

■ PRODUCT DATA SHEET

Edition January 2017

DESCRIPTION

Tech-Mix® Repar-Mix® is a fast-setting mortar consisting of a stable blend of cement, sand, latex base polymer and other additives. It is designed for horizontal applications requiring coverage greater than 25 mm (1").

TECHNICAL DATA

Packaging — 20 kg bags
 Colour — Grey
 Water required — About 2.3 to 2.7 litres (for a 20 kg bag)
 Shelf life — 1 year

USES

- Repairing concrete sidewalks, curbs, driveway entrances, road joints and loading docks
- Concrete stairs, balconies, floors, tiles, low walls, pools, parking areas, access ramps and manholes
- Bridge decks, marine structures

INSTRUCTION

SURFACE PREPARATION

- Surface to be repaired must be structurally sound, clean and free of bond inhibiting materials such as oil or dirt. Remove any debris, coatings or damaged concrete.
- Concrete surface to be repaired must be textured.
- Thoroughly wet the surface and keep it saturated with water for 20 minutes. Keep surface saturated longer if very dry or very absorbent.

MIX PREPARATION

- Pour the contents of the bag into a wheelbarrow, a pail or directly onto a smooth, clean surface.
- As a precaution, set aside one tenth of the contents of the bag.
- Form a hollow into which you will pour water.
- Add 2.3 to 2.7 litres of clean water per 20 kg bag.
- Mix well. If the mixture is too thick, add only a small amount of water at a time. Mix well for several minutes before adding more water as REPAR-MIX® contain special agents that require approximately 3 minutes to act. Avoid over-diluting.
- If the mixture is too thin or over-diluted, use the tenth of the bag that was set aside to thicken the mixture. The mixture should be pasty rather than creamy.
- Let mixture sit for 3 to 5 minutes before applying.

PRODUCT APPLICATION

- Wet your tools and keep them wet even when not in use.
- Important: Make sure no water has accumulated in depressions before performing repairs.
- Use a trowel to apply mixture to the surface to be repaired. When applying mixture to depressions, begin at the centre and work outward.
- Level using a trowel or board depending on the desired finish.

FINISHING

- As REPAR-MIX® is a fast-setting concrete, finishing should be done within 10 minutes of application.

FINISHES

- Rough: use a wood trowel
- Textured: begin by using a steel trowel, followed by a brush or broom
- Smooth: use a steel trowel for interior repairs. For out side repairs use a wood or magnesium trowel.

PRECAUTIONS/RESTRICTIONS

- Store product in a dry area.
- Apply at a temperature between 5°C and 35°C.
- Do not add cement, additives, sand or fine aggregate.
- Do not use on concrete that is covered with ice or on which water has accumulated.
- If stones are added (Up to 50% of bag volume), the application thickness should be between 50 mm (2") and 300 mm (12").
- Do not use limestone aggregate.
- Protect from bad weather.
- Always restore repaired floor and tile joints.
- For safety information, refer to the MSDS.

Note: Depending on the mixing and application, the product may appear darker than the surrounding concrete.

CURING

- After finishing, wet cure the surface:
 - Cover the surface with wet burlap, or
 - Spray the surface with water so as to keep it damp at all times.
- Keep the surface damp for the entire curing period (approximately 4 hours).

*If wet curing cannot be done, apply a curing agent available at Tech-Mix®

CLEAN-UP

- Clean tools and equipment with water before product hardens.

MECHANICAL PROPERTIES AND PERFORMANCE

RÉPAR-MIX® PRODUCTION

One 20 kg bag covers an approximate surface of:

COMPRESSIVE STRENGTH – ASTM C 109

THICKNESS		SURFACE			
mm	inches	m ²	ft ²		
12	½	0.85	9.1	3 hours	1.9 MPa
25	1	0.42	4.5	6 hours	6.4 MPa
50	2	0.21	2.3	1 day	21.2 MPa
				3 days	32.7 MPa
				7 days	38.3 MPa
				28 days	55.7 MPa

One 20 kg bag gives an approximate volume of 0.012 m³ (0.38 ft³)

One 20 kg bag (with a maximum 50% 5-10 mm stones) covers a surface of:

BENDING STRENGTH – ASTM C 78

mm	inches	m ²	pi ²		
50	2	0.28	3.0	3 days	4.2 MPa
150	6	0.093	1.0	7 days	6.0 MPa
300	12	0.046	0.5	28 days	7.3 MPa

One 20 kg bag (with a maximum 50% 5-10 mm stones) gives an approximate volume of 0.014 m³ (0.5 ft³)

RÉPAR-MIX SETTING TIME*

BONDING STRENGTH – ASTM C 1042

TEMPERATURE	THICKNESS	THICKNESS	TIME		
30°C	5 mm	1po	1 hour	3 days	5.3 MPa
20°C	25 mm	1po	2 hours	7 days	10.8 MPa
8°C	25 mm	1po	12 hours	28 days	16.1 MPa

RESISTANCE TO FREEZE/THAW CYCLES– ASTM C 666

1 Mass percentage
 * Setting time represents, in this case, the real time required before allowing light foot traffic. This data is provided only as a guide. It shows the relationship between setting time and ambient temperature.

300 cycles 100% de durability

RESISTANCE TO DE-ICING SALTS – ASTM C 672

50 cycles 0 rating / no scaling
No mass loss

RESISTANCE TO SULFATES – ASTM C 1012

12 months 0.015% expansion
Minimal, no effect

IMPERMEABILITY – ASTM C 1202

250 coulombs Very weak

TECH-MIX® GUARANTEE

This product is guaranteed to be of good merchantable quality when used according to the instructions above. This product will be replaced or its purchase price refunded at our discretion if defective in manufacture or packaging. With the exception of the aforementioned replacement or refund, the sale, use or other handling of this product is without any warranty, implicit or explicit, and Tech-Mix® cannot be held responsible for any defects, damages or losses caused by negligence or other errors.