TREMCO
Construction Products Group

Express Repair

Rapid Setting Repair Mortar with Corrosion Inhibitor

PRODUCT DESCRIPTION

Express Repair is a cementitious, ready to use, rapid strength gaining repair mortar containing an integral corrosion inhibitor. Express Repair is capable of being extended with pea gravel. Requiring only the addition of water, Express Repair is easy to use for fast track projects.

USAGE/PURPOSE

Fast setting horizontal concrete repairs for:

- ❑ Highways
- ❑ Bridge decks
- ❑ Parking decks
- ❑ Loading docks
- ❑ Pavement joints & concrete hardstands
- ❑ Industrial floors

FEATURES & BENEFITS

- ❑ Fast setting
- ❑ Rapid strength gain
- ❑ Contains an integral corrosion inhibitor
- ❑ Excellent durability
- ❑ Can be extended with aggregate

PACKAGING

20kg Bag

SHELF LIFE

12 months when stored as recommended.

COVERAGE/YIELD

Approximately 9.4L per 20kg bag at maximum water content.

STORAGE

Store in original, undamaged packaging in a clean, dry, protected location.

TYPICAL PHYSICAL PERFORMANCE @ 21°C			
PROPERTY		**STANDARD**	**VALUES**
Compressive Strength	3 Hours	ASTM C109	22 MPa
	1 Day		36 MPa
	7 Days		48.5 MPa
	28 Days		59 MPa
Flexural Strength	1 Day	ASTM C348	5.5 MPa
	7 Days		10.3 MPa
	28 Days		11.7 MPa
Split Tensile Strength	1 Day	ASTM C496	2.1 MPa
	7 Days		3.8 MPa
	28 Days		5.5 MPa
Scaling Resistance		ASTM C672	25 Cycles - Rating 2
Freeze/Thaw Resistance		ASTM C666 (Procedure A)	300 Cycles - 95%
Length Change/ Shrinkage	3 Days	ASTM C157	-0.040%
	7 Days		-0.078%
	28 Days		-0.093%
Setting Time	Initial Set	Gillmore Needles	20 - 30 Minutes
Working Time @ 21°C		N/A	15 - 20 Minutes

*Compressive strength results published above are typical based on laboratory testing using 50mm cubes and tested at 11% water. Variations of these results can be expected if alternative sample sizes, or test methodology is used.

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SURFACE PREPARATION

Vertical & horizontal concrete surfaces must be prepared using acceptable mechanical means and concrete degreasers as necessary to obtain clean, sound and rough concrete surfaces with an exposed coarse aggregate profile. The prepared substrate must be free from oil, grease, surface laitance and any other contaminants. Corroded steel must be fully exposed and cleaned to remove all oxidation & loose rust/scale. To provide maximum bond and avoid feather edging, a minimum saw cut edge of 12mm deep must be provided around the perimeter of the area to be repaired. Ensure that saw cut faces are roughened to provide a mechanical key for the repair mortar.

REINFORCING STEEL PRIMING

Apply one full coat of Eucocrete Zincrich Primer to prepared steel and allow to dry before continuing. If any doubt exists about having achieved an unbroken coating, a second coat should be applied.

SUBSTRATE PRIMING

Prior to placement, soak prepared concrete surfaces thoroughly with potable water leaving the concrete saturated. Remove any excess water.

Dependent on the substrate condition, the clean, damp substrate can be primed with a generous coat of Eucocrete Activator, to provide a damp, but puddle free and non-glistening appearance prior to application of the Express Repair. Alternatively, apply a scrub coat of Express Repair to the saturated surface dry (SSD) concrete surface to enhance bonding. The repair material must be placed onto the scrub coat before it dries out.

MIXING

- ❑ Mix Express Repair with 2.2 to 2.4 lts of potable water.
- ❑ Single bags of Express Repair may be mixed with a drill and paddle mixer. A mortar or pan mixer should be used for larger repair jobs and/or where the repair mortar is to be extended with aggregate.
- ❑ Do not exceed one-half the maximum capacity of the mortar mixer. Pre-wet mortar mixer & empty excess water.
- ❑ Start by adding 2/3 of the selected, pre-measured water content to mixer.
- ❑ While mixing, slowly add the repair material and mix to a uniform consistency for approximately two minutes. Add remaining water as necessary to achieve desired consistency.
- ❑ Total mixing time should not exceed three minutes. Do not exceed maximum water as stated on product packaging or add an amount that will cause segregation.
- ❑ Do not mix more material than can be placed within the working time of the repair material.
- ❑ Do not re-temper the mix by adding additional water. For pours greater than 50mm in depth the Express Repair should be extended with coarse aggregate meeting ASTM C33. Contact customer service on (02) 9638 2755 for aggregate extension guidelines.

PLACEMENT

Place the mixed material into the prepared area to be repaired. Work the material firmly into the bottom and sides of the repair area to ensure good adhesion. Do not use Express Repair for repairs less than 12mm deep. If placing the material thicker than 50mm, then it should be extended with coarse aggregate as outlined above or placed in multiple lifts. If multiple lifts are to be applied, score the previous lift after placing to provide a suitable mechanical key for the subsequent lifts. Pre-dampen the placed material prior to applying subsequent lifts. Contact customer service on (02) 9638 2755 should you require more detailed placement guidelines.

FINISHING & CURING

Finish as necessary. Proper curing procedures are important to ensure the durability and quality of the repair. For best results cure with wet rags, plastic sheeting or apply an approved curing compound such as Evencure XDS-NXGEN immediately after finishing and once the repair material has set.

PRECAUTIONS/LIMITATIONS

- ❑ For optimum performance, material should be conditioned to ambient temperatures of between 15°C and 24°C. Temperatures of substrate and equipment should be between 2°C and 32°C
- ❑ When grouting in extreme conditions, follow the recommendations of ACI 305R "Guide to Hot Weather Concreting", or ACI 306R "Guide to Cold Weather Concreting".
- ❑ Do not feather edge, overwork, re-temper or over trowel the repair material.
- ❑ Rate of strength gain is significantly affected by temperature extremes. Published Physical Properties are typical values at ambient conditions.
- ❑ Proper curing is required.
- ❑ In all cases, consult the Safety Data Sheet before use.

HEALTH & SAFETY PRECAUTIONS

The Safety Data Sheet (SDS) must be read and understood prior to use.

TECHNICAL SERVICE

Tremco CPG Australia Pty Ltd has a team of Representatives who provide assistance in the selection and specification of products. For more detailed information or service and advice, call Customer Service on (02) 9638 2755 or fax (02) 9638 2955.

GUARANTEE/WARRANTY

Tremco CPG Australia Pty Ltd products are manufactured to rigid standards of quality. Any product which has been applied (a) in accordance with Tremco CPG Australia written instructions and (b) in any application recommended by Tremco CPG Australia, but which is proved to be defective, will be replaced free of charge.

Any information provided by Tremco CPG Australia in this document in relation to Tremco CPG Australia's goods or their use is given in good faith and is believed by Tremco CPG Australia to be appropriate and reliable. However, the information is provided as a guide only, as the actual use and application will vary with application conditions which are beyond our control. Tremco CPG Australia makes no representation, guarantee or warranty relating to the accuracy or reliability of the information and assumes no obligation or liability in connection with the information. To the extent permitted by law, all warranties, expressed or implied are excluded.

CONTACT OUR TEAM

Tremco CPG Australia Pty Ltd
ABN: 25 000 024 064
Unit 12, 4 Southridge Street
Eastern Creek, NSW 2766

P: (02) 9638 2755
F: (02) 9638 2955
E: tremco@tremco.com.au