

Large format tile is an established, well-documented trend in the industry, and sizes are continuing to increase. Where 12" x 12" was once considered large, tile formats twice that size are now common, and stone manufacturers are also fabricating bigger, thicker, heavier stone tile to feed the demand. This explosion of tile sizes, densities, and compositions has created a need for technological advances in setting materials and the adoption of new installation methods that are best suited to these projects.

By Steve Taylor Director of Architecture and Technical Marketing, Custom Building Products



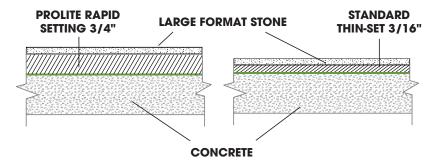
Technical White Paper

MEDIUM BED MORTAR



A rapid setting, medium-bed mortar maintains its form while in its wet stage and during the curing process instead of shrinking, which would result in an uneven finished surface.

One of the most significant advancements is the use of medium bed mortars, which better support the size and weight of larger tile than traditional thin-set. While thin-set mortars have been popular and effective for standard tile and stone installations for many years now, a thin-set mortar bed is just 3/32" to 3/16" thick and as we get beyond the 12" x 12" format, sub-floors need to be absolutely flat for standard thin-set mortars to be used on these large tiles. A "flat" concrete surface starts to show its imperfections when working with larger tile, and the minor dips found in all concrete slabs or wood sub-floors suddenly become a landscape of mountains and valleys when the tile size is up to 24" x 24". A thin-set bed is simply not engineered for such conditions and won't deliver the best results.



Created primarily for un-gauged stone and to keep floors flat during the installation, medium-bed mortars have been around for a few years, but are just now earning full appreciation as tile formats continue to increase. Mixed correctly, a medium-bed mortar will not slump when used up to 3/4" thick after the tile has been beat-in, supporting the weight of the large format tile or stone and compensating for the inevitable irregularities in the tile or subfloor. Standard thin-set mortars are not formulated to hold up in a medium-bed application and will not hold form to support the weight of the tile; these formulas tend to shrink as they cure, causing an uneven surface from tile to tile, and is known as "lippage," an unwanted finish result.

With the introduction of ProLite Rapid Setting Large Format Tile & Sone Mortar, this lightweight, full coverage, medium-bed provides the non-slump support and rapid setting cure times that firmly keeps tile in its place, answering many of the issues faced when setting large format tile.



ABOUT THE AUTHOR

Steve Taylor is Director of Architecture and Technical Marketing for Custom Building Products and has more than 30 years of experience developing products for the construction industry. Steve is a member of the Tile Council of North America (TCNA), helping to determine proper tile installation methods and standards, including the simplification of tile installation processes which enables tile professionals to save time and money.



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