

KÖSTER® EP Mortar

Epoxy based screed, patching and repair mortar (2 component)

- **İTÜ, İstanbul Teknik Üniversitesi** – İnşaat Fakültesi Test Raporu No 761/21.07.2004
- **İTÜ, İstanbul Teknik Üniversitesi** – İnşaat Fakültesi Test raporu No 390b/17.04.2007

Product Description:

Turkish product name > KÖSTER EP Mortar

KÖSTER EP Mortar is a epoxy based, solvent free, 2 component screed, patching and repair mortar.

The material can be used as a floor coating screed. Also partial repair or patching of industrial coatings is possible.

The material is sand colored as standart and can be tinted with suitable pigments.



Applications:

- As a floor coating screed
- As a repair mortar for concrete surfaces like industrial floor, loading areas, dilatation joints etc
- As a bedding or underfilling mortar

Technical Data:

Compressive strength (28 days) EN 196-1 60-70 N / mm²

Tensile strength (28 days) EN 196-1 28,0 N / mm²

Adherence (concrete surface) (14 days) 4,0 N / mm²

Note : The tensile concrete has been in

Density	1,90 g / cm ³
View	sand color grout
Pot life (20 °C – 1 lt)	app. 40 minute
Curing periyod (+ 20 °C ve % 50 moisture)	app. 24 hour
Final mechanical and chemical values reach after 7 days	
Application temperature	min. + 5 °C
Mixing ration (weight)	20:1 – A:B
Color	yellow sand

Characteristics:

- Tough hard, resistant to impact
- High mechanical strength
- High abrasion resistance
- Physiological harmless after curing
- Solvent free
- Shrinkage free curing

Instructions:

Surface preparation:

Surfaces must be clean, sound and dry. Dust, oil, grease, old coatings, laitance, efflorence, rust, curing compounds, waxes, form oil and similar contaminations should be cleaned or removed prior to application.

Surfaces must be prepared by mechanical means e.g. Blastrac shot blasting.

Minimum requirements

- Free of cement laitance, dust, oil, fat and other contaminants
- Open textured, absorbent surface
- Pull of strength min 1,5 N/mm²
- Concrete residual moisture max. 4%

Do not apply on concrete surfaces with rising damp conditions or take appropriate measures before application.

Application of Primer:

Depending on substrate conditions the surface must be prepared non-porous by applying a primer coat with KÖSTER KB-Pox LF-BM or KÖSTER KB-Pox 002, which must be lightly sprinkled with clean, dry quartz sand. Application of KÖSTER EP Mortar must follow while the primer surface is still tacky.

Preparation of Mixture:

Condition material to room temperature. Premix A and B components. Add B component to A component and mix until uniform in color. Transfer mixture to clean container and mix again for at least 1 minute.

Mixing should be done with low speed drill and mixing paddle.

Application of KÖSTER EP Mortar:

Whilst the primer is still tacky, spread KÖSTER EP Mortar evenly and trowel down firmly with a trowel or spatula. Clean the trowel or spatula regularly with KÖSTER Thinner No.1 to prevent mortar sticking to the trowel.

Prior to, during and after the application the temperature of the substrate must be at least +3°C above the current dew point temperature.

Top coat for KÖSTER EP Mortar:

If desired to surface of KÖSTER EP Mortar can be painted after curing. Suitable products are KÖSTER KB-Pox LF-VS and KÖSTER KB-Pox 082. Consumption > 100-300gr/m².

Consumption:

For every mm thickness 2,00 kg / m²

Packaging:

KÖSTER EP Mortar

25 kg SET



Cleaning of Tools:

Clean epoxy with KÖSTER Thinner No.1 while still wet. Cured material can only be removed mechanically.

Notes:

- Do not apply below +8°C or if temperatures below +5°C are expected within 24 hours.
- Do not apply on wet or frozen surfaces.
- Do not apply on dusting or weak surfaces. If in doubt, perform adhesion test.
- Cold temperatures lengthen and hot temperatures shorten pot life and curing time of the mixed material.
- High levels of humidity might prevent proper curing of epoxy adhesive.
- Do not add solvents or thinners.
- Do not apply on concrete which is fresher than 3-4 weeks.

Storage:

Store in dry conditions and at room temperatures, in original containers.


Shelf Life:

12 months.

Health and Safety:

Avoid inhaling the vapours and contact with skin. Wear suitable protective clothing, gloves and eye / face protection. Adequate ventilation of the working area is recommended. After contact with skin, wash immediately with plenty of water and soap. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. When using do not eat, drink, smoke and keep away from sources of

ignition. For additional references to safety-hazard warnings, regulations regarding the transport and waste management please refer to the relevant Material Safety Data Sheet.

 1020	
KÖSTER YAPI KİMYASALLARI İNŞ. SAN. ve TİC. A.Ş. GEBKİM Kimya İhtisas OSB Atatürk Bulvarı No: 6 41455 DİLOVASI / KOCAELİ 16	
1020 - CPR - 040 051990 / DOP NO: 043 EN 1504-3 KÖSTER EP Mortar Epoxy based screed, patching and repair mortar (2 component) Coating application (PI) 3.1/4.4/7.1/7.2 Sınıf R2	
Compressive Strength	$\geq 15 \text{ N/mm}^2$
Chloride Ion Content	$\leq \%0,05$
Bond formed with adhesion	$\geq 0,8 \text{ N/mm}^2$
Limited Shrinkage / Expansion	$\geq 0,8 \text{ N/mm}^2$
Elasticity Module	$\geq 25 \text{ GPa}$
Response to Fire	D-s2, d0
Dangerous Materials	Materials 5.4 appropriate

Legal Notes : This guide has been issued to provide details regarding the use and application of our products, which can be used in very wide and various areas and to demonstrate the general technical details. This information reflects the knowledge and expertise of our company and is of recommendation nature. Especially, the details regarding implementation and final use are provided with good will to cover the storage, handling and application of our products under normal and recommended conditions. Products, application surfaces, areas and application conditions vary in practice. Therefore, it is of utmost importance to make sure you are applying the right product, at the right conditions and places. Since KÖSTER cannot check how its products are used, it does not accept any responsibility regarding the results of the application and does not provide any guarantees. Information provided here or written/verbal information provided by KÖSTER employees should solely be considered as recommendation. KÖSTER employees to visit the application area do not create any supervisor responsibilities on our part. The product users (user) should test the suitability of the product they are planning to use for the respective application and purpose. KÖSTER has the right to modify its products without announcement. Acceptance of all orders is based on our current sale and transportation terms and conditions. Users should always consider the final version of the local Technical Sheet of the respective product, which can be obtained by applying to KÖSTER. Product users should act cautious and observe and protect their own interests and property rights. They are even obliged to act in this manner. This guide only covers KÖSTER products and is not valid for products of other companies. Only the written announcements of our company are valid regarding matters that require technical support provided by us. This technical document is valid until a new version is printed and supersedes all previous versions.