PRODUCT DATA SHEET

PENETRON® ACRYLIC PATCH

Version, Penetron Hellas 17.08.2026

ALL-PURPOSE POLYMER-MODIFIED PATCHING COMPOUND

DESCRIPTION

ACRYLIC PATCH is a cementitious compound with a special polymer additive for all-purpose patching and repairing. ACRYLIC PATCH is a precisely proportioned, ready-to-use, patching compound that is fast setting, self-bonding and stronger than regular concrete. Higher compressive, tensile, adhesive, and flexural strength makes ACRYLIC PATCH an excellent choice for repair work on a great variety of surfaces and conditions. The fast-setting property of ACRYLIC PATCH can be extremely advantageous in situations where downtime must be minimized, as in urgent highway or industrial repair work. ACRYLIC PATCH achieves nearly half its ultimate strength in 24 hours and can accept loads as quickly as one hour after initial placement. The adhesive properties of ACRYLIC PATCH assure secure, resilient, and long-lasting repairs of holes, cavities, and cracks in all kinds of concrete or stucco surfaces. The bonding enhancer in ACRYLIC PATCH is a synthetic polymer which provides an impermeable shield against normal hydrostatic pressure. ACRYLIC PATCH can be used for water-resistant repairs, patching concrete pipe, and other underwater applications.

RECOMMENDED FOR

- Bridges, parking garages
- Concrete pipes (bells, corners, and joinings)
- Handrail anchoring
- Honeycombed surfaces
- Loading docks, ramps, steps
- Precast vaults, swimming pools

PENETRON® ACRYLIC PATCH can be used for water-resistant repairs, patching concrete pipe, and other underwater applications.

ADVANTAGES

- Scientifically tested and formulated for high compressive, tensile and flexural strength
- Plasticizers for easy application, workability and tuck pointing
- Quick setting - initial set in only 15 minutes. Final set in 30 to 45 minutes
- Can be used for water-resistant and underwater repairs
- Eliminates need for form work
- Self-bonding
- Resistant to chemical attack
- Lasting surface adhesion
- Contains zero volatile organic content (VOC) and is safe for use both outdoors and in confined indoor spaces

TECHNICAL CHARACTERISTICS

Characteristics	**Test Results**		
	Elapsed time	Water cure	Air cure
Compressive strength (ASTM-C109)	1 hour	1157 kPa (220 psi)	1551kPa (225 psi)
	24 hours	19305 kPa (2800 psi)	23028 kPa (3340 psi)
	7 days	44988 kPa (6525 psi)	34819 kPa (5050 psi)
	28 days	45505 kPa (6600 psi)	39987 kPa (5800 psi)
Flexural strength (ASTM-C348)	28 days	6205 kPa (900 psi)	
Shear bond to concrete	28 days	Exceeds 1724 kPa (250 psi)	
Freeze-Thaw stability (ASTM-C290)	N/A		
Compressive - 300 cycles	41369 kPa (6000 psi)		
Flexural - 300 cycles	8274 kPa (1200 psi)		
Volume change - 300 cycles	Expands 0,2% of volume		

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Chemical Resistance	Good against de-icing salts, and mild acids. Low porosity
Set Time (Gillmore)	15-30 min initial. 30-45 min final at 23°C (73°F)
Abrasion Resistance (Local Test)	Less than 1/5th as much weight loss, as unmodified concrete (1200 passes)

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: To assure the strongest bond, surface area should be free of all potential contaminants, such as oil, grease, form release agents, dust or any other foreign matter. When bonding onto steel or other metal surfaces, remove all scale, rust, and paint and place wire laths around metal surface. Remove any loose or weakened concrete. Optimum bonding conditions require rough jagged concrete surfaces. Surface preparation involving acid etching, power hammering or sandblasting should be implemented. Areas roughened by acid etching should be neutralized with a thorough cleaning operation. In high traffic and heavy loading repair areas, the sides of the cavity should be square cut or undercut to a minimum depth of 5 cm (2”). Cracks should be dug out and widened for the best results [minimum 0,6 cm (¼”) wide and 2,5 cm (1”) deep]. Immediately prior to all applications, surface areas must be pre-dampened. Puddled water should be removed prior to placement of PENETRON® ACRYLIC PATCH.

Mixing: Mix 4,7 to 5 L (5 to 5¼ quarts) of fresh uncontaminated water for every 22,7 kg (50 lbs) of PENETRON® ACRYLIC PATCH. Never mix more than can be applied within 15 minutes. Mix thoroughly using a trowel or mortar mixer, for one to two minutes. Do not add more than the recommended amount of water. Excessive water or retempering can seriously diminish the strength and adhesive properties of the material. Mixing equipment should be cleaned frequently to avoid product build-up.

Application: Place immediately after mixing. Using a steel trowel or putty knife, place PENETRON® ACRYLIC PATCH mortar into cavity. Cavities should be completely filled and compacted. Pack until approximately level with surrounding surface. Do not overwork before initial set. After surface sheen has disappeared, finish to desired texture; dry brush for rough surface, shave with edge of trowel. For large cavities, PENETRON® ACRYLIC PATCH must be extended by adding clean, dampened 3/8” (1 cm) diameter gravel. The amount of aggregate must not exceed 25% of the weight of PENETRON® ACRYLIC PATCH material. Do not add additional water. For a smoother surface and higher strength, the upper layer of the deep cavity should be filled with unextended PENETRON® ACRYLIC PATCH mortar. Large cavities can also be filled with successive layers as the mixer readies PENETRON® ACRYLIC PATCH for each placement. On smooth surfaces which cannot be prepared (roughened), Penetron recommends thin applications of PENETRON® ACRYLIC BONDCRETE™ to increase adhesion of patching material to surface. For resurfacing and dressing non-load-bearing concrete such as columns, panels, retaining wall, etc., thoroughly clean and pre-dampen surface. For underwater applications, mix only small quantities at a time using the least amount of water consistent with placement. As with other applications, all surfaces must be cleaned. Surface film and algae must be removed and surface must be mechanically roughened. Sufficient PENETRON® ACRYLIC PATCH must be thoroughly packed into all repair areas.

Curing: ACRYLIC PATCH should be cured immediately upon finishing. Penetron recommends a membrane curing agent. Curing is especially critical in high temperature, high evaporation rate or low humidity environments.

Coverage: PENETRON® ACRYLIC PATCH coverage is about 0,012 m³ (0,42 ft^3) per 22,7 kg (50 lb) bag.

SPECIAL CONSIDERATIONS

Higher compressive, tensile, adhesive, and flexural strength makes PENETRON® ACRYLIC PATCH an excellent choice for repair work on a great variety of surfaces and conditions.

PENETRON® ACRYLIC PATCH should not be used to repair non-concrete surfaces such as asphalt and latex modified concrete.

The use of air-entraining agents, retarding agents or water reducing agents is not recommended. PENETRON® ACRYLIC PATCH is not a satisfactory remedy for moving cracks or cracks involving “rocking slabs”.

Excessive water or retempering can seriously diminish the strength and adhesive properties of the material.

Mixing equipment should be cleaned frequently to avoid product build-up.

DO NOT use as a self-leveling, topping material.

At temperatures below the freezing point, surface temperature must be raised above freezing and must not be pre-dampened. Low temperatures will lengthen setting time.

Contact PENETRON HELLAS for additional information, regarding your project.

PACKAGING

PENETRON® ACRYLIC PATCH is available in 22.7 kg (50 lb) multi-wall bags with tear resistant, moisture proof, polyethylene liner.

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STORAGE / SHELF LIFE

PENETRON® ACRYLIC PATCH must be stored in a dry enclosed area off the ground at a minimum temperature of 7 ºC (45 ºF). Shelf life when stored in proper conditions in unopened, undamaged packaging is 12 months.

SAFE HANDLING INFORMATION

ACRYLIC PATCH contains cement that 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. KEEP OUT OF REACH OF CHILDREN.

CERTIFICATION

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Allentown, PA 18103
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1085-CPR-0040
DOP NO: 10.20004D310322-01
EN 1504-3
ACRYLIC PATCH
Products and systems for structural and non-structural protection and repair of concrete structures
Compressive strength: Class R3 (≥ 25 MPa)
Chloride ion content: < 0.05% by mass
Adhesive bond: NPD
Restrained shrinkage, expanding: NPD
Elastic modulus: NPD
Thermal compatibility (Part 1): NPD
Carbonation resistance: deemed to have no corrosive effect
Dangerous substances: NPD
Reaction to fire: NPD

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