

SFL MORTAR

Product Information

Product description: SFL Mortar is an inorganic, non-shrinking, asbestos-free mortar. It is used as a mechanical barrier for pipe- and cable wall penetrations as required with installation of sealing materials manufactured by Seal For Life Industries like Stopaq® 2100 Aquastop or Sealtaq® Aquablock. The material is well-suited for application in wall- and floor conduits and bonds well to concrete and brick.

Features:

- Excellent adhesion to concrete and brick
- Fast and easy to apply
- Easy to retrofit without the use of power tools
- Compliant with EU REACH Annex XVII, contains chromium (VI) reducing agent

Benefits:

- No special application tools required
- Allows change in cable and pipe configuration through wall conduit
- Provides permanent and optimal sealing when combined with sealing materials manufactured by Seal For Life Industries
- Allows minor axial movements of pipes and cables

Application examples

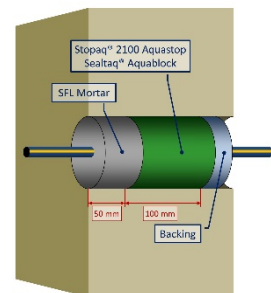
Cable and pipe wall penetrations: As mechanical barrier in wall conduits filled with Seal For Life sealing materials like Stopaq® 2100 Aquastop, or Sealtaq® Aquablock

Product properties of SFL Mortar

Colour	Grey
Dry bulk density	≥ 0,9 kg/l [7.5 lb/gal]
Application temp.	≥ 5 °C [41 °F]
Mixing ratio	1,0 kg of SFL Mortar to 0,15 litres of water [1 lbs of SFL Mortar to 2.3 fl oz of water]
Pot life	Approx. 30 min at 20 °C [68 °F] after mixing
Full curing time	Approx. 28 days at 20 °C [68 °F]
Compressive strength	After full curing: M 2.5 (EN 1015-11)
Apparent density	Air dried: 1,0 kg/l [8.3 lb/gal] (EN 1015-10)
Setting behaviour	No shrinkage or expansion during curing

Properties of sealing system comprising Stopaq® 2100 Aquastop or Sealtaq® Aquablock and SFL Mortar

- Construction**
- 100 mm [4 inch] of Stopaq® 2100 Aquastop or Sealtaq® Aquablock
 - 50 mm [2 inch] of SFL Mortar



- Performance**
- Watertight up to 1,0 bar [14.5 psi]
 - Gastight (natural gas) up to 100 mbar [1.5 psi]
- Tested by DVGW - Deutsche Verein des Gas- und Wasserfaches*

General order information

Product	SFL Mortar is available in different packing sizes: <u>Art. Nr.:</u> 1110-00500 1110-05000	<u>Product dimensions and contents:</u> Pail 500 g [1.1 lbs], 20 pails/box, 480 pails/pallet Pail 5 kg [11 lbs], 48 pails/pallet
Handling	See Safety Data Sheet for specific handling instructions. Handle with care. Keep boxes and pails upright.	
Storage	See Safety Data Sheets for specific storage instructions. Store indoor, clean and dry. Keep containers tightly sealed to prevent reaction with moisture. Keep from freezing. Hard or lumpy SFL 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 1 year (see expiration date on label).	

Application instruction - Job preparation		Application instruction – Brief version	
Fire protection of wall penetrations	In case fire protection of wall penetration is required, please contact Seal For Life Industries.	Detailed application instructions are available from Seal For Life Industries.	
OHSE measures	See Safety Data Sheets (SDS) for applicable Occupational Health, Safety and Environmental measures in accordance with national regulations. Personnel that will come in contact with the product must wear appropriate personal protective gear.	Wetting	Wet the inside of the conduit wall with water (spray bottle) to prevent excessive absorption of water from the freshly installed mortar.
Pipe and cable fixation	Pipes and cables must be fastened to avoid excessive movements which may otherwise damage the integrity of the sealing.	Mixing ratio	<ul style="list-style-type: none"> – 1,0 kg of SFL Mortar to 0,15 litres of water [1 lbs of SFL Mortar to 2.3 fl oz of water] – Mixing time 3 – 5 minutes After mixing the mortar should have a pasty consistency. 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.
Tools, equipment and auxiliaries	<ul style="list-style-type: none"> – Personal protective gear. – Mixing equipment with grout mixing paddles for mixing of large quantities. – Masonry tools (trowels, tuckpointing tools), e.g. for compacting of mortar in narrow gaps. 	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 bit by bit while mixing. Incorrect mixing may lead to hard lumps in the mixture.
Additional materials	<ul style="list-style-type: none"> – Masking tape, width preferably 50 mm [2"]. – Clean water, free from visible and chemical contaminations, temperature $\geq 5\text{ }^{\circ}\text{C}$ [41 °F]. – Plastic sheet, e.g. PE-film. – Slip liner in case axial movement occurs due to thermal expansion of pipes or cables. – Stopaq coating system for application on metallic pipes prone to corrosion (if required). 	Mixing process	Small portions of mixture may be prepared by kneading the mixture by hand (use gloves). Larger quantities should be prepared by using proper mixing equipment.
Ambient conditions	Ambient temperature should be between +5 and +30 °C [+41 to +86 °F]. Special measures for working in winter conditions with cement-like materials must be observed.	Application	First fill the areas that are difficult to access, e.g. between cables and pipes. Push the mixture towards the walls of the conduit (brick/concrete). Avoid air inclusions. Fill up with mixture towards the boundary of the conduit. Smoothen the surface of the mortar using small amount of water and masonry tools.
Substrate conditions	The temperature of all substrates (wall conduit, pipe and cable surfaces) should be between +5 and +30 °C [+41 to +86 °F] during application and curing.	Removal of masking tape	Remove applied masking tape immediately after application of the mortar has finished.
Product conditions	Temperature of SFL Mortar and mixtures thereof, should be between +5 and +30 °C [+41 to +86 °F] during application and curing.	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 evaporation of water.
Surface preparation	All surfaces must be free of oil, grease, dirt, dust and poorly adhering matter like cement film, paint, etc. Make sure any present sealing materials are removed completely from the conduit walls prior to application of SFL Mortar. Conduits walls with a smooth surface like polymeric materials must be roughened e.g. by sanding. Absorbent conduit walls (e.g. concrete and brick) must be wetted with water prior to installation.	Application instruction - Repair	
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 barrier, the surface of these pipes and cables should be covered with a slip liner, allowing axial sliding of the pipes and cables through SFL Mortar.	Cracks and holes	Cracks and holes should be reamed to a width of at least 10 mm [$\frac{3}{8}$ "] to enable proper application of additional SFL Mortar. Application should be done according to the procedure described in this document.
Masking	Mask surfaces not intended to be bonded with SFL Mortar with masking tape, e.g. sections of pipes and cables protruding from the mortar barrier.	Information	
		Documentation	Extensive information is available on our web-site. 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 materials should be carried out by certified personnel.



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Further information is available on our website www.sealforlife.com, or by sending an inquiry to info@sealforlife.com

DISCLAIMER: Seal For Life Industries warrants that the product conforms to its chemical and physical description and is appropriate for the use stated on the technical data sheet when used in compliance with Seal For Life Industries' written instructions. Because many installation factors are beyond the control of Seal For Life Industries, the user shall determine the suitability of the products for the intended uses and assume all risks and liabilities in connection herewith. Seal For Life's liability is stated in its General Terms and Conditions of Sale. Seal For Life Industries makes no other warranty either express or implied. All information contained in this technical data sheet is to be used as a guide and is subject to change without notice. This technical data sheet supersedes all previous data sheets on this product.