ABRIS CRYSTAL

INSTALLATION GUIDE

Double car shelter

16 × 16 ft

11 steps | 3 people | Frame · tarp · doors · anchoring

INTERACTIVE GUIDE

Scan to follow each step on your phone.

abriscrystal.com/en/guide/double-16x16

Read the whole guide before you start. Keep it for reassembly.

953, rue Michelin, Laval (Québec) H7L 5B6 · 450-914-1444 · abriscrystal.com

Before you start

3
PEOPLE RECOMMENDED
Plan for 3 people: the shelter is heavy to lift.

FLAT GROUND
Assemble the shelter on flat, clear ground, close to where it will stand.

11
STEPS
Follow them in order. Each step lists its parts.

TOOLS

- Gloves
- Safety glasses
- Drill-driver
- Wrench
- Pliers
- Tape measure
- Stepladder
- Box cutter

HOW TO READ THIS GUIDE

SR ×3 = the part code and the quantity, as in the list on page 3.

A gold circle shows exactly where to look.

☐ Check off each step when it's done.

The photos show a 20 × 24: same steps.

Golden rule: wing nuts **W1** facing in, tightened with the drill-driver as you go. Check them all in step 9.

IMPORTANT · SAFETY

- **This shelter must be securely anchored.** It is a temporary structure, not recommended as a permanent structure.
- Guy wires or permanent anchors: **strongly recommended.**
- Read and follow the warnings printed on your tarp.
- Read the whole guide before assembly.

The 11 steps

FRAME

01 Prepare the parts
02 Assemble the 2 end arches
03 Assemble the 3 middle arches
04 Assemble the roof (on the ground)

TARP

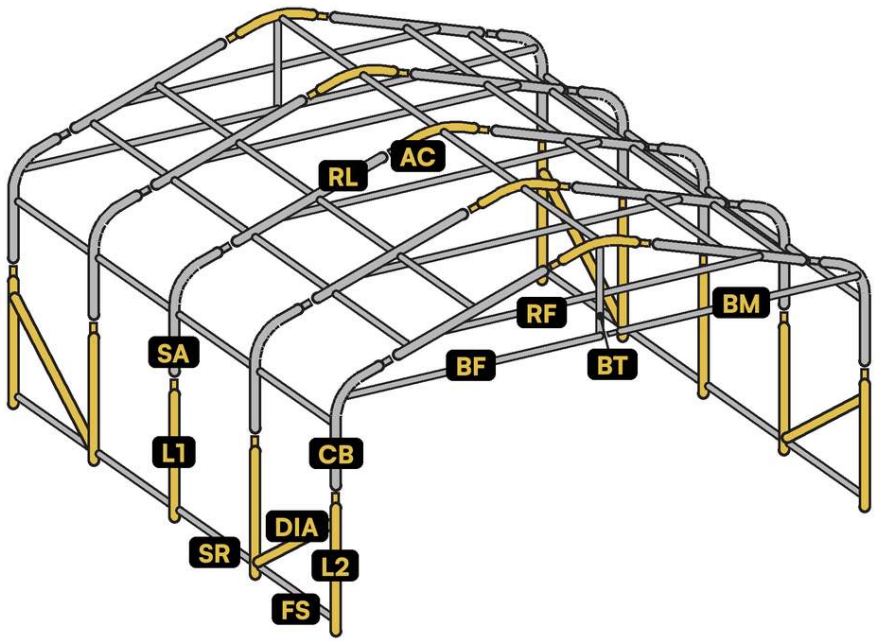
05 Put on the tarp
06 Legs and diagonal braces — side 1
07 Legs and diagonal braces — side 2
08 Tighten and tie the tarp

FINISHING

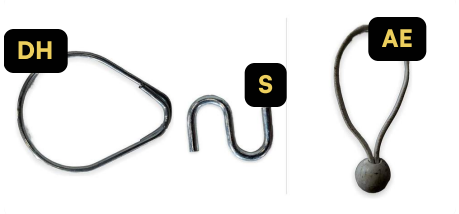
09 Square it and check
10 Install the doors
11 Anchor the shelter

Parts list • 16 × 16 ft

Check off each part before you start. Missing a part? Call us at 450-914-1444.



Hardware: bolts and wing nuts W1



Doors: ring DH, hook S, elastic tie AE (photo: single shelter)

FRONT bottom right. Every arch: centre AC, 2 extensions RL, stiffener RF, 2 corners. End arches: also the door bar BF + BM and the T-bar BT. 9 lines of spacers. At the 4 corners: L2 + DIA. Legs: narrow end up.

ARCHES

☐	AC	Arch centre	5
☐	RL	Arch extension	10
☐	RF	Arch stiffener	5
☐	CB	End corner (2 holes)	4
☐	SA	Arch corner (1 hole)	6

END ARCHES

☐	BF	Female door bar	2
☐	BM	Male door bar	2
☐	BT	T-bar	2

LEGS AND SPACERS

☐	L2	2-hole leg	4
☐	L1	Leg	6
☐	DIA	Diagonal brace	4
☐	SR	Male spacer	27
☐	FS	Female spacer	9

TARP AND DOORS

☐	T	Tarp (doors sewn on)	1
☐	CO	Rope	1
☐	DH	Door ring	24
☐	S	S-hook	24
☐	AE	Elastic tie	24

HARDWARE

☐	B5	Stiffener bolt 5⁄16 in	10
☐	W5	Wing nut 5⁄16 in	10
☐	B1	Door bar bolt 2 ½ in	6
☐	B3	Diagonal bolt 3 in	4
☐	B2	Long bolt	45
☐	W1	Wing nut ¼ in	55

ANCHORING

☐	U	Anchor

01 Prepare the parts

All the parts on the ground, sorted, ready to assemble.

DONE

Wing nuts W1 in the middle

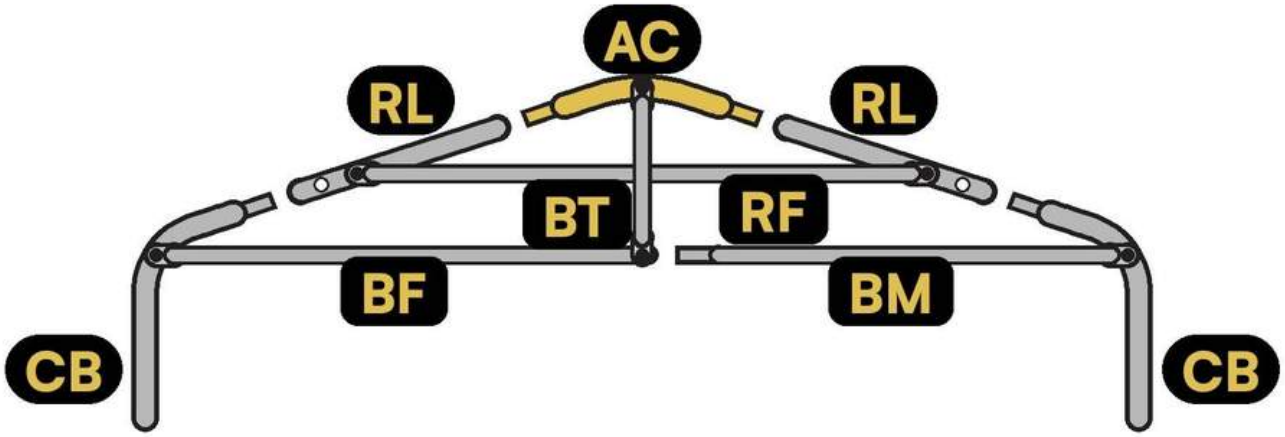
1. Open the box carefully: don't cut the tarp. Leave it folded until step 5.
2. Check off each part in the list on page 3. Lay matching parts out in rows; don't mix up the legs and the extensions RL.
3. Set aside the parts for the 2 end arches: 4 corners with 2 holes CB, door bars BF BM, T-bars BT.
4. Sort the hardware by size: stiffener bolts B5 and wing nuts W5, bolts B1, B3 and B2, wing nuts W1.

KEY POINT A narrow end always goes into a wide end.

02 Assemble the 2 end arches

The front and back arches, complete, on the ground.

DONE



End arch (parts spread out)

Door bar joint

PARTS FOR THIS STEP

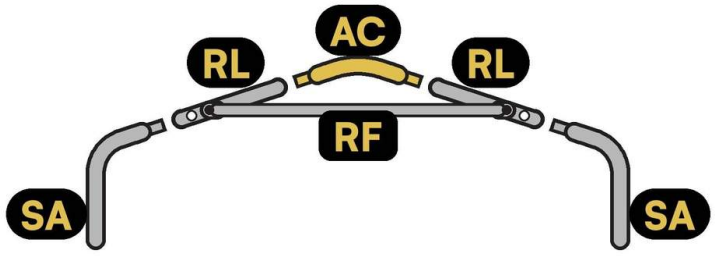
AC	×2	Arch centre
RL	×4	Arch extension
RF	×2	Arch stiffener
CB	×4	End corner (2 holes)
BF	×2	Female door bar
BM	×2	Male door bar
BT	×2	T-bar
B5	×4	Stiffener bolt 5⁄16 in
W5	×4	Wing nut 5⁄16 in
B1	×6	Door bar bolt 2 ½ in
W1	×6	Wing nut ¼ in

1. Both ends of the centre **AC** go into extensions **RL**, at their end with no hole nearby. The short end of corner **CB** goes into the other end.
2. Bolt the stiffener **RF** across, under the centre, to the 2 extensions: **B5** + **W5**.
3. Slide the narrow end of the male bar **BM** into the female **BF**. At the joint, bolt the bottom of the T-bar **BT**: **B1** + **W1**.
4. Door bar ends: to a corner **CB**, **B1** + **W1**. Top of **BT**: bent end pointing up, not bolted. Build the 2nd arch the same way.

03 Assemble the 3 middle arches

3 middle arches on the ground: like step 2, without door bar or T-bar.

DONE



Middle arch (parts spread out)

PARTS FOR 1 MIDDLE ARCH

AC	Arch centre	×1
RL	Arch extension	×2
RF	Arch stiffener	×1
SA	Arch corner (1 hole)	×2
B5	Stiffener bolt 5⁄16 in	×2
W5	Wing nut 5⁄16 in	×2

×3 Repeat for the 3 arches

1. As in step 2: both ends of the centre **AC** into extensions **RL** (end with no hole nearby), the short end of corner **SA** into the other end.
2. Bolt the stiffener **RF** to the 2 extensions: **B5** + **W5**, as in step 2.
3. Tighten the wing nuts with the drill-driver. Repeat for the 3 middle arches.

04 Assemble the roof (on the ground)

The 5 arches standing on the ground, joined by 7 lines of spacers. The legs come in steps 6 and 7.

DONE

End-arch ridge: arch, bent end of BT, spacer, wing nut

PARTS FOR THIS STEP

SR	Male spacer	×21
FS	Female spacer	×7
B2	Long bolt	×35
W1	Wing nut ¼ in	×35

1. Build from the back to the front (front: the side where cars drive in). Stand the back arch up on its corners, no legs. One person holds it.
2. Lift the next arch. On each of the 7 lines (the ridge and 3 lines on each side), join it with 1 spacer, on the shelter's inner side.
3. Each line, from back to front: 3 male spacers SR, narrow end toward the front, then 1 female FS in the last section, at the front.
4. Each joint: long bolt B2 + wing nut W1 facing in. At the ridge of the end arches: bent end of BT on the bolt, then the spacer.

WARNING
Hold the arches until all the spacers are bolted and tightened with the drill: until then, nothing keeps them standing.

05 Put on the tarp

The tarp on the roof, well centred, tied at the front and back.

DONE

Inside, at the front

PARTS FOR THIS STEP

T	Tarp (doors sewn on)	×1
CO	Rope	×1

1. Unfold the tarp beside the shelter. Find the front: the logo goes at the front. The doors are sewn to the tarp.
2. With 3 people, pull the tarp over the arches, gently: never jerk it, it can tear.
3. Centre the tarp on the roof. Inside, close the tarp's velcro straps around the T-bars BT.
4. Cut the rope CO in 2, one per end arch. Its middle at the top; each end goes down one side: grommet, around the arch, next grommet.

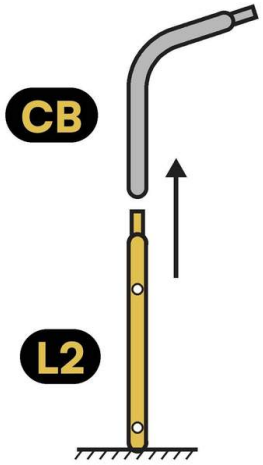
GOOD TO KNOW

Tarp on before the legs: you work under cover if it rains or snows.

06 Legs and diagonal braces — side 1

One side of the shelter on its legs, with its 2 diagonal braces: one at the front, one at the back.

DONE



Leg: wide end down

PARTS FOR THIS STEP

L2	×2	2-hole leg
L1	×3	Leg
DIA	×2	Diagonal brace
SR	×3	Male spacer
FS	×1	Female spacer
B2	×5	Long bolt
B3	×2	Diagonal bolt 3 in
W1	×7	Wing nut ¼ in

1. With 3 people, lift one side. The other stays on the ground.
2. Legs: narrow end up, into the corner. First the legs with holes **L2**, under the front and back arches, then the **L1** in the middle.
3. From the front, join the feet: 1 female **FS**, then 3 male spacers **SR**. Each leg: bolt **B2** + wing nut **W1**; 2nd leg from each end: bolt only.
4. Diagonal braces **DIA**, front and back: bottom onto the 2nd leg's bolt **B2**, then its wing nut **W1**. Top: top hole of **L2**, **B3** + **W1**.

KEY POINT Spacers, diagonal braces and wing nuts: on the inner side of the shelter. Otherwise they damage the tarp.

07 Legs and diagonal braces — side 2

The whole frame on its legs. 4 diagonal braces in all: 2 at the front, 2 at the back.

DONE

Seen from inside

PARTS FOR THIS STEP

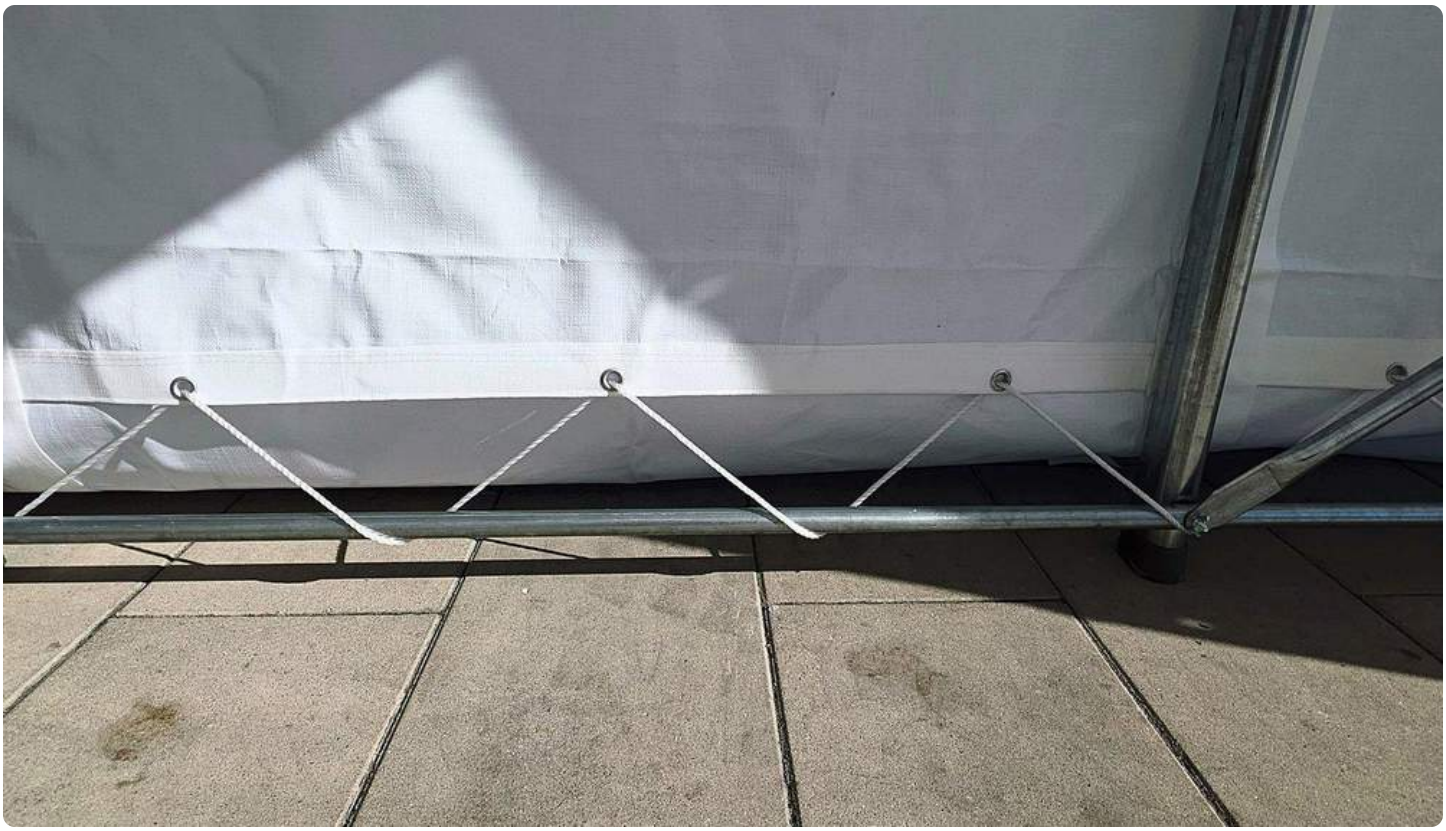
L2	×2	2-hole leg
L1	×3	Leg
DIA	×2	Diagonal brace
SR	×3	Male spacer
FS	×1	Female spacer
B2	×5	Long bolt
B3	×2	Diagonal bolt 3 in
W1	×7	Wing nut ¼ in

1. With 3 people, from the inside, lift the other side: the tarp comes with it.
2. Insert the legs as in step 6: narrow end up, **L2** at both ends, **L1** in the middle.
3. Install the foot spacers (3 **SR** + 1 **FS**), then the 2 diagonal braces **DIA** on this side, as in step 6.

08 Tighten and tie the tarp

A tight tarp that doesn't move.

DONE



The knot

PARTS

No new parts: the rest of the rope CO from step 5.

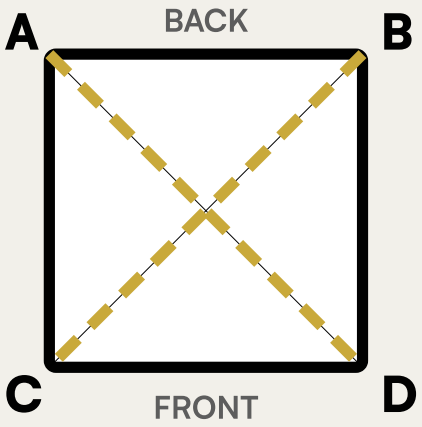
1. At the front and back, run the rope down along the arch to the foot of the legs.
2. At the bottom, on both sides: thread the rope through each grommet of the tarp and around the foot spacer, zigzag.
3. Pull the rope grommet by grommet to tighten the tarp, then tie the end at the foot of a leg.

09 Square it and check

The shelter square, all wing nuts tight.

DONE

Square: the arches line up from end to end



Seen from above

PARTS

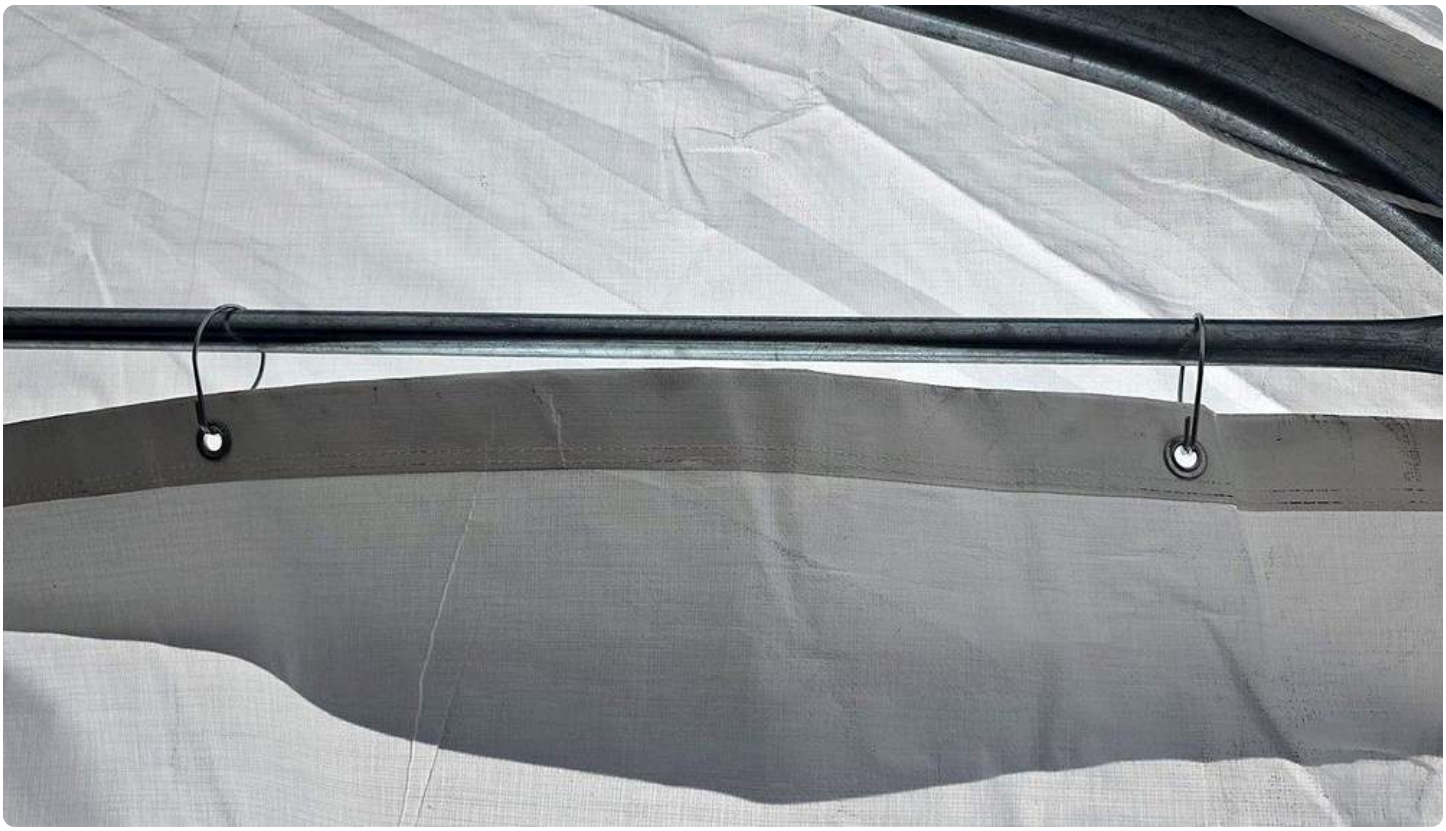
No new parts. Tools: tape measure, wrench or drill-driver.

1. Measure the 2 diagonals in an X (A to D, then B to C). Equal: the shelter is square. If not, gently push one corner and measure again.
2. Check every wing nut **W1** and **W5**: tight, facing in, not touching the tarp. Re-tighten it if needed.

10 Install the doors

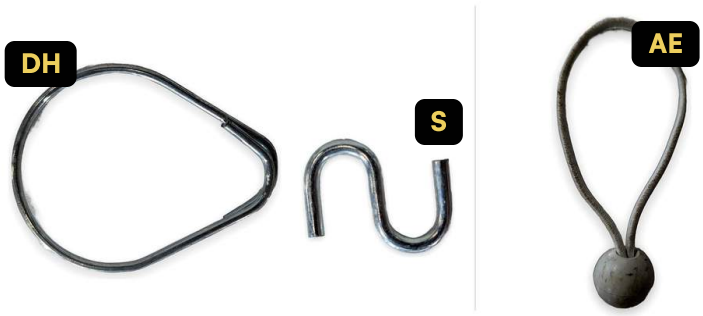
The front and back doors hung, ties and hooks in place.

DONE



PARTS

Rings DH, S-hooks S and elastic ties AE.



Ring DH • hook S • elastic tie AE (photo: single shelter)

1. Using the stepladder, hang the top of each door on the door bar: one ring DH through each grommet, around the bar.
2. Thread an elastic tie AE through each grommet along the edge of the door: the ball stays outside.
3. Hook an S-hook S onto the loop of the tie and close that side with pliers.

11 Anchor the shelter

A securely anchored shelter, ready for winter.

DONE

On pavers

PARTS

The anchors U from the box.

1. Place each anchor U over the foot spacer, then fasten it to the ground.
2. Soil or grass: call us at 450-914-1444.
3. Pavers or concrete: fasten U to a permanent anchor in the ground (sold separately).

WARNING

An unanchored shelter can blow away or collapse. Anchor it before you use it. Guy wires strongly recommended (sold separately).

ALL DONE

Your shelter is ready.

A few simple habits to make it last.

Interactive guide

Every step of this guide, on your phone.

abriscrystal.com/en/guide/double-16x16

Tips to make your shelter last

1. **Clear the snow often.** Don't let snow or ice build up on the roof or the sides.
2. **From the outside, gently.** Push the snow off with a broom or a snow pusher. Never use a pointed or sharp tool on the tarp.
3. **Both sides, in turn.** Clear one side, then the other, alternating. Never just one side.
4. **A tight tarp lasts longer.** Re-tighten the rope and the wing nuts W1 after a few days, then after every big windstorm.
5. **Nothing rubs on the tarp.** Keep the wing nuts facing the inside of the shelter: rubbing wears out the tarp.
6. **In the spring.** Take it down in the reverse order of assembly. Store the tarp clean and fully dry. Don't leave it up in summer: the sun wears it out.

Is your shelter up?

★ ★ ★ ★ ★

Leave us a Google review. It takes a minute and it helps us a lot.

ABRIS CRYSTAL

NEED HELP?

450-914-1444

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