

Fire EX MORTAR 494671

Fire EX MORTAR for fire sealing of cables, pipes and ducts: EL 60-240. Dry white powder consisting of inorganic compounds and perlite. When mixed with water, the compounds form a highly thermally insulating fire sealing compound to prevent the spread of fire and smoke through openings in fire rated walls and floors, including openings formed around building service penetrations.



- Classified in walls and floors of concrete, brick, gypsum etc.
- Suitable for cables, bundled cables, cable racks, cable trays, steel, copper, alupex and plastic pipes and air ventilation ducts.
- Simple to apply leaving a very smooth finish.

TECHNICAL DATA

Condition: Powder ready for mixing with water
Mixture:
2:1 for a thicker mixture
2:1,5 for a thinner mixture
Dry density: About 900 kg/m³ after full cure
Full cure time: Less than 1 hour depending on the local climate
Flash point: Class A1 according to EN 13501-1
Totally hardened: Up to 30 days depending on thickness and temp
Flexibility: None
Thermal conduct: 0.051 W/mK
Storage: No particular limit for unopened pails in dry places with storage temperatures between 5°C and 30°C
Compatibility: Suitable for use with most materials, but should not be used in direct contact with metals that may corrode
Colour: Off white

LIMITATIONS

Should not be used in permanently damp areas or in moving joints.

Suitable for most surfaces, included concrete, bricks, Leca, steel, plastic etc, but not suitable to fitting of doors or in service openings that involve movement.

Suitable for cables, bundled cables, cable racks, cable trays, steel, copper, alupex and plastic pipes and air ventilation ducts.

SURFACE PREPARATION

No priming necessary prior to application in most building material substrates however metal services in contact with the seal must be corrosion protected.

PROPERTIES

- Classified in walls and floors of concrete, brick, gypsum etc.
- High degree of mechanical resistance; the seal is load bearing without reinforcement.
- The product is certified for use in gypsum walls but it is recommended to use Fire Boards for these applications.
- The fire performance specification of the compound has been derived when the seal has been left to cure for 1 month.

APPLICATION

- EX Mortar is a dry white powder consisting of inorganic compounds and perlite.
- When mixed with water, the compounds form a highly thermally insulating fire sealing compound to prevent the spread of fire and smoke through openings in fire rated walls and floors, including openings formed around building service penetrations.
- Expands approx. 1% by hydraulic action during curing ensuring a very tight seal around the service penetrations and the surrounding opening apertures.
- Easy to sand or drill. The compound dries to an off-white colour which may be painted.

- Simple to apply leaving a very smooth finish.
- Will also maintain the acoustic design performance in walls and floors.

LOADBEARING PROPERTIES (FL OORS)

EX Mortar has been subject to concentrated load and impact tests in floors according to ETAG 026-2 and EOTA TR001 Clause 2.

The tests were conducted on the minimum allowed cast depth of 100mm.

According to the loading limits in the table below, reinforcement is not necessary, however it is highly recommended that the edges of the aperture are brushed free of any dust or loose particles and that any contamination is washed away using clean water. Moistening the edges well before casting will improve adhesion.

Should not be cast in surface treated concrete. The mortar must be mixed to a thick but fluid mass at a rate of approx. 2 parts of powder to 1 part water. Maximum loadbearing performance will be achieved 28 days after casting.

Test results:

Test in 1500x1000mm frame	Results
Soft body impact, serviceability	500Nm
Soft body impact, safety in use	700Nm
Hard body impact, serviceability	6 Nm
Hard body impact, safety in use	10 Nm
Concentrated load to ETAG 26-2	15 kN

EMISSION DATA (INDOOR QUALITY)

Compound	Emission rate after 3 days	Emission rate after 4 weeks
TVOC	12 $\mu\text{g}/\text{m}^3$	< 5 $\mu\text{g}/\text{m}^3$
TSVOC	n.d.	< 5 $\mu\text{g}/\text{m}^3$

VOC w/o NIK	n.d.	< 5 $\mu\text{g}/\text{m}^3$
R Value	n.d.	< 1
Formaldehyde	7.1 $\mu\text{g}/\text{m}^3$	n.d.
Acetaldehyde	< 3 $\mu\text{g}/\text{m}^3$	n.d.
Sum for+ace	< 0.006 ppm	n.d.
Carcinogenic	< 1 $\mu\text{g}/\text{m}^3$	< 1 $\mu\text{g}/\text{m}^3$
n.d. or < means not detected		

EX Mortar complies with the requirements of GEV and the results correspond to the EMICODE emission class EC 1PLUS which is the best possible environmental and indoor hygiene health protection mark.

Tested by Eurofins Product Testing, report number G12874B.

SOUND INSULATION

Description	Sound reduction
Single sided cast \geq 50 mm on stone wool board	64 dB
Single sided cast \geq 100 mm without board	64 dB
Double sided cast \geq 25 mm on stone wool board	64 dB
Double sided cast \geq 50 mm without board	64 dB

Our information is based on laboratory tests and practical experience and may, as such, be considered a guide in connection with choice of product and working method. As the user's working conditions are beyond our control, we do not assume any responsibility for the results. Our responsibility covers exclusively personal injury or damage to property which actually have been proved subsequent to faults and defects in one of the products manufactured by us.

Certifierad enligt:



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RESISTANCE TO FIRE

Construction	Description	Classification
Flexible walls comprise gypsum, masonry, aerated concrete or concrete	Up to 2400 mm wide by 1200 mm high blank seal with med double sided 25mm EX Mortar on 25mm cast board	EI 120 (E 120)
Rigid walls comprise masonry, aerated concrete or concrete	Up to 2400 mm wide by 1200 mm high blank seal with single sided 50mm Casco® EX Mortar on 50mm cast board	EI 120 (E 180)
	Up to 2400 mm wide by 1200 mm high blank seal with single sided 100mm Casco® EX Mortar	EI 240 (E 240)
VOC w/o NIK Rigid floors comprise aerated concrete, concrete or hollow concrete floor slabs	Up to 2400 mm by 1200 mm blank seal with 50mm Casco® EX Mortar on top of 50mm cast board	EI 180 (E 180)
	Up to 2400 mm by 1200 mm blank seal casted with 100mm Casco® EX Mortar	EI 180 (E 180)

The cast board comprise stone wool with density $\geq 150\text{kg/m}^3$.

NB. Please see the product's Installation Instructions for full details.

PACKAGE SIZE

10 L

ENVIRONMENTAL ASPECTS

For additional health and safety information consult the Safety Data Sheet.

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