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#### **IMPORTANT INFORMATION**

Prior to placing any orders, on site measurements need to be taken to verify the actual measurements.

This installation manual is designed to be used as a guide when installing specific metal panels. It is the responsibility of the installer/contractor to ensure the safe installation of this metal roofing system.

The drawings and depictions are for the purpose of illustration only and may not be applied to every product line or building design. All of the products installed should meet or exceed applicable building codes for the area of installation. We recommend following all building regulations and industry best practices.

Metal Exteriors LLC is not to be responsible for the performance of the roofing system when it is not installed according to the instructions outlined in this installation manual. If there is any conflict between this manual and the actual construction drawings, the construction drawings should take precedence.

Metal Exteriors LLC reserves the right to modify, without notice, any details, recommendations or suggestions. Any questions you may have regarding proper installation of the roofing system should be directed to your Metal Exterior's Sales Representative.

# **SAFETY**

#### Always use extreme caution when installing any metal panels.

Do not use roofing panels as a walking platform, as the panels are not designed to withstand a great deal of weight placed on an edge of the panel. Never stand on a panel before it is fully secured and remember that the panel can be very slippery under certain conditions. We recommend that the installation of metal roofing and siding be supervised by a knowledgeable professional.

#### HANDLING MATERIAL

When handling painted metal panels, care should be taken to not drop, scratch, or drag panels across the ground, any rough surface, or another panel. We recommend wearing clean gloves whenever handling or cutting metal materials. Soft rubber soled shoes will help ensure proper grip and keep the panels from scuffing.

Great caution needs to be taken when handling panels in windy conditions, especially when wind speeds exceed 10 mph, due to the kite-like effect of the panel. We recommend trained professionals oversee any weather or jobsite conditions that may become a working hazard.

Always carry panels by the edge so the panels are held vertical to the ground. Never carry the panels horizontally with the ground, as this may result in buckling of the panel.

While in most cases a single person can handle a panel of up to 8' in length, we recommend that additional people be placed every 10' along the entirety of the panel on larger panels.

#### **DELIVERING MATERIAL**

The installer is responsible for unloading material from the delivery truck and having the proper equipment to unload the delivery.

Each metal order is delivered by trained professionals.

Each load should always be checked by the installer with the driver present to check for damages that may have occurred while the metal has been delivered or unloaded. If the order has damaged pieces of metal or property, the installer should contact Metal Exteriors as soon as possible.

#### MECHANICAL UNLOADING

Crane: When panels are greater than 24' in length, a crane should be used. To evenly distribute the weight of the bundle, spreader bars must be used. Never let more than 1/4 of the crate be lifted without support. Never use chains to unload crates, always use a soft rope or strap.

**Forklift:** If panels do not exceed 24' in length, a forklift can usually be used to unload materials from the truck. Ensure the forks are at maximum separation. Avoid any rough terrain.

#### DESIGN CONSIDERATIONS

Always check with an Engineer/Local Building Codes, before installation for any codes that apply to the area of installation.

Metal Exteriors has designed their metal panels to be installed over open framing or directly over a plywood/ OSB substrate 30# or equal UDL moisture barrier. An ice guard may be required (check your Local Building Codes) in some instances.

Installing either a new or existing roof, the installer should check if roof deck is square before installing any metal panels.

Always have an authorized contractor inspect the roof of an existing wooden substrate, for any inferior details such as rot, sagging, or possible structural failure. Before installation, make sure all nails, staples or protruding hardware are removed from existing roof.

Never let Galvalume panels come into contact with any water runoff from copper, lead, or uncoated steel materials.

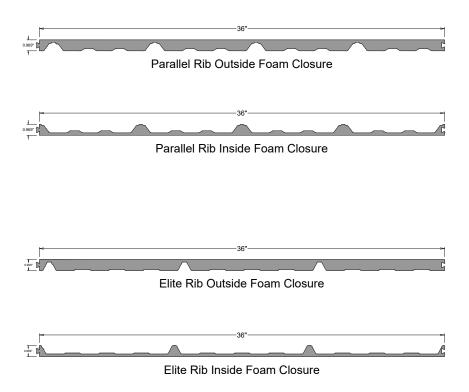
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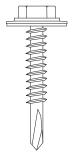


### FASTENING AND CLOSURE APPLICATIONS

#### **SCREWS:**

It is recommended to use a plated or painted screw, Type A or driller tip with a flat rubber washer, when using screws as a fastener. Using a screw gun with the appropriate speed and torque settings will help prevent possible damage to the panel and fastener head. Typically 80 screws are used per square for 36" Parallel Rib Panels.





1.5" Metal-to-Wood Screw - 250 Ct. Bags

#### FIELD CUTTING AND TOUCH UP

Saftey glasses must be worn at all times while cutting metal panels.

For cutting the metal in the field, tin snips or electric nibblers are recommended. Cutting the steel causes "slivers" or small metal particles to collect on the edge of the metal panel. Remove these immediately as they will cause damage to the finish and shorten the life of the product.

#### TOUCHING UP PANELS WITH PAINT

A factory baked on finish has been applied to the painted panels and trim components, some handling and installing of these product may result in minor nicks or scratches to the painted finish. Matching touch up paint from Metal Exteriors is available. Use a small brush to apply touch up paint, a few coats may be needed in some situations.

#### **VENTILATION**

To prevent condensation from forming on the under inside of the roof, the use of vapor barriers and vented closures are necessary. Condensation occurs when moisture laden air comes in contact with a surface that has a temperature equal or below the dew point of the air. This can cause several potential issues, all of which can be avoided with the proper ventilation products and techniques.

It is recommended that you discuss the proper product to use with your Metal Exterior's Sales Representative.

#### **ACCESSORIES**



Emseal Expanding Foam



Caulk Tape

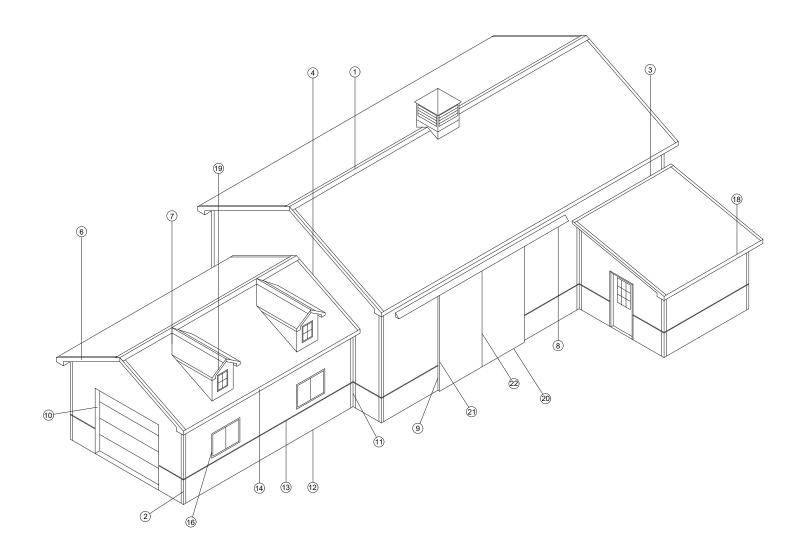


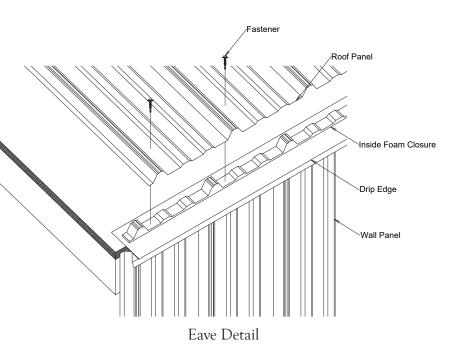
Flex-O-Vent

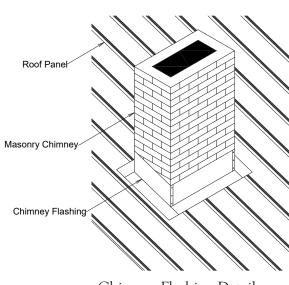


Roof Boot

# TRIM PROFILES/POST FRAME

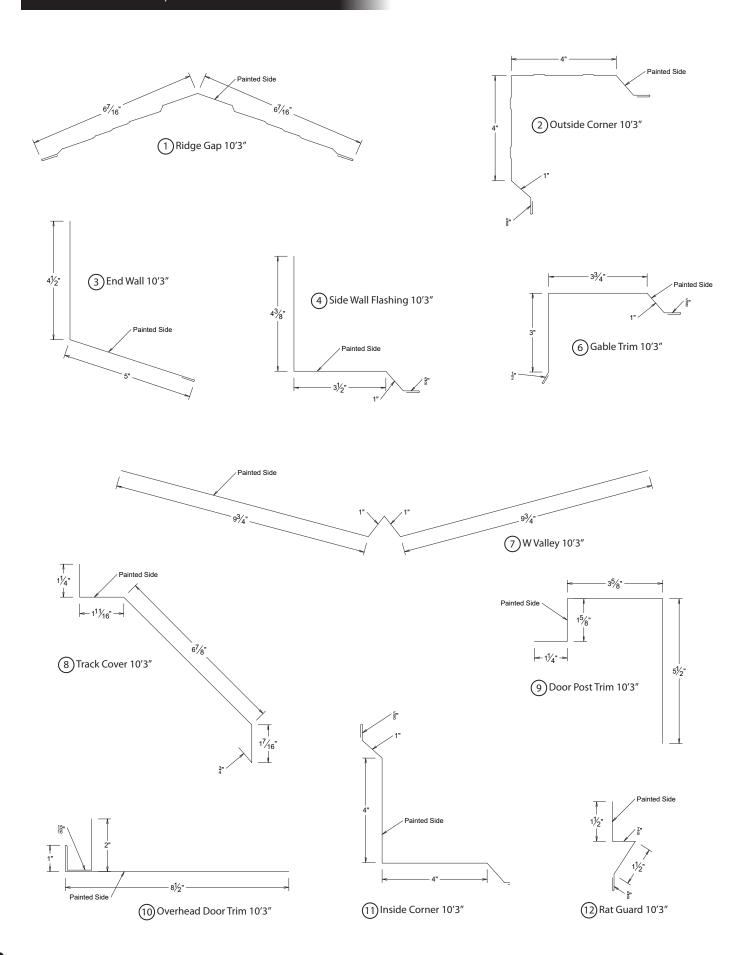




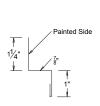


Chimney Flashing Detail

### TRIM PROFILES/POST FRAME



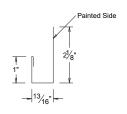
### TRIM PROFILES/POST FRAME



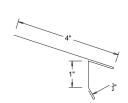
-1½" ---

(13) Double Angle 10'3"

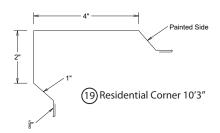
(14) Fascia Trim X = 3 1/2" 5 1/2" 7 1/4" 9 1/4" 11 1/4"

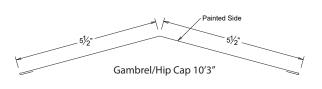


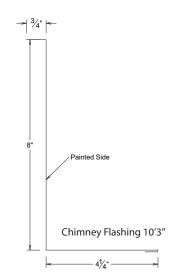
(16) J Channel 10'3"

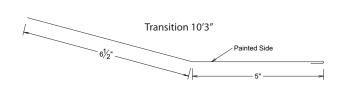


(18) Drip Edge 10'3"



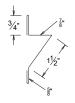




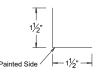




Drip Flashing 10'3"



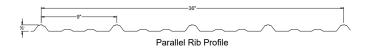
Snow Guard

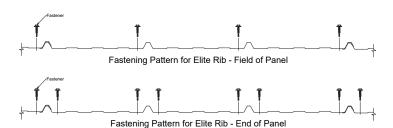


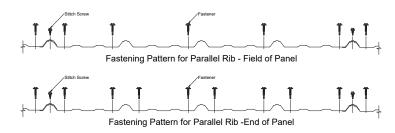
Mini Angle 10'3"

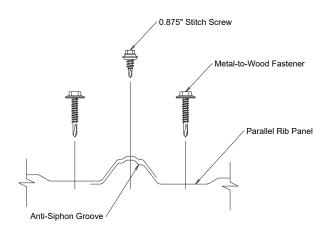
### FASTENING PATTERNS



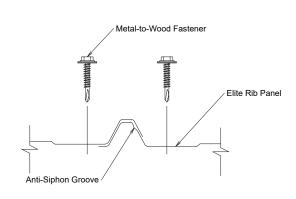






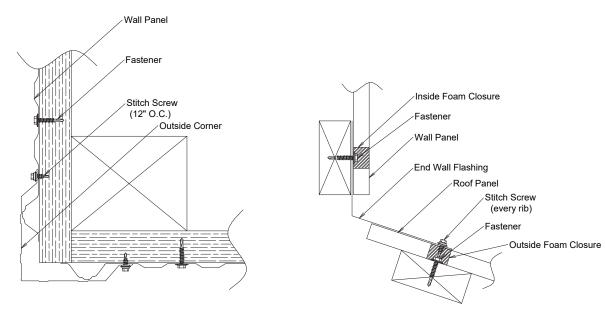






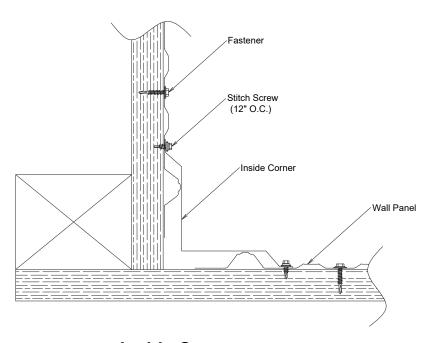
Elite Rib Panel Lap Detail

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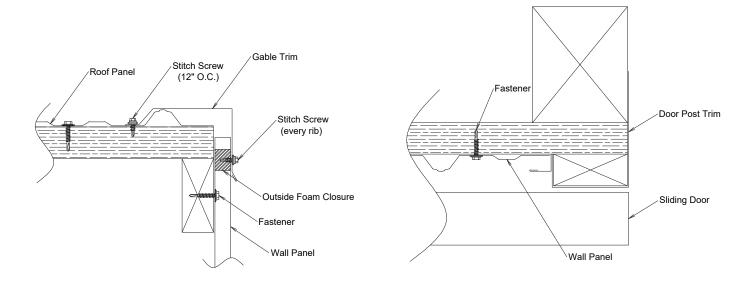


**Outside Corner** 

**End Wall Flashing** 

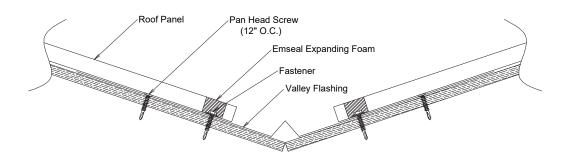


**Inside Corner** 

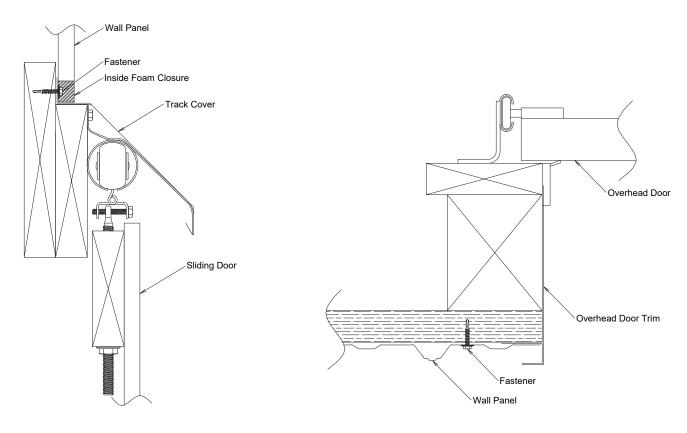


**Gable Trim** 

**Door Post Trim** 

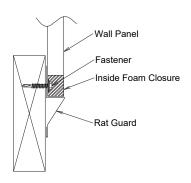


**Valley Flashing** 

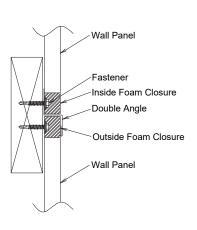


**Door Track** 

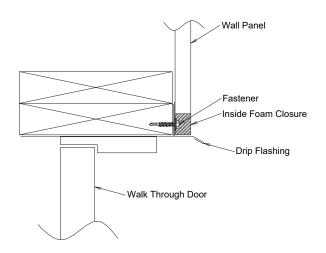
**Overhead Door Trim** 



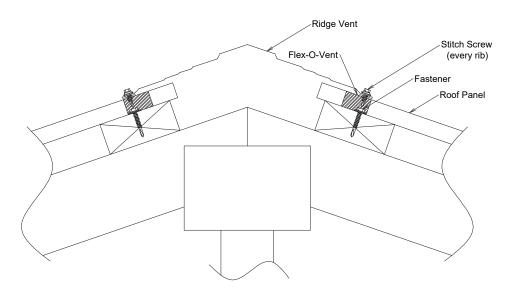
**Rat Guard** 



**Double Angle** 



**Drip Flashing** 



Ridge Cap



#### CARE AND MAINTENANCE

While the factory applied finishes are very durable and will last many years, it may eventually become necessary to clean them. A light cleaning is usually all that is needed, and with the proper products you can easily restore the panels to their original beauty and appearance.

Dirt pickup may cause slight discoloration of the paint when it has been exposed to dirt saturated atmospheres for extended periods of time. Some chalking may also occur in areas of extreme sunlight exposure.

Simply spraying the panels with plain water using a water hose or a pressure washer will be enough in many cases where cleaning is needed. In areas that have heavier dirt deposits, a cloth or soft bristle brush and a solution of water and detergent (1/2 cup of Tide or similar laundry detergent per gallon of water) may be used, followed by a thorough rinse with clean water.

Mildew can occur in areas with high humidity but is not normally a problem due to the mildew resistance of the baked on finish that is used in manufacturing.

In a large bucket mix together and apply to the needed area with a mop or soft bristled brush. Rinse thoroughly after applying and repeat as necessary.

1 cup trisodium phosphate

1-1/2 quart of sodium hypochlorite solution

1 cup laundry detergent

4 quarts clean water

Strong solvents or abrasive cleaners should not be used. Most solvents are flammable and should be handled with care. Do NOT use wire brush, abrasives, or cleaning tools which may damage the coating surface.

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