



Weather for Schools



Building a Double Wooden Weather Station

This design is simply a guide. It is intended to be made by adults taking sensible safety precautions. The user is responsible for his/her own wellbeing and safety.

This easy-to-make weather station is intended for use with a *Maximum and Minimum thermometer* and a *wet and dry thermometer*. Naturally it would be best if this was supported with a rain gauge and a weather vane in the same locality. Most of the instruments needed can be purchased at a garden centre. Educational suppliers also provide a choice of instruments.

It is designed to be made from easily obtainable wood. The length can be adjusted to suit the instruments to be housed.

The weather station provides for circulation of air whilst stopping most rain and wind.

The whole should be painted white to reflect sunlight. The whole should be mounted on

the north facing side of a post so that the bottom of the thermometer is 125cm from floor level.

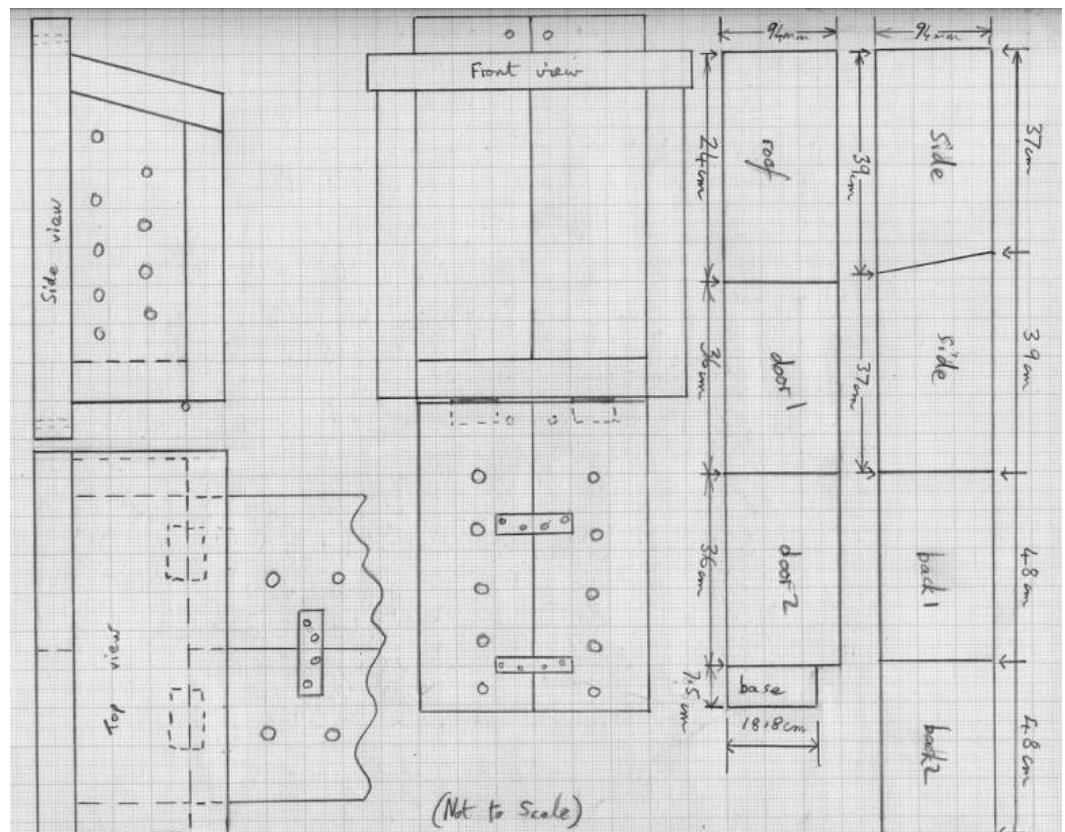
Materials

- 2 x plank of smooth planed wood 210cm x 9.4cm x 1.8cm
- 9 x screws No8 x 1 ¼ inch
- 2 x small brass hinges
- 2 x 12.5cm Zinc mending plates (to join two parts of door)
- Magnetic or other catch
- Filler
- Paint (primer, undercoat and gloss)

Tools

- Sandpaper
- Saw
- Drill
- Drill bit
- Hole cutter - 16mm
- Countersinking tool
- Screwdriver
- Paint brush

Method of Making





Mark the wood, cut and sand the pieces. Note that the sides are intended to slope at the top, so that the roof is sloping.

Rule a line 3cm from the bottom end of the back. Fix the long edges of the sides to the back, aligned above the 3cm line (2 screws, drill and countersink)



Fix the base aligned above the 3cm line (one screw each side and one at the back). Attach the roof, making sure it touches the back. Join the two parts of the door together using the fixing plates.

Mount door using piano hinge cut to size. The fixing plates face the inside.



Drill 16mm ventilation holes in sides, front and base. These are at 5cm intervals. Avoid screws.

Drill mounting holes in the protruding sections of the back. Attach catch.





Fill screw holes. Paint with primer, undercoat and top coat. The final coat must be white gloss to reflect the heat of the sun.

Mount on a post at the correct height. Make sure that the door opens to the north so that the sun does not shine on the instruments.

