

Heavy clay masonry mortar

(also dry earth filling)

Item No. 05.020, 05.0220

DIN 18946

- Mortar for heavy clay blocks
- Can be used for load-bearing masonry
- For timber-frame masonry



Masonry mortar for heavy clay blocks. The material has no organic additives and is approved for load-bearing brickwork. Because of its good pourability, clay masonry mortar is also used for ceiling infills.

Heavy clay masonry mortar

(also dry earth filling)

Item. No. 05.020, 05.220

Clay masonry mortar - DIN 18946 - LMM 0/4 m - M3 - 2.0

Field of application Masonry mortar for clay blocks and light clay blocks in the application class I or II. Not to be used as plastering mortar or as the base material for the manufacture of plastering mortars. Heavy clay masonry mortar is suitable as a pourable infill as well as a filling material for ceilings and similar building components.

Composition Natural building clay up to 5 mm, sand 0–2 mm. Grain group, oversize grain according to DIN 0/4, <8 mm.

Material parameters Drying shrinkage < 2.5 %. Strength class M3. Compressive strength 3.0 N/mm². Adhesive strength 0.08 N/mm². Gross density class 2.0. Thermal conductivity 1.1 W/m·K. μ -value 5/10. Building material class A1.

Supply form, coverage

Earth-moist 05.020 in 1.0 t Big Bags (yields 500 l masonry mortar)

Earth-moist 05.220 in 0.5 t Big Bags (yields 250 l masonry mortar)

Storage If stored correctly and dry, will keep for an indefinite period. If the material clumps together due to dehydration, this can lead to extra work during preparation; complaints on account of this are excluded. **In winter, earth-moist goods must be stored so they are protected from freezing, otherwise workability during frost is impaired.**

Required material Depending on the block format and wall thickness, the following amount of mortar litre/m² is needed.

Steinformat	11,5 cm	17,5 cm	24,0 cm	36,0 cm
DF	29	-	(uncommon)	(uncommon)
NF	27	-	65	101
2DF	20	-	50	80
3DF	-	29	42	(uncommon)

When using as backfill, it must be taken into account when determining the material requirement that the material is compacted by approx. 15% during installation.

Mortar preparation Add approx. 10% water (earth-moist) or approx. 30–35% (dry) using any rotary drum, turbomixer or pug mill mixer. For smaller amounts use a motor whisk or mix by hand.

Processing Work with the mortar according to the rules of masonry. If lime plaster is planned, scrape out the joints to create a sharp-edged recess of approx. 0.3 mm.

Working time Since no chemical setting process takes place, the material remains workable for several days if kept covered. It can remain in mortar pumps and hoses for the same period.

Colour The colour of the mortar may deviate from the colour of the clay blocks and light clay blocks.

Installing ceiling infills Pour the material between the raft battens or ceiling beams and it normally only needs to be slightly compacted. The dry bulk density and thus the weight per unit area of the ceiling infill depend on the degree of compaction. With a normal installation, the dry bulk density is around 1,600 kg/m³. Take into account the moisture stress from inserted pieces of wood or other adjacent parts of the building. After installation, it is essential to ensure that drying takes place rapidly, e.g. by means of adequate cross-ventilation (all windows and doors kept open 24 hours a day) or drying equipment. **The infill must be absolutely dry before the subsequent installation of wooden flooring, etc.**

For instructions on working with this product see:

