Traditionally, tile or stone grout joints measuring more than 1/8” wide were filled with a grout including an aggregate – sand. Grout joints less than 1/8” were filled with a “non-sanded” grout and 1/16” was the smallest joint recommended for tile installations.

Today’s advanced grout formulations grouts such as Fusion Pro® Single Component® Grout, Prism® Color Consistent Grout and CEG-Lite™ 100% Solids Commercial Epoxy Grout provide additional options for small grout joints. This is due to their finer and more variably-sized aggregates such as glass, limestone or sand. Now, most grout joints greater than 1/16” can also be filled with one of these products containing aggregates.

There are exceptions and limitations and a mockup of the tile installation will confirm suitability of the grout for the project. Here are some types of tiles that may still require use of a grout without aggregates, such as CUSTOM’s PolyBlend® Non-Sanded Grout.

Polished stone, bisque, metal and other soft tile types
Sand and other aggregates may scratch and permanently damage the tile surface during the grout installation. This may be a consideration in hot weather when grout can dry prematurely during cleanup and aggressive scrubbing can increase the force of the sand abrasion. Always perform tests prior to grouting to determine if the grout will scratch the tile.

Lugged or self-spaced tile types
Tiles with preset spacing or lugs on their edges, such as commonly available subway tiles, may have 1/16” spacing when stacked in straight patterns. However, the joint is reduced to 1/32” when stacking these tiles in a broken joint/brick pattern. This is due to the rounded edges and lugs not lining up; the joint width is actually smaller or has very little depth where the spacing lug and tile edges make contact. Grouts with sand or glass will only fill the top 1/32” or less of the joint and it will be difficult or impossible to place the grout and finish it correctly. Grout strength and durability is also compromised as very little grout is actually placed in the joint. Aesthetically, the appearance of these joints is unacceptable and often referred to as a “fuzzy joint” due to the exposed sand and aggregate particles.

Chamfered edged stone or tile
Stone and other tiles that have a slight chamfer are at times placed with a 1/16” spacing, the minimum joint width requirement. As in the case of lugged tiles, the chamfered areas may not support a grout with aggregates and cracks will occur. The grout will have to be finished to the top of the joint only and cleaned away from the chamfer in the installation process. Rectified and square-cut edges should be selected when flush filled joints are the desired look for the installation.

For questions about grouts and grout joints, contact Custom Building Products Technical Services Department at (800) 272-8786 or email technicalservicedepartment@cbpmail.net.

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