

# Joint Mortar

Pumpable joint and grouting mortar



## Product description

Marlon Joint Mortar is a pre-mixed expanding dry mortar product that is simply mixed with water at the work site. Marlon Joint Mortar comes in the variants 35 MPa, 45 MPa and 60 MPa. These variants also exist in a winter version (see separate data sheet). With its plastic consistency, Marlon Joint Mortar is pumpable and easily mixed in an automatic mixing pump. Marlon Joint Mortar is manufactured from Portland cement, with adhesion-improving, expanding and plasticizing additives. Marlon Joint Mortar contains oven-dried silica sand with a controlled grain curve. The aggregate satisfies the requirements of environmental class E (see DS/EN 206 DK NA:2020). Marlon Joint Mortar is water and frost-resistant in its set state.

## Benefits

- High-strength pumpable expanding mortar
- Well-suited for element joints from 3 mm up to 60 mm
- Contains expanding and adhesion-improving additives
- Just add water

## Applications

Marlon Joint Mortar is used for joining and grouting prefabricated concrete elements with both horizontal and vertical joints. For joining corners, concrete element floors and similar tasks.

## Preparation

To ensure the greatest possible adhesion for old concrete, the surface should be cleaned of any cement slurry, dust, oil, grease and other loose impurities. Water down the cleaned surface so it is uniform, dull and slightly absorbent, to ensure adequate adhesion of the mortar.

## Mixing

Pour Marlon Joint Mortar in a suitable mixing pump, and add approx. 3.5-3.9 l of cold water per 25 kg of dry powder. The mixing time is min. 5 minutes. Do not mix more mortar than can be used within about 20 min. Marlon Element Joint Mortar can also be mixed in a suitable agitator mixer. Manual mixing can be done with a low-speed drill connected to a two-bladed mixer or by hand-mixing. First pour the water in the tub, then add the dry product and mix thoroughly to achieve a good working consistency.

## Pointing of concrete elements

The pre-mixed mortar is pumped directly into the element joint with a suitable pump connection piece in joint thicknesses from 3 mm up to 60 mm wide in the horizontal and/ or vertical joints. The mortar is then pressed into the joint, and the final finish made with the proper tools. Preparation time is approx. 20 min. at +20°C. Lower temperatures prolong, and higher temperatures shorten the opening and hardening times.

## Aftercare

Newly grouted joints must be protected from rapid drying due to draught, high temperatures, sun rays, etc. In hot and dry periods, the joint should be watered down. Castings underwater are naturally protected from drying.

## Limitations

Marlon Joint Mortar should not be used at temperatures under +5°C or over +25°C. The product does not tolerate frost during the curing and cementation period.

## Cleaning

Clean equipment, machinery and tools with water immediately after use. Hardened Joint Mortar can only be removed mechanically.

## Inspection

Marlon Joint Mortar is subject to internal inspection according to Marlon's quality assurance system. Subsequent measuring and mixing at the site of application is not included in quality control.



# Product information

## Manufacturer

Marlon Tørmørtel A/S  
Virkelyst 20  
DK-8740 Brædstrup

## Material type

Cement-based, expanding and pumpable joint mortar.

## Added water

35 MPa 14-15% of the dry powder weight.  
45 MPa 14-15% of the dry powder weight.  
60 MPa 15-16% of the dry powder weight.

## Environmental class

Joint Mortar 45/60 Extra aggressive

## Time open

Approx. 20-25 minutes, depending on the temperature.

## Pouring temperature

-5°C til ca. +5°C.

## Layer thickness

Guideline, approx. 3-60 mm.

## Yield

Approx. 13 l per 25 kg.

## Filler material

Oven-dried and sorted silica sand, d. E.

## Cement type

Portland cement, CEM I 52.5 N (LA).

## Additives

Plasticiser, expanding and stabilising additives.

## Packaging

type 25 kg plastic sacks and big bags.

## Storage

12 months in dry and suited conditions in unopened original packaging.

Technical values	35 MPa	45 MPa	60 MPa	Method
<i>Typical internal values cf. EN 196-1 / EN 1015-11 (40 x 40/160 mm prisms)</i>				
Compressive strength, 1 day	> 10 MPa	> 12 MPa	> 14 MPa	DS/EN 1015-11
Compressive strength, 7 days	> 30 MPa	> 45 MPa	> 54 MPa	DS/EN 1015-11
Compressive strength, 28 days	> 47 MPa	> 53 MPa	> 64 MPa	DS/EN 1015-11
Bending tensile strength, 28 days	> 5.0 MPa	> 7.0 MPa	> 8.0 MPa	DS/EN 1015-11
Expansion of fresh mortar	0,2-0,4 %			
Air content	5%			DS 423.15
Density (wet)	Ca. 2100 kg/m <sup>3</sup>			DS/EN 1015-6
Chromate content	< 2 mg/kg cement			
Chloride content	0.01 %			DS/EN 1015-17

## Information

Item no. 35 MPa	10230
DB no.	1461154
Item no. 45 MPa	10240
Item no. 60 MPa	10250
Pr no.	2172448
Version	07.18 replaces 04.14

## Compressive strength cf. Bulletin no.5

*Performance acc. to DS/EN 206 DK NA:2020 & EN 206-1 Measured on 150 x 300 mm cylinders:*

### Joint Mortar 35

Compression strength, 28 days	$f_{ck} > 40$ MPa
Correction building site uncertainty	$f_{ck} > 35$ MPa

### Joint Mortar 45

Compression strength, 28 days	$f_{ck} > 45$ MPa
Correction building site uncertainty	$f_{ck} > 40$ MPa

### Joint Mortar 60

Compression strength, 28 days	$f_{ck} > 55$ MPa
Correction building site uncertainty	$f_{ck} > 50$ MPa

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