# DS14-3642-1224



For the Builders of a Better World™

# 3642 Latex Concentrate

3642 Latex Concentrate is a concentrated latex admix which is diluted with water on site and then mixed with LATICRETE Thick Bed Mortar or Portland cement and sand to make cement plasters, renders, coatings, mortar beds and screeds for concrete repairs. Portland cement mortars which have been fortified with 3642 Latex Concentrate have greatly improved physical characteristics and can be used in exterior, interior, as well as underwater plasters, screeds and renders.



# FEATURES/BENEFITS

- Greatly improved compressive strength
- Lower water absorption
- Improved adhesion
- Resistant to thermal and seismic shock



# USES

3642 Latex Concentrate is diluted with clean water and then used as the gauging liquid with all Portland cement mortars, concrete, screeds, renders, stucco and plasters.

# MANUFACTURER/ DISTRIBUTED BY

LATICRETE South East Asia Pte Ltd No. 38 Sungei Kadut Street 2 (Level 2, A3) Singapore 729245 Telephone: +65 6515 3028 Fax: +65 6515 3037 Internet: <u>se.laticrete.com</u>

# STANDARDS/CERTIFICATIONS

Coutinho Ring

ASTM C1437

BS EN 1015

- ASTM C109/C109M
- ASTM C348

BS EN 1881

BS EN 4551ASTM C413

- BS EN 13892
  - -
    - ASTM C482
      - ASTM C827/C827M
      - ASTM C627



This product has been certified green by the Singapore Green Building Council.

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#### Suitable Substrates

- Concrete
- Cement mortar beds
- Ceramic tile and stone
- Cement backer board\*
- Gypsum wallboard (interior only)
- Cement plaster
- Brick masonry
- Cement terrazzo
- Concrete masonry

 $^{\ast}$  Consult cement backer board manufacturer for specific installation recommendations and to verify acceptability for exterior use.

# Packaging

20e /pail, 32 pails per pallet. 210e /drum, 4 drums per pallet.

#### Coverage

A drum of 3642 Latex Concentrate will yield a coverage of  $350m^2$  per 20mm thick when mixed with LATICRETE Thick Bed Mortar

# Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for two (2) years if stored at temperatures  $\ge 0^{\circ}$ C to  $\le 40^{\circ}$ C.

#### Limitations

- Not for use as a thin-set mortar additive over exterior glue plywood.
- Use LATAPOXY<sup>®</sup> 300 Adhesive for installing green marble or water sensitive stone and agglomerates and resin backed tile and stone.
- Use a white thin-set mortar when installing white or light-colored stone.
- Adhesives/mastics, mortars and grouts for ceramic tile, pavers, brick and stone are not replacements for waterproofing membranes. When a waterproofing membrane is required, use a LATICRETE Waterproofing Membrane.

**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.

# Cautions

Consult MSDS for more safety information.

- During cold weather, protect finished work from traffic until fully cured.
- Wait 14 days after the final grouting period before filing water features with water at 21°C.
- Keep out of reach of children.

# TECHNICAL DATA

# **Performance Properties**

Typical properties of mortars made with 3642 Latex Concentrate diluted 1:4 with water and mixed with 226 Thick Bed Mortar.

Test	Test Method	Results
Compressive Strength	ASTM C109/C109M	$\geq$ 30 N/mm <sup>2</sup>
Flexural Strength	ASTM C348	$\geq$ 7 N/mm <sup>2</sup>
Tensile Adhesion Strength	BS EN 13892	$\geq$ 2 N/mm <sup>2</sup>
Modulus of Elasticity in Compression	BS EN 1881	$\geq$ 8,000 N/mm <sup>2</sup>
Water Retentivity	BS EN 4551	≥90%
Water Absorption	ASTM C413	≤4%
Shrinkage	Couthinho Ring	No crack
Flow	ASTM C1437	≥80%
Stiffening Time - 1.0N/mm <sup>2</sup> - 2.0N/mm <sup>2</sup>	BS EN 1015	<150 mins <250 mins
Shear Bond Strength	ASTM C482	$\geq$ 1 N/mm <sup>2</sup>
Change in Height at Early Ages	ASTM C827/C827M	≤0.5%
TCNA Service Rating	ASTM C627	Extra Heavy

#### Working Properties

Mixed with 226 Thick Bed Mortar		
Pot Life (25°C)	1 hour	
Time to Light Traffic	24 hours	

Results shown are typical but reflect test procedures used. Actual field performance will depend on installation methods and site conditions.

#### INSTALLATION

#### Surface Preparation

All surfaces should be between 5°C and 40°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 LATICRETE Latex Portland Cement Underlayment to provide a wood float (or better) finish. Dry, dusty concrete slabs or masonry should be dampened and excess water swept off. Installation may be made on a damp surface.

**Note:** Latex portland cement mortars do not require a minimum cure time for cement slabs. All slabs must be plumb and true to within 6 mm in 3 m. Expansion joints shall be provided through the tile work from all construction or expansion joints in the substrate. Follow ANSI specification A108.01-3.7 "Requirements for Movement Joints: Preparations by Other Trades" or TCNA detail EJ-171 "Movement Joints — Vertical & Horizontal". Do not cover expansion joints with mortar.

#### Mixing

Pre-dilute latex with water. For slurry bond coat, dilute 1 part of 3642 Latex Concentrate to 2 parts of clean water. For screed and plaster application, dilute 1 part of 3642 Latex Concentrate to 4 parts of clean water. Mix to a semi dry consistency for mortar beds and screeds. Mix to a more plastic consistency for renders, stucco and plasters. Clean sand up to 3mm in size may be used in screeds over 50mm in thickness. Please do not mix other aggregates such as cement or sand etc to 3642 Latex Concentrate.

#### Application

#### **Bonded Method for Floor Screeds**

Before placing mortar, apply a bonding slurry coat. Dilute 3642 Latex Concentrate with clean water in the ratio 1:4. Mix a 27kg bag of 226 Thick Bed Mortar to 2.7e - 3.1e of diluted 3642 Latex Concentrate, yielding approximately 0.8 m<sup>2</sup> at 20 mm thick. Mix to a stiff, semi-dry consistency (refer to bag for mixing hints). Mixing ratio may vary depending on weight of finish.

While the bonding slurry is wet spread the mortar and compact well. If placing tile immediately, apply bonding slurry of 4237 Thin-Set Mortar Additive and 211 Crete Filler Powder to the mortar. While the bonding slurry is wet and sticky, place the tile and beat in well.

#### Non Bonded Method - Installation

Before placing mortar, place a 0.1 or 0.15 mm polyethylene cleavage membrane on the substrate. Place mortar to a depth of approximately 1/2 the finished bed thickness. Lay 50mm x 50mm 1.5mm gauge galvanized welded reinforcing wire fabric over mortar. Place additional mortar over wire and compact mortar by tamping with a flat trowel. If placing tile immediately, apply a bonding slurry coat of 4237 Thin-Set Mortar Additive and 211 Crete Filler Powder to the mortar. While the bonding slurry is wet and sticky, place the tile and beat in well.

**Note:** A slurry bond coat should also be applied to the edges of mortar beds installed from previous work periods.

Hot Weather Note: The evaporation of moisture in Portland cement mortars is accelerated by hot, dry conditions. Apply to dampened surfaces and protect freshly spread mortar and finished work in temperatures above  $35^{\circ}$ C.

#### Cold Weather Note:

The setting of portland cement mortars and grouts are retarded by low temperatures. Protect finished work for an extended period when installing in cold weather. For faster setting mortar use LATICRETE Thin-Sets with 101 Rapid Latex Admix. Do not set tile when surface temperature is below freezing or when substrate is frozen.

#### Cleaning

Clean tools and tile work with water while mortar is fresh.

# **AVAILABILITY AND COST**

#### Availability

LATICRETE and LATAPOXY materials are available worldwide. For distributor information, call: **Telephone:** (65) 6515-3028 **Fax:** (65) 6515-3037 For on-line distributor information, visit LATICRETE at <u>se.laticrete.com</u>

#### Cost

Contact a LATICRETE Distributor in your area.

#### WARRANTY

LATICRETE South East Asia Pte Ltd warrants that 3642 Latex Concentrate is free from manufacturing defect sand will not break down, deteriorate or disintegrate under normal usage for a period of one (1) year from date of purchase subject to the terms and conditions.

#### 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.

#### **TECHNICAL SERVICES/ CONTACT**

**Technical Assistance** Information is available by calling:

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#### Technical and safety literature

To acquire technical and safety literature, please visit our website at se.laticrete.com

#### Disclaimer

LATICRETE is not responsible for product use beyond its intended application. Liability is limited to replacing defective materials. We are not responsible for any loss or damage resulting from improper use. Product specifications are subject to change without notice. For the most up-to-date information, please visit our website at se.laticrete.com.