



PATCHFIX CONCRETE

HIGH PERFORMANCE RAPID SETTING CONCRETE

19 April 2017

YOUR SMART ADVANTAGES

- Rapid strength gain will accept vehicle traffic in 2 hours
- High early strength
- Abrasion and weather resistance
- One component product, just add water
- Excellent bond strength to concrete substrate
- High build repairs can be carried out in a single application
- Shrinkage compensated
- Internal or external application
- Low permeability provides protection against chlorides and carbon dioxide

USES

Bostik Patchfix concrete is a high performance rapid setting, high early strength, shrinkage compensated repair concrete for patching concrete roadways, pavements and floors. It is a special blend of cement and aggregates supplied in a ready to use form. The addition of water and mixing produces a high strength, heavy-duty, trowellable repair concrete that minimizes shut down time and allows the repair back in service in 2-3 hours. Bostik Patchfix Concrete can be used for:

- Repairing localised patches, small or large
- Repairing concrete roadways, warehouse floors, ramps, concrete pavements
- Maintenance repairs for areas 10mm to 180mm in depth in one layer
- Emergency repair of concrete
- Patching of worn or damaged concrete
- Concrete spalling repair
- Floor repairs and overlay
- Where minimum disruption to traffic and floor shutdown is required
- Floor areas subject to high abrasion and impact

PRODUCT CHARACTERISTICS

Colour	Grey
Viscosity	Liquid
Composition	Powder
Application temperature	5°C to 35°C

Product code	30840150
20kg bag	

TYPICAL PERFORMANCE DATA (approx.)

Specification	ASTM C191-08 AS/NZS 2350.11 AS2350.13 ASTM C501-1984 ASTM C1090 ASTM C348-08 ASTM C191.08 ASTM C882-1987
Coefficient of thermal expansion	7 – 12 x 10 to 6mm/°C
Application thickness	10 to 180mm
Working time	
10°C	45 to 55 minutes
20°C	25 to 30 minutes
30°C	15 to 20 minutes
Initial set time*	
20°C	35 to 40 minutes
30°C	20 to 30 minutes
* Tested in accordance to ASTM C191-08	
Final set time*	
20°C	40 to 50 minutes
30°C	30 to 40 minutes
* Tested in accordance to ASTM C191-08	
Drying/shrinkage time*	
7 days	<100 microstrain
28 days	<200 microstrain
56 days	<350 microstrain
* Tested in accordance with AS2350.13 /ASTM C1090	
Traffic time/overcoating	
Foot traffic	1 to 2 hours
Vehicle traffic	2 hours
Protective and architectural coating	12 to 24 hours
Water requirement	
20kg bag	2.5 to 3.0 litres

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Coverage	
20kg bag with 2.5 litres of water	11 litres
Fresh wet density*	2,300 Kg per m ³
<i>* Tested in accordance to ASTM C191.08</i>	depending on actual consistency used
Bags per m ³	80- 90 bags
Compressive strength*	
2 hours	>25 MPa
24 hours	>30 MPa
3 days	>50 MPa
7 days	>55 MPa
28 days	70 - 90 MPa
<i>* Tested in accordance to AS/NZS 2350.11</i>	
Flexural strength*	
24 hours	6.0 MPa
3 days	7.1 MPa
7 days	8.0 MPa
28 days	10.5 MPa
<i>* Tested in accordance with ASTM C348-08</i>	
Bond strength*	
7 days	>10MPa
28 days	>15 MPa
<i>* Tested in accordance with ASTM C882-1987 slant/shear method</i>	
Abrasion resistance*	
28 days	105 (wear index)
<i>* Tested in accordance with ASTM C501-1984 (Taber abrasion)</i>	

Comparison chart of abrasion resistance

SURFACE	WEAR INDEX	CLASSIFICATION (RESISTANCE TO WEAR)
Ceramic tile	142	Very high
Bluestone (Bassalt)	39	Poor
Concrete (30 MPa)	36	Poor
Concrete (60 MPa)	71	Low
Cast iron	99	Low-high

DIRECTIONS FOR USE

Read and understand the Safety Data Sheet before using this product. SDS can be acquired by visiting www.bostik.com.au or by scanning the relevant QR code on pack.

APPLICATION INSTRUCTIONS

SUBSTRATE & SURFACE PREPARATION

Saw cut or cut back the extremities of the repair locations to a depth of at least 10mm to avoid feather edging and to provide a square edge. Break out the complete repair area to a minimum depth of 10mm up to sawn edge. Clean the surface and remove any dust, unsound or contaminated material, plaster, oil, paint, grease, corrosion deposits or algae.

Where breaking out is not required, roughen the surface and remove any laitance by light scabbing or grit blasting. Steam cleaning, detergent scrubbing or the use of a proprietary degreaser should remove oil and grease deposits. Expose fully any corroded steel in

the repair area and remove all loose scale and corrosion deposits. Steel should be cleaned to a bright condition, paying particular attention to the back of exposed steel bars. Grit blasting is recommended for this purpose.

Priming

No special primer is required; however, pre soaking or pre wetting with water is essential. Remove excess water from the repair areas and ensure substrate is damp and not wet. To achieve a high bond strength the use of Bostik Bond 'N' Cure is recommended ensuring that Bostik Bond 'N' Cure is tacky prior to application of Bostik Patchfix Concrete

Mixing

Care should be taken to ensure that Bostik Patchfix Concrete is thoroughly mixed. Free fall mixers must not be used. Mixing of part bags should never be attempted. Full bags should be mixed. Bostik Patchfix Concrete must be mixed with a mechanical forced action mixer with a high shear stirrer. Add between 2.5 to 3.0 litres of clean water into the mixing vessel and with the mixer in operation, add one full 20kg bag of Bostik Patchfix Concrete and mix for 3 to 5 minutes until fully homogeneous. Note: The powder must always be added to water. Dependant on the ambient temperature and the desired consistency, the amount of water required may vary slightly but should not exceed 3.0 litres per 20kg bag of Bostik Patchfix Concrete. DO NOT MIX BY HAND.

Application

Bostik Patchfix Concrete should be struck off to the correct level and finished with a steel trowel to fully close the surface. If a textured surface is required, this can be achieved using a suitable roller or brush or wooden trowel. The completed surface should not be over worked. DO NOT ADD EXCESS WATER. The recommended application thickness of concrete is 10mm to 180mm in a single application.

Pot Life

Setting begins after approx. 35 minutes (at 25°C substrate and ambient temperature) and ends after another 40-50 minutes. The working period depends very much on the product temperature and on the amount of mixing water added. Therefore, the time given above should be regarded as a guideline. The lower the temperature; the longer the setting time. The less water added the shorter the setting time. The addition of water to the mortar after it has started to stiffen is not recommended and the product should be discarded.

Finishing

Bostik Patchfix Concrete is finished by striking off with a straight edge and closing with a steel float. Wooden or plastic floats or damp sponges may be used to achieve the desired surface texture. The completed surface should not be overworked.

Low Temperature Working

In cold conditions down to 5°C, the use of warm water (up to 30°C) is advised to accelerate strength development. Normal precautions for winter working with cementitious materials should then be adopted. The material should not be applied when the substrate or air temperature is 5°C and fall in **High Temperature**

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Working

At ambient temperatures above 35°C, the material should not be used as this will cause premature setting and make working with the product difficult.

Curing

All cementitious-based mortars have to be protected against excessively rapid surface drying and evaporation.

Bostik Patchfix Concrete must be cured immediately after finishing in accordance with good concrete practice. The use of Bostik Bond 'N' Cure sprayed; brushed or rolled on the surface of the finished Bostik Patchfix Concrete in a continuous film is recommended. Bostik Bond 'N' Cure should be applied at coverage rate of 4-5m² per litre and should be applied immediately after final trowel. In extreme temperatures and drying conditions, supplementary curing with polythene sheeting, taped down at the edges, may be required. Large areas should be cured as trowelling progresses (0.5m² at a time) without waiting for completion of the entire area.

Application of Coating

Bostik Patchfix Concrete, when cured, has good resistance to water. However, if areas are subject to continuous water immersion or chemical attack from solvents or organic acids etc., Bostik Patchfix Concrete should be protected depending on aesthetic and performance requirements. The required epoxy or acrylic coating will act as a sealer and dust proofer which may be easily cleaned and is resistant to a range of oil and chemicals depending on the choice of coating.

LIMITATIONS

- Bostik Patchfix Concrete should not be used when the temperature is below 5°C and greater than 35°C
- Bostik Patchfix Concrete should not be applied less than 10mm in thickness in any given application
- For concrete substrates subject to rising damp or moisture, a moisture barrier is required use Bostik Moisture Seal.
- New concrete surfaces must be at least 14 days old prior to application of Bostik Patchfix Concrete
- If the substrate onto which Bostik Patchfix Concrete is applied moves or cracks, reflective cracking will occur in the Bostik Patchfix Concrete
- To avoid rapid drying protect Bostik Patchfix Concrete from direct sunlight or drying winds during actual application and while curing for up to 24 hours
- Do not apply to vertical surfaces as sagging will occur

CLEANING

Bostik Patchfix Concrete should be removed from tools and equipment with clean water immediately after use.

STORAGE AND SHELF LIFE

Must be stored in a cool, dry elevated place and protected from high humidity and kept completely away from moisture. Shelf life is 12 months in unopened bag.

DISPOSAL

Empty bags may be disposed via local landfill. Dispose of according to local authority regulations. Do not dispose of down drains or into local waterways.

VOC INFORMATION

1g/litre

SAFETY DIRECTIONS

Keep out of reach of children. Read label before use. Do not breathe dust, fume, gas, mist, vapours or spray. Wash hands, face and all exposed skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective clothing, gloves, eye/face protection and suitable respirator.

CAUSES SKIN IRRITATION.

CAUSES SERIOUS EYE DAMAGE.

MAY CAUSE RESPIRATORY IRRITATION.

MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.

FIRST AID

Swallowed: If swallowed, do NOT induce vomiting.

Give a glass of water **Skin:** If skin contact occurs, remove contaminated clothing and wash skin thoroughly. **Inhaled:** Remove from contaminated area. Apply artificial respiration if not breathing.

Eyes: If in eyes, hold eyes open, flood with water for at least 15 minutes.

For emergency information contact the Poisons Information Centre, phone 131 126 or the Emergency Response Service, phone 1800 033 111.

BOSTIK HOTLINE

Smart help 1800 898 551



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