

MODIFIED GENERAL APPLICATION CONCRETE REPAIRING MORTAR

DESCRIPTION

PENETRON® MULTI PATCH is a one-component, polymer modified, concrete based, fiber reinforced, non-shrink, repairing mortar, for low cost general concrete repairing and restoration applications. When mixed with water produces an excellent workability and thixotropic behavior. It can be applied on vertical and horizontal surfaces, without sagging, and skim coat repairs, with no need of formwork.

RECOMMENDED FOR

- ▶ Interior or exterior surfaces
- ▶ Concrete repairs beneath the slab or structural components
- ▶ Balconies, etc
- ▶ Architectural details and finishing
- ▶ Pre casted concrete slabs
- ▶ Masonry
- ▶ Bridge-decks, tunnels
- ▶ Surface repairing and smoothing (spalled and honeycombed areas, tie holes and faulty construction joints)

ADVANTAGES

- ▶ Polymer modified, one-component mortar
- ▶ Low cost application. No formwork is required
- ▶ No shrinkage
- ▶ High durability and mechanical strength.
- ▶ Excellent thixotropic behavior
- ▶ Excellent bonding with structural materials, i.e. concrete, masonry, stone, etc.
- ▶ Applicable by trowel, metallic spatula or shotcrete machine.

TECHNICAL DATA

Characteristic	Test Result		Test Method
Composition	Cement based repairing mortar		
Color	Grey and white		
Compressive strength	7 days	28 days	EN 12190
	31.5 MPa (4,600 psi)	46 MPa (6,700 psi)	
Tensile strength	7 days	28 days	EN 1055 - 11
	-	7.5 MPa (1,090 psi)	
Bonding	> 2 N/mm ²		
Repair thickness	5 – 40 mm (1/5” – 8/5”)		

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: Careful surface preparation is essential for excellent bonding and repair. Surfaces to be treated must be clean and sound, free of dirt and any other contaminant that will act as a bond breaker of

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PENETRON® MULTI PATCH. For optimum result, surfaces must be treated with appropriate means, until the sound surface is exposed ensuring optimum bonding of the mortar. Surfaces must be saturated with water, without any standing or puddled water (in case of no use of a bonding agent). If needed, apply a bonding agent, i.e. PENETRON® ACRYLIC BONDCRETE™ (roller, brush or spray), to enhance bonding properties, before PENETRON® MULTI PATCH application. In case of non-porous substrates apply PRIMER STX 100™.

NOTE: After the application of PENETRON® ACRYLIC BONDCRETE™ wait at least 40 minutes, until the surface is touch dry (not "tacky") before PENETRON® MULTI PATCH is applied. PENETRON® ACRYLIC BONDCRETE™ retains its excellent bonding properties for up to 2 weeks, if kept clean and dry.

Mixing: PENETRON® MULTI PATCH requires 3.1 to 3.7 kg (6.8 to 8.2 lb) clean water per bag [or 25 kg (55 lb) mortar].

Application: Moisten the surface to a dull dampness or apply bonding enhancers as mentioned above.

Pour the required quantity of clean water into the mixing pail and then add the equivalent quantity of PENETRON® MULTI PATCH, while mixing thoroughly. Mix thoroughly for 2 – 3 minutes, until a uniform mixture is formed and apply the fresh mortar on the repairing surface, immediately after mixing, using a trowel or a metallic spatula, holding the PENETRON® MULTI PATCH steadily on the surface to achieve better bonding with the substrate. Add excessive quantity of PENETRON® MULTI PATCH on the surface, after the first layer, using a trowel or a metallic spatula, and squeeze the mortar from the center to the edges of the repairing surface, for a better finishing.

Wide repairing areas can be filled with multi-layer fillings.

Curing: Protect PENETRON® MULTI PATCH against conditions that can cause rapid dehydration of the applied mortar (high temperatures, wind, low moist, direct sunlight), using a soaked rag or plastic cover for up to 24 hours. Wet curing material can also be applied.

NOTE: Small quantities of PENETRON® MULTI PATCH can be mixed, using a spatula or mixing paddle ½" (400 – 600 rpm).

Do not exceed the indicated quantity of water and do not add extra quantity of water after mixing. Limit to the indicated mixing time and do not re-stir the mortar. Clean the mixing pail thoroughly after every mix, so as to avoid dried residues in the next mix.

For sufficient workability, mixing of up to ½ the bag, is advised.

SPECIAL CONSIDERATIONS

DO NOT bridge control joints and expansion joint. Protect the mixture from early dehydration.

Avoid wind, sunlight, and heat. Low temperature may prolong curing time.

Total applied coat must be at least 5 mm (1/5") in thickness.

DO NOT exceed working time, do not add more water than required and do not use admixtures.

Use appropriate methods for surface preparation (concrete or masonry).

PENETRON® MULTI PATCH is not a finishing material.

Use water to clean your tools after use.

Contact PENETRON HELLAS S.A. for additional information regarding your project.

PACKAGING

PENETRON® MULTI PATCH is available in 25 kg (55 lb) bags.

STORAGE / SHELF LIFE

Storage life is 12 months, when stores appropriate, in a protected area, in the sealed corporate packaging in a dry and cool place. Storage Temperature: 5 – 30 °C.

SAFE HANDLING INFORMATION

Contains cement, which is alkaline. Will irritate eyes and skin and may cause skin sensitization. Wear appropriate eye, skin and breathing protection when using this product. Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. For further information please refer to Safety Data Sheet. PENETRON HELLAS S.A. has recently updated Safety Data Sheet on the safe use of PENETRON® products. Each Safety Data Sheet contains health and safety information for the protection of your employees and your customers. For further information please refer to Material Safety Data Sheet. KEEP OUT OF REACH OF CHILDREN.

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CERTIFICATION



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12.021-094D060422-06
EN 1504-3

PENETRON® MULTI PATCH

Products and systems for structural and non-structural
protection and repair of concrete structures

Compressive strength: Class R4 (≥ 45 MPa)

Chloride ion content: $< 0.05\%$ by mass

Adhesive bond: ≥ 2 MPa

Restrained shrinkage, expanding: Durability of bonding
after testing $\geq 2,0$ MPa

Carbonation resistance: Deemed to have no corrosive
effect

Elastic modulus: NPD

Thermal compatibility: NPD

Dangerous substances: NPD

Reaction to fire: NPD