

PPC CEMENT TUTORIAL

HOW TO SCREED A FLOOR

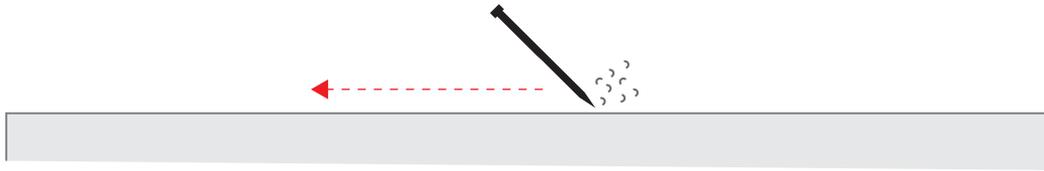


PRE-BUILD: TOOLS & MATERIALS

ITEM	Quantity	Check
1. Builders' bucket		
2. Wheelbarrow		
3. Shovel		
4. Builder's line		
5. 150mm steel pegs		
6. Rigid timber forms		
7. Flexible forms		
8. Stiff bristled brush or broom		
9. Straight edge		
10. Spirit level		
11. Tape measure		
12. Wood float		
13. Edging tool		
14. PPC Surebuild Cement		
15. 19mm stone		
16. Clean concrete sand		
17. Polythene sheeting		

STEP 1: ASSESS THE SURFACE OF THE BASE

- 1 The base surface onto which the screed is to be bonded should be well cured, sound and durable. This can be checked by drawing a steel nail or other sharp object across the surface. If the surface crumbles or dusts, then mechanical preparation may be required.



STEP 2: CALCULATE THE MATERIALS

- 1 Use the PPC Builders' app to calculate how much sand and Surebuild cement will be required.



- 2 Alternatively, multiply the length (in meters) by the width (in meters) to calculate the area of the floor. Multiply this by the thickness of the screed (in millimeters) to calculate the volume of screed mix required in litres.

$$\text{Length} \times \text{width} \times \text{depth} = \text{volume}^3$$

- 3 As a guide, 1 bag of Surebuild cement mixed with 2 wheelbarrows clean, coarse sand and water will yield 110 litres, which is sufficient to screed 4.4 m² at 25 mm thick.



1x
Surebuild
cement

+



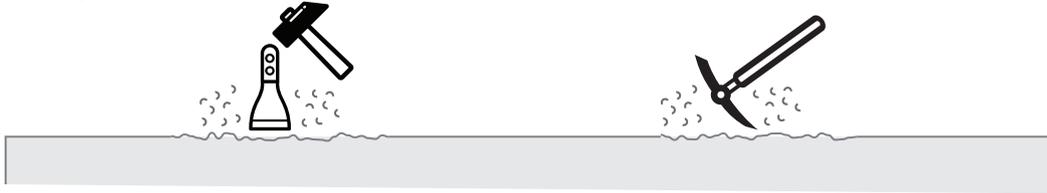
2x
Clean concrete sand

=

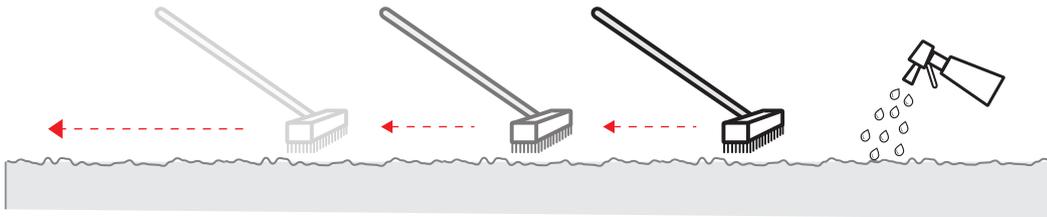
110 litres

STEP 3: PREPARE THE BASE

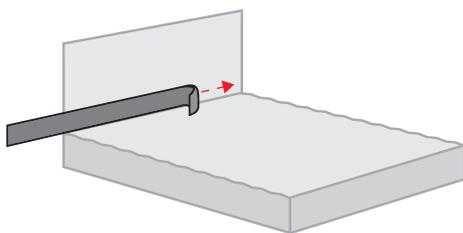
- 1 The entire base should be prepared to result in a rough surface, suitable for bonding. Use a chipping hammer, pick or other suitable equipment to break the surface, remove mortar, plaster, paint etc. Remember, the entire surface must be roughened to ensure a good bond. If the surface of the base was wood floated or struck rough, mechanical preparation may not be necessary.



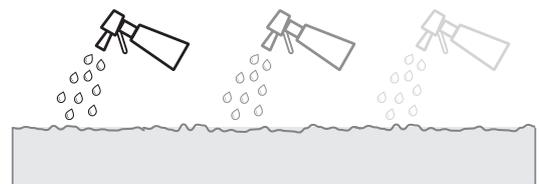
- 2 Clean the entire surface with a stiff bristled brush or broom, sprinkling clean water as you work to keep the dust to a minimum.



- 3 Fix 30 mm wide soft-board, closed-cell foam or polystyrene strips to the perimeter walls to isolate the screed.



- 4 Wet the prepared surface with clean water for at least 1 hour before applying the bond coat.



STEP 4: PREPARING THE SCREED MIX

- 1 Either use a mechanical mixer or a wheelbarrow and shovel to mix.



Machine

or



Wheelbarrow

- 2 mix 1 part Surebuild cement with 4 parts clean, coarse sand with sufficient water until a plastic consistence similar to cement plaster is achieved.



1x

+



5x

- 2 Excess water should be avoided as this will reduce the strength and will increase the risk of cracking.

A stiff mix with too little water will not allow full compaction, and the screed may crumble over time.

STEP 5: PREPARE AND APPLY THE BONDING SLURRY

- 1 Mix 2 parts water with 5 parts Surebuild cement until a smooth, thick slurry of paint consistency is achieved.



2x

+

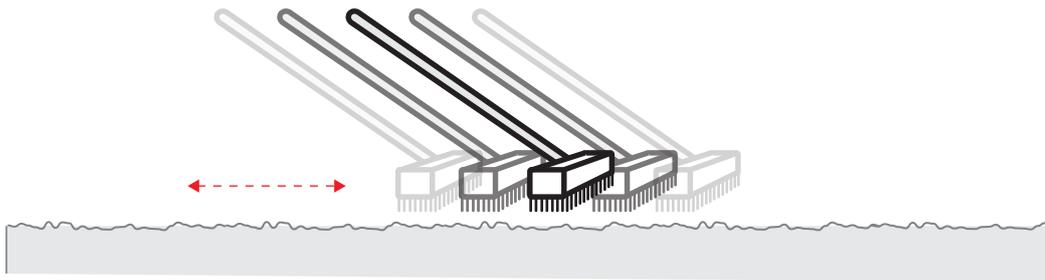


5x

- 2 An acrylic bonding agent may be added in accordance with the manufacturer's instructions to assist with bonding to the base.



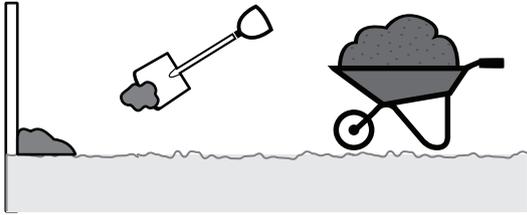
- 3 Remove excess water from the prepared surface and using a stiff bristled brush or broom, scrub the bonding slurry into the surface immediately ahead of the screed mix placement.



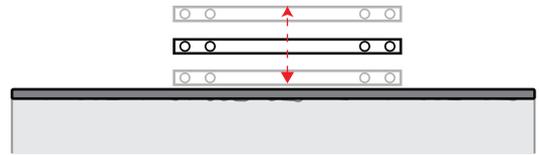
- 4 The screed mix must be cast onto the wet bonding slurry within 10 to 15 minutes.

STEP 6: PLACING AND COMPACTION

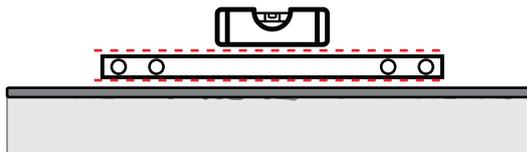
- 1 Begin placing in the furthest corner of the room. Place the screed mix onto the bonding slurry whilst it is still wet



- 2 Spread the mix and compact with a chopping motion of the straight edge and wood float to ensure that the air is expelled. This will also ensure that there is full contact between the bonding slurry and screed mix.



- 3 Check the thickness of the placed screed regularly and use the straight edge and spirit level to check that the screed is level in all directions.



- 4 If the screed is to receive carpets or ceramic tiles, use the same swirling motion of the wood float held in a flat position to create a textured paste at the surface.



- 4 If the screed is to receive vinyl tiles, or if a smooth wearing surface is required, use the same swirling motion of the steel trowel held in a flat position to create a smooth paste at the surface.



NOTE THAT:

- When the surface is firm enough, you can place knee boards onto the surface and whilst standing on one, move the other towards the corner where you started placing the screed. (This will prevent footprints in the screed.)
- Ensure that the openings remain closed to prevent evaporation from the surface while waiting for the screed to set sufficiently to permit final finishing.

STEP 7: CURE THE SCREED

- 1 Immediately after final finishing, cover with polythene sheeting or pond the surface with water for at least 7 days.



7 days



These instructions are only a guide. There are many other alternative methods to screeding a great floor that will impress your friends.

Always remember to wear protective clothing.