

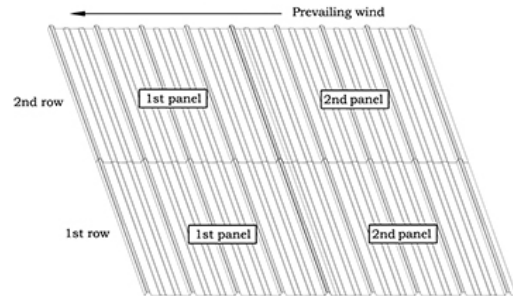
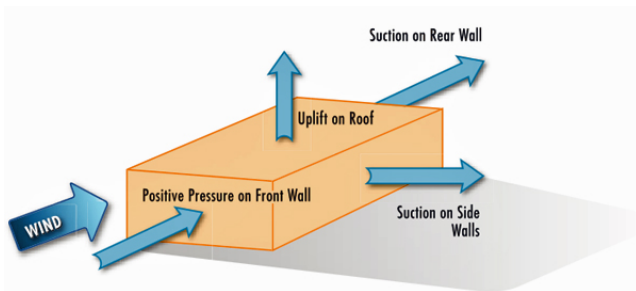
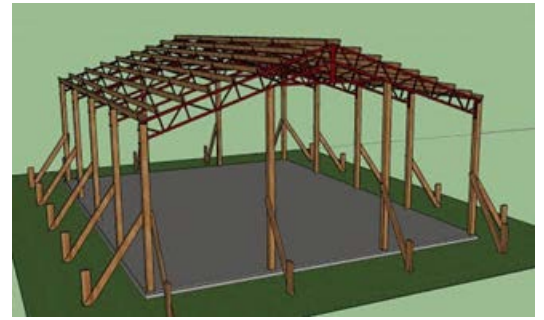
# Pole Barn Erection

## PLANNING

Check with your local municipal and/or county building planning and zoning to obtain a building permit if needed.

Determine the dimensions of the structure that will fulfill your needs, along with the types of doors, windows and ventilation. Decide if you will connect water and electricity. Consider the building site slope, soil and drainage.

Building orientation is very important. Know the direction of the sun, shade and prevailing winds to determine the impact on your structure. The strongest buildings are aligned with the prevailing winds. Thus the panels can be installed to lap with positive pressure rather than against.

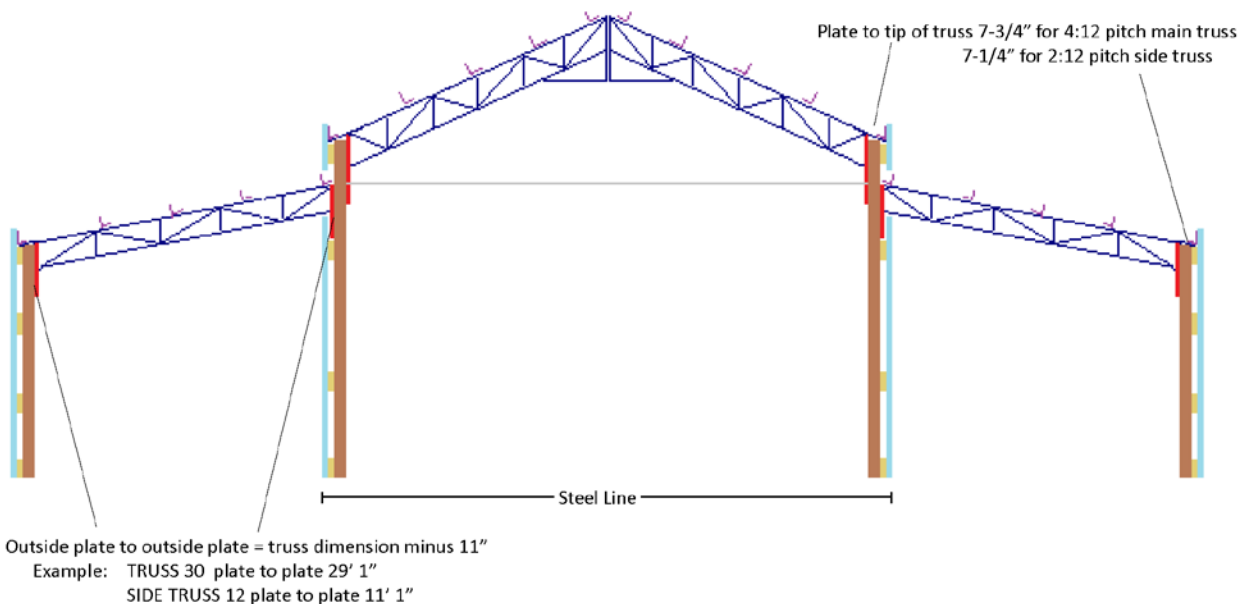


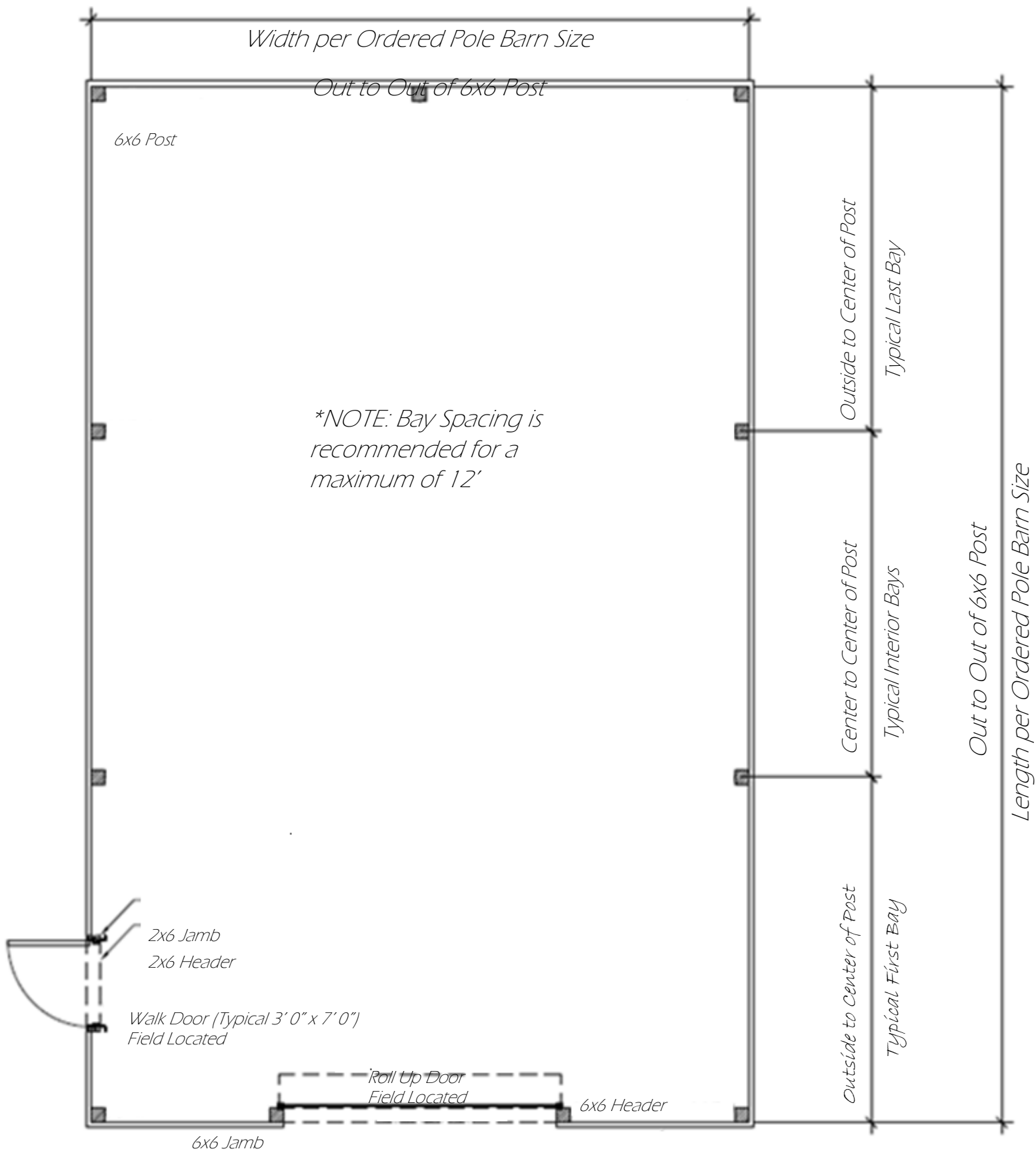
Meet with a Reed's Metals building sales representative to assist in designing your building.

## SITE PREPARATION

1. Level the ground and lay any base rock needed. Create a string-line to mark the outline of the building.
2. Post locations and slab details depend on the layout of your particular structure. Plan your site considering whether you designed your building using bypass or flush girts and whether you intend to have a sheet notch.
3. Reed's Metals trusses are designed for the truss plate to be on the inside of the posts, so that the steel line reflects the specified width of the building.

NOTE: The measurements in the diagram below represent using our engineer-stamped trusses. Side trusses are designed in width for a stand alone structure (12' wide single slope building needing 2 posts at 5-1/2" each). Sharing the main structure's post will result in a side structure steel-line width of ordered truss size minus 5-1/2".





## SETTING POSTS

Dig the holes using powered auger or post-hole digger. Make hole at least 10" diameter to allow for 6x6 posts.

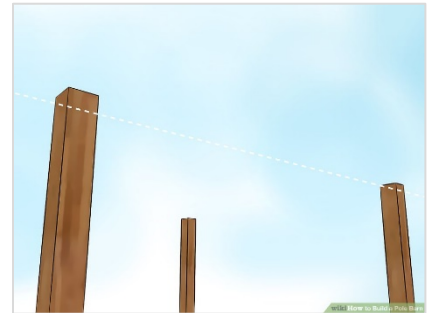
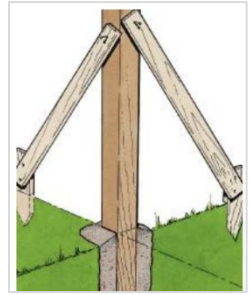
Mix your concrete. You will need enough to add 12–24 inches (30.5–61.0 cm) in the bottom of each hole depending on the size of your posts. Drop each post inside the holes into the concrete to add stability. Make sure that they are completely vertical before leaving them to set.

Make sure the corners are exactly square—at 90 degrees—and the spacing between the posts is exact, so that you won't have problems completing your structure later.

Use staking and bracing material on two sides of the posts to keep them in place. It is important to prevent posts from moving. Posts will need to be left for 2-3 days to give time for the concrete to set completely.

Even-out the height of the posts. Even if your posts were all exactly the same height when you started out, because the holes are not all the same size your posts are likely uneven now. Use a string or laser-level to mark off the tops at the same height.

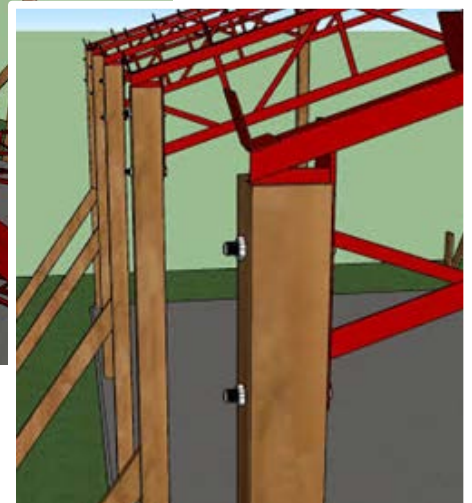
Use scaffolding or a sturdy ladder to climb to the top of each of the posts and remove the excess height. You can do this right before you install the trusses.



## INSTALLING TRUSSES

Lay flat two halves of a metal roof truss making sure the angle iron is facing the same direction. Bolt the pieces together in the middle. Add a temporary wood brace across the face of the truss for stability while maneuvering it into position.

Using scaffolding, lift straps on a tractor, a skylift or other equipment, position the truss above and inside the posts. Use string or laser level to ensure holes in truss plates are aligned from post to post. Drill through posts at holes in truss plate and attach truss to posts with hot-dipped galvanized bolts.



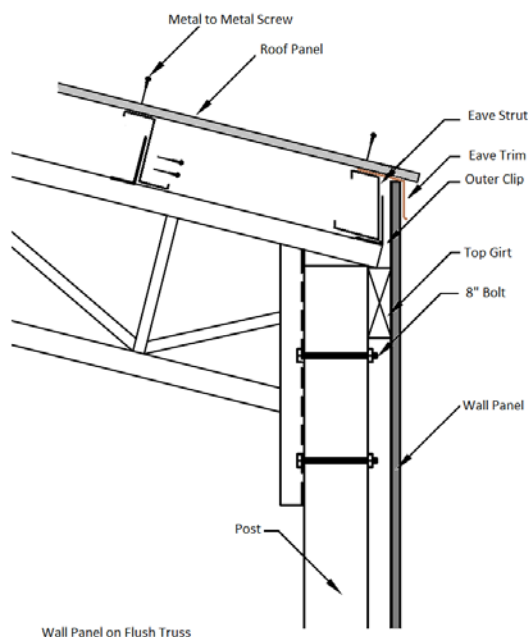
## ADDING PURLINS

Arrange purlins from clip on one truss to clip on the next. Wood purlins need to meet end to end on top of a truss. They should be laid on edge to allow spacing between the truss and roofing panels. Metal zee purlins should overlap on top of a truss. They should be placed on the outside of the truss clip with the bottom leg of the zee pointing toward the sidewall of the structure.

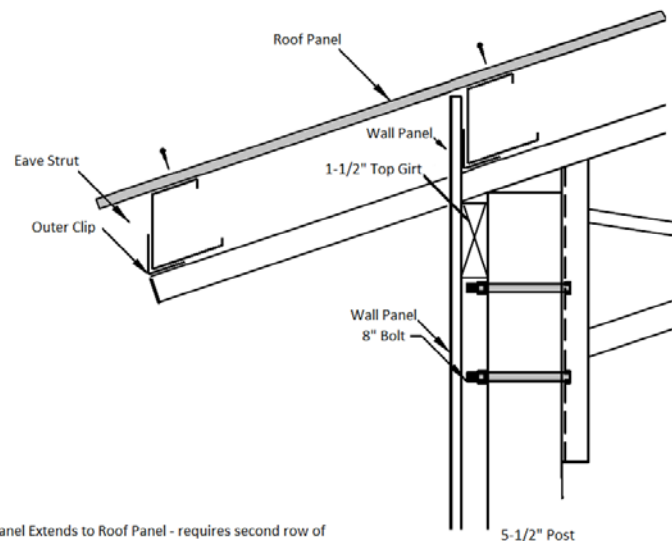


The outermost truss clip will need to be adjusted for a vertical alignment.

For metal purlins, the outermost purlin will be an eave strut. If the pole barn has extended trusses that overhang the sidewall, the two outermost purlins will be eave struts.



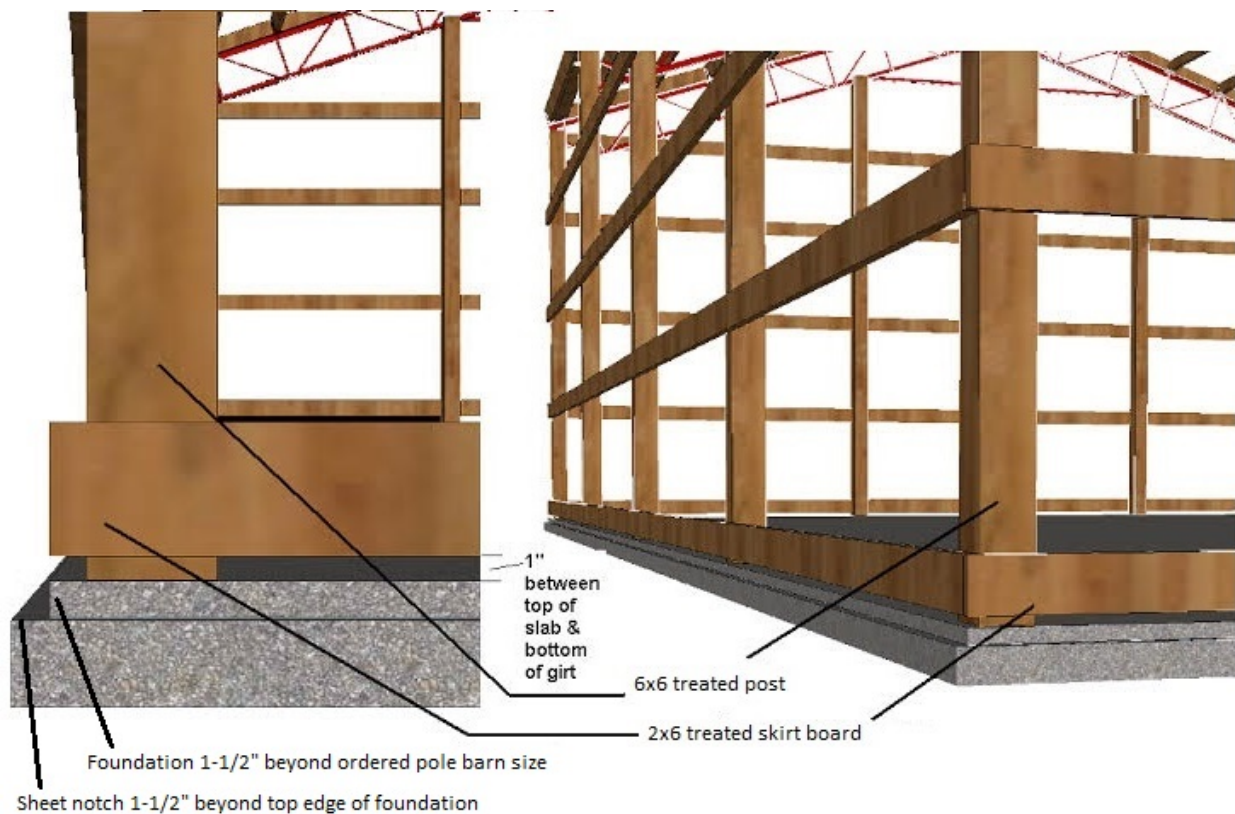
Wall Panel Extends to Roof Panel - requires second row of eave struts and cutting panel around top chord of each truss





## EXTERNAL FRAMING

For enclosed pole barns add skirt board, girts and girder along sidewalls. Frame for windows and doors. If foundation has sheet notch, skirt board should align with inside of notch.



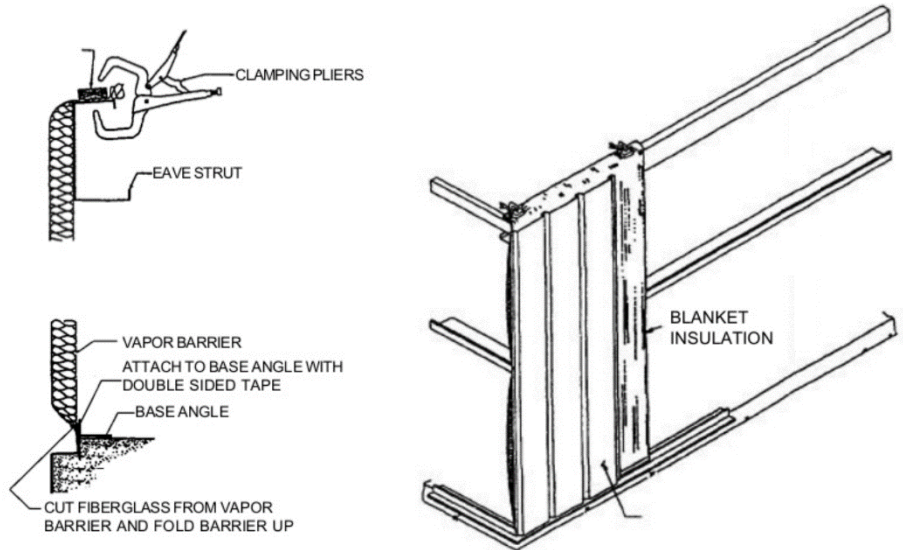
## PANELS, TRIM AND INSULATION

Attach base trim, window and door trim to external framing. Install panels and insulation on wall panels before roofing.

If using insulation, install insulation in conjunction with installing wall panels. Pre-cut insulation to length. Wall panel can be used as a guide. Fiber side of insulation should face out and tab without fiber should be aimed toward the next row of insulation. Attach insulation to eave strut using double sided tape or vice grip. Cut fiberglass from backing and fold backing up to seal edge of fiberglass at bottom of wall and attach to base trim to hold taut.

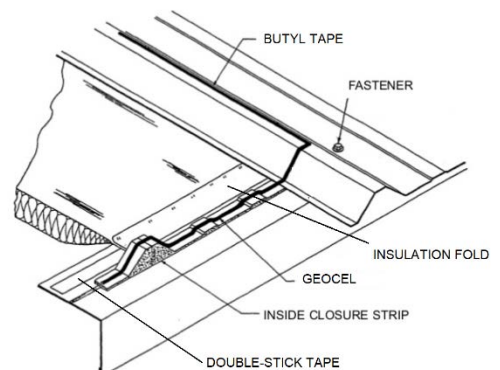
Install wall panel and screw in place through insulation and into framing. Trim excess insulation at end of run by cutting vertically.

Trim insulation to fit around door and windows frames. Fold backing toward outside of building and tuck into door trim, installing panel to cover insulation edge.



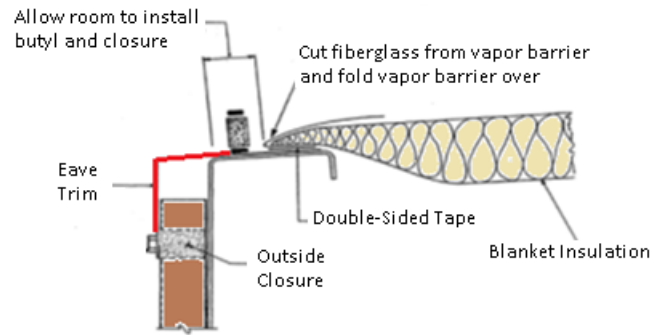
Attach eave trim on top of eave strut, hanging over top of sidewall panel. Add inside closure and butyl atop eave trim.

Pre-cut roof insulation to reach from eave to eave allowing 6-12" of additional length to facilitate handling. Hold insulation at one sidewall and roll out insulation across the purlins, vapor barrier to the inside of the building. Stretch the insulation to provide a tight and smooth inside surface. Bare tab on side of insulation should be flat against purlins and next row on insulation will lay atop tab.

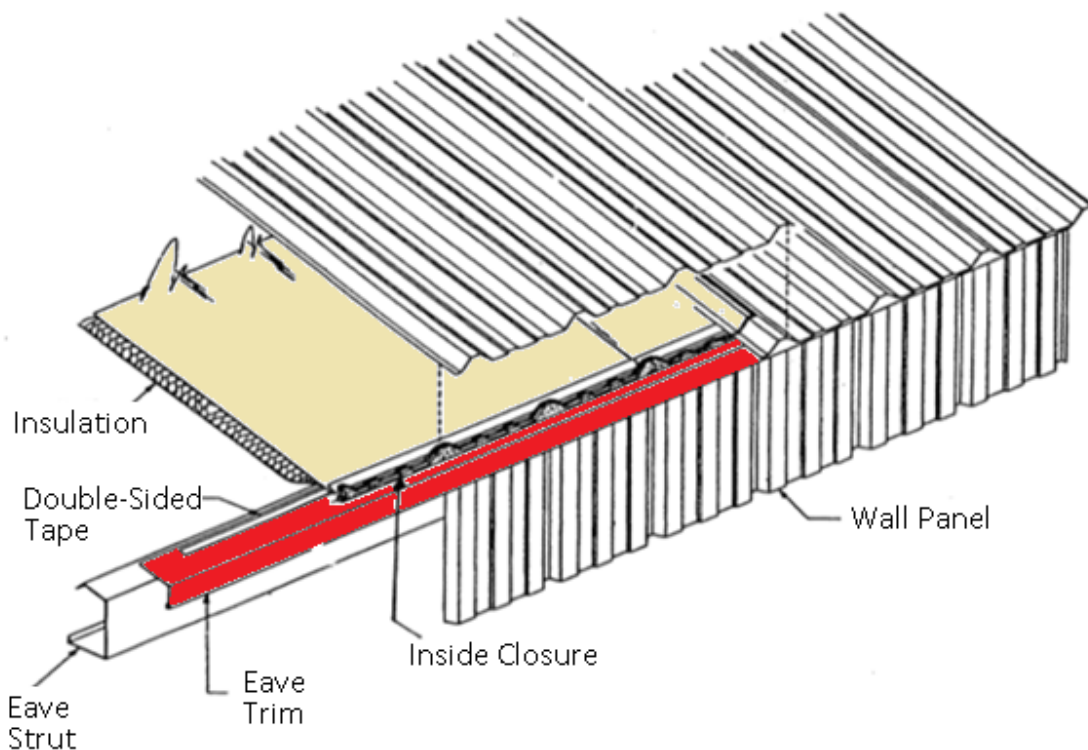


As on the walls, the general sequence is to install the roof sheets in conjunction with the insulation.

Use double-sided tape at eave to hold insulation in place while the roof sheets are being installed. Trim excess insulation to the edge of the eave trim and cut fiberglass approximately 4 inches from end leaving only facing. Fold facing over end of blanket insulation to seal the end.

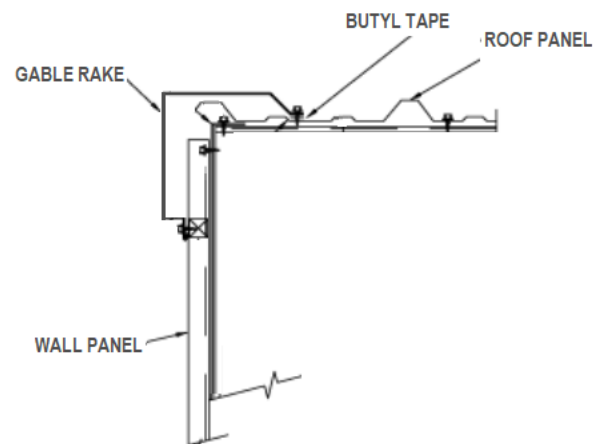


Set the roof panel in place over the inside closure insuring the major ribs of the panel nest properly with the inside closure. With the panel properly placed, secure the panel to the structure with appropriate fasteners.



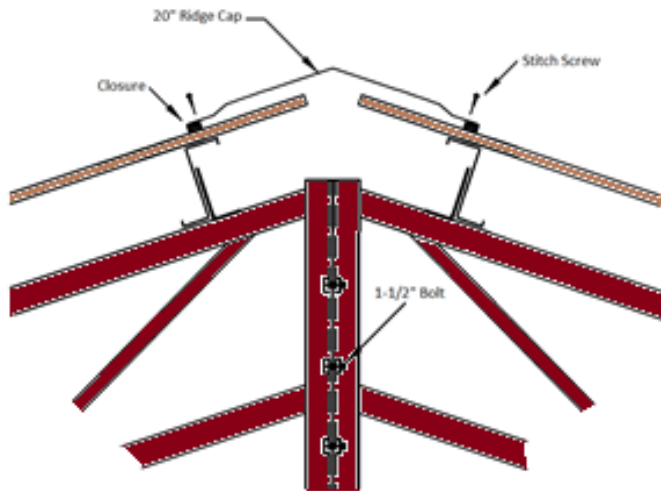
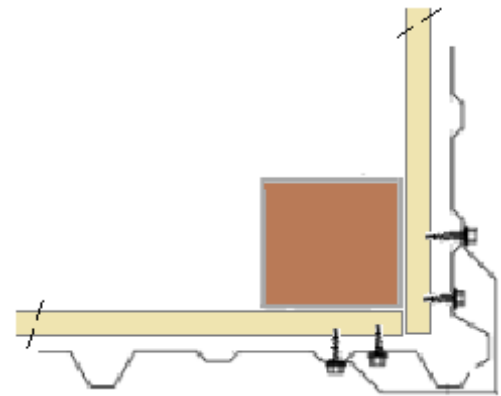
Finish with Gable Rake, Outside Corners and Ridge Cap.

Finish peaked ends of roof with gable rake. Use butyl tape where the flat of the gable sits on the roof panel. Attach the gable to the roof panel through the purlins. Use lap screws to attach the bottom side of the gable to every other rib on the wall panels.



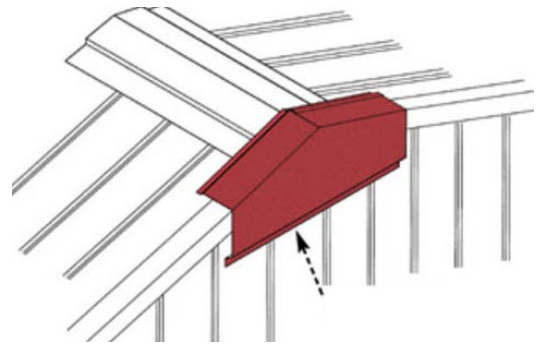


Corner trim is added after wall panels are installed from top of the base trim to the underside of eave trim and gable rake. Attach corners through panels into girts. Use lap screws where no girt is available. Space screws about every 2 feet.



Ridge caps should endlap 6" for water tightness. Use butyl tape and outside closure underneath sides of ridge cap. Use lap screws to attach ridge cap through panels into top-most purlins.

Add peak box to cover ends of gable rake and ridge cap. . Use butyl tape where the flat of the peak box sits on the roof panel. Attach the peak box to the roof and wall panels using lap screws.



More detailed structures will require inside corner, wainscote, transition flashing, valley and other trims. Refer to a Reed's Metals Sales Representative for more information.

