WHERE TO USE
Primer SN Rasante has been specifically formulated for smoothing and levelling cementitious surfaces in general, including vertical surfaces, before applying protective and/or decorative epoxy and polyurethane resin-based coating products from the Mapefloor range and cementitious mortars from the Ultratop and Ultratop Loft range.
Primer SN Rasante is also used for skimming cementitious substrates in tunnels, underground railways, underpasses, etc.

TECHNICAL CHARACTERISTICS
Primer SN Rasante is a two-component, fillerized epoxy resin-based smoothing and levelling compound with 100% solids content applied with a metal trowel or smooth rake according to a formula developed in the MAPEI R&D laboratories.
When the two components are mixed together they form a thixotropic compound which is ideal for smoothing and levelling surfaces, including vertical surfaces, before applying resin or cementitious coating products. Thanks to its special formulation, Primer SN Rasante may also be applied on moderately damp surfaces.
Primer SN Rasante is characterised by the following:
• high strength;
• high resistance to abrasion;
• adhesion to substrates $> 1.5 \text{ N/mm}^2$;
• chemical resistance to sewage waste, detergent, saline solution, mineral oil and petrol.

RECOMMENDATIONS
• Do not apply Primer SN Rasante in areas with capillary rising damp.
• Do not dilute Primer SN Rasante with solvent or water.
• Do not apply Primer SN Rasante on dusty, crumbling or weak substrates.
• Do not apply Primer SN Rasante on substrates with oil or grease stains or stains in general.
• Do not apply Primer SN Rasante on substrates not prepared according to specification.
• Do not mix partial quantities of the components to avoid mixing errors; the product may not harden correctly.
• Do not expose the mixed product to sources of heat.
• If rooms where the product is being used need to be warmed up do not use heaters that burn fossil fuels; the carbon dioxide and water vapour given off into the air will affect the shine on the finish and ruin its appearance. Use electric heaters only.
• Protect the product from water for at least 24 hours after application.
• Do not apply the product directly on substrates with moisture content higher than 4% (check with a carbide hygrometer), and/or with capillary rising damp (check by testing it with a sheet of polythene).
• The temperature of the substrate must be at least 3°C above the dew-point temperature.

APPLICATION PROCEDURE  
Preparation of the substrate
Cementitious surfaces must be preferably dry or with very little residual moisture, clean and sound and have no crumbling or detached portions. The compressive strength of the substrate must be at least 25 N/mm² and its tensile strength must be at least 1.5 N/mm². The strength of the substrate must also be suitable for its final use and the types of load to which it will be subjected.

The level of moisture in the substrate must be a maximum of 4% and there must be no capillary rising damp (check by testing it with a sheet of polythene). The surface of the floor must be prepared with a suitable mechanical process (e.g. shot-blasting or grinding with a diamond disk), to remove all traces of dirt, cement laitance and crumbling or detached portions and to make the surface slightly rough and absorbent. Surfaces impregnated with oil and grease must be thoroughly cleaned with a solution of water and 10% soda or detergent and then rinsed several times with plenty of clean water. Remove any excess water from the surface and wait until the level of residual moisture is no higher than 4% before applying Primer SN Rasante.

If the oil or grease has penetrated deeper into the substrate, all the affected parts must be removed by scarifying or a similar process. The substrate must then be integrated with Mapefloor EP19, three-component epoxy mortar or with a cementitious mortar, from the Mapegrount range.

Before applying Primer SN Rasante remove all traces of dust from the surface with a vacuum cleaner.

Surfaces in tunnels, underpasses, etc. may be prepared by hydro-blasting. Remove any excess water from the surface and wait until the level of residual moisture is no higher than 4% before applying Primer SN Rasante.

Preparation of the product
The two components which make up Primer SN Rasante must be mixed together just before application. Mix component A thoroughly and add the content of component B. Add Mapecolor Paste, if required, and mix again with an electric mixer at low speed to prevent entraining air into the mix (300-400 revs/min), for at least 2 minutes until the mix is completely blended. Up to 80% by weight of Quartz 0.5 sand may be added to the mix.

Pour the mix into a clean container and briefly mix again. Do not mix the product for too long to avoid entraining too much air into the mix. Apply the mix within the pot life indicated in the table (refers to a temperature of +23°C). Higher surrounding temperatures will reduce the pot life of the mix, while lower temperatures will increase it.

Application of Primer SN Rasante
Apply an even coat of Primer SN Rasante on the substrate after it has been prepared as specified with a flat trowel or a smooth rake. Immediately after applying Primer SN Rasante, broadcast the wet surface with a sufficient amount of Quartz 0.5 if an epoxy, polyurethane resin, or Ultratop Loft have to be applied. On the other hand if Ultratop or Ultratop Living have to be applied, broadcast the surface with Quartz 1.2.

Make sure there are no open pores in the surface of the substrate, otherwise air bubbles could escape from the substrate and form pinholes in the coating system to be applied. This is particularly important when applying self-levelling resin or cementitious systems.

When using the product in tunnels, underpasses, etc. Primer SN Rasante may be applied by spray.

Cleaning tools
Clean tools used to prepare and apply sure Primer SN Rasante immediately after use with ethanol. Once hardened the product may only be removed mechanically.

CONSUMPTION
Approximately 1.4 kg/m² per mm of thickness; on average 0.4-0.9 kg/m² per layer, depending on the characteristics of the substrate such as roughness, absorbency, temperature, etc.

PACKAGING
25 kg kit:
– component A = 20 kg;
– component B = 5 kg.

STORAGE
Store Primer SN Rasante for up to 12 months in a dry area in its original packaging at a temperature of +5°C to +30°C.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION
Primer SN Rasante component A irritates the skin and eyes. Components A and B may cause sensitisation to those predisposed if they come in contact with the skin. Primer SN Rasante component B is corrosive and may cause burns. It is also harmful if swallowed. The product contains low molecular weight epoxy resins that may cause sensitisation if cross-contamination occurs with other epoxy compounds. When applying the product it is recommended to use protective gloves and goggles and to take the usual precautions for handling chemicals. If the product comes in contact with the eyes or skin, wash immediately with plenty of water and seek medical attention. Do not use in the presence of pregnant women.

When the product reacts it generates considerable heat. After mixing components A and B, we recommend applying the product as soon as possible and to never leave the container unguarded until it is completely empty. Primer SN Rasante components A and B are also hazardous for aquatic life. Do not dispose of these products in the environment.

For further and complete information about the safe use of our product please refer to...
### TECHNICAL DATA (typical values)

#### PRODUCT IDENTITY

<table>
<thead>
<tr>
<th>Component</th>
<th>Component A</th>
<th>Component B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>white-beige</td>
<td>white</td>
</tr>
<tr>
<td>Consistency</td>
<td>paste</td>
<td>paste</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Component A</th>
<th>Component B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density (EN ISO 2811-1) (g/m³):</td>
<td>1.7</td>
<td>1.0</td>
</tr>
<tr>
<td>Viscosity at +23°C (EN ISO 2555) (mPa·s):</td>
<td>500 (# F - 5 rpm)</td>
<td>2 ÷ 3 (# 3 - rpm 20)</td>
</tr>
</tbody>
</table>

#### APPLICATION DATA (at +23°C - 50% R.H.)

| Mixing ratio: | component A : component B = 80 : 20 by weight |
| Colour of mix: | beige |
| Consistency of mix: | paste |
| Density of mix (EN ISO 2811-1) (kg/m³): | 1,550 |
| Viscosity of mix (EN ISO 2555) (Pa·s): | 45 (# 6 - 20 rpm) |
| Workability time at +23°C: | 35 mins. |
| Application temperature: | from +5°C to +35°C min. +5°C |
| Hardening time at +23°C and 50% R.H.: | approx. 6 hours |
| – start setting time: | approx. 24 hours |
| – complete hardening: | approx. 7 days |

The times above are for indication purposes only and are influenced by actual site conditions (e.g. temperature of the surroundings and substrate, relative humidity of the surrounding air, etc.).

#### FINAL PERFORMANCE

<table>
<thead>
<tr>
<th>Performance characteristic</th>
<th>Test method</th>
<th>Performance of product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adhesion strength (N/mm²):</td>
<td>EN 13892-8; 2004</td>
<td>3.5</td>
</tr>
<tr>
<td>Reaction to fire:</td>
<td>EN 13501-1</td>
<td>E₄</td>
</tr>
<tr>
<td>Compressive strength (N/mm²):</td>
<td>EN 196-1</td>
<td>45</td>
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<tr>
<td>Shore D hardness:</td>
<td>DIN 53505</td>
<td>50</td>
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</tbody>
</table>
the latest version of our Material Safety Data Sheet.

PRODUCT ONLY FOR PROFESSIONAL USE.

WARNING
Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application; for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application. In every case, the user alone is fully responsible for any consequences deriving from the use of the product.

Please refer to the current version of the Technical Data Sheet, available from our website www.mapei.com

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All relevant references for the product are available upon request and from www.mapei.com