

## D.6 CUTTING FORMS FOR CURVED WALLS

PolySteel Forms can be easily modified to accommodate designs requiring curved walls. By removing a specified section of foam on the inside of the curve, the form can be bent to create a curve with a radius of as little as 6 feet. The Table below provides the specific measurements for achieving a variety of common radii. If you have need for additional measurements, you can use the formula called out in the figure below, or contact your PolySteel Dealer for assistance.

### D.6.1 STEP-BY-STEP PROCEDURES.

The illustration below (Figure 4.3) shows a 6" form (PS•4600) with 1 inch removed from each core and bent to a radius of 10 feet.

1. Determine the radius of the wall to be constructed and refer to the Table below for the cuts that need to be made.
2. Remove the sections specified by cutting the inside surface form with a saw or hot knife. It is recommended that you make your cuts with a hot knife that has a special blade designed to create a matching tongue and groove as it makes the desired cut.
3. Apply a foam adhesive to the cut areas and bend the form by pulling the ends together. Secure the form in its curved shape by attaching 16-gauge tie wire, or other strapping material, to the form tie on each end and cinch it into place until the adhesive has set. If you have a large number of forms that need to be cut for a curved wall, we highly recommend that you create a wooden jig that will allow you to secure the forms in their proper shape and be consistent in your measurements and forming.
4. For radii less than 10 feet, cut a 1-inch deep groove into the inside surface of the outside wall of the form every 4 inches. This will allow it to bend and not break.
5. Once the forms are in place, brace the outside of the wall by installing 4" strips of Masonite (or a similar strong and flexible material) horizontally, and screwed directly to the attachments studs on each course of forms. Brace the wall for plumb as you would any other PolySteel wall.



FORM JIG



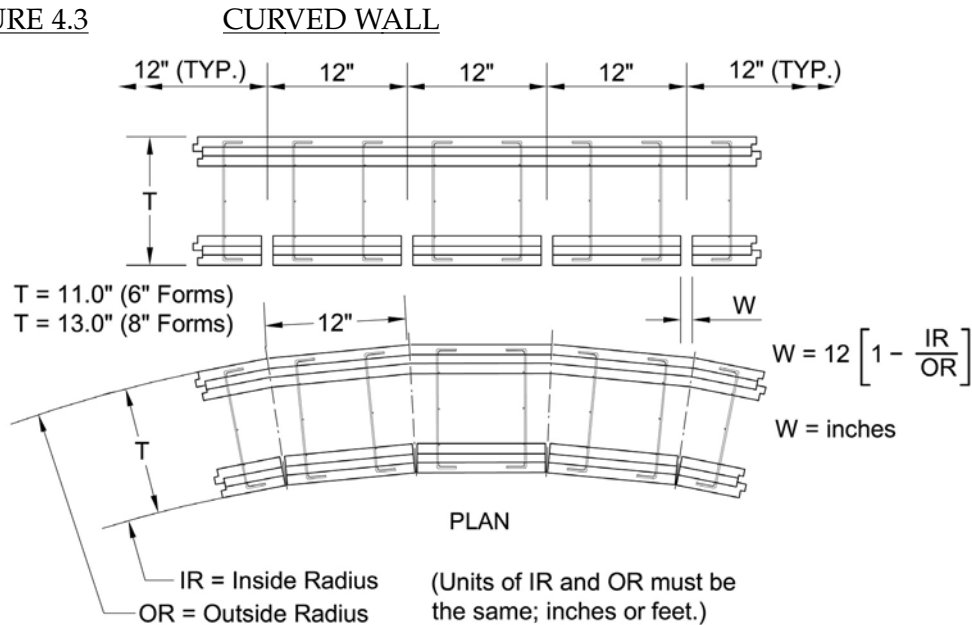
FORMS IN PLACE



FINISHED WALL

## D.6 CUTTING FORMS FOR CURVED WALLS

FIGURE 4.3



**NOTE:** If the spacing of the cuts is revised to 6" on center, replace the number 12 to 6 in the formula to calculate "W". Or, divide the value in the table by 2.

### Cutting Curved PolySteel PS•4000 Walls

PolySteel Forms can be easily modified to accommodate designs requiring curved walls. By removing a specified section on the inside of the curve in the center of each core, the Form can be bent to create a curve with a radius of as little as 4 feet. The Table below provides the specific measurements for achieving a variety of common radii. If you have need for additional measurements use the formula given above for "W".

Radius to Outside of Wall	Section Cut "W" to Remove From Each Core (12" o.c.)	
	6" Form (PS-4600)	8" Form (PS-4800)
*6 feet	1-7/8"	2-3/16"
*7 feet	1-5/8"	1-7/8"
*8 feet	1-3/8"	1-5/8"
*9feet	1-1/4"	1-7/16"
10 feet	1-1/8"	1-5/16"
12 feet	15/16"	1-1/16"
15 feet	3/4"	7/8"
20 feet	9/16"	5/8"
25 feet	7/16"	1/2"
30 feet	3/8"	7/16"
40 feet	5/16"	5/16"
50 feet	1/2" @ 24" o.c.	1/2" @ 24" o.c.
100 feet	1/4" @ 24" o.c.	1/4" @ 24" o.c.

\* For tight radii, cut 1 inch deep vertical saw cuts every 4 inches around the outer perimeter of the Form so that it will bend and not break.