

# Installation Instructions for R Panel, PBR Panel, & IR Panel

## Storage

If metal is not to be used immediately, store inside in a well ventilated, dry location. Condensation or other moisture can form between the sheets during storage causing water stains or white rust which detract from the appearance of the product and may affect the product's useful life. **Trapped moisture between sheets of painted metal can cause white rust to form underneath the paint. This can cause the paint to flake off the panel immediately or several years later.** To prevent white rust and staining, break the shipping bands on the material. Store the material on end or on an incline of at least 8" with a supporting board underneath to prevent sagging. Fan the sheets slightly at the bottom to allow for air circulation. Keep the sheets off of the ground with an insulator such as wood. Any outdoor storage is at the customer's own risk. If outdoor storage cannot be avoided, protect the metal using a canvas cover or waterproof paper. **Never cover the metal with plastic as this will cause condensation to form.**

## General Installation Information

*Insure that the structure is square and true before beginning panel installation. If the structure is not square, the panels will not properly seal at the side laps.*

**The R Panel is recommended for use on side walls only. For roof installations, use the PBR Panel which has a purlin bearing leg to provide greater support at the laps.**

**The IR Panel is used on side walls only.**

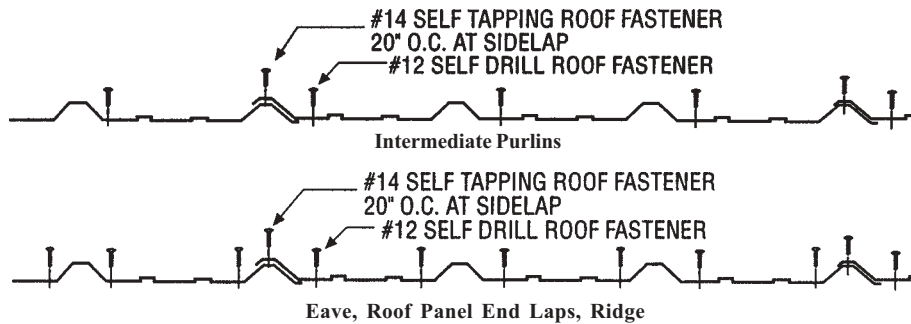
To prevent corrosion, immediately remove any loose metal shavings left on roof surface. After installing roof, remove any debris such as leaves or dirt to prevent moisture from getting trapped on panels.

**Pitch:** Minimum is 1:12.

## Fastening

**Screws:** For best results use #14 x 7/8" Lap Tek Screws at panel overlaps. For installation into a steel frame, use #12 x 1" (minimum) Self-Drilling Screws. For installation into a wood frame, use #10 x 1" (minimum) Wood Screws. Position fasteners as shown in illustrations below.

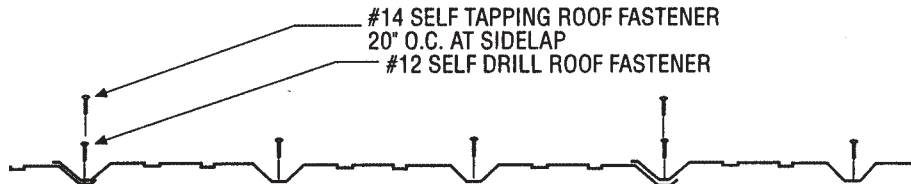
**Figure #1 - Fastening Patterns for PBR Panel for Roof Applications**



**Figure #2 - Fastening Patterns for R Panel & PBR Panel for Wall Applications**



**Figure #3 - Fastening Patterns for IR Panel for Wall Applications**



These instructions provide a general guide for installing fasteners, however, your application may require an alternative fastening pattern. Consult the specifications for your project or an engineer before beginning installation.



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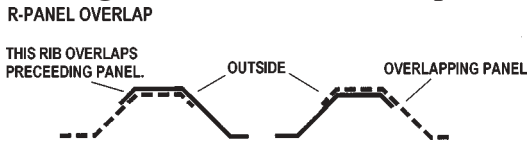
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# Installation Instructions for R Panel, PBR Panel, & IR Panel

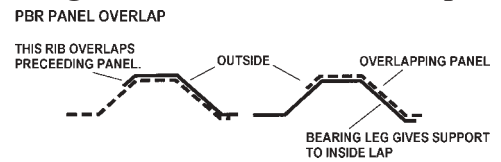
Pre-drilling fastener holes may improve the finished appearance of your project by aiding in aligning fasteners. If you choose to predrill holes, use a cover sheet, and/or drill panels with the finished side down. Do not allow nearby panels to be sprayed with metal shavings. Completely remove any metal shavings that are on the panels prior to installation.

## Panel Overlap

**Figure #4 - R Panel Overlap**



**Figure #5 - PBR Panel Overlap**



Since the R Panel profile is symmetric, either edge of the panel can be overlapped. For the PBR panel, the non-purlin bearing leg side of the panel must lap over the purlin bearing leg side. In either case, it is recommended that the panel be installed so that the open side of the lap faces away from the prevailing wind.

## Sealant and Closure Strip

The use of 3/8" x 3/32" butyl sealant tape on roof panels is critical for preventing water infiltration. Apply sealant at the locations listed below. Closure strip is also critical for preventing back water infiltration and pest infiltration.

**Eave:** Apply sealant tape along entire eave. Remove upper protective cover from portion where panel is to be applied. Lay R-Panel inside closure on top of tape. Apply another layer of tape on top of closure strip. Remove top layer of protective cover just before applying panel. See Figure #6.

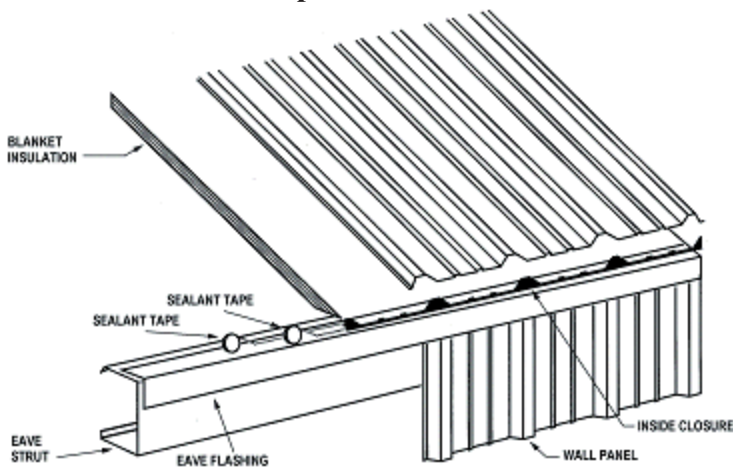
**Ridge:** For standard ridge cap, apply sealant tape both underneath and on top of outside closure strip, just below the fastener line as in eave application.

**Sidelap:** Apply sealant tape on the outer edge of the major rib of the underside panel. See Figure #8.

**Endlap:** Apply sealant tape across the width of the underside panel just below the fastener line.

**Gable/Rake Flashing:** Apply sealant tape before applying Gable/Rake Trim.

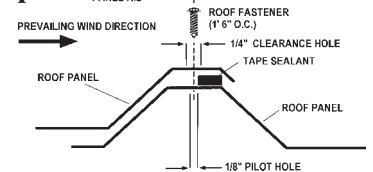
**Figure #6 - Application of Sealant Tape and Closure Strip at Eave**



**Figure #7 - Proper Panel Application Sequence**



**Figure #8 - Application of Sealant Tape at Side Lap**



## Some Safety Precautions

Always wear heavy gloves when working with steel panels to avoid cuts from sharp edges. When power cutting or drilling steel panels, always wear safety glasses to prevent eye injury from flying metal fragments.

If you must walk on a metal roof, take great care. Metal panels can become slippery, so always wear shoes with non-slip soles. Avoid working on metal roofs during wet conditions when the panels can become extremely slippery. Walking or standing on a metal roof which does not have a plywood or other deck beneath it is not recommended. However, if you must do so, always walk on the purlins, never between.

**R Panel UL Ratings: UL580 Uplift, --- UL90 Construction Numbers 30, 79, 161, and 167 --- UL2218 Impact Resistance Class 4 --- UL790 Fire Resistance Class A**

The Panel Profile has been assumed to remain constant under loading

The panel section properties have been calculated in accordance with the 1996 AISI Specification.

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