

## 20 ft. Dome Frame Instructions

### You will need :

- a couple of friends
- a couple of ladders
- a couple of 9/16" wrenches\*

\*Ratchet wrenches make the job easier, but normal wrenches will work fine. A drill with a 9/16" socket tip will speed things up.

**In this kit you will receive:**

- 30 'A' struts
- 45 'B' struts
- 70 'C' struts
- 10 'D' struts
- 10 'E' struts

### Color coding the struts:

The 20 ft. dome frame has 165 struts in 5 different lengths. Each strut is marked with a letter 'A' through 'E' at one or both ends. The number 3 tells us that it is a 20 ft. dome strut. To help make it clearer as you are erecting the frame, color code each strut with the provided stickers. Put the sticker in the middle of each strut facing the inside of the dome. Double check each strut as you are putting up the frame.

### Assembly:

*NOTE:* It is easier to set up your frame off the deck as long as you have enough people to help lift it back on when complete. If you are setting up on your deck, temporarily nail a brace board to all perimeter boards to hold frame on deck.

Start at the bottom, bolting the struts together as you go. Complete each row before you move up to the next. The large washer is positioned on the outside of the struts to cover any sharp edges. Use the small washers for the bottom row. Do not tighten the bolts until the entire frame is together because you will be unbolting and adding more struts. We find this much easier than trying to bolt all the struts on at once. Add the upper struts to the outside of the bolt, closest to the large washer to enable the dome skin to slide on easily. Let the upper struts hang down until you are ready to add to them, to avoid bending the strut ends.

**Use the written instructions below if they are helpful to you. Some people find it easier to set up by just following the frame diagram. Watch the dome construction section of the Pacific Domes video before**

## **assembling your frame and putting on the dome skin.**

- Begin by bolting the base and sides of Row I together.  
There will be four strut ends at each bolt. There will be 15 bolts.  
Make sure struts match the Bs, Cs, Ds and Es on your frame diagram.
- Add the Base of Row II to the Apex of Row I, bolting together loosely.  
There will be 4 strut ends at each bolt. There will be 15 bolts.  
If you add 2, then skip 1 all the way around, and then go back and add the 1, it will be easier to raise your side wall.
- Unbolt and add the sides of Row II to each of these bolts.  
Remember to add them to the outside of the bolt.  
Let them hang down until you add the Base of Row III.
- Add the Base of Row III to the Apex of Row II.  
There will be 4 strut ends at each bolt. There will be 15 bolts.
- Unbolt and add the sides of Row III to each of these bolts.  
Remember to add them to the outside of the bolt.  
Let them hang down until you add the Base of Row IV.
- Add the Base of Row IV to the Apex of Row III.  
There will be 4 or 5 struts at each bolt alternately. There will be 10 bolts.
- Unbolt and add the sides of Row IV to each of these bolts.  
Remember to add them to the outside of the bolt.  
Let them hang down until you add the Base of the top pentagon.
- Add the Base of the top pentagon to the Apex of Row IV.  
There will be 5 strut ends at each bolt. There will be 5 bolts.
- Unbolt and add one 'A' strut to the outside of each of these bolts.
- Bolt your last bolt by bringing these 5 struts together in the center.
- Tighten all bolts when you are done.
- Now you are ready to attach the frame to the floor.