HYDRAULIC MORTAR FOR STOPPING LEAKS

Quick setting hydraulic mortar for stopping leaks under pressure.

Description

Hydraulic Mortar for Stopping Leaks is a quick-setting cement-based mortar that instantly stops running water from cracks, fissures, holes or other openings in concrete and masonry. It is non-shrink and sets within three to five minutes depending on the temperature. Once Hydraulic Mortar for Stopping Leaks sets, it adheres perfectly to the substrate. It only requires water for mixing.

Contents	Art. No.
5kg	**5875500590**

Technical Data

Product characteristics		
General appearance and colour	Grey powder	
Maximum aggregate size, (mm) <	<0,8	
Mixing water, (%, by weight)	28	
Application and curing conditions		
Minimum application temperature for substrate and ambient, (°C)	>5	
Final setting time at 20 °C & 50 % R.H., (min)	3 – 5	
Curing time for coating at 20 °C & 50 % R.H., (h)	24 - 48	
Cured product characteristics		
Mechanical strengths, (MPa) - 30 minutes - 3 days - 7 days - 28 days	Flexural 1,2 3,7 5,7 5,2	Compressive 3,8 22,5 36,2 40,7
Consumption*		
Consumption per application, (kg/l)	1,62	

* These figures are for guidance only and may vary depending on conditions for substrate, and application method. Perform a preliminary test on-site to ascertain the total consumption exactly under jobsite conditions.

Advantages

- Does not shrink or become weak due to its exothermic reaction.
- Hydraulic Mortar for Stopping Leaks increases in volume, giving a permanent seal in areas where there is flowing water.
- Its quick setting-time from 3 to 5 minutes can be controlled, either sped up or slowed down, by adding warm or cold water. Setting may even be instantaneous by adding hot water during warm weather.
- Its mechanical properties are similar or higher than concrete.
- Non-toxic. It can be used in contact with drinking water.
- It sets even underwater.
- Does not contain chlorides or other corrosive compounds.
- Easy to use.

Application Fields

- Sealing of leaks in concrete surfaces, solid masonry and other sound substrates wherein water flows through cracks and holes.
- Emergency repairs on concrete water pipes. For broken concrete pipes, Hydraulic Mortar for Stopping Leaks will even work when the concrete pipes are under hydrostatic pressure.
- Emergency plugging of gas leaks.
- Sealing of concave corners and working joints, filling the grooves with Hydraulic Mortar for Stopping Leaks in the shape of a cove.
- Anchoring of bolts and other accessories that require immediate use.
- Stopping running water in basements, tunnels, foundations and sewers under hydrostatic pressure.
- It is a suitable maintenance material for homes and industry.

Application Instructions

Surface Preparation

Cracks or fissures must be opened to a minimum depth of 4 cm and a width from 3 to 4 cm. In order to provide a good mechanical key, make a square-shaped groove; preferably dovetail to the surface to which the material is applied. Avoid a "V" shape. Clean the surface until it is free of any loose or unsound materials or surface contaminants. If there is no water present at the time of application, dampen the surface before applying Hydraulic Mortar for Stopping Leaks .

Mixing

Mix only the amounts of Hydraulic Mortar for Stopping Leaks that it can be applied within 3 minutes under normal conditions. If flowing water is present, only the amount of material that can be applied by hand should be mixed. In order to mix the mortar, use a plastic container, fill it with the necessary amount of Hydraulic Mortar for Stopping Leaks , and add clean water slowly. Mix all components slowly with a trowel until the consistency of cement mortar is achieved. Depending on weather conditions, one kg of Hydraulic Mortar for Stopping Leaks requires about 0,28 l of water.

Application

Sealing leaks in cracks or joints. Prepare the surface removing the loose or unsound concrete from the crack or joint and cutting to a depth of 5 cm. Hydraulic Mortar for Stopping Leaks should be applied in small amounts that can be applied by hand. Do not pour the material in place; always apply by hand.

Once Hydraulic Mortar for Stopping Leaks is mixed, form the mixture into the shape of a plug and hold it in your hand until it becomes warm and then, press Hydraulic Mortar for Stopping Leaks firmly into the crack or joint but do not twist or overwork. Maintain pressure with the hand until it sets and finally remove any excess material with a trowel.

In large openings with high pressure such as tunnels and basements, begin the application at the top of the crack, where water pressure is lower, and proceed with the surrounding area until the crack is finished, allowing Hydraulic Mortar for Stopping Leaks to harden enough between the successive applications.

Sealing joints between concrete slab and wall. This is a common situation in basements, elevator shafts, swimming pools and reservoirs. Along the concave corners at least a 2 x 3 cm groove must be opened and filled with Hydraulic Mortar for Stopping Leaks in the shape of a waterproofing cove.

Expansion joints. In order to stop running water from these joints, perform a groove along the joint and refill it with Hydraulic Mortar for Stopping Leaks to stop the leakages. After Hydraulic Mortar for Stopping Leaks hardens, cut and define the new joint, sealing then with a flexible material.

Anchoring. To anchor steel bolts and other metal fixtures, Hydraulic Mortar for Stopping Leaks is suitable.

Application Conditions

The optimum setting time corresponds with a temperature range from 18° to 20° C.
Hydraulic Mortar for Stopping Leaks will set in about 3 to 5 min, depending on water and ambient temperature and relative humidity.

- Hot weather application. At high temperatures (>30 °C) or where is exposed to winds, Hydraulic Mortar for Stopping Leaks will set very quickly. In order to slow down the setting time, cold water may be used. This procedure allows apply the material within 30 - 60 s after mixing. In extreme cases, product should be kept in the shade and ice should be added to the mixing water in order to slow down the setting time.
- Cold weather application. In order to shorten the setting time, warm or hot water may be used.

Cleaning
Before Hydraulic Mortar for Stopping Leaks sets, all tools and equipment should be cleaned immediately with water. Once it hardens, product can only be removed by mechanical means.

Consumption
One kg of Hydraulic Mortar for Stopping Leaks fills about 0,615-0,620 l, depending on the amount of mixing water (approximately 1,62 kg/ l).

Packaging
Hydraulic Mortar for Stopping Leaks is supplied in 5 kg cans.

Storage
Twelve months in its original unopened packaging. It should be stored in a dry, fresh and covered place rotected from humidity, sunlight and frost, at temperatures above 5 °C.

Important Indications
- Always use clean and dry tools to take Hydraulic Mortar for Stopping Leaks from the packaging.
- Do not mix the product with other materials or hardened product as the mixture characteristics may be modified.

Safety and Health
Hydraulic Mortar for Stopping Leaks is non-toxic but it is an abrasive product, so protective rubber gloves and safety goggles must be used to repare and apply it. In case of eye contact, rinse thoroughly with clean water but do not rub. In case of skin contact, wash affected areas with soap and water. If irritation continues, seek medical attention. For further information, Safety Data Sheet of Hydraulic Mortar for Stopping Leaks is available by request. Disposal of the product and its empty packaging must be made by the final user and according to official regulations.