



# Metal Roofing Instructions for Residential Roofing Installation

The following brochure is a step-by-step procedure for re-roofing a residence. Great care must be taken to use the proper flashings and screws to insure a perfect, long lasting, leak proof roof. Many inexperienced applicators try to cut corners on flashings but the end result is a roof that fails and will not last the entire life of the structure without leaks.

## **Step#1**

Cut off the overhanging old roofing with the fascia. Replace fascia boards that are rotten.

## **Step#2**

Use a minimum of 1" x 3" standard and better lumber to install nailers around pipes that protrude through the roof. Check the dektite flashings for the location of the nailer. Then install nailers down the valleys, ridges, hips and any other place where a flashing will be required. In each case check the flashing for the proper location of the nailer. Secure nailers around the chimney, check the chimney application diagram for location.

## **Step#3**

Strip the rest of the roof with a minimum of a 1" x 3" standard and better lumber. These should be placed 2' (recommended) to 3' (max) on center and must be a minimum of 3/4" thick for the screws to hold properly. On new roofs, a 2" x 4" may be used directly over trusses; no sheathing is required to hold the metal. Be sure and check local building codes for their requirements.

## **Step#4**

Install the fascia cover flashing. This can be ordered to any dimension and slope.

## **Step#5**

Install the valley flashing using small galvanized nails to hold them in place. Screws will be applied later, securing them permanently. Rubber closure should be applied on top of the wing of the valley flashing, sealing the valley to the configuration of the metal.

## **Step#6**

Begin to apply the sheets. Be sure and start your sheets square, lapping the short lap over the full lap, as per specifications. The sheets should only be applied with wood screws, not nails. Wood screws hold better, have a superior washer and can be purchased in colors to match the metal. Great care must be taken to adjust the nose of the screw gun so that the washer is compressed but not over tightened. Be very careful not to strip the screw out.

## **Step#7**

Apply the gable trim. The leg on this trim may be ordered to any length to match the existing structure.

## **Step#8**

Secure the ridge cap using outside closures under the ridge cap and on top of the roof metal. Not using closure will allow rain to be blown up and under the ridge cap. Also, using closures under and above all trim and metal applications should prevent all leaks from occurring. In the valleys closures cannot be used because valleys do not have a straight angle therefore you must use universal foam to fit in those areas where closures cannot be used. Always use a high grade silicone caulking around a pipe flashing to make sure no leaks occur.

**Always call mbs 800-467-0626 for questions referring to installation or metal building products.**

### **Remember on this Application:**

- Always use screws, no nails.
- Use the proper screw gun, not a drill with a socket.
- Use the proper flashings around the vents.
- Flash all exposed edges with standard or custom flashings.
- Always cut with a shear; never use an abrasive (grinding) wheel.

### **Installation Summary**

- Determine the quantity and size of panels needed.
- Determine the quantity and number of flashings and accessories.
- Install vapor barrier.
- Install eave trim and W-Valley.
- Apply pre-cut panels (cut hips and valleys as required).
- Install gable trim, sidewall, closure strip, endwall and ridge cap.

### **Panel Cutting Procedure**

It is recommended that metal panels be cut with a metal cutting blade, tin snips or metal shears. Panels should be turned upside-down and held securely while cutting. **ALWAYS WEAR SAFETY GOGGLES WHEN CUTTING METAL PANELS.** It is imperative to clean metal particles from panel to prevent pitting and rusting.

## **Accessories**

### **Insulation**

There are a few options when it comes to insulation. Reflective insulation (bubble) with an R-10 insulating value is a popular choice. It has a fire rating of Class 1/ Class A. This is an easy to install insulation with a 15 year limited warranty that also doubles as a vapor barrier. Next, you have 3" vinyl reinforced fiberglass with an R-10 insulating value. The fiberglass is reinforced with a vinyl backing that also doubles as a vapor barrier.

### **Tri-Ply Vapor Barrier**

Used when no insulation is needed to prevent the condensation from penetrating the decking.

### **Doors**

Pre-hung insulated steel utility doors available in 3' x 6'8" and 4' x 6'8" sizes complete with lockset and weather stripping. Doors are available in both standard and heavy-duty service. Door lights are available as an option.

### **Screws**

A wide variety of screws are available for both metal-to-wood and metal-to-metal applications. There are also a full range of lengths from ¾" to 3" along with all colors.

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