



211 POWDER

DS-2390-0721

**Globally Proven
Construction Solutions**



1. PRODUCT NAME

211 POWDER

2. MANUFACTURER

LATICRETE Europe S.r.l. a socio unico

Via Paletti, snc, 41051

Castelnuovo Rangone MO, Italy

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Email: info@laticreteurope.com

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3. PRODUCT DESCRIPTION

211 POWDER is a factory prepared blend of carefully selected raw materials, Portland cement and graded aggregates. Designed for use with various latex admixtures to produce a high strength smoothing compound or adhesive for ceramic tile and stone that meets and exceeds the requirements international standards.

4237 LATEX ADDITIVE + 211 POWDER: Premium, two component, flexible, latex fortified cement adhesive system; no water required. Conforms to EN 12004 C2 TE S1. (*Note: 254 PLATINUM is an approved substitute for 4237 LATEX ADDITIVE + 211 POWDER.*)

73 CRETE ADMIX + 211 POWDER: High performing, two component, flexible latex fortified cement adhesive system; no water required. IMO-MED certified and meets requirements of EN 12004 C2 TE.

8510 BONDING ADMIX + 211 POWDER: High performing smoothing compound for thicknesses from 1 to 5 mm, ideal for use over steel, in ships, in pools before

waterproofing, and as substrate preparation before the installation of LATICRETE resinous finishes; IMO-MED certified and meets requirements of EN 13813.

Uses

- For interior, exterior, and submerged applications
- Suitable for walls and ceiling
- EN 12004 C2 TE S1 adhesive when mixed with 4237 LATEX ADDITIVE
- EN 12004 C2 TE adhesive when mixed with 73 CRETE ADMIX
- EN 13813 smoothing compound when mixed with 8510 BONDING ADMIX

Advantages

- Factory prepared blend of high quality raw materials — can be used as smoothing compound or adhesive
- High strength formula — meets and exceeds international standards
- Premixed — no jobsite blending of powders required
- Safe — non-flammable; safe to store and mix
- Easy to use — no special tools required
- Versatile — wet and dry areas, walls, floors and ceilings
- Excellent for use in swimming pools, fountains and water features

Suitable Substrates

- Concrete
- Cement Plaster
- Cement Mortar Bed
- Concrete Masonry
- Brick Masonry
- Gypsum Wallboard (Interior use only, non-wet areas)
- Cement Backer Board (Consult cement backer board manufacturer for specific installation recommendations and to verify acceptability for exterior use)
- Cement Terrazzo
- Ceramic Tile and Stone

Packaging

White or Grey

25 kg / bag

Approximate Coverage / Consumption

When mixed with 4237 LATEX ADDITIVE:

- 5 - 6 kg/m² with a 10 x 10 mm notched trowel
- 7- 8 kg/m² with a 15 mm notched trowel

When mixed with 73 CRETE ADMIX:

- 5 - 6 kg/m² with a 10 x 10 mm notched trowel
- 7- 8 kg/m² with a 15 mm notched trowel

When mixed with 8510 BONDING ADMIX:

- 0.3 - 0.5 kg/m² of latex per mm of thickness

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. High humidity will reduce the shelf life of bagged product.

Limitations

- Use LATAPOXY® 300 Adhesive for installing green marble, water sensitive stone and agglomerate and resin backed tile and stone.
- For veneer installations using this product, consult local building code requirements regarding limitations and installation system specifications.
- 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.*

Cautions

Consult MSDS for more safety information.

- During cold weather, protect finished work from traffic until fully cured.
- 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.
- Wait 14 days after the final grouting period before filing water features with water at 70°F (21°C).
- Do not take internally. Silica sand may cause cancer or serious lung problems. Avoid breathing dust. Wear a respirator in dusty areas.
- Keep out of reach of children.

4. TECHNICAL DATA



VOC/LEED Product Information

- **4237 LATEX ADDITIVE + 211 POWDER:** UL GREENGUARD certified
- **73 CRETE ADMIX + 211 POWDER:** GEV EMICODE EC1 certified

Applicable Standard

- **4237 LATEX ADDITIVE + 211 POWDER:** EN 12004 C2 TE S1
- **73 CRETE ADMIX + 211 POWDER:** EN 12004 C2 TE and IMO-MED Certified
- **8510 BONDING ADMIX + 211 POWDER:** EN 13813 and IMO-MED Certified
- ISO 9001:2015 Quality Management System

Physical Properties

Basis:	Cement, aggregates, additives
Colour	Grey & white
Maximum Grain Size:	0,5 mm

(Physical Properties continued on next page)

4237 LATEX ADDITIVE mixed with 211 POWDER			
Classification EN 12004-1:	C2 TE S1		
Flammability:	No		
	Value	Requirement	Test Method
Tensile Adhesion Strength:	~ 3.8 N/mm ²	≥ 1,0 N/mm ²	12004-2 8,3
Tensile Adhesion Strength after Water Immersion:	~ 2.7 N/mm ²	≥ 1,0 N/mm ²	12004-2 8,3
Tensile Adhesion Strength after Heat Ageing:	~ 4.6 N/mm ²	≥ 1,0 N/mm ²	12004-2 8,3
Tensile Adhesion Strength after Freeze-Thaw Cycles:	~ 03.2 N/mm ²	≥ 1,0 N/mm ²	12004-2 8,3
Open Time: Tensile Adhesion Strength after 30 min.:	~ 1,7 N/mm ²	≥ 0,5 N/mm ²	12004-2 8,1
Transverse Deformation:	~ 2.6 mm	≥ 2,5 mm	12004-2 8,4
Slip:	~ 0,1 mm	≤ 0,5 mm	12004-2 8,2
Temperature Resistance:	From -30 °C to +90 °C		

73 CRETE ADMIX mixed with 211 POWDER			
Classification EN 12004-1:	C2 TE		
Flammability:	No		
	Value	Requirement	Test Method
Tensile Adhesion Strength:	~ 3,7 N/mm ²	≥ 1,0 N/mm ²	12004-2 8,3
Tensile Adhesion Strength after Water Immersion:	~ 2,0 N/mm ²	≥ 1,0 N/mm ²	12004-2 8,3
Tensile Adhesion Strength after Heat Ageing:	~ 3,7 N/mm ²	≥ 1,0 N/mm ²	12004-2 8,3
Tensile Adhesion Strength after Freeze-Thaw Cycles:	~ 3,4 N/mm ²	≥ 1,0 N/mm ²	12004-2 8,3
Open Time: Tensile Adhesion Strength after 30 min.:	~ 1,0 N/mm ²	≥ 0,5 N/mm ²	12004-2 8,1
Slip:	~ 0,1 mm	≤ 0,5 mm	12004-2 8,2
Temperature Resistance:	From -30 °C to +90 °C		

8510 BONDING ADMIX mixed with 211 POWDER	
Classification EN 13813:	CT C45-F15
Reaction to Fire:	Bfl S1
Compressive Strength (7 days):	~ 45,0 N/mm ²
Compressive Strength (28 days):	~ 45,0 N/mm ²
Flexural Strength (28 days):	~ 15,0 N/mm ²
Tensile Adhesion to Concrete:	~ 1,6 N/mm ² / 1,9 N/mm ² (Diluted / Pure*)
Tensile Adhesion to Sheet Metal:	~ 1.4 N/mm ² (Pure)
Temperature Resistance:	From -30°C to +90°C

*when 8510 BONDING ADMIX is used pure, without diluting with water

Working Properties (at 23°C and 50% R.H.)

4237 LATEX ADDITIVE mixed with 211 POWDER	
Consistency:	Creamy
Wet Density:	~ 1.64 g/cm ³
Mix Ratio:	25,2% (6,3 lt latex per 25 kg bag)
Working Time:	~ 180-240 min.
Open Time:	~ 30 min.
Maximum Thickness:	15 mm
Time to Foot Traffic:	24 hours
Time to Grouting:	24 hours
Time to Full-Service Conditions:	7 days
Final Hardening:	28 days

73 CRETE ADMIX mixed with 211 POWDER	
Consistency:	Creamy
Wet Density:	1637 kg/m ³
Mix Ratio:	~6,5 kg latex per 25 kg bag
Working Time:	40-60 minutes
Pot Life:	5 hours
Time to Light Foot Traffic:	12 hours
Time to Traffic:	24 hours
Time to Grouting:	24 hours
Time to Full-Service Conditions:	7 days
Final Hardening:	28 days

(Working Properties continued on next page)

8510 BONDING ADMIX mixed with 211 POWDER	
Consistency:	Plastic or fluid
Mixing Ratio with Pure Latex:	23% (5.75 kg of latex)
Mixing Ratio with Water Diluted Latex:	18-20% (4.5 - 5 kg of liquid)
Working Time:	~ 25-30 minutes
Application Thickness:	2-5 mm
Time to Foot Traffic:	~ 6-8 hours
Time to Tile Install:	12 - 24 hours
Time to Installation of Resinous Finishes:*	> 24 hours

*subject to residual moisture check < 3%

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 5°C and 35°C and structurally sound, clean and free of all laitance, efflorescence, dirt, oil, grease, paint, concrete sealers or curing compounds.

When using as a thin-set tile adhesive, rough or uneven concrete surfaces should be made smooth with a 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. New concrete slabs shall be damp cured and 28 days old before application. 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 either local standard or design requirement for movement and expansion joints (i.e. UNI 11493-1:2016, 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.

Note: Latex Portland Cement Mortars do not require a minimum cure time for concrete 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.

AS A THIN-SET ADHESIVE

(211 POWDER mixed with 4237 LATEX ADDITIVE or 73 CRETE ADMIX)

Stir latex admixture thoroughly before use:

- **For 4237 LATEX ADDITIVE:** Use 6 - 6.5 kg of 4237 LATEX ADDITIVE to 25 kg of 211 POWDER. Place 4237 LATEX ADDITIVE in a clean plastic pail. **Do not dilute.** Add 211 POWDER to 4237 LATEX ADDITIVE and mix to a smooth, trowelable consistency. Allow mortar to slake for 2–3 minutes. Adjust consistency if necessary. Remix and apply with the proper sized notched trowel.
- **For 73 CRETE ADMIX:** Stir thoroughly before use. Use 6.5 kg of 73 CRETE ADMIX to approximately 25 kg of 211 POWDER and mix to a smooth, trowelable consistency. Allow mortar to slake for 5–10 minutes. Adjust consistency if necessary. Remix and apply with the proper sized notched trowel.

Once mixed, apply mortar to the substrate with the flat side of the trowel, pressing firmly to work into surface. Comb additional mortar with the notched side.

Note: Use the proper sized notched trowel to ensure full bedding of the tile. It is essential that enough mortar is used to completely cover the back of the tile with a minimum 3/32" (2 mm) to 1/8" (3 mm) uniform thickness. Spread as much mortar as can be covered with tile in 15–20 minutes. Back butter large tiles >8" x 8" (>200 x 200 mm) to provide full bedding and firm support. Place tiles into place with a slight twisting motion and beat in using a beating block and rubber mallet to embed tile and adjust level.

Check mortar for complete coverage by periodically removing a tile and inspecting bedding mortar transfer onto back of tile.

Grout installation after a minimum of 24 hours curing time at 23°C. Grout with PERMACOLOR® SELECT GROUT, SPECTRALOCK® PRO PREMIUM GROUT, COLORBASE FS or COLOBASE FL.

AS A HIGH-PERFORMANCE SMOOTHING REPAIR MORTAR (211 POWDER mixed with 8510 BONDING ADMIX)

For use as a repair mortar, use approximately 4.5-5.75 kg of liquid per 25 kg of 211 POWDER.

Dilute 8510 BONDING ADMIX with water, using a mix ratio of 3 kg of 8510 BONDING ADMIX with 1.5 - 2 kg of water depending on the desired consistency (the 3 kg 8510 BONDING ADMIX is packaged in a 5.5 L tank and includes a fill guideline).

Note: For application on steel (i.e. in the marine or naval sector) or existing glazed tiles, do not dilute 8510

BONDING ADMIX; use pure with 211 POWDER. Use 5.5-5.75 kg of latex with 25 kg of 211 POWDER.

Depending on the application, mix diluted or pure liquid admixture with the powder in a clean pail using a low speed mixer/drill for about 2 minutes. Let the mix slake for 2 minutes, then briefly mix again. The consistency of the mixture can vary from plastic to semi-fluid (but never fluid liquid). If necessary, add additional admixture or powder to adjust the mortar consistency.

Mix the mortar every 10-15 minutes during use. Apply the mortar within 20-25 minutes (at 23°C and 50% R.H.). Working in sections about the width of your arm spread, use the flat side of a trowel to apply the mortar to the substrate pressing firmly to work it into the surface, between 1 and 5 mm in thickness.

For finish installations, follow the below guidelines:

- **Tile or Stone:** Allow smoothing compound to cure for a minimum of 6-8 hours before installing tile or stone finishes (at 21°C and 50% RH).
- **Resinous Finish :** When used below resinous finishes, sand the smoothing compound between 12 and 24 hours after application. Allow smoothing compound to cure for a minimum of 24 hours and verify readiness before installing resinous finishes (measured moisture content must be less than 3%). Refer to *TDS 450: Installation Guideline for Installing Resinous Finishes over Existing or Worn Substrates* for more details on installing resinous finishes over the 8510 BONDING ADMIX + 211 POWDER system.

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 Thin-Sets with Rapid Latex Admix. Do not set tile when surface temperature is below freezing or when substrate is frozen.*

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 when installing in temperatures over 35°C.*

CLEANING

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

6. AVAILABILITY AND COST

Availability

LATICRETE® materials are available worldwide. For distributor information, please contact LATICRETE Europe S.r.l. a socio unico:

+39 059 535540

info@laticreteurope.com

For on-line distributor information, visit www.laticrete.eu.

Cost

Contact LATICRETE Europe S.r.l. a socio unico to obtain complete information and cost.

7. WARRANTY

The supplier warrants that the product will not deteriorate under normal conditions and use. The warranty validity of one (1) year. Contact Technical Services for further information. See 10. FILING SYSTEM:

- DS 230.13EU: 1 Year Product Warranty

8. MAINTENANCE

LATICRETE® and LATAPOXY® are products of high quality designed to achieve lasting installations and avoid maintenance, however performance and durability may depend on properly maintaining products, depending of the cleaning products used.

9. TECHNICAL SERVICES

Technical Assistance

Information is available by calling or emailing the Technical Service Hotline:

+39 059 535540

technicalservices@laticreteurope.com

Technical and Safety Literature

To obtain technical and safety literature, please visit our website at www.laticrete.eu.

Warning

The information and the instructions in the data sheet, although based on knowledge gained through years of applications, are indicative. LATICRETE® is unable to directly control the installation methods and conditions of products and does not assume any liability arising from their implementation. Those who want to use LATICRETE® products should conduct adequate tests to determine the site specifications. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation method and site conditions.

LATICRETE® products are covered by a warranty within the limits of what is established by our general conditions of sale and within the limits of correspondence related to technical specifications and applicable certifications, as expressly indicated in the product data sheets, documentation, or applicable technical documentation.

10. FILING SYSTEM

Additional product information is available on our website at laticrete.eu. The following is a list of related documents:

- DS 230.13EU: 1 Year Product Warranty
- DS 2494 8510 BONDING ADMIX Product Data Sheet
- DS 2666 73 CRETE ADMIX Product Data Sheet
- DS 3201 4237 LATEX ADDITIVE Product Data Sheet
- DS 6550 4237 LATEX RAPID ADDITIVE Product Data Sheet
- TDS 450: Installation Guideline for Installing Resinous Finishes over Existing Worn Surfaces/Substrates