



CONMIX LTD.

WATERPROOF TILE ADHESIVE - C500

Value for money...

C500 is a dry pre mix, cement based, thin bed tile adhesive. It can be used on ceramic tiles (group III-BS5385-1:2009) having water absorption (E) more than 10% (E>10%). C500 white is advised to be used on stain prominent tiles.

TECHNICAL DATA

Composition	:	Portland Cement, fine graded sand and chemical additives including powder polymers.
Binder	:	Portland Cement
Aggregate Size	:	0-0.5 mm
Appearance	:	Granular powder available in grey & white colours
Mixing Ratio	:	6.25 ltrs of water per 25 kg bag Water/Powder ratio = 0.25
Approx. Yield/Coverage *	:	17 ltrs per 25 kg bag; 7.5 m ² per bag at 3 mm thickness 4.5 m ² per bag at 5 mm thickness
Density *	:	Wet: 1.8 kg/ltr Dry: 1.75 kg/ltr
Compressive Strength *	:	15.0 N/mm ² @ 28 days
Flexural Strength *	:	3.0 N/mm ² @ 28 days
Bond Strength *	:	> 0.5 N/mm ² @ 28 days
Pack Size	:	25 kg paper bags
Shelf Life	:	12 months from date of production when stored under dry conditions
Working Time	:	Approx. 30 minutes
Specification	:	BSEN 12004:2007 DIN18156 & ANSI A118.1

* Typical results under laboratory condition.

APPLICATION METHOD

BACKGROUND

Conmix Waterproof Tile Adhesive C500 is suitable for backgrounds such as Portland Cement based renders, floor screeds and concrete. C500 should not be applied onto wood, metal sheets or painted surfaces. The background and tile must be clean, free of dust deposits, sinter skin, formwork oil and other contamination which may affect adhesion. The suction in the background should be neutralized by applying potable water.

MIXING

C500 supplied in 25 kg bags has to be mixed with potable water only, in a clean plastic bucket or a clean, non-corrosive uncontaminated metal tub. To ensure a homogeneous and uniform mix, an electric agitator must be used.

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Application tools





The amount of water to be added is approximately 6.25 ltrs per 25 kg bag (i.e. 25% by weight). Add C500 to water, turn the contents of the bag carefully and stir frequently.

Once mixed, allow to stand for 5 minutes and mix again before applying. No further water should be added to the mix. The mixed mortar must be used within 30 minutes. Hard and set mortar should not be re-mixed or used.

APPLICATION

C500 is rendered in one coat, having a thickness of 2-5 mm. To achieve a uniform thickness, the mortar is leveled with a serrated trowel. The thickness of the adhesive will depend upon the size and type of tile. Do not spread more than 1m² at a time. Spreading large areas may result in the mortar drying before tiles can be pressed home, causing poor adhesion.

Once the mortar has been applied, the working time will vary according to the porosity of the surface and atmospheric conditions.

Tiling in wet areas, i.e. shower rooms, swimming pools and in all such instances, ensure a solid bedding. There must be no void or air pockets behind the tiles. Do not apply the mortar sparingly. Buttering the mortar onto the back of the tile is not recommended, but if essential it should be spread over the entire back of the tile to an even depth.

TILE PREPARATION

Pre-treatment, i.e. wetting of tiles is essential. However, due to the wide variety of tiles available, it is advisable to consult the tile manufacturer for recommendations.

JOINTS

Ceramic tiles should not be fixed with tight joints. Leave a minimum space of 2 mm around every tile. For normal use, the joints should be filled with Conmix cementitious grout.

MOVEMENT JOINTS

The possibility of incorporating movement joints in any tile installation should be considered at the design stage and usually they will be located at the following areas:

- a) Over existing movement joints in the structure
- b) Where tiling other materials i.e ceiling, floors, skirting, door and window frames etc.
- c) In large tiled areas at internal vertical corners and at 3-4.5 m centers horizontally and vertically. Movement joints should be at least 6 mm wide and extend completely through tile and adhesive bed. An appropriate sealant, e.g. silicone rubber, should be used for filling the movement joints.

The recommendations in BS 5385 should be followed.

Conmix demonstration team will assist in these procedures upon request.

GROUTING

Grouting should not be carried out for at least 48 hours after completion of the tiling.

STORAGE

Conmix C500 must be stored in a dry place, off the ground and well covered. Hard or lumpy material must be rejected.