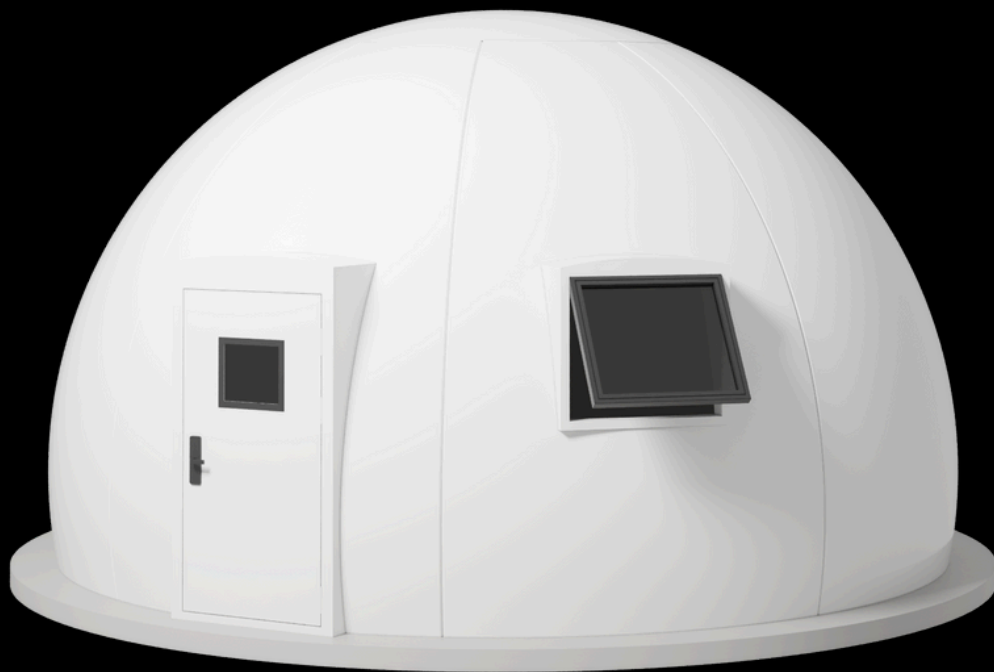


NOVA DOME

assembly manual



astro series model

⚠ Please carefully read entire manual before assembling your NovaDome ⚠

before you begin.

we know you're excited to get your dome up. we're excited too! but before you get going, we highly recommend you watch our astro series installation guide video that goes along with this manual before installing your dome. It will help give you a high level idea of the installation process from start to finish. **the QR code below will take you straight to the video.** enjoy the chill music and beautiful animations!



can't scan the code? no worries. you can also find the video by using the link below.

<https://www.youtube.com/watch?v=PjWSK0Fzkeg>

getting ready.

1 site location

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

If you are not using a level, 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. There are a total of 9 insulated panels consisting of 8 wall panels and 1 round top cap panel. We recommend laying out the panels around your foundation/building site for easy access during the installation.

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.

4 required tools, materials & labor

For tools, you will need two 9/16 sockets, a battery-powered drill, a 12' stepladder, a large flathead screwdriver, a pry bar, two 12ft 2x4 boards with notches cut out on one end for panel bracing, a caulking gun, and a 16'+ extension ladder. For materials, you will need some waterproof, non-expanding spray foam to fill the bolt holes. We recommend that you have a team of at least 4 people when installing your Astro Series dome. The more people you have, the easier and faster the installation 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 outside in. After you have pushed a bolt through a hole, you install another metal washer in the inside and loosely screw the nut onto the bolt threads. 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 each item listed below. This hardware is shipped with your dome.

- | | |
|-------------------------------|-----------------------------|
| 01 Metal Washer (x96) | 02 Nut (x48) |
| 03 Short Bolt (x48) | 04 Long Bolt (x8) |
| 05 Concrete Anchor Bolt (x24) | 06 Bolt Hole Cap (x96) |
| 07 Wood Anchor Screw (x24) | 08 Wood Anchor Washer (x24) |

NOTE: The short bolts are used to bolt together the wall panels. The long bolts are used to bolt down the last round top cap panel to the wall panels

tips & suggestions.

⚠ NovaDome recommends using four or more people in the assembly process ⚠

- 1 Two people should be on the outside of the dome during the assembly process to push the bolts through the holes and stabilize/balance the panels. The other two people should be on the inside to help line up and stabilize the panels and loosely thread the nuts onto the bolts.
- 2 Before you begin putting up your wall panels, lay them out around your foundation in the approximate position you will install them, with the top of the panels pointing towards the foundation. This makes the installation process easier as you will minimize the distance you have to move the panels into position.
- 3 **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.** ⚠

tips & suggestions cont.

4

If the holes in the fiberglass panels don't fully line up when installing the bolts, you can use a pry bar and wooden shims to slightly shift the panels to align the bolt holes. If the bolt holes are still slightly misaligned, you can also use a power drill to spin/angle the bolt into the hole. Do not hit or pound bolts through holes. If necessary, use a drill bit to slightly widen the bolt holes so the bolt can be pushed through.

5

If a few bolt holes still do not fully line up AFTER all the panels are in place and the dome has taken shape, run a ratchet strap around the base of the dome approximately 2 inches up from the bottom. Tighten the ratchet strap until the panel gaps start to close and bolt holes start to align.

6

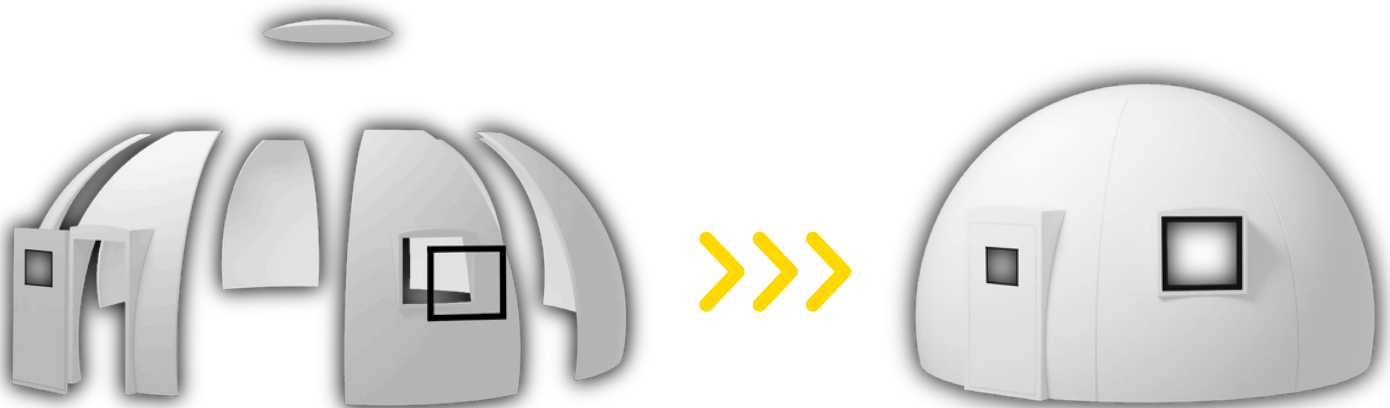
As you bolt together the wall panels, we recommend starting from the bottom of the panels and working your way up to the top of the panel. **Remember, if your foundation is not level, the bolt holes will not align properly!**

7

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 your Astro Series by starting with the door panel to ensure your door stays in the desired position during installation.



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

step one.

Lift the first wall panel into position. We recommend starting with the door panel to ensure the door is in the exact position you want it to be. Use one of the 12' 2x4 boards with a notch cut out at one end to support the panel as shown in the image. The notch in the top of the 2x4 board will brace the top lip of the panel. You are now ready to lift your second wall panel into position.

⚠ The dome panels **MUST** be constructed in a clockwise direction. ⚠



step two.

Moving clockwise, lift the second wall panel into position. Use the other 12' 2x4 board with a notch cut out at one end to support the second panel as shown in the image. There should be a minimum of 2 people on each side of the panels, helping brace and hold them into place. Use the 2x4 board to slightly lift the top of the panel you are installing. This will suck the bottom of the panel against the previous panel, which will help align the bolt holes and make it easier to install the bolts. Working your way from the bottom to top, install the shorter bolts, washers, and nuts, inserting the bolts from the outside in. **Be sure to place a metal washer on both the outside and inside.**

NOTE: When inserting the top bolts, you can set up your 12' step ladder on the inside of the dome and lean your extension ladder up against the outside of the dome to make the process easier.

⚠ If the bolt holes don't completely align, inspect your foundation and make sure it's completely level. If your foundation is level and the bolt holes are still slightly misaligned, refer to tips 4 and 5 outlined on page 3 of this manual. ⚠



step three.

Repeat the process in step 2 for the rest of your wall panels. After the first two panels are up (with the nuts hand tightened), the dome panels should support themselves for the rest of the installation. **If it's windy, we highly recommend waiting to install your dome when there is minimal wind.** You can continue to use the two 12' 2x4 boards to brace each panel as you install them. You only need to brace two panels at a time (the panel you are currently installing and the last panel you installed).

TIP: When leaning your extension ladder on the outside of the dome, put foam, microfiber towels or something else that is soft between the ladder and the dome to avoid scratching the surface.

⚠ You may need to slightly shift the dome panels as you install them to ensure a consistent, round shape. If you get the last wall panel and the gap is too small or too large for the last panel, have everyone work together to shift/move the dome into a round shape so the final panel is aligned properly. ⚠



step four.

You are now ready to install your final round top cap panel. Have at least 1 person on a stepladder in the middle on the inside of the dome ready to help receive and stabilize the top cap panel. Have at least 1 person on an extension ladder on the outside of the dome (or have the person stand on top of your door) ready to help move/shimmy the cap panel to the top of the dome. The last two people are positioned on the ground, ready to hand the top cap panel off to the person on the extension ladder (or the person standing on top of the door). Have the two people on the ground hand the top cap panel to the person on the extension ladder (or the person standing on the door) and carefully lift the panel into place while the person on the inside of the dome stabilizes the underside of the panel. When the bolt holes align, install the long bolts along with metal washers and nuts. **Hand tighten only.**

TIP: You can put foam or something else that is soft between the top cap panel and dome as you lift it up into place to avoid scratching the dome.



step five.

You can now work your way around the dome and fully tighten all of your bolts. With one person on the inside and another on the outside, use your ratchets to fully tighten and snug up all bolts. **Do not overtighten.** The person tightening the bolts from the outside can use a drill with the ratchet enabled to make this process faster. **Double check to make sure that the drill is on a conservative ratchet setting and is NOT set to full power. The drill is only used to speed up the process. It is not to be used for final tightening.**

NOTE: The bolts just need to be snug. Use discretion when tightening. Do not use a breaker bar to tighten the bolts or you could damage/crack the fiberglass.



step six.

After you have fully tightened all bolts, use a non-expanding spray foam to fill all the bolt holes on both the inside and outside the dome. As you apply the spray foam to the bolt holes, use this time to also install your plastic, color-matched bolt hole caps. They will be easier to install while the spray foam is still wet.

NOTE: Sometimes, non-expanding spray foam still slightly expands. If this happens, and it pops the bolt hole cap out, trim the foam and reinstall the cap.

Alternatively, you can also fill the bolt holes with the heavy-duty, all-weather sealant that is included with your dome. We recommend the spray foam because it is easier to apply and has a slightly better insulation factor than the sealant. However, both work well.

TIP: If the plastic color-matched bolt hole caps don't fit perfectly into the bolt holes, you can use a small rotary tool to widen the bolt holes so the caps fit snug.



step seven.

If you have a concrete foundation/base:

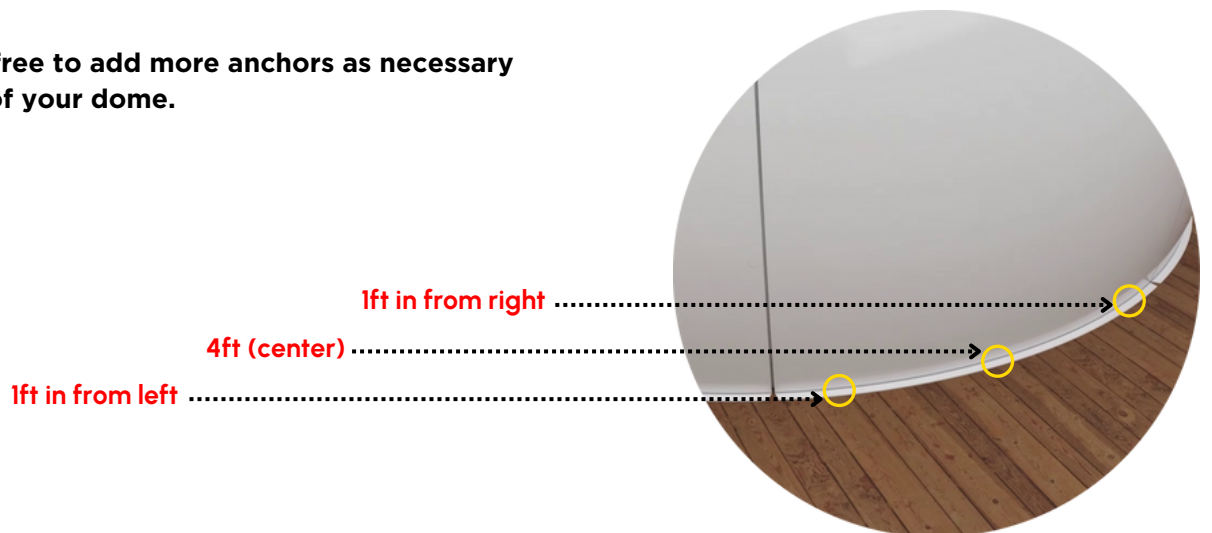
Locate the 24 concrete anchor bolts that came with your dome. These will go through the 2" fiberglass lip on the bottom of your panels. You will install three concrete anchor bolts per panel. Two bolts will be located 1ft in from each side of the panel, and the third bolt will be located directly in the center of the panel. To install the concrete anchors, measure out your holes and drill 10mm (3/8") holes through the fiberglass dome lip into the concrete at a minimum depth of approximately 3.5". Pound your concrete anchors into the drilled holes until the metal washer is flush with the fiberglass lip, and tighten the top nut to secure the bolts.

If you have a wooden foundation/base:

Locate the 24 wood anchor screws that came with your dome. These will go through the 2" fiberglass lip on the bottom of your panels. You will install three wood anchor screws per panel. Two screws will be located 1ft in from each side of the panel, and the third bolt will be located directly in the center of the panel. To install the wood anchor screws, measure out your holes and drill the screw anchors through the fiberglass lip into the wooden deck foundation.

NOTE: Feel free to add more anchors as necessary into the lip of your dome.

wooden screw anchors
shown as example



step eight.

You are now ready to install your door. Locate the door hardware (a bag of screws with small plastic screw caps and a door handle) that is included with your dome. Lift the door into position and line it up in the center of the door opening. Mark where the edges of the door sit in the opening and set the door aside. Take some of the included heavy duty sealant and caulk a bead around the door opening on the inside of the frame mark you just made. This will help seal your door to the dome and prevent any potential water from seeping inside. Go ahead and carefully lift the door into position and press it up against the dome and sealant bead. Have someone hold the door in place while it is screwed to the dome. Screw through the pre-drilled holes in the door and finish the installation by inserting the small white caps over the screw holes. Finally, install the door handle and lock.



step nine.

Next, you will install the tilt window. Locate the window and metal frame that came with your dome. You will install the window and frame from the inside of the dome. Use the provided sealant to make a bead around the inside edge of the window opening. This will help fully seal the window to the dome. Install your window and press it firmly up against the bead of sealant. Use the provided screws to screw the frame to the dome. This will hold the window in place as it will slightly overlap the edge of the window.



apply sealant



install window



install frame

step ten.

You are now ready to seal up your dome. Use the included clear sealant to seal up all exterior panel joins and base lip. We recommend starting from the top of the dome and work your way down to the bottom. Use your extension ladder to reach the higher sections of the panel joins when starting from the top.

NOTE: You'll receive both clear sealant and white sealant. The clear sealant is for the exterior panel joins. The white sealant is for the interior panel joins.

TIP: You can use a caulking application tool to help smooth out the sealant to make it even with the dome surface. This will help create a seamless panel appearance.



final step.

Use the included white sealant to seal up all interior panel joins and base. We recommend starting from the top of the dome and work your way down to the bottom. Use your stepladder to reach the higher sections of the panel joins when starting from the top.

TIP: You can use a caulking application tool to help smooth out the sealant to make it even with the dome surface. You can also use a paintable putty to seal up interior panel joins and blend them with the rest of the interior to create seamless walls. The interior of the Astro Series can be prepped and painted if you want to make it another color other than our standard white.



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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