

MASTAR®

ANCHORING MORTAR Special mortars



Update on 09/10/2024

Properties

MASTAR® is an NF-certified hydraulic anchoring mortar according to NF030 - AFNOR CERTIFICATION, www.marque-nf.com, made up of cement PMES, pure and calibrated sand, and suitable additives. Anchoring mortar compliant with standard NF EN 1504-6, it is suitable for exposure classes XC4, XF1, and XA3 defined by concrete standard NF EN 206/CN.

Many tests have validated its performance and led to the development of a product having the following properties :

- controlled expansion,
- compensated shrinkage,
- outstanding initial and final mechanical strength values,
- very high adherence to concretes and steels.

MASTAR® is a product ready to mix with water.

It allows you to obtain, depending on the quantity of water :

- a trowelable mortar (on ceiling, wall and floor),
- a very fluid mortar, without segregation (on floor).

Domains of application

- Anchoring of reinforcements in concrete (deformed rebars),
- Anchoring of threaded rods (anchor bolts),
- Anchoring of columns,
- Caulking of substrates (filling of joints with MASTAR® having a very firm consistency),
- Assembly of precast éléments.

Characteristics

Appearance	Grey Powder
Sand size	0 to 2 mm
Density of the fresh mortar	2,1
Temperature of use	+ 5°C à + 35°C

Use

Depending on the quantity of water added, MASTAR® can be poured, dammed, rammed, or pumped.

Types of substrates :
Concrete, rock, ashlar.

Condition of the substrates :
Clean, free of dust and grease, not frozen, freed of all friable parts and moistened 24h in advance (but eliminate residual after).
Age at least 28 days.

Application :
Do not mix MASTAR® at temperatures < 0°C.

Character standardized at 3.88 L of water per bag : horizontal/wall and vertical/floor orientation.

Mix in a vertical mixer or using an agitator having a slow speed of rotation (500 rpm).
The mixture must be used within the hour that follows (at 20°C).

Once the anchorages have been placed, protect them from drying by spraying with PROTECSOL® (a curing agent).

Do not pour more than 2 bags of 25 kg of pure MASTAR®, or approximately 30 L of mixed mortar, for a single element.

Make MASTAR® concrete (Details below. Contact us for more information).

Performances

Note that, between 0 and 9°C, the early strength values increase more slowly.

Mechanical strength values on 4x4x16 at 20°C in MPa (dosage : 3,88 L of water for a 25 kg bag) :

	24 h	7 days	28 days
Compressive strength	50,4	52,4	74,9
Flexural strength	7,1	10,9	11,6

Laboratory test.

Setting time :

	Beginning	End
Mixed mortar (5,25 L of water per 25 kg bag)	5h42	8h12

Laboratory test.

Case of MASTAR® concrete (mortar-aggregate proportion : 1-1) :
Plastic consistency : 3,88 L of water / 25 kg bag

	24 h	7 days	28 days
Compressive strength	44,6	57,8	76,3
Flexural strength	7,2	10,7	11,2

Laboratory test on 4 x 4 x 16 specimen

For MASTAR® concrete, mix 25 kg of gravel with a particle size of 3/8 or 4/8 + 3.88 L of water per 25 kg bag of MASTAR®.

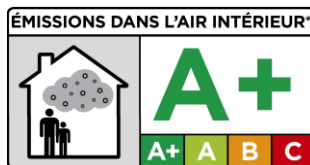
For MASTAR® concrete, it is recommended to contact the sales manager in your region.
Note : the NF certification of MASTAR® was obtained with the ready-to-use mortar, without adding gravel.

Proportion

Firm consistency (ceiling) : 2,2 L of water / 25 kg bag
Plastic consistency (standardized in wall and floor) : 3,88 L of water / 25 kg bag
Very fluid consistency (in floor) : 4,2 to 4,6 L of water / 25 kg bag

Safety

Refer to the safety data sheet.



**Information on the level of emissions of volatile substances into indoor air presenting a risk of toxicity by inhalation, on a class scale ranging from A+ (very low emissions) to C (high emissions).*

Storage

1 year in unopened original packaging, protected from humidity.

Packaging

25 kg bag
Pallet of 1400 kg, i.e. 56 bags

The data sheets are written in French. The English version is provided for informational purposes. In case of conflict, only the French version shall prevail between the parties.

CE marking applies to the European Economic Area (EEA)

	
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MASTAR-RPC-2013 07 01-00001	
EN 1504-6:2006 - Wall category	
MASTAR	
Anchoring product	
Testing of anchoring products by pull-out method : Displacement $\leq 0,6$ mm at load of 75kN Chloride ion content : 0,014 % Fire rating : Euroclasse A1 Dangerous substances comply with 5.3	

The information provided in this document is for guidance only and reflects our current knowledge. We shall not be responsible or liable for any improper or inappropriate use of our products.

Given the wide range of possible uses, our recommendations do not exempt users from carrying out their own tests. Our laboratory and technical department will be happy to provide you with any information you may require.

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