MasterStrength® ER 1206

Multi – Purpose Epoxy Based Adhesive Especially Developed for Bonding Different Types of Dilatation Tapes

Material Description

MasterStrength® ER 1206 epoxy based, two component, especially developed for bonding different types of dilatation tapes, multi – purpose adhesive.

Complies with EN 1504 – 3/ R4 ve EN 1504 – 4

Areas of Application

- Can be used for bonding different types of dilatation tapes (TPO, FPO, EPDM etc.) Before stick PVC based tapes and membranes, please consult with MBT Tech Technical Service teams.
- Used for the repair of concrete floors

Characteristics and Benefits

- Pasty consistency, easy to apply and non – sag properties in over – head applications.
- Perfect adhesion to concrete and steel.
- Can be applied without primer.
- Resists to freeze – thaw cycles.
- Resists to some chemicals
- Resistant to short – term sudden temperature changes.
- Solvent free.

Technical Properties	
Structure of the Material **MasterStrength® ER 1206** Part A **MasterStrength® ER 1206** Part B	 Epoxy Resin Epoxy Hardener
Color	Dark Grey
Compressive Strength 1 day 7 days	 >25 Mpa >50 Mpa
Flexural Strength 1 day 7 days	 >15 Mpa >20 Mpa
Bonding Strength (7 days) To concrete To steel To TPO Based Dilatation Tape To FPO Based Dilatation Tape To EPDM Based Dilatation Tape	 >3,0 Mpa >3,0 Mpa >2,0 Mpa >2,0 Mpa >1,5 Mpa
Application Thickness	Min. 1,5 mm Max. 30 mm
Service Temperature	-15°C + 80°C
Pot Life	40 minutes
Re-use After	24 hours
Fully Cured	7 days

Typical values are obtained from the test results of 4x4x16 mortar prism in 23°C and 50% relative humidity conditions. High temperatures shortens the curing and working time, lower temperatures extends the durations

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Processing Method

(A) Preparation of Substrate

The concrete surfaces must be sound, cleanand dry. It shouldn't be weakened by overtrowelingand lack of curing. The concreteshould be free of frost, curing membranes,waterproofing treatments, oil stains, laitance,friable material and dust. If there is a waterleakage it must be drained or properly plugged.

(B) Mixing

MasterStrength® ER 1206 has two parts in pails,produced according to right mixing ratio. Materialtemperature should be between 15 -25°C beforemixing. Part B should be added into the Part Awithout any remaining material in the pail. Itshould be mixed with using a proper mixer(~300 rpm) for polymer mixing. Mix the parts atleast 3 minutes to have a homogenous mixture.

Mixing Ratio

MasterStrength® ER 1206	Part A	Part B
Quantity	3,00 kg	1,00 kg
Mixed Density	1,65 kg/liter	

(C) Processing

MasterStrength® ER 1206 should be applied tothe prepared surface by using a steel spatula orsteel trowel. Application thickness should be between 1,5 - 30 mm.

Consumption

1.65 kg/m^2 for obtaining 1 mm thick layer.

Point to Consider

- During the application the substrate and ambient temperature should be between 5°C - 30°C.
- The packages should be conditioned at +20°C - +35°C to maximize the workability of the material in cold weather.
- Resinous materials' pot life and curing times vary depending on the relative humidity, substrate and ambient temperature. Reaction gets slow in low temperatures and it causes to extension on pot life and working time. On the other hand high temperatures speed up the reaction, which results to short pot life and working time. For full curing of material, both the substrate and ambient temperature shouldn't be under allowed application temperature.
- **MasterStrength® ER 1206** is provided in ready to mix pails. Do not add any solvent etc. İnto the mixture during the application.
- Mixing should be made with proper mixers and do not allow mixing by hand.

Cleaning of Tools

After the application all tools should be cleaned with a proper detergent or solvent such as thinner. **MasterStrength® ER 1206** can be cleaned with only mechanical abrasion after hardening.

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Packaging

MasterStrength® ER 1206 is sold in sets of 4 in boxes
MasterStrength® ER 1206 Part A: 3,00 kg Plastic Bucket
MasterStrength® ER 1206 Part B: 1,00 kg Plastic Bucket

Shelf Life

12 months after the production date under appropriate storing conditions.Opened packages have to be stored by tightly sealing the bag/cover and must be used in one week.

Storage

It should be stored in its unopened original package, in a cool and dry environment, protected from frost. In short-term storage, maximum 3 pallets should be placed on top of each other and shipment should be made with a first-in, first-out system. In long-term storage, pallets should not be placed on top of each other.

Health and Safety

It is dangerous to approach the application sites. During the application, a protective apparel, protective gloves, goggles and masks which comply with the Occupational Health and Safety Rules should be used. Due to the irritation effect of the uncured materials, the mixture should not come into contact with skin and eyes; in case of a contact, the affected area should be washed with plenty of water and soap; in case of swallowing, a physician should be consulted immediately. No food or beverages should be brought to the application area. The product should be stored and kept out of reach of children. For detailed information please consult the Material Safety Data Sheet.

Disclaimer

The technical information given in this publication is based on the present state of our best scientific and practical knowledge. **MBT Teknik Yapı Kimyasalları Sanayi ve Ticaret A.Ş.** is only responsible for the quality of the product **MBT Teknik Yapı Kimyasalları Sanayi ve Ticaret A.Ş.** is not responsible for results that may occur because the product is used other than advised and/or out of instructions regarding the place and the method of use. This technical form is valid only till a new version is implemented and nullifies the old ones.

Contact

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DOP NO: 2103010

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MasterStrength®ER 1206

TS EN 1504-3
Yapısal olan ve yapısal olmayan tamir ***(Structural and Non-Structural Repair Mortar)***
Structural Repair Mortar (Yapısal olan Tamir)
Sınıf R4 *(Class R4)* **3.1 Elle harç uygulaması** *(Concrete restoration by applying mortar by hand)*
3.2 Yeniden beton dökülmesi *(Concrete restoration by recasting with concrete)*

Basınç Dayanımı (Compressive Strength)	≥ 45 N/mm²
Klorür içeriği (Chloride ion Content)	≤ % 0,05
Adezyon Dayanımı (Adhesive Bond)	≥ 2 N/mm²
Kontrollü Büzülme / Genleşme (Restrained shrinkage/expansion)	≥ 2 N/mm²
Yangına tepki (Reaction to fire)	D-s2,d0
Tehlikeli maddeler (Dangerous substances)	Madde 5.4'e uygun (Comply with clause 5.4)

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2184-CPR-0493

MasterStrength® ER 1206

TS EN 1504-4:2005
Bölüm 4: Yapısal Bağ
Part 4: Structural Bonding
Tamir yöntemi 4.4: Bağlanmış harç veya beton
(Repair method 4.4: Bonded mortar or concrete)

Islak Alt Tabaka Kayma Dayanımı (Slant Shear Strength)	≥ 6,0 N/mm^2
Adezyon : Sertleşmiş beton ile sertleşmiş beton arasında (Adhesion concrete to concrete : Hardened concrete to hardened concrete)	Beton kopar (Deformation should be from concrete)
Adezyon : Taze beton ile sertleşmiş beton arasında (Adhesion concrete to concrete : Wet concrete to hardened concrete)	Beton kopar (Deformation should be from concrete)
Dayanıklılık (Durability)	Uygun (Pass)
İşlenebilirlik Süresi (Workable life)	40 dakika / minute (23°C)
Elastisite Modülü (Elastic Modulus)	≥ 2000 N/mm^2
Basınç Dayanımı (Compressive Strength)	≥ 30 N/mm^2
Kesme Dayanımı (Shear Strength)	≥ 6,0 N/mm^2
Camsıya geçiş sıcaklığı (Glass transition temperatures)	≥ 40°C
Isıl genleşme katsayısı (Coefficient of thermal expansion)	≤ 100 x 10^-6/ °C
Büzülme / Genleşme (Linear Shrinkage)	≤ % 0,1
Reaction to fire (Yangına Tepki)	D-s2,d0
Tehlikeli maddeler (Dangerous substances)	Madde 5.4'e uygun (Comply with clause 5.4)