

RAPID SETTING CEMENT-BASED REPAIRING MORTAR

DESCRIPTION

PENETRON® QUICK PATCH is a single component, quick setting, cementitious compound used for areas where fast repairs are necessary and the concrete must be put back in service promptly. PENETRON® QUICK PATCH is excellent for cold weather repairs. It can be used for repairs from full thickness down to ½" (13 mm) thickness.

RECOMMENDED FOR

- ▶ Concrete roads and highways
- ▶ Bridge decks
- ▶ Airport runways and taxiways
- ▶ Distribution and storage facilities
- ▶ Manufacturing facilities
- ▶ Cold storage and food processing plants

ADVANTAGES

- ▶ *Easy To Use:* A one component product mixed with clean water. No need for primers or liquid activators.
- ▶ *Compatibility:* A hydraulic based cementitious system that is fully compatible with concrete.
- ▶ *Fast Acting:* Rapid setting and rapid strength development allows fast turnaround of repaired areas.
- ▶ *Economical:* Can be extended with pea gravel for large or thick repairs. This allows for a higher yield.
- ▶ *Cold Weather Applications:* Freeze-thaw durable and resistant to scaling by de-icing chemicals allowing for excellent long-term performance in cold climates
- ▶ *Performance:* Contains both polymers and fibers increasing bond, tensile and flexural strength.
- ▶ *Zero VOC:* Penetron powdered products contain zero volatile organic content and are safe for use both outdoors and in confined indoor spaces

TECHNICAL CHARACTERISTICS

Characteristic	Test Result		Test Method
<i>Compressive Strength</i>	1 hour	2,100 psi (14 MPa)	ASTM C 109
	3 hours	4,500 psi (31 MPa)	
	24 hours	6,000 psi (41 MPa)	
	7 days	7,000 psi (48 MPa)	
	28 days	8,000 psi (55 MPa)	
<i>Setting Time (Gillmore Test)</i>	Initial set	15 minutes	ASTM C 266
	Final set:	20 minutes	
<i>Scaling resistance to de-icing chemicals</i>	25 cycles 0.71 lb/ft ² (3.47 kg/m ²)		ASTM C 672
<i>Freeze/Thaw Resistance</i>	99.2% D.F.		ASTM C 666
<i>Relative Dynamic Modulus</i>	300 cycles		Procedure B

*All data are average values obtained under laboratory conditions. Impractical use, temperature, humidity and absorption of the substrate may influence the above given values.

DIRECTIONS FOR USE

Surface Preparation: Remove all loose, unsound or contaminated concrete from patch area. Square off and vertical cut or undercut the patch area edges. Remove concrete to a depth, as determined by the load type, as follows:

For light load (cars) patch thickness limitations are between ½" (12 mm) to 2" (50 mm). Unextended.

For heavy load (trucks) patch thickness must be above 2" (50 mm). Extended.

Moisten patch area thoroughly and keep continuously damp for at least one hour, then immediately before patch placement, remove all standing water by air blast or other method. Allow surface water to evaporate (sheen should disappear, but surface must remain somewhat darkened by moisture).

NOTE: Applications over 2" (50 mm) thickness must be extended by quartz aggregate (QUARTZ SAND MIX 1.5-8.0 mm or similar) addition, described as follows (see *Mixing*).

Mixing: Pre-wet mixer for the first batch and allow to drain. Carefully measure the required potable mixing water and pour it into the mixer. Start the mixer and then add PENETRON® QUICK PATCH slowly. Mix for one to two minutes until a uniform lump-free consistency is obtained. Never add additional water after initial mixing. Applications over 2" (50 mm) in thickness must be extended by the addition of 50% by weight of clean, uniformly graded 3/8 in (10 mm) maximum size quartz aggregate. The quartz aggregate should be prewet and allowed to drain and dry slightly. Add 25 lb (11.3 kg) of quartz aggregate, for each 50 lb (22.68 kg) of PENETRON® QUICK PATCH used to the mixer only after a uniform lump-free consistency is obtained (see above), then continue mixing until the quartz aggregate blends in evenly.

Mixing ratios:

Quick Patch: 50 lb (22.68 kg)
Mix Water: 3.25 qt (3.1 Lt)
Mixed Yield: 0.41 ft³ (12 Lt)

NOTE: Do not add additional water, when using quartz aggregate.

Application: After mixing, PENETRON® QUICK PATCH should be placed without delay and quickly consolidated by tamping. The surface can be finished or it can be struck off with a screed to a level slightly above the surrounding concrete and later be shaved down with the sharp edge of a trowel, as it adequate personnel to permit mixing, placing and finishing operations to occur simultaneously, without interruption, in order to avoid cold joints. Mixer and tools must be promptly

RAPID SETTING CEMENT-BASED REPAIRING MORTAR

cleaned to prevent build-up. Consideration should be given to providing stress relief for large patch areas.

starts to set. Mix only an amount of material that can be placed within a 10 minute working time. Large jobs require

Curing: Immediately after finishing, apply a good quality membrane type curing compound (i.e. PENEKURE, or similar). Alternatively, moist cure for as long as possible, up to three days. Protect patched area from vibration or loading, until desired strength is achieved.

SPECIAL CONSIDERATIONS

DO NOT add any admixtures, sand or cement.

DO NOT place in lifts.

DO NOT use for patching asphalt, later modified concrete or for vertical surfaces.

Pea gravel can be used, instead of quartz aggregates, following the instructions as mentioned.

Consult PENETRON ROMANIA for additional information, regarding your project.

PACKAGING

PENETRON® QUICK PATCH is available in 50 lb (22.68 kg) multi-wall bag with moisture-resistant liner.

STORAGE / SHELF LIFE

When properly stored in a dry place in unopened, undamaged original packaging, shelf life is 12 months. Always keep in warm dry place. Always tightly reseal container.

SAFE HANDLING INFORMATION

Skin may be sensitive to cement. Use appropriate safety equipment (gloves, dust masks, eye protection), when working with this product. Avoid contact with eyes or prolonged contact with skin. If eye contact occurs, wash immediately and repeatedly with fresh water and then get medical attention without delay. If skin contact occurs, wash with soap and water. KEEP OUT OF THE REACH OF CHILDREN.

RAPID SETTING CEMENT-BASED REPAIRING MORTAR**WARRANTY – DISCLAIMER**

BEST IMPORT PRODUCTS PENETRON warrants that its products are manufactured under certified ISO Standard procedures, are of excellent quality and shall be free from material defects and contain all components in their proper proportion. Should any of the products be proven defective, the liability to BEST IMPORT PRODUCTS PENETRON shall be limited to replacement of the material proven to be defective, since the standard application procedures have been met and the suitability of the product for the particular application have been proven. BEST IMPORT PRODUCTS PENETRON makes no warranty as to merchantability of fitness for a particular purpose. User, after contacting the distributor of the product, shall determine the suitability of the product for his intended use and assume all risks and liability in connection therewith. While every care has been taken, the information provided in this product's data sheet make no part of any contract. All recommendations, technical data and test data contained in this product's data sheet are based upon the results of control laboratory tests or in actual field tests. However, BEST IMPORT PRODUCTS PENETRON makes no warranty of any kind, concerning this data. In any case, this data are given in good faith based in the BEST IMPORT PRODUCTS PENETRON experience, till the publication of this sheet. Due to variance in storage, handling and applications of the materials, BEST IMPORT PRODUCTS PENETRON accepts no liability for the results obtained. It is suggested that potential users try small applications to determine the suitability of each individual product for their specific requirements. The users should always refer to the most recent edition of the product's data sheet. BEST IMPORT PRODUCTS PENETRON may particularly differentiate its versions of the product's data sheet compared with those of PENETRON INTERNATIONAL LTD or respective PENETRON companies worldwide. These changes are due to text formatting, different application weathering and procedures or different product names and aim at the optimal consumer information



1085-CPR-0040

EN 1504-3

Penetron International Ltd.

601 South Tenth Street, Unit 300

Allentown, PA 18103

11

QUICK PATCH

Products and systems for structural and non-structural protection and repair of concrete structures
Compressive strength: Class R4 (≥ 45 MPa)
Chloride content: < 0.20 % by mass
Adhesive bond: NPD
Restrained shrinkage, expanding: NPD
Elastic modulus: NPD
Thermal compatibility (Part 1): NPD
Corrosion behaviour: deemed to have no corrosive effect
Dangerous substances: NPD
Reaction to fire: NPD

BEST IMPORT PRODUCTS PENETRON

Departament Tehnic

Tel: 0742 454 382/ 0368 734 003

office@penetron-romania.eu

Adresa : Complex Duplex 2

Str. Fundatura Harmanului, Brasov

www.penetron-romania.eu