

CONCRETE REPAIR COMPOUND

www.gripset.com

TECHNICAL DATA SHEET

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Description

Gripset Patch-crete is a specifically formulated repair compound designed for use directly over concrete, masonry and general building substrates, to repair failed or aged areas. Patch-crete offers high strength repairs for low to high build areas to extend the life and make good surfaces that have been damaged or compromised by age, water ingress, weathering and traffic loadings.

Gripset Patch-crete is user friendly, environmentally safe, free of solvent and dangerous odours, and is easily applied to a wide range of surfaces. Once applied, Patch-crete not only provides a high strength finish, but also forms a more durable surface to withstand weather, water and abrasion.

Features & Benefits

- * Enables repairs directly over concrete and masonry surfaces
- * Solvent free and environmentally safe
- * Ideal for a wide range of repair challenges, from a feathered finish to high build patching (up to 50mm)
- * Waterproof
- * Increased flexural strength and durability
- * Improved water resistance and waterproof properties
- * Improved crack, frost and salt resistance
- * Reduction of permeability to gases and liquids
- * Higher early strength development & reduced shrinkage
- * Trafficable for vehicular use once cured
- * Excellent resistance against freeze/thaw cycles and de-icing salts
- * Ease of workability
- * Available in fast setting or slow setting forms

Application

- * Gripset Patch-crete is suitable for civil, industrial, mining and commercial applications.

Uses

- * Repair of broken or damaged concrete
- * Filling and levelling depressed concrete
- * Repairs to trip hazards
- * Ramping and concrete coving
- * Tram line repairs between rail and broken concrete
- * Concrete repairs around utilities
- * Concrete kerbing and gutter repairs
- * Repairs to concrete abutments to asphalt, steel or timber surfaces
- * Levelling abutments between old and new concrete surfaces
- * Repairs to concrete areas ponding water or with poor drainage

Substrates

Substrates suitable for Patch-crete applications include:

- * Concrete
- * Masonry
- * Block
- * Steel, metal surfaces (not raw steel)
- * Timber surfaces
- * Rock and stone surfaces

Surface Preparation

Surfaces must be prepared thoroughly before commencing application. All substrates must be structurally sound, stable, and clean, free of loose foreign matter. Surfaces can be damp but must be free of any surface water.

Surfaces are to be free of curing membranes/agents, release agents, wax residues, laitance, algae and moss, grime, oils, animal fats or grease remains. For thorough surface preparation, refer to Gripset SC (algae and moss remover) and Gripset DG (water based oil degreaser) products.

For surfaces that will have vehicular traffic applied over, the substrate compressive strength must be a minimum 30MPa and cohesive strength a minimum 1.5MPa. All surfaces are to be free of sharp protruding surfaces, loose material, de-bonded coatings, curing membranes/agents, release agents, wax residues, foreign particles, laitance, algae and moss, grime, oils, animal fats or grease remains.

Application

The Patch-crete product is a 2 component compound consisting of liquid and dry components:

- * Patch-crete liquid (15 kg liquid)
- * Patch dry powder (15kg bag), available in both standard and slow set forms

Getting started

- * Once surfaces have been correctly prepared, a priming slurry is required to enhance surface adhesion to the substrate. The priming slurry is formed by mixing 1kg of Patch-crete liquid to 1kg of Patch dry powder. This will mix into the form of a paintable liquid slurry and should be brushed, sponged or rolled to the area to be treated

Forming the Patch-crete compound

- * The Patch-crete compound is mixed at the following ratio to form the desired consistency for all general applications:

Measuring on parts by weight – 1kg of Patch-crete liquid + 4kg of Patch dry powder

Measuring on parts by volume – 1litre of Patch-crete liquid + 2.4 litres of Patch dry powder

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- * Using an electric stirrer with paddle attachment, slowly add the powder to the liquid and increase the stirring speed as more powder is added to the liquid. Stir for approximately 2-3 minutes until a homogenous mortar consistency is formed, with all dry powder dispersed into the liquid.
- * Lightly re-stir and product is then ready to apply

Applying the Patch-crete compound

- * The Patch-crete compound is applied directly over the priming slurry using a spatula, or steel floated trowel. The priming slurry does not need to be dry to enable the Patch-crete compound to be applied, it can be covered over if the slurry is in a damp state.
- * Once the Patch-crete compound is applied to the surface, using a clean flat tool, position the product until desired heights, levels etc are formed. The tool can be wetted and then smoothed to get an even finish.
- * If a smooth finish is required, a damp sponge can be applied over the Patch-crete product to even off the finish.

Remember

- * If using the standard Patch dry powder, pot life once the liquid and dry components are mixed will be approx 15 minutes in normal ambient conditions of 20⁰ C. Slow setting Patch dry powder will enable a pot life of 30-40 minutes in normal ambient conditions of 20⁰ C.

Storage

- * Both liquid and dry components are best stored at room temperature.
- * Avoid cold freezing conditions and off concrete floors
- * Keep dry powder out of cold wet conditions
- * Do not store in direct sunlight.
- * Shelf life is 12 months for liquid and 9 months for dry powder in original unopened container

Packaging

- * Patch-crete liquid: 15 litre pails (with spout pourer); 200 litre drums and 1,000 litre IBC
- * Patch dry powder: 15kg bags.

Technical Data

Appearance	Patch-crete liquid : White/ Patch-dry powder: dark grey
Form	Thin liquid
Specific gravity	Liquid: 1kg/litre/ Dry: 1kg/600ml
pH	8
Bond Strength (to concrete)	1.3Mpa
Flexural Strength	6.1Mpa
Compressive Strength	11Mpa

Notes

It is recommended before commencing the application; that adhesion of products to be used (e.g. primers, membranes, coatings adhesives etc) is tested over a typical area of the prepared surface to ensure satisfactory adhesion. It is the responsibility of the applicator to carry this out and accept the substrate suitability before any application starts. Gripset Industries offers a service for pre testing adhesion to surfaces for large commercial areas or unusual substrates. For further details contact Gripset Industries. Details contained in product data sheets are general. For any situation or items not covered in this data sheet, it is the responsibility of the applicator to check with Gripset Technical Services before commencing the application. A written confirmation will then be issued by Gripset Technical Services.

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Product Disclaimer

This Product Data Sheet (PDS) summarises our best knowledge of the product, including how to use and apply the product based on the information available at the time. You should read this PDS carefully and consider the information in the context of how the product will be used, including in conjunction with any other product and the type of surfaces to, and the manner in which, the product will be applied. Our responsibility for products sold is subject to our standard terms and conditions of sale. Gripset Industries does not accept any liability either directly or indirectly for any losses suffered in connection with the use or application of the product whether or not in accordance with any advice, specification, recommendation or information given by it.