

Frequently asked questions about Alcolin P300

1. What is Alcolin P300?

Alcolin P300 is a high quality, grey, cement-based tile adhesive specifically for the bonding of wall and floor ceramic tiles. The product is suitable for both indoor and external tiling.

2. What is Alcolin P300 used for?

Alcolin P300 is formulated for interior/exterior wall and floor applications where it is used for the fixing of mosaic, ceramic, stone, brick and clay tiles to cement render, screeds, concrete, and primed fibre cement surfaces.

3. How do I use Alcolin P300?

It is critical to first ensure correct floor and wall preparation. We recommend that one reads the technical data sheet for Alcolin P300 for full details on surface preparation.

Once surface preparation has been completed, mix approximately 3 volumes of Alcolin P300 with 1 volume of clean, cold water and gradually mix until a smooth consistency is achieved. Allow to stand for 5 minutes, then remix immediately prior to using. Do not add more water and do not mix more adhesive than can be used within 1 hour.

Tiles should not be butt joined. A minimum grouting joint width for walls is 2mm and for floors, 3mm. Use a 6mm notched trowel for wall tiles, and a 10mm notched trowel for floor tiles, and apply to a thickness of 3mm on walls, and 6mm on floors. Heavily lugged, grooved or dovetailed tiles must be buttered with adhesive before bedding into the troweled adhesive in order to prevent any voids. If the tiles do not have spacer lugs, plastic spacers may be inserted between the tiles to help maintain straight grout lines. Remove these after placing the tile, before they become firmly set in the adhesive. Do not spread more adhesive than can be tiled in 10 minutes. Press tiles firmly into wet adhesive with a twisting action (before surface drying/skinning occurs). Use a "RUBBER Mallet" to bed large or heavy tiles. Occasionally lift a tile to check that full contact is being made between the tile and the adhesive. Use only dry tiles – do not pre-wet tiles in water. Clean excess adhesive off tile surface, grout joints and tools while still wet.

Do not tile over existing structural movement joints. Movement joints should be located in both directions at a maximum 5m for interior applications and every 3m for exterior applications. Movement joints should also be located in all horizontal and vertical corners, and against obstructions fixed to the structural background and over all discontinuities in building materials e.g. interfaces between concrete and brickwork.

4. Can I use P300 if I am butt joining tiles?

No, it is not suitable for butt joining tiles – space must be left between the tiles for tile expansion. These spaces can be filled with a tile grout such as Alcolin Grout.

5. How long should I wait before grouting?

Allow a minimum of 24 hours before grouting.

6. Can I tile over existing expansion / structural movement joints?

No, all expansion and movement joints must extend through the adhesive bed and tiling.

7. Can I use P300 for porcelain or vitrified tiles?

No, you must use Alcolin P301 or Alcolin Porcelain Fix for these tiles.

8. Can I use P300 for light coloured natural stone tiles?

No, you must use a white coloured tile adhesive such as Alcolin Mosaic Marble Fix. A grey coloured tile adhesive may cause discolouration on natural stone, marble and travertine tiles.

9. I have a wooden floor that I want to tile using ceramic tiles. Is there an adhesive and grout, which I could use for this type of floor construction?

Alcolin P300 is not suitable for this application as it cannot accommodate any movement that may come from the existing wooden floor.

One can use Alcolin Flexi-tiler, however due care must be taken when doing this job. Before laying the floor tiles, ensure that the existing timber floor is secure and free from movement. Remember a ceramic tile is not flexible and will crack if the substrate is not sound. If in doubt the timber may be secured by overlaying it with treated flooring grade chipboard. Ensure that the surface is free from any polish; dirt or similar contaminants; if in doubt sand the surface down. Prime the boards with an undiluted solution of Alcolin Permobond, using a paintbrush/block brush and allow to dry. Using a 6x6mm notched trowel apply Alcolin Flexi-Tiler to the substrate and lay the floor tiles within the adhesives open time. Due care must be taken when fixing tiles of low porosity such as porcelain tiles. Being water-based, Alcolin Flexi-Tiler may not set if placed between two non-porous surfaces. Grouting can be carried out as soon as the adhesive has set firm. Mix Alcolin Tile Grout (cement based) with Alcolin Latex-Bond or Permobond by replacing the rate of water of addition. Grout joint widths should not be narrower than 2mm, nor wider than 10mm.

10. Does a new cement/sand render/screed require a minimum drying time of 3 weeks prior to the fixing of ceramic tiles? If this is correct, is there an alternative material that allows the fixing of tiles within a shorter time scale?

This is correct, and is recommended by the SABS 0107:1996 specifications: The design and installation of ceramic tiling.

If the subfloor is new, then there are no shortcuts, however if the subfloor is aged, and one is only repairing the surface prior to tiling, then instead of repairing the surface with a standard cement screed, one could use a rapid setting self levelling screed such as Alcolin Z101, or a rapid set patching cement such as Alcolin Anchoring and Patching Cement. These products would allow for tiling between 4-5 hours after application.

- 11. I have an existing tiled floor that needs to be retiled with ceramic tiles. How do I go about doing this job, and as the area is in regular use we need to use a rapid set adhesive that will allow for early foot traffic on the floor?**

Remove all of the existing floor tiles and as much of the old tile adhesive as possible by means of a mechanical scraping. Ensure that the newly exposed surface is free from dust and other contaminants. Check the surface for rising damp (as it may require damp proofing treatment). Repair any deep cracks or imperfections with Alcolin Rapid Set Anchoring and Patching Cement. Once the surface conditions have been met, apply a key coat/primer mix of Alcolin Permo-Key and Alcolin Latex-Bond onto the newly exposed surface by means of a painters block brush or broom to a depth of approximately 2mm. Allow to dry. If the surface is still in relatively good condition it may be tiled using a 10x10mm notched trowel and Alcolin Rapid Set P301 Ceramic Tile Adhesive. Alcolin Rapid Set P301 Ceramic Tile Adhesive will set in only 4hrs after which it may be grouted using Alcolin Grouts. If the surface is too irregular it must first be screeded with Alcolin Rapid Set Z101 Self Levelling Screed (sets in 4hrs) to a depth of 3-10mm to obtain a smooth level surface. This is then followed by the tiling process using Alcolin Rapid Set P301 Ceramic Tile Adhesive (4hrs setting time). This means that it is now possible to screed and tile in just 8-hours. Grout using one of the Alcolin Tile Grouts.

- 12. I want to fix a light colour natural stonewall or travertine tile to a cement/sand rendered wall. Is it true that staining of the tiles can occur as a result of the dark grey cement tiling adhesive? What precautionary procedures would you recommend?**

Yes, staining will occur if using a grey coloured ceramic tiling adhesive. The natural stone / Travertine tiles are very porous and the cement can absorb into these pores causing staining. Also the dark colour of the cement adhesive can show through light coloured tiles. It is best to use a white coloured cement tiling adhesive such as Alcolin Mosaic Marble Fix for these applications – Alcolin Flexi-tiler can also be used if the tiles are light weight. The tile adhesive can also be used as a grout if necessary. In addition to the above, it is normally recommended that the tiles are pre-sealed prior to the installation with an appropriate sealer. Seek advice from the tile/stone merchant where the tiles were purchased. , depending on the circumstances, the tile adhesive may also be used as the grout.

- 13. I need to tile over a flexible, dimensionally unstable surface. Can I use Alcolin Easy-Tiler?**

No, for this application you should use a flexible tile adhesive such as Alcolin Flexi-tiler.

- 14. Can I use salt water to mix into my mortar / cement based product?**

Definitely not as the salt will negatively affect all aspects of performance.

15. What are expansion joints and where should these be installed?

Stresses build up in tiling installations due to a combination of a number of factors such as the drying shrinkage of cement in the adhesive, irreversible expansion of tiles due to moisture ingress, temperature differentials, movement in the subfloor, etc. These stresses need to be alleviated by means of expansion joints (movement joints).

According to the South African specification SABS 0107:1996 The Design and Installation of Ceramic Tiling expansion joints need to be at least 5mm wide, coincide with any structural movement joints, where tiling meets other surfaces, across junctions of different backgrounds, dry interior areas, interior & exterior wet areas, areas where there large temperature variances and additional joints are required in large areas extending every 5m² in both the horizontal and vertical directions. Failing to insert expansion joints in the installation it could result in the following consequences: Lifting or tenting of the tiles, cracking and crazing on the tiles surface etc.

16. Can borehole water be used to mix into mortar / cement based product?

The amount of water in a mortar is relatively small compared with the other ingredients. This means that the concentration of any contaminants in water should have to be very high to have any marked effect. Most natural waters in SA do not have high concentrations and are perfectly satisfactory for use as mixing water.

A general rule of thumb is that if water is drinkable it is suitable for mortar or concrete. The exception to this is the presence of sugar in water that affects the setting time of mortar or concrete adversely. If the water is not drinkable, have it tested, as it may still be usable. The best way to test if water is suitable is to make cubes with the suspected water and compare results of compressive strength against good water. For addition into more technical products, such as Alcolin Z101 and Alcolin P301 where flow or setting characteristics is important, we do not recommend borehole water.

