

PORTAbell TOWER



PORTAbell TOWER

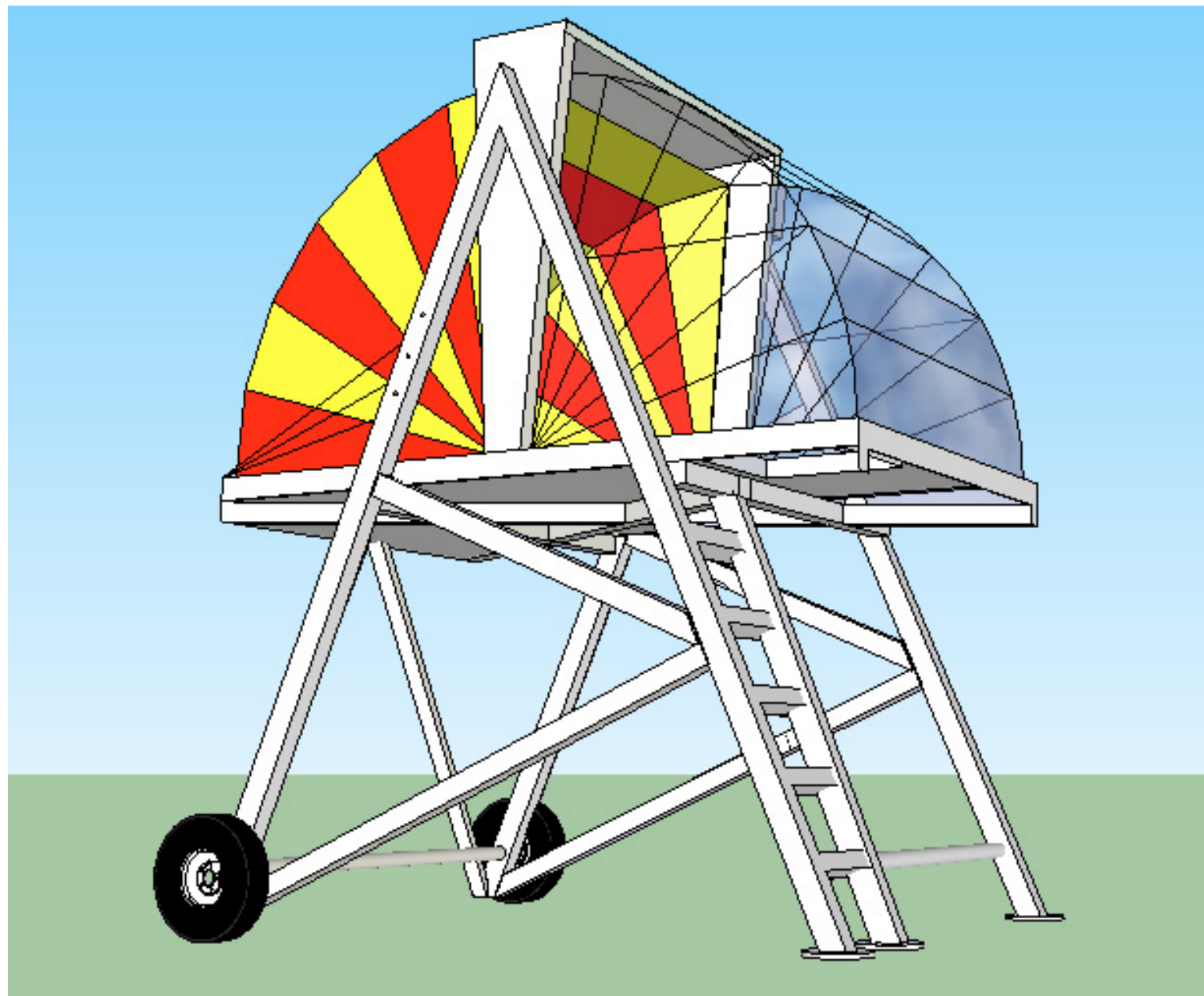
Portable life saving unit

The key design need is for the unit to sit off the ground to function as a Life-saving tower. This design sits 2m above the ground, is portable, and can be anchored to the ground using metal cables and KELTY sand pegs.

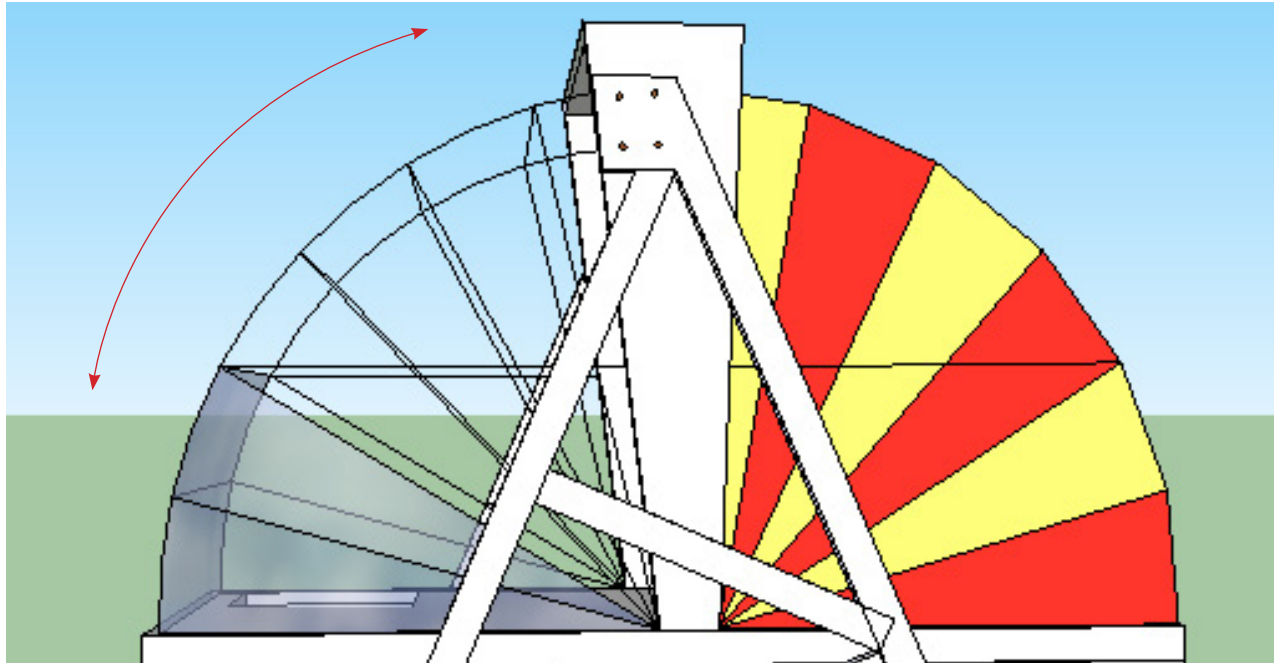
The unit has a waterproof covering, 1 half which is red and yellow giving the unit identity and the other half transparent for beach watch.

The canvas frame uses 30 x 4 flat alloy bar connected by nut + bolt to pivot simply allowing the transparent covering to fold, beneficial for scenarios where there may be a breeze or rain.

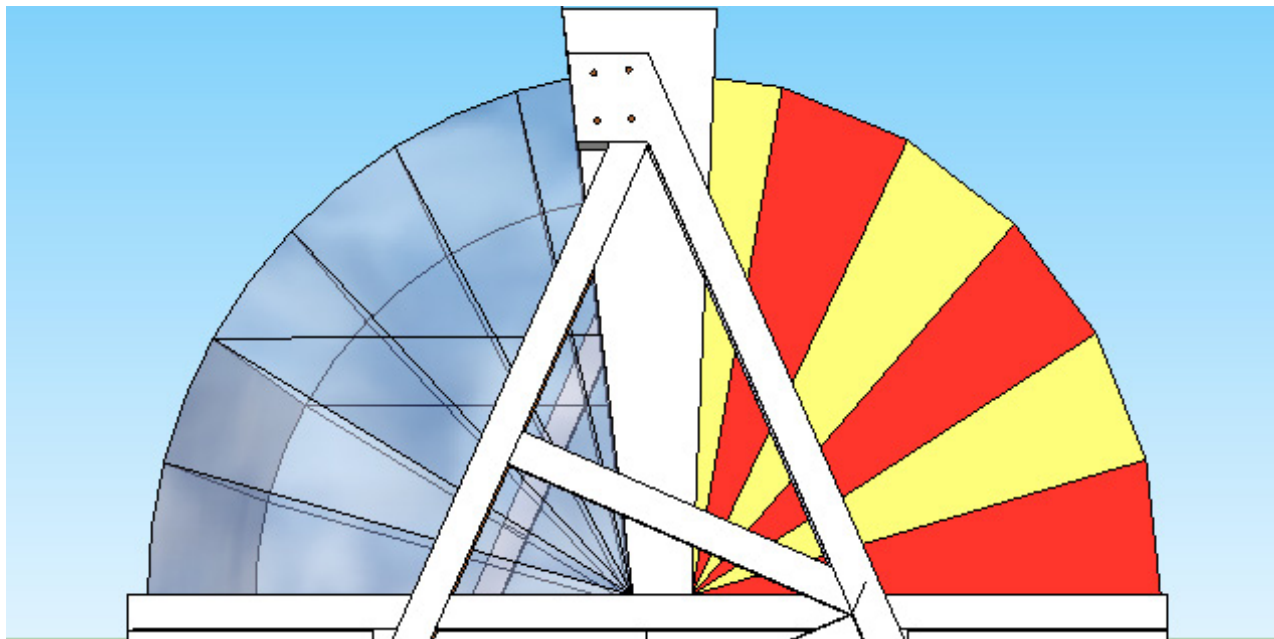
The A-frame is constructed with Macrocarpa (100 x 50mm) using mortise and tennon joins.



PORTAbell TOWER

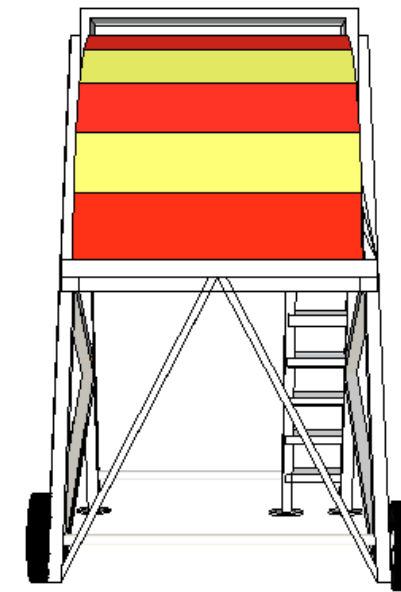


Transparent shelter folds down to 1m creating balustrade.

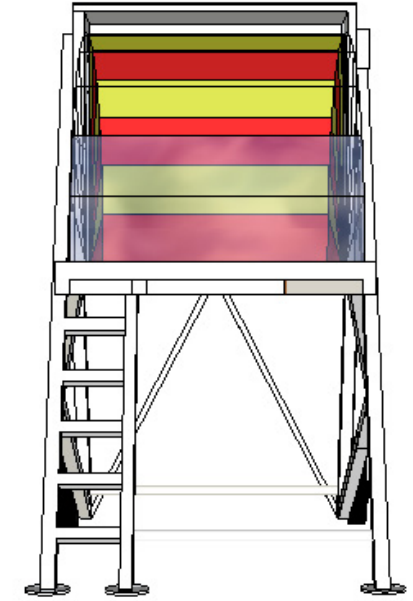


Closes to create shelter in windy weather or protect from harsh sun.

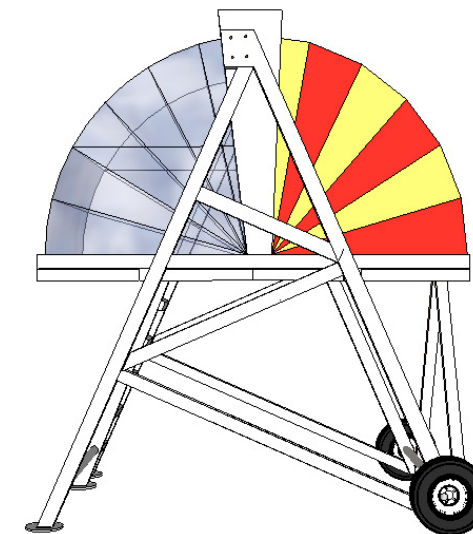
BACK



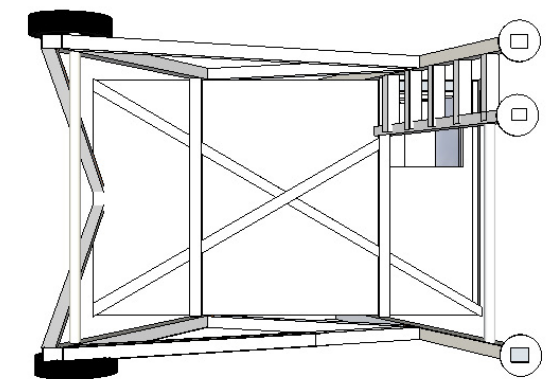
FRONT



SIDE



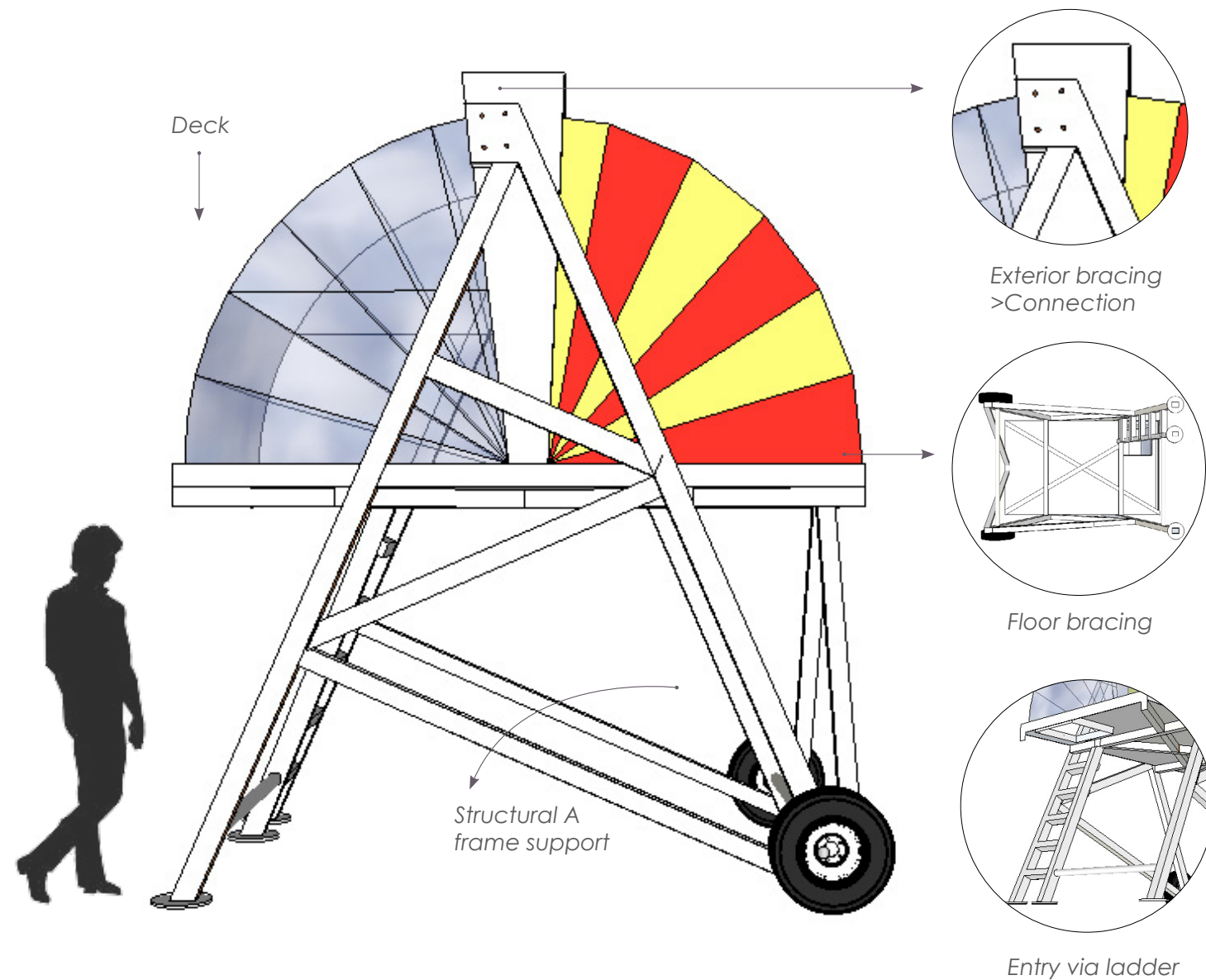
BOTTOM



PORTAbell TOWER

STRUCTURAL COMPONENTS

The unit can be self-supported. Like tents, the cables attached at the top of the A-frame can be inserted into sand using metal pegs. This will provide extra stability.

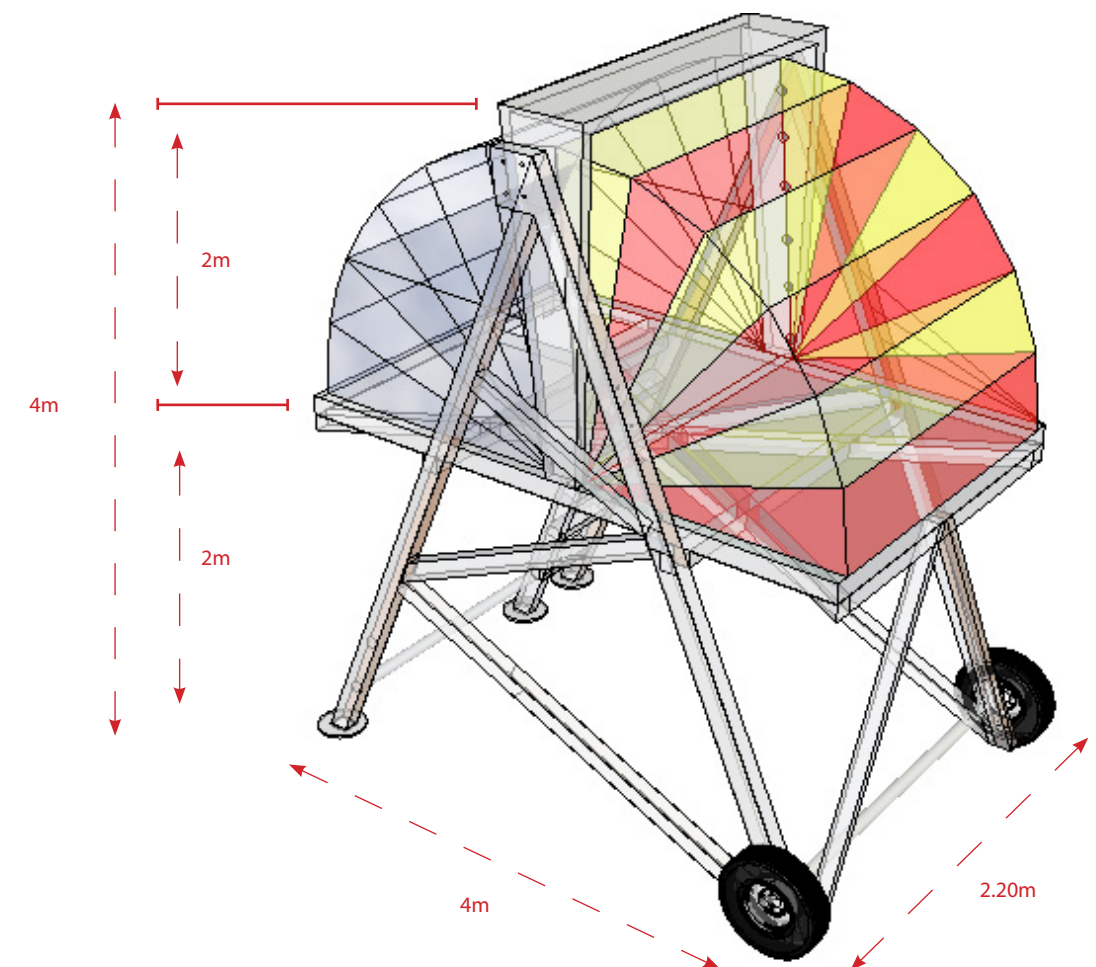


DIMENSIONS

Floor space = $8m^2$

The size and material choice ensures it is light enough to manoeuvre. This portable unit is under $10m^2$ and reduces consent and permits needed for larger construction.

**Under $10m^2$
NO PERMITS**

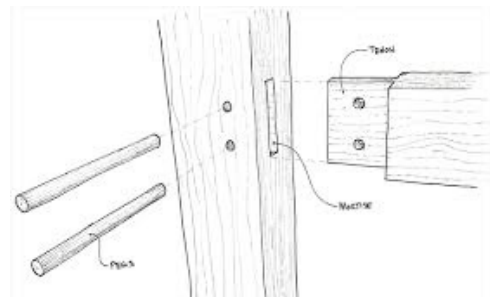


PORTAbell TOWER

Central wooden hub for canvas tent structure to connect to.

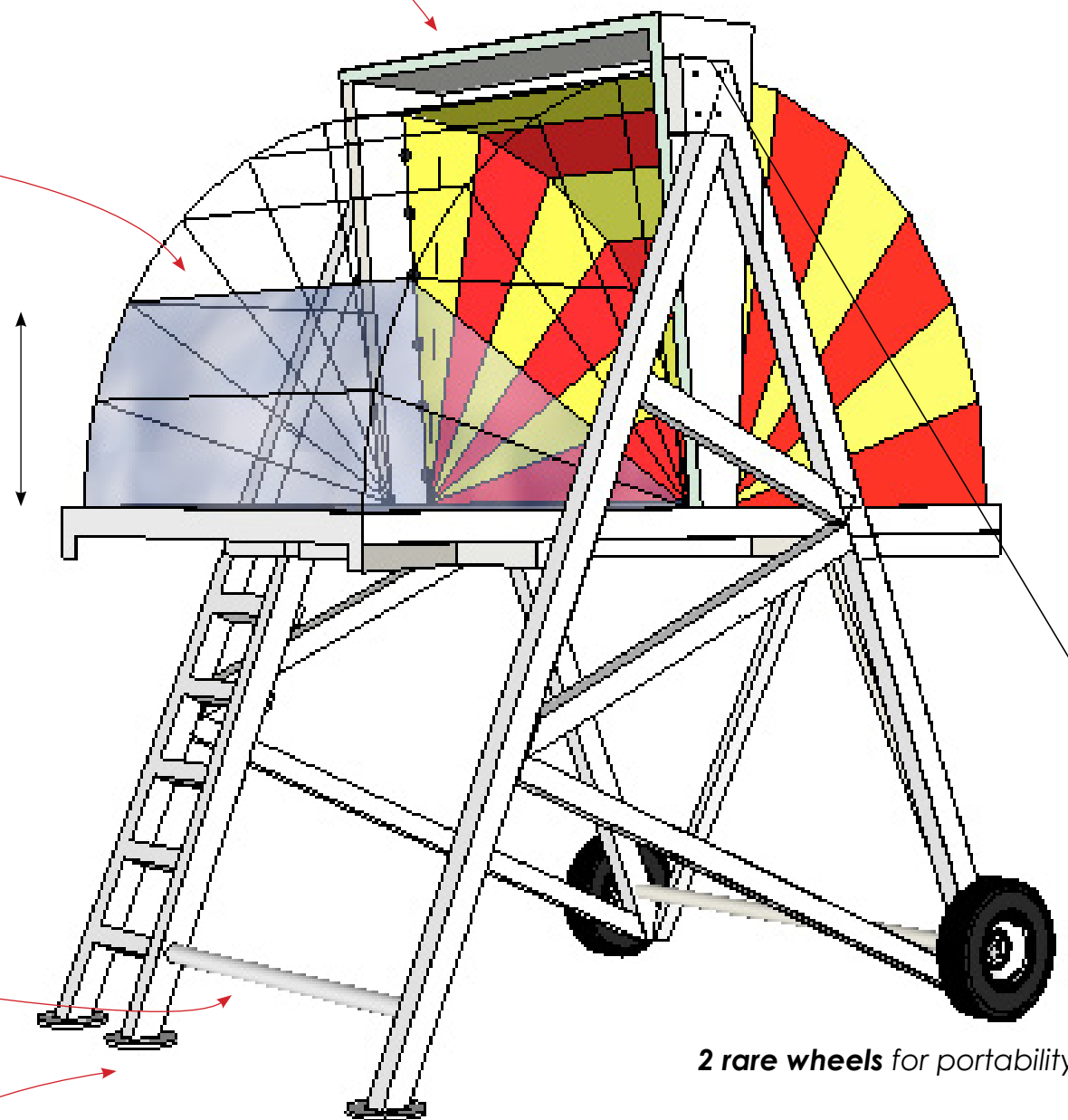
Canvas framing:
30 x 4 flat alloy bar.
Connect by a simple nut + bolt to pivot.

Mortise and tennon
construction joins



Tubular pole: Users can pick up the front of unit and wheel it to different locations.

Flat feet so beams dont sink into sand.



2 rare wheels for portability

MATERIAL COSTING

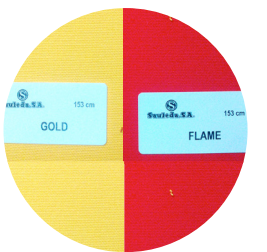
Macrocarpa 100 x 50mm

\$6.50 per meter



Canvas and transparent

\$35 per meter



H3 treated ply 21mm

\$100 per sheet (2.4 x 1.2)



Cables placed into the sand using KELTY sand pegs

1/16 by 250-Foot 7 by 7
Cable , Stainless Steel

\$31



Stainless steel coach bolts + screws (for A-frame/cable connection)

\$6.50 each



Canvas canopy connects to clips attached to wooden frame

\$2.60 each

