



ICC Premiscelati

REPAIR PAV

**FIBRE-REINFORCED PREMIXED MORTAR
SULFATE-RESISTANT
ULTRA-FAST SETTING AND HARDENING
FOR FIXING MANHOLE TOPS AND STREET FURNITURE**



Description:

REPAIR PAV is a special fibre-reinforced premixed mortar sulfate-resistant, ultra-fast setting and hardening properties, ideal for high-strength fixing of manhole tops, drain covers, access hatches, curbstones, poles, etc. **REPAIR PAV** develops high mechanical strengths in a very short time and allows for record-breaking reopening to vehicular traffic. Composed of a mixture of hydraulic binders, selected aggregates, and specific additives, it contains special steel metal fibres designed to reduce dimensional shrinkage and increase mechanical strengths, making the product also suitable for particularly heavy-duty applications. The consistency can be adjusted by varying the water content, from thixotropic to semi-fluid.

REPAIR PAV is certified in accordance with **EN 1504-3** as R4-class PCC mortar for the structural repair of concrete.

Areas of application:

REPAIR PAV is ideal whenever a rapid commissioning of intervention areas is required, such as road works (installation of manhole tops and drain covers, fixing of road signs, installation of protective barriers, etc.), repairs and maintenance of industrial and airport pavements, installation of access hatches and manholes for technical systems, fixing of fences, etc.

REPAIR PAV is in compliance with UNI/TR 11256:2007 "Guideline for the installation for gully tops and manhole tops for pedestrian and/or vehicular areas".

Substrate preparation:

Remove any traces of oil, dust, efflorescence, loose parts, and general dirt. Damaged or poorly adhering concrete must be removed until reaching solid and resistant material. Do not apply on smooth substrates; strongly roughen the surface (scarification or hydrodemolition is recommended). Any reinforcement should be cleaned by removing the oxidized part (rust) with a wire brush or sandblasting. For fixing road manhole tops using a pneumatic hammer, cut and create a track of about 10 cm around the manhole by making a clean vertical cut until reaching a solid support (slab under manhole).

Remove dust using compressed air, then wet the surfaces to be treated with clean water until saturated (wet to refusal). Before applying the mortar, remove any remaining water: dry the surface with rags or compressed air jets.

Mortar preparation:

REPAIR PAV is mixed using a low-speed mixer with a paddle: introduce approximately 4 liters of clean water per 25 kg bag into a bucket and then, while mixing, slowly add the powder. Mix for 2 or maximum 3 minutes until achieving perfect homogeneity and the absence of lumps, being careful not to incorporate air. If thicknesses greater than 6-10 cm need to be achieved, washed gravel with a size of 6 to 12 mm must be added, in an amount of approximately 30% of the quantity of powder used (about 7 -8 kg per 25 kg bag); this allows for thicknesses up to 30 cm. It is recommended to add the minimum amount of water necessary to achieve the desired consistency. Manual mixing is always discouraged. After mixing with water, the obtained mortar remains usable for approximately 15 minutes*.

Application:

Place the frame to be fixed, taking care to level it with the road surface and, if necessary, use formwork previously treated with formwork release agent. Fill it using shovel and trowel, carefully levelling the material. Check the flatness of the surface using a straightedge and then trowel it. If reinforcement bars need to be added, they must be fixed to the structure using suitable connectors and the cover layer must have a thickness of at least 2 cm. It is always advisable, especially in case of high temperatures or wind, to prevent rapid drying of the applied mortar by misting water and protecting the work with wet rags.

Coverage:

Approximately 21 kg/m² for each centimeter of applied thickness. With 1 bag of 25 kg, approximately 12 liters of mortar are obtained.

TECHNICAL DATA

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| Appearance | Grey powder |
| Maximum grain-size | 2,5 mm |
| Bulk density (powder) | 1,4 gr/cm ³ approx. |
| Bulk density (fresh mortar) | 2200 kg/m ³ approx |
| Mixing water for each 25 kg bag | 4 litres approx |
| Working time | approx 15 minutes* |
| Maximum permitted thickness (per single layer) | 10 mm |
| Permitted application temperatures | from +5°C to +35 °C |

FINAL PERFORMANCE

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| Compressive strength (EN 12190) | ≥ 45 MPa |
| Elastic modulus (EN 13412) | ≥ 20 GPa |
| Adhesion to concrete (EN 1542) | ≥ 2 MPa |
| Restrained shrinkage/expansion (EN 12617-4) | ≥ 2 MPa |
| Carbonation resistance (EN 13295) | Pass |
| Reaction to fire | Euroclass A1 |

* Data measured at (20±2)°C and (65±5)% relative humidity. Lower temperatures lengthen curing and hardening times.

Cleaning of equipment:

Wash hands and equipment with plenty of clean water before the adhesive starts setting; mechanical means should be used afterwards.

Hygiene and safety:

EUH 208 Contains cement. May cause an allergic reaction. Cement contained in the product can cause skin irritation and serious eye injuries. Do not inhale dust, ventilate areas during mixing and carefully protect yourself with gloves, protective clothing and goggles. Before use, carefully read the instructions on the packaging and consult the Safety Data Sheet.

Packs:

REPAIR PAV is available in bags of 25 kg each and delivered on 1500 kg wooden pallets.

Storage:

Store the product in its undamaged original packaging in a cool, dry place. Do not disperse dust. Product compliant with DM 10/05/2004. Cr VI content less than 2 p.p.m. Properly stored product must be used within 6 months of the packaging date stamped on the bag.

Capitolato specifications:

The installation and leveling of manhole covers, drains, and pedestrian crossings in roads, sidewalks, and various driveways, including industrial pavements, must be carried out using rapid-setting and rapid-hardening mortar sulfates-resistant, with high mechanical strengths, hydraulic binders based, resistant to mineral oils and de-icing salts, such as **REPAIR PAV** produced by **Industria Calce Casertana S.r.l.**; mortar to be mixed with water only, with a compressive strength at 28 days of no less than 45 MPa (R4 class according to EN 1504-3).

Warning:

REPAIR PAV has excellent adhesion to asphalt located laterally, but it cannot be used as a bonding base. Low temperatures lengthen setting and hardening times, while high temperatures greatly accelerate setting. In the summer period, do not leave the bags exposed to sunlight. If the temperature exceeds 30°C, use cold water to mix. Apply only at temperatures between 5 and 35°C. Do not apply on frozen surfaces. The surfaces to be treated must be rough and thoroughly wetted with water. Protect the finished surfaces from rapid drying by repeatedly wetting them with misted water or wet rags. Protect the completed work from rain, washouts, frost, and direct sunlight. Do not add water to the product during setting. It is recommended not to add unrelated products. Only the latest updated version of this technical data sheet, available on the website www.calcecasertana.it, is to be considered valid.

PRODUCT FOR PROFESSIONAL USE ONLY

All the data and information contained in this technical data sheet, although resulting from laboratory tests performed and from our direct application experiences, due to the infinity of variables related to site conditions, are to be considered in any case as purely indicative. Before applying the product, the user is therefore required to establish whether it is suitable for the intended use, in the specific hygrothermal and application conditions provided for at the time of use. All responsibilities are therefore borne by the user. We are not liable for damage to persons or things deriving from improper use of the product.