

SFL™ MORTAR WR

Product Information

Product description: SFL™ Mortar WR is a cement based, rapid setting mortar that can be used as a mechanical barrier for pipe- and cable wall penetrations as required with installation of sealing materials manufactured by Seal For Life Industries, e.g. Stopaq® 2100 Aquastop or Sealtaq® Aquablock. The material is particularly suited for application in situations where the mortar is frequently or continuously exposed to wet conditions, e.g. with wall penetrations exposed to weather conditions and in water storage basins. It bonds very well to concrete and brick and protects against water penetration through pores and capillaries.

Features:

- Excellent hold strength, also on old concrete
- Rapid water stopping in emergency situations
- Single component – just add clean water
- Very low level of cracking
- Fast and easy to apply
- Hard and tough waterproofing barrier
- Chloride free

Benefits:

- Rapid setting
- Single component
- Stable bonding
- No special application tools required
- Provides permanent and optimal safety

Application examples

Wall penetrations exposed to weather conditions: As mechanical barrier in wall penetrations filled with Seal For Life sealing materials, e.g. Stopaq® 2100 Aquastop, or Sealtaq® Aquablock

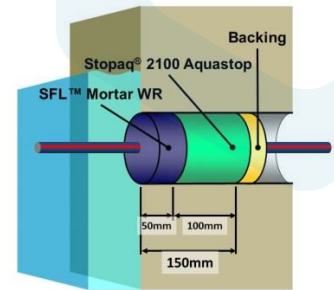
Wall penetrations in water storage basins: As mechanical barrier in basin wall penetrations filled with Seal For Life sealing materials, e.g. Stopaq® 2100 Aquastop, or Sealtaq® Aquablock

Product properties of SFL™ Mortar WR

Colour	Grey
Specific gravity	1.6 ± 0.2 g/cm³ at +20°C
Mixing ratio	4 parts of SFL™ Mortar WR to 1 part of water by volume
Shrinkage	None
Initial setting time	1 - 2 min. at +20°C
Particle size	45 – 150 µm
Compressive strength after curing	5 MPa after 1 hour 9 MPa after 6 hours 25 MPa after 28 days

Properties of sealing system comprising Stopaq® 2100 Aquastop and SFL™ Mortar WR

Construction	– Stopaq® 2100 Aquastop: 100 mm – SFL™ Mortar WR: 50 mm
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Maximum pressure	0.5 bar (i.e. 5 m of water pressure)
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General order information

Product	SFL™ Mortar WR is available in different packing sizes
<u>Art. Nr.:</u>	<u>Packing size:</u>
1109	Pail 0.5 kg, 20 pails/box, 480 pails/pallet
1112	Pail 5 kg, 72 pails/pallet
1114	Pail 20 kg, 27 pails/pallet
Handling	Handle with care, keep boxes and pails upright. Consult safety data sheet for appropriate safety and health measures.
Storage	Store indoor, clean and dry. Keep containers tightly sealed to prevent reaction with moisture. Hard or lumpy Mortar should not be used; this has most probably reacted with moisture from air and is not capable of creating an appropriate seal. Shelf life max. 9 months.

Application instruction - Job preparation		Application instruction - Brief version	
Pipe and cable fixation	Pipes and cables must be fastened to avoid lateral movements. Excessive lateral forces exerted to the SFL™ Mortar WR barrier may cause cracking.	Wetting	Wet the wall opening with water, using a spray bottle or a brush, such in order to prevent premature or excessive absorption of moisture from the freshly placed mortar.
Tools, equipment and auxiliaries	<ul style="list-style-type: none"> - Personal protective gear like appropriate gloves, safety goggles, etc. - Masonry tools like trowels, tuck-pointing tools, etc. - Pencil size piece of wood, for compacting of mortar in narrow gaps. 	Mixing process	Small portions of mixture may be prepared by kneading the mixture by hand (use gloves). It is not recommended to prepare large quantities of mixture at once, since it will already have set partially (thereby forming hard lumps) before all material has been applied.
Additional materials	<ul style="list-style-type: none"> - Masking tape, width preferably 50 mm. - Clean water, free from visible and chemical contaminations, temperature preferably +20°C or lower. - Plastic sheet, e.g. PE-foil - Slip liner in case axial movement occurs due to thermal expansion of pipes or cables. 	Mixing sequence	Sequence of mixing is critical for obtaining an homogenous and easy to apply mortar mixture. First add the required amount of water to the mixing vessel, then gently add the SFL™ Mortar WR bit by bit while mixing. Incorrect mixing may lead to hard lumps in the mixture.
Ambient conditions	Ambient temperature should be above freezing point and below +35°C during application and curing. Special measures for working in winter conditions with cement-like materials should be adopted.	Mixing ratio	4 parts of Mortar WR to 1 part of water by volume. Mixing time is 1 minute. After mixing the mortar should have a pasty consistency.
Substrate conditions	Temperature of all substrates, (wall inlet, pipe- and cable surfaces) should be above freezing point and below +35°C during application and curing.		It is advised to keep the water content as low as possible in order to create a rigid barrier. Higher water content will lead to a more fluid mixture, which can be used to fill narrow gaps.
Product conditions	Temperature of SFL™ Mortar WR, and mixtures thereof, should preferably below +20°C during application and curing. Lower temperatures obtains longer pot life and leads to longer setting periods, while higher temperatures may cause too fast curing.	Application	First fill the areas that are difficult to access, e.g. between cables and pipes. Push the mixture towards the sides of the conduit (brick/concrete). Make sure to avoid air enclosures. Fill up with mixture towards the boundary of the conduit. Smoothen the surface of the Mortar using small amount of water and masonry tools.
Surface preparation	All surfaces must be free of oil, grease, dirt, dust and poorly adhering matter, such as cement film, paint or other. Make sure eventually present sealing materials are removed completely from the conduit walls prior to application of SFL™ Mortar WR.	Removal of masking tape	Remove applied masking tape immediately after finishing application of the mortar.
Axial pipe or cable movements	Pipes or cables might expand and shrink due to temperature fluctuations, causing slight axial movements. To avoid cracking of the SFL™ Mortar WR barrier, the surface of these pipes and cables should be covered with a slip liner, allowing axial sliding of the pipes and cables through the layer of SFL™ Mortar WR.	Controlled curing	In order to minimize the risks of improper curing or cracking - which might occur at higher ambient temperatures - cover the fresh mortar surface with a sheet of plastic to minimize water evaporation.
Masking	Mask surfaces not intended to be bonded with SFL™ Mortar WR with masking tape, e.g. sections of pipes and cables protruding from the mortar barrier.		
		Application instruction - Repair	
		Cracks and holes	Cracks and holes should be reamed to a width of at least 10 mm to enable proper application of additional SFL™ Mortar WR. Application should be done according to the procedure described in this document.
		Information	
		Documentation	Extensive information is available on our website. Application instructions and other documentation can be obtained by contacting our head office, from our local distributor or by sending email to info@sealforlife.com
		Certified staff	Application of the described coating system should be carried out by certified personnel.