

CPM – STEVENSON WOODEN SHELTERS TO SHIELD METEOROLOGICAL INSTRUMENTS

(Rev.6 300823)



The CPM shelters have been designed and built according to the World Meteorological Organization (WMO) guidelines to place inside meteorological instruments. CPM shelters are made of seasoned larch treated with special white paints reflecting solar radiation. The base and the 4 perimeter louvers are constructed with lamellas arranged to avoid direct sunlight infiltration and to ensure the maximum accuracy of the sensors inserted for weather-climatic measurements.

The base and the roof are in phenolic multilayer; The latter is covered with a galvanized sheet, painted white and tilted like a "Sloping" to allow the rain to flow freely and to the snow not to settle massively. The front door has an upside-down opening with a lateral rod that lock the door facilitating the maintenance operations; at the same time the door offer a shield from the sun rays to the operator.

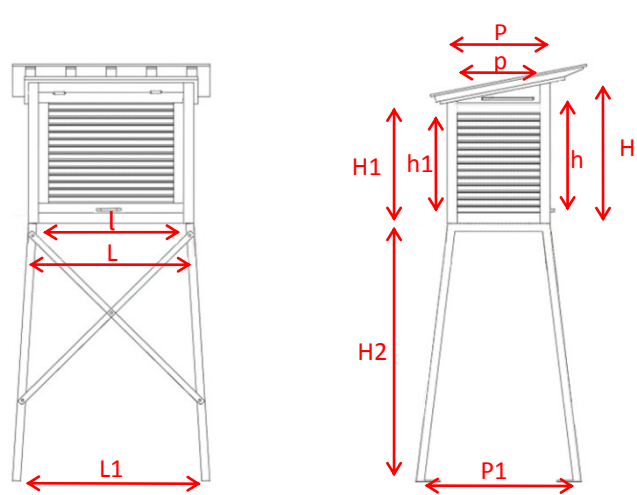
The door is also fixed to the shelter with stainless steel hinges and has two eyelets that can be fitted with a padlock. The stand is galvanized steel and the legs are slightly curved to ensure better stability. The legs of the stand end with perforated bases that allow the fixing to the ground with dowels, pegs or to dip it into the concrete.

Optionally, anchor rods can be provided to ensure even greater stability even in windy areas. The shed, in the small CPM1 version, is assembled and ready for use, while in the large version it is always supplied disassembled to facilitate transport; the trestle is always delivered disassembled.



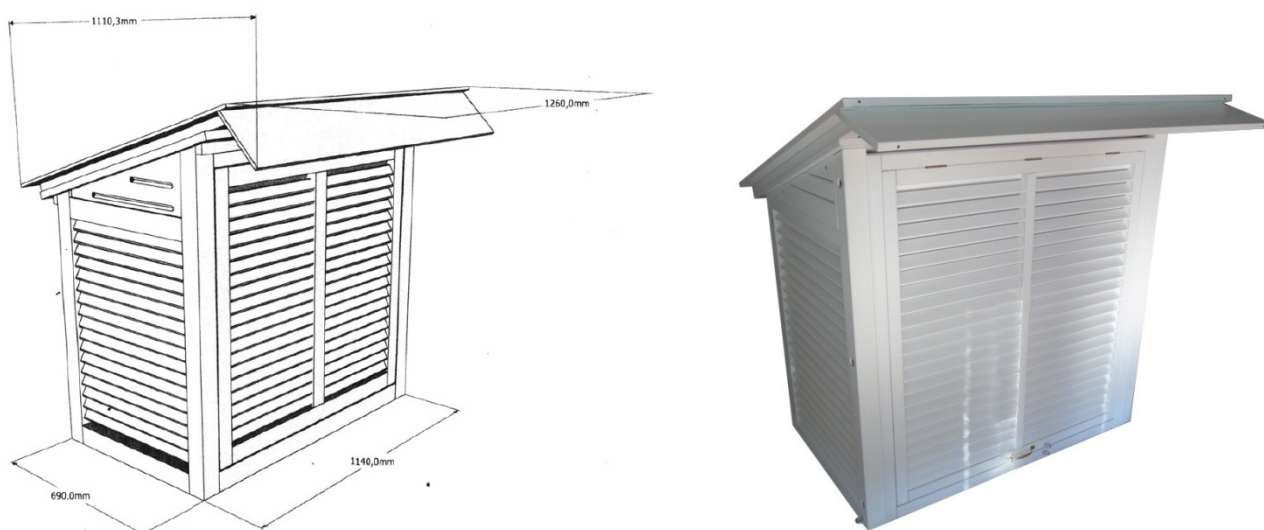
Internal view of the CPM shelter

Specifications

Models	CPM1 (model: "basic-small")	CPM2 (model: "big")
External dimensions (LxPxH):	820 x 505 x 792mm;	1140 x 690 x 1100mm;
Internal dimensions (lpxh):	720 x 415 x 650 mm	1020 x 570 x 980 mm
Other dimensions:	H1=620 h1=575 H2=1200 L1=900 P1=580mm	H1=900 h1=780 H2=1200 L1=1300 P1=790mm
 <p>Roof tilting: 11°</p>		
Weight	50kg (shelter) + 7kg (metallic stand)	80kg (shelter) + 8kg (metallic stand)

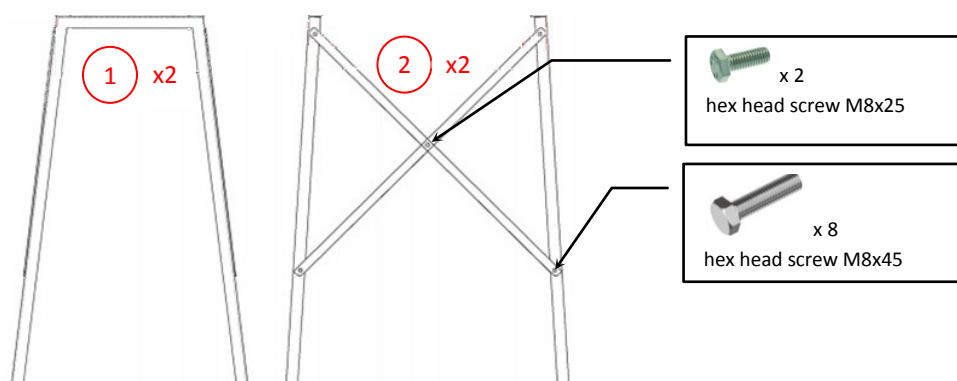
Materials	Shelter: larch treated with special white paints (RAL9010) Roof covering: galvanized sheet painted white RAL9010 Screws and accessories: galvanized steel and brass
Opzioni	A) Double row of louvres arranged in a herringbone pattern (WMO compliant) B) Metal stand in galvanized steel C) Set of 3 bracing tie rods D) Front side roof projection Example of "large" removable shelter coding with double louvers, trestle and front side roof: CPM2-ABD

Example of CPM2 shelter, "big" model with front side roof projection

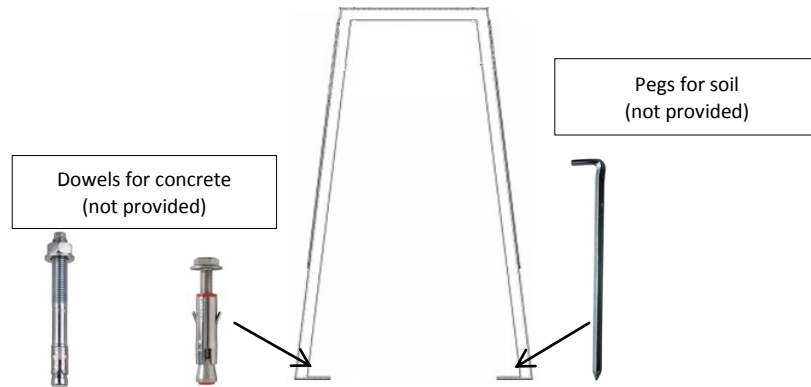


Assembly instructions of the metallic stand

- To assemble the stand used as a base of CPM wooden shelter, fix the 2 lateral posts ❶ using the 2 cross arms ❷. The procedure must be done both in the front and at the back side of the stand using the screws provided.



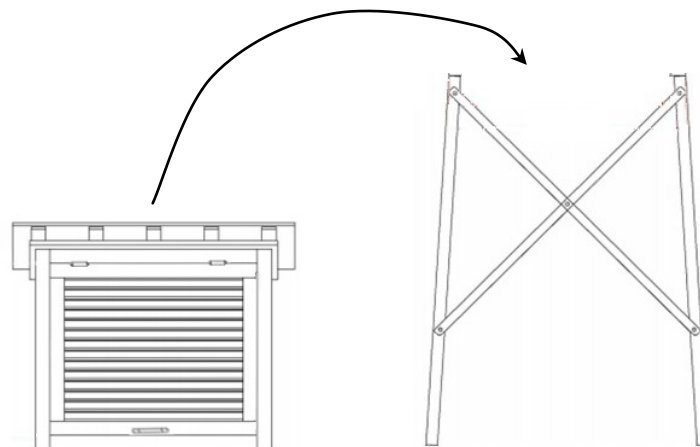
- Move the obtained structure above a flat surface then fix it on the ground by using dowels (for concrete surface) or pegs or round rods (for soil).



3. Before tightening the screws at the stand base (or before planting the picket to the bottom), it must check with a spirit level that the stand is perfectly parallel to the ground. Add any thicknesses until the stand will be horizontally leveled then tighten the screws (or plant the pegs in the ground until they hit the bases of the 4 support legs).

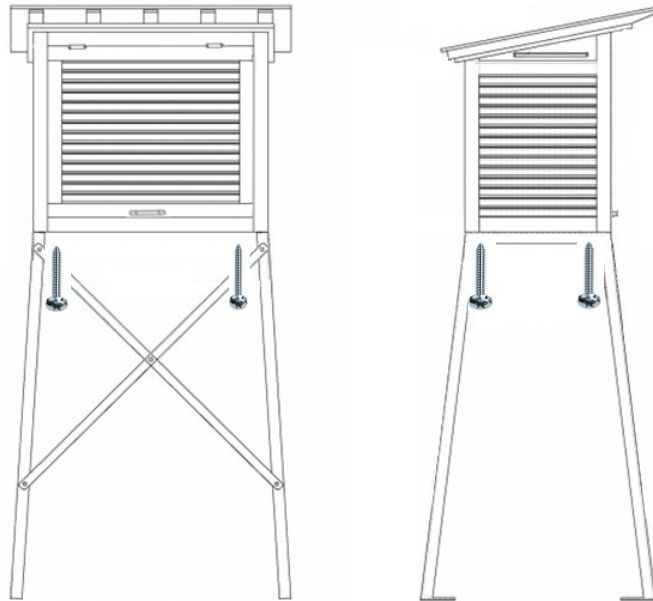


4. Lift the shelter than lay it above the metallic joining the shorter side of the support at the side of the shelter (v. Picture 1); it is recommended to carry out this operation in 2 people for CPM1 model and 3/4 people for CPM2



Picture 1

- Fix the wooden shelter to the metallic stand by using the 4 provided self-tapping screws; screws must be inserted in the 4 holes of the top of the stand as it's shown in the Picture 2.



Picture 2

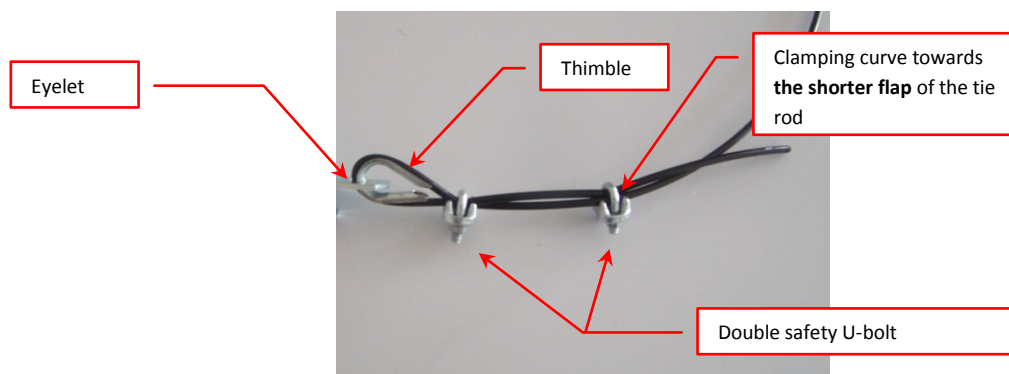
In the CPM versions with eyelet for the guywires, the latter must be fixed as follows:

- Open slightly the beaks of the thimble so that it can be inserted into the eyelet hole



Picture 3

- Place the thimble in the eyelet hole and then fold it back to form the original shape
- Push the tie rod into the eyelet for about 30cm by sliding it into the thimble as shown in Picture 4



Picture 4

- Lock the tie rod 30cm with the 2 U-bolts (one for fastening + one for safety) using a 8-inch hexagonal wrench. The U-bolts must be mounted as shown in Picture 5



Picture 5

5. **Important note:** Because plastic monofilament tie rods are typically used, the cable must be bent gently (no 180 ° curves should be made) and the U-bolt must not be tightened with too much force but with the normal force needed to prevent it from coming snared the guy-wire.
6. Repeat steps 1 to 5 on the other two eyelets secured to the shelter, then secure the 3 guy-wires to the ground on suitable and robust sealing points by maintaining an angle between one rod and the other around 120 °.
7. For safety reasons, it is advisable to report the tie rods with the white / red ribbon to prevent staff (and not) from stumbling.

