

TECHNICAL DATA SHEET

# 4034 RAPID REPAIR

## High strength, low viscosity concrete repair material

### DESCRIPTION

Rockbond 4034 Rapid Repair (RB8.20) is a very rapid set, high strength ultra low viscosity concrete repair material. This two part poly-alloy system is designed for rapidly rebuilding deeply spalled or damaged concrete surfaces, broken control joints and repairing damaged concrete rapidly even in extreme cold. Rockbond 4034 Rapid repairs can be put back in service in 10-30 minutes after the installation is made. Rockbond 4034 Rapid Repair is ideal in areas where "downtime" is costly, such as 24/7 operations.



## SPECIAL PROPERTIES

- Meets USDA food plant requirements
- 10 to 30 minutes back-in-service time
- Self-priming
- Nano-locks into concrete
- Very high impact resistance
- Low viscosity
- High strength bond in minutes
- Non-brittle
- Easy 1:1 mix ratio
- Saves man hours, saves downtime
- High fuel & Chemical resistance.
- Long term durability
- Provides smooth working surface for forklifts.
- Saves money, lift bearings and wheels

## USES

- All concrete spall/damage repair
- Rebuilding control joints, floor repair.
- Knitting Cracked concrete with rebar
- Shallow spalls in warehouse floors
- Spalls and crack repairs in forklift traffic areas
- Grade matching.

## UNIQUE CHARACTERISTICS

4034 Rapid Repair is very low in viscosity allowing the product to deeply penetrate and “nano-lock” into the concrete “better than epoxy” and does not become brittle. It is unique, because it repairs spalls of any size, and sets down to -27°C temperatures. The 4034 Rapid Repair is extremely fast setting. It cuts working time, man hours and down-time. Traffic can resume in 10-30 minutes.

4034 Rapid Repair is ideal for damage repair to concrete surfaces that will be coated. The product can be ground smooth and become almost invisible when properly coated.

## APPLICATION

4034 Rapid Repair can be used as a grout. Use equal parts of A and B mixed together. Add this one part of mixed product to two parts of sand. Sand filler should be of DRY, low moisture content. Grit sizes from 30 to 60. Pea gravel or #10 grit sand can be used on very large cracks or spalls.

Mix 4034 at a 1:1 ratio. Use a speed mixer, jiffy mixer or other multi blade mechanical mixer only. No paddle mixers. Mix part A and B mechanically at high speed for approximately 30 seconds. Blend mixed product into sand quickly. Mix product and sand for another 30 seconds and immediately pour into the prepared applications area. Work into the repair area quickly. Screed to finished grade and allow to set. For better finished repair surface, pour grout mix slightly high above the finished grade. Allow to set and grind using a grinder fitted with a fine grit Zec wheel. Work in circular motion to grind/smooth to finished grade. Seal the surface using mixed product with no sand.

## PRE-CONDITION + POT LIFE

To slow product cure time, store product in cool conditions <10°C before mixing.

First Time Use: This is a very fast set product, it is advisable to test this product before using it in an application.

## TECHNICAL DATA

<b>SHELF LIFE</b>	<b>1 YEAR</b>
<b>HARDNESS ASTM D2240</b>	<b>SHORE D 70</b>
<b>MIX RATIO</b>	<b>1:1</b>
<b>TACK FREE ASTM D2471</b>	<b>4-5 MINUTES</b>
<b>TENSILE ASTM D412</b>	<b>4500, FILLED</b>
<b>TEAR STRENGTH, PLI ASTM 624-C</b>	<b>560</b>
<b>GEL TIMES</b>	<b>+/-2.5 MIN. @ 20°C</b>
<b>ELONGATION ASTM D124</b>	<b>8%</b>
<b>VISCOSITY@ 25°C CPS, MIXED</b>	<b>20</b>

## LIMITATIONS

Do not use on wet surfaces or expose PART A to moisture. This product is moisture sensitive and should not be applied to wet surfaces. Not intended for use where substrate movement is present, or exterior conditions.

## HOT CONDITIONS

The product will cure very faster in warm or hot conditions and slower in cold conditions. Do not use product that is hot. Keep out of direct sunlight and store the product kits at room temperature

## SET TIME + PACK SIZE

Trafficable in 10-30 minutes @ 20°C. Full cure +/- hours. Comes in 2 litre kits, 38.8lt kit or custom on indent.

## APPLICATION (with pre-placement of sand)

1. Break out all loose concrete
2. Note: Badly spalled/damaged joint, use a air-powered needle spike gun where necessary to insure all loose concrete is removed.
3. Use a wire brush to clean out surfaces of area to be repaired.
4. Use a soft brush to remove all dust and contaminants.
5. Mask 20mm from all sides of repair to stop product from spreading out over the surface.
6. Use dry sand/aggregate
7. Pour sand into repair
8. Spread evenly over repair with a wide trowel
9. Brush off excess sand. Note, if you are desiring a smooth finish, leave sand 5mm below surface, or fill to the top, for traction surface for larger areas being repaired.
10. Always use gloves when dealing with the product.
11. 4034 Rapid Repair is a two part product. Part A is a dark amber, part B is dark blue. Mix ratio 1:1. Always use separate measuring containers for each product. Mix directly into your applicator bottle.
12. Mix even proportions together but remember product goes off fast, so mix it just before you need to use it.
13. Shake applicator bottle well to mix product thoroughly. Applicator bottle should have a diene nozzle.
14. Apply product evenly, allowing it to soak into sand. Keep applying product until its 10mm from top of surface.
15. Allow product to partially cure 3 or 4 mins until you see it going cloudy or a whole lot of bubbles.
16. Apply more product until it has reached the desired level. Do not be afraid to slightly overfill the crack as it is easy to smooth off with an abrasive wheel later. Note: if filling repair in layers, do not allow to repair to tack off, as when you add the final amount of product you could get a delineation problem.
17. Let product cure. It should be ready for traffic in 30 mins at 20C.
18. Remove excess product with abrasive wheel to produce a flush surface Repair.

## TECHNICAL INFORMATION

Should you have any queries, or require further information, please contact our **Technical Sales Team: +64 4 568 5401**