

Technical sheet

EP-Rapid Plinth / Repair Gel

A fast-curing binder for installing (coved) plinths or repairing cracks and unevenness.

Application area

- Tiles
- Screed
- (Polished) concrete
- Existing poured floor
- Existing broadcast floor
- Concrete with floor paint
- Turbodec floor

Contact Sidec for application on other types of substrates.



Properties

EP-Rapid Plinth / Repair Gel is a fast-curing binder that can be used for two applications: installing (coved) plinths and repairing cracks or unevenness before applying a primer. Unlike most epoxy binders, EP-Rapid Plinth / Repair Gel can be used at temperatures from 0°C upwards.

- Fast curing with sufficient processing time
- Optimal viscosity
- Thixotropic liquid
- Broadly applicable

Technical data

Mixing ratio	100 A / 24.5 B / 690 C (gravel 0.4/0.8)
Pot-life A + B	5 - 7 min*
Pot-life A + B + C	20 min*
Processing time A + B	15 min*
Processing time A + B + C	20 - 30 min*
Temperature range	0°C - 25°C
Optimal conditions	18°C - 22°C, 40% - 60% RH
Colour	Light yellow
Physical appearance	Paste
Viscosity thixotropic paste A + B	+/- 2800 mPas (Anton Paar MCR 92 Shear Rate 100 1/s, 20°C)
Solid content	100 vol.% (= 100 wt.%)
Density A + B	+/- 0.99 g/ml (20°C)
Density A + B + C	+/- 1.3 g/ml (20°C)
Adhesion strength on concrete	Greater than the tensile strength of concrete (greater than 3 MPa)
Chemically loadable	10 h*

* At a temperature of 22°C, 55% RH

Drying time vs. floor and wall temperature

Floor and wall temperature (°C) at 55% RH	Drying time
10	> 4h
15	3h
20	2h
25	1h30

Pay extra attention to the dew point at lower floor and wall temperatures as drying times will be significantly longer.

Consumption

Plinth height (mm)	Plinth depth (mm)	Consumption A + B + C (kg/m)
50	6	0.9
70	6	1.8
100	6	2.6

Consumption will vary for different plinth sizes.

Preparation and substrate check

Before applying EP-Rapid Plinth / Repair Gel, an inspection of the substrate is necessary.

The substrate must have a minimum compressive strength of 25 N/mm² and a minimum tensile strength of 2 N/mm².

The substrate must always be moisture and grease-free. Use a moisture meter to measure the floor's moisture content. The moisture content in the substrate must be ≤ 5%. If it's more than 5% but less than 10%, you can opt to dry the floor as much as possible with a burner. After treating the floor, a new measurement can be taken 15 minutes after stopping the burning. If the moisture percentage has not decreased, there may be an underlying moisture problem. If this is the case, the underlying issue must be resolved before applying EP-Rapid Plinth / Repair Gel. Clean the floor with a degreaser and then with clean water before proceeding to blast or sand. This action is best performed the evening before installation.

After degreasing, the substrate must always be mechanically pre-treated. This is preferably done by blasting the substrate. If the installation conditions do not allow for this, the substrate can also be sanded with a double-ring diamond disc. The entire substrate must be homogeneously sanded. Any remnants of old coatings and adhesives must be completely blasted/sanded away. All substrates must first be made grease and dust-free before roughening can commence.

Here are some points of attention for each substrate:

- Tiles: the joints must not contain any dirt, grease or other chemicals. Tiles must be blasted so that the ceramic or glaze layer is completely removed. Not fully sanding tiles carries a risk of detachment. Loose or hollow-sounding tiles must be removed.
- Screed: new screed must first cure for at least 28 days. It does not need to be sanded.
- Concrete: new concrete must cure for at least 28 days. Any existing protective layer, impregnation agent or paint layer on existing concrete must first be sanded away. For polished concrete, it is very important to sand away the curing compounds on the surface. If the concrete is not polished, a cement layer can form on the surface. This layer must also be sanded away.
- Anhydrite: degrease, then sand and make dust-free.

If there is any unevenness greater than 5 mm in the substrate, this must first be levelled with an EP-Rapid Plinth / Repair Gel gravel mixture. Loose floor pieces or tiles must first be removed and then filled in with an EP-Rapid Plinth / Repair Gel gravel mixture. Saturate these areas afterwards with enough primer. For repairing both the unevenness and the loose parts, a mixture

of EP-Rapid Primer (15-20%) and gravel 0.4/0.8 (85-80%) can also be chosen. Consult the technical sheet of the respective product for this. After curing, sand the repaired areas with a double-ring diamond disc to achieve as flat a result as possible. In the case of cracks wider than 1 mm, these must first be further cut open and then filled with EP-Rapid Plinth / Repair gel. After curing, sand the repaired areas with a double-ring diamond disc.

Expansion joints in the substrate should also be followed when applying EP-Rapid Plinth / Repair Gel.

Conditions during application

The recommended floor and ambient temperatures range between 10°C and 25°C, with an ideal application temperature of 18-22°C. To shorten the drying time of the skirting boards at a construction site with a low floor temperature (<15°C), the room can be preheated to 20-22°C the day before. Application at lower temperatures (down to 0°C) is possible, but the drying time will be significantly longer. The maximum air humidity is 80% RH. The temperature of the substrate and the uncured products must be 3°C above the dew point. When applying at temperatures lower than 10°C, it is very important to monitor this parameter as there is a high risk of condensation at these low temperatures. Condensation on the surface must be avoided at all times.

Application as plinth paste

Processing

- Measure out an amount of EP-Rapid Plinth / Repair Gel that can be processed within a 15-minute timeframe.
- Mix a set of EP-Rapid Plinth / Repair Gel and apply it with a brush or paintbrush as a primer where the plinth will be placed. Also, prime a distance of 5 cm on the floor in front of the plinths with a brush or paintbrush.
- Then mix a 2nd set of EP-Rapid Plinth / Repair Gel. Then add a total of 9 kg of coloured gravel 0.4/0.8 in two parts. Start by putting half of the gravel in a bucket, then add the plinth paste and mix well. Then add the rest of the gravel and mix for 1 to 2 minutes until a homogeneous paste is formed.
- Apply the compact mortar against the wall with a trowel/plaster knife and then finish with a coved or straight corner trowel to give the skirting the correct shape. Always work wet-on-wet between 0 and 30 minutes after applying the primer layer.

Points of attention

- If EP-Rapid Plinth / Repair Gel is spilled on a plinth profile, it must be removed immediately. Clean the profile with a cloth soaked in Isopropanol. Do not use a brush as the solvent may come into contact with the plinth, potentially causing colour differences and significantly longer drying times for the plinth.
- The connection between the plinth profile and the wall must be sealed with sanitary sealant before the floor is put into use to prevent water from getting under the plinth and/or floor via the wall.
- Both the trowel and the plinth can be misted with water. This will make the application smoother and result in a tighter and better-compacted skirting.

Executing repairs

Levelling pits and unevenness

- Prepare the substrate as described in the 'Preparation and Substrate Check' section.
- Prime the substrate. Consult the technical sheet of the respective primer for this.
- Prepare the Rapid Plinth gravel mixture according to the method for applying the skirting.
- Apply the Rapid Plinth gravel mixture to the area to be levelled. Use a trowel to achieve minimal height difference and press down firmly.
- Before priming the floor, first saturate the repair with primer.
- After the required drying time, sand the surface with a double-ring diamond disc.
- Then the floor and the repaired surface can be primed. Consult the technical sheet of the respective primer for this.

Filling cracks

- Cracks wider than 1 mm should first be further cut open.
- Then mix the A and B components according to the specified mixing ratio.
- Apply the mixture with a trowel or plaster knife into the crack, ensuring the crack is completely filled.
- After the required drying time, sand the surface with a double-ring diamond disc.
- Then the floor and the repaired surface can be primed. Consult the technical sheet of the respective primer for this.

Packaging

EP-Rapid Plinth / Repair Gel	Sets of 1.62 kg	Metal can
Coloured gravel	25 kg	Bag

Cleaning

Clean the used tools with Cleaner EP, isopropanol or acetone. Cured product residues must be removed mechanically.

Storage and preservation

Shelf life: 12 months in closed and original packaging when stored in a cool and dry place (10-25°C).

Safety measures

Read the safety sheets carefully before using EP-Rapid Plinth / Repair Gel. Always wear personal protective equipment according to the applicable local guidelines and legislation. Gloves and safety glasses are mandatory.

Technical support

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The latest version of this technical data sheet is available on our website.

