

Artist's Conception

© Pacific Yurts Inc.

SET UP MANUAL

The original manufacturer of the modern lattice wall yurt, the highest quality for over 35 years.

Manufactured by Pacific Yurts Inc. • 77456 Hwy 99 S. • Cottage Grove, OR 97424 • (541) 942-9435 • www.yurts.com

Have you done these important things?

Please be sure you have done the following:

- The platform must be round and the same diameter as your yurt.
- The screw in the tip of each rafter should be installed to keep the rafter from lifting off the tension cable. *(Page 8)*
- The rafters over the door should be secured to the top door sill with the screws provided. *(Page 8)*
- If the Snow & Wind Kit was purchased, two screws need to be installed through the lattice wall into the back of each rafter support. *(Page 12)*
- After making sure the gap is 1", be sure the cord in the grommet strip (under the valance) is securely tied to the last grommet on the top cover next to the door. *(Page 24)*
- The gap between the side cover and grommet strip on the top cover needs to be a consistent 1" before securing the bottom of the side cover to the platform. *(Page 24)*
- The cord that is laced through the grommets at the bottom of the top cover valance needs to be pulled **as tight as possible**, and secured at the door frame. *(Page 28)*
- If the dome opener is purchased it is **extremely important** to make sure the opener spindle is installed correctly to avoid breaking the dome skylight. *(Page 30)*
- When cleaning the dome skylight **DO NOT USE** glass cleaners! See care recommendations on *page 48*.
- Remember that this manual includes a care and maintenance section that should be referred to periodically.

If you do not fully understand the set up process call us at 1-800-944-0240.

The Yurt Set Up Manual

Including Care & Maintenance

12', 14' & 16' Yurts

Pacific Yurts Inc.
Recreational Living Structures

Warning: Safety is very important in the assembly and use of yurts. Therefore, purchaser should read the manual thoroughly before starting assembly in order to avoid accidental injury.

Welcome Aboard!

We would like to take this opportunity to thank you for purchasing a Pacific Yurt and to welcome you to the growing Pacific Yurts' family. Pacific Yurts was established in 1978 and is the original designer and manufacturer of the modern lattice wall yurt. Today Pacific Yurts Inc. enjoys an international reputation for successfully adapting this ancient shelter into a modern recreational living structure. We are committed to the highest quality in our materials and workmanship. Each yurt is made of select kiln dried, second growth Douglas fir and space age architectural fabrics. We are dedicated to earning your confidence by giving you the same professional quality and service we ourselves appreciate. We welcome your comments and suggestions. Count on us to be here for all your future needs.

If after reading through this manual you have any questions about the installation of the yurt please call us at 800-944-0240.

Enjoy your yurt!

Sincerely,

The Pacific Yurts' Staff

Manufactured by:

Pacific Yurts Inc. • 77456 Hwy. 99 S • Cottage Grove, OR 97424 • 541-942-9435 • www.yurts.com

Patented. All rights reserved. No part of this work covered by the copyright hereon may be reproduced or copied in any form or by any means – graphic, electronic, or mechanical, including photocopying, recording, or informational and retrieval systems – without written permission of Pacific Yurts Inc.

©2014, Pacific Yurts Inc.

List of Figures

<i>Typical Platform Elevation</i>	1
<i>Diagram I: Door Cut-Out In Drip Edge</i>	3
<i>Diagram II: Connecting The Lattice Wall To Door Frame</i>	5
<i>Diagram III: Securing The Lattice Wall</i>	5
<i>Diagram IV: Raising the Center Ring</i>	7
<i>Diagram V: Securing Tension Cable</i>	9
<i>Diagram VI: Rafters at Door</i>	9
<i>Diagram VII: Typical Section Through Yurt</i>	11
<i>Diagram VIII: Perimeter Blocking</i>	13
<i>Diagram IX: Installation Of Interior Bracing</i>	15
<i>Diagram X: Additional Valance Lacing</i>	15
<i>Diagram XI: Unfolding Roof Insulation Liner</i>	17
<i>Diagram XII: Unfolding Custom 1/2 Roof Insulation Liner</i>	19
<i>Diagram XIII: Unfolding Top Cover</i>	21
<i>Diagram XIV: Top Cover Door Detail</i>	21
<i>Diagram XV: Wall Insulation Example</i>	23
<i>Diagram XVI: Roof to Wall Connection</i>	25
<i>Diagram XVII: Attaching Side Cover Clips</i>	25
<i>Diagram XVIII: Side Cover Attachment At Door</i>	25
<i>Diagram XIX: Securing The Side Cover</i>	27
<i>Diagram XX: Rain Diverter Inserts</i>	29
<i>Diagram XXI: Non-Opening Skylight</i>	31
<i>Diagram XXII: Dome Opener Spindle</i>	32
<i>Diagram XXIII: Opening Skylight</i>	33
<i>Diagram XXIV: Stovepipe Hole</i>	35
<i>Diagram XXV: Woodstove & Chimney Installation</i>	36
<i>Diagram XXVI: Gas Stove Installation</i>	37
<i>Diagram XXVII: Insulation Board Pattern</i>	39
<i>Diagram XXVIII: Water Catchment System</i>	41
<i>Diagram XXIX: Cable Tie-Down System</i>	43
<i>Diagram XXX: Gutter Parts</i>	45
<i>Diagram XXXI: Gutter Hanger Bracket</i>	45
<i>Diagram XXXII: Gutter Assembly</i>	45

Tool List

- 8'-10' step ladder (two)
- Blanket or pad (for protecting top cover while installing dome)
- Cable cutters (for trimming excess on safety cable)
- Electric drill (or cordless driver drill) with Phillips bit
- Hand saw (for cutting lattice for stove pipe)
- Knife (for cutting lacing cord)
- Level
- Masking tape
- Miter saw (for trimming rafter supports on Snow & Wind Kit)
- Phillips screwdriver
- Standard screwdriver
- Pliers (for crimping springs on dome opener if applicable)
- Sawzall or equivalent (for cutting door opening in drip edge)
- Sharp scissors
- Small crescent wrench
- Staple gun
- Baby powder (for top cover insulation only)
- Tape measure
- 1/4" hex driver (for Snow & Wind Kit only)

Note: Remember the tools required may vary according to your platform height, options chosen and yurt size. Read entire manual before installation.

Contents

Tool List	vi	Additional Options	40
Site Location	viii	Door Screen Curtain	40
Platform (Floor) Construction.....	viii	Center Ring Insert.....	40
Ready To Start	2	Insulated Window Cover	40
Assembling the Framework.....	2	Removable Cable Tie-Down System	42
Lattice Wall.....	2	Perimeter Gutter System.....	44
Door Frame	4	Care & Maintenance	46
Adjusting & Securing The Lattice Wall	4	Vinyl Covers	46
Tension Cable	4	100% Polyester Side Covers	46
Raising The Center Ring & Rafters.....	6	Stove.....	46
Securing Tension Cable	8	Lattice Wall.....	47
Securing Rafters To Door Frame	8	Adjusting The Door	47
Safety Cable	10	Door & Door Frame	47
Snow & Wind Kit.....	10	Dome Skylight And Door Window.....	48
Perimeter Blocking.....	12	Vinyl Windows	48
Snow And Wind Protection.....	14	Glossary	49
Installing Insulation & Outer Covers	16	Limited Warranty	50
Insulating The Yurt	16	Epilogue	51
Roof Insulation And Liner Facing.....	16		
Custom 1/2 Roof Insulation	18		
Top Cover	20		
Wall Insulation With Liner Facing	22		
Side Cover.....	24		
Top Cover Valance	28		
Dome Skylight	30		
Dome Skylight (Without Opener).....	30		
Dome Skylight (With Opener)	30		
Stovepipe Installation	34		
Additional Insulation Information	38		
Insulating The Roof With Insulation Board	38		
Floor Insulation.....	39		

Site Location

Being what we call a 'soft' structure, the yurt reacts more readily to climatic conditions than do 'rigid' structures, therefore, it is important to choose your site carefully and take into account prevailing wind patterns, overhead tree limbs, water runoff, etc. In general, the best site would be protected from the wind, would receive morning sun and afternoon shade and be free from overhead objects such as large dead tree limbs that could damage the yurt in heavy winds. Plan your entry so that the doorway is facing away from prevailing winds.

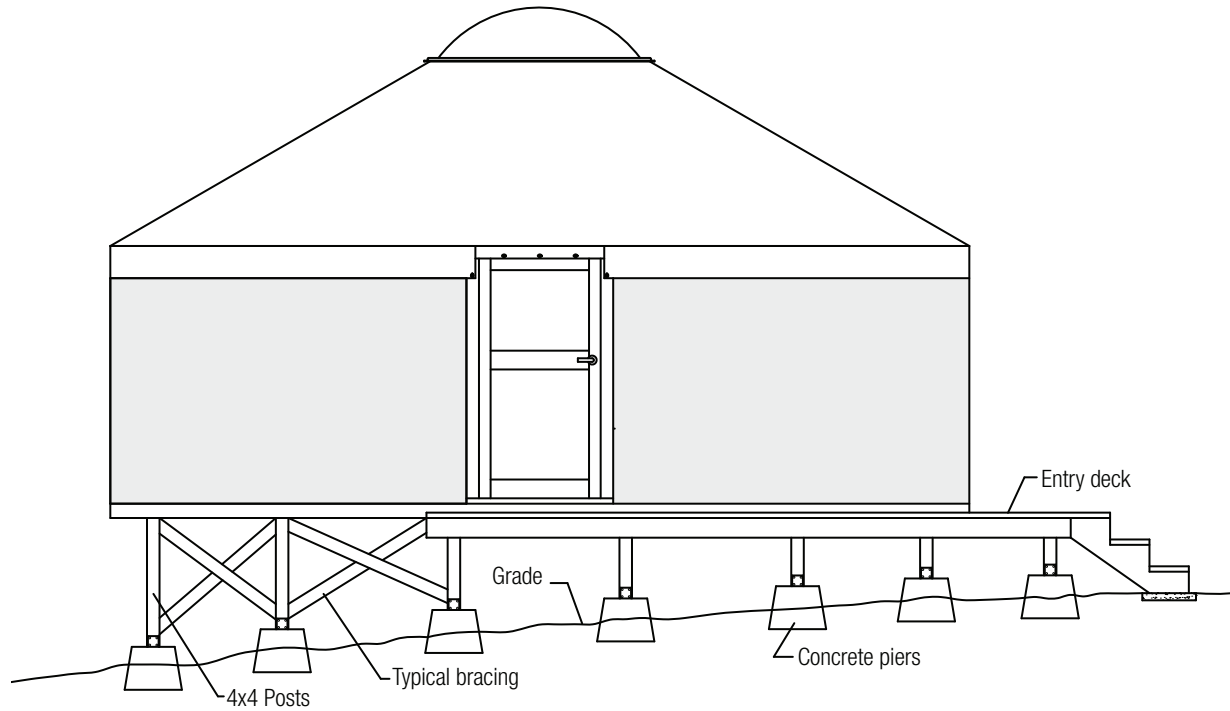
We do not recommend setting up the yurt for extended periods without a platform (floor). However, if you do set up the yurt on the ground, make sure your site is leveled, leaving enough room to ditch around the perimeter for watershed control. Plan your site with the lay of the land and runoff patterns in mind so that you don't get caught by surprise in the first rainstorm. Also, we recommend a ring of gravel or bricks so that the side cover does not come in contact with the damp earth. A temporary floor can be easily installed using a layer of bark chips covered with heavy black plastic and layered with carpeting. Be sure to stake down the lattice wall securely.

Platform (Floor) Construction

For a secure and comfortable installation, a well-built platform is necessary. To ensure a weather proof installation the platform needs to be circular and the same diameter as the yurt so the side cover fabric can extend below the interior floor level. This will provide a draft-free and watertight seal. Any exterior decking should be separated from, or at a lower level than the yurt platform. Unless you are skilled, enlist the help of an experienced carpenter for building the platform.

Contact Pacific Yurts to obtain recommended platform construction plans for the size of your yurt or download them from our web site www.yurts.com. Keep in mind that every site will be different, so the platform construction and footings should reflect the conditions of each individual site and may need to be modified from our recommended plan.

Typical Platform Elevation



Note: Platform and footings should be designed according to the conditions of each individual site and local building requirements.

Ready To Start

Now you are ready to start setting up the yurt. It is helpful at this point to familiarize yourself with the various components (see diagram on front cover) and to have read through **the entire** set up sequence so that it is clear and you know what to expect. A glossary is included in this manual to familiarize yourself with the terms used. All hardware for the yurt is provided in the hardware box.

1. Locate your door position(s) **exactly** and mark the center on your platform's drip edge.
2. Measure the door threshold length (42-5/8" for standard door and 49-1/4" for French door) and notch out 1" of drip edge material to this dimension using your mark as center. You are simply cutting the 1" portion of the plywood drip edge that extends above the interior floor level back down to floor level so the door threshold can overhang the circular platform. When marking the platform's drip edge for the door cut-out be sure to measure the width of the door threshold **straight across** rather than around the curved surface of the platform. *(See Diagram I)*

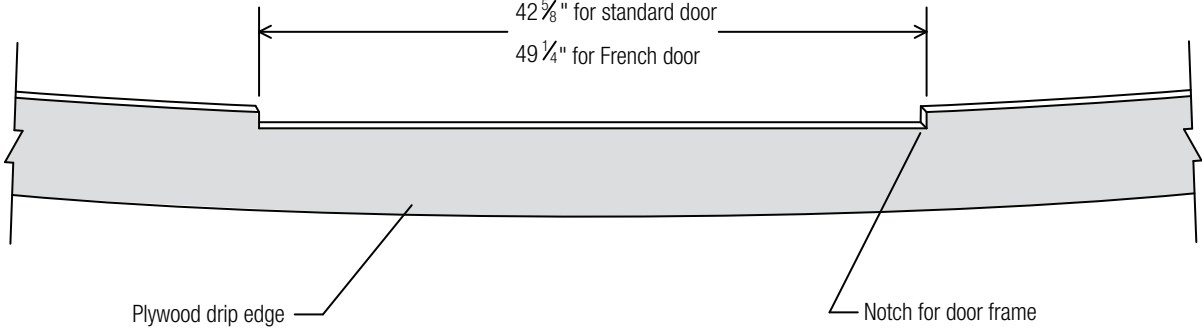
Note: If you are setting up a yurt with doors at 6:00 & 12:00, be sure the doors are **exactly** opposite by running a string through the center point of the circle to the outside perimeter on each side. This is the center line of the doors.

Assembling the Framework

Lattice Wall

1. Locate and unwrap the lattice wall. It will be a cylindrical package roughly 24" in diameter and seven to eight feet long. Take the lattice wall and a helper to the back of the circular platform, opposite to where you want the 6:00 door to be, and stand the lattice wall on end. **(Note:** Make sure the lattice wall is right side up! The bottom of the lattice wall is easily identified by the bolts that have been installed for the anchoring straps.) Also, note that there is an inside and an outside. The outside is the side with the holes in the middle of the rivets, while the inside has no holes in the rivets.
2. Carefully undo the straps around the lattice wall and stretch it out around the perimeter of the circular platform (just inside the drip edge), **making sure to keep it stable as you proceed. (Safety note: Be careful of pinch points while extending lattice wall.)**
3. Leave about 4 ft. for the door opening. The lattice wall will be secured to the platform after the door is in place.

Diagram I: Door Cut-Out In Drip Edge



Door Frame

1. Position the door frame at the opening, making sure the keyed side of the door faces outward. **(See Diagram II)** Remove the door clamp fascia and “door stickers” and set them aside for later.
2. Remove the wing nuts and washers (but not the wooden door clamps) from the inside of the door frame. The ends of the lattice wall have metal plates installed, which will attach to the bolts on the door frame.
3. Slip the end of the plate with the oval hole onto the clamp bolts then replace the washers and wing nuts and snug them down (not too tightly at this point).
4. Notice that there is a notch in the door threshold directly behind the door frame upright. Position the door threshold so that this notch is outside of the drip edge **(see Diagram II)** and then anchor the threshold to the platform using the screws provided in hardware box. The notch allows the side cover to extend below the threshold.

Adjusting & Securing The Lattice Wall

The lattice wall height should be consistent all the way around the perimeter (within 1/2”).

1. Go around the perimeter and check the wall height with a tape measure every few feet. The finished height will vary depending on the yurt size and number of doors, but it is important that the measurement be consistent. The height of the lattice wall can be adjusted by expanding out the lattice wall where it needs to be shorter and contracting it where it needs to be taller. Be sure to keep the lattice wall against the drip edge as you go. **Helpful Hint:** Using a stick with the average height marked on it is a quick and easy way of measuring the height of the lattice wall.
2. Remove the cap nuts, washers, and bolts, located approximately every sixth crotch along the bottom of the lattice wall. Then bolt on the formed lattice wall anchoring straps (from your hardware box) and anchor them to the edge of the platform with the screws provided. **(See Diagram III)** These brackets are designed so the screws will go through the plywood drip edge and into the flooring material.

Tension Cable

1. Locate the steel cable (in your hardware box) labeled “tension cable”. Unroll the cable by starting with one end ‘off center’ above the 6:00 door. This is important so that the cable hardware does not interfere with the rafters that will be resting on top of the door frame.
2. Lay the cable in the crotches along the top of the lattice wall. Take the slack out as you go and be sure not to miss a crotch. Hook the two ends together as you come around, meeting above the door where you began. If the two ends do not meet there is excess slack in the cable. Simply pull out the slack a little at a time, working it towards the cable ends. Before setting the rafters make sure to distribute any slack in the cable evenly around the perimeter.

Diagram II: Connecting The Lattice Wall To Door Frame

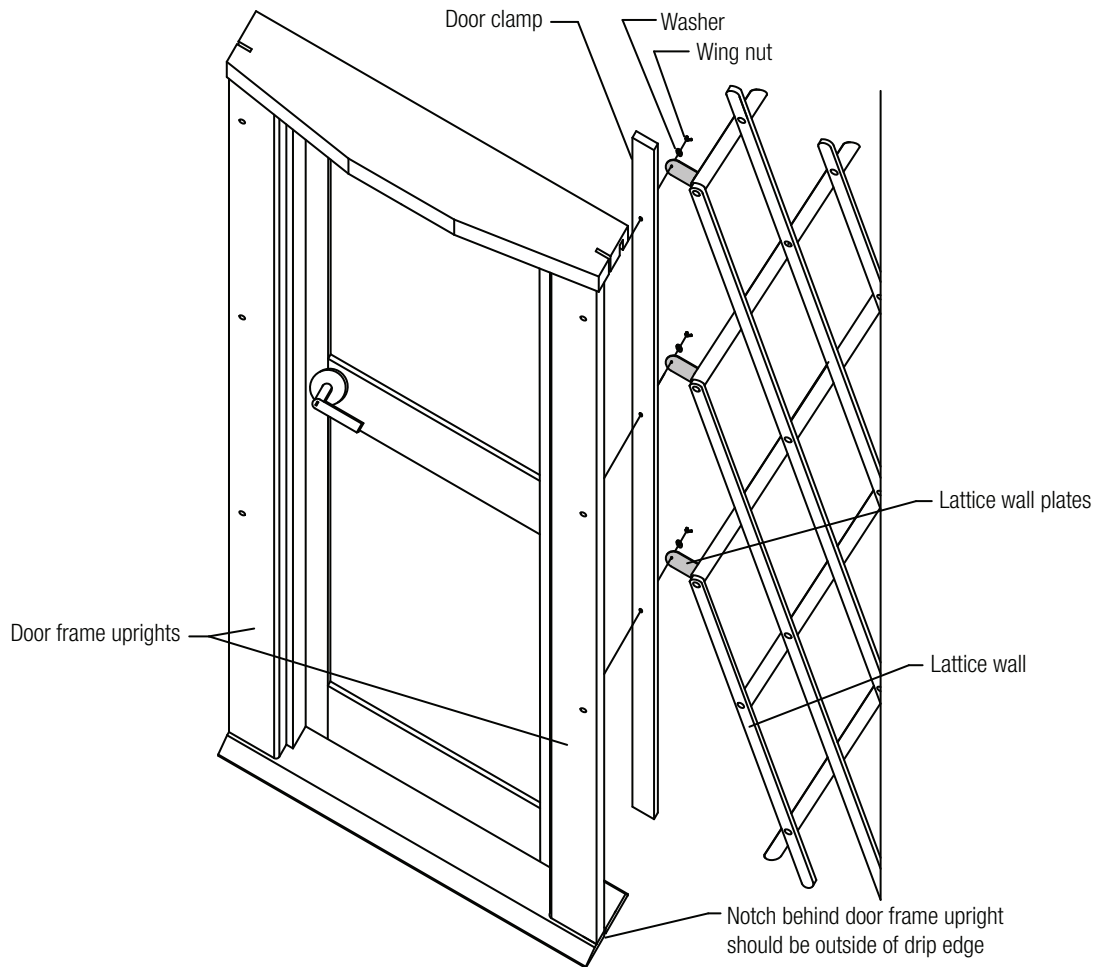
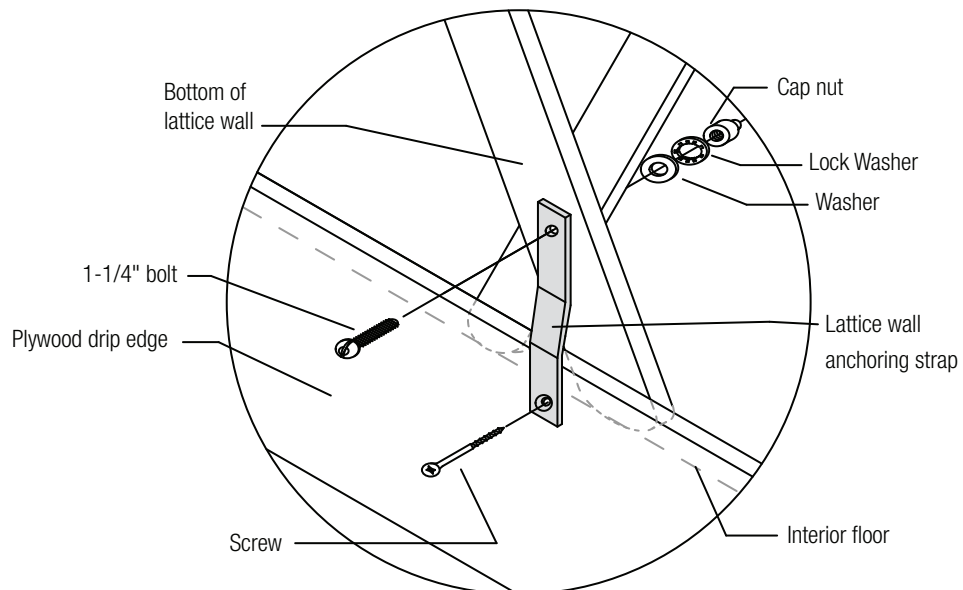


Diagram III: Securing The Lattice Wall



Raising The Center Ring & Rafters

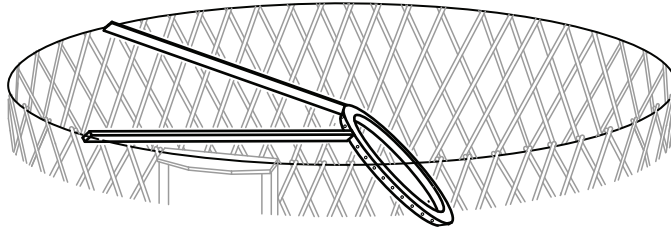
Raising the center ring is the most exciting step and needs to be executed with some care. Extra care should be taken on larger yurts because of the added weight of the components, length of the rafters and height of the center ring. **Be sure to read this entire section before beginning.**

1. Disconnect the dome skylight from the center ring. The dome will be installed later.
2. Bring the center ring into the yurt and lay it in the center of the floor with the bolt heads down and nutted ends up.
3. **Important Note: If you purchased a dome opener, it is at this point you will want to position the aluminum bracket on the center ring away from the prevailing winds to avoid having the wind catch the dome on the open side. The aluminum bracket is on the side that opens, not the hinge side.** Using a heavy felt pen (and referring to the Rafter Spacing Diagram enclosed in your hardware box) mark the locations of the three or four evenly spaced holes on the center ring (shown in blue on diagram). These will be the points at which the first “set up” rafters will be inserted to raise the center ring.
4. Locate the positions where these “set up” rafters will rest on the cable (**again refer to the Rafter Spacing Diagram**) and mark each of these cable spaces with a piece of tape to facilitate the set up.
5. Bring five or six rafters into the center of the yurt and lay them aside. Place one of the rafters on one of the cable's marked spaces (notched end to the cable and the pin towards the ring). **Note: The notched end of the rafter has a rounded top and a pointed bottom. The pointed end should be facing downward when the ring and rafters are erected.**
6. Lift the ring up so it is on edge and insert the pin of the rafter into the ring. Staying on the marked holes and cable spaces only, do the same with the second rafter. (**See Diagram IV**)
7. Lift the ring off the ground letting the first two rafters support one side of it and insert the pin of the third rafter into the remaining marked hole. Use the third rafter to lift the center ring up into position, keeping pressure against the first two rafters, and then place the notched end on the cable. It helps to have someone standing by with an extra rafter to help push the ring up and brace it until you get a few more rafters into position. (**See Diagram IV**)

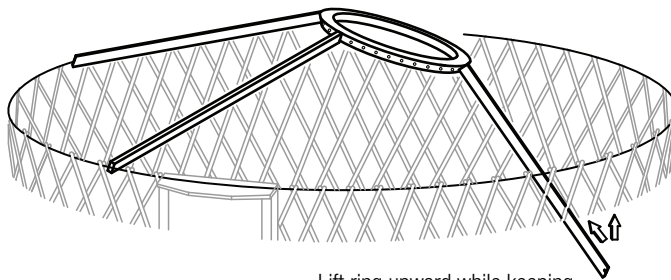
CAUTION: UNTIL THE RAFTERS ARE ALL INSERTED, THE INTERIOR OF THE YURT SHOULD BE CONSIDERED A HARD-HAT ZONE; CHILDREN AND THOSE NOT INVOLVED WITH THE ASSEMBLY SHOULD WAIT OUTSIDE! IF SOMEONE PUSHES A RAFTER INTO THE RING WITH TOO MUCH FORCE IT COULD MAKE THE RAFTER NEXT TO IT SLIP OUT OF THE RING AND FALL!

8. Carefully insert the rest of the rafters, being sure to balance your placement by keeping the rafter pattern symmetrical (so the weight stays equally distributed) and keeping two lattice wall crotches between each rafter. When inserting the rafters, it works best to set the pin end in completely, bring the other end up under the cable, push the lattice wall out a little with your shoulder (not too far) and then hook the rafter onto the cable. **Do not force the rafter into the ring. Once you get the correct angle it will easily slip in.**
9. Install the center rafter over the door last. Install this rafter by sliding the notched end of the rafter between the tension cable and top door sill, then slip the pin into the center ring. After the pin is in the center ring the cable can be slipped into the rafter's notch.
10. Once the rafters are in place double check to make sure all the rafters square up with the center ring and are separated by two lattice wall crotches. Also check to be sure that all of the rafters that should be resting on the door are actually on top of the door and not next to it (**refer to the Rafter Spacing Diagram**).

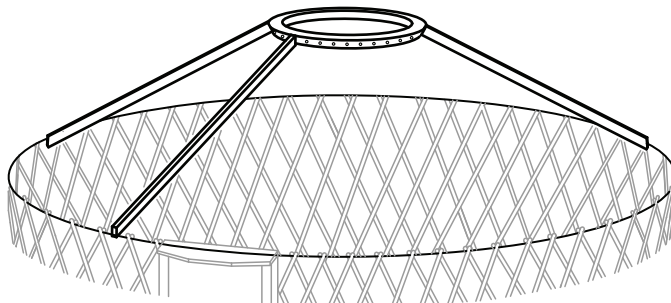
Diagram IV: Raising the Center Ring



Insert first two rafters
while ring is at floor level.



Lift ring upward while keeping
pressure against first two rafters



Slip notch of third rafter
onto tension cable

Securing Tension Cable

1. To eliminate the possibility of the rafter lifting off of the cable a screw will need to be installed on the underside of the rafter just below the tension cable into a predrilled hole. **(See Diagram V)** This secures the rafter end onto the cable. **Do not substitute longer screws for those provided.**

When installing the screw, install it only deep enough to make the head of the screw flush with the bottom of the rafter. **If installed too deeply it is possible to drive the screw through the rafter and damage the top cover. Note:** The rafters over the door(s) will not need these screws because they will be fastened to the door frame.

Securing Rafters To Door Frame

Rafters over doors are secured in position with the screws provided once the door frame is plumb and square.

1. Check to be sure the rafter is in its proper position, then from below, drill an 1/8" pilot hole through the door sill into the rafter tip and screw the rafters to the sill **(see Diagram VI).**

Diagram V: Securing Tension Cable

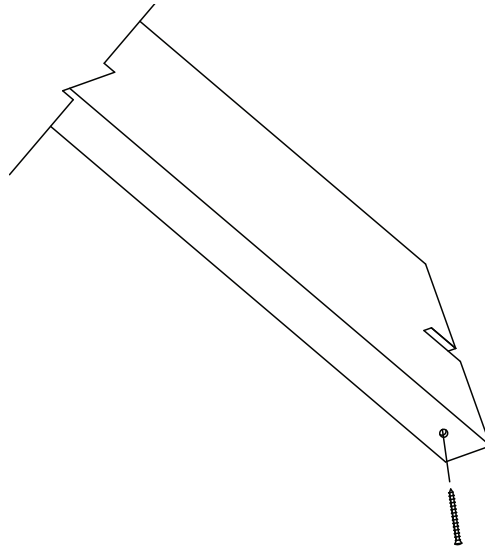
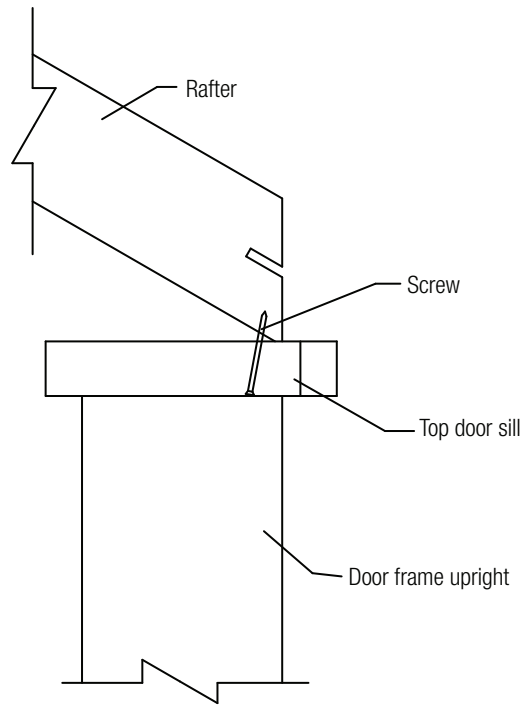


Diagram VI: Rafters at Door



Safety Cable

A "Safety Cable" is included which should be installed through the holes in each rafter, near the center ring. It will help hold the rafters into the ring.

1. Remove the cable clamps from the end of the safety cable and thread it through the predrilled holes in the rafters.
2. Once the cable is laced through the rafters and you get back to the starting point, pass the end of the cable through the loop on the opposite end and pull tight.
3. Put the cable clamps back on and tighten securely.
4. Cut off any excess cable using a cable cutter.

Snow & Wind Kit

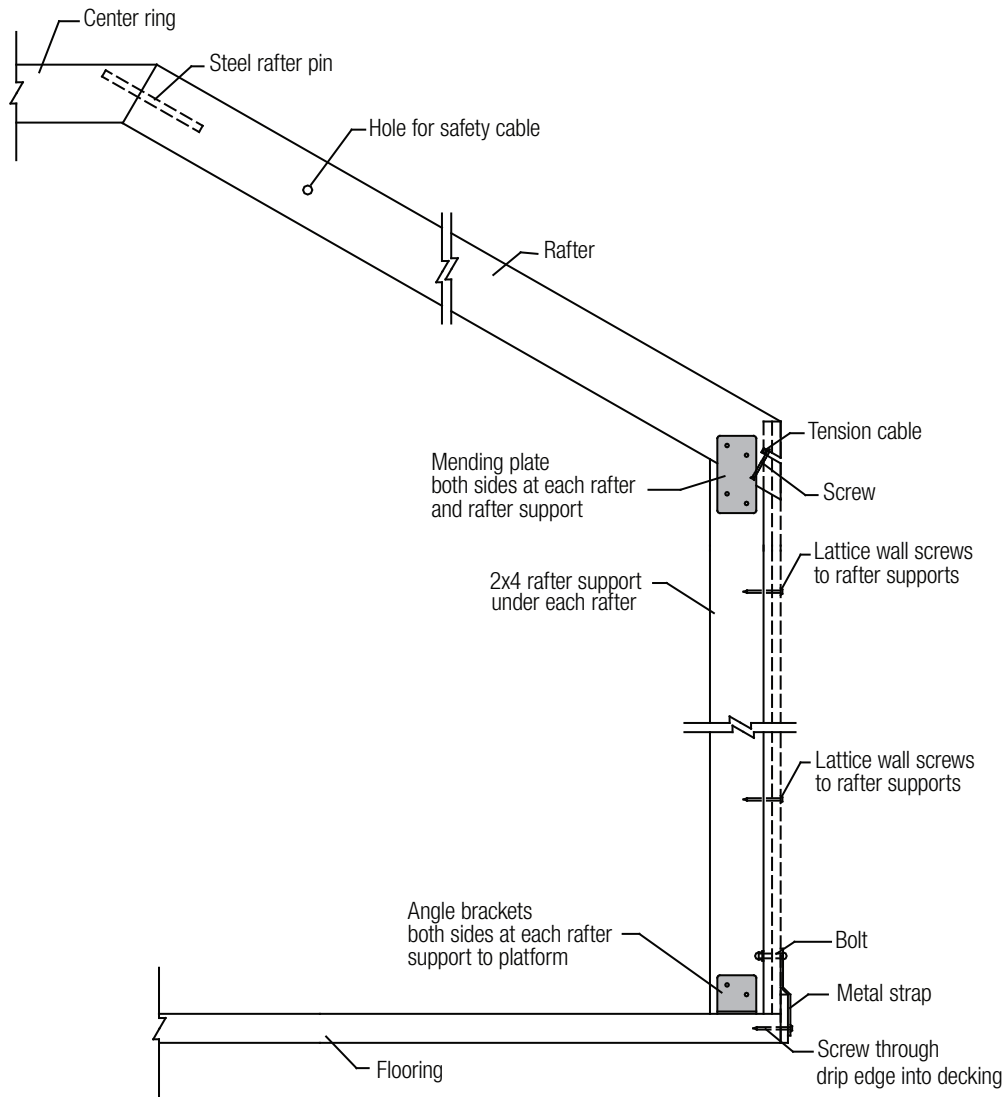
If you purchased the Snow & Wind Kit continue. **If you are not installing the Snow & Wind Kit at this time go to page 16 for installing the roof insulation.** This is to be done after the wood frame is completely installed. **If you did not purchase insulation for your yurt, go directly to page 20 for top cover installation.** **Note:** The Snow & Wind Kit involves a lot of screws. If the yurt is being set up at a site without electricity be sure to have plenty of fully charged batteries for cordless drills or a generator to charge them.

1. Locate and unwrap the package(s) marked "Rafter Supports". The 2x4 rafter supports will be installed against the lattice wall under each rafter. **(See Diagram VII). They are purposely provided long** so they can be cut on site to fit exactly (since the lattice wall height may vary). Be sure to cut the square end when cutting them to length so the angled end is not changed. (A miter saw works well for this.)
2. Measure and cut one rafter support and check it under several rafters to make sure it is the proper length. Once you are convinced that you have the right length, cut all of the rafter supports to the same length.

2" x 4" mending plates are provided to attach the rafter supports to the rafters **on both sides**. 2" x 2" angle brackets are provided for attaching the rafter supports to the floor on each side **(see Diagram VII)**

3. Use the cardboard template from your hardware box and the pilot bit provided to drill pilot holes for the metal plates before screwing them onto the rafter supports. This will ensure that the plates are properly positioned and the screws are offset so they do not hit each other.
4. Using a ¼" hex driver, attach the mending plates and angle brackets to the rafter supports with the hex head screws provided (in hardware box). Be sure to drive the screws in **straight** to avoid having the heads pop off.
5. Once all of the rafter supports have the hardware mounted to them, stand them up under each rafter and make sure the rafter is centered between the lattice wall crotches. Note: It is helpful to place a 1" block against the drip edge to ensure proper positioning of the rafter support. Have one person drill pilot holes while another installs the screws to secure the rafter support to the floor.
6. Once the rafter support has been anchored to the floor make sure it is plumb and secure it to the rafter. Be sure to drill pilot holes before driving in the screws.
7. Repeat for all rafter supports.

Diagram VII: Typical Section Through Yurt

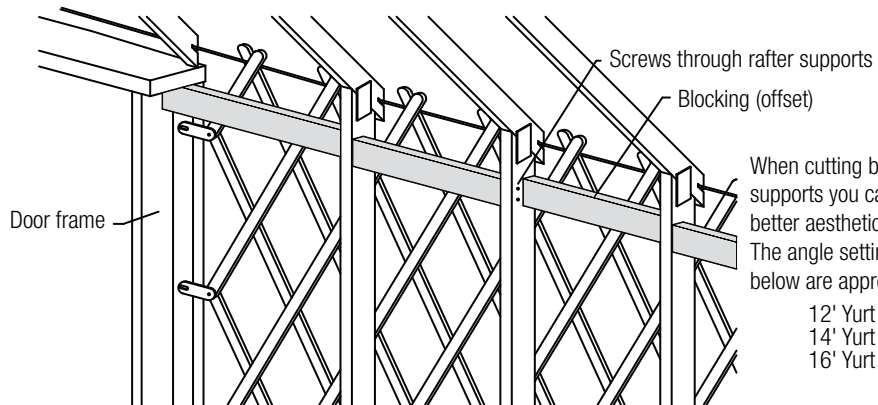


8. Double check to be sure the rafter supports are plumb, centered between lattice wall crotches and are tight against the lattice wall. **From outside the yurt drill a pilot hole through the lattice wall (where it crosses) into each rafter support using the drill bit provided (see Diagram VII, page 11). This should be done in two locations: Approximately 12" from the top of the lattice wall (just above the rivet) and at approximately 51" from the top of the lattice wall. Then drive a 1-7/8" screw (from hardware box) through the lattice wall into the support at each location.** This is done from outside of the yurt before the side cover is installed. This screw is an important part of the Snow & Wind Kit providing a shear point to prevent torque in the yurt.

Perimeter Blocking

If you purchased Perimeter Blocking continue. **If you are not installing Perimeter Blocking at this time go to page 16 for installing the roof insulation. If you did not purchase insulation for your yurt, go directly to page 20 for installing top cover.**

1. Locate and unwrap the package marked "Perimeter Blocking". Perimeter blocking is essentially 2x4 blocks fastened horizontally between the rafter supports and door(s). This blocking creates a secondary 'compression ring' near the top of the wall, so it is important that it be continuous. Do not omit blocks next to the door(s).
2. Due to variances in the rafter support spacing the perimeter blocking is prefinished, but provided in bulk lengths (approx. 8') that will need to be cut to fit on site. Measure and cut the 2x4's to fit between the rafter supports (near the top), then screw them into position. Staggering the blocks will allow you to secure screws through the rafter support into the end of each block as shown on **Diagram VIII**. Be sure to pre-drill pilot holes to prevent splitting the rafter supports or blocking.

Diagram VIII: Perimeter Blocking

When cutting blocks to fit between the rafter supports you can achieve a tighter fit and better aesthetics by angling the cut slightly. The angle settings for a miter saw listed below are approximate, but may be helpful:

12' Yurt - 9°	20' Yurt - 5°
14' Yurt - 8°	24' Yurt - 4°
16' Yurt - 6°	30' Yurt - 4°

Snow And Wind Protection

Do not let heavy snows collect on the roof in excess of 12". A push broom can be used to sweep down the excess, or a rope thrown over the yurt can be used to cut under the snow causing it to slide off. Also, be aware that you are risking possible snow avalanche damage to the yurt if you choose your site directly under a tall coniferous tree. A protective snow fence is a good idea where there could be a large snow bank or build-up exerting pressure against the side of the yurt. A freestanding, well built porch structure will keep snow build-up away from your entry area, providing easy access in case of heavy snow. Integrating expanded metal grating into the porch can also help prevent excess snow build-up in front of the door by allowing the snow to fall through.

For both heavy snow and wind conditions, or when roof snow load cannot be maintained regularly, four 4" x 4" posts should be installed under the center ring as an additional shoring-up system. (See Diagram IX) These posts are not included in the Snow & Wind Kit and can be purchased from your local lumber supplier. Make sure the posts are evenly spaced on the center ring, plumb and are supported by the joists under the floor (not just the flooring itself). The posts may be secured with Simpson 4" x 4" BC40 Post Cap/Base hardware (or equivalent) using wood screws at the top and bottom (or lag screws and angle brackets).

In areas where very heavy wind exposure is expected, we strongly recommend taking some extra precautions to prevent possible damage to the structure:

1. Purchase and install Pacific Yurts' cable tie-down system (*see page 42*) and perimeter blocking (*see page 12*).
2. Be sure your door is closed, windows are attached and the dome is closed during heavy wind.
3. The lacing on the yurt covers should be periodically checked and pulled tight if necessary. Optional zigzag lacing from the valance grommets to eyescrews, which can be installed around the base, is recommended in areas with frequent high wind (*see Diagram X*).
4. For domes with openers – Install a second pair of long springs and crimp the ends securely. This will put more tension on the dome as it is opened, so you shouldn't crank it up more than a few inches.

Diagram IX: Installation Of Interior Bracing

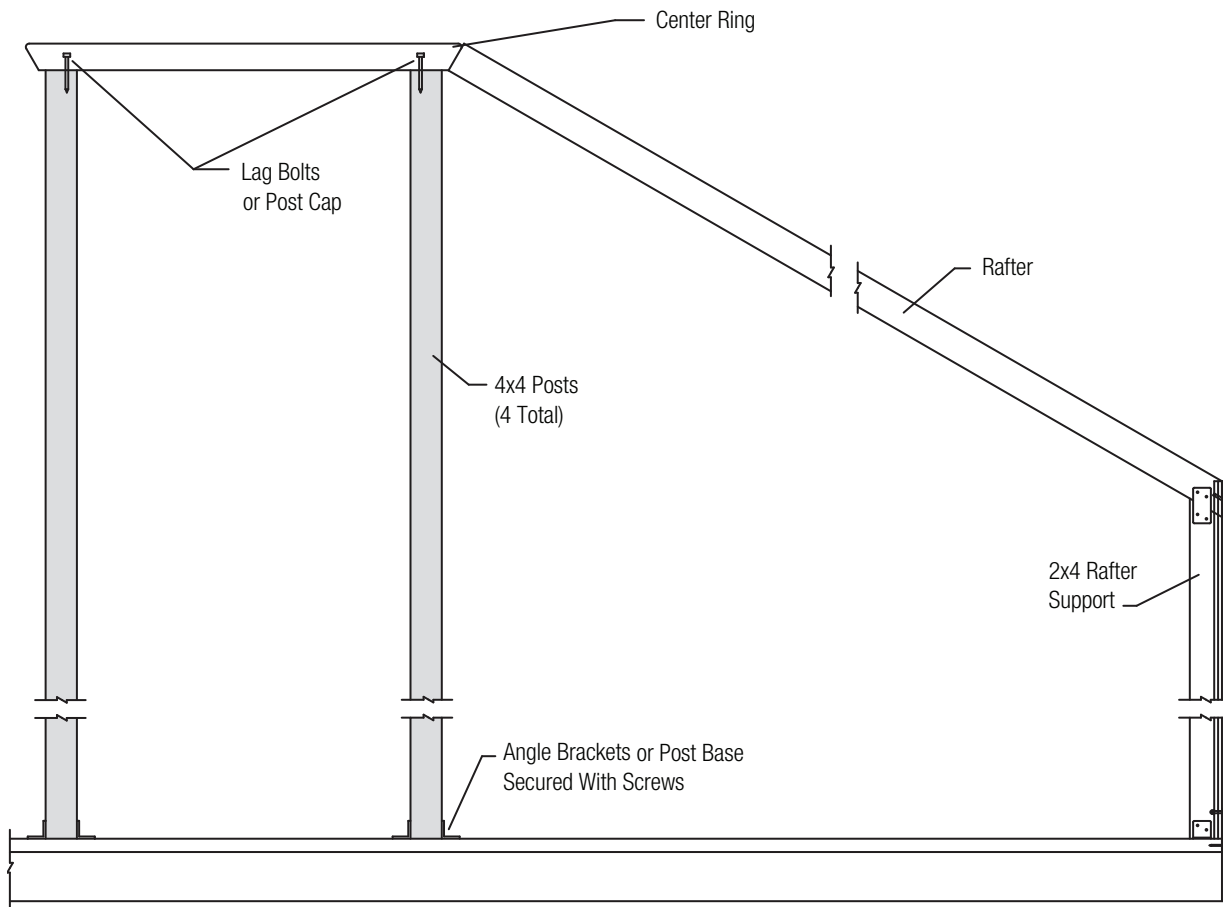
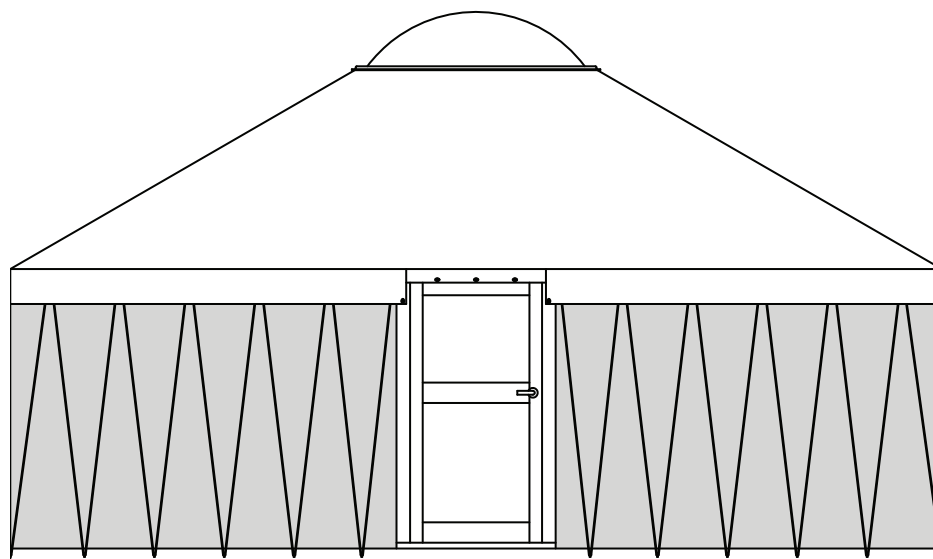


Diagram X: Additional Valance Lacing



Installing Insulation & Outer Covers

Insulating The Yurt

Many materials have been used successfully to insulate the yurt. Climatic conditions and individual considerations of light transmission, portability, comfort level and expense all are involved when deciding on the optimum insulation. In the milder climates no insulation at all may be required. However, in cold areas like Alaska or warm tropical climates, either our space age reflective insulation or Thermax insulation board or its equivalent (**see specifications page 38**) will provide more comfort. In colder climates we recommend insulating under the platform (see page 39). **Note: We do not recommend using blankets or other moisture retaining fabrics for insulation liners as they may cause severe mildew problems.**

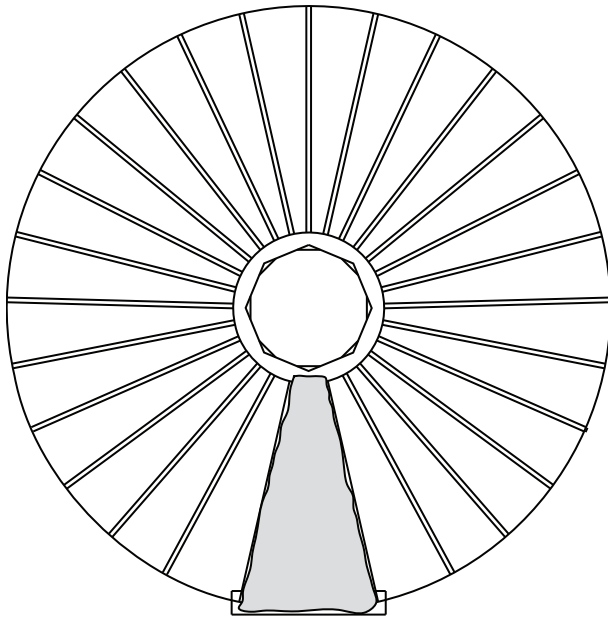
Roof Insulation And Liner Facing

If you did not purchase the roof insulation go to page 20 for installing the top cover. If you purchased the custom 1/2 roof insulation (which is used with a Solar Skylight Arc) please refer to the instructions on the page 18 instead of the instructions below.

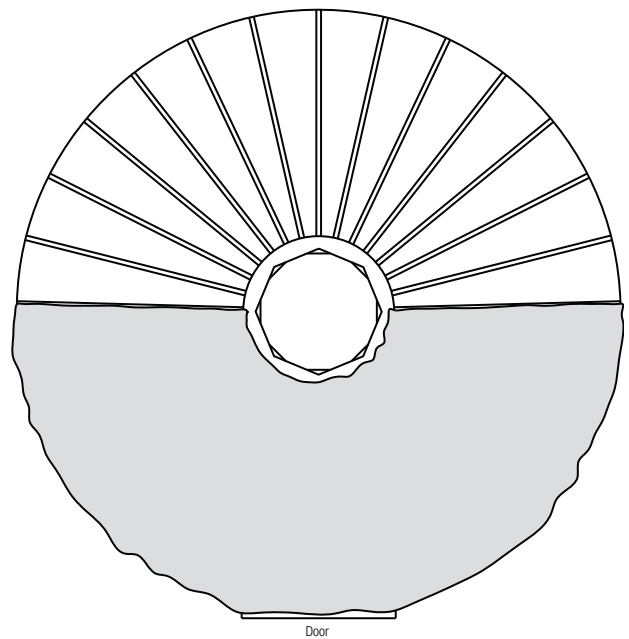
Choose a day for installation that is not too windy as this may cause the liner to blow away before it is properly secured. Install the fabric liner facing only after the rafters have all been put in.

1. Locate the fabric liner facing. It is a small bundle of ivory colored fabric. Note that the liner facing is not sewn to the insulation as with the wall insulation and that it is all one continuous cone-shaped piece that is folded.
2. Using a step ladder (or scaffolding) in the center of the yurt, carry the fabric liner facing up through the center ring, unfold and spread it out over the rafters while a helper pulls the hemmed edge down around the rafter ends. **(See Diagram XI)** Be sure the liner facing is installed evenly and overlaps the rafter ends equally around the yurt perimeter. In windy conditions the facing can be secured by using a staple gun to staple through the liner into a few evenly spaced rafter ends. This should hold the facing down tight. Before proceeding check that the liner has the rough seams facing upward and finished seams facing inward.
3. Lift the reflective insulation up onto the roof from below, placing it on top of the liner facing. One person should handle the upper end at the center ring while another works around the perimeter of the yurt.
4. Carefully unfold the insulation and bring both ends around until they meet.
5. When the insulation seam is properly aligned use the foil tape from the hardware box to secure the open seam. Tape the top half from the ladder at the center ring. Tape the bottom half from a ladder down below. **Helpful Hint:** You can reach the middle of the roof to seal the foil tape by using one of the "door stickers". (They were clamped into the door frame when you received the yurt.)
6. Check the insulation for fit. Trim the insulation at the door frame so it will not interfere with the operation of the door. **Do not trim the insulation that overlaps the side wall.** It will overlap the wall insulation for a draft-free seal. **Go to page 20 for installation of top cover.**

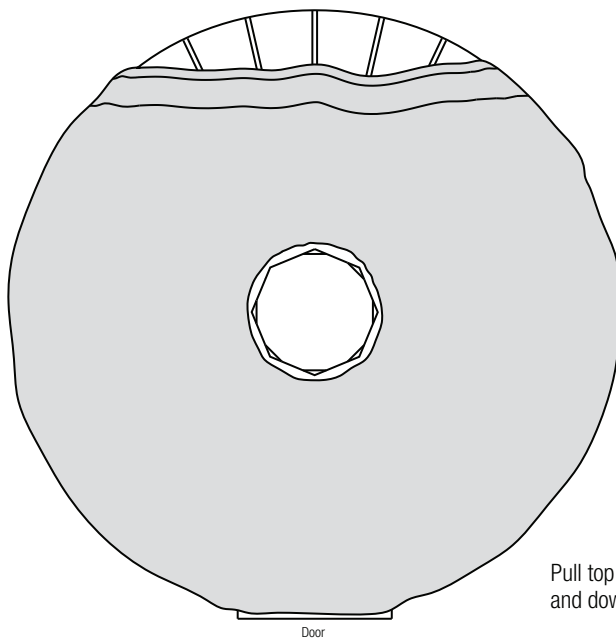
Diagram XI: Unfolding Roof Insulation Liner



Door
Slide liner down rafters



Door
Unfold liner



Door
Pull top layer over center ring and down to perimeter

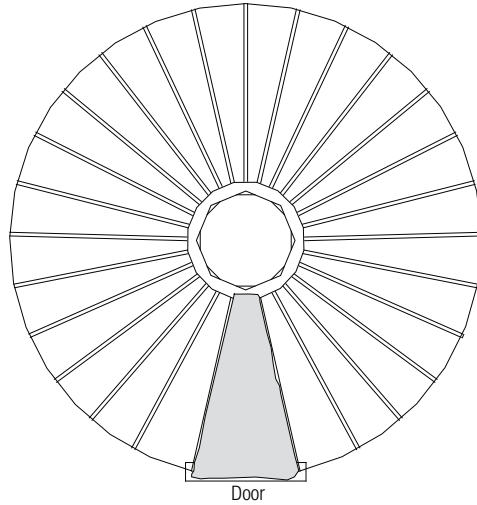
Custom 1/2 Roof Insulation

The 1/2 insulation is used with the optional Solar Skylight Arc. **If you did not specifically order the 1/2 insulation, go directly to page 20 for installing the top cover.**

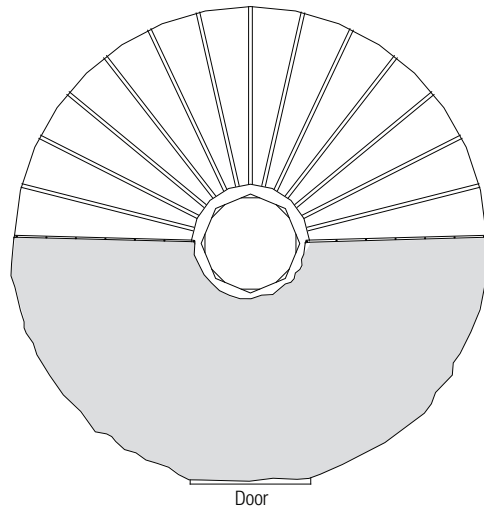
Choose a day for installation that is not too windy as this may cause the liner facing to blow away before it is properly secured. Install the fabric liner facing only after the rafters have all been put in.

1. Locate the fabric liner facing. It is a small bundle of ivory colored fabric. Note that the liner facing is not sewn to the insulation as with the wall insulation.
2. Using a step ladder in the center of the yurt, carry the fabric liner facing up through the center ring. Unfold and spread it out over the rafters while a helper pulls the hemmed edge down around the rafter ends (the top of the liner should not overlap the center ring more than 2"). You will notice that the liner will only cover half of the roof.
3. Position the center of the liner facing **opposite** the center of the Solar Arc position (refer to your "Exhibit A" diagram). Be sure the liner facing is installed evenly and overlaps the rafter ends equally around the yurt perimeter. Before proceeding check to be sure the liner has the rough seams facing upward and the finished seams facing inward. The liner facing can be secured by using a staple gun to staple through the liner into a few evenly spaced rafter ends and to the center ring. This should hold the facing in position.
4. There will be a few inches excess, which will be folded back over the reflective insulation and fastened to the top of the nearest rafter after the top cover is installed.
5. Lift the reflective insulation up onto the roof from below, placing it on top of the liner facing. One person should handle the upper end at the center ring while another works around the perimeter of the yurt and staple into position. Insulation should overlap the outside edge of the center ring by no more than 2".
6. Install top cover carefully so that insulation and facing will not be moved out of position. **(Instructions on page 20)**
7. After the top cover is in position, determine a satisfactory ending point for the insulation over the nearest rafter on either end of the solar arc. If necessary, carefully trim the insulation (**not the liner**) with scissors along the edge of the rafter being **very** careful not to damage the top cover. To protect the top cover from being accidentally cut during this process put heavy cardboard between the top cover and the insulation being cut.
8. Fold the excess fabric facing neatly back over the insulation and use thumb tacks every few feet along the top of the rafter for a neat finished appearance.

Diagram XII: Unfolding Custom 1/2 Roof Insulation Liner



Slide liner down rafters



Unfold liner

Note: Example reflects Solar Arc located at 12:00 position.

Top Cover

The top cover will be unfolded starting at the 6:00 door on your “Exhibit A” diagram. If you have multiple doors be sure the correct door cut-out is over the correct door frame by checking the style of door and layout plan noted on the “Exhibit A” diagram sent with your Purchase Agreement. If you have the roof insulation **it is highly recommended to sprinkle some baby powder onto the foil insulation before installing the top cover.** This will allow the top cover to slide more easily on the foil insulation and make adjustments easier.

1. Locate the top cover. It will be in a bag made from the same material as the top itself. Take your top cover out of the bag and remove the binding strap tied around it. Notice that the top cover has been folded into a long narrow triangle.
2. Using a step ladder set up under the center ring carry the top up through the center ring opening and unroll it down towards the 6:00 door frame. **Note:** The wide end of the triangle will be toward the door and the narrow end toward the center ring. **(See Diagram XIII) Caution: Premium top covers are especially heavy.**
3. With one person on the step ladder or scaffolding in the center of the yurt and another working around the perimeter of the yurt, unfold the top cover a little in each direction (2-3 folds).
4. Look for the door cut-out opening in the top cover valance. It is easily identified by the series of oval grommets around it (rather than round grommets). The door detail should be similar to that shown on **Diagram XIV.** This cut-out must be kept centered over the door frame during the rest of the installation process.
5. Unfold the top cover in both directions starting at the door until it is halfway unfolded and covers half of the rafters. Installing a few twist-lock connectors (see step 7) and securing the top cover at the door will help keep the door detail aligned.
6. The person at the top of the ladder should pull the top layer of top cover fabric up over the center ring and down the other side. It is helpful to tie a cord to a few grommets on the top cover and use the cord to help pull the top layer of fabric over the center ring and down to the perimeter on the other side. Finish by pulling the outside edge down snugly around the ends of the rafters. **Be sure that the top cover is centered** on the center ring and pulled down evenly around the perimeter. **Note:** The top cover does not need to be fastened to the center ring.
7. Check the final fit around the door frame and mark the oval grommet locations. Drill 7/64” pilot holes with bit provided and screw in the twist-lock connectors (from hardware box). **(See Diagram XIV)** Failure to drill pilot holes may result in breaking the twist-lock shank. Overtightening can also result in a broken shank.

Diagram XIII: Unfolding Top Cover

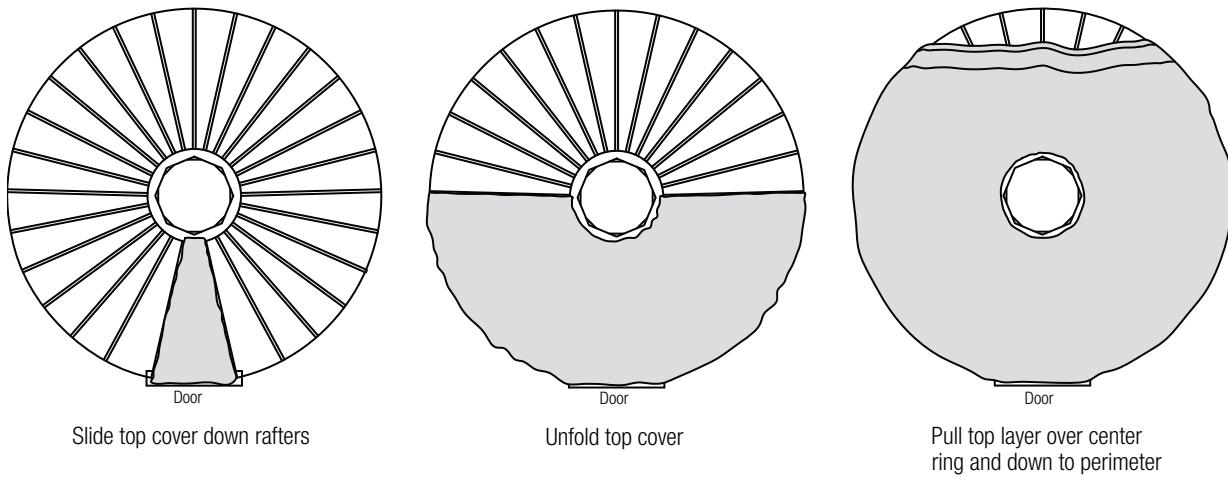
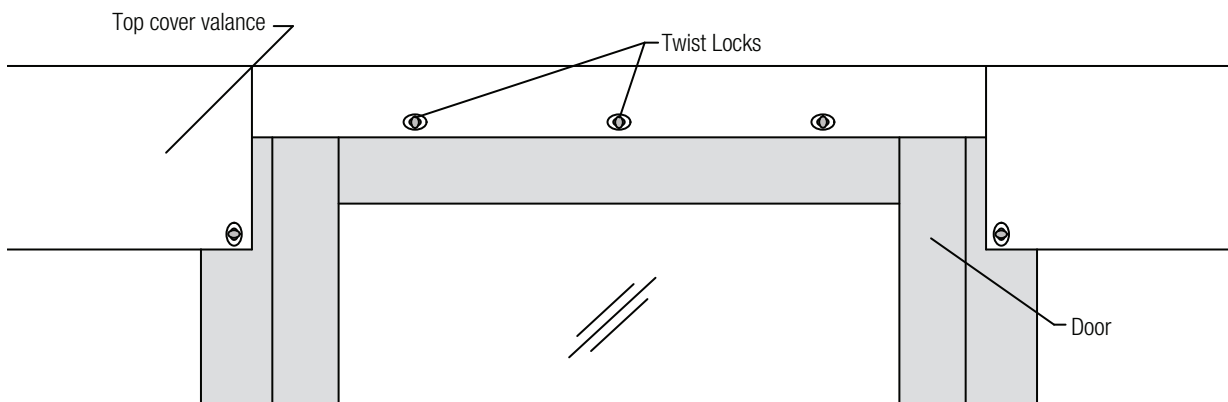


Diagram XIV: Top Cover Door Detail



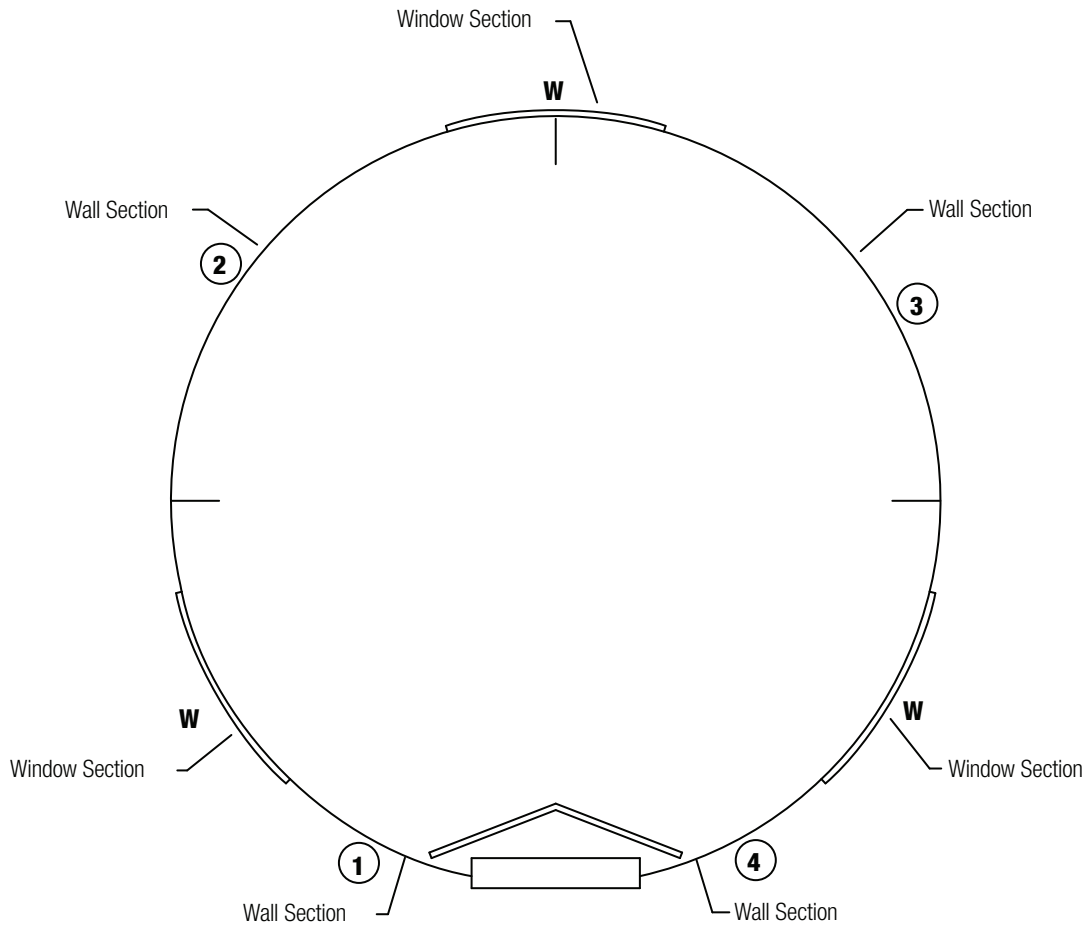
Wall Insulation With Liner Facing

If you did not purchase the wall insulation go to page 24 for installing your side cover. If you purchased the wall insulation continue.

Locate and open your wall insulation roll. A diagram of the window and door placement is taped to the foil side of the roll. This corresponds to the window placement you requested on your order. The insulation wall is made with the window sections separate from the wall sections. This approach allows you to locate the windows to match the side cover more exactly. There is a numbered sticker on the foil side of the **wall sections only** that will match the number on the diagram. All window sections are interchangeable (unless vertical or horizontal windows were ordered), so they are not numbered. Use the diagram on your insulation to help facilitate putting your insulation up in the correct order. **Diagram XV on page 23 is an example only.**

1. Starting with the first section of insulation at the edge of the door hang it **temporarily** (outside the lattice wall) from the steel tension cable with a few of the 'S' hooks provided. Grommets are installed at the top of the liner for this purpose. Keep in mind that the 'S' hooks will be removed and the wall insulation secured to the tension cable after the side cover is installed (**see #10, page 26**).
2. Work around the yurt clockwise hanging the wall and window sections according to your diagram. Overlap each of the sections approximately 10". This allows adjustment later to match your side cover window position should this be necessary for a better fit. **Note:** The overlap may not end up being 10" when you are finished. **Hint:** If you have the **vinyl** side cover, applying baby powder to the foil side of the insulation before installing the side cover will make it easier to adjust and achieve a tight fit.
3. After installing side cover (see next section) align the insulation window sections with the windows if necessary. Make sure the insulation panels end at the edge of the door frame. **The insulation does not get clamped into the door frame.**

Diagram XV: Wall Insulation Example



Layout is an example only

Side Cover

You will be hanging the side cover onto the 3/16" polyester cord that has been pre-installed through grommets **under the top cover valance (see Diagram XVI)**. This cord has been temporarily tied off at the door(s). The excess cord allows for adjustment and may be trimmed later. In order to expose this cord you will need to fold the top cover valance up so that it is out of the way during the installation of the side cover.

1. Locate the side cover. It will be in a bag made of the same material as the side cover itself. Take the side cover out of the bag. **Note:** The top of the side cover has the white clips and the bottom has metal grommets.
2. Two pieces of unfinished lath labeled "door sticker" were clamped in the door frame. These door stickers will be used when fastening the side cover into the door frame. In order to secure the side cover into the door frame you will need to loosen the wing nuts as much as you can without removing them.
3. The side cover will be unrolled starting at the right-hand edge of the door (outside the lattice) going counter-clockwise. Notice that the end of the side cover has a pouch for a door sticker to slide into (**See Diagram XVIII**). Slide the door sticker into the pouch then insert the side cover into the edge of the door frame (between the door frame and the wooden clamp) until it butts against the bolts (**see Diagram XVIII**) and tighten the wing nuts **very securely**.
4. Unroll the side cover around the perimeter attaching the nylon clips onto the 3/16" cord as you go. It works best to have one person unrolling the side cover around the yurt while another clips the side cover onto the cord. You can be sure the correct side of the cover is facing outward by confirming that the window screens face inward and the window flaps face outward. To attach the clips onto the cord, simply twist the clip 90 degrees to the left, slip it onto the cord and twist it back into position making sure the cord "snaps" into the clip on both sides. (**See Diagram XVII**). **Do not clip the side cover onto the steel tension cable.**
5. Notice that the end of the side cover at the left side of the door does not have a door sticker pouch. The side cover will get folded around a door sticker and clamped into the door frame. This allows for future adjustments. Pull all slack in the side cover around the circumference and fold the side cover overlap around a door sticker so that the excess fabric is between the side cover and lattice wall (or sidewall insulation) as shown on **Diagram XXVIII**. **Hint:** Attaching the excess side cover fabric to the cord before tucking the door sticker into the door frame will help hold it straight and avoid wrinkles. A tight side cover installation will be more aesthetic and provide a better seal to the platform.
6. If you have wall insulation, it helps to slide the insulation piece nearest the door to the side while securing the side cover into the door frame. You can slide it back after the side cover is secured in place. Now adjust the positioning of the door sticker for a tight side cover fit before inserting it into the edge of the door frame (between the frame and the wooden clamp) until it butts against the bolts (**see Diagram XVIII**) and then tighten the wing nuts **very securely**. **Note:** Do not "roll" the side cover around the door sticker.
7. Check the gap between the grommet strip under the valance (where the cord is installed) and the top of the side cover. This gap needs to be approximately 1" and consistent all the way around the yurt. (**See Diagram XVI**) Adjust the gap by tightening or loosening the cord until the gap is consistently 1" all of the way around, then tie the ends of the cord **securely** to the last grommet on the top cover next to the door. Excess cord may be cut and removed. Melting the end of the cord after cutting will keep it from unraveling.

Diagram XVI: Roof to Wall Connection

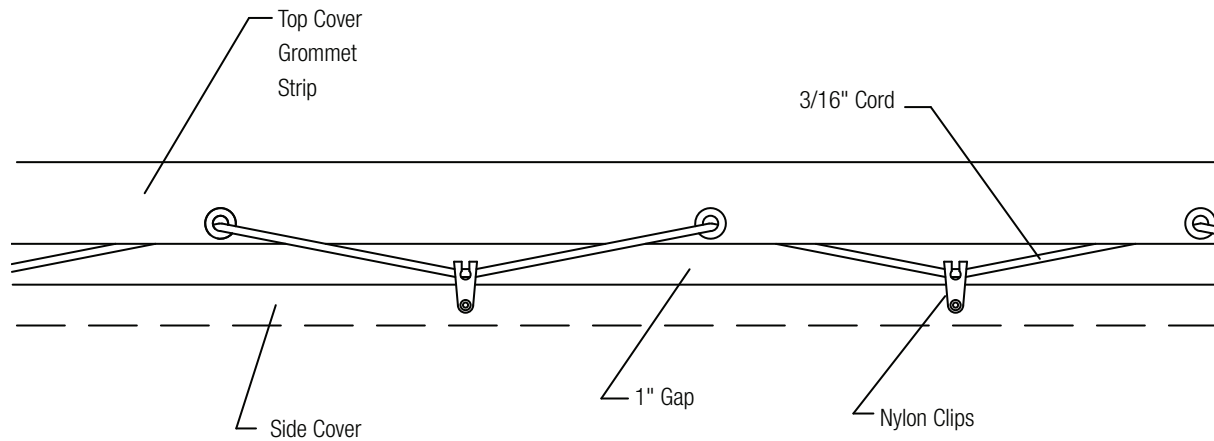


Diagram XVII: Attaching Side Cover Clips

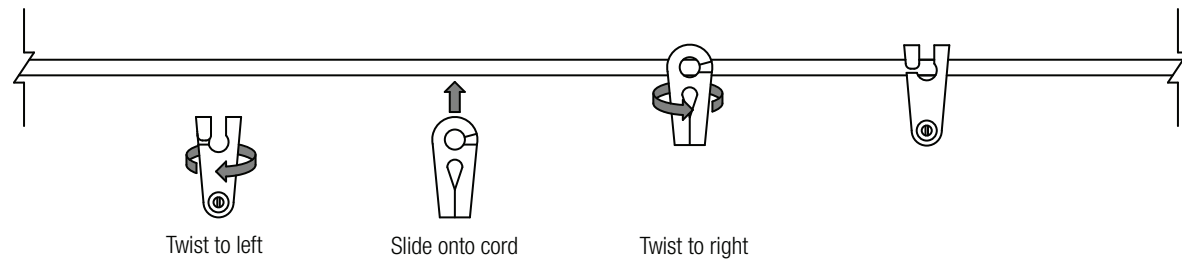
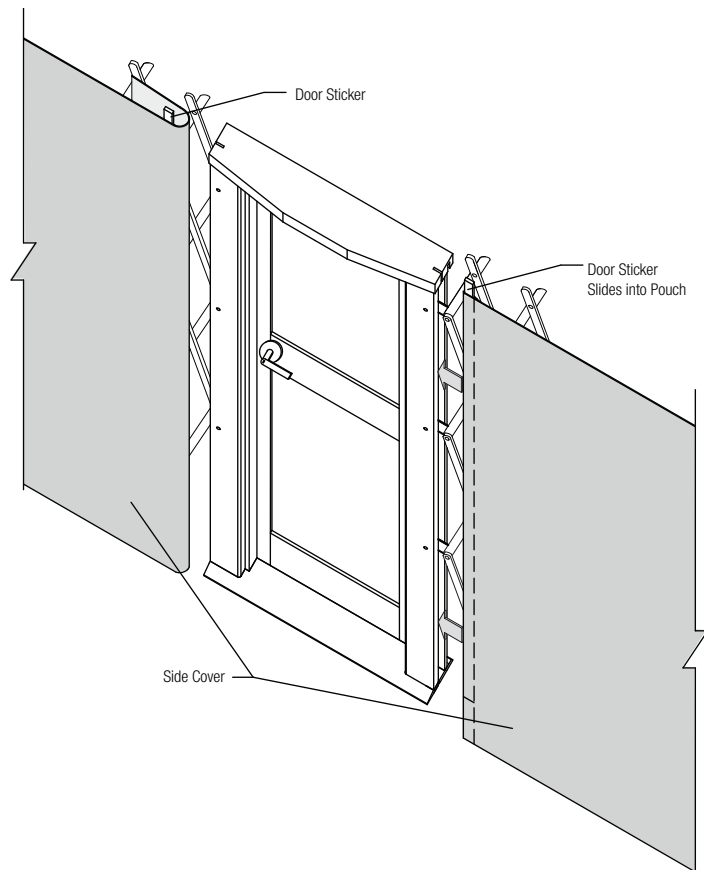


Diagram XVIII: Side Cover Attachment At Door



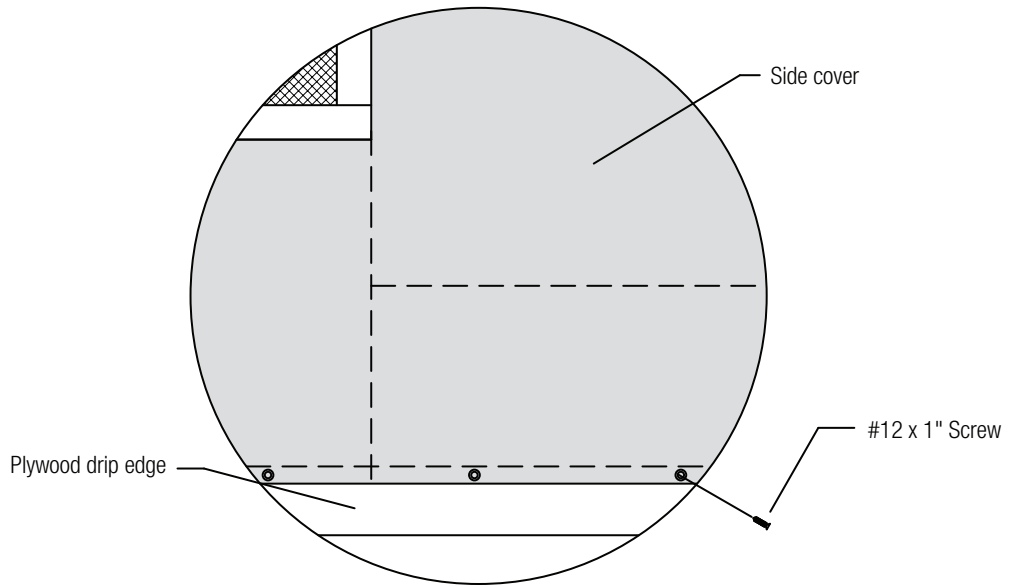
Notice that the vinyl windows are purposely oversized a little. This allows for natural shrinkage of the vinyl over time. If you purchased window twist locks, gathers will be present until the shrinkage occurs. You should distribute the excess into several small gathers (rather than one large gather) in order to achieve a proper seal.

Note: If a tighter seal between the side cover and the plywood drip edge is desired, foam weather stripping (available at local hardware store) can be used. To install, adhere the foam to the drip edge at the grommet line and drive the screws through it when securing the side cover.

8. Fasten the bottom of the side cover to the drip edge at the grommets using #12 x 1" Phillips head screws (included in the hardware box) as shown on **Diagram XIX**. A variable speed electric drill with a Phillips head driver works well for this and saves a lot of time. Keep the side cover an even distance from the bottom of drip edge for a good appearance. If the wall insulation is hanging below the side cover you will need to pull it up from inside the yurt before installing the screws. **Note:** Bottom of side cover should end up below the interior floor.
9. Be sure the side cover fabric hanging **below** the floor level at the door frame is folded neatly and pulled through the notch in the door threshold, then put a screw through it into the drip edge to create a good seal.
10. If you have wall insulation adjust the window sections to match the windows on the side cover, then remove all 'S' hooks. Secure the insulation window and wall sections to the steel tension cable with a few evenly spaced plastic cable ties (from hardware box). It is not necessary to use a cable tie on **every** grommet.
11. Slide the door clamp fascia boards back into the door frame to cover the wing nuts and provide a finished appearance.
12. Roll up the window flaps to create a drip edge for water runoff. Be sure to roll them **under** so that the runoff from the roof does not collect there. For privacy, most people install curtains or louvered blinds on the **inside** of the yurt rather than utilize the flaps for this purpose. For those times when you do want to drop the window flaps, they are zippered along the sides.

Note: When clear vinyl windows have been removed, do not stack them and leave them in the sun. See care recommendations in the back of this manual. UV web frames are available from Pacific Yurts if you are in a high UV area and wish to protect the Velcro (on your side cover) while the vinyl windows are off.

Diagram XIX: Securing The Side Cover



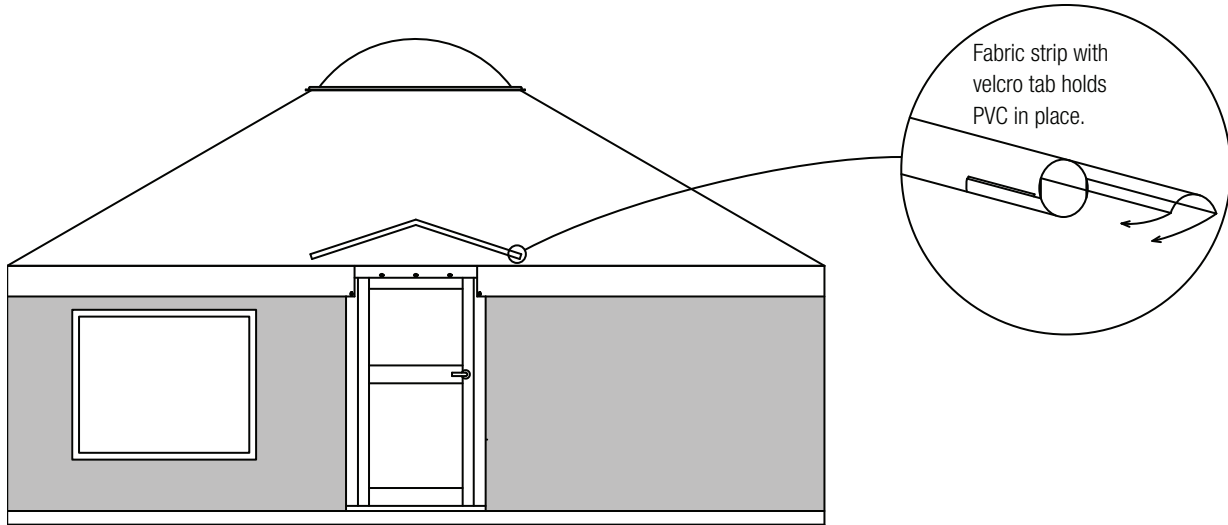
Top Cover Valance

1. Fold down the top cover valance (the portion of the top cover that overhangs the side cover). If you have our standard top cover you will have pairs of grommets on the underside of the valance hem where a cord has been pre-installed. If you purchased our premium (Heavy Duty) top cover you will have pairs of grommets along the bottom of the valance, but no pre-installed cord. Lacing cord has been provided in your hardware box to lace through the valance grommets horizontally around the circumference. Make sure to lace it so the majority of the cord is visible on the outside of the valance. With either top cover you will need to install eye screws (included in hardware box) in the edge of the door frame (level with cord in the valance hem) for securing the ends of the cord.
2. Pull the cord as tight as possible and tie it securely to the eye screws. This cord cinches the top cover valance tight against the wall for a good seal.
3. Using the seam sealer provided (in hardware box) coat the sewn seam, which connects the roof overhang (valance) to the top cover. (This is not necessary on Premium [Heavy Duty] top covers.) This must be done when the covers are dry and clean and it is best to do immediately after the top cover is installed.
4. It is also recommended to apply a coat (of seam sealer) to the seam at the top of the window flap (except on vinyl side covers).

If you purchased a door awning a local carpenter will need to build a frame to support the awning. Pacific Yurts can provide some ideas for this. If your yurt has a rain diverter over the door now is a good time to install the PVC pipe inserts.

1. Slide the PVC inserts into the pockets to make an inverted "V" over the door. The fabric strip can then be pulled down and attached under the rain diverter to secure the PVC into the pocket. **(See Diagram XX)**

Diagram XX: Rain Diverter Inserts



Dome Skylight

Dome Skylight (Without Opener)

If you purchased the dome opener option go to next section for installing the dome skylight. If you do not have the dome opener option continue.

1. Lay a blanket or cardboard on the top cover to protect it when sliding your dome skylight into position.
2. Working from scaffolding or a step ladder in the center of the yurt, toss a strong cord or rope to a helper outside the perimeter of the yurt and have them tie it to two of the eye bolts inside the dome.
3. Have the person at the perimeter set the dome on the blanket or cardboard so you can pull the dome up the roof of the yurt to the center ring (using the cord) then remove the cord.
4. Line up the hooks on the center ring with eyebolts on the dome and snap the hooks on **(see Diagram XXI)**. Be sure to align the numbers on the dome with the numbers on the ring.

Dome Skylight (With Opener)

Note: If you purchased a fan support you should install it prior to installing the dome skylight (instructions are in hardware box).

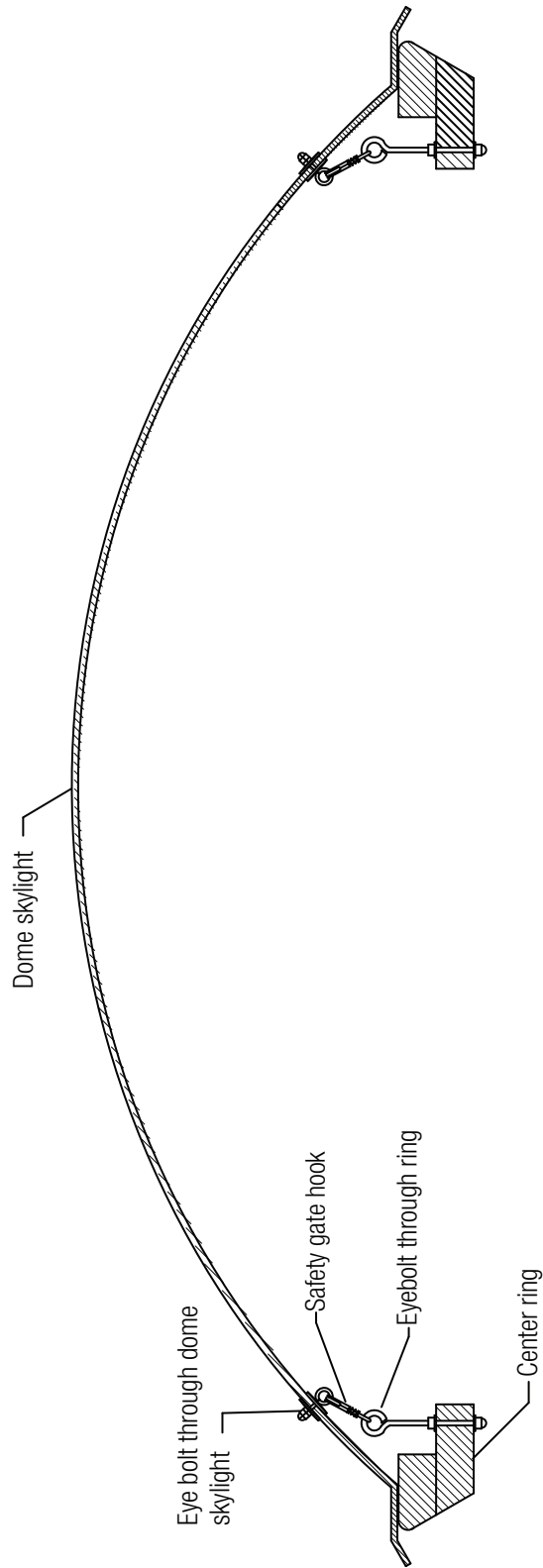
1. Lay a blanket or cardboard on the top cover to protect it when sliding the dome into position.
2. Working from scaffolding or step ladder in the center of the yurt, toss a strong cord or rope to a helper outside the perimeter of the yurt and have them tie it to two of the eye bolts inside the dome.
3. Have the person at the perimeter set the dome on the blanket or cardboard so you can pull the dome up the roof of the yurt to the center ring (using the cord) then remove the cord.
4. Align the aluminum bracket on the dome skylight with the aluminum bracket on the center ring and attach the three springs to the eyebolts on the dome.
5. Attach the dome opener (threaded chrome spindle) by removing the thumbscrew on the aluminum dome bracket and aligning the hole in the brass core of the spindle with the thumbscrew and securing the thumbscrew again. **(See Diagram XXIII on page 33)** The brass core will attach onto the thumbscrew **between** the two plastic spacers. **Make sure the inner brass core of the spindle is screwed all the way into the chrome portion.**
6. Loosen the bracket bolts on the center ring's aluminum bracket and align the holes in the chrome hub with these bolts. **It is very important that the brass core remains all of the way inside the chrome spindle as you do this.**
7. Tighten the ring's bracket bolts so they hold the chrome hub in position. **(See Diagrams XXII and XXIII)**
8. Crimp the ends of the springs closed with a pair of pliers so they don't pull off the eyebolts.
9. Attach the short safety cables to the eyebolts on the dome. **(See Diagram XXIII)** The safety cables will help hold the dome even if the wind stretches your springs. **Note: Be sure to keep the dome closed when you leave the yurt or during high winds.**

EXTREMELY IMPORTANT: When closing the dome skylight the opener should not continue to turn once the dome is closed. It should bottom out, which prevents overtightening that can result in a cracked or broken dome. If opener does not bottom out, it is installed improperly and should be removed and reinstalled per instructions above.

Diagram XXI: Non-Opening Skylight

Side View of Completed Assembly

Non-Opening Skylight



Note: The dome opener option is used not only to vent out excess heat, but also to vent moisture. The key to avoiding condensation is ventilation! Any time moisture is introduced into the yurt (by cooking, wet clothes or even breathing) it should be vented back out. Since warm air can hold more water vapor than cold air it is best to heat the yurt, then open the dome skylight on a regular basis to vent excess water vapor. This will minimize or eliminate condensation in the yurt.

Diagram XXII: Dome Opener Spindle

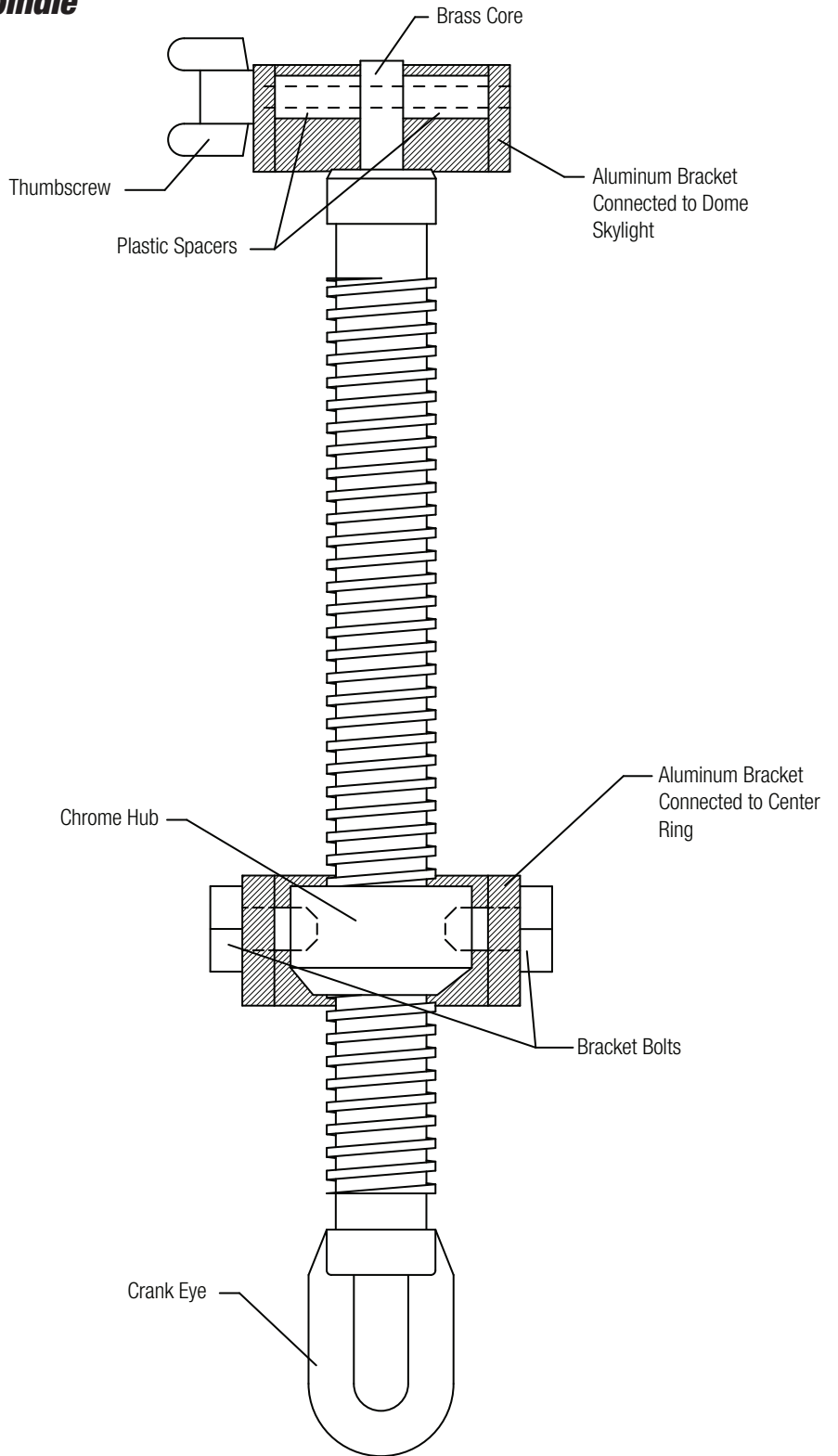
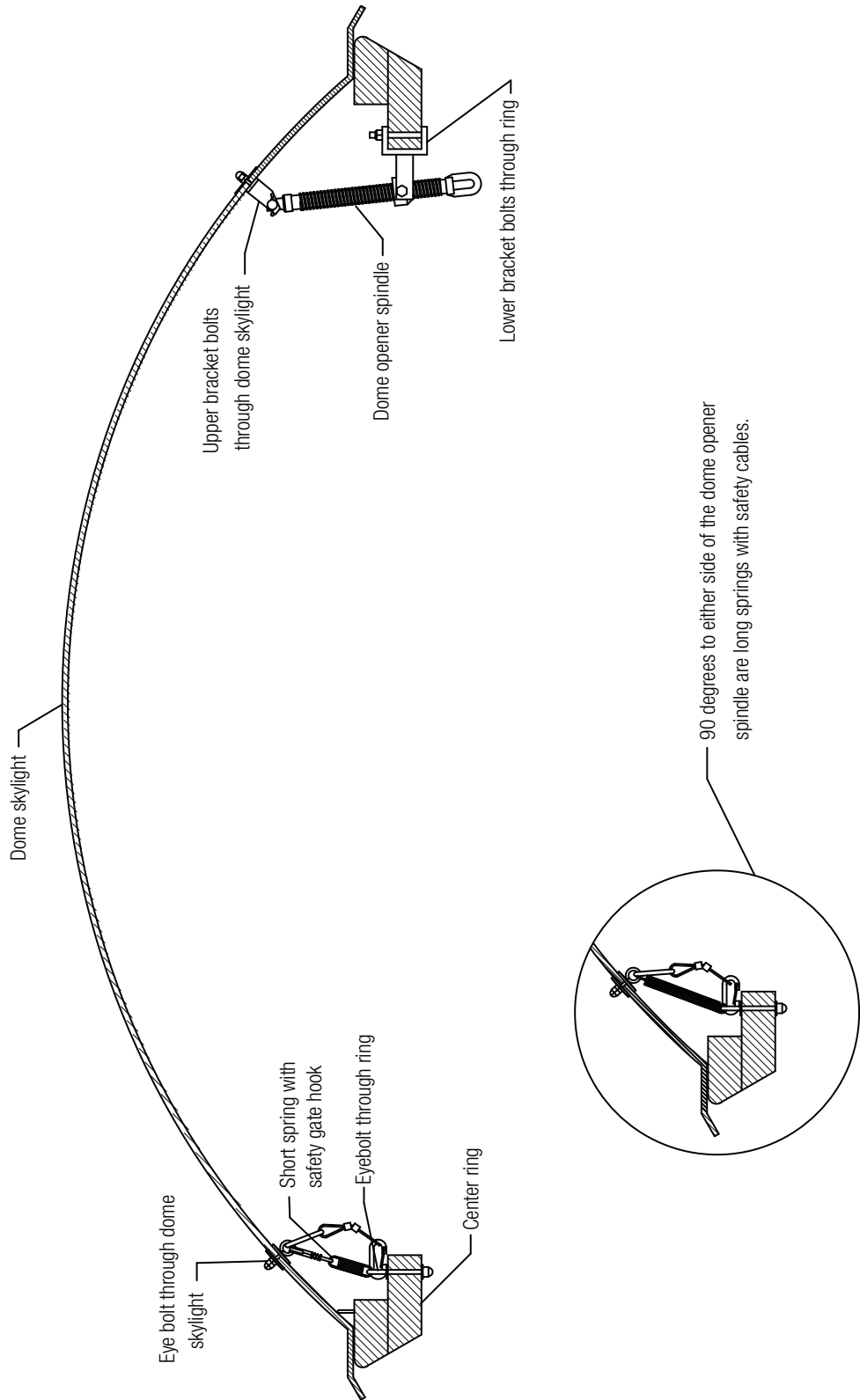


Diagram XXIII: Opening Skylight

Side View of Completed Assembly Opening Skylight



Stovepipe Installation

There are various ways to heat a yurt. Most conventional heating methods work, but may require advance planning and understanding of the yurt chimney exit installation (see pages 35 through 37) and consultation with your heating specialist. If the lattice wall is cut other than according to the diagram it may require custom cut flashing and reinforcement for the lattice wall. The size heater you should choose is relative to the yurt size, weather conditions and whether you have it completely insulated or not. Usually larger is better. For example, we recommend a 40,000 BTU woodstove or equivalent for an insulated 24' yurt in a cold climate. Following are instructions for a typical woodstove chimney installation. For more information consult with your heating specialist or contractor.

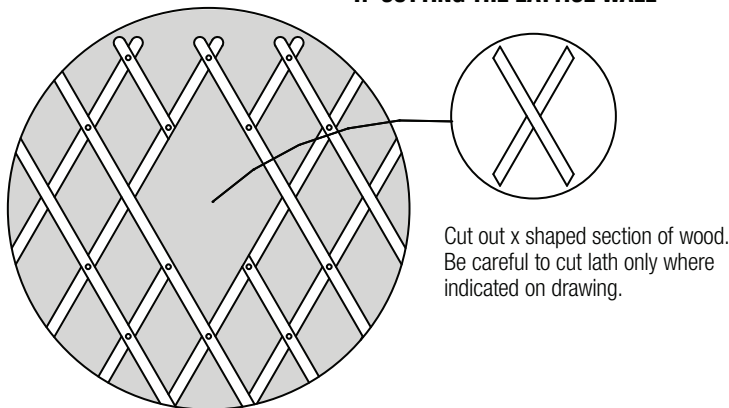
1. Locate your stovepipe on the side of the yurt where prevailing winds will carry the smoke and ash away from the roof. Once the location is determined, cut the lattice wall using a hand saw according to fig. 1 (**see Diagram XXIV**) leaving a diamond-shaped opening in the lattice wall.
2. Center the six-sided interior flashing over the exit hole. If you have the Snow & Wind Kit you should check to see if the center hole is at least 2" from the nearest rafter support. If not, adjust it to the left or right so that you have at least 2" of clearance from the rafter support and lattice wall.
3. Using a pencil, trace the flashing's center hole onto the side cover (or wall insulation) and remove the flashing. This is where the insulated stove pipe will penetrate through the wall of the yurt.
4. Using this circle as a reference, draw a larger circle with a radius that is 2" larger (**see fig. 2, Diagram XXIV**). This is where the side cover and insulation material will be cut so that none of the material is closer than 2" from the insulated stove pipe.
5. Using a sharp pair of scissors, cut and remove the (larger) circle of fabric.
6. Attach the interior flashing by means of the screws provided. Be sure to drill pilot holes first to avoid splitting the lath.
7. Attach the rectangular exterior flashing in the same manner by screwing through the side cover into the lattice wall making sure the opening is exactly lined up with the interior flashing's hole. Once again, be sure to drill pilot holes first. The top of the flashing should be slipped under the top cover valance (roof overhang) to act as a shingle for protection against leakage.
8. Install the woodstove on a fire-proof base **following the stove manufacturer's guidelines for specific clearances from combustible surfaces. Note:** The clearances shown on **Diagram XXV** are examples. Single-wall stovepipe can be used up to the exit flashing, where a Metalbestos or equivalent (insulated) pipe is inserted through the flashing to safely vent the hot gases through the side cover.
9. For the exterior stove pipe, you should use Metalbestos pipe or equivalent insulated pipe. The Metalbestos system must be well supported and needs to have only a few inches of clearance from the side cover. In high fire danger areas a spark screen must be used at the top of the chimney.

10. We recommend choosing your woodstove carefully. A large, quality made, airtight woodstove puts out a uniform heat over a long period of time, which is decidedly to your advantage. Also, consider the total volume to be heated and the fact that the yurt has a higher rate of heat loss than a typical insulated house of the same volume. Make-up air for the wood burning stove may be provided through a vent in the wood floor adjacent to the stove if needed. To prevent ashes from falling into the vent do not place it under the door of the stove. A fan near the woodstove or a ceiling fan mounted on the fan support (available from Pacific Yurts) helps circulate the heat throughout the interior.

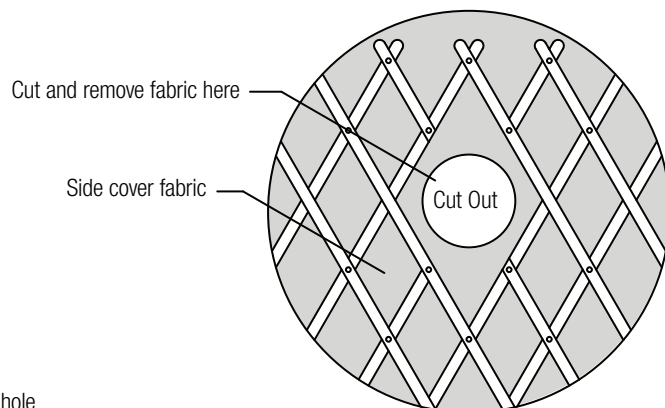
IMPORTANT NOTE: These recommendations should only be used as guidelines. To obtain more details about a safe and sensible installation in your area, and to comply with all local fire regulations, we recommend that you contact your local Fire Marshal. Safety is the best fire insurance.

Diagram XXIV: Stovepipe Hole

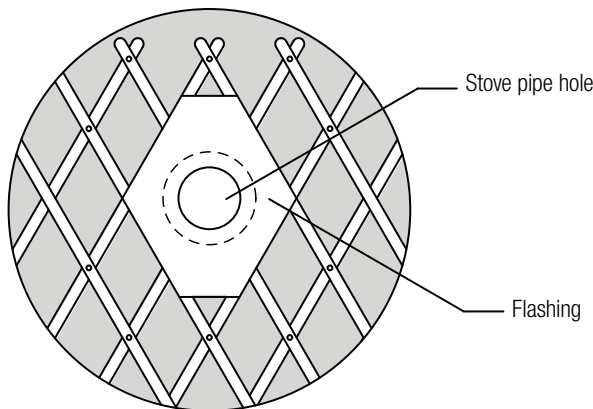
1. CUTTING THE LATTICE WALL



2. CUTTING THE SIDE COVER

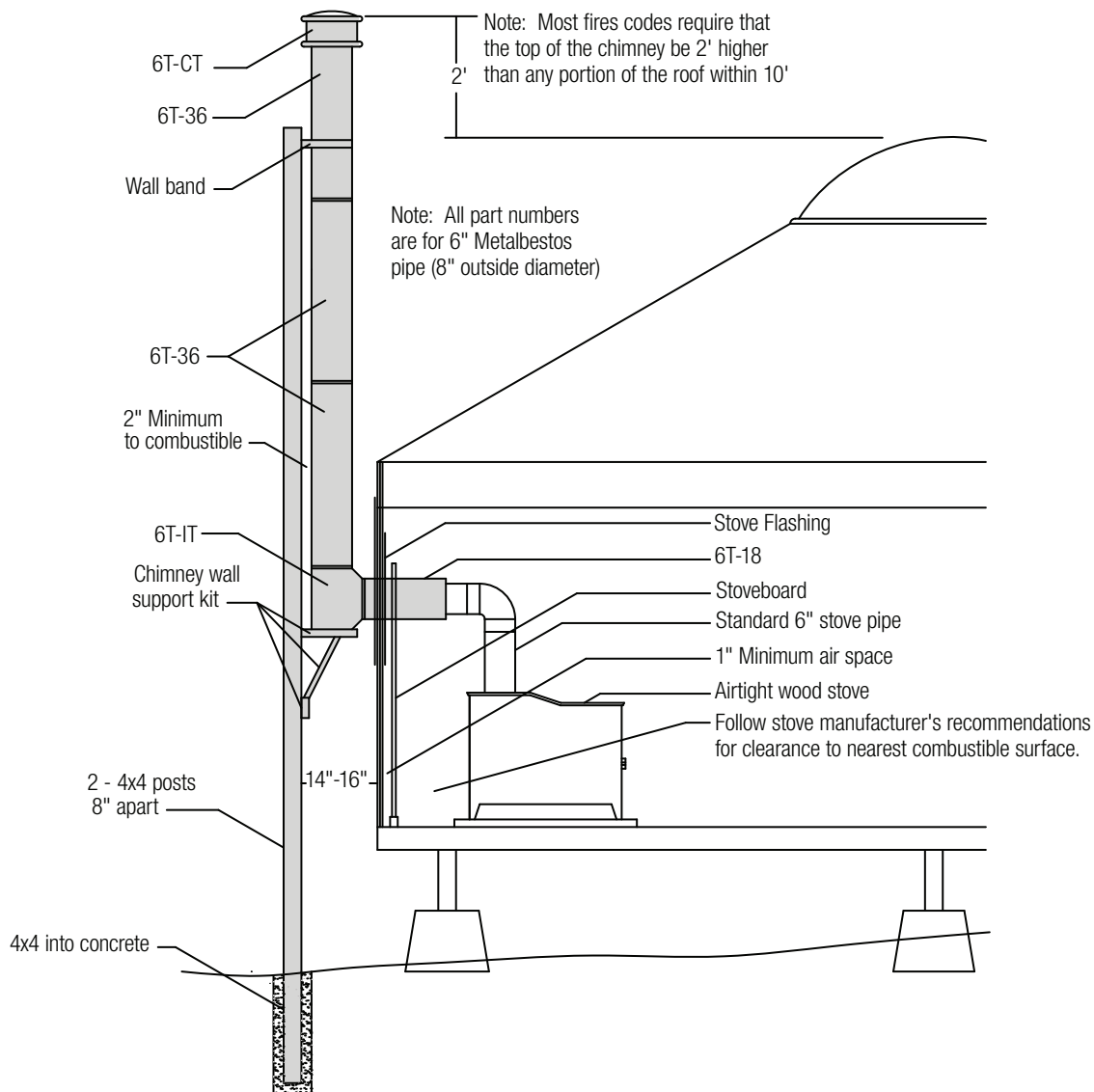


3. INSTALLING FLASHING (inside view)



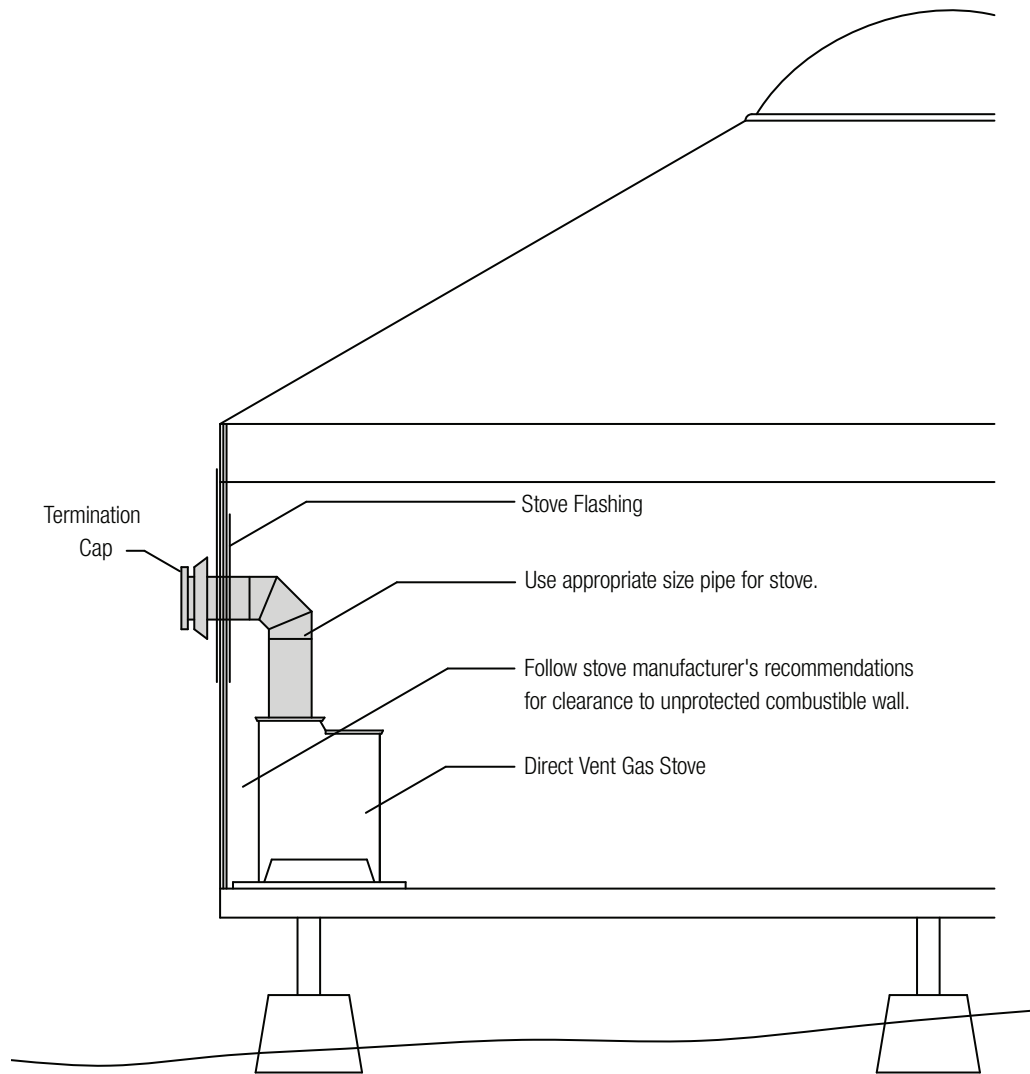
These specifications should only be used as a guideline. For more information contact your local Fire Marshal and stove dealer. Safety is the best fire insurance. Follow stove manufacturer's recommendations for clearances from combustible surfaces.

Diagram XXV: Woodstove & Chimney Installation



These specifications should only be used as a guideline. For more information contact your local Fire Marshal and stove dealer. Safety is the best fire insurance. Follow stove manufacturer's recommendations for clearances from combustible surfaces.

Diagram XXVI: Gas Stove Installation

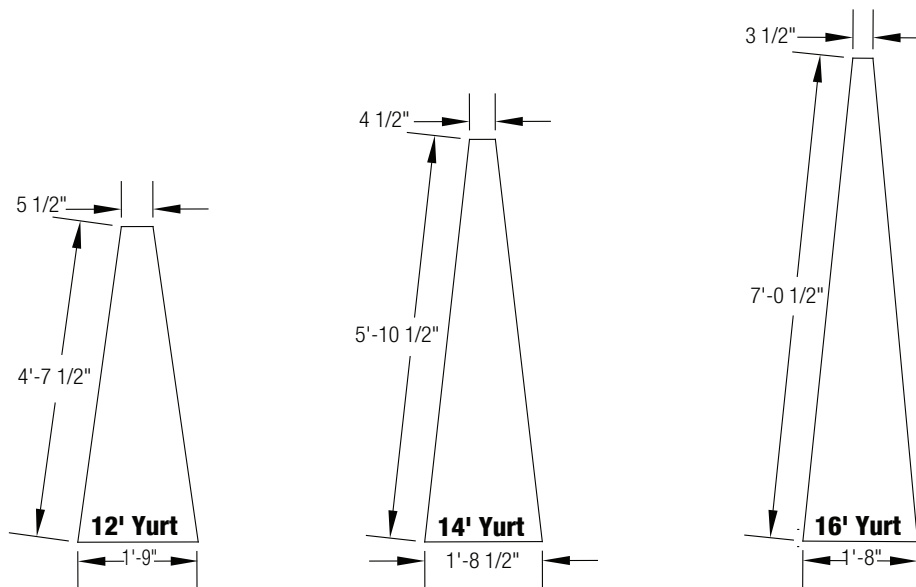


Additional Insulation Information

Insulating The Roof With Insulation Board

1. Use the dimensions on the *Diagram XXVII* to lay out a full-scale pattern on a piece of cardboard. Cut the pattern out and use it to check the fit between rafters. Make sure to space your rafters so that the center of the rafter is exactly at the center of its respective crotch when determining the fit of your sample pattern. Check several locations. You may have to make slight adjustments, since the hole spacing in the center ring (for the rafter pins) sometimes varies slightly.
2. Place your pattern on a sheet of insulation board. With a **sharp** knife trace the pattern on the board and then remove the pattern and finish cutting the panel. The remaining short pieces can be cut out of scrap and taped on using duct tape or glued on using a construction adhesive.
3. If you are using an insulation material that is not rated for exposed insulation, it is important to cover it with a flame-retardant fabric before installing it, or install a flame retardant liner onto the underside of the rafters to cover the insulation.
4. Either quarter round, 1" x 2" or some other molding fastened along the bottom edge of the rafters will hold the insulation panels in place.
5. The rafters can be spread apart to allow easy installation of the panels. The last panel can be installed by loosening the top cover and inserting from the outside.

YURT DIAMETER	TOP PANELS REQUIRED	# OF 4 x 8 SHEETS REQUIRED
12'	20	5
14'	24	6
16'	28	7

Diagram XXVII: Insulation Board Pattern**Floor Insulation**

For optimum comfort it is desirable to install insulation under the floor. Reflective insulation is easily installed and available from Pacific Yurts in 4' wide rolls. It can be stapled between the 4" x 6" joists or to the bottom edge. Rigid foam insulation board is also recommended and can be cut to fit between the joists and supported with protruding nails or wood strips used as stops. Alternatively it can also be nailed to the underside of the joists in full sheets and trimmed at the perimeter joists. Use large head simplex nails or lath strips when nailing so that the insulation board is firmly attached and will not work itself loose. Standard fiberglass roll insulation also works when wire mesh or equivalent is used to support and protect it. Even so, certain nesting creatures find this material attractive for their nests and this could reduce its effectiveness.

Additional Options

Door Screen Curtain

Notice that the screen curtain is made in two pieces that will overlap in the middle.

1. Take one of the halves and hold it up to the inside (for an outward opening door) of your door frame so that the weighted end hangs just above the door threshold and the right side is even with the outer edge of the door frame. Using staples or thumbtacks, secure it to the inside of the top door sill.
2. Now take the other half of the curtain and hold it up to the inside of the door frame so that the weighted end hangs just above the door threshold and is even with the left side of the door frame. Secure it just as you did the right side.
3. Trim excess screen above the top door sill. For a clean, finished appearance a strip of molding can be screwed over the staples or thumbtacks.

Center Ring Insert

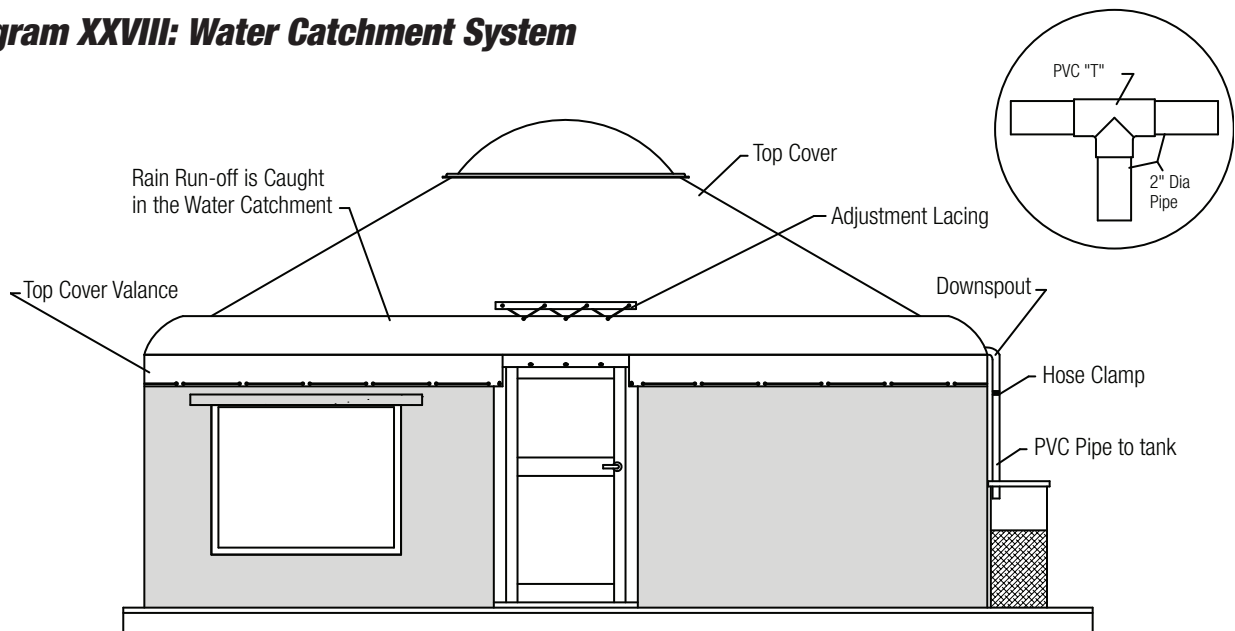
The center ring insert should be installed after the entire yurt has been set up.

1. Using a step ladder in the center of the yurt, slip the center ring insert into the underside of the center ring. Be sure the side of the center ring insert that has the screen (or fabric) attached to it faces up. The center ring insert has been made to install around the dome opener bracket, so also be sure to line up this opening with the bracket.
2. Once it is in place, screw the center ring insert to the center ring in the predrilled locations with the screws provided.
3. If the center ring insert has screen, a screen patch has been included for installation to the underside of the center ring insert at the dome opener spindle location. It can be secured with staples, tacks or an adhesive. Before attaching it, mark and cut a small "x" for the dome opener spindle to protrude through.

Insulated Window Cover

Pacific Yurts' insulated window covers are designed to attach to the buckles under the window flap (on the outside of the yurt) and block off the window, providing better heat retention during cold conditions. Notice that one side of the insulated window cover has an ivory colored liner fabric on it. This provides an attractive appearance once the window cover has been installed.

1. From outside the yurt, unbuckle the window flap and let it unroll. Notice that when this is done the male-end buckle under the flap is not being used. This is where the insulated window cover will be installed.
2. Clip the female-end buckles on the insulated window cover to the male-end buckles under the window flap so the ivory colored liner faces the yurt and the foil faces out.
3. Lower the window flap and zip it closed.

Diagram XXVIII: Water Catchment System**Water Catchment System**

The yurt should be completely installed according to this manual. If the yurt has an awning, roll it up and secure it so it is out of the way. The water catchment system is essentially a second valance on the top cover that will be folded upward to create a gutter.

1. Go around the yurt and fold the outermost valance (water catchment) upward onto the roof. Notice that the water catchment has a cord installed into the hem, which has cut-outs approximately every eight feet.
2. Carefully pull the cord in the rim hem to tighten the circumference. Tightening the cord evenly around the perimeter will create the fabric gutter. Be sure not to tighten the cord too much. It just needs to be tight enough to make the circumference smaller than the circumference of the yurt.
3. Tie the cord in a knot so the gutter will hold its shape.
4. Using the PVC cement provided, glue the 6" long sections of 2" diameter pipe into the PVC "T" (see diagram - upper right).
5. Insert the PVC "T" assembly into the downspout. This will prevent the downspout from pinching off the water flow.
6. The sections of larger diameter (4") pipe are provided for placing horizontally in the fabric gutter (evenly spaced) around the perimeter to hold the fabric gutter away from the roof.
7. Notice that the top cover has one or more (larger yurts have more than one) strips of grommeted fabric welded above the fabric gutter.
8. Using the nylon lacing cord provided, lace the grommeted strip to the corresponding grommets on the fabric gutter. This is the adjustment lacing. By tightening or loosening it you can control the water flow toward the downspouts.
9. Using a hose clamp, fasten a length of 2" diameter pipe (available at local hardware store) into the downspout and run the pipe into your water storage container.

Note: Installing 1/2" diameter PVC pipe into the rim hem to create a continuous rigid rim on the water catchment will make the catchment system function better and look nicer. This may be purchased at a local hardware store.

Removable Cable Tie-Down System

If this option was purchased there will be four eyebolts installed in your center ring for the Cable Tie-Down to attach to.

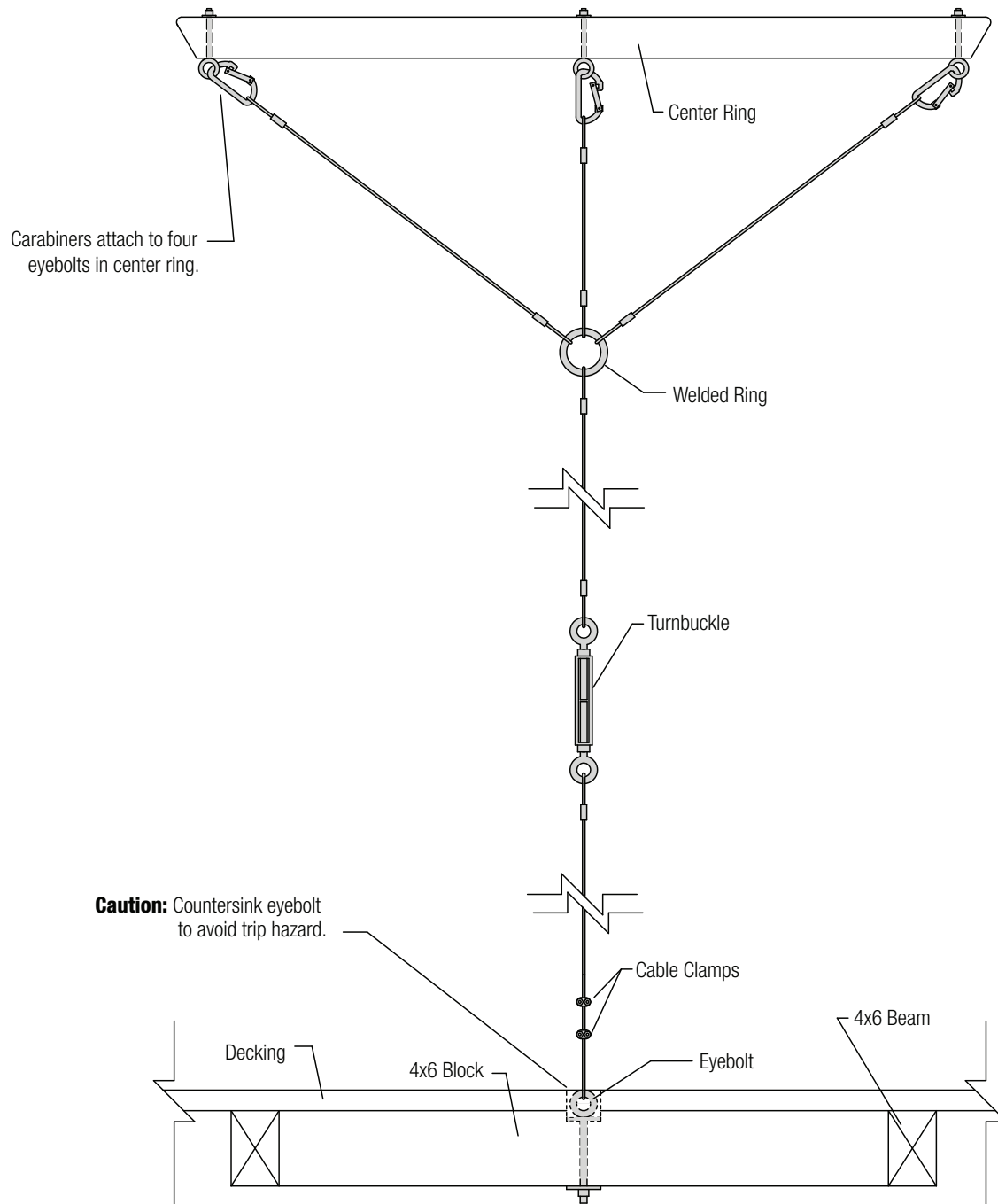
1. Locate and mark the exact center of yurt floor.
2. Drill a 9/16" hole completely through the flooring at this center mark.
3. Cut a piece of 4x6 to fit between the existing beams under the floor at the center point and secure it into position.
4. Drill the 9/16" hole completely through the 4x6 block. This 4x6 will ensure that the cable tie-down system is securely fastened to your platform. **Note:** Counter-sink the hole in the flooring 2" deep using a 2" drill bit to avoid a trip hazard.
5. Install the large eyebolt provided through the hole and secure with the large washer and nut. **(See Diagram XXIX)**

The cable tie-down has a steel ring with four shorter cables and one longer cable attached to it. The four shorter cables have carabiners. The longer cable has a turnbuckle in the middle of it.

1. Clip the four carabiners to the eyebolts installed in the center ring. The longer cable should hang down to the floor.
2. Remove the cable clamps at the bottom of the long cable and thread the cable through the large eyebolt in your floor.
3. Pull the cable tight, secure the cable clamps and trim any excess cable. **Note:** If the Cable Tie-Down is left in place be sure to check the cable clamps regularly making sure they are tight.
4. Use the turnbuckle to tension the Cable Tie-Down by twisting the center hub until the cables start to pull the center ring downward. **Do not cinch it down tight, just snug!**

To remove the cable tie-down, loosen the turnbuckle, unclip the carabiners from the center ring and remove the cable clamps.

Diagram XXIX: Cable Tie-Down System



Perimeter Gutter System

The yurt should be completely installed prior to installing the perimeter gutter system.

1. Loosen the valance cord and fold the top cover valance upward onto the roof of the yurt to expose the connection between the top cover and side cover. There should be a gap of approximately 1" where this connection occurs. This is where the hanger brackets will be installed.
2. Slip the angled end of the hanger bracket under the top cover so that it matches the angle on the rafter (**see Diagram XXXI**). In order to do this you will need to carefully cut a horizontal slit through the inner valance on your top cover (using a razor or utility knife) wide enough for the aluminum bracket to slide through. **Note:** If you have roof insulation the bracket should go between the top cover and foil insulation.
3. After aligning the bracket with the end of the rafter drill pilot holes into the end of the rafter. **Failure to drill pilot holes can result in split rafters, which can weaken the yurt.** Using the screws provided secure the hanger brackets to the ends of the rafters (**see Diagram XXXI**). Fasten hanger brackets onto all rafters except rafters over the door(s).
4. Starting with the end of a gutter section approximately 6" from the left side of the door frame snap the gutter section into the hanger brackets going clockwise around the yurt. The sections of gutter are interchangeable, so they do not have to be installed in a particular order. The hanger brackets should end up approximately in the center of straight gutter segments.
5. Decide where you want your center drop(s) and down pipe(s) to be. Whenever possible try to locate the center drop opposite the door or near the midpoint of the gutter (large yurts have multiple center drops). Remember that if you place a center drop over a window your down pipe will be in front of the window and make it difficult to access for ventilation.
6. Cut the gutter where the center drop is to be placed so that the edge of the center drop is at least 2" from the nearest joint and does not interfere with the hanger bracket (**see Diagram XXXII**). You will need to cut out a 1"-2" section of the gutter that will be centered in the center drop.
7. Cut the ends of the gutter (by the door) to remove the molded end and so that the gutter ends approximately 6" from the edge of the door frame. Having the gutter too close to the door will create a long unsupported end section that will not drain properly. The molded ends have to be cut off so that the end caps can be installed.
8. Using the cement provided, glue the sections of gutter together (follow instructions on tube) and rivet them using the 1/8" rivets provided. When riveting the sections together insert the first rivet from the outside of the gutter and apply a backup washer to the back of the rivet (on the inside of gutter) before 'popping' the rivet. The washer goes on the backside of the rivet to prevent it from working loose and coming out. Install a second rivet in the back edge of the gutter as well (from inside the gutter).
9. Glue the end caps into position.
10. After allowing the cement to fully set up, fold the top cover valance down into the gutter and re-attach the twist locks and valance cord at the door frame.
11. Attach the pipe holder to your platform's drip edge below the side cover and secure the down pipe into the pipe holder and center drop.

Diagram XXX: Gutter Parts

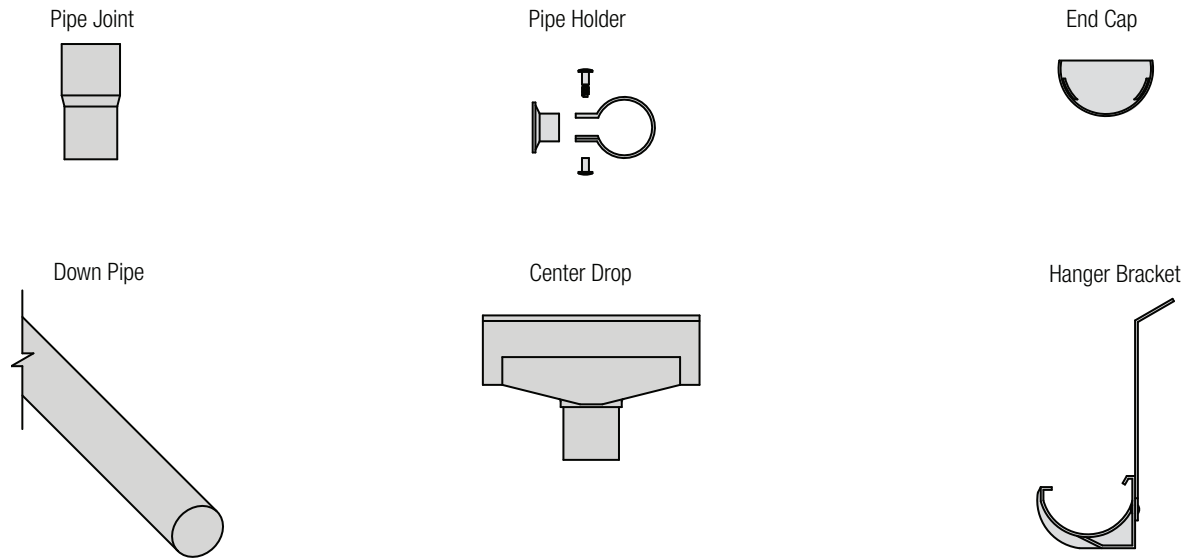


Diagram XXXI: Gutter Hanger Bracket

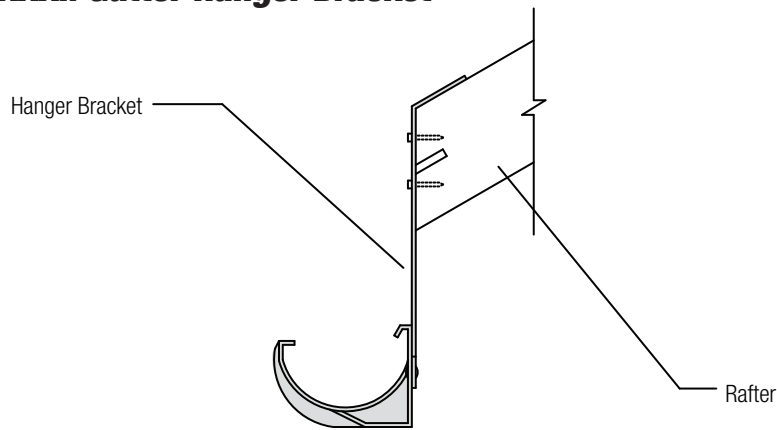
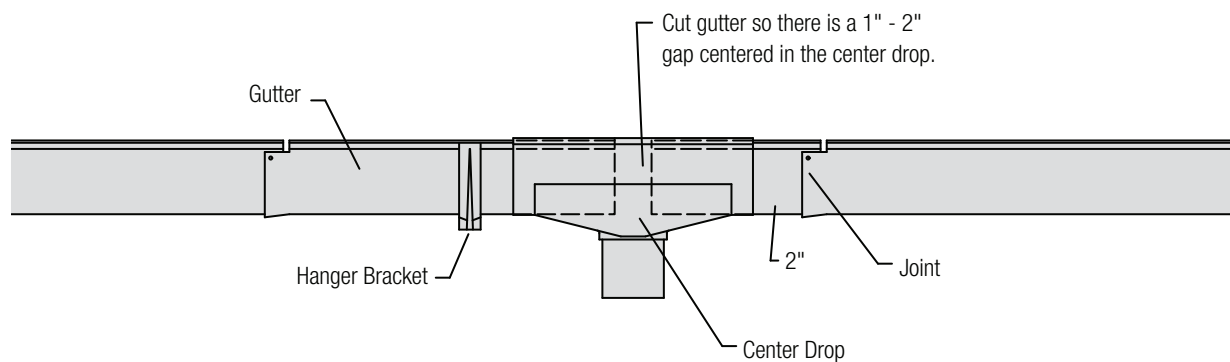


Diagram XXXII: Gutter Assembly



Care & Maintenance

Vinyl Covers

As with any quality product, there are several cautions and care recommendations that must be observed to get the longest possible functional life from your fabric covers.

An accumulation of dirt or soiling can create an ideal environment for bacteria to grow and cause staining of the fabric. It is important that this be removed regularly to maintain appearance and longevity of the fabric.

The vinyl covers should be cleaned at least twice a year with a mild soap (Ivory soap) and warm water. We have found this to be the least aggressive to the fabric. Recommendations for cleaning include hand scrubbing with a soft bristle brush using a ladder around the lower perimeter areas and using the dome opening for access to the top areas. A swimming pool brush with an extension handle and hose attachment would be a good investment for this purpose. Be sure to protect the top cover before sliding the dome down to remove it. In areas where tree sap and leaves are a problem, it may be necessary to clean the top every few months. If mildew is ever found growing on the roof, it should be removed with soap and water. In the event the roof ever becomes torn, it can be repaired with a standard vinyl patch kit available from Pacific Yurts. Always be sure the covers are **completely dry** before storing them.

100% Polyester Side Covers

This material is also relatively maintenance free. It should be kept clean (see cleaning recommendations for vinyl covers above), never stored wet, and kept free of mildew much the same as the vinyl covers. The side cover may be treated with a clear water repellent if needed. This may be available through your local canvas or awning dealer. Be sure to follow instructions. Side cover should be clean and dry before applying water repellent. Seam sealer is also available.

Stove

A stove adds a comforting dimension to the yurt space, but along with it, the danger of fire. A cover treated with a fire retardant does not mean it is fire proof. **Safety is the best fire insurance.**

1. Clean stove pipe at regular, monthly intervals.
2. Keep stove a safe distance from any combustible surface!
3. Flashing is designed to receive 6" (inside diameter) Metalbestos (or equivalent) insulated pipe rated to be two inches from a combustible surface.
4. Invest in a small fire extinguisher. Fire is always a danger when woodstoves are used.
5. Seek advice from your woodstove dealer if you have any questions or **give us a call.**

Lattice Wall

The lath is made from kiln-dried Douglas fir for its strength and resilient properties. Because of the nature of this wood a piece of lath may occasionally split or break even under normal usage. Replacement lath and rivets are available from Pacific Yurts.

If a piece of lath should break. . .

1. From the **outside** of the lattice (the side with the hole in the rivet), use a 1/4" bit to drill out the rivets on the broken piece of lath. When the rivet top is drilled off, **carefully** tap the bottom part out with a hammer and punch.
2. Replace broken lath piece by lining up the holes in the pieces of lath to be riveted and placing the bottom part of the rivet through the hole from the inside of the yurt. Put the top of the rivet into the bottom part and with a *rivet tool pop the rivet, being sure it is flush on the inside and outside of the lattice. Repeat these steps with the other holes.

* Available at most hardware stores or rentals.

Adjusting The Door

If the door is not closing properly, it may not be hanging square. An easy remedy is to loosen the wing nuts on the door clamps, remove the screws anchoring the door frame to the rafters and floor then shift the door. Re-tighten the wing nuts on the door clamps and re-install the screws anchoring the door frame to the rafters and floor.

If the door appears to be bowing outward at one corner the frame may be out of alignment. To adjust this remove the screws anchoring the door frame to the rafters above it and push outward on one corner (at the top) of the door frame. Watch to see if the problem corner of the door is corrected or gets worse. If it seems to get worse when pushing on that corner you will want to push on the other corner. This will pull the corner of the door inward into proper alignment. Re-install the screws into the rafters to hold the door frame in proper alignment.

Door & Door Frame

All exterior wood should be re-coated with cedar semi-transparent (such as Superdeck 1901) or solid body stain or equivalent every year or as needed. Sand lightly or use deck cleaner before applying the stain. Note: Adding a covered porch or awning will protect the door and make the finish last much longer.

Lubricate door knob on a regular basis with graphite or Teflon based lubricant.

Dome Skylight And Door Window

Wash acrylic dome and door window with a mild soap (dish washing liquid), plenty of lukewarm water and a soft cloth. Rinse with clear water. Never use paper towels or other paper products, which tend to scratch the surface finish. Novus plastic polish or equivalent and a soft cloth can be used to polish the acrylic surfaces.

To remove grease, oil or tar, use a good grade of hexane or kerosene. Immediately wash away oily film residues with a mild soap and water solution.

Do not use window cleaning sprays or solvents. Alcohol may cause crazing (many small cracks).

Vinyl Windows

Always roll the vinyl windows, as folding them makes creases that impair vision and weaken the material. Rolling them with a clean cotton towel reduces the possibilities of scratches. Clean the windows with a soft cloth and warm soapy water. Novus plastic polish or equivalent and a non-abrasive cloth can be used to polish the vinyl windows. These surfaces scratch very easily with even the finest dust, so hose off dirt before cleaning. Never use paper towels or newspaper when cleaning the windows. When vinyl windows have been removed, do not stack them and leave them in the sun. **Note:** UV web frames are available from Pacific Yurts if you are in a high UV area and wish to protect the Velcro (on your side cover) while the vinyl windows are off.

Glossary

Carabiner – Oval or “D” shaped clip typically made of aluminum or steel and used for rock or ice climbing. They are designed to be strong, light weight and easy to clip and unclip.

Clamp – See door clamp.

Countersink – To drill or shape a depression, as at the top of a hole, for the head of a screw or bolt.

Crotch – Where two pieces of lath come together to create an “X” at the top of the lattice wall.

Door clamp – Wooden board on the inside of the door frame that clamps the door sticker and side cover against the door frame.

Door clamp fascia – Wooden board about the same size as the door clamp that slides into grooves in the door sills to hide the wing nuts.

Door Sill – The horizontal wooden board that makes up the top of the door frame.

Door Sticker – Piece of lath (without any holes) that is used for tucking the side cover into the door frame. Two door stickers are needed per door and typically have been clamped into the door frame before the customer first receives the yurt.

Drip Edge – 3/8” exterior plywood strips, usually 8” wide, that are attached to the outer perimeter of your circular platform (should extend 1” above the interior floor). The lattice wall will butt against the inner face of the drip edge, while the side cover attaches to the outer face.

Plumb – Perpendicular position; vertical.

Safety cable – 1/8” diameter cable strung through the holes in the rafters nearest the center ring. This cable holds the rafters into the center ring so that they cannot fall out. The safety cable is included on all 12', 14' and 16' yurts and on 20', 24' or 30' yurts that **do not have** the Snow & Wind Kit option.

Turnbuckle – A device in the form of a sleeve connector, or union, usually with threaded rods, for regulating the length or tension of connected ropes or cables.

Twist lock – Metal “common sense” fastener that attaches the top cover to the door frame. It has a screw shank on one end and a turn-button on the other end.

Valance – Portion of the top cover that overhangs the exterior wall.

Limited Warranty

Standard vinyl top covers carry a ten (10) year pro-rated fabric warranty from the manufacturer. Premium (heavy duty) top covers carry a fifteen (15) year pro-rated warranty from the manufacturer. Standard side covers carry a five (5) year pro-rated fabric warranty from the manufacturer. These warranties do not apply to fabrication workmanship, normal color fading or stiffening of the fabric which occurs naturally over time.

Pacific Yurts Inc. warrants all of their products for a period of one (1) year from the date of purchase. We will repair or replace, at our option, any product covered under this warranty which proves to be defective in materials or workmanship during the warranty period.

The above warranties do not apply if the unit was subject to abuse, neglect, accidental damage or if the instructions outlined in the set-up manual were not properly followed. All shipping costs on replacement parts or returned merchandise are the responsibility of the customer. Warranties are not transferable and extend only to the original purchaser of the product.

PROMPT DISPOSITION. Pacific Yurts Inc. will make a good faith effort for prompt correction or other adjustment with respect to any product which proves to be defective within the warranty. For any product believed to be defective within the warranty, call or write to Pacific Yurts Inc., giving name, address, date of purchase and description of defect. If product was damaged in transit to you, please file a claim with responsible carrier.

THE FOREGOING WARRANTY IS AN EXCLUSIVE REMEDY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE EXPRESS OBLIGATION OF PACIFIC YURTS INC. STATED ABOVE IS IN LIEU OF ALL LIABILITIES OR OBLIGATIONS OF PACIFIC YURTS INC. FOR DAMAGES INCLUDING, BUT NOT LIMITED TO, COMPENSATORY DAMAGES, CONSEQUENTIAL DAMAGES, INCIDENTAL DAMAGES, SPECIAL DAMAGES, INDIRECT DAMAGES, LOST PROFITS, OR OTHER DAMAGES, COSTS OR EXPENSES ARISING OUT OF OR RELATING TO THE DELIVERY, USE OR PERFORMANCE OF THE PRODUCT.

Pacific Yurts Inc. assumes no responsibility or liability relating to or arising out of Purchaser's selection of the location for the yurt. Purchaser expressly assumes all risk of loss, injury or damage relating to or arising out of the installation, set-up or site location of the yurt. In particular, but without limitation, Pacific Yurts, Inc. shall not be responsible or liable for any loss, injury or damage relating to or arising out of any forces of nature or acts of God.

Pacific Yurts Inc. makes no representations, warranties or promises as to whether the yurt will satisfy any applicable laws, statutes, regulations or rules including, but not limited to, zoning or land use regulations or building codes.

This Agreement is governed by the laws of the state of Oregon and shall be interpreted and construed by Oregon's version of the Uniform Commercial Code. Venue and jurisdiction of any legal proceeding relating to or arising out of this Agreement shall be in Lane County, Oregon.

In the event of any legal proceeding arising out of or relating to the enforcement or interpretation of this Agreement, the prevailing party in such proceeding shall be entitled to recover its reasonable attorney fees incurred therein, including any appeal thereof, in addition to such costs, disbursements and damages as are allowed by law.

This is the complete and final Agreement of Purchaser and Pacific Yurts Inc. and entirely replaces all other representations, negotiations, discussions, correspondence, communications or agreements.

**Pacific Yurts Inc.
77456 Hwy. 99 S.
Cottage Grove, Oregon 97424**

Epilogue

We have tried to make these directions as clear and concise as possible; however, describing the erection of something as unique as a yurt is not easy. Just take your time the first time through and think it out before acting. You should be able to manage without any major problems. After putting your yurt up once or twice, you will appreciate the simple beauty of this structure and the integrity of its design. **If you have any questions about the installation of the yurt please call us at 1-800-944-0240.**

Best wishes from Pacific Yurts.

