

YURT SETUP MANUAL

FOR 12 FOOT TO 34 FOOT DIAMETERS

Congratulations on your new Nomad Shelter yurt! This manual will guide you through the basic steps of setting up your yurt, and we are happy to offer full phone and email support as needed. You can also find more information in the Resources section of our website, including spec sheets, floor plans and commonly asked questions. There are many options for customizing your yurt, constructing foundations and floors, and installing utilities. This manual will briefly touch on those aspects, and we are always happy to provide insights and assistance wherever possible!

SUPPORT:

907.299.3871 (M-F, 9am-5pm) www.nomadshelter.com support@nomadshelter.com



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BEFORE YOU GET STARTED

This guide is intended as a reference for every Nomad Shelter yurt under 40' in diameter, but some steps will be slightly different between sizes. Larger yurts require scaffolding or a drywall lift and in some cases will benefit from a crane or a several person team to lift some of the heavier components, like the top cover. There are also unique considerations for yurts with custom options, like hard window frames or extra doors. See page 16 for more information.

Regardless of the size of your yurt, these structures were specifically designed to be set up and taken down quickly and with minimal tools. Smaller sizes can go up in as little as an afternoon, larger yurts may take a few days. It's best to plan accordingly, be mindful of the weather, have plenty of help, and remember -

Safety First!

We are also happy to refer you to some great companies we work with that do full setups, foundation and deck construction, and many custom options for your yurt. These companies are not affiliated with Nomad Shelter and will charge seperately for their work. You can also reach out to your local contractor.

We suggest reading through this entire guide before getting started.

SITE SELECTION

Nomad Shelter yurts are heavily engineered for extreme weather conditions, but it's still important to consider your yurt placement for maximum longevity and comfort. Keep in mind the drainage on your site and the direction of the light. Consider the prevailing wind direction in placing your doors and windows. In snow areas, think about how snow will drift and build up given the prevailing winds. For more information about our yurts' weather resistance and engineering, please visit our website at: **nomadshelter.com/ouryurts**

PARTS LIST

See included parts list for your specific yurt. All necessary components, hardware, zipties, and line should be included.

REQUIRED TOOLS

- Screw gun with phillips and star bits
- Scissors or knife
- Hammer or mallet
- Wrenches, ratchets, etc for various nut sizes
- 6' ladder or taller
- Scaffold materials for yurts 20' or larger (see page 7 for more information)



FOUNDATION AND FLOOR

The foundation and yurt platform are important considerations for your yurt build. We do not provide the floor or platform, but are happy to offer floor plans for all our sizes at: **nomadshelter.com/downloads**

Tongue and groove 1 1/8" plywood works well for the yurt floor, and can be treated with finish or aesthetic flooring options of your choice. Floor insulation is recommended, and the circular platform sized to your yurt diameter should be raised a few inches above any surrounding decking to allow the yurt cover to hang below floor level. Smaller sized yurts can sit on blocks and beams for a quick setup without breaking ground. Many types of foundation piles work just fine for a more permanent setting.



If you choose to use our floor plans, the easiest way to cut out the circle is to attach a pencil to a piece of string and mark the circumference from a center point. There should be point to easily find the center from the intersection of plywood sheets. Keep this center point marked, it will be useful for positioning door and hard window frames later.

RIM

The rim around the perimeter of the floor provides a stop for the lattice wall and seals the bottom of the wall against drafts and bugs. The cover extends below floor level on the outside and can be screwed to the rim by it's line of grommets. The lattice and insulation sit on the floor on the inside of the rim.

The rim must be at least 8 inches tall in total, extending above floor level at least 2 inches. We recommend cutting strips from 3/8" plywood as shown below. Start the first rim strip at a girder beam where you can secure it with 2 to 3 screws.

If you need to start a new strip where there is no beam, use a wood backing block about 6" x 6" to connect the strips. Place the block halfway behind the first strip flush to the bottom of the floor, and connect both strips with 2 screws each to the block and 1 screw each to the edge of the floor. At a doorway or hard window frame where the yurt wall stops, leave a gap in the rim to accommodate the width of the frame. You can use a hand saw or circular saw to cut out the top edge of the rim flush to the floor.





LATTICE

The lattice wall will come in two or more sections depending on the size of your yurt. The steps for connecting these sections will be the same regardless. Start by placing your lattice sections on the floor interior side up to overlap the connection holes as shown below. Match each section in the proper orientation to build your wall:

- Finished flat face of rivets to the interior, clenched side of rivets with holes to the exterior
- $\boldsymbol{\cdot}$ The top edge of the lattice has notches for the tension cable to rest along and a row of bolts

instead of rivets

Insert 1/4" x 2" carriage bolts through each hole along the top and bottom edge of the lattice with washers on either side and the nut on the exterior side to connect the lattice sections. You can gently tap the bolts in with a hammer or mallet if needed, and tighten them just snug (do not overtighten). There are more holes for bolts along the entire connecting edge, fasten as many bolts as you can reach and the rest can be inserted once you stand the lattice up.

With the lattice sections bolted together at least along the top and bottom, stand the lattice upright on the opposite side of the floor from where your door will go, with the notched edge upwards and the finished rivet side to the interior. Open the lattice by pulling the ends on either side around the edge of the floor towards the door. Open it just enough to shape it with a slight curve so that it will stand upright. Now you can complete the placement of all carriage bolts with washers and nuts to finish connecting the lattice sections.

For yurts with one continuous lattice wall, you can continue stretching the lattice out around the perimeter of the floor to the door gap. Open the lattice as evenly as possible so that it is the same height all the way around. It will be easier to finish stretching the lattice closer to the rim and to an even height after it is bolted to the door frame.

If you have multiple doors or hard window frames, stage your connected lattice sections around your yurt and continue to setting your door frames. You'll want to work your way around attaching the lattice one section at a time starting from the front door.



Connection holes (interior side)



Exterior side of rivets



Tension cable notches on top edge

DOOR FRAMES AND TENSION CABLE

Sit your door frame in place but do not screw it to the floor yet. The frame should rest 1 1/2" out from the edge of the platform. The bottom side of the door frame has grooves, the top does not. Pull the lattice about 4 inches inside the door frame as shown below. Make sure it's evenly situated inside the frame. Starting on one side, insert the 5/16" x 5" bolts along the edge of the frame from the outside. Line up the 1" x 5" lattice block board on the interior so that you can bolt the lattice between the block and the frame. Orient the lattice block so there is a gap between the top of the block and the door frame when the bolt holes are lined up. Again, you may need to gently tap the bolts in from the outside and shift the lattice and door frame around so the holes line up. It is easier to secure all the bolts on one side first, then move to the other side. Use the included nuts and washers and tighten them just snug enough to firmly sandwich the lattice between the frame and the block board.

If your yurt has hard window frames or multiple doors, the process is the same at each frame. However, you'll want to make sure the frames are placed precisely around the yurt according to your design so the lattice sections fit properly and create an even wall height. See page 18 for help with frame placement around the circumference of your yurt. With the frames positioned around the yurt, you can work your way around attaching lattice sections starting from the front door.

At this point, you can finish stretching the lattice evenly into place. Make sure the lattice comes to the same height on either side of each frame, and sits within an inch of the rim around the perimeter of the yurt. You can measure the height of your lattice wall around the yurt to make sure it's stretched evenly. With all hard frames and lattice sections in place and connected, you can screw the frames into your yurt floor. Also, our door frames are designed to fit a 6 9/16" door jamb.

CABLE

The tension cable will be the correct length for your size of yurt, do not adjust the cable length. Lay the cable along the top of the lattice inside the notches starting with the connected ends spanning over the door frame. The cable will have some slack at places when it is first placed on the lattice, this is normal.



Cable in notch



Lattice, frame, and cable set





Lattice secured between door frame and block (interior)

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RING AND RAFTERS

Raising the central compression ring into place and securing the rafters will be one of the more precarious steps, especially for a larger yurt. We recommend at least two to three people for this procedure to reduce the risk of injury, even for the smaller sizes. You will be raising the ring into the air and slotting the rafters between the tension cable and the ring so the entire framework of your yurt is secure and freestanding as shown. Take your time and take all necessary safety precautions.



Completed yurt framework

18 FT YURTS OR SMALLER

Read through this entire step to the next page before starting.

Until every rafter is in place, be careful and watch your head! Rafters may slip out of place and fall. Communicate clearly and work together. There are many connection points being stabilized in this step and none will be entirely secure until they all are.

On smaller models, it is possible to raise the ring without a scaffold with two to three people on hand. There are several rafters (depending on your yurt size) that have a blunted shape on the notched end, these sit on top of the door frame as shown. Every other rafter corresponds to one space on the tension cable between lattice joins and one slot in the compression ring. With every rafter in place, there will be no empty spaces.



Door frame vs regular rafters



Door frame rafter positioning



Rafter to tension cable connection



Rafter to ring connection



18 FT YURTS OR SMALLER CONT.

Place your ladder in the center of the floor and have your rafters staged on your yurt floor within easy reach. Have one strong person on the ladder holding the ring up so the others can start slotting rafters. Space the first few rafters evenly around the yurt, and continue until the ring feels stable on its own. It is easier to insert a rafter into the ring first as shown on the previous page, then notch the rafter onto the tension cable. You may have to pull down on the cable to get the rafter on. Keep an eye out for the tension cable slipping out of the lattice as you work. The slack in the tension cable will even out as you finish rafter placement.

Alternatively, you can raise the ring by inserting two rafters spaced one-third of the way around the yurt, then lifting the ring into place with a third rafter on the opposite side. If you use this method, insert the first two rafters into the ring and then notch them carefully into the tension cable while the ring is still on the floor. Have two people holding the ends of the rafters as they rotate into position, making sure the tension cable does not unseat from the lattice. Start carefully lifting the ring up with a third rafter and secure that to the tension cable as well. It is still advisable to have someone hold the ring in place at this point while you continue, at least until the ring feels stable on its own.

Once the ring is held up by the first several rafters, start taking note of the spacing between gaps. It is easiest to start at one side of the door and go around matching the number of gaps in the ring slots and cable spaces so that each rafter will sit straight and they will all fit. You may have to reposition some rafters as you go. Door frame rafters can be evenly spaced across the top of the door frame. Once all rafters are seated, you can gently tap them into place if some are not fully inserted into the ring.

20 FT TO 34 FT YURTS

The general steps and safety precautions are the same for larger yurts, but the added weight and size of components requires extra caution and ideally more people to help. These yurts will also require some type of scaffold to hold the ring in place. Whatever you can build that will safely hold the ring in place will work just fine. 2" x 6" lumber and wood screws work well for this job. You can also use a drywall lift. A plywood ramp from the floor up to the top of the scaffold will allow you to safely pull the ring up. The pictures on the next page highlight a few different techniques.

With the ring raised into position, it is still advisable to have someone up on your scaffold or a ladder to help guide the rafters into place as you go and make sure the ring stays steady. Insert the rafters as previously described to complete this step. Do not dismantle your scaffold yet, someone will need to sit on the ring to place the roof insulation and top cover, unless you choose to use a tall ladder to get up there instead.

Great job! You're about halfway there. Now it's time to start on the fabric components.

RAISING LARGE RINGS



 $Basic \ and \ effective \ scaffold \ design$



Using a plywood ramp to safely hoist large rings



Using a drywall lift



Staging rafters in place is optional - be careful of knocking any over!

TOP INSULATION

If you have insulation for your yurt, the next step will be securing the roof portion of this liner. If your yurt has no insulation, just skip ahead to the Duro-last top cover. It will be easiest to do this step with little to no wind. The insulation goes on the outside of the rafters and will come in several sections depending on the size of your yurt.

For all sizes, start with one person safely sitting on the ring with their legs inside the yurt to position and secure the insulation. Feed the first section up to this person through the ring from the inside of the yurt. If your yurt is 30ft or larger, the first section will have one sewn edge and one velcro edge. Both 3season and 4 season insulation panels will have one finished white fabric side. This goes to the inside of the yurt. As you secure each panel, there will be some overlap. It's best to not have this overlap over a door or window frame, so start the first section centered over the door. Keep in mind that the top cover will firmly hold all this in place. As long as the top edge is evenly laid over the ring, the overlap between panels doesn't have to be perfectly even.

Lay the upper edge of the triangle about two inches over the top face of the ring and tack it into place with a 3/4" truss head screw on each side. Have someone down below holding the panel in place as best they can so this first section is squarely set and doesn't catch the wind too much. The rest of this process will depend on your yurt size.

12 FT TO 20 FT YURTS

These yurts will only have two insulation panels. With the first screwed in place over half the yurt, pass up the second panel and spread it out over the rest of the yurt. Position it so the overlap is even on both sides and the top sits over the ring about two inches along the whole edge. Screw this panel into place the same way, and you're done!

24 FT YURTS

These yurts have four insulation panels, but otherwise the process is the same. Work your way around screwing them into place one at a time, with about a two foot overlap. When you get to the last panel, if the overlap is smaller than a foot, you will need to reposition the panels more evenly.

30 FT AND 34 FT YURTS

These yurts have either 12 or 15 panels that velcro together, with one overlap at the end. With the first panel in place, it is easiest to lay the next over top of it and slide it into place so that the velcro sticks evenly. You can use a stick or board to tap the velcro along the edge where you can't reach from the ring or ground, but don't lean too far out! Secure the top edge with screws as you go.

TOP COVER

With the roof insulation in place, you can set your top cover. There are a couple methods you can use to get the cover in place. Whatever method you choose, it will be important to have several people to help, and someone strong on a ladder or scaffold in the center ring. The top cover is quite heavy, and will likely require a good bit of shifting to get properly oriented. Keep an eye on the insulation as you go, making sure it stays in place. You can readjust it a bit from the inside once the cover is on.

One method starts with unfolding the cover on the ground next to your yurt. Slide the cover up and over the yurt. The exterior side is shiny, and has an eave flap that covers the line of grommets. This should be done slowly and carefully, with plenty of help. You can tie lines to the grommets along the edge of the cover to help pull it up from the other side. As you work your way up, someone will have to be positioned in the center ring to help guide it over the top to the other side. Make sure the door overhang flap is centered over the door. Pull the cover down evenly over the eave and seat it snug all the way around. Make sure it is centered correctly to the center ring.

The other method is similar, but should only be used for smaller yurt sizes where one strong person can safely handle the weight of the cover while sitting on the ring. Feed the cover up through the ring and unfold it on the roof. As soon as you can see the door overhang, try and position that close to the door as you unfold. The tricky part will be grabbing the edge and pulling the cover over you as you spread it out over the yurt. Be careful and go slow.

With the top cover in place, pull up the flap along the eave all the way around, exposing the grommets. You will be attaching the wall panels to these grommets next.



Lee Tenhoff raising the top in Homer, c. 2001

SIDEWALL COVER

The next step will be attaching your sidewall Duro-last panels. These will be specific to your yurt, and depend on your window and door configuration. Any panels that attach to doors or hard window frames will have one zipper edge and one clean edge. The rest may be full panels or have soft windows sewn in. Lay them all out and organize the configuration for your yurt design. The exterior side of the sidewall panels is shinier than the interior.

Always start with the front door panel. Hold it up on the outside of the yurt, and line it up so there is about a foot of extra material with the clean edge to the door side. The large grommets go on top, small grommets on bottom. It is easiest for one person to hold a panel while another attaches it to the top cover. Using the included line, leave a few feet of slack on the door side and start threading the line through the grommets with a running stitch as shown below. When you get to the next panel, continue with the same line pulling tight as you go. It is easiest to work with 10 to 15 foot lengths at a time so you don't have to pull so much through each grommet. When you get to the end of a piece of line, tie on some more with a square knot.

Do your best to attach the panels tight and even as you work your way around the yurt. Do not zip any panels together yet. It's ok if the wall panels hang a little low right now, you can continue to tighten and adjust when they are all in place so that there is little to no gap between the fabrics you are stitching together. When you make your way to the other door panel, line it up to the correct grommets regardless of how much slack there is by the door. To finish the line, bring it inside the yurt in the upper corner as shown and pull the wall panel tight to close that gap as much as possible. You can tie off the line to the lattice or door frame. If you have multiple doors or hard window frames, the process is much the same. Tie off the line at each frame and continue around the yurt. When the whole wall is in place, you can go back to the starting panel and tie it off inside the yurt as well.



Use a continuous running stitch along the whole yurt



Tie off inside the yurt

WALL INSULATION

The wall insulation will also come in panels that match the sidewall sections, with some overlap between them. You will be sliding them into place between the wall cover and the lattice and using zipties or your choice of ties to hang them from the tension cable by the grommets. The panels tuck between the ends of the rafters and the edge of the top insulation that extends down the wall. On the bottom, they extend to the floor between the lattice and the rim. Like the top insulation, the finished white fabric face goes to the inside.

The door panels will be the shortest sections; start on one side of your yurt by sliding one in under the unzipped cover from the outside. Have another person inside the yurt to pull the panel flush to the door frame, as shown. If you are able to tuck the insulation further in between the door frame and the lattice feel free to do so. Pull the panel up until it's about an inch below the tension cable and ziptie it through each grommet with a little slack, as shown. Make sure it's behind every rafter end and laying inside the

Continue around the yurt, hanging the panels that correspond to each wall section. There will be some overlap between panels. If you have soft windows, make sure to bring the interior Duro-last flap inside the insulation around the entire window.

After you have all the insulation in place, you can zip up your yurt! Zip each panel of the cover up from the bottom and secure the velcro. Fold down the eave and slide the copper wire into the sewn sleeve of the door overhang to give it shape. You can fold back the ends so it doesn't slip out.

Great job, you're almost there!



Insulation layering and zip ties

FINISHING

At this point, you can finish the wall by securing the door panels to the door frames with one 2" x 2" board each. Set wood screws halfway into each pre-drilled hole of the 2x2. Fold the cover to the inside so that the edge is hidden and it comes right up to the door frame, with enough material to fold under the board. This is where you can tighten the cover to address any wrinkles or sagging around the yurt so take your time and make sure you have a nice even fold. Hold a 2x2 firmly flush along the front face of the door frame with the folded Duro-last clamped evenly in between, just barely sticking out. Screw the board into the door frame through the fabric, clamping the cover in place. It is easiest to start with the top and bottom screws. Walk around your yurt, making sure all the slack is out of the wall, and repeat this process on the other side and for each door or hard window frame.



Cover evenly tucked inside



Screwed on snug

SKÝLIGHT

We recommend at least two people to attach the skylight. Tie a line to the inside of the skylight by one of the eye rings and lift the skylight up on to the roof. With one person holding it in place, get in position at the center ring to pull the skylight up the roof with the attached line. You can sit on the ring or sturdy scaffolding. The skylight should fit around and over the top cover for a tight seal. Rotate the skylight in place so the eye rings are in line with the ones in the compression ring, and connect them together with a tightly wrapped piece of line. Tie another length of line through the hole in the top of the vent flap in the skylight and run this down the rafters and behind the tension cable. You can tie this off or otherwise secure it within reach as a handle for ventilation. If your skylight came flatpacked, see page 19 for assembly instructions.



Skylight ties



SECURING THE YURT

Nomad Shelter yurts are designed to withstand heavy winds and high snow loads, but only when properly set up and secured. The first step will be screwing the cover into the floor rim through the small grommets along the bottom edge of the cover with the included 3/4" truss head screws. Make sure the skylight is tightly fastened on, the yurt is secured to the platform, and the platform is secured to the ground. This will be sufficient for areas with low to medium winds. If you live in a very windy area, additional wind mitigation can be added by placing lines over the top of the yurt in a cross pattern. Anchor these lines either to the floor joists or to ground anchors with good, thick rope. And as always, feel free to call us with any questions or concerns about the environmental factors of your yurt setup!



We hope you love your new Nomad Shelter yurt!

If you are proud of your yurt build and want to share it with the world, we'd love to hear from you. You can send pictures or video to: *raven@nomadshelter.com* to be featured on our social media, website, or blog. If you want to include a little bit about your yurt story, that's great too!



CUSTOM OPTIONS

Your yurt may have custom options, including additional door frames or hard window frames. If you have any questions that are not answered in this guide or in the Resources section of our website, please contact Support.

Hard window frames do take some extra consideration on your end. Since the exterior Duro-Last yurt cover and insulation stops at each window, you will need to frame out that space inside the window frame with 2" x 4" or your choice of wood. Then you can add exterior siding above and below the window, and your choice of insulation and interior surface treatment. You will also need to add the window sill and window header, and framing above the header and below the sill. This will allow your window to fit snug inside our handcrafted frames. You might also consider building in any fixtures or pipes through this area to avoid compromising the Duro-last cover. For hard frame assembly instructions, see page 21.



Beautiful interior treatment



Framed and fitted



Great spot for a toyo stove!

Most other custom aspects will have been discussed during the ordering process, and shouldn't impact the set up too much.



UTILITIES

Many yurts use a wood stove as the main heat source. Our skylights include a safety bracket designed to securely support a stove stack. The stove stack exits the center of the skylight, making installation easy and clearance code-compliant.

Yurts 20 feet and under use an 8 inch bracket fitting an insulated Metalbestos stove pipe which is 6 inches on the interior, and 8 inches on the exterior. Our 8 inch bracket has an outer diameter of 12 inches, allowing 2 inches of clearance on all sides. Yurts 24 feet or larger have a 10 inch central bracket.

The stove stack is safest when it exits the peak of your yurt for optimum draft and wind resistance. The stack can be angled on the interior of the yurt to allow your stove to be placed anywhere in the yurt you desire. The skylight can be capped if there is no stove stack needed.

The yurt can also be heated with a Toyo Stove, monitor heater, or propane heater with vents running to the outside. We have custom options available for welding vent pipe fixtures into your yurt wall, or you vent through the framing in your hard window frame as shown on the previous page.

A yurt can be plumbed by running pipes underneath the yurt with an insulated floor, and having the stub fixtures coming upwards through the floor. People sometimes choose to build bathrooms into their yurt, which is quite feasible with downdraft ventilation through the floor. Some customers make a separate room extension behind the yurt for plumbing needs.

There are also many ways to integrate electrical into your yurt. Conduit can be run around the perimeter inside or behind the lattice wall with 2"x4" posts and fixtures. Alternatively, you can run a power cable into the yurt up under the bottom of the cover from a main electrical source. Solar systems are also a great option for your yurt.



GEOMETRY REFERENCE

CIRCLE CIRCUMFERENCE AND AREA:



HOW TO FIND THE CENTER OF A CIRCLE

When building your platform, you most likely will have marked the center to cut out the plywood floor into a circle shape. If not, here is another way to find the center.

- 1. Mark any straight line touching two points inside the circle.
- 2. Measure a second line the same length and parallel to the first.
- 3. Connect the corners to make a cross, and you'll have a center point!



HARD FRAME PLACEMENT

If you have multiple hard frames, placing them correctly around the circumference according to your yurt design will make the lattice assembly much easier. If a frame is off, your later lattice pieces may not connect properly without affecting the uniform wall height. From the center point of your yurt, you can measure angles using any protractor or square, and extend those lines out to the edge to determine frame placement. A circle has 360 degrees in total, which you can subdivide according to your floor plan.

SKYLIGHT ASSEMBLY

This guide is intended as a reference for assembling your Nomad Shelter yurt skylight. If you have any questions or concerns through the assembly process, please feel free to get in touch via any of the contacts at the bottom of the page. It is recommended to read through the entire guide before getting started. You will need a drill with phillips and screwdriver bits (or a set of ratchets), a hammer or mallet, a ratchet strap, and some work gloves. If your skylight came flat-packed, it should include the following components and hardware. Depending on the size of the skylight, there will be some variation of certain components.

- Circular wooden baseplate (preassembled in two halves) Hardware: 5/16" bolts with nut and washer, aluminum plates
- Wood mullions (predrilled and routed for plexiglass panels) Hardware: carriage bolts with nut and washer, #14 phillips head screws, eyebolts with 2 washers and nut
- Plexiglass panels (one with wood framed vent assembly) Hardware: roofing screws with bonded washers, 5200 glue for top seams
- Vent flap (with line for attaching)
- Central support ring (predrilled metal ring) Hardware: 8' and larger come with brackets and 1" mounting bolts to fit an 8" stovepipe assembly

STEP 1

First, you will want to finish connecting the base plate to form a ring. Assemble them just like the other connections, with the aluminum plate sandwiched inside. Use the same 5/16" bolts with nut and washer, coming up from the underside and tightened just snug. The top side has routed channels to fit the mullions. It may be helpful to use ratchet straps to tighten the two halves together, and you can use a hammer or mallet to gently tap things together or to thread the bolts through. Stage the finished baseplate on a table or other raised flat surface so that you can reach the underside.

STEP 2

Next, you will want to attach the mullions to the central support ring. There is an alphanumeric system used to identify the proper connections. Match mullion A to channel A in the baseplate and hole A in the support ring, etc. The numbers are used later to match the skylight panels to their place. A1, B2, C3, etc.

For skylights 8' and larger:

It is helpful to have two or three people holding things in place at you go. With your base plate on a raised surface, stage the support ring a few feet above it. Orient your first mullion A snug against the ring, with the bottom resting in the channel of the base plate extending a few inches beyond. Each mullion takes two #14 screws to connect to the ring, tightened just snug. Several of the mullions will have an extra predrilled hole towards the lower end. These holes are for the eyebolts to tie the skylight to your yurt compression ring. The eyebolts may already be attached, otherwise thread them in from the bottom (the side closer to the routed grooves along the edge) and attach with a washer on either side and a bolt on top. 4' skylights have two eyelets, 5' and 6' skylights have four, 8' and 10' skylights have six. Start with one of these mullions, and continue screwing mullions to the support ring opposite each other around the skylight. Make sure your eyelet mullions are placed evenly around the skylight.

For skylights 6' and smaller:

The process is much the same, but it may be easier to assemble upside down. Set the support ring on the table with the larger side up, and screw in your mullions according to the lettered system with one screw each. With every mullion attached, flip it back over and set the assembly in their corresponding channels on the baseplate.



STEP 3

With all the mullions screwed into the support ring, you can now attach them to the baseplate. With a mullion lined up in its channel, thread a carriage bolt in from the top through the baseplate and the predrilled hole in the mullion. Different sizes have different lengths of bolts (3", 5", etc), but they will always be the longest piece of hardware in the kit. You may need to tap them in lightly with a hammer or mallet. Set every bolt, then tighten them snug with a washer and nut on the bottom. You may want to flip the skylight over to tighten the nuts. With the framework assembled, you can go around and make sure everything is snug and even before sliding in the plexiglass panels.

STEP 4

Next, you will be sliding the plexiglass skylight panels into the routed channels of the mullions. The edges of the plexiglass are very sharp so use good gloves! Start with number 1 between mullions A and B. It may be easier to set one side in its channel first and support the top edge as you go so it slides in smoothly. You can lean into the bottom edge of a panel to get it tight to the top so that the predrilled holes on the bottom rest on the thin faceted edge of the baseplate. Use roofing screws through the predrilled holes in the panels to attach them to the baseplate. Don't overtighten or you can break the plexiglass! Continue around the skylight, with panel 2 between B and C, etc. The last panel will have the vent assembly, so you can reach inside to adjust the panel into place. Run a bead of 5200 glue on the outside along the top edge of the panels to seal and waterproof that gap against the metal support ring. For sizes 6' and smaller, you will also want to seal around the support ring where the tubes change size. Make sure to use adequate ventilation and follow all instructions on the package. The glue is very sticky but gives a strong permanent connection.

STEP 5

To finish the vent flap assembly, set the vent flap against the framed edge on the plexiglass panel on the outside of the skylight, with the handle on the inside towards the top. Use a piece of line to thread a loop through the two holes on the bottom edge of the frame and the hole towards the bottom edge of the vent flap. Make this loop about 5 or 6 inches long. This is an arresting cable that will prevent the flap from opening too far when the handle is pulled. Tie a long piece of line to the handle of the vent flap inside the skylight. You can run this down the inside of the yurt along the rafters and tuck it behind the tension cable for a handle to open the vent flap.

STEP 6

The last step of finishing your skylight is completing the chimney assembly. If you're using a wood stove with a skylight 8' or larger, bolt the double-angled metal brackets onto the support ring on the inside with 1" stainless bolts. Insert the bolts from the outside into the predrilled holes near the top of the support ring, through the brackets (facing up and in) and tighten with a washer and nut. These brackets are sized to fit a standard 8" metalbestos chimney assembly. The self tapping screws included with the chimney pipe go through the predrilled holes on the top of the brackets. Skylights 6' and smaller have a support ring that changes size, so you won't need the brackets. Your chimney kit will come with a dripless smokepipe adapter, insulated chimney pipe, storm collar, and chimney cap. If you are not installing a stovepipe, just place our included chimney cap on top of the support ring with a storm collar covering the support ring and top edge of the skylight panels. It is highly recommended to finish this assembly before getting your skylight up!

HARD FRAME ASSEMBLY

This guide is intended as a reference for assembling your Nomad Shelter hard window or door frames. If you have any questions or concerns through the assembly process, please feel free to get in touch via any of the contacts at the bottom of the page. It is recommended to read through the entire guide before getting started. You will need a ratchet strap, framer's square, drill with torx bit, and ratchets or wrenches for the lag bolts.

Make sure you have a large flat surface to assemble your frame flush and square.

1. Lay down a ratchet strap fully lengthened. This will be looped over the frame and tightened to hold the frame together for fastening.

2. Lay down the face boards on the ratchet strap, perpendicular to the strap, with the finished side up.

3. Set the bottom plate and the top plate in place, as labeled, with the rounded side up.

4. Tighten the rachet strap to bring the frame together and hold it in place.

5. Check the frame with a framer's square for 90 degree corner angles. Adjust the strap and boards as necessary.

6. Tighten the 3" Torx screws to fasten the top and bottom plates in place. Use two screws on each side (4 screws per plate).

7. Install and tighten the lag bolts holding the frame together (12 lag bolts per frame).

8. Install the header on the upper portion of the frame, with the finished side facing upwards to match the face boards. Fasten the header with 3" Torx screws (1 screw per foot of header, or 5 screws minimum).

10. Install the trim boards on the inside face of frame. Fasten the trimmers with 2.5" Torx screws (14 per side, 28 screws total per frame).