



# 26' GROWING DOME ICF/CONCRETE WALL PACKAGE For Foundation Wall Completion

## MATERIALS LIST

The ICF/Concrete Wall Package consists of the following:

15 pressure treated sill plates (cut to length)

15 Simpson tie plates (with nails)

45 concrete screws (3 per wall section)

Sill seal moisture barrier

30 - 8-1/2" expansion anchor bolts

(New horizontal metal trim strips will need to be fabricated when using the ICF/ Concrete wall option.

Contact Growing Spaces for specifics.)

## INSTALLING THE WALL PACKAGE

If you have utilized an ICF foundation which includes an ICF foundation wall or other solid material foundation wall like concrete or block, you are required to install an option referred to as an ICF/Concrete Wall Package prior to installing the dome structure. By now you should have a concrete or ICF foundation wall that has cured and are ready to prepare for the construction of the dome structure on this wall.

To anchor the dome structure to the concrete wall we require putting down a pressure treated sill plate, 2x8 or wider depending on the wall width. First, place 1/4" thick sill seal between the concrete and the sill plate for added moisture protection and insulation. It is easiest to cut to length and staple this (just enough to hold in place) to the underside of the sill plate before continuing. Then begin placing the sill plates on the top of the concrete wall. These sill plates will match the length of the wall sections required for the dome structure and the outside mitered corners will meet the radius length. It should match up with the outside edge of the concrete. See "ICF/Concrete Wall Detail" Diagram 3-D3. Continually recheck the radius points.

### **2<sup>nd</sup> IMPORTANT ASPECT:**

*Double check the 'roundness' of the placed sill plates. Simply re-measure from the center stake to the outside corners of all the sill plates. Nudge sill plates in or out until all dimensions are consistent. You will also need to make sure the sill plates are all in the same relationship relative to the outside edge of the concrete (or as close as you can get it).*

*If the center stake has been removed, or no longer seems accurate, you can also check 'roundness' by measuring the distance from each corner point to the center of the opposite wall section and then nudge the sill plates in or out until all dimensions are consistent.*

Once the sill plates are in place and consistently the same distance from the center stake, anchor them to the concrete wall with the flathead concrete screws (3 per wall section, one at about 9" of the intersection of the 2 wall sections at each end and 1 near the middle) including across the doorway opening.

Next, place a Simpson tie plate over the intersection of the sill plates and nail down using 8 nails per plate (4 nails into each sill plate below).

Construction of the dome structure can now begin by laying out the base struts per the instructions in Step 4a or 4b depending on whether you build the structure Strut by Strut or use Sub-Units. Once backer rod is in place, the base struts can then attach temporarily to the sill plates using 3" deck screws per the instructions. After completion of the dome structure, including straightening and tightening the hubs, it will be necessary to permanently anchor the dome structure to the wall. Refer to "Step 5 – Anchoring the Growing Dome" for the instructions on anchoring the dome structure to the ICF/concrete foundation wall.