

COLORADO YURT COMPANY - YURT SPECIFICATIONS

Roof Fabric

- Standard: Pro-Structure, 18.5 oz. per square yard PVC coated high tenacity polyester with clear acrylic top-coat. UV and mildew resistant. Flame retardant to meet California State Fire Marshal, CPAI-84, and NFPA-701. Cold crack rating: - 45° F. Available in tan, gray or white.
- Upgrade: Duro-Last, 15-year manufacturer's warranty, 40 mil (37 oz. per square yard) proprietary polymer. Available in tan, gray or white.

Roof Construction

Watertight, thermally welded main seams. Fifteen rolled-rim brass grommets at the top to attach to compression ring. Bottom perimeter of roof and valance reinforced with 2" polyester webbing for dimensional stability and strength. Includes #3 rolled-rim brass grommets for lacing wall to roof; valance and inner valance; webbing reinforced door cut-out in valance with standard rain-diverter thermally welded to roof above each door. Top Cover secures to door header and jamb with eleven #8 x 1" stainless steel, self drilling, self tapping (tek) screws.

Wall Fabric

Three Standard Choices:

- ProTech, a three layer, vinyl laminate, with excellent UV and mildew resistance. 15-oz psy, tensile strength: 220 lbs x 220 lbs. Main seams are thermally welded. ProTech is RECOMMENDED FOR COMMERCIAL USE because it can be solvent welded for easy on-site repairs. 14 color choices.
- TuffStar, a 15 oz psy cotton/polyester blend with acrylic top coat. Tensile strength: 283 lbs x 214 lbs. Sewn construction. 7 color choices.
- ProStar, 12.5 oz 100% polyester with resin top coat. Tensile strength: 460 lbs x 360 lbs. Sewn construction. 7 color choices.

Wall Construction

Top and bottom reinforced with 2" polyester webbing. 3/16" polyester cord loops, sewn one-foot on center through the top webbing, corresponding to grommets in the roof, lace wall to roof for an integrated yurt covering. Rolled rim grommets, fifteen inches on center through the bottom webbing accept #14 x 1-1/4" stainless washer head sheet metal screws. Each yurt wall includes a minimum of three windows. Additional windows available.

Window Construction

Standard Windows

Sewn-in 20 x 30 weave fiberglass netting is 48" x 30" on standard height walls, and, 44" x 44" on taller wall windows. 20-mil clear vinyl (UV resistant, flame retardant, -15 ° F cold crack), framed in 2" polyester webbing and 2" UV resistant polyester Velcro, can be completely removed and stored. Weather/privacy flap is fully zippered (#10 YKK), rolls up and stores with 1" side-release fasteners. A nylon rod sewn into a pocket stiffens the weather flap for easy roll-up.

Operable Wood Casement Window

Sierra Pacific*, 30" x 42" thermal pane casement window; clear vertical grain Douglas Fir with tan aluminum cladding. Window is pre-installed in a CVG Douglas Fir, floor-to-ceiling framework with oil finish. Cedar exterior trim. Furniture quality joinery. Meets International Building Code (IBC) requirements for egress. Operable Wood Casement Window is modular and may be retrofitted into any existing taller wall yurt wall.

* *Sierra Pacific is a member of the Sustainable Forestry Initiative*

Dome Skylight

Five-foot diameter, 16" dome height. 1/4" pure acrylic includes a 2" diameter flange and 1/2" perimeter turn-down with 5/8" diameter tadpole gasket for tight fit. Dome fastens to ring with 6 stainless steel expansion spring and four 1" webbing detachable safety straps.

Compression Ring

A five-foot diameter, 12-sided polygon constructed of clear, vertical grain Douglas Fir. Thickness: 3"; maximum radial dimension: 5"; minimum: 3.25". Glued and screwed.

Rafters

Select 2" x 4" or optional select 2" x 6". All rafters are machine stress rated to a bending strength of 2100 lbs per square inch. Rafters are molded with a 3/16" round-over and notched to fit over the main cable. A brass nut is embedded in each rafter to accept a 3/8" - 16 slotted bolt which closes off the cable notch and prevents the rafter from detaching from the cable.

Cable

3/16" diameter galvanized aircraft cable; break strength 4200 lbs, encased in a protective covering. A continuous loop, precut to the exact yurt circumference in provided. Cable ends are attached with a 2-ton alloy eye-hook and aluminum ferrules.

Lattice Wall

Clear, vertical grain Douglas Fir; 1/2" x 1.5", fastened at one-foot intervals with aluminum pull rivets and stainless steel back-up washers. Fully expanded wall heights are 5'-10" for a standard height; 6'-9" for taller wall yurts.

Doors and Door Jamb

Solid, clear, vertical grain Douglas fir door and jamb. Standard equipment includes an acrylic half-light fixed window; Door is full 36" width opening for wheelchair access. Standard door height (not including header): 5'-6"; taller wall: 6'-5". Full-light French doors also available with 42" opening.

Insulation (optional)

Astro-foil: a double layer of air-bubble insulation sandwiched between two layers of aluminum sheathing. R-values (based on direction of heat flow): downward, R15; horizontal, R7.31; upward, R5.4. Astro-foil has reflective and vapor barrier characteristics for increased heat retention. Insulation is upholstered with white polyester lining fabric (Tex-Tex).

Wood Finish: All wood frame components finished with Cedar Superdeck stain made by Duckback.

Hardware and Attachments

Lattice wall to Deck: Galvanized steel "L" bracket, 5" x 3" x 1.5" on 24" centers. Attaches to deck with two 1/4" x 1" plated lag screws; bolts to lattice wall with one 1/4" x 1.5" machine screw and nylock nut.

Exterior Fabric Wall to Deck: #14 x 1.5" stainless steel washer head sheet metal screw through rolled rim brass grommets set in 2" polyester webbing, at 15" on center.

Roof to Compression Ring: 1/4" x 1" stainless steel through rolled rim brass grommets, 12" on center.

Roof to Door Header and Jamb: Top Cover secures to door header and jamb with eleven #8 x 1" stainless steel, self drilling, self tapping (tek) screws.

Fabric Wall to Door Jamb: 3/8" diameter rope bead sewn into wall, slides into an aluminum track. Flange of the aluminum track screws to the door jamb with # 8 x 1" sheet metal screws, 24" on center.

Lattice Wall to Door: 5/16" x 5" plated carriage bolt with wing nut and protective nylon acorn nut sandwich lattice wall between door jamb (2" x 6") and back up board (1" x 4").

Other Options
Snow and Wind Load Elements:
CORR Brackets: Compression Ring to Rafter attaching bracket, U-shaped beam pocket screws to Compression ring with two # 10 x 2.5" plated hex head sheet metal screws.
2" x 6" Snow Load Rafters: See Framework above.
2" x 4" columnar support (studs): Windload load studs under every rafter. Attach each side of rafter with 3.25" x 11" truss plates and # 8 x 1" sheet metal screws; and to yurt deck with 1.5" x 1.5" x 3" angle brackets and 1/4" x 1" lag screws.
Door Awning: ProTech fabric awning zips to roof and projects above door on 1" galvanized pipe frame.
Window Awning: Converts window flap to fully adjustable, full awning with 1" steel tubing support and projection arms.
Dome Skylight Opening: Single spindle skylight opener operates from floor level with winding brace. Spindle attaches to dome and compression ring with "Z" bracket and watertight bolts.
Screen Doors: Full 36" wide, heavy duty screen door, 2" x 6" clear, vertical grain Douglas Fir with 20 x 30 fiberglass screen, steel strap hinges and "D" handle, spring loaded closure