

FLEX R20

THIN SET MORTAR



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ANSI
- ANSI 118.1.

DESCRIPTION

FLEX R20 is a unmodified thin set mortar specifically designed for the installation of the Schluter™-Systems (DITRA™ uncoupling membrane KERDI™ waterproof membrane and KERDI-BOARD™). It allows the installation of ceramic tiles, porcelain, slate, marble, granite or any type of natural stone on walls or floors with the proper membrane. This mortar is recommended for most interior and exterior residential uses as well as light commercial uses.

CHARACTERISTICS

- Easy to mix (add only water)
- Easy to trowel
- Can be used indoors and outdoors
- Specially designed for Schluter membranes
- Includes hybrid technology
- Offers great support for large format tiles installation on walls & floors
- Meet or exceeds ANSI A118.1

FORMATS

- Available in Grey or White 22.7 kg (50 lbs) bag – 49 per skid

TECHNICAL DATA AT 22°C

TEST METHOD	ANSI SPECIFICATION	FLEX R20 TEST RESULTS
ANSI A118.1 - Shear strength, impervious ceramic (porcelain) mosaics	>150 psi (1,03 MPa) at 28 days	200 to 220 psi (1.37 to 1.51 MPa)
ANSI A118.1 - Shear strength, glazed wall tile	>250 psi (1,72 MPa) at 28 days	270 to 330 psi (1.86 to 2.27 MPa)
ANSI A118.1 - Shear strength, quarry tile to quarry tile	>100 psi (0,69 MPa) at 28 days	250 to 320 psi (1.72 to 2.20 MPa)

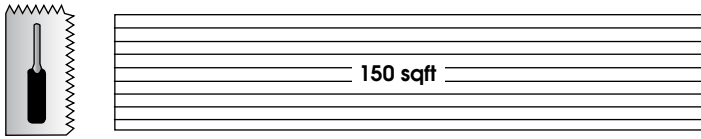
Pot life	2-3 hrs
Open time	20-30 minutes
VOC	0 g/L
Initial cure	24 hours
Final cure	28 days
Colours	Grey or white

Which size of notched trowel should I use for my tile or stone installation? Interior applications of tiles should achieve a minimum transfer of 80% and exterior applications a minimum of 95%. Back buttering the tile and stone will help achieve a greater percentage of transfer.

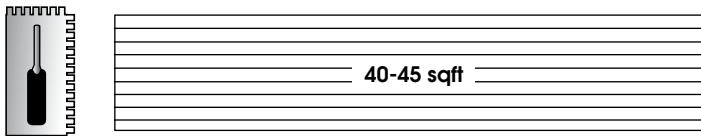
A 22.7 KG BAG COVERS:

COVERAGE*

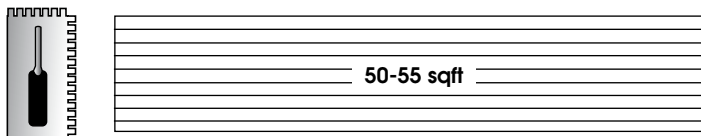
1/4 X 3/16 - Coverage underneath membranes



1/4 X 3/8 - Coverage over Ditra™



1/4 X 3/8 - Coverage over Kerdi™



* Usage requirements are approximate. Coverage will depend on the trowel used and the condition of your sub floor. Coverage can also vary depending on the membrane that is used.

SHELF LIFE

12 months following production date. Must be stored in a dry and heated area.

RECOMMENDED SUBSTRATES

Test on a small surface first to ensure suitability of coverings.

- Cured concrete (28 days)
- Masonry blocks
- Gypsum board (primed only with latex)
- Cement backer-board
- Existing bricks

TECHNICAL NOTES

- Avoid any circulation for a minimum of 24 hours.
- Expansion joints: do not cover the joints with mortar
- Ideally, adhesive residues and vinyl tiles must be removed from the surface, which must then be cleaned of all residues. Although the mortar will bond to adhesive residues and non-cushioned vinyl tiles, it is unknown for how long. Therefore, the results can not be guaranteed.
- Use white mortar when installing white marble or light coloured stones. Some natural stones require specific methods of installation. Verify with your retailer.
- Do not use in pools.
- Do not use with moisture sensitive stones.

INSTRUCTIONS

UNDERLAYMENT

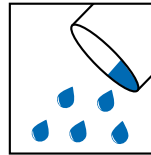
The underlayment is the most important step for a long lasting result. Refer to the "Good supports" technical bulletin on our website. The underlayment must meet the TTMAC and TCA standards.

SUBSTRATE PREPARATION



All backing surfaces must be structurally sound, dry, and free of any deleterious substances (wax, sealer, etc.), which may act as bond barriers (according to industry standards as outlined by the TTMAC and the TCA).

MIX

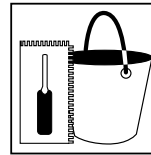


For the installation of the Schluter™ membranes (KERDITM & DITRATM) on the recommended substrates, mix 7.2 liters (1.96 gal US) of liquid with 22.7kg (50 lbs) of mortar. A creamier texture will allow a better transfer on the membrane. To install over the Schluter™ membranes (KERDITM & DITRATM), mix 6.1 liters (1.61 US gal) of water with 22.7kg (50 lbs) of Flex R20 mortar. Mix the mortar at low speed (no higher than 150 RPM) if using a mechanical mixer. Let the mortar rest 10 minutes and mix a second time before applying it without adding water, additives or powder.

Ratio:

- Approximately 7.2 L of water per 22.7 kg of powder (under membrane)
 - Approximately 6.1 L of water per 22.7 kg of powder (over membrane)
- (powder/water: 3 for 1)

APPLICATION



For installation over plywood, do not mix FLEX R20 with water. Use Latex 6500 instead of water or use a high quality polymer-modified mortar (see Schluter™ recommendations). Mix FLEX R20 with water to install over concrete, masonry, gypsum, mortar or cement based backer-board. Surfaces must have been pre-prepared properly and as mentioned in the "SUBSTRATE PREPARATION" section.

INSTALLATION OF THE DITRA™ MEMBRANE

Apply a layer of mortar FLEX R20 to the substrate using a 1/4" X 3/16" V-trowel, a 5/16" X 5/16" V-trowel or a 11/64" X 11/64" square-notched trowel. Install the DITRATM membrane by carefully pressing it into the mortar with the help of, for instance, a float trowel. The mortar must be covered with a membrane, at a maximum of 20 minutes after its application. If the mortar begins drying before you are ready to install the membrane, remove it and replace with fresh mortar. Lift up one of the membrane's corners to make sure the mortar has transferred.

Apply one layer of the mortar using the flat side of the trowel in order to fill all of the DITRA™ membrane's cavities. Next, apply another layer of mortar using the adequate trowel size according to the tiles being installed. The mortar can be applied up to 1/2" thick. The tile has to be installed over the mortar within 20 minutes after the application. If the mortar begins to dry before you are ready to install the tiles, remove it and replace with fresh mortar. Press the tiles firmly using a twisting motion to ensure good contact (more than 80% for an indoor installation and 95% for an outdoor or humid area installation). Avoid moving the tiles 25 minutes after setting.

INSTALLATION OF THE KERDI™ MEMBRANE

Apply one layer of mortar FLEX R20 over the surface using the flat side of a trowel in order to ensure proper adhesion. Next, apply another layer of mortar using a 1/8" X 1/8" square-notched trowel or a 1/4" X 3/16" V notched trowel. The mortar must be covered with a membrane, at a maximum of 20 minutes after its application. If the mortar begins to dry before you are ready to install the membrane, remove it and replace with fresh mortar. Press the KERDI™ membrane into the mortar with the flat side of the trowel in order to ensure good contact and to get rid of any air pocket. Lift up one of the membrane's corners to make sure the mortar has transferred.

Apply one layer of the mortar using the flat side of the trowel so as to optimize the contact between the KERDI™ membrane and the mortar. Next, apply another layer of mortar using the adequate trowel size according to the tiles being installed. The mortar can be applied up to 1/2" thick. The tile has to be installed over the mortar within 20 minutes after its application. If the mortar begins to dry before you are ready to install the tiles, remove it and replace with fresh mortar. Press the tiles firmly using a twisting motion to ensure good contact (more 80% for an indoor installation and 95% for an outdoor or humid area installation). Avoid moving the tiles 25 minutes after setting.

CLEANING



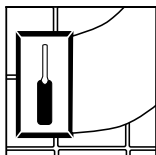
Promptly clean tools with water while material is fresh.

CURING



Let cure at least 24 hours before grouting at 22°C. Be advised that the lower the temperature, the longer the drying time. Never try to accelerate drying time. Light circulation is allowed after 24 hours, but only for grouting. A minimum of 48 hours is necessary before placing furniture and supplies. Heavy circulation is allowed after 7 days. After 28 days, the cure will be complete.

ENTRETIEN



No particular maintenance is required given the nature of this product. For grouting, use POLY 600 unsanded grout, POLY 500 sanded grout, or POLY 800 PRECISION epoxy stain resistant grout.

LIMITATIONS

- The temperature should be maintained minimally at 10°C for 28 days to allow the cement to reach its final and complete cure, and therefore, all its strength.
- Do not use over pressed wood, particle board, Masonite, lauan or as- bestos board, or other similar materials. Do not use on hardwood floors.
- Replace the water by the PROFIX 6500 Latex for external installations undergoing cycles of freezing and thawing.

WARRANTY

See SCHLUTER™ data.

LEED



Leadership in Energy & Environmental Design (LEED) is a rating system for green building designs, operates, compares and certifies sustainable buildings around the world. The Green Building Council of Canada certifies the project based on the total of points obtained in an audits and review of documentation submitted by the design team and construction.

INDOOR ENVIRONMENTAL QUALITY:

- IEQ Credit 3.2 option 3 – Reduce indoor air quality problems
- IEQ Credit 4.1 - Low Emitting Materials
- IEQ Credit 4.3 - Low Emitting Materials - Flooring systems

MATERIALS AND RESOURCES:

- MR Credit 5.1 – 10% extracted and manufactured regionally
- MR Credit 5.2 - 20% extracted and manufactured regionally

Refer to the PROFIX website for letters of certification.

CAUTION



This product contains cement and silica that can irritate skin and eyes. Avoid prolonged contact with skin. In case of contact with eyes, rinse thoroughly with water.

HEALTH AND SAFETY

Refer to MSDS on our website for handling recommendations.

TECHNICAL SUPPORT

For questions, please contact our customer service PROFIX toll free: 1-800-463-6850 or info@profixsystems.com.

PROFIX is a registered trademark.

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LEXICON

POT LIFE

Maximum time the product can stay in the pail and remain usable. After this time, the product will be difficult to use and start to dry, making your work more difficult and the product much less effective.

OPEN TIME

Maximum time you have to install your tiles once the mortar has been applied to the subfloor. After this time, a film will appear over the surface of the mortar and progressively reduce its grip. It is therefore recommended NOT to install tiles on mortar that has been applied for longer than the maximum time indicated.

INITIAL SET

Minimum time recommended before allowing light circulation (e.g. the weight of one person) over the surface. Before that time, no circulation should be allowed.

FINAL SET

Product's final set time.

SHEAR STRENGTH

Mortar strength in psi.

DRAFT ISO 13007 (TO COME)

ISO 13007 is essentially a combination of European, British and American ceramic tile adhesive Standards.

ADHESIVE TYPE SYMBOLS

- C** Means it is a cementitious adhesive containing cement, aggregates and organic additives. The adhesive needs to be mixed with water or a liquid admix just before use.
- D** Means it is a dispersion adhesive. Dispersion means it is a pre-mixed, ready to use adhesive made from water based polymer with organic additives and mineral fillers.
- R** Means it is a reaction resin adhesive containing synthetic resin, mineral fillers and organic additives. The adhesive cures by chemical reaction.

ADHESIVE PERFORMANCE SYMBOLS

- 1** Means the adhesive has passed the minimum pass level tests that are mandatory for that adhesive type.
- 2** Means the adhesive has passed the same tests as in 1 and/or other applicable tests, but a higher pass levels.
- F** Means the adhesive has met the requirements for a fast setting adhesive.
- T** Means the adhesive has met the requirements for a slip resistant adhesive.
- E** Means the adhesive has met the requirements for extended open time.

CGSB

Meets or exceeds standard norm ONGC 71-GP-30 M type 2 of «Canadian General Standards Board».

LIABILITY

Before using, the user shall determine the suitability of this product for its intended use and the user alone shall assume all risks and liabilities in connection therewith. La Margna Inc. shall not accept any liability for any damage, loss or prejudice resulting from the direct or indirect use of our product in non-compliance to our specifications. • April 1, 2012