



KWIKBUILD CEMENT

MANUFACTURED BY KWIKBUILD CEMENT
3 TRANS RD, SILVERTON, PRETORIA
TEL:(012) 804 8337



www.kwikbuildcement.co.za

• QUALITY PLASTER •

Plaster consistently proves to be one of the greatest problem areas in building. Poor quality plaster becomes evident in the form of cracks, dusting, crazing and poor adhesion of the plaster to the wall surface.

Most of the problems can be avoided by a careful selection of the cementitious products and the sand however the preparation of the wall and brickwork are extremely important and weather can also play an important role. The advice given here does not attempt to address the problems associated with techniques or types of finish.

CHOOSING MATERIALS

Cement

Only use a minimum of an '32.5 N' cement that carries a certified LOA Number and SABS Mark (SANS Specification 50197-1)

Note:

If a masonry cement (12.5x or 22.5x) are used the quantity of sand to be mixed with a bag of masonry cement is reduced to a maximum of 2 1/2 wheelbarrows.

Sand

Use a good quality plaster sand.

A simple test for sand:

Step 1

Mix 1 litre of cement with 5 litres of **dry** sand.



Step 2

Add 1 litre of water



- If after **Step 2** the mix is wet enough, the sand is "GOOD"
- If not, add another 0.5 litre of water
- If the mix is wet enough the sand is "OK"
- **If not** : Try another sand.

THE MIX



Mix proportions should be:

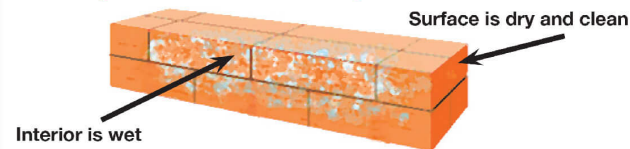
- 50kg cement (1 bag)
- 200 litres (maximum loose damp sand (approx. 3 wheelbarrows filled level with the top).

UNDER NO CIRCUMSTANCES SHOULD MORTAR BE RETEMPERED

PREPARING THE WALL

- The wall should be clean (no oil or dust)
- The bricks or concrete should be saturated, but the surface should be dry.

Cut through section of bricks showing saturation:



USEFUL INFORMATION AND SPECS

- 6 x 50KG pocket of cement will produce 1m³ of mortar
- 1m² of single leaf brickwork requires 52 bricks
- 1m³ of mortar will lay 3000 bricks of single leaf brickwork (115mm) if it is 10mm thick
- 1m³ of mortar will lay 2000 bricks of single leaf brickwork if it is 15mm thick
- 1m³ of plaster will cover 60m² (15mm thick) or 100m² (10mm thick)

Referred documents

SANS 1090 Sand for plaster and mortar
SANS 10145 Concrete masonry construction
SANS 10164-2 The Structural use of masonry
SANS 50197-1 Specification for common cements

Notes

1. Assuming standard brick i.e 222mm x 106mm x 73mm
2. Wastage depending on site control can vary from 20% to 200% in extreme cases
3. The above estimates allow for zero wastage

COMMON PLASTERING PROBLEMS

Soft weak surface.

This can be determined by rubbing one's fingers over the plastered surface.

Causes are:

- Not enough cement in the mix.
- A poor quality sand.
- Bricks were dry (unsaturated).
- Mix was retempered.
- Rapid drying.

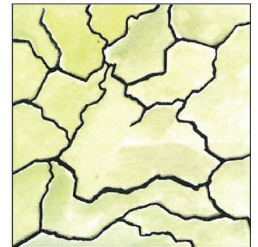


Craze cracks.

This can appear in various forms, depending on the reasons that they occur.

Causes are:

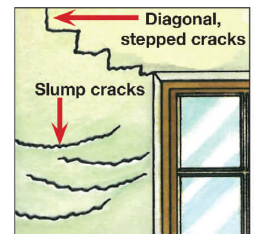
- Plaster was trowelled too early or over-trowelled.
- Mix was too rich.
- Early drying occurred (wind and sun on a north facing wall).
- The sand was of poor quality.
- Trowelling neat cement onto the surface.
- High water absorption of bricks.



Diagonal, stepped cracks.

Causes are:

- Wall under the plaster is cracked.



Slump cracks.

Causes are:

- Mix was too wet.
- Layers were too thick.
- Surface was too wet.

Debonding (hollow) spots.

This is the separation from the brickwork and can be determined by lightly tapping the wall with a hammer and listening for hollow sounds.

Causes are:

- A surface that was wet, dusty or oily.



FAST STRONG DURABLE