



MEGAPRO Y117

Cement and polymer emulsion based adhesive mortar with high adhesion strength, very high elasticity, reduced slippage, quick set, elongated workable time, two component, resistance against temperature change, water and frost for large size coating materials such as ceramic, granite ceramic, marble, natural stone and porcelain.

SKU: 054.Y117

PRODUCT DESCRIPTION

Product Advantages

- Hardens, rapidly.
- Ideal for the adhesion of large size and thick coating materials.
- Poses very high elasticity and bonding strength thanks to the polymer additive.
 - Resistant to temperature changes ,water and frost.
- Poses a longer workable time thanks to the elongated retention time thereof.
 - Prepared and applied easily.
- Does not cause slippage in the case of vertical applications.

Usage Areas

- MegaPro Y117; is used for the adhesion on such sound, dust free vertical and horizontal cement

based plaster, trowel coating and prime coated concrete surfaces and dry wall systems coating materials with low water absorbance as ceramic tiles in indoors and outdoors spaces. The product is preferable especially for renovation applications, for such surfaces, which are required to be rapidly opened for pedestrian traffic and for such floors, which are intended to be exposed to busy pedestrian traffic. The product should be preferred to such environments, which are likely to be exposed to frost after the application, due to its rapid hardening nature. It is used safely in bonding coating materials such as large dimension floor and wall tiles, natural stones, porcelain ceramic by absorbing heat changes in environments and surfaces requiring high elasticity and strength, vibrating surface movements, form changes such as expansion and contraction, thanks to its high elasticity. The product is suitable for use in such spaces characterized by sudden changes in temperature such as cold storage rooms, quick freezing facilities, exteriors of furnaces and floor heated systems. The product is also used on the floors and the walls of such spaces characterized by vibration as metro stations, terminals and coach stations. The product is also used for ceramic tile adhesion applications on old ceramic tile coated surfaces.

Technical Informations

- **Performance** Early tensile adhesion strength: $\geq 0,5 \text{ N/mm}^2$ (EN 12004-2:2017, 8.3)
 - Initial tensile adhesion strength: $\geq 1 \text{ N/mm}^2$ (EN 12004-2:2017, 8.3)
 - Tensile adhesion strength after water immersion: $\geq 1 \text{ N/mm}^2$ (EN 12004-2:2017, 8.3)
 - Tensile adhesion strength after thermal aging: $\geq 1 \text{ N/mm}^2$ (EN 12004-2:2017, 8.3)
 - Tensile adhesion strength after freezing - thawing cycle: $\geq 1 \text{ N/mm}^2$ (EN 12004-2:2017, 8.3)
 - Tensile adhesion strength after retention time (after 30 minutes): $\geq 0,5 \text{ N/mm}^2$ (EN 12004-2:2017, 8.1)
 - Transverse deformation: $S_2 \geq 5 \text{ mm}$ (EN 12004-2:2017, 8.6)
 - Slippage: $\leq 0,5 \text{ mm}$ (EN 12004-2:2017, 8.2)
 - Reaction to fire: A2 (TS EN 13501 - 1)

The foregoing values represent the results of the laboratory tests conducted at $23 \pm 2^\circ\text{C}$ temperature and $50\% \pm 5$ relative humidity conditions. The values provided as per the table may vary depending on the surface and ambient conditions.

Application Limits Useful time for prepared mortar - Pot life: Maximum 1 hour.
Workable time: Maximum 30 minutes.
Smoothing time: 20 minutes

Required standby time for joint application: 4 - 6 hours
Period necessary for opening the ground for traffic: 8 hours

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- Technical Specifications**
- a. Chemical Structure: Cement based and polymer emulsion additive ceramic tile adhesive mortar
 - b. Dry Density: $0,85 \pm 0,05 \text{ gr/cm}^3$
 - c. Mortar Density: $1,30 \pm 0,05 \text{ gr/cm}^3$
 - d. Colour: Grey
 - e. Temperature Resistance: Between -15°C and $+80^{\circ}\text{C}$

Mixing Ratio 20 kg powder component should be mixed with the 10 kg liquid component.

Mixing Equipment

- Low speed electrical mixer (400 cycles/ min.)
- Special tip stirring equipment

Mixing Period

Mixing with a low speed mixer should be continuously done by slowly adding the powder component into the liquid component. The components should be mixed until it gets homogenous without any dry dust or lump left. The mortar should, then, be stirred once again for 1 to 2 minutes after being had settled for 5 to 10 minutes following preparation.

Application Equipment

- Steel notched trowel determined with respect to the size of ceramic tile and the structure of the surface
- Rubber tip ceramic hammer

Equipment Cleaning

The equipment used should be cleaned with water following the application before the mortar dries.

Consumption The consumption amount varies depending on the condition of the application surface and the coating material.

Ceramic Tile Size	Notch Size	Consumption
10x10 cm to 10x15 cm or smaller	6x6x6	Single side adhesion: 3,0 - 3,5 kg/m ²
		Double side adhesion: 4,5 - 5 kg/m ²
10x15 to 25x40 cm 10x15 to 33x33 cm	8x8x8	Single side adhesion: 3,5 - 4 kg/m ²
		Double side adhesion: 5,5 - 6,5 kg/m ²
25x40 to 33x33 cm or larger	10x10x10	Single side adhesion: 4,5 - 5,0 kg/m ²
		Double side adhesion: 6 - 6,5 kg/m ²

Packaging MegaPro Y117; is delivered as a set of powder component in net 20 kg craft bags and liquid component in net 10 kg plastic drum.

Reference Standardsa. Certifications/ Standards

- TS EN 12004-1 2017

b. Ministry of Public Works and Settlement Item No.

- Ministry of Public Works and Settlement Item No.: 10.300.2205

Quality Certificates

- Conformant to TS EN 12004-1 2017 / C2FTES2
- CE

Application Procedure

▪ Application Surfaces

Interior and Exterior Wall;

- Cement based plaster
- Concrete (MegaFilm A201 or MegaFilm BB A204 primer applied)
- Old ceramic tile coating (MegaFilm Visko A203 primer applied)

Interior and Exterior Floor;

- Cement based trowel coating
- Concrete (MegaFilm A201 or MegaFilm BB A204 primer applied)
- Old ceramic tile coating (MegaFilm Visko A203 primer applied)

Surface Preparation:

- The application surface should be dry, clean, sound and dust free, and should have been cleansed of oil, dirt or any materials that may prevent adhesion, and any such materials as mortar and cement residues should be scraped from the application

surface.

- The dusty surface on the reverse side of the ceramic tile should be moisturized and cleaned.
 - The surface defects, which are deeper than 1 cm, should be repaired with MegaTamir İ T101 or MegaTamir K T102 6-8 hours in advance of the adhesive mortar application. In the cases, where structural repair mortar should be used; MegaTamir İ Yapısal T103 or MegaTamir K Yapısal T104 should be preferred.
 - Upon the completion of the surface cleaning, MegaFilm A201 primer should be applied in a single coat with a brush and be left to dry for 1 to 2 hours in order to enhance the bonding strength and stabilize the surface absorption.
- Exposed concrete surfaces should be applied MegaFilm BB A204 exposed concrete primer in single coat and be left to dry for minimum 3 hours prior to the application of the adhesive mortar in order to enhance the adhesion strength.
- In the case of ceramic tile coating application on old/ former ceramic tile coating, the surface should, prior to the application, be prepared by applying MegaFilm Visko A203 and to dry for minimum 3 hours.
- In the case of wet space applications, waterproofing should be ensured with Megaizo Lastik 10 S103 on the surface, which should have been coated with the recommended primer, prior to ceramic flooring.

Application Methods:

- MegaPro Y117 should be applied to the surface with the notched trowel determined with respect to the size of the ceramic tile and the structural condition of the surface.
- Due care must be taken to ensure that MegaPro Y117 does not form a film layer on the surface during the application. In the cases of formation of film layer on the surface, the adhesive should be scraped off the surface and should never be used again.
 - The coating material should be placed on the surface and be ensured to settle thereon with a rubber tip hammer.
 - The application thickness of the product should not exceed 10 mm.
 - In the application of ceramic and coating materials, leveling should be done by using the Gauge Wedge K908 in order to easily and quickly adjust the height of the first horizontal row from the ground.
- Tile Levelling System (STS) – K904/ K911/ K905/K906 should be used to remove the level difference in large-size ceramic applications.
 - Joint filling may be initiated minimum 4 – 6 hours after the adhesion.
 - In the case of the applications with ceramic tiles with dimensions in excess of

33x33 cm in indoors and outdoors spaces; double side adhesion should be applied

- Minimum 3 mm joint gaps should be left between 30x60 cm and larger coating materials (Coating area ≥ 1800 cm²).
- In outdoor vertical applications, depending on the type of coating material, TS EN 120004-1 2017 ceramics up to 60x60 cm (Coating area ≤ 3600 cm²) up to 9 m high, ceramic tiles bigger than 80x80 cm size it enables that the ceramics (Covering area ≥ 6400 cm²) can be safely adhered up to a height of 3 m.
- Minimum 10 mm expansion joint gap should be left every 8 meters and filled with Megaİzo PU Mastik HM S492.
- Recommended pin rake (notch) sizes are as follows.

Application Recommendations :

- The product should, once mixed, be used before the expiration of its pot life. Any mortar, the pot life of which has expired, should not be used during the application.
- Any such foreign substance as lime, cement or plaster should not be added to the mortar prepared.
- The product should not be applied on unsound surfaces. The soundness and the load bearing capacity of old surfaces should be checked prior to adhesion.
- The surface should be preserved from air currents and water contact during and after the application.
- Due care should be taken to ensure that the material is not exposed to direct sunlight in hot weather conditions.
- The product should not be applied on extremely windy weather conditions or on hot surfaces, which are exposed to direct sunlight; and in the cases, where application is imperative under such conditions, the environment and the surface should be prepared for application in advance.
- The product should not be applied in rainy weather conditions, and the application surface should be preserved from rain for a period of 24 hours.
- Refer to our technical support hotline for recommendation on different surface applications. (PHONE: +90 444 4 595)

Surface and Ambient Temperature

The surface and ambient temperature should be between +5°C and +35°C whilst at application.

ADDITIONAL INFORMATION

