

WEBER OL 15 P FROST THIN LAYER MASONRY MORTAR



- The mortar can be used to build block/brick structures without heating structures at temperatures of +10 ... -10 °C
- Low mortar consumption
- Compressive strength class M15
- Meets the requirements of SFS-EN 1996-1 (Eurocode 6)
- Certified EPD environmental product description
- The product is listed in the portal for building products that can be used in Nordic Swan Ecolabelled buildings.

ABOUT THIS PRODUCT

Light-coloured dry mortar for thin-joint masonry in winter conditions.

AREA OF USE

Thin-joint masonry mortar for calcium silicate masonry units, Leca® EasyLex partition blocks and aerated masonry units with a joint thickness of approx. 2 mm in winter conditions.

MIXING

A bag (25 kg) of dry mortar is mixed with approx. 5 litres of clean, cold water. The pre-mix is mixed, for example, with a whisk attached to a drill until the product is even. The mortar is left to stand for about 5 minutes, after which it is mixed lightly again. Exceeding the maximum amount of water raises the lowest operating tempera-

PRODUCT SPECIFICATION

Material consumption	OL 15 P Frost thin layer mortar (kg/block). Kahi masonry units • Partition wall tongue-and-groove 300: 0.10 / 0.15 ¹⁾ • Partition wall tongue-and-groove end block 235, conduit, H=98, beam: 0.10 • Frame tongue-and-groove, end block, beam, conduit, H=98, Solid frame tongue-and-groove: 0.20 • Half a frame tongue-and-groove: 0.10 • Bevelled block, Bevelled end block: 0.23 • Bevelled half block: 0.12 • Bevelled brick: 0.20 • Bevelled half brick: 0.10 • Decibel tongue-and-groove: 0.25 • Decibel tongue-and-groove L=148: 0.13 • Facade 85: 0.10 / 0.15 ¹⁾ • Facade 130: 0.20 ¹⁾ Reinforced. Values are indicative. The exact consumption depends on the thickness of the joint.
Recommended water content	approx. 5 l/25 kg (=0.20 l/kg)
Pot life (Operating time)	approx. 1 hour after adding water
Binder	White cement
Aggregate	Natural sand and limestone, maximum grain size 1 mm
Additive	Additives that improve weather resistance and adhesion, and increase frost resistance
Adhesion strength	Nominal shear resistance $f_{v,0} \geq 0.31$ N/mm ² (SFS-EN 998-2, 5.4.2 a)
Compressive strength	Compressive strength class M 15
Flexural strength 28 days	$f_{ct1} > 0.20$ N/mm ² and $f_{ct2} > 0.13$ N/mm ² (SFS 7001)
Reaction to fire (for exposure 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/(m ² · min ^{0.5})
Thermal conductivity	0.6 W/mK (P=50%) (SFS-EN 1745)
Density of dry hardened mortar 28 days	approx. 1600 kg/m ³ (SFS-EN 1015-10)
Color	Light
Storage conditions	Shelf life approx. 12 months from date of manufacture (unopened packaging, dry space)
Package	25 kg paper sack
GTIN-codes	6415910021337 (25 kg)
Certifications	CE, EPD, FI, Key Flag Symbol

ture and reduces the strength of the mortar. The mixed mortar must be used within about 1 hour of the addition of water.

WORK INSTRUCTIONS

OL 15 P Frost thin layer mortar can be used on calcium silicate masonry units, Leca® EasyLex partition wall blocks and aerated concrete blocks in the temperature range +10 ... -10 °C without heating. In thin-joint masonry, -10 °C is the lowest temperature for the Kahi block / brick

/ Leca® EasyLex partition block / lightweight concrete block, in which case it is still possible to do the masonry work with OL 15 P Frost thin layer mortar. In this case, the open time of the mortar is about 10 minutes, after which the surface of the mortar freezes and the adhesion weakens or is prevented. In this case, the mortar cannot be applied further than the time to attach the masonry unit within 10 minutes of applying the mortar! The blocks must always be dry and absorbent! The mortar must be free of pieces of ice and frozen constituents. When the temperature drops below -10 °C, the blocks / bricks must also be heated. Masonry work can be carried out up to -15 °C when using warm (> +5 °C) blocks/bricks and OL 15 P Frost thin layer mortar. When using mortar in load-bearing structures, the development of the mortar's strength in construction site conditions must be ensured before the structure is loaded with, for example, concrete elements. When the temperature drops below 0 °C, the strength development of the mortar slows down considerably.

In winter conditions the horizontal joint of the first block layer is usually laid with weber ML 10 P Frost mortar to get the right height and completely straight from the beginning. It is allowed to dry before the work continues as a thin-joint masonry. If it is necessary to adapt the height dimensioning to the room and / or door height, the masonry is started or finished with blocks cut to a suitable height. The wall is placed in the right place and straightened in the normal way with mason's twine, string line and a spirit level.

Thin-joint masonry is performed by overlapping bricks or blocks and using a joint thickness of about 2 mm. The mortar is applied with a mortar sled or mortar trowel developed for this purpose. It is not necessary to use mortar in the vertical grooves of the masonry unit. However, mortar is to be used in the vertical joint of cut masonry units. The straightness of the wall is monitored with a

masonry string and a spirit level. Any line faults are carefully corrected by tapping with a rubber mallet or with the help of a mortar joint. The seams of the Kahi beveled blocks are finished in connection with masonry work, for example by cutting with a sharp corner of a trowel and brushing with a rigid brush. Tools should be cleaned with water immediately after use. In addition, more detailed work instructions for Kahi frame, Kahi Facade or Leca® EasyLex partition wall block systems must be observed during installation work.

COATING

The levelling work is carried out with Weber finishing plaster after the joints of the frost thin layer mortar have hardened in accordance with Weber's instructions.

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.