METAL BATTEN

INSTALLATION GUIDE



MILLER METAL, LLC

MANUFACTURED BY METAL EXTERIORS

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OVERVIEW

Thank you for taking the time to review the installation instructions for our Metal Batten.

In this guide we hope to give you all the information you will need to install this panel properly and efficiently.

In this guide we will share:

- The tools that are best suited for the job
- Best Cutting Practices
- Safety Instructions
- How to Properly Prep the Wall
- Diagrams on how to properly Install the Trims
- How to Properly Center the Batten in the Gable
- Panel Installation

It is our hope that this guide will serve as an additional tool in your belt for an easy install and reference for any questions that may arise throughout the course of your project.
For any additional questions that aren't covered by this guide, please contact us at (740) 824-4040, or by email at sales@millermetalsales.com. Our office staff would love to help answer any questions that you may have.

PANEL HANDLING & STORAGE

QUALITY INSPECTIONS

The Metal Exteriors team strives for accuracy in our orders and makes all efforts to create timely customer service. Please check your order upon receiving it. In the event that you notice any discrepancies, please notify us right away so we can move swiftly to correct any mistakes that were made.

HANDLING INSTRUCTIONS

Handle your panels and trim with care to avoid any damage. If you have longer panels, you may need more than one pick-up point when lifting them from the trailer or transferring them across the jobsite by hand. Trim bundles may be heavy and should be broken apart to avoid harm to the worker when moving these to where they are needed. Don't lift more than you can safely.

STORAGE INSTRUCTIONS

Metal Exteriors recommends having a covered area to store panels upon arrival at the jobsite. When ordering material, it is important to have panels delivered as close to the time they will be installed to avoid any damage from sitting on the jobsite. The longer panels are sitting the more likely they are to be damaged prior to installation.

If you do order materials in advance to have them ready when the time comes for installation, proper storage of the product is of utmost importance. Panels and trims should be stored in a covered, dry, and well-ventilated area. If panels are left in direct sunlight or exposed to moisture prior to installation it could cause a failure in the finish resulting in water spots or even surface rust. Panels should never be stored in direct contact with the
ground.

During manufacturing we roll a film onto the panels to protect them during transit. This film should not be exposed to direct sunlight and should be removed immediately to prevent any damage to the finished coating. Failure to remove this film in a timely manner could result in surface rusting on the face of the panels.

ESSENTIAL PREPARTION

REQUIRED TOOLS

It has been said that a workman is only as good as his tools. When installing this product here are some of the tools that will make this the most efficient job possible:

- Screw Gun (impact drivers should not be used as this will lead to over-tightening and oil canning)
- Hand Shears
- Tape measure
- Rivet tool
- Chalk line
- Nibblers
- Circular saw with a carbide tipped blade
- Hand Benders
- Straight Edge

SAFETY

Whether the job you are doing is a roof or siding, safety should be the top priority. Safety hazards are all around a jobsite no matter what the job is and should be taken into careful consideration. Here are some tips to help you and your workers maintain a safe and injury free worksite:

• Maintain a clean clutter free workspace. Cut panels laying on the ground, extension or equipment cords
often lead to tripping hazards.
• Be aware of electrical lines when moving panels.
• Always wear proper hearing and eye protection whenever cutting panels. Gloves should be worn to
protect your hands from sharp edges.
• Always be aware of your co-workers in the area. Make sure not to put them or yourself in danger.

• Be sure to always follow state and local safety guidelines when installing this product.

AVOID COMMON ERRORS

CUTTING DO'S AND DON'TS

When cutting the panels in the field, here are some helpful tips to avoid damage. If you are using a circular saw to make your cuts, always cut from the back side of the panel.

This will ensure that no hot shavings come in contact with the finish and mar the paint. Always remember to wear proper eye and ear protection when cutting steel. Hand shears and Nibblers can also be used to cut these panels as well.

The same would apply to these options as well, all shavings should be removed from the panels to not damage the finish. Failure to remove these will result in rust stains on the panels. Never cut any panels on top of existing panels.

OIL CANNING

Oil canning is defined as a visual waviness in the flat area of metal panels. Many factors can contribute to the degree of natural and unnatural oil canning, including deflection due to thermal movement, misaligned substrates or framing and improperly aligned fasteners.

Deforming of the panel caused by improper installation or substrate should be addressed by the appropriate contractor.

To help reduce the appearance of oil canning, please follow installation guidelines and take the following steps:

- Nail or screw the metal batten siding loosely on the wall.
- Panels may require a backer rod to be run down the back center of the panel. This creates a small cup outward on the panel.
- Using textured 26-gauge steel will also help lessen the appearance of oil canning.

PREPPING THE WALLS

When starting the job, the first step would be to prep the wall. To properly install the panels, you will need to have a solid substrate to attach them to. Installing with a solid substrate is key to keeping the panels from oil canning.

We would recommend at least a 1/2" plywood for your substrate. After you install the substrate, you should also cover the wall with house wrap to help protect it from water damage.

Once these steps are complete you are ready to begin installing the trims for your siding.

TRIM INSTALLATION

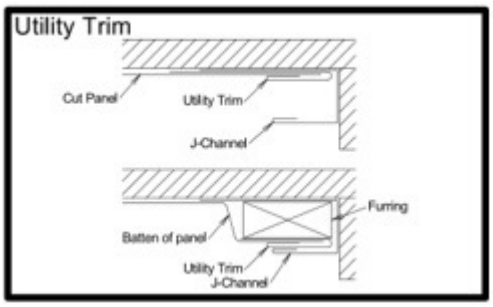
Door and Window Openings
When panels butt up against the side of a window or door opening, Utility Trim should be installed inside the J-Channel to protect the cut edge of the panel, and to prevent chattering. If the panel terminates on the intermediate portion of a batten, it may be necessary to place a furring strip behind it. (See Illustration)

Outside Corners
Outside Corners should be installed before fastening any panels, as the nailing flange should be hidden behind the finished panels. Outside corners have a built in J-Channel to receive the panels. They will require a Utility trim in both sides to protect the cut edge of the panel, and to prevent any chattering. If the panel terminates on the intermediate portion of a batten, it may be necessary to place a furring strip behind it. (As illustrated above.)

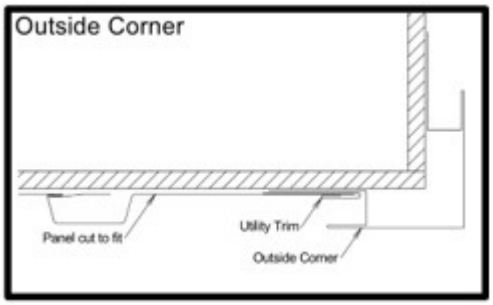
Base Angles (Starter Strip)
This trim is also referred to as a Rat Guard. This trim should be fastened to the skirt board of the building. It is important to leave about a 1/4” gap at the bottom of the panel above the Rat Guard to allow for expansion and contraction.

Drip Flashing
Drip Flashing, also known as Drip Cap, would go at the base of the wall instead of a Rat Guard when the base of the wall sits on a concrete pad, or deck. It should be fastened to the skirt board of the building. It is important to leave about a 1/4” gap at the bottom of the panel above the Drip Flashing to allow for expansion and contraction.

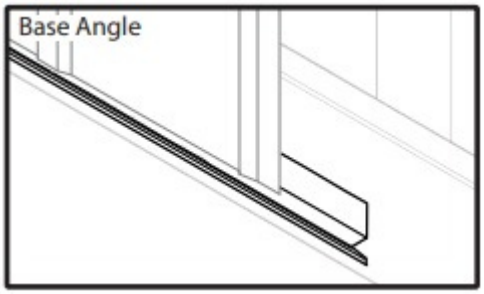
TRIM FIGURE 1



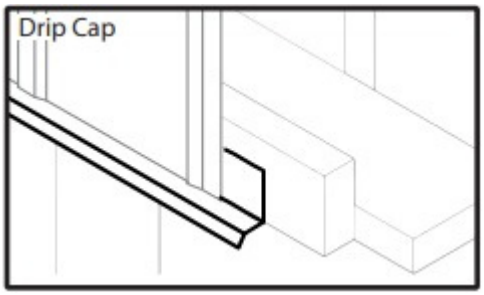
TRIM FIGURE 2



TRIM FIGURE 3



TRIM FIGURE 4

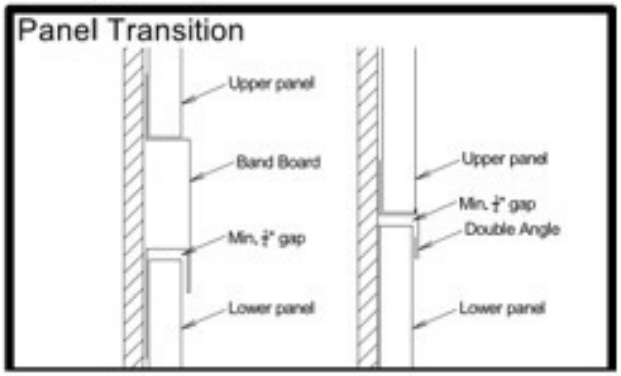


Panel Transitions

In some circumstances, if may be necessary (or desired) to make a horizontal break or “transition” within the wall panels. This is frequently done where a gable begins, to add aesthetic appeal and depth to large wall areas. A Double Angle may be used, but it is critical to ensure there is a minimum ¼” gap between the top of the lower panel and the bottom of the transition trim to allow for vertical expansion. (see illustration) To give it a bolder look you could use a 3-1/2” or 5-1/2” Band Board to make the transition.

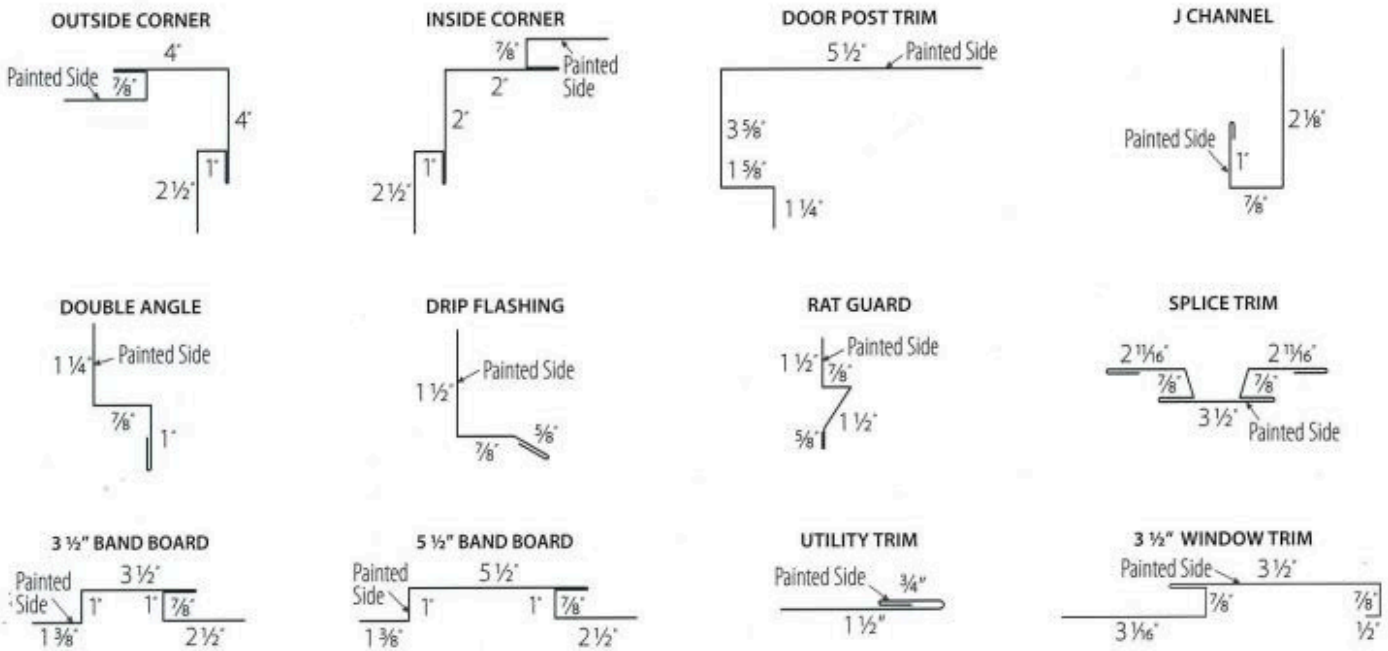
**Custom Trims can be bent on our break with provided drawings. **

TRIM FIGURE 5





TRIM CHART



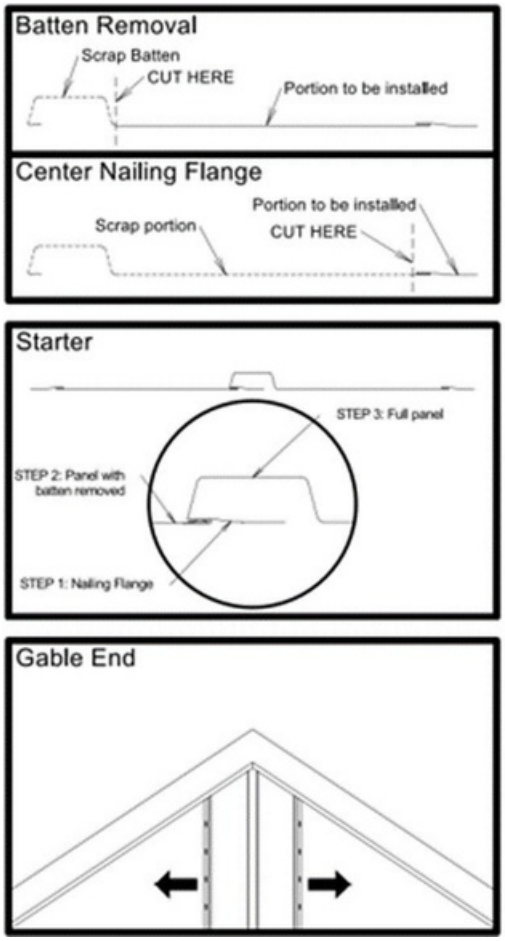
SPLITTING THE GABLE

For gable end installation, it is critical to ensure the center panel lines up with the center of the gable. The best option is to start installation from the center, and install outward to the left and right hand sides.

To do this, start by cutting the nailing flange portion from a full-length panel (see illustration). This nailing flange should be fastened to the center of the gable end, ensuring the batten will line up with the center of the gable.

Once the nailing flange is fastened to the substrate, you will need to cut the batten portion off of a full-length panel (see illustration). This piece will then be fastened to the substrate with the cut edge tucked into the open hem on the already-fastened nailing flange.

When this is complete, you should see two nailing flanges with the open hems facing one another. To finish this center starter gable panel, now fasten a full-width panel to the substrate with the batten clipped into the center nailing flange piece just as field panels are installed. You should now be able to work in both the left and right hand directions (see illustration).







PANEL INSTALLATION

Metal Batten Panel

When installing Metal Batten panels, it is critical to ensure there is room for vertical expansion. Be sure not to over-tighten the fasteners. The panels should be semi-loose to allow them to “float”. Fasteners should be placed in the center of the fastening slot of the nailing flange. To properly tighten the fasteners a 1/32” gap should be left between the fastener and the panel. (See Illustration)

