

Tile & Stone Installation Systems

## Porcelain tiles coated with wax

## Why are porcelain tiles treated with factory-applied wax coatings?

It has become common practice for porcelain tile manufacturers to apply a wax coating to the surface of unglazed, honed and polished porcelain tiles. This coating is applied at the factory, before the tiles are packaged and shipped.

The purpose of this coating has been debated since its inception. One justification is that "transit" or "transportation" coatings help to protect the tile surface from mars and scratches that may occur during transportation. Another explanation is that such treatment acts as a sealer, filling in the micro-pores of the porcelain and thus protecting the tiles from staining during the grouting process.

Whether the treatment is beneficial in either circumstance is uncertain, and the idea of the wax coatings has mixed reviews. Not all porcelain is created equal. But by doing some pre-installation homework before grouting, installers can avoid time-consuming and costly callbacks regarding grout haze issues. And if issues do arise, selecting the correct products to correctly remove waxes and grout haze will expedite cleanup, minimizing effort and cost.

## Assessing the presence and benefits of wax coatings

It is often left up to the installer to determine if a wax treatment is present and whether the treatment will be beneficial during the grouting process. To determine if the porcelain tile you have chosen has been treated with this wax, visually inspect the tiles by looking at their well-lit top surface from various angles. Any wax will appear as a cloudy haze that smudges easily.

Another way to identify a wax treatment is to place several droplets of water onto the tile surface. If the droplets show a pronounced beading effect and don't spread, this may indicate the presence of waxes or sealers, but this is not always a reliable indicator. The best source of information is the supplier or the manufacturer of the tile. Some porcelain tile manufacturers say that there is no need to seal before grouting, while others recommend that you do apply a sealer.

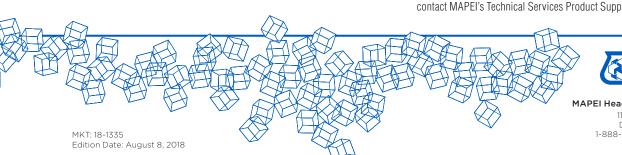
If you choose to leave the wax coating on the surface to act as a grout release (rather than removing it with a surface cleaner and applying a sealer to help in releasing the grout, for example), perform a grout release test in an inconspicuous area or on a mockup of the same tile type being installed. The wax haze may not appear on unglazed and honed porcelain tile until <u>after</u> the tiles have been grouted and the grout residue has been removed. If the tiles dry hazy and dull after the grouting and cleanup processes are completed, this also may indicate the presence of a wax treatment. Use <u>UltraCare</u> Abrasive Surface Cleaner to remove this wax haze if desired.

When wax is applied at the factory, it runs down the sides of tiles and dries. This wax coating interferes with the ability of grout to adhere to the sides of the tiles during installation, and may even allow some grouts to slump out of the joint.

MAPEI recommends that any wax treatments on tile for vertical installations be removed before grouting. Remove the wax coating using *UltraCare* Abrasive Surface Cleaner. If the unglazed porcelain is honed or polished, after removing the wax but before grouting, protect the tile using from staining by using *UltraCare* Penetrating SB Stone, Tile & Grout Sealer; *UltraCare* Penetrating Plus SB Stone & Porcelain Tile Sealer; or *UltraCare* Grout Release.

After grouting and normal cleanup procedures have been followed, the tiles may exhibit signs of dried grout residue on the surface. If so, MAPEI offers a variety of problem-solver products to efficiently remove the grout residue. For cement-based grouts such as  $Keracolor^{\circledast} S$  and Keracolor U, use UltraCare Cement Grout Haze Remover. For ready-mixed grouts such as MAPEI  $Flexcolor^{\varpi} CQ$ , use UltraCare Heavy-Duty Stone, Tile & Grout Cleaner or UltraCare Epoxy Grout Haze Remover. For epoxy grouts, use UltraCare Epoxy Grout Haze Remover. If a haze is still present after chemical cleaning, use UltraCare Abrasive Surface Cleaner.

Jobsite conditions vary and may present circumstances not covered in this document. For the most current product information, visit www.mapei.com or contact MAPEI's Technical Services Product Support Team.





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