

# LATICRETE® 255 Multimax™

DS-255.0-0921

# Globally Proven Construction Solutions



# 1. PRODUCT NAME

LATICRETE 255 Multimax™<sup>Λ</sup>

# 2. MANUFACTURER

LATICRETE UK

Speke Hall Industrial Estate

Speke, Liverpool, Merseyside, L24 1YA

United Kingdom Tel: 0151 486 6101 Fax: 0151 448 1982

e-mail: sales@laticrete.co.uk

www.laticrete.co.uk

# 3. PRODUCT DESCRIPTION

LATICRETE Multimax 255 is a patented, versatile polymer fortified mortar designed specifically for the installation of adhered masonry veneer, natural manufactured stone and thin brick. A high-performance mix provides maximum non-sag performance for vertical installations and also obtains maximum bond strength to the substrate and selected veneers. Reinforced with Kevlar® for added strength, LATICRETE Multimax 255 offers exceptional workability and is backed by the Laticrete 25 Year Tile & Stone System Warranty.

#### Uses

- For wall installations of interior and exterior ceramic tile, porcelain tile and stone.
- Can be used as a medium bed mortar for flooring installations.
- Ideal for showers, bathrooms and wet areas where large format tiles are to be installed on walls & floors.
- For vertical, & horizontal installation of manufactured stone and thin brick veneers on exterior and interior installations.
- Ideal for both commercial and residential installations.

# Advantages

- Incredible non-sag performance even when high build up to 18mm giving faster, easier installations
- Revolutionary patented formula provides maximum bond strength to veneers and substrate–exceeds ANSI A118.4 requirements
- Exceeds ASTM C270 compressive strength requirements for masonry veneer installations
- Passes IBC and IRC shear bond strength code requirements for adhered masonry veneer when tested in accordance with ASTM C482
- Conforms to EN 12004 with a classification of C2 TE
- Mixes only with water no admix needed
- Reinforced with Kevlar
- Lightweight mortar very smooth and easy to apply
- GREENGUARD certified for low VOCs

# **Suitable Substrates**

- Cement mortar (Scratch & brown coat)
- Concrete
- Concrete block
- Cement backer board\*
- Masonry and brick

\*Consult cement backer board manufacturer for specific installation recommendations and to verify acceptability for exterior use.

Packaging 15kg x 54 per pallet

#### Colour

Grey

# Approximate Coverage

Per 15 kg bag mixed with 5 litres of water

#### **Trowel Size**

Vertical Applications	m²	
(6 mm x 9 mm) notched trowel	3.8-4.5	
(12 mm x 12 mm) notched trowel	2.8-3.3	
Adhered Masonry Veneer Application Method	2.2-2.7	

#### **Shelf Life**

Factory sealed containers of this product are guaranteed to be of first quality for one (1) year\* if stored off the ground in a dry area.

<sup>\*</sup> High humidity will reduce the shelf life of bagged product.

#### Limitations

- Mastics, adhesive mortars and pointing mortars for thin brick, masonry veneer, stone, pavers and thin brick are not replacements for waterproofing membranes or air and water barriers. When a waterproofing membrane or air and water barriers is required, use Hydroban (see data sheets DS 633.0 & DS 633.5 for more information).
- For veneer installations using this product, consult local building code requirements regarding limitations and installation system specifications.
- Not for use in submerged or steam room applications. For these applications use LATICRETE Platinum 254.
- Use LATAPOXY® 300 Adhesive for installing green marble, Resin backed, or moisture sensitive tile, stone and agglomerates (refer to DS 633.0 for more information)

Note: Surfaces must be structurally sound, stable and rigid enough to support ceramic/stone tile, thin brick and similar finishes. Substrate deflection under all live, dead and impact loads, including concentrated loads, must not exceed L/360 for thin bed ceramic tile/brick installations or L/480 for thin bed stone installations where L=span length. For exterior vertical installations over framed construction, the substrate deflection under all lice, dead and impact loads, including concentrated loads, must not exceed L/600 where L=span length (except where local building codes specify more stringent deflection requirements).

#### Cautions

Consult MSDS for more safety information.

- Some marbles and other stone have low flexural strength and might not be suitable for exterior installations, check with veneer manufacturer for suitability.
- During cold & wet weather in exposed locations, protect finished work from traffic & load until fully cured.
- Protection of exterior walls in exposed (coastal) locations can require temporary screens or tarpaulins prior during and after installation secured to a stable & secure scaffold frame or similar throughout the full cure period to shield from wind-blown spray & rain for up to 28 days.
- Contains Portland cement and silica sand. May irritate eyes and skin. Avoid contact with eyes or prolonged contact with skin. In case of contact, flush thoroughly with water.
- Application should be planned for when air or ground temperatures are forecast to be above 5'C or less than 35'C at any time during the first 24 hours during & after application.
- For white and light-colored stone, conduct test area to ensure no shadowing or staining is observed.
- Keep out of reach of children.

# 4. TECHNICAL DATA

# **VOC/LEED Product Information**



This product has been certified for Low Chemical Emissions (ULCOM/GG UL2818) under the UL GREENGUARD Certification Program For Chemical Emissions For Building Materials, Finishes and Furnishings (UL 2818 Standard) by UL Environment.

Total VOC Content pounds/gallon (grams/litre) of product is 0.00 g/\ell.

#### Applicable Standard

ASTM C270, ANSI A118.4, ANSI A118.11, EN12004 C2TE.

#### **Physical Properties**

Mixed with water [5.0 £) per 15kg

Test	Test Method	EN 12004 C2 Specification	Results
28 day cure tensile adhesive strength	EN 12004	> 1.0 N/mm <sup>2</sup>	1.9 – 2.1 N/mm <sup>2</sup>
7 day cure 21 day water immersion tensile adhesive strength	EN 12004	> 1.0 N/mm <sup>2</sup>	1.1–1.4N/mm²
14 day cure 14 day heat age tensile adhesive strength	EN 12004	> 1.0 N/mm²	2.0-2.8N/mm <sup>2</sup>
7 day cure 21 day water immersion 25 freeze/thaw cycle tensile adhesive strength	EN 12004	> 1.0 N/mm <sup>2</sup>	1.2–1.4 N/mm²
Open time after 30 minutes	EN 12004	> 0.5 N/mm <sup>2</sup>	1.5–1.7 N/mm <sup>2</sup>
Slip	EN 12008	< 0.5 mm	< 0.5 mm
Transverse deformation	EN12002	> 2.5 mm and < 5 mm	3.1-3.3mm

# **Working Properties**

Tronking Freperade		
Pot Life	4 hours	
Wet Density	1.3 gm/cm <sup>3</sup>	

Specifications subject to change without notification. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation methods and site conditions.

# 5. INSTALLATION

#### **Surface Preparation**

All surfaces should be between 40°F (4°C) and 90°F (32°C) and structurally sound, clean and free of all dirt, oil, grease, paint, concrete sealers or curing compounds. Rough or uneven concrete surfaces should be made smooth with Premium Mortar Bed. Expansion joints shall be carried through the adhered manufactured stone masonry veneer from all construction or expansion joints in the substrate.

Do not cover expansion joints with mortar.

 Installer must verify that deflection under all live, dead and impact loads of substrates does not exceed industry standards of L/600 for AMSMV units or stone installations where L=span length. For exterior vertical installations over framed construction, the substrate deflection under all live, dead and impact loads, including concentrated loads, must not exceed L/600 where L=span length.

#### Mixing – (15 kg) bag

Place approximately  $5.0~\ell$  of clean water in a pail and slowly add the entire bag of **LATICRETE Multimax 255**. Mix with slow speed mixer for one minute or until a creamy smooth consistency is reached. Allow to stand for 5 minutes, remix and use. Jobsite conditions might vary. Add slightly more water if necessary for proper consistency.

# **Application**

See applicable LATICRETE details in LATICRETE® Veneer Installation System Brochure (DS 002.8).

Note: If installing on sheathed wood or steel frame construction with wire lath, use LATICRETE Premium Mortar Bed for the wall render prior to installing applicable waterproofing membrane or Masonry Veneer Mortar.

If waterproofing is required, install Laticrete Hydroban as per instructions (see Data sheet DS 661.0) to the substrate prior to installation of **LATICRETE Multimax 255**.

For adhered masonry veneers use a hand trowel to apply a thin coat of LATICRETE Multimax 255 to cover entire back of the veneer unit. Spread additional mortar onto the back of the skim coated veneer unit sufficient to completely fill the space between the veneer unit and the substrate when compressed against the substrate. Press the mortar covered back of the veneer against the substrate at the desired final position. Slide the unit roughly (25 - 38 mm) diagonally from the desired final position and back into the desired position while maintaining even pressure. This should be done in such a manner as to squeeze the mortar to fill the entire space between the veneer unit and the substrate, helping to achieve 100% solid bed coverage to both the substrate and veneer unit, allowing excess mortar to extrude on all sides around the veneer unit. Clean excess extruded mortar with trowel and spread onto the next veneer unit to be installed.

Note: Prior to installation, ensure back of veneer units are clean of dust, laitance, loose concrete crumbs and any excess film that could impede bond.

For adhered masonry veneer using a hand trowel to apply **LATICRETE Multimax 255** into the substrate thoroughly and then comb on additional mortar (trowel size is determined by substrate flatness and finished material size). Back butter all veneer units (200 mm x 200 mm) or larger to provide full bedding of the veneer. Place veneer into the mortar and adjust to desired position. Clean any excess mortar between veneers or sides of stone or tile veneer.

Note: Use proper sized notched trowel to ensure full bedding of the tile. Spread only enough mortar that can be covered with tile within 15–20 minutes. Adjust as necessary. Check mortar for complete coverage by periodically removing veneer unit and inspecting the transfer onto the back of the tile. The size and weight of the veneer will vary. Conduct a small test area for non-sag performance. Due to job site conditions and differences in finish material types; ledger boards, shims, wedges or spacers may be required to maintain finish levels and heights.

# **Grouting/Pointing**

Point all joints within the installation after a minimum of 12–24 hours curing time at 70°F (21°C). Cooler temperatures require a longer curing time. Point all veneer joints with either Laticrete Masonry Pointing Mortar or Premium Masonry Pointing Mortar in accordance with the product instructions.

# Cleaning

Clean tools with water.

# **6. AVAILABILITY AND COST**

#### Availability

LATICRETE and LATAPOXY® materials are available worldwide. For on-line Distributor Information, call 0151 486 6101 or visit LATICRETE UK at www.laticrete.co.uk

#### 7. MAINTENANCE

LATICRETE and LATAPOXY grouts require routine cleaning with a neutral pH soap and water. All other LATICRETE and LATAPOXY materials require no maintenance but installation performance and

durability may depend on properly maintaining products supplied by other manufacturers.

# 8. TECHNICAL SERVICES

#### **Technical Assistance**

Information is available by calling the LATICRETE UK Technical Service Hotline:

Tel: 0151 486 6101 Fax: 0151 448 1982

e-mail: sales@laticrete.co.uk

# **Technical and Safety Literature**

To acquire technical and safety literature, please visit our website at www.laticrete.co.uk

# 9. DISCLAIMER

The information contained in this document is given in good faith and to the best of our knowledge is true and accurate.

This information is subject to change without notice and it is the responsibility of the user to obtain up to date and current information.

The use of this product is beyond our control and liability is assumed by the user when used incorrectly and not in accordance with LATICRETE guidelines.

The manufacturer is not responsible for any loss or damage arising from incorrect usage of this product.

The specifier or other party responsible for the project must ensure that the details in this data sheet are appropriate for the intended application and that additional detailing is performed for specific design or any areas that fall outside the scope of this specification.

LATICRETE International, Inc.

One LATICRETE Park North, Bethany, CT 06524-3423 USA • 1.800.243.4788 • +1.203.393.0010 • www.laticrete.com

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<sup>^</sup> United States Invention Patent No.:6784229 (and other Patents)

<sup>†</sup> United States Invention Patent No.: 6881768 (and other Patents)