WEBER ML LECA® P FROST MORTAR

- Low water absorption, which means that the block joints are not easily visible through the plaster
- Low mortar consumption
- Compressive strength class M10
- Meets the requirements of SFS-EN 1996-1 (Eurocode 6)
- Can also be applied by pumping
- The product is listed in the portal for building products that can be used in Nordic Swan Ecolabelled buildings.

ABOUT THIS PRODUCT

Dry mortar developed for thin-joint masonry of Leca basic blocks and Leca® Smart insulation blocks.

AREA OF USE

Masonry of Leca basic blocks and Leca® Smart insulation blocks indoors or outdoors in winter conditions up to -15 ° C with a thin joint, either applied by hand, masonry sled or by pumping. Can also be used as thin-joint masonry for bricks. Note that more white efflorescence may appear on the masonry surface in the spring as the structure dries out.

MIXING

One bag (25 kg) of dry mortar is mixed with 3.5-4.0 litres of clean water. When using a large bag or silo, the water content of the mortar is 14-15 % of the amount of dry matter. The mortar is mixed in a concrete mixer, horizontal pan-mixer or a mortar station with a screw mixer and an automated water meter is used on site. The mortar station can be conveniently connected to pumping equipment suitable for concretes to facilitate the application of the mortar. The mixing time is 5-8 min in a concrete mixer and 4-5 min in a horizontal pan-mixer. The mixed mortar must be used within 2 hours of adding water.

PRODUCT SPECIFICATION

Material consumption	Dry mortar consumption with a 5 mm joint thickness (kg/block). • Pillar block P-240 [1]): 0.5 • H-75: 0.5 • UH-100, UH-125, UH-150: 1.5 • RUH-200, RUH-200 corner, RUH-250, RUH-250 corner, RUH-300, RUH-340 and RUH-380: 2.5 • RUH-300 corner, RUH-340 corner: 3.0 • RUH-380 corner: 3.5 • LSH-300: 2.0 • LSH-300 corner: 0.7 • LSH-380: 2.5 • LSH-380 external corner: 0.9 • LSH-380 inner corner: 1.1 • LSP-380 beam [2]): 1.5 [1])In addition, P-240 block hole casting weber S30P or similar approx. 5.5 kg/block [2])In addition to LSP-380 block cells casting weber S30P or similar approx. 19.3 kg/block Consumption figures include an estimated 15% mortar loss, (4% in concrete castings). Values are indicative. The exact consumption depends on the thickness of the seam.
Recommended water content	3.5-4.0 l/25 kg (=0.14-0.16 l/kg)
Pot life (Operating time)	2 hours after adding water
Binder	Fast setting Portland cement
Aggregate	Natural sand, maximum grain size 1.5 mm
Additive	Additives that lower the freezing point of water, and improve weather resistance and workability
Adhesion strength	Nominal shear resistance $f_{vko} \geq 0.16$ N/ mm² (SFS-EN 998-2, 5.4.2 a)
Compressive strength	Compressive strength class M 10
Flexural strength 28 days	$f_{xk1} > 0.20$ N/mm² and $f_{xk2} > 0.13$ N/mm² (SFS 7001)
Reaction to fire (for exposive situations)	A1
Durability (freeze-thaw)	Freeze-thaw resistance: Approved according to SFS 7001 Annex 4
Water vapour permeability	μ 15/35
Water absorption	0.1 kg/(m² ·min$^{0.5}$)
Thermal conductivity	0.76 W/mK (P=50%) (SFS-EN 1745)
Density of dry hardened mortar 28 days	approx. 1750 kg/m³ (SFS-EN 1015-10)
Color	Grey
Storage conditions	Shelf life approx. 12 months from date of manufacture (unopened packaging, dry space)
Package	25 kg sack. 500 or 1000 kg large sack.
GTIN-codes	6415990124935 (25 kg) 6415990125321 (500 kg) 6415990124959 (1000 kg)
Certifications	CE, FI, Key Flag Symbol

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WORK INSTRUCTIONS

Masonry work is carried out in accordance with SFS-EN 1996-1 guidelines and the general quality requirements for construction work RunkoRYL 2010 and SisäRYL 2013. Detailed instructions for Leca® block masonry can be found in our Leca® blocks - Work Instructions brochure. weber ML Leca® P Frost mortar, developed for the winter masonry of Leca® blocks, can be laid down to -15 ° C without heating or protection. When planning masonry work, it must be taken into account that the strength development of the mortar is slower than normal in winter conditions. The actual strength development only begins when the temperature rises. Masonry units must not be wet, icy or snowy. The mortar must be free of pieces of ice and frozen constituents.

In large applications, the mortar is most easily used with Weber Construction site equipment. In smaller areas, the mortar can be applied with a Leca® masonry sled or by hand with a mason's trowel. The blocks with a thickness of at least 200 mm are laid in the so-called open joint. Thinner blocks are bricked with a closed joint. In normal Leca® block masonry work, the joint thickness is approx. 5 mm. If necessary, the joint thickness can be increased up to about 20-30 mm by using a stiffer mortar, e.g. in the initial layer of foundations. The blocks are usually laid with mortar-free vertical joints. If necessary, the mortar can also be used in vertical joints, e.g. in long walls stressed by earth pressure(so-called nokkalaasti "blockend mortar"). When applying the mortar on the blocks, the block is placed tightly on the end surface of the previous block and then lowered onto the mortar layer. Mortar spills are removed immediately. The block is tapped into place with a rubber mallet. The joint sealing of untreated walls is done in connection with the masonry work. The block must not be moved on top of the mortar layer in such a way that the adhesion of the block to the mortar suffers. Clean tools with water immediately after use.

PLEASE OBSERVE

The additive used in the frost mortar to reduce the risk of freezing may migrate to the surface of the mortar and masonry unit after masonry work (also when conditions vary). This phenomenon occurs especially in darker colors/shades as a salt mildew on the surface. The disadvantage is only aesthetic and does not impair the structure itself or its structural properties. Salt mildew disappears from the surface with rainfall. If necessary, it can be washed off with a light pressure wash or mechanically brushing.

DISCLAIMER

As there are different conditions at every opportunity, Weber can not be held responsible for anything other than the information provided under the heading "Product Specification". Examples of information and circumstances, which are outside Saint-Gobain (whether specifically stated or not) include storage, construction, processing, interoperability with other products, workmanship and local conditions.

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