



MAPEI's ANSI A118.15 tile and stone mortars

*Granirapid
Kerabond T / Keralastic
Kerabond/Keralastic
Keraflex Super
Ultraflex LFT*

*Ultraflex LFT Rapid
MAPEI Ultralite Mortar
MAPEI Ultralite S2
Ultraflex RS*



How MAPEI has expanded its A118.15 mortar offering

In 2012, the tile installation industry finalized the new category “Improved Modified Dry-Set Cement Mortars” that is designated A118.15, and updated the standard’s testing requirements for 2018. This standard joined A118.1 (unmodified mortars), A118.4 (modified standard mortars) and A118.11 (mortars for use over plywood) as an additional tool in differentiating products. The A118.15 standard details the requirements for high-performance mortars that can be used in freeze/thaw environments, submerged applications, areas with elevated expansion and deflection, hot environments, etc. Additionally, the standard allows mortars to be categorized as fast-setting (F), large and heavy tile (H), extended-working-time (E) and slip-resistant (T).

MAPEI has pushed for this standard for many years as the U.S. market has been slow to adopt the Europe’s ISO criteria for mortars that already include the “F”, “H”, “E” and “T” categories. MAPEI also was instrumental in developing the testing methodology and minimum performance requirements for A118.15 while working with the labs and technical departments of other industry participants. This standard allows specifiers to call out the performance requirements that they need on the job without fear that the installer will substitute a less robust product due to last-minute value engineering.

For years, MAPEI has listed the ISO standards that its products meet and is proud to list the ANSI A118.15 information as well. Because the requirements for ISO and ANSI differ somewhat, MAPEI has had to carefully engineer its mortars to be able to meet both. Many MAPEI mortars are fully compliant with the A118.15 standard, and those “meeting and exceeding” the specification will indicate this on their Technical Data Sheets and packaging. These mortars have been tested for and passed all 12 of the standard’s requirements (15 requirements for fast-setting mortars). See the charts on the back cover for the requirements.

MAPEI has a complete offering of mortars that are fully compliant with ANSI A118.15: *Granirapid*® System, *Kerabond/Keralastic*™ System, *Kerabond*® T / *Keralastic*® System, *Keraflex*® Super, *Ultraflex*® LFT™, *Ultraflex LFT Rapid*, *MAPEI Ultralite*® S2, *MAPEI Ultralite Mortar* and *Ultraflex RS* are mortars that fully meet all aspects of A118.15.

For help in interpreting the data and in deciding whether mortars under consideration are a good fit for service environments – as defined in the Tile Council of North America’s (TCNA) Handbook or the Terrazzo Tile and Marble Association of Canada’s (TTMAC) Tile Installation Manual – contact MAPEI’s Technical Services Department or view the technical data at www.mapei.com.



Kerabond T / Keralastic System

Premium, flexible large-and-heavy-tile and thin-set mortar

FEATURES AND BENEFITS

- Two-component system for maximum deformability
- High-performance bond
- Best for most difficult tiles, substrates and conditions
- For thicker bond coats from 3/32" to 1/2" (2.5 to 12 mm)
- Excellent for large tile and ungauged tile
- Exceptional bond strength, flexural strength and elongation
- Excellent freeze/thaw durability
- Lifetime commercial/residential system warranty

INDUSTRY STANDARDS AND APPROVED USES

- ISO 13007: Classification C2ES2P2
- ANSI: Meets or exceeds A118.4HE, A118.11 and A118.15HE requirements
- Approved for exterior facades
- Approved for submerged applications
- Approved for steam rooms



Learn more



ISO 13007 C2ES2P2



	Product Code	Color	Packaging
U.S.	0021623	Gray	Bag: 50 lbs. (22.7 kg)
	0011623	White	Bag: 50 lbs. (22.7 kg)
	0970508	N/A	Jug: 2 U.S. gals. (7.57 L)
	0970519	N/A	Pail: 5 U.S. gals. (18.9 L)
Canada	0021623CAN	Gray	Bag: 50 lbs. (22.7 kg)
	0011623CAN	White	Bag: 50 lbs. (22.7 kg)
	0970508	N/A	Jug: 2 U.S. gals. (7.57 L)
	0970519	N/A	Pail: 5 U.S. gals. (18.9 L)
	0970578	N/A	Drum: 55 U.S. gals. (208 L)

Keraflex Super

Premium, extra smooth, large-and-heavy-tile mortar with polymer
CO₂ FULLY OFFSET IN THE ENTIRE LIFE CYCLE

FEATURES AND BENEFITS

- *Keraflex Super* is part of the "CO₂ Fully Offset in the Entire Life Cycle" line of products. CO₂ emissions measured throughout the life cycle of products from the Zero line in 2023, using Life Cycle Assessment (LCA) methodology, verified and certified with EPDs, have been offset through the acquisition of third-party-certified carbon credits in support of renewable energy and forestry protection projects: A commitment to the planet, to people and to biodiversity. [Scan the QR code that is on the back page for more information.](#)
- High-Transfer Technology™ to provide outstanding transfer of mortar to tile backs – combined with tenacious bond strength
- Extra smooth, creamy consistency for ease of application
- Easy mixing, handling and troweling properties
- Highly resistant to extreme freeze/thaw conditions
- Ideal for lippage control systems applications
- Nonsag/nonslump formula for large-format and heavy tile/stone in wall and floor applications
- For bond coats up to 1/2" (12 mm) in embedded thickness
- Lifetime commercial/residential system warranty

INDUSTRY STANDARDS AND APPROVED USES

- ISO 13007: Classification C2TES1P1
- ANSI: Exceeds A118.4HET, A118.11 and A118.15HET requirements
- Approved for interior/exterior water immersion applications, including water features, fountains and pools
- Approved for exterior facades
- Approved for glass tile



Learn more



ISO 13007 C2TES1P1



	Product Code	Color	Packaging
U.S.	1200120USA	Gray	Bag: 44 lbs. (20 kg)
	1200220USA	White	Bag: 44 lbs. (20 kg)
Canada	1200120	Gray	Bag: 44 lbs. (20 kg)
	1200220	White	Bag: 44 lbs. (20 kg)



Ultraflex LFT Rapid

Premium, rapid-setting, large and heavy-tile mortar with polymer

FEATURES AND BENEFITS

- Polymer-enriched for high performance and deformability
- Nonsag formula for large and heavy tile and stone in wall applications
- Nonslump for large and heavy tile and stone in floor applications
- For thicker bond coats from 3/32" to 1/2" (2.5 to 12 mm)
- Smooth and creamy consistency makes it easy to apply.
- Allows grouting in 3 to 4 hours
- Lifetime commercial/residential system warranty

INDUSTRY STANDARDS AND APPROVED USES

- ISO 13007: Classification C2TFSIPI
- ANSI: Meets or exceeds ANSI A118.4FHT, ANSI A118.11 and ANSI A118.15FHT bond-strength requirements
- Approved for exterior facades
- Approved for submerged applications



Learn more

MAPEI
Ultraflex LFT Rapid
Premium, Large and Heavy Tile Mortar with Polymer

Fast Track Ready

ISO 13007 C2TFSIPI

	Product Code	Color	Packaging
U.S./	2904823	Gray	Bag: 50 lbs. (22.7 kg)
Canada	2904923	White	Bag: 50 lbs. (22.7 kg)

Ultraflex LFT

Premium, large-and-heavy-tile mortar with polymer
CO₂ FULLY OFFSET IN THE ENTIRE LIFE CYCLE

FEATURES AND BENEFITS

- *Ultraflex LFT* is part of the "CO₂ Fully Offset in the Entire Life Cycle" line of products. CO₂ emissions measured throughout the life cycle of products from the Zero line in 2023, using Life Cycle Assessment (LCA) methodology, verified and certified with EPDs, have been offset through the acquisition of third-party-certified carbon credits in support of renewable energy and forestry protection projects: A commitment to the planet, to people and to biodiversity. [Scan the QR code that is on the back page for more information.](#)
- Polymer-enriched for high performance and deformability
- Nonsag formula for large and heavy tile and stone in wall applications
- Nonslump for large and heavy tile and stone in floor applications
- For thicker bond coats from 3/32" to 1/2" (2.5 to 12 mm) thick
- Smooth and creamy consistency for easy handling and application
- Lifetime commercial/residential system warranty

INDUSTRY STANDARDS AND APPROVED USES

- ISO 13007 classification C2TESIPI
- ANSI specifications A118.4HET, A118.11 and A118.15HET
- Approved for exterior facades
- Approved for submerged applications
- Exceptional open time
- Excellent adjustability



Learn more

MAPEI
Ultraflex LFT
Large and Heavy Tile Mortar with Polymer

CO₂ FULLY OFFSET IN THE ENTIRE LIFE CYCLE
ZERO

ISO 13007 C2TESIPI

	Product Code	Color	Packaging
U.S.	2905323 2905423	Gray White	Bag: 50 lbs. (22.7 kg) Bag: 50 lbs. (22.7 kg)
Canada	2905323CAN 2905423CAN	Gray White	Bag: 50 lbs. (22.7 kg) Bag: 50 lbs. (22.7 kg)



Ultraflex RS

Premium, rapid-setting tile mortar with polymer

FEATURES AND BENEFITS

- Polymer-enriched for high performance and deformability
- High content of unique dry polymer
- Superior adhesion to substrate and tile
- Ready to grout in 2 to 3 hours
- 25-year commercial/residential system warranty

INDUSTRY STANDARDS AND APPROVED USES

- ISO 13007: Classification C2FS1P1
- ANSI: Exceeds ANSI A118.4F, ANSI A118.11 and ANSI A118.15F requirements for fast-setting mortars



Learn more

ISO 13007 C2FS1P1

Fast Track Ready

	Product Code	Color	Packaging
U.S./	2903911	Gray	Bag: 25 lbs. (11.3 kg)
Canada	2903923	Gray	Bag: 50 lbs. (22.7 kg)
	2904123	White	Bag: 50 lbs. (22.7 kg)

MAPEI Ultralite S2

Premium, highly deformable, lightweight, gauged-tile mortar with polymer

FEATURES AND BENEFITS

- Polymer-enriched for high performance and deformability
- Extended coverage formula for most types and sizes of thin tiles
- Smooth, creamy consistency with easy-glide troweling
- 25-lb. (11.3-kg) bag provides the same coverage as a 50-lb. (22.7-kg) bag of a standard polymer-modified mortar
- Superior transfer promotes full coverage for tile panels
- Excellent wet-out characteristics promote bonding
- Maximum embedded thickness of 3/8" (10 mm)
- Contains recycled material
- Lifetime commercial/residential system warranty

INDUSTRY STANDARDS AND APPROVED USES

- ISO 13007: Classification C2ES2P2
- ANSI: Exceeds ANSI A118.4HE, A118.11 and A118.15HE
- SCS Green Squared Certified per ANSI A138.1
- Extended open time, adjustability and pot life
- Approved for exterior facades
- Approved for steam rooms



Learn more

ISO 13007 C2ES2P2

UltraLite Technology

GREEN SQUARED CERTIFIED

SCS certified

	Product Code	Color	Packaging
U.S.	1199311	Gray	Bag: 25 lbs. (11.3 kg)
	1199211	White	Bag: 25 lbs. (11.3 kg)
Canada	1199311CAN	Gray	Bag: 25 lbs. (11.3 kg)
	1199211CAN	White	Bag: 25 lbs. (11.3 kg)

Requirements for A118.15-compliant mortars

The following tests in italics deal with extreme conditions that are challenging for mortars to meet.

Test	Property	Test Section	Duration	Requirement
1	Open time	5.3.6	20 minutes	75 psi (0.5 MPa) or higher
2	Glazed wall tile shear strength	7.1.2	7 days	450 psi (3.10 MPa) or higher
3	<i>Glazed wall tile shear strength</i>	7.1.3	<i>7 days, water immersion</i>	<i>250 psi (1.72 MPa) or higher</i>
4	<i>Glazed wall tile shear strength</i>	7.1.4	<i>28 days, heat aging</i>	<i>450 psi (3.10 MPa) or higher</i>
5	Porcelain tile shear strength	7.2.2	1 day	100 psi (0.69 MPa) or higher
6	Porcelain tile shear strength	7.2.3	7 days	300 psi (2.07 MPa) or higher
7	<i>Porcelain tile shear strength</i>	7.2.4	<i>7 days, water immersion</i>	<i>200 psi (1.38 MPa) or higher</i>
8	Porcelain tile shear strength	7.2.5	28 days	400 psi (2.76 MPa) or higher
9	<i>Porcelain tile shear strength</i>	7.2.6	<i>28 days, with freeze/thaw cycling</i>	<i>250 psi (1.72 MPa) or higher</i>
10	<i>Porcelain tile shear strength</i>	7.2.7	<i>28 days, heat aging</i>	<i>400 psi (2.76 MPa) or higher</i>
11	Quarry tile shear strength	7.3.2	28 days	150 psi (1.03 MPa) or higher
12	<i>Quarry tile shear strength</i>	7.3.3	<i>28 days, with freeze/thaw cycling</i>	<i>100 psi (0.69 MPa) or higher</i>

MAPEI Ultralite Mortar

Premium, lightweight mortar with polymer for large and heavy tile
CO₂ FULLY OFFSET IN THE ENTIRE LIFE CYCLE

FEATURES AND BENEFITS

- MAPEI Ultralite Mortar is part of the “CO₂ Fully Offset in the Entire Life Cycle” line of products. CO₂ emissions measured throughout the life cycle of products from the Zero line in 2023, using Life Cycle Assessment (LCA) methodology, verified and certified with EPDs, have been offset through the acquisition of third-party-certified carbon credits in support of renewable energy and forestry protection projects: A commitment to the planet, to people and to biodiversity. [Scan the QR code that is on the back page for more information.](#)
- Polymer-enriched for high performance and deformability
- Nonsag formula for large and heavy tile and stone
- Nonslump for large and heavy tile and stone in floor applications
- For thicker bond coats from 3/32" to 1/2" (2.5 to 12 mm)
- 25-lb. (11.3-kg) bag provides the same coverage as a 50-lb. (22.7-kg) bag of a standard polymer-modified mortar
- Smooth and creamy consistency
- Contains more than 20% recycled content
- Lifetime commercial/residential system warranty
- Suitable for submerged applications
- No silica sand added*

* Does not contain intentionally added crystalline silica. Trace amounts exist in cement and other ingredients, which will be listed on the Safety Data Sheet.

INDUSTRY STANDARDS AND APPROVED USES

- ISO 13007: Classification C2TES1P1
- ANSI: Exceeds ANSI A118.4HET, ANSI A118.11 and ANSI A118.15HET bond-strength requirements
- Exceptional open time and pot life
- Approved for steam rooms
- Approved for exterior facades
- Approved for glass tile



Learn more



ISO 13007 C2TES1P1



	Product Code	Color	Packaging
U.S.	2426211	Gray	Bag: 25 lbs. (11.3 kg)
	2426311	White	Bag: 25 lbs. (11.3 kg)
Canada	2429011CAN	Universal	Bag: 25 lbs. (11.3 kg)



Additional requirements for A118.15F-, A118.15E- and A118.15T-compliant mortars

Test	Property	Test Section	Duration	Requirement
13	Extended open time (A118.15E)	5.3.6	30 minutes	75 psi (0.5 MPa) or higher
14	Fast-set open time (A118.15F)	5.3.7	10 minutes	75 psi (0.5 MPa) or higher
15	Final set (A118.15F)	5.2	< 4 hours	< 4 hours
16	Porcelain tile shear strength (A118.15F)	7.5.1	4 hours	50 psi (0.34 MPa) or higher
17	Sag (A118.15T)	6.1.5	20 minutes	0.02" (0.5 mm) or less

MAPEI's offering of ANSI A118.15 mortars

MAPEI's ANSI A118.15 high-performance mortars allow specifiers to call out desired job installation requirements, while protecting contractors from value engineering bidding, providing all the benefits of the characteristics described by the TCNA Handbook.

Granirapid System

Premium, rapid-setting, flexible tile mortar

FEATURES AND BENEFITS

- Two-component system for maximum deformability
- High-performance bond strengths
- Early mechanical strength development
- Best for most difficult tiles, substrates and conditions
- Allows grouting in 3 to 4 hours
- Superior drying-out characteristics
- Low residual moisture does not contribute to efflorescence
- Allows water submersion in 72 hours
- Excellent for large tile and ungauged tile
- Excellent freeze/thaw durability
- Lifetime commercial/residential system warranty

INDUSTRY STANDARDS AND APPROVED USES

- ISO 13007: Classification C2FS2P2
- ANSI: Meets or exceeds ANSI A118.4F, ANSI A118.11 and ANSI A118.15F bond-strength requirements
- Approved for exterior facades
- Approved for submerged applications
- Approved for steam rooms



Learn more



ISO 13007 C2FS2P2



	Product Code	Color	Packaging
U.S./ Canada	1401408	N/A	Jug: 2 U.S. gals. (7.57 L)
	1401419	N/A	Pail: 5 U.S. gals. (18.9 L)
	1401478	N/A	Drum: 55 U.S. gals. (208 L)
	1401223	Gray	Bag: 50 lbs. (22.7 kg)
	1402221	White	Bag: 46 lbs. (20.9 kg)

Kerabond/Keralastic System

Premium, flexible tile mortar

FEATURES AND BENEFITS

- Two-component system for maximum deformability
- Best for most difficult tiles, substrates and conditions
- Exceptional bond strength, flexural strength and elongation
- Excellent freeze/thaw durability
- Lifetime commercial/residential system warranty

INDUSTRY STANDARDS AND APPROVED USES

- ISO 13007: Classification C2ES2P2
- ANSI: Meets or exceeds ANSI A118.4E, ANSI A118.11 and ANSI A118.15E bond-strength requirements
- Approved for exterior facades
- Approved for submerged applications
- Approved for steam rooms



Learn more



ISO 13007 C2ES2P2



	Product Code	Color	Packaging
U.S.	0021523	Gray	Bag: 50 lbs. (22.7 kg)
	0011523	White	Bag: 50 lbs. (22.7 kg)
	0970508	N/A	Jug: 2 U.S. gals. (7.57 L)
	0970519	N/A	Pail: 5 U.S. gals. (18.9 L)
	0970578	N/A	Drum: 55 U.S. gals. (208 L)
Canada	0021523CAN	Gray	Bag: 50 lbs. (22.7 kg)
	0011523CAN	White	Bag: 50 lbs. (22.7 kg)
	0970508	N/A	Jug: 2 U.S. gals. (7.57 L)
	0970519	N/A	Pail: 5 U.S. gals. (18.9 L)
	0970578	N/A	Drum: 55 U.S. gals. (208 L)

Now you can also choose products with CO₂ emissions fully offset.

Choose sustainability for all your projects, with MAPEI.

CO₂ emissions measured throughout the life cycle of products from the Zero line in 2023 using Life Cycle Assessment (LCA) methodology, verified and certified with EPDs, have been offset through the acquisition of third-party-certified carbon credits in support of renewable energy and reforestation projects: A commitment to the planet, to people and to biodiversity. For more details on how emissions are calculated and on climate-mitigation projects that are financed through certified carbon credits, scan the QR code.



MAPEI USA
MAPEI Caribe
MAPEI Canada

MAPEI Headquarters of North America

1144 East Newport Center Drive
Deerfield Beach, Florida 33442
1-888-US-MAPEI (1-888-876-2734) /
(954) 246-8888

Technical Services

1-800-992-6273 (U.S. and Puerto Rico)
1-800-361-9309 (Canada)

Customer Service

1-800-42-MAPEI (1-800-426-2734)

Copyright ©2024 by MAPEI Corporation (“MAPEI”) and all rights are reserved. All intellectual property rights and other information contained in this document are the exclusive property of MAPEI (or its parent or related companies), unless otherwise noted. No part of this document may be reproduced or transmitted in any form without the prior written consent of MAPEI.

Printed in the USA.

