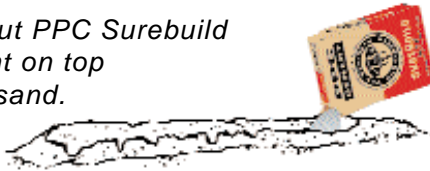


b. Pour out PPC Surebuild Cement on top of the sand.



c. Mix the cement and sand together until an even colour.

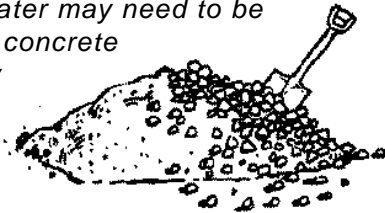
d. Create a hollow in the centre and slowly add clean water while mixing until a good paste is formed.



WARNING:

Too much water will reduce the final strength of your concrete.

e. Now add stone to the paste and mix well. (The stone tends to dry out the mix and a little more water may need to be added). The concrete is now ready for placing.



HOW DO I PLACE CONCRETE?

1. Concrete must be placed within an hour of mixing.
2. Place the concrete as close to the final position as possible.
3. If the concrete is being placed on the ground, make sure the ground is dampened with a spray of water before placing concrete.
4. Once placed, spread the concrete evenly with a rake or spade.
5. The concrete should be well compacted or 'tamped down' with a rod or spade, making sure that the concrete fills the form or hole completely.
6. To create a flat surface (for a slab or driveway) use a wooden straight edge tool. First use a 'chopping' motion, then a sawing motion to first flatten the surface and then strike off the excess concrete.
7. Concrete slabs or driveways should be divided into panels to limit cracking. Joints should be no more than 2,5 meters apart for 80 mm thick slabs and about 3,5 meters apart for 100 mm thick slabs.
8. Once it has stiffened, keep the concrete damp by covering it with plastic sheeting, damp hessian, damp sand, or by spraying it with water regularly. For optimum strength, this curing process should be continued for 7 days.
9. For driveways, keep vehicles off the concrete for at least 10 days.

THE SURE WAY TO MAKE CONCRETE



PPC
CEMENT



Visit our Web Site at: <http://www.ppc.co.za>.

For more advice on cement please ask your PPC Cement stockist or call the PPC toll-free help line 0800 023 470 (SA only).

While all information in this brochure is supplied in good faith, no responsibility can be accepted by PPC or the stockist for claims arising from its use.

PPC
CEMENT

THE SECRET OF STRONG CONCRETE

Making concrete is easy.

There are many small concrete projects that you as a homeowner can confidently tackle using PPC Surebuild Cement. Foundations, flooring slabs, fish ponds and driveways are easy and by doing it yourself you can save money.

The secret of strong concrete is to use a power-packed cement like PPC Surebuild, and never use too much water.

WHAT MATERIALS DO I NEED?

1. PPC Surebuild Cement

Surebuild is ideal for concrete, mortar and plaster. PPC Surebuild complies with SABS EN 197 cement standard, it meets the NHBRC requirements and is made by PPC, South Africa's No.1 cement producer.

2. Clean Concrete Sand

Ask your supplier for clean concrete sand. The sand should be free of twigs, roots or other foreign matter.



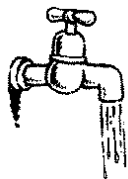
3. Clean Stone

13mm to 19mm in diameter is the ideal stone size.



4. Clean Water

If you can drink it, it is suitable for concrete.



WHAT MIX PROPORTIONS SHOULD I USE?

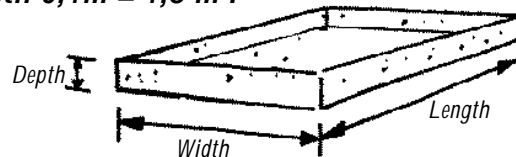
See details on the back of the PPC Surebuild bag, "The Sure Way to Estimate Quantities" leaflet or visit the PPC website - www.ppc.co.za.

HOW MUCH CONCRETE WILL I NEED?

Concrete is always poured into a 'form' or hollow in the ground. To work out how much concrete you need you first need to measure the volume of the space you are going to fill.

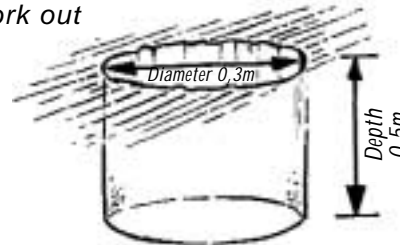
1. Flat Slabs/Foundations/Driveways

Using a measuring tape, measure the **length**, **width** and **depth** of the area to be filled and multiply these together to work out how many cubic meters (m^3) of concrete you need, e.g. **length 4,5m, width 4m, depth 0,1m = 1,8 m^3** .



2. Post Holes (Cylindrical Forms)

Using a tape measure, measure the **diameter (width)** and **depth** of the hole. Now multiply the **diameter** by the **diameter** then multiply this total by the **depth** and then by 0,8 to work out how many cubic meters (m^3) of concrete are needed, e.g. **Diameter 0,3 m**
Diameter 0,3 m
Depth 0,5 m
($0,3 \times 0,3 \times 0,5 \times 0,8 = 0,036 m^3$).



3. How much material should I order?

See details on the back of the PPC Surebuild bag or refer to the PPC Cement "The Sure Way to Estimate Quantities" leaflet to calculate the amount of PPC Surebuild Cement, sand and stone you will need. But as a rough guide, to mix 1 cubic metre of concrete ($1 m^3$) you'll need 4-6 bags of PPC Surebuild (depending on the strength of the concrete required) plus approximately $0,7 m^3$ of sand and $0,7 m^3$ of stone.

HOW DO I MIX CONCRETE?

1. Concrete Mixer

If you use a concrete mixer the batch size should suit the mixer. Underfilling the mixer wastes time, while overfilling results in spillage and poor mixing.

- Measure the quantity of stone and place in the mixer. Add a little water to wet the stone.
- Add the measured quantity of PPC Surebuild.
- Add the measured quantity of sand.
- Finally add water; a little at a time, until the concrete is flowable but not runny.

2. Manual Mixing

For small batches: mix in a wheelbarrow.

For larger batches:

- Measure out sand and place in a long, thin heap on a flat, clean, hard surface.

