

### 12'x16' Shelter

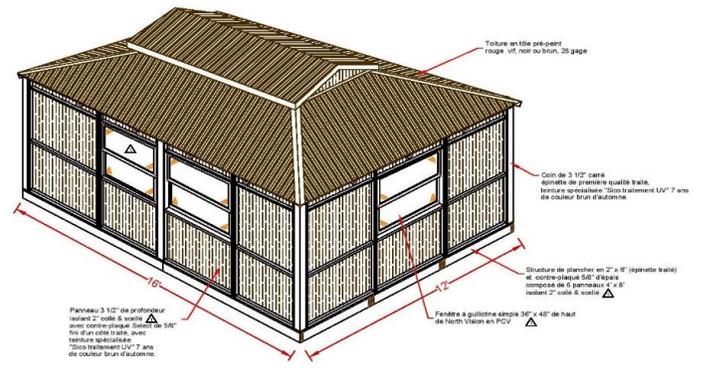
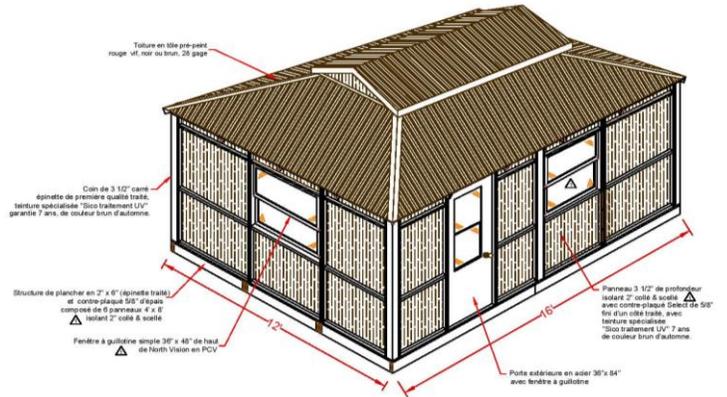
List of items:

Qté	Item	Description
500*	V2	2½" treated wood screws
300*	V3	3½" wood screws
400*	V4	Sheet metal screws
3	S0	Solives de sous-plancher
6	S- 1 à 6	Insulated floor board 4'x8 '
16	Me1-Me6	Wall / Door Panel Exterior
10	M1	4x4 wood stud
9	Mi1-Mi5	Interior Wall / Door Panel
1	R1	Insulating roll (under sheets of roof sheet)
1	R2	Insulating roll (under exterior walls)
1	R3	Roll tape for outdoor
3	P1	2"x6"x7' door stops
3	P2	2"x4"x29¼" width without angle
3	P3	2"x4"x29¼" width with angle
3	P4	2"x4"x8' with notch
3	P5	Aluminum track with caster system
8	B1	2"x4" plank for roof contour (with 2x2 sticks)
4	B2	Corner bracket for roof contour
12	B3	Small chevron
4	B4	Large chevron
12'+ 16'	B5	Roof stick (package)
2	B6	8' cross under pinion
5	B7	Reinforcement - interior walls (identified a to d)
1	B8	Reinforcement module - roof
4	F1	Pinion - outer wall
2	F2	Pinion - central wall
4	F3	Pinion - Sidewall
8	F4	Pinion - Stick
4	T1	J' of sheet metal
8	T2	Sheet metal whole
8	T3	Sheet metal left
8	T4	Sheet metal right
4	T5	Sheet metal peak for corners
76	T6	Foam sealing (linear feet)
2	T7	Molding of departure bottom of the pinion
1	T8	Sheet metal pack for top pinion
4	T9	Side molding for sides pinion
1	T10	Sheet metal cap for pinion top
2	A1	Single bed with Clips (with bracket and leg)
1	A2	Table
1	A3	Counter
1	-----	Kit of hooks for entrance
1	-----	Handle for exterior door
1	-----	Outdoor air intake
1	-----	Smoke detector (with battery)
1	-----	Gas detector (with battery)
6	-----	Flextra tube with applicator gun
2	-----	Square tip #2 (2½" long)
1	-----	Sheet metal chisel

\*=approximate quantity

\*Note that a video demonstrating the building of the of this shelter is available via internet at:

[https://www.youtube.com/watch?v=qvb\\_KV5Lvxw](https://www.youtube.com/watch?v=qvb_KV5Lvxw)



**warnings:**

IMPORTANT: Read and follow all assembly instructions in order to ensure product strength and durability. Always work according to the minimum standards of health & safety (height, individual protections, lifting procedure, ...)

**Material needed not included:**

- Drills with square tip # 2 (2½" long)
- Stepladders or ladders
- Measuring tape

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#### Practical tips to ensure maximum strength

Item **V2-V3** Wood screws

It is important to insert the wood screws between the 2 pieces to join: The threads of the screw must be fully entered in the 2nd piece of wood so the clamping effect works well.

Item **V4** Metal screws

Screws V4 must be put on the embossing of the sheet (and NOT in the hollow).

The water flows in the hollows so avoid to put screws (and will be too long).



You have to insert the screw as deeply as in the picture below.

## Step 1 : Floor installation

Reference Annex A: Plan View-Floor Structure

**It is important to choose a shelter location that will be well leveled to ensure its strength.**

Unfold the 3 S0 subfloor joists for placement as shown in Annex A (Hinge Down).



Each floor panel is numbered (see Annex A) and **you must install them in the following order: # 1-3-5-2-4-6**

Only insert the female / male parts of the clips into the adjacent panels.



Note: It is easy to adjust a clip with tools as needed to make insertion easier.



Screw the floor panels together using V3 screws.



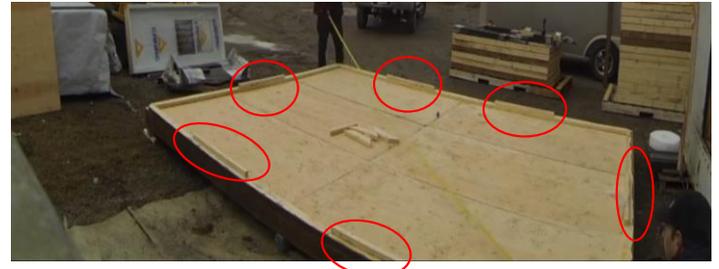
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## Step 2 : Assembly of the roof structure

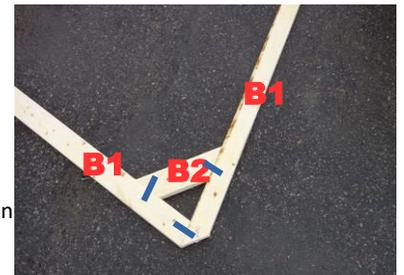
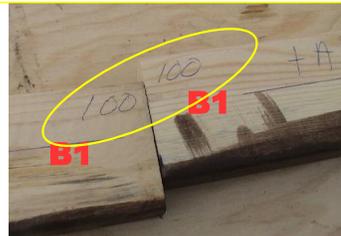
We suggest you to assemble the roof structure directly on the floor that you have just installed because it is exactly the same size.

First, assemble with B3 wood screws the B1 together to form the outline of the roof. Make sure to take your 'square-line' (2 large diagonals of the same length) to ensure the perfect square / rectangle.

Note that pieces of wood (2x2 sticks) are included in the package of B1 to join them to each other (circled in red).

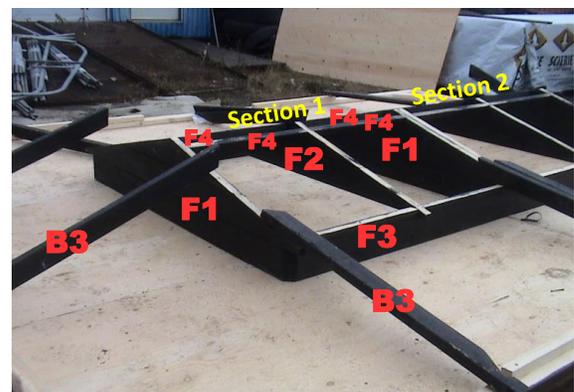


Be careful of notes on some pieces to know which join together.



Then only fix the B2 at the corners with 6 V3 wood screws for each. Visualize how to insert the screws (in blue) on the photo opposite (2 on the thickness).

You must now assemble the roof pinion structure that will be in the center (in 2 similar sections to be assembled to form a whole). Parts (F1 to F4) for each section are grouped into packages (1/2 and 2/2). To form the first section, screw together its 2 F1 parts with its 2 pieces F3 as shown in the picture below (with screw V2). Add part F2 in the notches provided in parts F3. To finalize this section screw the 4 pieces F4 that must be installed in the top of the section (2 on each side). Perform exactly the same work to form the second section and finally screw together (screw V2) the 2 sections. Be careful, an inscription mentions the right sides of F1 sections to screw together so that the corners of the pinion receive the B4 parts in the next steps.



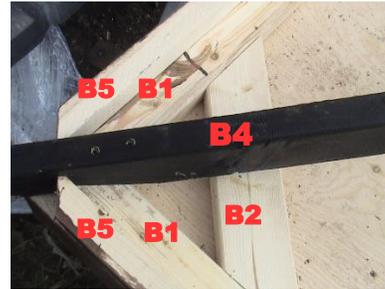
Screw the rafters B3 (with wood screws V2) on the marks identified on the roof outline (mark IXI on the B1). You must insert at least 2 screws from the top of B3 to B1.

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Lift the center pinion structure so that it fits between the top of the B3 you just installed. Attach the top of the B3 to the marks on the F3 (IXI) parts with the V2 wood screws. Go slowly inserting the pinion because everything fits perfectly tight. if you push it too much, pulling it back could be a little difficult.

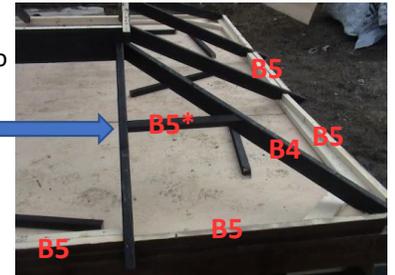


Now secure the B4s from the corners of the roof contour to the corners of the pinion. (with V3).

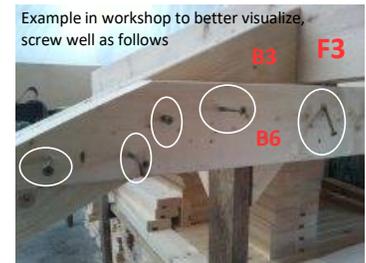
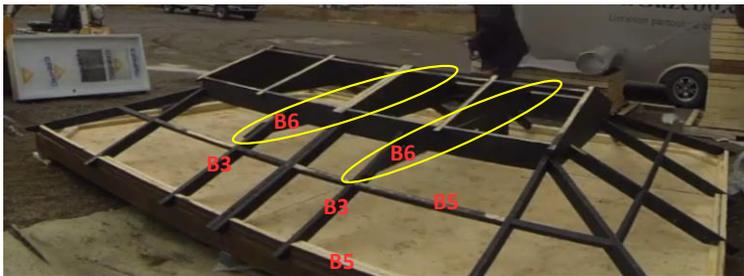


Fix the B5 on the whole structure with the wood screw V2 (inscription C12 = for sides 12' and C16 = for sides 16'). Attach the B5 roof strips directly to the B1. For those who go higher, start with a corner referring to the angle to have the right height (see B5 with \* on the photo opposite). Then continue to go around with the other chopsticks at the same height and make sure they are straight to screw the sheet just now.

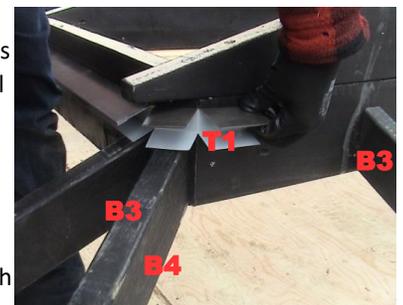
Bareme height others B5



You must screw the B6 under the pinion (with V2) outside of two specific B3 (as in the picture below).

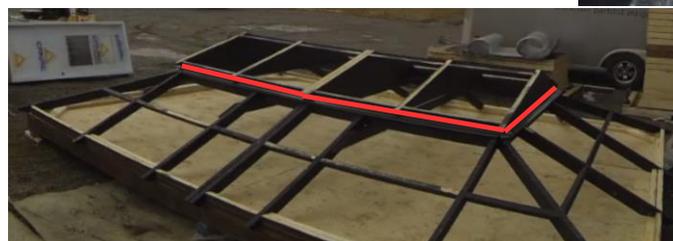


Secure the T1s with V4 screws over the entire outline of the pinion structure by pressing it on the rafters B3 and B4. You must turn the 'J' (T1) on the corner to properly close the well with the sheet metal chisel (cut the top and bottom and make them fit the curve).



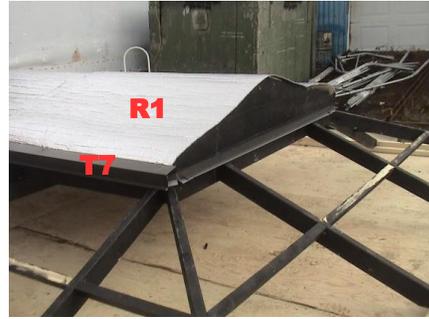
When you have finished the entire contour with the T1, put Silicone Flextra in the top of it at its join with the wood (see the red line below).

Refer to the Flextra package instructions for use.



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Unroll and extend the insulation R1 on the pinion and fix it by screwing (with V4) the first moldings T7 (on F3) at the bottom of both sides of the pinion. Overlap the 2 layers of insulation R1 to join / adjust the width (do not cut).



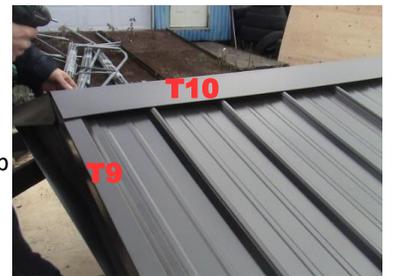
Put the sheets of the T8 package by overlapping them on both sides of the pinion with the screws V4. You must put sealing foam (T6) in the bottom of the sheet where it will stick on T7 (glued under the sheet to fit the embossing) as you install the sheets of sheet metal. You can start by putting only 1 screw per sheet so you can adjust as needed and finalize the sides by screwing everywhere (on F4 in the top and bottom on T7).



**WARNING:** the screws must be put on the embossing of the sheet (and NOT in the hollow).



Always with screws V4 fix the 4 endings of sheet metal on the sides of the pinion (T9). Then affix R3 tape on the top of the T8 sheet junction (will be under T10 in prevention). Finally attach the T10 cap to the top by screwing V4 on each of its sides (not on the center fold).



The roof structure is completed for the moment, we do not advise you to affix the rest of the sheet at this stage because the module will be too heavy to climb on the structure of the walls subsequently.

Now move the roof structure module near your floor to have space to mount the walls.

## Step 3 : Installation of exterior walls

Reference APPENDIX B: Position of exterior panels

First, unravel and differentiate all exterior and interior walls.

Referring to Annex B, begin installing the walls in the corner near the outside door so that you can go around and finish at the door. It is important to fix an R2 insulation tape under the exterior walls.

Fix together the walls and corners (M1 and Me1 to Me5) using the screws V2 between them **in the sides** (inside and outside) but also **on the floor** (inside and outside) \* see diagram opposite. Of course, the brown treated wood side must be outward and the white insulated side towards the inside. Refer to walls with windows to know the up / down walls.



Complete this step by installing the Me6 exterior door with V2 screws around the door (sides and floor, interior and exterior). You must add the handle provided (refer to the instructions on the packaging).



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#### Step 4 :

#### Installation of interior walls

Reference ANNEX C: Position of Interior Panels

Referring to Annex C, start by installing the walls of the rooms and ending with the walls of the entrance. Fix together all the walls and corners (M1 and Mi1 to Mi4) with the screws V2 between them but also on the floor on both sides.



Screw (with V2) the pieces P1 vertically on the sides where the doors of the 3 openings will close (put notch towards the inside of the rooms / entry as on schema). Then screw the pieces P2 in the top of the frames and the P3 in the bottom (as on diagram) always with screws V2.



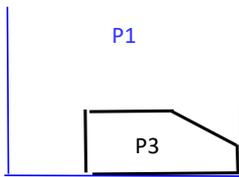
Seen from above

Inside      P1      Outside



Side view

Inside      P1      Outside



#### Step :5

#### Raise the roof structure module on the walls

Bring the roof structure right next to the shelter. Take the 2 corners of the structure that are closest to the shelter and mount them temporarily lodged in the top of the wall (the other 2 corners of the roof structure module remains on the ground).



Change your position to pick up the corners that remained on the ground and lift them by sliding the structure on the top of the walls. Place the roof structure (parts B1) exactly on the outside walls and screw generously with V2 (see note below) \* with the outside walls.



**\* IMPORTANT: ALWAYS screw up (from the inside of the top of the walls to the roof structure) as the screw heads will be easily accessible to change a section of wall as needed in the future. Otherwise you will have to remove sheets of sheet metal to make this same change of wall section.**

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**Step 6 :**

**Finishing reinforces interior walls and roof**

Reference ANNEX D: Reinforcement Position - Interior Walls

Referring to ANNEX D, screw the 5 reinforcement pieces B7 (a to d) onto the top of the inner walls to solidify them together (screw V2).

Item	Qty	Length
B7a	1	94½"
B7b	2	63¾"
B7c	1	65½"
B7d	1	36"

Install the roof reinforcement module between the top of the B7b and the bottom of the center F1s (with V2 screws).



**Step 7 :**

**Roof sheet finishing**

Pieces T2 to T4 packed in two packs: one for the 12' sides and the other for the 16' sides

As with the pinion, you must unroll R1 insulation first and then put T6 foam sealant under the bottom of each sheet as and when.

Always start installing the leaves from the center to the corners (full sheet T2 first).

Insert the top of the sheet into the 'J' (T1). Screw only one screw (V4) for now (so you can still adjust as needed).

When all the plates on one side are affixed and adjusted you can then finalize the installation adding several screws V4 so that the sheet is well fixed to the rafters B3 and the sticks B5.

Repeat on all sides.



Put outside R3 tape at the 4 corner joints before putting the T5. Then fix the ridges (T5) in each corner to close the joint of the sheets at the four corners. Screw the ridge directly into the sheet metal by putting 2 min. Sheet metal screws (V4) on each side (and NOT centered on the bend 'as the sheet is embossed).



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#### Step 8 :

#### Install interior doors

Reference ANNEX C: Position of Interior Panels

You will have to perform the operation 3 times:

Attach the P5 aluminum track (with V2 wood screws) directly to the B7 side above P2 (inside the chambers and inside the entrance). Attach the female adapters to the top of the Mi5 door (approx 3 " ends).

Install the door by sliding it under the track and clipping the wheels into the track.

Finalize the installation of the door by sliding the piece P4 under the door and screw it with screws V2.

Note that a key is included in the set of casters so that they can be adjusted as needed.



#### Step 9 :

#### Seal the outside of the shelter

Seal on the outside, with Flextra seal: the bottom of the walls (with the floor), the top of the walls (with B1 parts) and the entire outline of the door.

#### Step 10 :

#### Interior finish

Reference ANNEX E: Plan View - Interior Design

Each bed (A1) is packaged with its 'L' wood fixture (male / female clips already installed) and its wedge leg. Visualize where they will be positioned (on Annex E) and determine the height to install based on the height with the leg. Remove the wooden fastener from the bed (unclip) to screw the wooden fixing to the height already determined with screws V2. Put the bed back on the wooden binding (reclip) and screw the paw to the bed and the floor.



Then visualize the positions for the table (A2) and the counter (A3) always on the annex E and screw them with screws V2.

Insert the included air intake into the pre-drilled hole of the Me1 wall and fix it.



Attach all hooks in the inlet and smoke / gas detectors (see their respective instructions).

