

# NOVA DOME

assembly manual



14' series & 20' series models

⚠ Please carefully read entire manual before assembling your NovaDome ⚠

## getting ready.

### 1 site location

#### ⚠️ Level ground or surface is required for proper installation and function ⚠️

If you are not using a pre-built flooring system such as a wooden deck or concrete slab, choose a location that is as level as possible and remove all debris. We do not recommend erecting your NovaDome on a surface with more than a 3-degree slope or grade without a foundation.

### 2 unpacking

All your NovaDome panels come pre-drilled and ready for assembly from the factory. Each panel is marked with a colored sticker label. This label will be either green, yellow, or red. When unpacking, sort panels by these colored labels.

### 3 flooring

NovaDome shelters are self-supporting without a flooring system or foundation. For long-term use, a wooden deck or concrete flooring system is recommended. For short-term use, soft marine vinyl flooring is recommended. If you are using vinyl flooring, select your location, fold out the floor and use the outside diameter as a reference line to install the first set of panels (green labels).

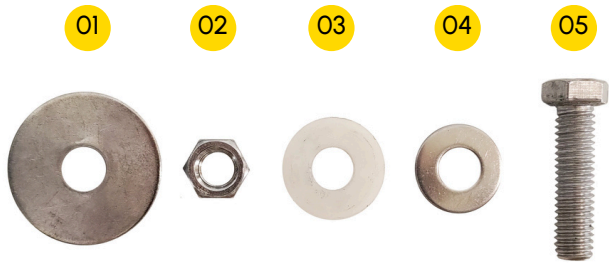
### 4 required tools & labor

For tools, you will need a 9/16 socket, a 9/16 open-end wrench, a battery-powered drill, a 12' stepladder, a large flathead screwdriver, a pry bar, and a 24' extension ladder (or a 16' extension ladder if you're installing a 14' Series). We also recommend that you have a team of at least 3 people when installing your NovaDome. The more people you have, the easier and faster the install will be.

### 5 bolt prep & install

When installing the bolts, the first step is to put the large metal washer on each bolt. Next, line up the fiberglass panels and push the bolts into the oversized holes from the inside out. After you have pushed a bolt through a hole, you can slide on the plastic washer followed by the small metal washer and loosely screw the nut onto the bolt threads. The plastic washer is there to protect the exterior gel coat when tightening the bolts and assisting in making the dome weather tight. Hand tighten only. **Do not tighten or snug up the nuts until every panel has been installed, and the dome has taken shape.**

## included hardware.



The hardware needed for the installation of each NovaDome includes 150 pieces of each item below. This hardware is shipped with your dome.

- |    |                           |    |                         |
|----|---------------------------|----|-------------------------|
| 01 | Metal Washer (interior)   | 02 | Nut (interior)          |
| 03 | Plastic Washer (exterior) | 04 | Metal Washer (exterior) |
| 05 | Bolt                      |    |                         |

## tips & suggestions.

**⚠ NovaDome recommends using three or more people in the assembly process ⚠**

1

Two people should be on the outside of the dome during the assembly process to loosely thread the nuts onto the bolts and stabilize/balance the panels. The third person on the inside helps line up the panels and push the bolts through the holes.

2

The 20' dimension is located approximately 2' off of the floor because a NovaDome is a 5/8 sphere. The diameter measurement at the lowest point of the erected dome will be approximately 19'7". This measurement may change due to tightening techniques or expansion and contraction. This concept will also apply to the 14' NovaDome (13'9").

3

Always keep the bottom of each panel against the outside wall while the person on the inside aligns the bolt. The people on the outside must avoid the tendency to pull the bottom of the panel out and look inside, which makes installation more difficult.

4

**When putting the bolts through the pre-drilled holes, make sure to wipe or blow off any fiberglass dust that is present on the stainless steel bolt threads BEFORE screwing on the stainless steel nut. If the bolt threads are not clear of fiberglass dust before screwing on the nut, the nut can seize onto the bolt, making it nearly impossible to remove or further tighten.** ⚠

5

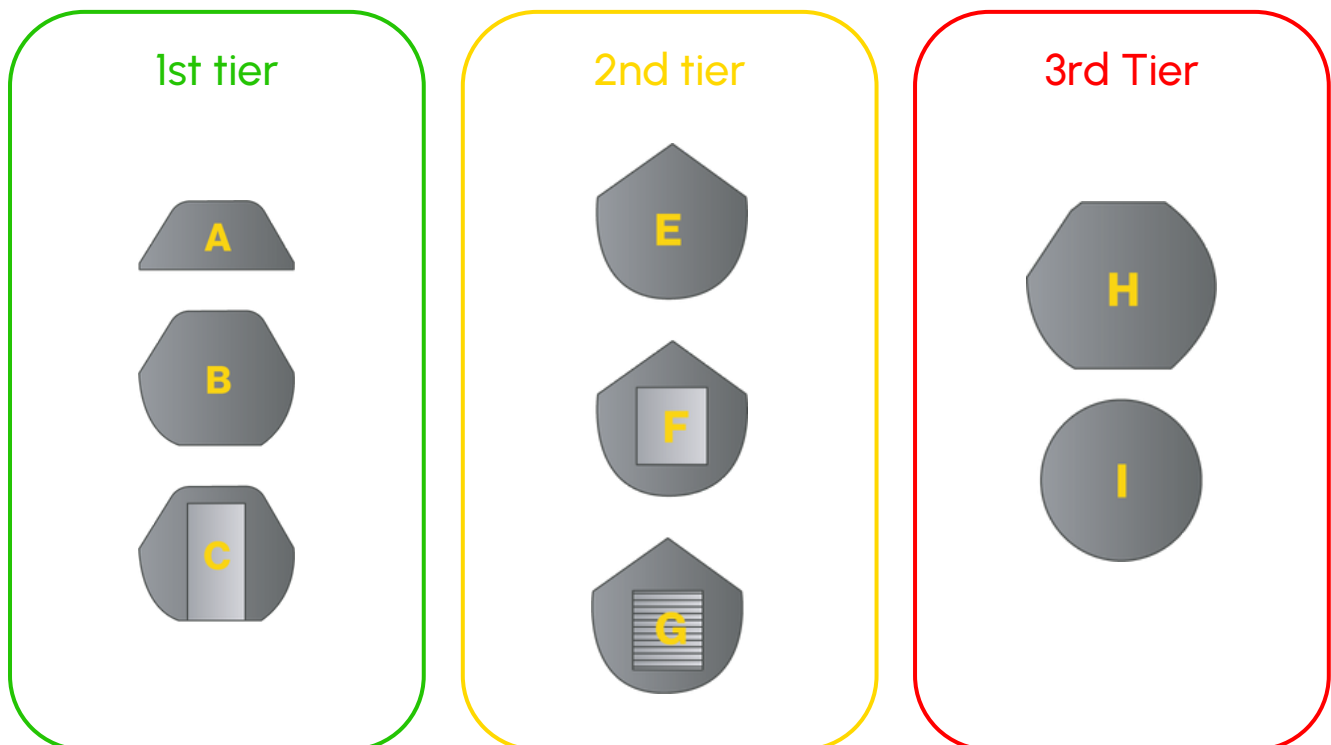
If the holes in the fiberglass panels don't exactly line up when installing the bolts, you can slightly angle the bolt into the hole and use a power drill to spin the bolt to help align the holes.

## tips & suggestions cont.

- 6 If a few bolts do not fully line up during assembly, skip them and come back later. They will align themselves while you install other panels. Do not hit or pound bolts through holes. These bolts will align with a slight movement of the panel later in the assembly process.
- 7 Always start by inserting the highest bolt on either side of each panel, then move to the highest bolt on the opposite side of that panel. If lower bolts pop through, pop them back out and start installing the top bolts (left and right) and gravity will help line up the bottom bolts. If you start with the bottom bolts, you may struggle to get the top bolts in.
- 8 In windy areas, be sure to properly anchor your NovaDome. Do not attempt to assemble a NovaDome in high winds.

## assembly of your novadome.

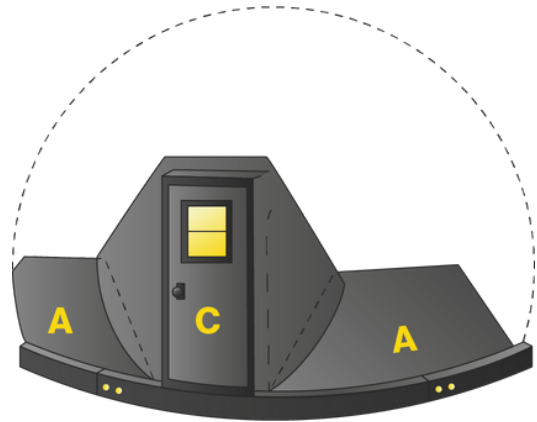
**Assemble green labeled panels 1st, yellow 2nd, and red 3rd. Colored sticker labels should be near the top of each panel allowing the next tier to cover the labels, so they will not be seen.**



⚠ Remember that the bolts are placed through the pre-drilled holes from the inside ⚠

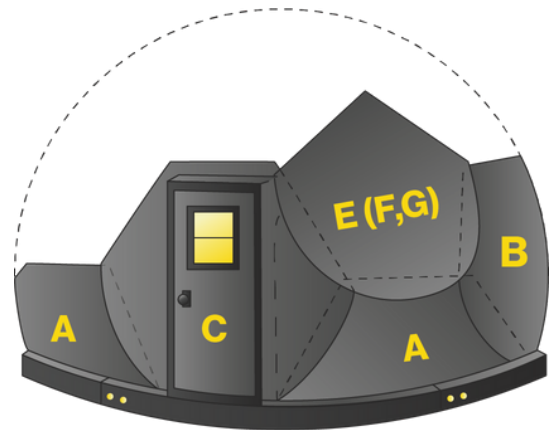
## step one.

The first tier (green) panels have a total of 10 panels. Go ahead and position the door panel at your desired location. Make sure you start with the (C)/door panel first. Attach the (A) panels to each side of the door panel by allowing the bolt from the door panel to go through the larger holes in the A panels. Inserting the top bolt first, hand-tighten an 11/16" nut (do not fully tighten). Continue attaching and bolting panels in a clockwise sequence, alternating one (A) panel between a (B) or (C) panel until you have a total of ten (10) panels to complete the first tier.



## step two.

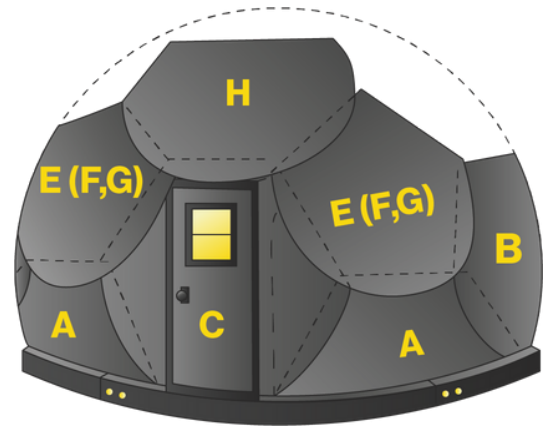
The second tier (yellow) panels have a total of 5 panels. Choose the location and quantity of your (F) or (G)/window panels. The (E) panels will go in the remaining locations. To position the yellow tier panels, three people are recommended. Two on the outside (on each side of the panel) and one on the inside. The person on the inside will line up and make sure the top bolt on the left and right inserts into the oversized holes of the first tier panel, then proceed with the lower bolts. Continue assembling your yellow tier panels in a clockwise direction until all five (5) panels are complete.



**NOTE: It's okay if the top portion of these panels sag a little when you are installing them. Don't worry, they won't break. The more panels you start to connect together, the less they will sag and the stronger they will become.**

## step three.

The third tier (red) panels have a total of 5 panels consisting of (H) panels. You will receive one (H) panel that has a straight cut at the bottom to accommodate the top of the door. Place this panel above the door panel (C) by having two people slide it up to the person on the stepladder inside the dome to position the panel and line up the oversized bolt holes. The two people on the outside will stabilize/balance the panel while the person on the inside pushes the bolts through the holes. Once you have the panel secured with nine (9) nuts (hand-tightened), you may let the panel sag. With the person on the inside facing the (H) panel, the three bolts showing at the top left will be used to connect the last (H) panel of the red tier. You are now ready to complete the rest of the installation in a clockwise direction with the rest of the (H) panels. Remember, (H) panels go above any (B) and (C) panels.

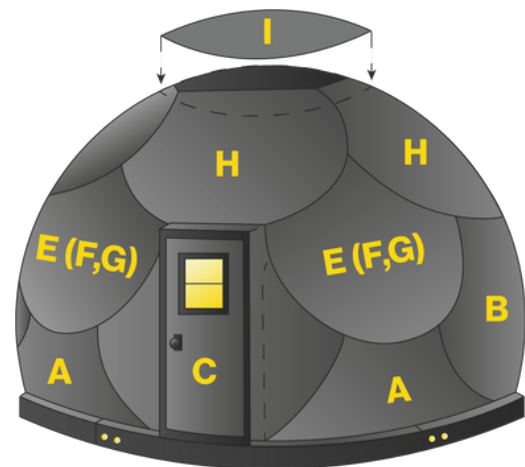


**NOTE: The last panel on this tier will overlap to the left and underlap to the right (as determined by standing on the inside of the dome and looking up).**

## step four.

This is the final panel (I). The panel will have all fifteen (15) holes and will overlap every panel it connects to. Have the two people using extension ladders on the outside, slide the panel up to the person using the stepladder on the inside. The person on the inside will grab the panel and position it over the top. Once the (I) panel is on top, rotate the panel until the holes begin to line up and install the bolts through the pre-drilled holes. Hand-tighten all nuts from the outside.

**NOTE: When installing the (I) panel bolts, lean your extension ladder up against the dome and start with the panel above the door first. Next, install the bolts on the panels above each window. Then finish installing the rest of the (I) panel bolts.**



## final step.

You can now go back and secure any bolts that may not have completely lined up earlier. The bolts should now be easier to align and secure. If not, gently kick the bottom of the interior wall until your NovaDome is truly round. Once all bolts are secure, you are ready to tighten the nuts. If you are using the cordless drill, set the torque rating to a medium range so the drill ratchets once the nuts are snug. If the torque is set too high, it could damage the fiberglass as they are tightened. Start tightening the nuts at the top and work your way down. Do not overtighten.

## base gasket seal.

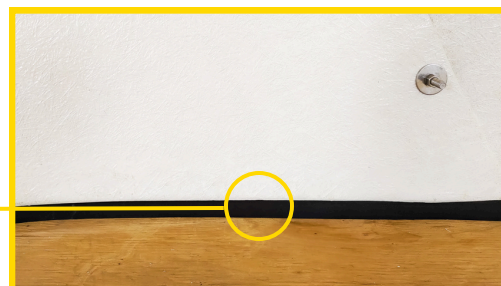
**⚠ If you are installing the base gasket seal in temperatures below -10 °C, please contact to review the proper installation procedure before continuing ⚠**

Once all bolts are tightened, you are ready to install your included base gasket seal. This gasket seal is a “pressure gasket” that requires even pressure around the dome to seal properly. The installation process is easiest to complete from the inside. Starting at any point around the base of the dome, use a pry bar to gently lift the edge. You can place pieces of 2x4 board underneath the dome to keep the section elevated during this install. Next, peel off a section of the 3M tape backing on the gasket seal and stick the seal to the underside of the dome section you have elevated. You want the gasket seal to be flush with the inside of the dome. After you have stuck the base gasket seal to your current section, you can take out your 2x4 boards and let the dome rest on the seal. Repeat this process until the entire base gasket seal is installed around the edge of the dome.

**NOTE: The base gasket seal comes in 2-3 pieces. When joining the pieces together, make sure they are snug up against each other, so water cannot flow between them. We recommend you use the provided sealant to seal up the join for extra protection from water. And don't worry about not having enough gasket seal. We've supplied extra.**



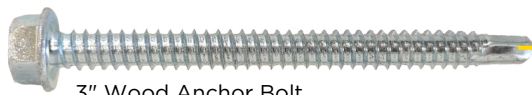
Base Gasket Seal



Example

## anchoring.

Your NovaDome ships with 3" self-tapping wood deck screws for anchoring your dome to a wooden platform. These screws are installed after you have completed your base gasket seal. Using a power drill, install the 3" self-tapping screws through the base lip into the wooden foundation approximately every 2 feet. If installing the dome on a concrete base/foundation, the same process is followed with concrete wedge anchors, which will need to be purchased separately. In case you want to use your NovaDome without a flooring/foundation system, we always recommend that your dome be properly anchored. We recommend replacing the middle bolt, which attaches the A panel to the B, or C panel, with a 3/8" x 4" eye bolt, one nut and fender washer on each side. The eye bolts should be evenly spaced in five (5) locations around the outside diameter. These eye bolts act as tie down hooks for linking cable to ground anchors.



3" Wood Anchor Bolt

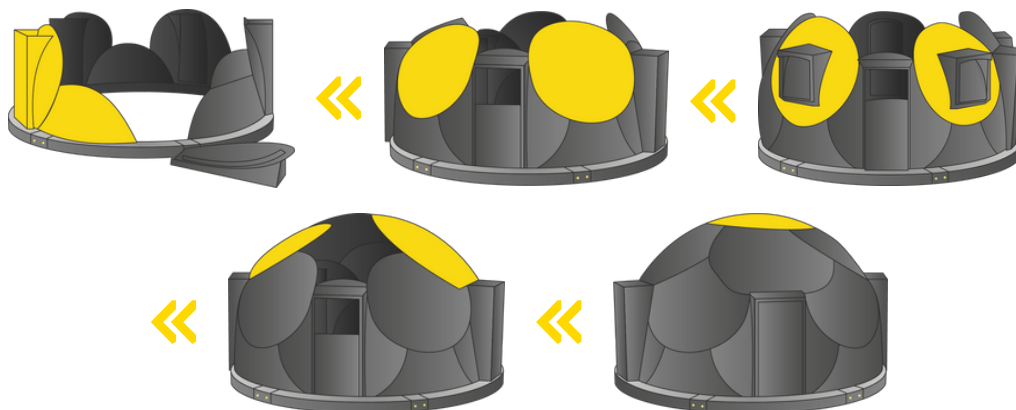


Example

## dissassembly.

Start with the top panel (I) and work backward from the installation process. Loosen nuts only on the panel you are currently working on. Continue to disassemble one panel at a time.

**⚠ Do not remove all nuts prior to disassembly. Only remove the nuts on the panel you are currently working with ⚠**





# NOVA DOME

enjoy your new dome!



<https://g.page/r/CSgDSOQgKfyqEAE/review>


If you're happy with your experience, scan the above QR code or click the link, write us a 5-star google review with a photo of your new NovaDome, and we'll send you a **\$100 amazon gift card!**



If you have any questions about the assembly of your NovaDome product, please contact us using the phone number or email below.

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