

A PARKING SPOT

It seems that you always need an extra parking space at home, and carports are the ideal solution for a tight budget or a tight space.



Here is a wooden design, that can double up as a structure for climbing plants, but is attractive enough to be left as is, too.

SETTING IT OUT

- 1) Find a suitable site, approximately 6 x 3m, without any obstructions.
- 2) Mark out column positions as shown on the plan. The dimensions shown on the plan indicate the centre lines of the poles.
- 3) Ensure squareness of pole positions, using the 3-4-5 (Pythagoras) set out method.
- 4) Measure out foundation holes of 500 x 500 mm and 60mm deep, around the centre of your set out lines.
- 5) Compact the base of the foundation holes.

PLACING THE UPRIGHTS

- 1) Secure 1/3m x 100-125 diameter pole in the foundation, get it plumb and brace it temporarily.
- 2) Repeat step 1 with the other 7 poles.
- 3) Cast the concrete mix around the poles, up to 100mm from ground level. ([See 'How to Plant a Pole'](#))
- 4) Only remove the braces after the concrete has set firmly.

PLACING THE GIRDERS

- 1) Secure log clogs in the centre of the top of poles.
- 2) Place 1/5,4m x 150-175 diameter pole (girder) on the log clogs. Ensure that the ends are equally overlapping. Secure the girder firmly.
- 3) Repeat step 2 with the other girder.

PLACING THE LATHS AT THE SIDE

- 1) Secure 1/1,2 x 50 diameter pole (laths) equal to the top of the uprights. Nail fix.
- 2) Place the second lath 300mm from the first one, ensuring that it is level. Nail fix.
- 3) Repeat steps 1 and 2 for the three other bays.

NOTE:

Very few timbers are naturally durable, and hardwoods that are durable can be very expensive. They can also crack and split, so they require some form of protection.

The cheaper locally grown timbers that should be used are pine and saligna, and fortunately, with proper impregnation of a suitable wood preservative, these timbers can offer long term durability.

There are various timber preservatives available. Some are not suitable for timber in ground contact, while others protect timber in all possible applications. Creosote and CCA preservatives are equally suitable for a car port.

Remember the use of treated timber ensures that your car port is protected against termites, borers and fungal decay.

Should it be necessary to paint the timber, CCA treated timber can be painted directly. Creosote timber can also be painted, provided it is first coated with a bituminous based aluminium coating.

As a general rule, preservative treated timber, in its natural form, is the easiest and cheapest solution.

This article was compiled by The South African Wood Preservers Association (SAWPA).

YOU WILL NEED

CCA OR Creosote timber poles:

8/3m x 100 - 125 diameter poles (upright)
2 / 5,4m x 150 - 175 diameter poles (girders)
32 / 1,2m x 50 diameter poles (laths)
80 / 3,3 x 75 diameter poles (laths)
25kg / 125mm wire nails
1m³ / concrete mix

[\(See Hazard Classification Classes in South Africa\)](#)

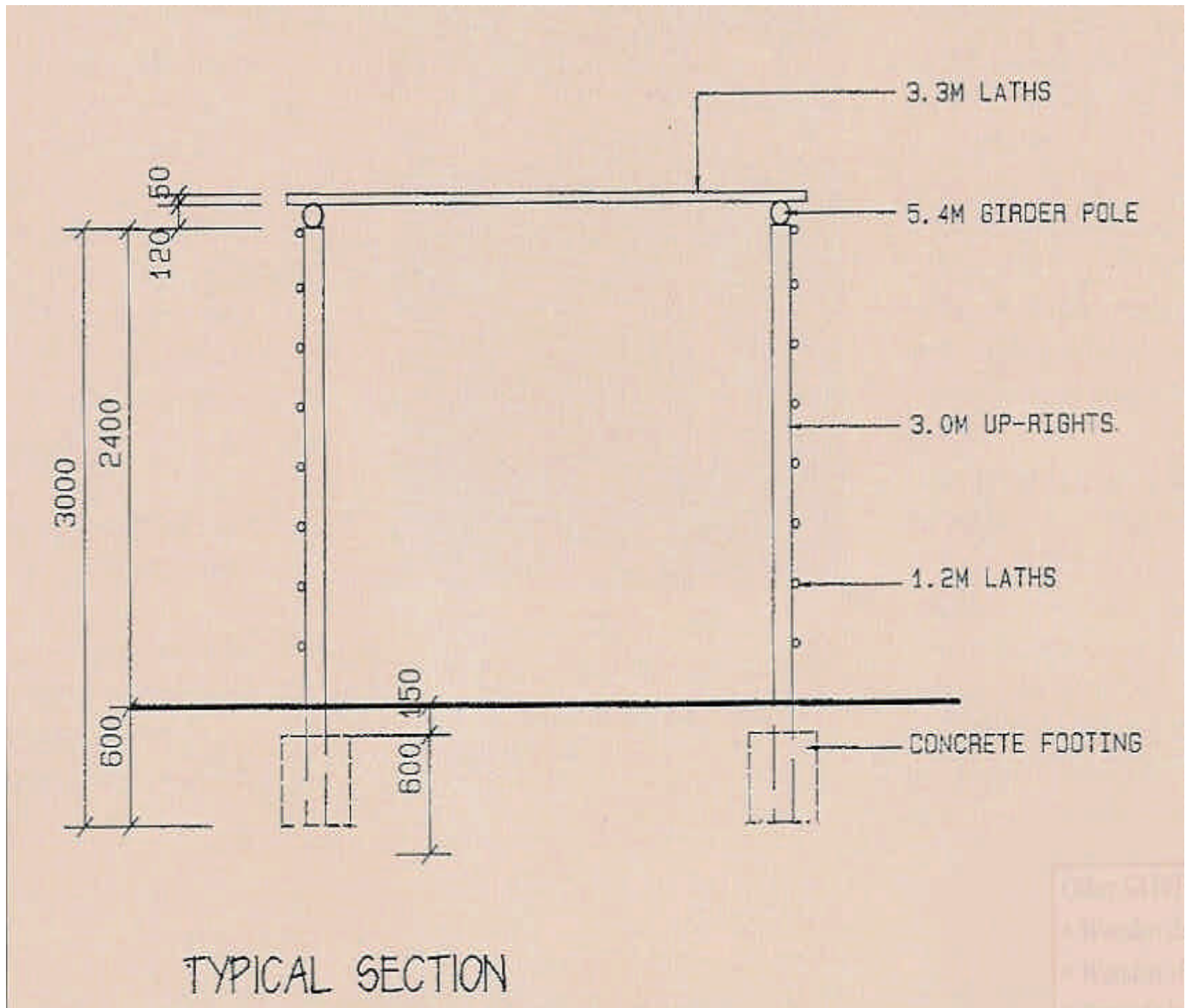
HOLES FOR POLES

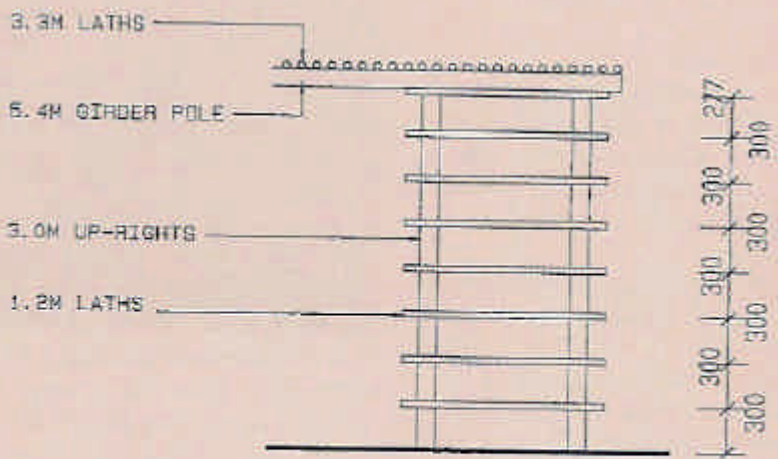
Although the stresses and loads on a structure like a carport are minimal compared to other pole built erections like hotels, bridges and homes, it is still important to embed the poles correctly. The carport is an unbraced structure and for this reason the embedded poles carrying the carport must be set to sufficient depth to provide adequate vertical support ... and also to prevent them from being uprooted by wind forces exerted on the structure. In the case of an unbraced frame, the depth of embedment should be sufficient to clamp the lower ends of the pole vertically as there is no anchoring or bracing to prevent the pole from rotating.

Before the length of the poles is determined, dig test holes to determine the type of soil and its bearing strength. Low bearing strength soils may be effectively stabilised by the addition of cement; 1:10 for the soil used at the bottom and top of the old and 1:20 for the remainder of the backfill.

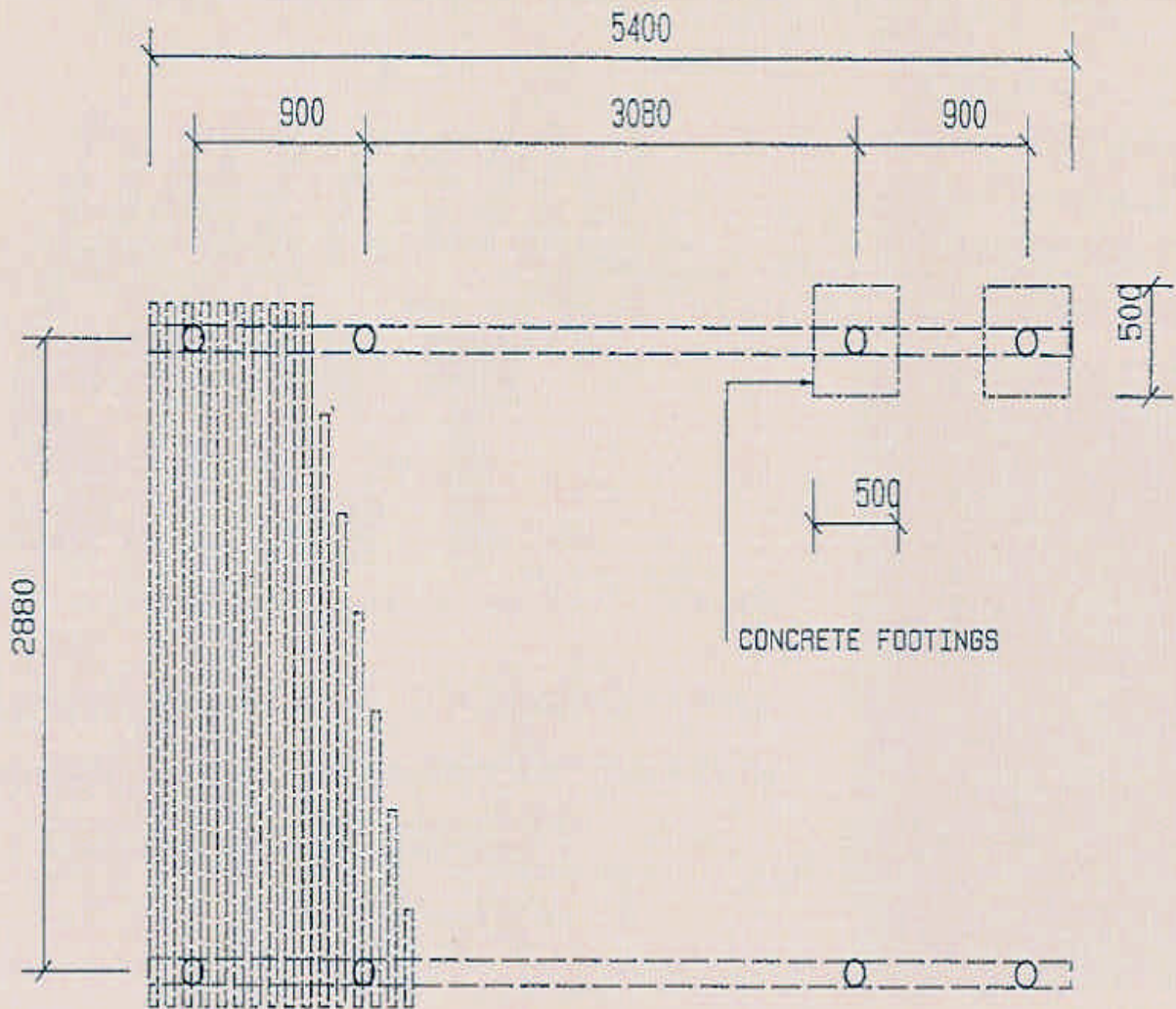
Thorough consolidation of the back fill is important. It should be rammed in layers of not more than 150mm thickness and the introduction of bricks and rocks in a soft backfill is not recommended as it will prevent proper ramming.

It is incorrect to encase the support poles of a structure in concrete because any moisture that may be absorbed by the pole will not have a way to escape. This will ultimately lead to the encased section rotting. A passage for water to escape must thus be provided. ([See How to Plant a Pole](#))





PORION OF SIDE ELEVATION
SHOWING LATHS



FLOOR PLAN LAY-OUT