RAPID PLUG

Fast setting hydraulic compound to stop water

**Description**
A fast-setting, ready-to-use, hydraulic compound, which can instantaneously stop flow in water under pressure and any kind of seepage in surfaces of all types.

**Uses**
RAPID PLUG was specifically developed to impede any kind of seepage or infiltration in surfaces subject to being permeated by water and/or leakage under pressure.
This product is particularly suitable for sealing pipeline or conduit shells, holes in bushing/manifold section of pipes, gravel beds etc, and, generally, for the preparation of surfaces to be waterproofed.

**Advantages**
- Very easy to use.
- Hardens in 3-5 minutes without shrinking.
- Instantaneously seals holes and cracks in weak, external or underwater surfaces.
- Creates a long-lasting waterproof barrier in joints between walls and floors.
- Permanently repairs faults in concrete castings.
- Very quickly and permanently anchors or fastens support feet or rods, screw anchors, dowels, shelves and shelf-frames, railing, handrails, window and door casings, doors etc.
- Impedes outward seepage when used to seal concrete conduits, sewage pipes, cisterns, wells, reservoirs etc.

**Technical data**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sp. Gr. of the powder</td>
<td>1.70 g/cm³</td>
</tr>
<tr>
<td>Setting time (start)</td>
<td>40 sec. at 20°C</td>
</tr>
<tr>
<td>Setting time (end)</td>
<td>5 mins at 20°C</td>
</tr>
</tbody>
</table>

n.b. Setting times may be influenced by ambient temperature and by the water contained in the mixture.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
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<tbody>
<tr>
<td>Resistance to compressive stress (UNI 6134)</td>
<td>at 1 day = 38MPa</td>
</tr>
<tr>
<td></td>
<td>7 days = 45MPa</td>
</tr>
<tr>
<td></td>
<td>28 days = 58MPa</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Resistance to freeze-thaw cycles (ASTM C-666)</td>
<td>a sample tested after 50 cycles showed no significant alteration.</td>
</tr>
</tbody>
</table>

**Instructions for use**
Chisel around the hole or crack, using mechanical or manual methods until a depth and width of about 2 cm has been created.
The best results will be obtained if the cavity inside the surface is larger than the external aperture and, preferably, an internal dove-tail (inverted “V”) cut should be made.
This method ensures better mechanical anchoring. Any loose or fragmented parts, dust, oil and grease etc. must be removed from the surface to be repaired or sealed, using, for example, a metal brush and then blowing away the materials with a jet of compressed air.
The area to be treated must be thoroughly dampened immediately before applying RAPID PLUG.
To prepare the product proceed as follows: pour some clean water into a container and gradually add paste acquires the density of stucco filler or sealing putty. Mix only a small quantity as pot-life is limited.
Normally, 1 litre of water is sufficient for 4 kg product. In very high ambient temperatures use water cooled with ice. In low ambient temperature mix with warm water. When filling holes and cracks, RAPID PLUG should be applied by rolling the paste, which has just been mixed, into the form of small balls and forcing it into the cavity. Press down with moderate pressure for a few minutes. When seepage has appeared in the joint between walls and flooring, create a groove and then make a wall-floor joint with 2x2 cm catheti.

Normally, about 2 kg of RAPID PLUG will be required for each linear metre of joint. To stop water flowing from vertical cracks start applying RAPID PLUG, working from the highest point downwards and pressing down with maximum pressure. In area where water is leaking under strong pressure hold the mixed product until it starts to generate heat and then force it into the aperture, keeping it pressed down for a few minutes by hand or with a trowel until the water has stopped leaking. About 1 hour after applying RAPID PLUG the surface can be waterproofed with an impermeable cementitious product such as CEMESEAL.

Dry surfaces treated with RAPID PLUG must be thoroughly dampened before and after application so as to allow for normal setting of the material and to avoid rapid dehydration.

Yield
The amount of product required will depend on the type of work to be carried out. To create wall-floor joints with 2 x 2 cm catheti consumption will normally be about 2 kg per linear metre.

Colour
Dark grey powder.

Packing
Plastic Pail 10 Kg plastic bags 5 kg and 25 kg.

Caution
RAPID PLUG contains hydraulic binders and therefore has a strong basic reaction. The use of plastic gloves is recommended when handling this product. The product must not be applied on a frozen surface or when the ambient temperature falls below 5°C. In the hot summer months application should be avoided during the hottest hours of the day. On cold days work in direct sunlight and do not apply the product during the late afternoon or when the temperature is expected to fall below 5°C during the 24 hours following application. In winter mix with warm water. In summer or in high ambient temperatures mix with ice-cooled water. Waterproof the surfaces treated with RAPID PLUG after at least 1 hour.

Do not use RAPID PLUG to seal structures subject to expansion or structural movement.

Storage
Shelf-life of at least 12 months when stored in the original sealed packaging in a dry environment.