

Locating Electrical Cutouts

When Electrical Access is requested, we will provide a 1 1/8" diameter hole in the baseplate and a 3/4" hole in connection plates allowing passage of wire all the way into the center compression ring or tube, or ridge beam. When any additional holes are requested to allow wire runs into tension members, purlins, ridge beams, or other members, these holes will be considered as Electrical Cutouts. Round or rectangular cutouts, required for installation of electrical boxes or lighting, can also be specified. To ensure a flush mounting of the outlet, round columns will be equipped with a welded-in enclosure that accommodates a standard UL listed box. As placement of cutout holes can be critical to the structural condition of the building, all requests must be reviewed by our engineering department. All cutout requests must be made in writing and purchased prior to the engineering of the shelter. Customers who cut their own holes in structural members may affect the structural integrity of the shelter. Any unauthorized field cutouts will void the warranty on the shelter. Please contact your representative to coordinate with Poligon for approval of cutouts.

Instructions

- Marking up Sheet 2 of submittal drawings when ordering the structure ensures a more accurate cutout placement. If the submittal set is not available, indicate on views as shown at right by marking wire run and cutout locations on member(s). Special size cutouts need to be communicated at order.
- Indicate on which side of member the cutout is to be located.
- Dimension the exact location to place cutout.
- Provide sketch of cutouts with dimensions.
- If not specified to the bottom, center, or top of cutout, dimension will be taken to the bottom of the cutout.

Definition of Side

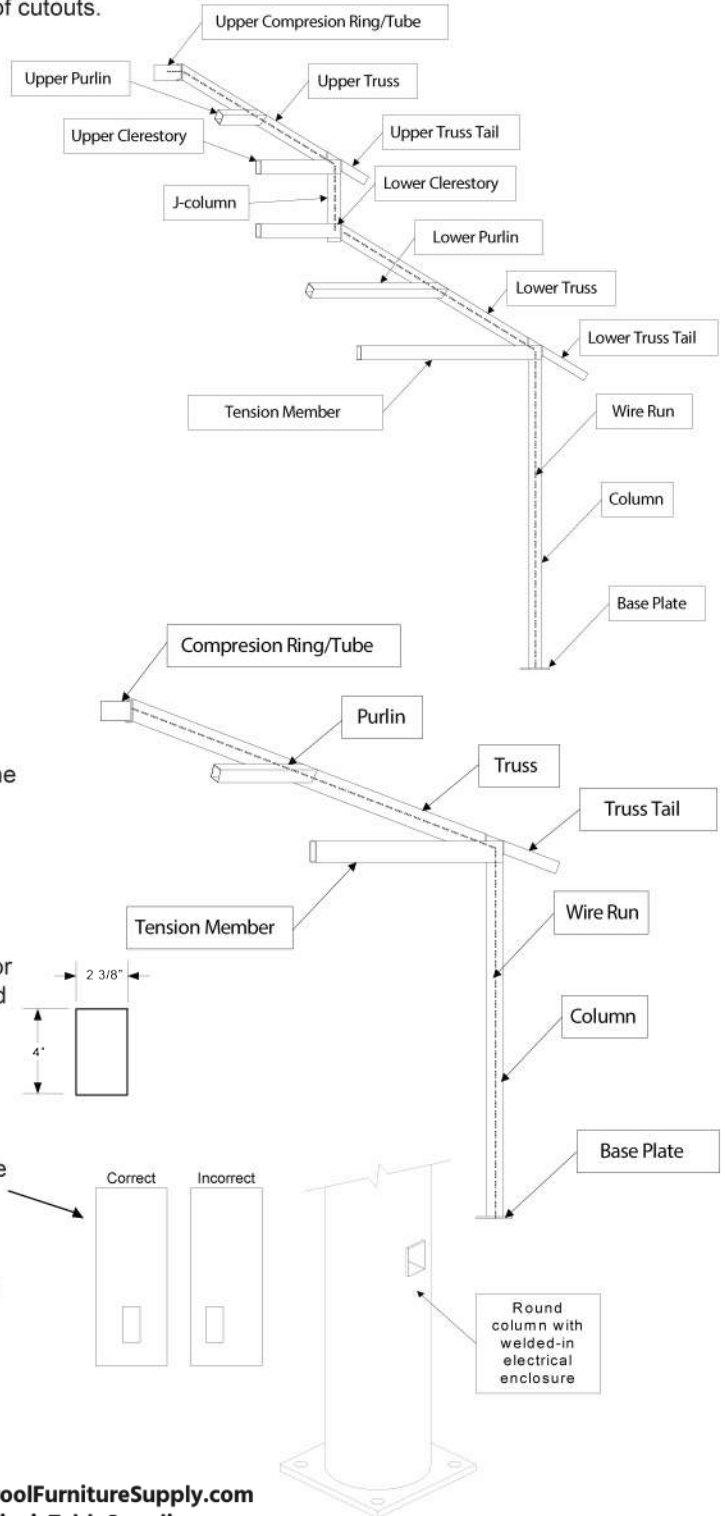
- Top Side: Side facing up; roofing side.
- Bottom Side: Side facing down; toward grade.
- Interior Side: Inside face of the member.
- Exterior Side: Outside face of the member.
- Left Side: Left side of a column or truss when viewed from the exterior side of the structure.
- Right Side: Right side of column or truss when viewed from the exterior side of the structure.

Sample Cutout Location Callouts

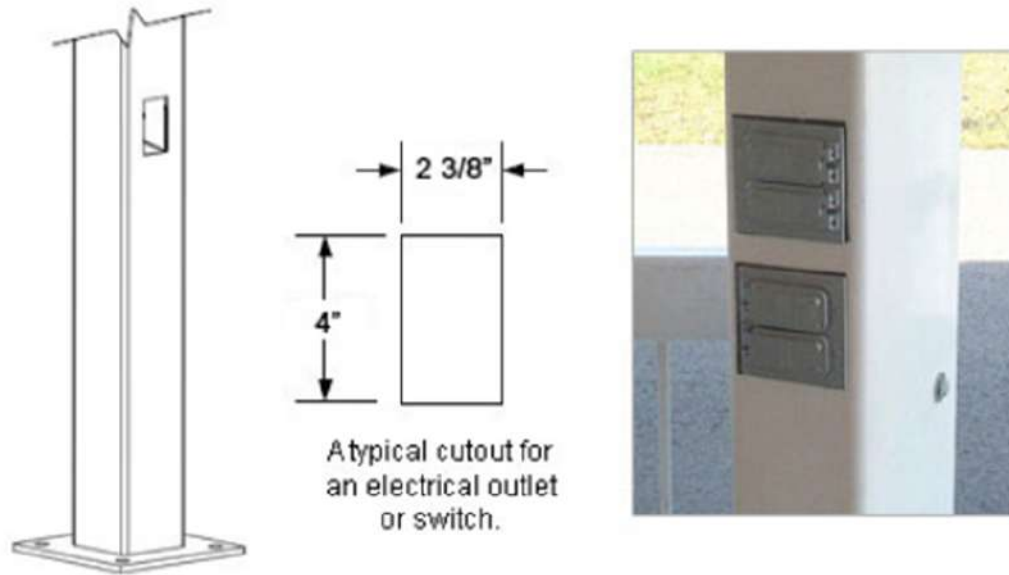
- "Electrical cutouts to be centered on every other lower purlin on the bottom side, total quantity of 3; cutout dimensions: 3/4" dia."
- "Single receptacle cutout 24" above grade to bottom of cutout on one column, interior face."

Where can I have cutouts?

- We typically place cutout areas on the inside of the column 18" (for an outlet) to 48" (for a switch) from the finished floor. The standard rectangular size is 2 3/8" x 4" and round size is 13/16". If sconces (wall mounted lights) are required, cutouts will be placed higher on the column.
- Cutouts we will avoid:
 - Within 12" of a structural joint.
 - Cutouts not centered on column or steel member (too close to either side of the radius).
 - Oversize cutout.
 - J-column (short vertical columns on clerestories), we are able to run electrical through j-columns and out the bottom cover plate.



ELECTRICAL CUTOUTS



On Structures requiring electrical, there are several things that must be identify while quoting fabrication.

1. Which column(s) location gets a receptacle?
2. What orientation and size is the receptacle? Portrait vs. landscape ond 2 x 4 vs. 3 x 5
3. Will wiring be internal or external to columns? Determine if holes are cut in end plates.
4. Will there be lights or fans? If so, where are they going to be located? This will Determine where 1" holes are cut.

DESIGN BENEFIT: Pre-cut openings in steel for electrical needs prevent eternal conduits and receptacles from being attached after the shelter is installed. External attachments comprises the steel powder coat and the design aesthetic of the structure.

NOTE: Wiring, fixtures, and receptacles are provided by the customer and not included in the Electrical Access Package.