

CTU Online Anytime Module 2.3 – Setting Large Format and Heavy Tile

Key Takeaways

- Today's large format and heavy tiles present new challenges, requiring higher performing mortars.
- TCNA classifies LHT/LFT as a tile with any side 15" or longer.
 - These tiles require a flat substrate ($1/8"$ Δ in ten feet).
- As tiles get larger, cupping, warping and doming become more prevalent.
 - ANSI A137.1 outlines allowances for cupping and warping
- Pavers and natural stone tiles need LHT/LFT mortar to support weight and avoid slumping.
- Thin-set mortar should only be used from $1/32"$ to $1/4"$ thickness, after is tile embedded.
- LHT mortar can be used up to a $1/2"$ nominally; use most CUSTOM products up to $3/4"$.
 - LHT mortar helps to avoid slumping and lippage
- Lippage can be seen when tile edges are raised or depressed, creating an uneven surface.
- Pattern layouts in Large Format Tile can reduce lippage (especially in common 12" x 24" tiles and planks).
 - 50% offset (high chance of lippage)
 - 33% offset (substantially reduce possibility of lippage)
 - No offset (lowest chance for lippage)
- Medium bed mortars supported large tile and stone applications by utilizing larger aggregate particles.
 - LHT/LFT mortar was previously known as medium bed mortar.
- New technology is focused on rheology, better flow and hold. Product is easy to trowel and covers well.
- LHT/LFT Mortar will soon become an ANSI Standard.
- Versabond® LFT is an excellent product for setting large format and heavy tiles, especially on floors.
- Non-sag/non-slump mortars keep tiles from sliding down wall and speed installation in the process.
- CUSTOM ProLite® Premium Large Format Tile Mortar is ideal for:
 - ANSI A118.11 and A118.15 (including A118.1 and A118.4) requirements
 - Non-sag. Meets A118.15T (thixotropic) for vertical slip resistance
- MegaLite® Ultimate Crack Prevention Large Format Tile Mortar is for the most challenging applications.
 - 28-day porcelain tile shear up to 725 psi (28-day glazed wall tile shear up to 830 psi)
 - ANSI A118.11 and A118.15 (including A118.1 and A118.4)
 - Exteriors or other demanding locations with conditions like thermal cycling
 - Non-sag. Meets A118.15T (thixotropic) for vertical slip resistance

- Sand is the heaviest item in a bag of traditional mortar.
 - ProLite & MegaLite feature CustomLite® aggregate replacement technology to reduce weight
 - These Products are 40% lighter than traditional mortars (30 lb. bag vs. 50 lb. bag)
 - Both products are Build Green®, GreenGuard Gold® and contribute to LEED certification
 - Rapid setting versions of both mortars are available for fast-track projects.

This content is provided “as is,” without any kind of warranty, either express or implied. This content is not a warranty as to any product or service provided by Custom® Building Products. Warranties, if any, accompany the product or service when purchased by a customer. Custom® Building Products is not liable for any errors, delays, inaccuracies, or omissions in this content or any sites that are linked to, or referred to by, this content. Under no circumstances shall Custom® Building Products be liable for any damages, including indirect, incidental, special, or consequential damages that result from the use of, or inability to use, this content whether based on actions in contract, tort, negligence, strict liability, or otherwise, even if Custom® Building Products has been advised of the possibility of such damage.

For more information, visit www.custombuildingproducts.com or contact CUSTOM Technical Services at 800-282-8786