

# GROUT COVERAGE RATES: UNDERSTANDING VARIATIONS

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Many different factors can affect grout coverage and cause variation from expected usage based on published coverage charts. These range from variances in tile thickness and surface texture to the installer's expertise. Air and surface temperatures can dry out grout and lower grout coverage. Consider the following issues when calculating actual grout usage.

## Don't allow grout under the tile

Adhesive and mortar installation techniques can affect grout because grout coverage calculations are based on depths, widths and lengths that are symmetrical. To achieve a consistent joint space, trowel ridges in the mortar should be completely collapsed under and between the tiles by using correct setting techniques. This involves combing straight ridges in the mortar, then moving the tile side to side across the ridges to collapse them. Otherwise, grout will push into any voids left beneath the tile during application. Grout joints should be cleared of excessive setting material.

TIP- Fill grout joints at least 2/3 full with grout. Especially when installing an epoxy or single component grout, allow the setting material to fill the lower 1/3 space in the grout joint. This method beds the tile more effectively and saves costs on grouting.

## Grout joint widths can vary from the plan

Even small variations in grout joint width can affect the amount of grout needed for the project. These include variations in the tile's thickness, length or width; tapered, scalloped or chamfered edges; and tile alignment during the installation.

For example, if the grout joints are calculated to be 1/8", but vary by just 1/32", grout requirement changes by 25%! The use of grout spacers can assist with placement and consistency and help to control grout usage, but the best way to determine coverage is to perform a mockup using the specific tile material.

## Where the grout meets the tile

Grout float hardness and the float's ability to deform according to the surface texture of the tile is a common factor in waste, grout haze and speed. Matching the grout float to the tile being grouted is even more important than choosing it based on the type of grout being applied. If the float is too hard or too soft, you will lose the squeegee affect that allows efficient removal of excess grout from the tile.

The surface profile and texture of the tile, along with overall tile porosity, will affect the amount of grout that is needed to be spread over the tile and the potential for loss. Natural stone, unglazed ceramic and raised textures, such as fabric-look tile, all present a significant grouting challenge. Pre-sealing the tile using a product such as Aqua Mix® Sealer's Choice® Gold or applying Aqua Mix® Grout Release prior to grouting will benefit most applications. A smoother, pre-treated surface presents less opportunity for leaving excessive grout residue that can form a haze.

Finally, don't overlook the effect of site conditions on grout consumption. High ambient and surface temperatures, as well as direct sunlight, low humidity or drying winds, can all result in excess grout drying on the face of the tile before it can be removed effectively and coverage will be lost in the cleanup.

There is always a waste factor to be considered, especially on a large project using epoxy or cement grouts. Full units of epoxy products must be mixed and used all at one time so the excess mix will be lost. Ordering smaller units may be appropriate based on project scheduling. While Portland cement grouts can be mixed in smaller batches, there will be some waste.

On the other hand, CUSTOM's Fusion Pro® Single Component® Grout is ready to use right from the bucket, with no mixing required. Excess material spread on the tiles can be placed back in the container and reused when grouting resumes. Fusion Pro's creamy texture is easier to spread, and clean up, which means installation time savings as well as simplifying grout coverage.

Always consult the grout's Technical Data Sheet or the Material Calculator on the CUSTOM website to help plan coverage rates accurately.

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