TEC™ 024 MVB

Moisture Vapor barrier for damp substrate or substrate exposed to humidity

ADVANTAGES

- Moisture Mitigation system
- Preventative and/or curative treatment of very humid substrates prior to application of a patcher, thin layers of mortar, direct bonding or floor covering.
- Multi-purpose use for new cement-based substrates – on old non-covered substrates and on old retained ceramic coverings.
- For works: inside premises - outside
- Excellent penetration strength - High level of adhesion including on humid substrates
- Many areas of application possible
- Solvent-free

USE

- Moisture Vapor Barrier
  - TEC™ 024 MVB is a colourless rigid, bi-component epoxy binder for preparation of humid cement-based substrates, or those subject to repeat episodes of capillary rise up to 10% CM.
    It is designed to accept application of a self-levelling P3 or P4S patching primer from our range, depending on the purpose of the premises, prior to laying of a floor covering *(PVC, linoleum, rubber, wood, textiles).*
  - TEC™ 024 MVB must be applied systematically in two layers. Quartzsand will be added to the second tinted layer until saturation point is reached, or a layer of TEC™ 056 primer will be applied to enable bonding of the subsequent self levelling compound layer.
- Strengthening primer on absorbent mineral substrate.
- Bonding primer

Attention: not suitable as a barrier for substrates sensitive to humidity *(calcium sulphate-based screed, etc.)*, or for electric underfloor heating does not involve a lining procedure, waterproofing procedure *(TEC™ 024-MVB is not crack-resistant).*

In the event of doubt concerning possible applications, please contact our technical support service first

GENERAL CHARACTERISTICS

Base	Consists of a colourless epoxy system and special additives
Appearance	Translucent
Colour	Clear straw
Practical usage time at 23℃	25 ± 5 minutes
Waiting time between two layers	24 to 96 hours at 10℃, 12 to 72 hours at 23℃, 8 t o 48 hours at 30℃
Minimum application consumption:	400 g/m² for the first layer and 300 g/m² for the second layer
Minimum/maximum usage temperature	> 10℃ - < 30℃
Storage	24 months in the intact original packaging in a cool area.
Packaging	Separate packaging: part A: 6.90 kg, - part B: 3.10 kg
Labelling	Xi (irritant) N, hazardous to the environment and C (corrosive)
Safety data sheet	Available on request.

SUBSTRATES

- The permitted substrates are reinforced paving, slabs, concrete floors and screed that comply with the DTU in force.
- The substrate must be sound, stable, flat, clean, dusted and degreased, tension and compression resistant and not cracked. 024 MVB can be used for a humid but not liquid substrate. The humid surface should be matt.
- The permitted substrates are reinforced paving, slabs, concrete floors and screed that comply with the DTU in force.
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- The cohesion of the substrate surface will be assessed by means of a cohesion test by perpendicular traction and the value obtained must be greater than or equal to 1 MPa for concrete and 0.8 MPa for screeds.
- The porosity of the surface will be between 1 and 4 minutes (water droplet test) after preparation of the substrate
- At the time of application of the system that protects against rising damp, the substrates must generally be free from any product that may damage the bonding of the primer: dust, non-adhesive or poorly adhesive particles, traces of grease, oil, paint, rust, laitance, wax, maintenance products, materials containing light oils, plasticisers or antioxidants: curing or stripping compounds, bitumen, pitch, silicone, old adhesives, etc. and clean.
- The substrate must comply with the standards and texts in force *(DTU, CPT and guides)*. Take the necessary measures in the event of non-compliance.
- The old or new substrate must be flushed, cleared of any surface film *(can damage adhesion of the primer):* such as cement laitance on a new concrete substrate or traces of floor or adhesive primer on a substrate stripped for renovation.
  In all cases, mechanical preparation is required:
  - For concrete, using shot blasting, except if the surface is reduced or if there are areas for which this technique is not possible: grinding with a star-shaped blade technical plate will therefore be carried out.
    Note: planing must not be considered unless shot blasting is not possible *(for example on very humid substrates: clogging of the shot blaster)*, and will be followed by surfacing carried out using a concrete resurfacer.
  - For cement screed: large grain black disc grinding *(16)* or light shot blasting is required.
- Tiled substrate: the substrate must be cleared of any trace that could damage the bonding of the resin. To do this, comply with part 2, section A2 of the CSTB book no. 3635 by washing with a soda washing powder or a degreasing detergent. Grinding/matting will be carried out systematically on the tiled surface using a grinder with a diamond disc plate.
- These tasks are followed by careful suction using an industrial vacuum in all cases.

- Treatment of cracks larger than 0.3 mm and smaller than 1 mm – Division joints:
  - The visible cracks are initially opened using a cut-off wheel fitted with a diamond disc to a depth of 10 to 30 mm, then, secondly, a V-shaped opening is created on the substrate surface using a milling machine fitted with a diamond grinding wheel
  - Careful dust removal is carried out using a reliable industrial vacuum
  - Filling of the crack until saturation point is reached is carried out using TEC™ 816 - TEC™ 817 or TEC™ 024 MVB resins.

- Refer to the technical data sheets for the different substrate preparation products

CONDITIONS OF USE

Temperatures to be heeded during use	Application should not be carried out during periods of frost or intense heat The ambient temperature *(ideal)* must be between +15 and +25°C Application should not be carried out on a floor in the process of heating. Heating is suspended for a minimum of 48 hours before application
Minimum usage temperature	Substrate and atmospheric temperatures must be at least equal to +10°C.
Maximum permissible humidity	Ambient humidity and the substrate temperature must be such that there is no condensation at substrate level *(dew point).*

APPLICATION

Note: For better use of the primer, we advise that the product be acclimatised at the ambient temperature of the premises for at least 24 hours.
Resin containers must be stored in a cool area, protected from humidity and frost.
An increased temperature of the components will lead to a reduction in working time and a low temperature will cause a prolonged curing time *(in the case of containers stored inside site vehicles).*

Mixing:

- Use the packaging container to mix the contents of the two components
- The two components are delivered in pre-measured packaging, ready to use.
- Mixing is carried out by adding the entirety of the container containing component B to the container containing component A.
- Mix the two components carefully using an electric mixer *(rotation speed 150 to 200 rpm)* preferably fitted with a spiral whisk, until a homogeneous mixture is achieved. Mixing time: 2 to 3 minutes.

Application:

- After mixing, pour the resin into an oval PVC bucket, or into a PVC hopper, then apply the primer immediately to the substrate using a 14 mm roller made from textured polyamide fibres.
  On a substrate that is not excessively rough, it is possible to spread the primer firstly using a B2 toothed spatula then to even out the resin on the surface using a roller. Ensure that the applied layer is even and perfectly homogeneous.
- Take into account the limited pot life.

- The second layer can be applied as soon as the first can be walked on *(dry appearance and hard to the touch)*, taking into account the recovering timeframe depending on the temperature *(cf. page 1)*.
- For better visual differentiation of the second layer, add around 0.25% coloured additive ref. 28511.

- On top of the fresh resin, evenly spread 845 Quartz sand until saturation point is reached, at a rate of 3.5 to 5.0 kg/m². The surface of the sand must retain its original colour. This point of reference enables the required consumption to be adjusted.

- After curing, remove the excess sand by sweeping using a road brush, then using suction *(with a reliable industrial vacuum)*.
  There must be no missing sand and the sand must be "dry" on the surface, i.e. not coated in resin.

  Important: the areas where the 845 Quartz sand **silica sand** is inadequately deposited or coated in the **primer** TEC™ 024 MVB, a new layer of sand must be spread. If necessary, treat again with the TEC™ 024 MVB **primer** then proceed immediately with spreading 845 QUARTZ SAND **silica sand**.

- Application of the TEC™ 056 adhesive primer replace sandblasting on a second layer of tinted TEC™ 024 MVB primer.
  In this case, the TEC™ 056 undiluted primer is applied evenly using a roller made from textured 8 mm polyamide fibres, in a crossed layer, as soon as the second layer of TEC™ 024 MVB primer can be walked on.
- Consumption: approx.: 150 g/m²
- Allow the TEC™ 056 primer to dry for at least 2 hours at 23°C pri or to application of the floor primer.
  Drying time of the TEC™ 056 primer prior to application of the floor primer:
  - at 10°C: 6 hours minimum
  - at 23°C: 2 hours minimum
  - at 30°C: 1 hour minimum

Recommendation:
All work must be carried out in compliance with DTU, CPT, professional regulations, etc. in force, according to the respective technical data sheets for our products, whilst complying with the laying instructions from the covering manufacturer, recommended by the application guide, technical data sheets and other documents.

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