRIM



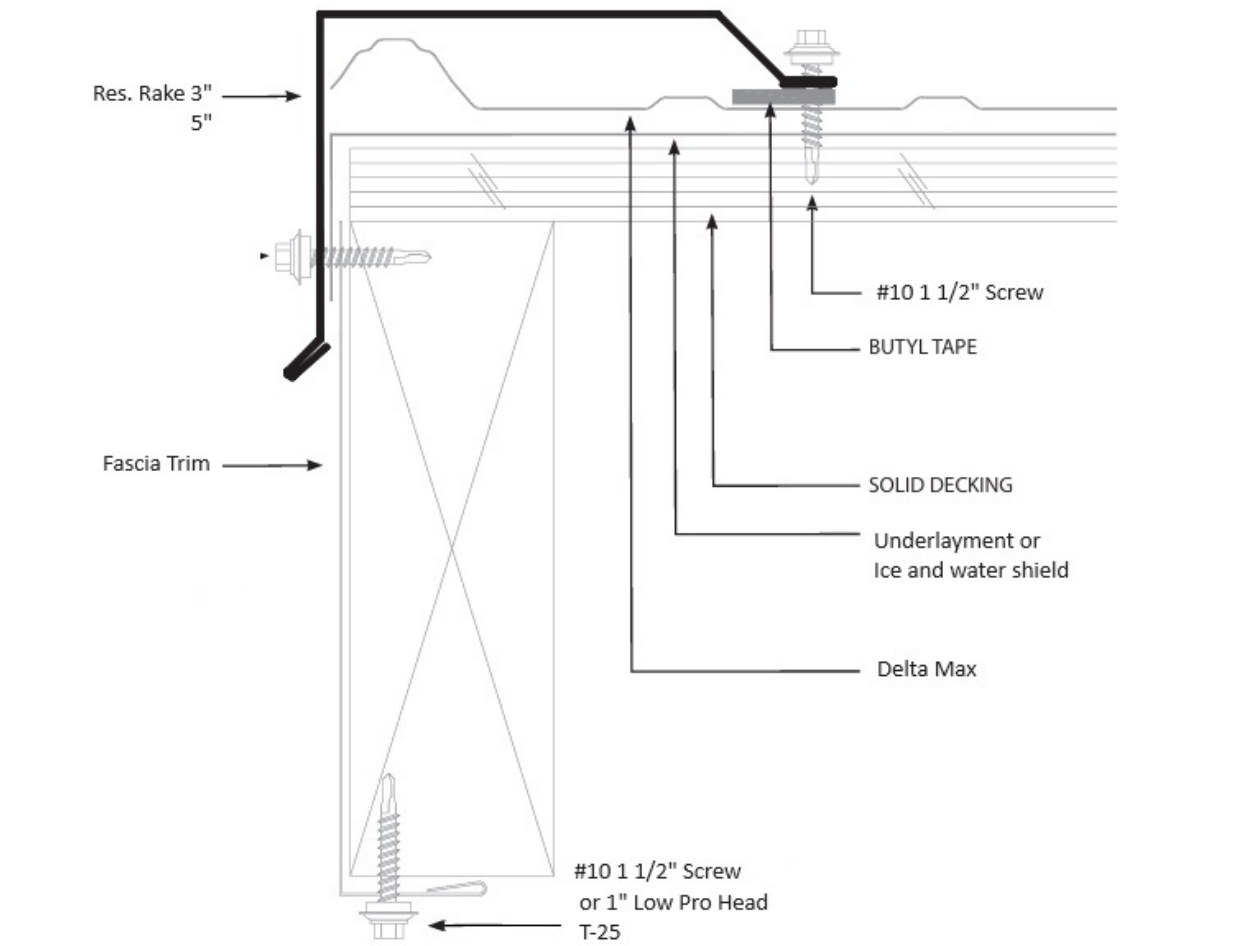
On a "Dutch style" roof line, the use of an upper gambrel trim will increase the security and weather proofing of gambrel joint. When ordering this product make sure to specify the pitches needed.

Once the lower roof panels are installed, secure with #10 screws. Use a chalk line along the roof decking to ensure accuracy and straightness. Secure the upper gambrel trim with pan head screws. Place and secure the upper gambrel trim with #10 1 1/2" screws. Screw

through the upper gambrel trim, the outside closure, and the rib on the lower panels to secure the trim.

You can leave a 1" to 1 ½" overhang on the upper panels. Using inside closure to seal the upper panels. Copying the screw placements for the eve, treat the starting upper panel edge as a new eve for screw patterns.

RESIDENTIAL RAKE 3" and 5"

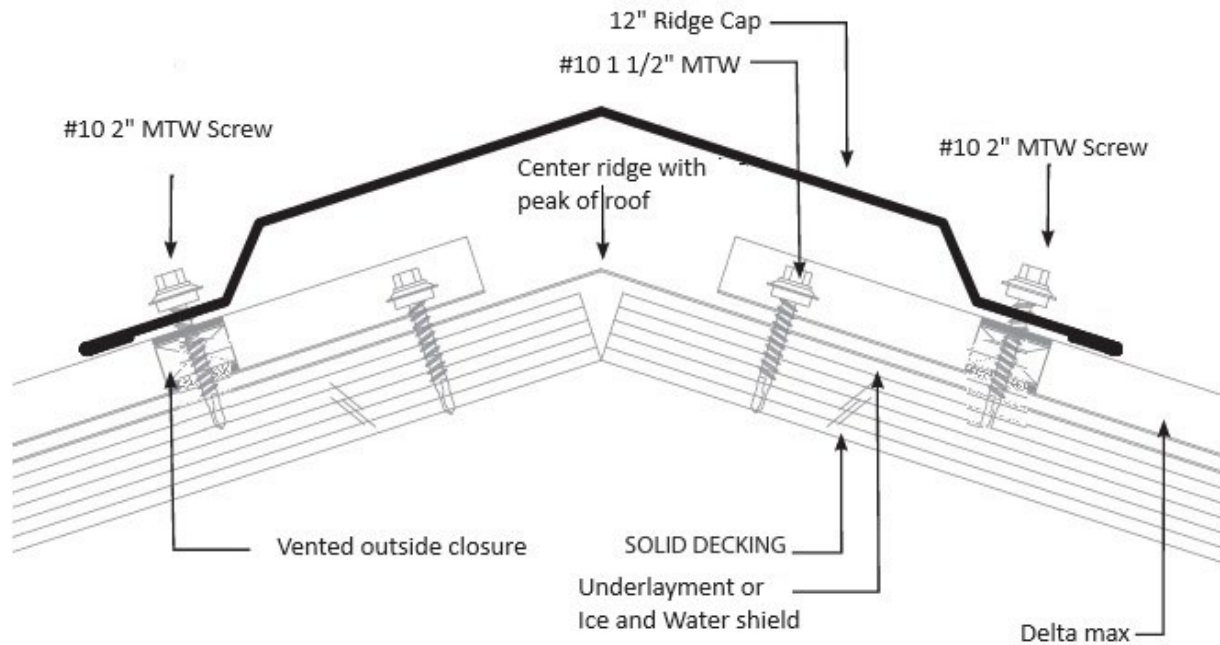


When installing the rake, make sure that the face of the rake is plum and flush with the fascia. Once you have Identified where the rake will set on the roof panels, run a strip of butyl tape.

As you fasten the rake on the roof, make sure that your screwing through the kicker, hem, and the butyl tape, fastening to the substrate with a # 10 1 ½" MTW screw.

Make sure the face of the rake is not abutting the edge of the panel. Plum the face then fastens with a # 10 1 ½" MTW or a 1" Low Pro Head T-25 screw.

12" RIDGE CAP



Snap a chalk line when installing the vented closure, so that when you screw through the kicker, closure strip, and into the rib of the panel. Make sure the peak of the ridge cap and the peak roof line stay in alignment across its run. Do not “Smash” or “Flatten” the ridge or the rib of the panel while securing it.

CUTTING AND DRILLING

Delta Metals recommends tin snips/hand shears, electric nibblers or a profile shear to cut metal panels and trim. All product surfaces should always be free of debris. Installed surfaces should be wiped clean at the end of each work period. Never cut panels over metal surfaces.

When cutting metal panels, always wear heavy gloves to avoid cuts from sharp edges and safety glasses to prevent eye injury. Delta Metals discourages the use of a power saw that may generate hot metal shavings. Hot shavings can stick to the painted surface. If loose shavings are not removed from the panel surface immediately, they will begin to corrode and shorten the life of the product.

One method of preventing this problem is to flip the panel over when cutting and only cut one panel at a time. This allows you to brush shavings off the back of the panel and helps to avoid damaging the painted finish. Make sure that stacks of panels are away from the cutting area, so shavings do not blow onto other panels.

DRILLING Always use a cover sheet underneath your panel if you are predrilling fastener holes. Predrilling more than one panel at a time can be done but is not advisable. Predrilling multiple panels can cause shavings to become embedded in interior panels. Brush away any loose shavings immediately.

A **COVERSHEET** is a great way to protect your panels from the elements, dust and scratching. A dusty panel can be very dangerous to stand on during installation.

CAUTION!! Shavings created by saw cutting or drilling may cause the panel to rust and could void the warranty of the metal.