

55LHT

POLYMER-MODIFIED LHT MORTAR

DESCRIPTION

Flextile 55LHT is a Polymer Modified Large Heavy Tile (LHT) Mortar, designed specifically for both thin or medium-bed wall, floor installation of large format tile and stone. Flextile 55LHT provides excellent sag resistance and mortar transfer to backs of larger format tile & stone on vertical applications, as well as superior tile support and mortar transfer on horizontal applications. A formula which includes high-performance polymers and water retention additives, carefully graded sands, Portland cement, and special non-sag additives contributes to the unique characteristics of Flextile 55LHT. Available in Grey & White.

BASIC USES

Installation of large format porcelain, ceramic, mosaic, quarry and paver tiles, or natural stone such as marble, granite, slate and precast terrazzo tile on horizontal surfaces where superior mortar transfer to backs of tile and support for large, heavy tile is required.

RECOMMENDED SURFACES

- Installation over concrete, masonry, approved tile backer boards.
- Installation over cement mortar beds or levelling compounds.
- Existing surfaces of properly prepared ceramic tile, stone, or cement terrazzo.
- Exterior Grade Plywood or Gypsum Board - in interior dry areas only
- Existing surfaces of properly prepared non-cushion sheet vinyl flooring, VCT, or cutback adhesive residue. *
- Flextile waterproofing, crack-isolation and sound reduction membranes.

* Check with Flextile Ltd. as to acceptability of specific surfaces

FEATURES

- Excellent for non-sag, thin or medium bed installations of large dimension, heavy tile and stone on both vertical or horizontal surfaces.
- Excellent movement capability and bond strength.
- Contributes to LEED certification.
- For interior and exterior floor and wall installations.
- Easy to use - just mix with water and apply.
- Promotes better mortar transfer to backs of large format or heavily lugged tile, ensuring adequate coverage - ideal for use with mechanical tile-leveling systems.
- Supports large format tile, reducing lippage.
- Excellent workability.
- Rated as suitable for Extra Heavy Service by ASTM C627-70 on concrete substrates.
- Rated as a light performance commercial and residential mortar by ASTM C627-70 on plywood substrates.

LIMITATIONS

- Do not use over particleboard, Masonite, chipboard, OSB or similar unstable materials.
- Do not use over cushioned resilient flooring, rubber, plastic, paint, asphalt, or plywood surfaces in wet areas.
- Do not use directly over single layer plywood floors.
- Use only on surfaces which are maintained at a temperature above 10°C (50°F) and below 35°C (95°F) during application and for at least 72 hours after application.
- On exterior applications, protect from rain until thoroughly dried and protect from freezing for at least 14 days after installation.
- When installing light-coloured stones and translucent marble use Flextile 55LHT White.
- To use directly over gypsum-based patching or leveling substrates, apply suitable primer before use.
- Installations over nonporous surfaces may require extended setting/curing times.
- Consult local building code requirements for use on exterior commercial building facades.
- For heavy service exterior or water immersion applications, or where extreme freeze/thaw conditions are present, use Flextile 5400 Maxi-Flex or Flextile 51/44 or Flextile 58XT Fast Set high solids, two-component latex Portland cement mortar systems.
- Do not use for moisture-sensitive stone such as green marble, certain limestone and granite, agglomerate tiles, cultured marble or resin-backed tiles. Instead, use FlexEpoxy 100 mortar.

TECHNICAL DATA at 23°C (73°F) and 50% humidity)

Exceeds ANSI A118.4 and A118.11 specification requirements

Description	ANSI SPEC. MPa (psi)	TYPICAL RESULT MPa (psi)
28 Day Shear Strength		
Glazed Wall Tile	> 2.07 (300)	3.11 to 4.14 (450 to 600)
Impervious Ceramic Tile (Porcelain) Mosaics	> 1.38 (200)	2.59 to 3.45 (375 to 500)
Quarry Tile	> 1.03 (150)	2.42 to 3.45 (350 to 500)
Quarry Tile / Plywood	> 1.03 (150)	1.21 to 1.79 (175 to 250)
Typical Physical Properties		
Pot Life	2 hours	
Open Time	20 minutes	
Initial Cure	24-48 hours	
Final Cure	28 days	
Cleanability:	With water before material dries	
VOCs	0 g/L	
Shelf Life:	1 year from production date when stored in dry, heated conditions	



Approx. coverage per 22.7 kg (50 lb) bag:6 mm x 10 mm (1/4" x 3/8") - square-notch trowel - 5.5 m² (60 ft²)10 mm x 10 mm (3/8" x 3/8") - square-notch trowel - 4.1 m² (45 ft²)19 mm x 14 mm (3/4" x 9/16") - round-notch trowel - 2.8 m² (30 ft²)** Coverages given are for estimating purposes only. Actual coverages may vary depending on job site conditions and installation techniques used.***LEED Points Contribution**

MR Credit 5, Regional Materials*

IEQ Credit 4.1, Low-Emitting

Materials – Adhesives & Sealants

IEQ Credit 4.3, Low-Emitting

Materials – Flooring Systems

May be eligible*LEED Points**

Up to 2 points

1 point

1 point

INSTALLATION**PREPARATORY WORK**

Surfaces must be sound, even, dry and free of grease, oil, dirt, paint, curing compounds or sealers, or other foreign matter. Surfaces must be true to a tolerance of ±3 mm (1/8") in 2.4 meters (8 ft.) for walls and 6mm (1/4") in 3 meters (10 ft.) for floors. Concrete surfaces should have a wood float or steel trowel with light broom finish. Roughen smooth concrete surfaces. Plywood floors should be designed for maximum deflection of L/360 of span. This normally requires an overlay of 16 mm (5/8") exterior grade plywood over 25 mm (1") nominal boards or 16 mm (5/8") plywood when on joists 40 cm (16") O.C. Fasten overlay with screw type nails and glue where possible. Leave a 3 mm - 6 mm (1/8"-1/4") gap between sheets of overlay and next to all vertical surfaces to allow for expansion. Refer to current editions of TTMAC 09 30 00 Tile Installation Manual, or TCNA Handbook For Ceramic Tile Installation for information regarding placement of movement or expansion joints, or for further substrate acceptability information.

APPLICATION

Mix with approximately 5.2 - 5.9 Litres (1.4 - 2.4 U.S. gals) of water per 22.7 kg (50 lb) bag. Avoid using high-speed mixers. Allow mixed mortar to slake for at least 10 minutes, then re-mix without adding further material or water. Spread a thin layer of mixed mortar with flat side of trowel to wet out the substrate; then reapply sufficient material with a suitably notched trowel that will leave enough mortar to give at least 85% (Interior applications) or 95% (Exterior applications) coverage to the backs of tile. It may be necessary to back-butter in order to reach these requirements. (Refer to ANSI A108.5 specifications, TTMAC and TNCA guidelines.) It is imperative that an appropriately sized trowel is used in conjunction with larger format tile or stone, so that adequate coverage is achieved. Comb that area which can be covered with tile before skinning occurs. Mortar should be troweled with notches running in straight, parallel lines. Press or beat in tile while moving slightly in the opposite direction of troweled mortar ridges, to achieve maximum coverage. Do not adjust tiles after they have been set for more than 25 minutes.

CURING AND GROUTING

Protect from all traffic and delay grouting until cured at least 24 hours, and preferably 48 hours. On exterior or cold weather applications, or when a larger format or impervious tile is installed over an impervious membrane, extended curing is recommended to ensure that mortar is sufficiently cured prior to grouting. Do not allow heavy traffic for at least 5 days following installation, and do not allow heavy construction equipment such as scissor lifts, etc. for a minimum of 14 days following installation. Protection of installation with 13 mm (1/2") plywood sheets prior to allowing heavy construction equipment is recommended until installation is fully cured. Grout using Flextile Polymer Modified Grout, Flextile 1600UPG Ultra Performance Grout or Flextile FlexEpoxy100 - 100% Solids Epoxy Grout.

CAUTION

Freshly mixed cement, mortar, concrete or grout may cause skin injury. Avoid extended contact with skin where possible and wash exposed skin areas promptly with water. If any cement or cement mixtures get into the eye, rinse immediately and repeatedly with water and get prompt medical attention. Keep out of reach of children.

SAFETY

Refer to Flextile Safety Data Sheet for detailed health and safety information.

AVAILABILITY

Flextile 55LHT is available from Flextile Ltd. and its distributors in 22.7 kg (50 lb) bags. Available in Grey & White formulas.

WARRANTY

Flextile warrants that this product is of merchantable quality and is suitable for the purpose for which it is intended. Flextile's liability under this warranty shall be limited to replacement of its product found to be defective or, at its option, a refund of the purchase price.

MAINTENANCE

No maintenance is required except where damages result from unforeseen circumstances. Repair procedures shall be directed by Flextile or its distributors.

TECHNICAL SERVICES

Flextile maintains a well-equipped laboratory able to test its products in conjunction with the products with which they are used. Technical assistance for use of Flextile products is available upon request.

RELATED REFERENCES

Current editions of TTMAC 09 30 00 & TCNA Ceramic Tile Installation Manuals.



Notice: The information herein is the best information we have relating to our products and the recommended uses of our products are based on tests believed to be reliable. Flextile warrants each of its products is of merchantable quality and suitable for the purpose for which it is intended BUT DOES NOT MAKE ANY OTHER WARRANTY, EXPRESSED OR IMPLIED. This Warranty may not be enlarged or extended by our sales representatives, written sales information or drawings. Liability of Flextile under this warranty shall be limited to replacement of its product found to be defective or, at its option, a refund of the purchase price. All advice given and structural specifications supplied by Flextile representatives shall be used at the sole risk of those receiving the same and Flextile assumes no responsibility for the design or construction of any works in which its products are used. Any review or inspection of plans, buildings or product applications by Flextile representatives is not to be construed as approval thereof by Flextile. This information supersedes all previous issues and is subject to change without notice.