

MasterCrete[®] A 235

Hydraulic Lime (HL 3,5)

Material Description

MasterCrete[®] A 235 is a cement-free hydraulic lime, produced at moderate temperatures (around 900°C) using traditional manufacturing techniques. It is designed for use as a binder in the production of Horasan mortar for the restoration of historical structures, ensuring high compatibility, durability, and long-term performance in conservation applications.
EN 998/2

Areas of Application

MasterCrete[®] A 235 is used as a binder in lime-based mortars for:

- Preparation of traditional lime plasters
- Masonry construction with stone or brick
- Joint pointing and production of *horasan* mortars for restoration work

Features and Benefits

- Cement-free composition
- Fired at low temperatures using traditional techniques
- Compatible with historical textures and suitable for various mortar formulations
- Breathable; high water vapor permeability

Application Method

(A) Surface Preparation

The surfaces of historical masonry to be repaired or plastered must be solid, dust-free, and clean. Remove all contaminants such as oil, grease, and rust that may reduce adhesion. Before application, moisten the wall surface to improve bonding and setting. If there is any water seepage, it must be stopped using a suitable plugging mortar and properly drained. No free water should remain on the surface before applying the mortar.

(B) Mixing

The materials specified in the mortar design should be measured and mixed in the correct proportions. Add MasterCrete[®] A 235 and the amount of water indicated in the horasan mortar formulation, then mix until a homogeneous consistency is achieved.

(C) Processing

Apply the prepared mortar with a trowel in the thickness specified in the project. After the mortar loses its surface water, sprinkle lightly with water and finish with a steel or wooden trowel to obtain the desired surface texture. For

Technical Properties	
Structure of the Material	Hydraulic Lime
Color	Light Beige
Density	0,8 ± 0,08 kg/lt
Compressive Strength (EN 1015-11)	>3,5 N/mm ²
Water Vapour Permeability (EN 1745)	15/35 μ
Capillary Water Absorption (EN 1015-18)	≤ % 2,0 Kg/(m ² .min ^{0,5})
Application Temperature	+5°C + 40°C
Pot Life	55 minutes
Reaction to Fire (EN 13501-1)	AI

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multi-layer applications, moisten the previous layer before applying the next

one. On large exposed surfaces, especially in hot, dry, or windy environments, protect the surface for **24–48 hours** after application using wet burlap or water mist to prevent rapid evaporation.

Consumption

Varies depending on the *horasan mortar* formulation.

Points to Consider

- Apply only when ambient and substrate temperatures are between **+5 °C and +40 °C**.
- During curing, temperature must not fall below the permitted minimum.
- Protect exterior surfaces from sunlight, wind, rain, and frost for **24–48 hours** after application.

Cleaning of Tools

Clean tools and equipment with water immediately after use. Once hardened, **MasterCrete® A 235** can only be removed mechanically.

Packaging

15 kg polyethylene-reinforced kraft bag.

Shelf Life

12 months from production date if properly stored. Once opened, seal tightly and use within one week.

Storage

Store unopened bags in a cool, dry environment between **+5 °C and +35 °C**, protected from frost.

Health and Safety

Take normal precautions when handling chemical products. Wash hands thoroughly with water during breaks and after work. Do not eat, drink, or smoke during application. For detailed safety information, consult the **Safety Data Sheet (SDS)**. Dispose of product and packaging according to local regulations; this is the user's responsibility.

Disclaimer

The information in this technical document is based on current scientific and practical knowledge. **MBT Teknik Yapı Kimyasalları Sanayi ve Ticaret A.Ş.** is responsible only for the quality of the product. The company cannot be held liable for results arising from improper use or applications outside the written recommendations. This technical data sheet remains valid until replaced by a newer version.

Contact

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Eyüp Sultan Mah. Sekmen Cad. HAYY 1000A No:26 K:5 D:8, 34885 Sancaktepe, İstanbul, Türkiye	
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DOP NO: 2108001	
2184-CPR-0491	
MasterCrete® A 235	
TS EN 998-2 Genel Amaçlı Harç (General Purpose Mortar)	
Basınç Dayanımı Compressive Strength	M 2,5 Sınıf/Class
Kuru Yığın Yoğunluğu Dry Bulk Density	2000 kg/m ³
Bağ Dayanımı Bond Strength	> 0,15 N/mm ²
Klorür İçeriği Chloride Content	≤ 0,1%
Su absorpsiyonu Water absorption	≤ % 2,0 kg/(m ² .min.0,5)
Su Buharı Geçirgenliği μ Water vapour permeability	15/35 μ
Isıl iletkenliğinin 1 ayını ortalaması (T=90 °C) Thermal conductivity mean (A / D, dry mat) values (T=90 °C)	1,17 W/(m.K)
Yangına karşı tepki Reaction to fire	A1
Tehlikeli maddeler (Dangerous substances)	Madde 5.4.9'a uygun (Comply with clause 5.4.9)

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