



PRODUCT INFORMATION

porcelain lht
(formerly porcelain mb)

Polymer modified mortar for large and heavy tile installations

PORCELAIN LHT is a standard grade, polymer modified, medium bed mortar, pre-blended with powdered latex polymer. It is composed of portland cement, sand and special additives and is used as a bond coat for large format tile and stone for interior and exterior use over a concrete and cementitious substrates. Used as a bond coat for setting porcelain tile, ceramic tile, natural marble and stone for service in residential and commercial use.

TEXTURE:

Powder, consisting of portland cement, polymer additives and graded sand.

COLORS:

Gray or white.

PACKAGING:

50 lb (22.7 kg) bag.

BASIC USE:

> **PORCELAIN LHT** is specifically formulated to hold large tile and marble units in place without the sinking or settling of conventional "thin-set" mortar thereby reducing lippage.

> It may be used in a setting bed as thin as 3/32" (3 mm) or as medium bed 3/4" (20 mm) thickness after the tiles are properly embedded.

> **PORCELAIN LHT** may be used for setting absorptive, semi-vitreous, vitreous and impervious ceramic, porcelain and stone tiles in residential or commercial service areas.

> It may be used for interior or exterior applications.

AREA OF USE:

Suitable backings include properly prepared plumb and true masonry, concrete (broom finished), cementitious backer units, cured portland cement mortar beds, brick, ceramic tiles, marble and cement based terrazzo. In interior dry areas only, it can be used over exterior glue plywood with addition of Texrite's Acrylic 150 fs additive in place of water.

BENEFITS:

> **PORCELAIN LHT** has excellent water and impact resistance, is water cleanable, non-flammable, and requires no soaking of tiles.

> **PORCELAIN LHT** may be used over waterproofing or crack isolation membranes meeting ANSI A118.10 and A118.12. Any other substrate must be approved in writing by an officer of the manufacturer.

LIMITATIONS:

> **PORCELAIN LHT** must not be applied directly to asphalt sheeting, vinyl

covered wall board, masonite, lauan plywood, cement asbestos board, metal, glass or plastic, cut back adhesives, curing compounds and chemically treated surfaces.

> Improperly cured or wet plywood, tongue and groove plywood, particle board, OSB or strip wood surfaces are not considered suitable substrates.

> Some green or red marbles may warp when installed with setting materials containing water, causing loss of bond and/or damage to the finish. These marbles must be set with EPOXYPLUS®.

> Usage of gray **PORCELAIN LHT** for setting light colored translucent marbles may produce shading in the marble. Use white **PORCELAIN LHT** for setting light colored marble.

> This product is not affected by prolonged water contact but does not form a water-proof barrier.

APPLICABLE STANDARDS:

Conforms to the requirements for dry-set mortars found in ANSI A118.1, ANSI A118.4 and ANSI A108.5, A108.11, A108.12.



WEATHER RESISTANT



OVER CONCRETE



INTERIOR/EXTERIOR FLOORS/WALLS



OVER TILE

Technical Data: PORCELAIN LHT (formerly porcelain mb)



| TEST | REQUIREMENT | TYPICAL VALUES |
|--|-------------|----------------|
| *Open time @ 70 °F (21 °C) | | 20 minutes |
| *Adjustability @ 70 °F (21 °C) | | 15-20 minutes |
| *Pot life @ 70 °F (21 °C) | | 6 hours |
| *Compressive strength (psi) | 2500 | > 3200 |
| ASTM C-109 | | |
| Shear bond (psi) ANSI A118.4 | | |
| Non-vitreous tile 7 days | 300 minimum | > 260 |
| 28 days | 300 minimum | > 285 |
| Porcelain tile (impervious tile) 7 day | 200 minimum | > 210 |
| 28 days | 200 minimum | > 240 |

*These values reflect the results of practical testing methods closely associated with applications in the field.

INSTALLATION: PREPARATORY WORK

All surfaces on which tiles are to be set must be structurally sound, completely clean and free of frost and in a temperature range above 40 °F (4 °C) and below 90 °F (32 °C) during its initial cure (72 hours).

CEMENTITIOUS SUBSTRATES

Area must be clean and dry. Remove all efflorescence, grease, oil, dirt, dust, paint, sealers, curing compounds, asphalt, cut back residue, old adhesives and other foreign matter. Failure to remove these items causes bond loss and void product warranty. Roughen smooth steel troweled concrete. Remove foreign matter and/or roughen surface by mechanical scarified or shot-blasting to prepare surface. Dampen porous surfaces with clean water before installing the mortar and leave no puddles or remaining water on surface for best conditions. Substrate deflection shall not exceed 1/360 that of the span.

PLYWOOD SUBSTRATES

Floor systems, including the framing system and subfloor panels over which underlayment and tile will be installed shall be in conformance with the IRC for residential applications, the IBC for commercial applications or other applicable building codes. Further, the underlayment to receive the **PORCELAIN LHT** mortar should be exterior glue plywood (interior only), secured with screw-type nails and glued where possible. A gap of 1/8" - 3/16" (3-5 mm) shall be left between sheets of plywood and remain empty after the installation to allow for expansion. In addition, all plywood surfaces must be for interior use only and protected from exposure to water.

NON-CEMENTITIOUS SUBSTRATES

All non conforming surfaces such as strip wood, old plaster or painted surfaces should be covered with a cleavage membrane topped with a 3/8" to 3/4" (10-20 mm) reinforced mortar bed for walls and a 1 1/4" (32 mm) reinforced mortar bed for floors. After a minimum of 20 hours, **PORCELAIN LHT** may be applied to the mortar bed.

TILE OVER TILE AND OTHER SURFACES

It is absolutely essential that the existing tile and other surfaces be well bonded. The surfaces must be prepared in accordance with the requirements for cementitious surfaces. It is also necessary to abrade the surface to assure proper bonding. Other surfaces include terrazzo and marble and vinyl composition tile. Remove all waxes, sealers and coatings that would interfere with the bond.

EXPANSION JOINTS

Install expansion joints around all perimeters or restraining surfaces where possible to allow for expansion movement. Never bridge an expansion, contraction or construction joint. Add additional joints for large areas and areas subject to the sunlight, heat/cold temperatures in accordance with local building codes. See EJ171 in TCNA Handbook for detailed specifications. Remove all thinset mortar, grout and debris from joints before backer rod and sealant are placed.

MIXING

Add cool, drinkable water and dry powder in a clean container. Stir by hand tool or low RPM (less than 300) drill mixer into a lump-free, mortar paste consistency. Drill mixer paddle or wand should be "open-loop" design to not add air or weaken the mortar. Mortar should be very soft paste mixture that does not slump, slide or flow from container, tool or trowel. Allow freshly mixed mortar to slake (wait) for 15 minutes, the re-stir into a paste to get maximum working and spreading time. Do not add any additional water after this point. Stir mortar occasionally to prevent firm set of mortar. If a mortar sets firm in container discard it and re-mix a new batch. Mix approximately 6 quarts (5.6 liters) per

50 lb (22.7 kg) bag. Add Texrite's Acrylic mortar liquid in place of water to this product for bonding to exterior glue plywood floors.

APPLICATION

Apply the wet mortar to the bond surface with flat-side of trowel in a scraping or scratching motion to drive the wet mortar into the surface. Then take additional mortar with the notched-side of trowel to form and comb the ridges. Trowel the mortar ridges in one straight direction helps to prevent hollow tiles and maximized bond contact. Tiles with deep patterns, high lugs or on those with irregular texture on the back surface may require "back buttering" to ensure 100% coverage of back of tiles. Proper method of bonding of tiles requires embedding, pressing and sliding tiles perpendicular to wet mortar ridges to have a nominal mortar thickness of 3/32" - 3/16" (3- 5 mm) and 100% coverage. During the setting of tile, it is advisable to occasionally remove a tile to be sure mortar has not skinned over and sufficient transfer is being made. Do not adjust tiles in mortar after they have been set past 10-15 minutes. Do not abut tile to perimeter walls or restraining surfaces. Leave a minimum spacing of 1/4", void of any setting material or tile to allow for expansion. Fill the 1/4" spacing with caulk or sealant if exposed. NOTE: As a practical test, it is recommended that three or more separate twelve inch square areas of tile be bonded to the properly prepared surface with the actual tile and bonding materials that will be used on the finished installation. These should be allowed to cure for 3-7 days and then removed with a hammer and chisel. At this point, one can determine if adequate bond has been obtained or if a problem exists.

TROWEL RECOMMENDATION

Suitable for providing a minimum 3/32" - 3/16" (3-5 mm) bed thickness.

CLEANING:

Water is all that is needed to remove uncured product.

COVERAGE:

A 50 lbs (22.7 kg) bag using a square-notched trowel covers:
1/4" X 1/4" = 77 sq ft
1/4" X 3/8" = 66 sq ft
1/2" X 1/2" = 40 sq ft

CURING AND GROUTING:

Do not allow dry-set mortar to freeze for the first 72 hours. A minimum cure is obtained in 12-24 hours depending on ambient temperatures. Normal grouting should be done 48 hours after tiles have been set (ANSI A108.5) except for setting beds in excess of 3/8" which requires 72 hours before grouting.

STORAGE LIFE:

One year if kept dry in sealed bag.

SAFETY - CAUTION: May cause eye, skin or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for silica dust. Contains portland cement. If any cement or cement mixtures get into eye, flush immediately and repeatedly with water and consult a physician promptly. Freshly mixed cement, mortar, concrete or grout may cause skin injury. Avoid contact with skin where possible and wash exposed skin areas promptly with water.

KEEP OUT OF REACH OF CHILDREN

GUARANTEE: The recommendations, suggestions, statements and technical data in this bulletin are based on our best knowledge. They are given for informational purposes only and without any responsibility for their use. The responsibility for the seller and manufacturer is only to replace that portion of the product of this manufacturer, which proves to be defective due to the quality of the ingredients or the manufacturing process itself. However, since handling and use is beyond our control, we do not guarantee the results to be obtained. Only written statements signed by an officer of the manufacturer are binding on the manufacturer or seller. Nothing in this bulletin should be interpreted as a recommendation for a use, which violates any patent right.

PORCELAINLHT20180921