MasterJoint™ WP 306 (Yapfleks® 306)

Cement and Acrylic Based Dual Part Fully-Flexible Waterprofing Material

Material Description

MasterJoint™ WP 306 is a cement and acrylic based dual part waterproofing material used on concrete, curtain, and cement based plasters, and applied from the inside or outside against leaking and surface waters.

Complies with the EN 1504-2
Complies with the EN 14891

Type: CM= Cementitious liquid-applied water impermeable products;
Class: O2P= Resistant to contact with chlorinated water, with crack bridging ability at low temperature.

Areas of Application

- Indoor and outdoor areas for vertical and horizontal applications from the direction of coming water.
- In insulation of foundations. In supporting walls.
- Grounds that are expected to be deflected. In terraces (on condition of protecting the top).
- In wet volumes like WC, bathroom, kitchen, and balcony.
- In olympic swimming pools.
- In water tanks (on condition of protecting the top).
- In facilities like spa and hamams. In insulation of flower gardens.

Characteristics and Benefits

- Easy to prepare and apply
- Applied by brush or spraying machine. Long working time
- **MasterJoint™ WP 306** covers cracks up to 0.92 mm according to TS EN 14891 when applied 2 mm.
- Ability to bridge shrinkage cracks with its highly flexible structure
- Forms a jointless, spliceless, permanent, moisture and waterproofing coating
- Resistant to chemicals and salt solutions in soil. Water vapor permeable
- High durability
- Resistant to freezing-thawing cycle

Technical Properties		
Structure of the Material **MasterJoint™ WP 306** Part A **MasterJoint™ WP 306** Part B	Mineral sealant, polmer modified admixtures and special cement Copolymer acrylic dispersion	
Color	Greenish Gray	
Adhesion Strength	≥ 0,8 N/mm^2	KR
Water Impermeability (EN 14891-A.7)	≤20 gr	
Capillary Water Absorption (EN 1062-3)	w<0,1 kg/m^2.√h	
Application Ground Temperature	+5^{0}C +25^{0}C	
Service Temperature	-20^{0}C +80^{0}C	
Maturity Period	3-5 minutes	
Usage Period	2 hours	
Period to Wait Before Opening to Service Mechanic Strength	2 days 7 days	
Period to Wait Before Coating Its Top By Plaster By Ceramic	 3 days 3 days	

The above values are based on +23°C and 50% relative humidity; higher temperatures shorten the time, lower temperatures lengthen it.

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- Can be used in areas affected by movement and vibration
- Forms a perfect water impermeable, nondeformable layer under grouts and ceramics with high adhesion performance and flexible structure
- Can be safely used in drinking water tanks (has a test report).

Chemical Analysis Laboratory and consiste with BS 6920 Standard Analysis Report.

Processing Method

(A) Preparation of Substrate

Cement based surfaces of the structures contacting with water have to be strong, dry, bearing, dustless, clean, and also in balance. Surface must be cleaned off all kinds of oil, grease, rust, and paraffin traces that can weaken adherence and no loose particles must be present. Iron and wooden wedges on the surface have to be removed, and active water leakages and spaces must be filled by **MasterJoint™ 591** or **MasterCrete™ S88 C** if present. Corners and sides must be beveled with minimum 4 cm radius bevels. Application surface has to be wetted well and then waited until it becomes wet/dry. If the coating material losses its water rapidly and turns dull, this means the surface is not wetted well or dried rapidly. In these instances where the weather is hot or materials are exposed to wind, mixture water can be increased for 10% of the part B just for the first layer.

(B) Mixing

Liquid part B (**MasterJoint™ WP 306**) is poured into a clean mixing container and powder part A (**MasterJoint™ WP 306**) is slowly added to the container and mixed with a 400-600 RPM mixer at least for 3-5 minutes until a homogenous and uniform mixture is obtained. After waiting for 3-5 minutes, the mixture is mixed again for approximately 30 seconds, and becomes ready to use.

Mixing Ratio

MasterJoint™ WP 306	Part A	Part B
Mixture Water	20 kg	10 kg
Density of Mixture	1,55 kg/liter	

(C) Processing

Prepared **MasterJoint™ WP 306** mixture is applied by Thoro brush or trowel as two or three layers. Brush application direction in each layer must be perpendicular to each other. Waiting period between each layer changes depending on environmental conditions. Reinforcement of **MasterJoint™ WP 306** with waterproofing net: First layer is applied by Thoro brush. After it dries, net is laid down, and second and third layers are applied on it.

Consumption

First Layer: 1.20 kg/m^2 mixture
Second Layer: 1.00 kg/m^2 mixture
Third Layer: 1.00 kg/m^2 mixture

Point to Consider

- If surface temperature is below +5ºC or over +25ºC in **MasterJoint™ WP 306** application, then suitable temperatures must be waited for. Also application should not be made in very hot, rainy or windy weathers.
- Working and reaction time of cement and acrylic based systems are affected by environment and ground temperature, and relative humidity in the air. Low temperatures slow down the chemical reaction, and increase working period, coating time, and work time. Also coverage decreases because viscosity increases. High temperatures accelerate the chemical reaction and times stated above are reduced depending on this. For the material to complete its curing, environment and ground temperatures must not fall down below the minimum allowed value. Wet film thickness must not pass 2 mm in single layer. The application has to be at least two layers.

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- In outer surface applications, the surface has to be protected from sun, wind, frost or rain during the first 24 hours.
- **MasterJoint™ WP 306** applied in +23°C gains mechanic strength after 2 days, becomes impermeable to water after 7 days, and gains final strength after 14 days. Higher temperatures decrease the time, lower temperatures increase the time.
- The surfaces that will be walked on have to be coated by **MasterCast® 125** screed. **MBT Tech** adhesives are recommended for pavement.

Cleaning of Tools

All the tools and equipments must be cleaned by water after the application. After **MasterJoint™ WP 306** is hardened, it can only be removed from the surface mechanically.

Packaging

MasterJoint™ WP 306 is available in a 30 kg set.
Part A: 20 kg polyethylene reinforced kraft bag
Part B: 10 kg tin

Shelf Life

12 months after the production date under appropriate storing conditions. Part B of **MasterJoint™ WP 306** freezes below 0°C. Opened packages have to be stored by tightly sealing the bag/cover and must be used in one week.

Storage

Must be stored in unopened original packing, and in cool and dry environment protected from freezing. In short-term storing, maximum 3 palettes can be stowed on top of each other and delivery has to be according to first in first out system. In long-term storing, the palettes must not be stowed 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.

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DOP NO 2402001

TS EN 14891 CM02P

MasterJoint™ WP 306 (Yapfleks® 306)
Yapıştırıcılarla tutturulmuş seramik karoların altında kullanım için sıvı halde uygulanan su geçirmez ürünler
(Liquid-applied water impermeable products for use beneath ceramic tiling bonded with adhesives)
CM02P: Sıvı halde uygulanan, çok düşük sıcaklıkta (-20 °C) çatlak köprüleme özelliği geliştirilmiş ve klorlu su ile temasa dirençli, polimer modifiye su geçirimsizlik ürünü
Polymer modified waterproofing product applied in liquid form, with improved crack bridging properties at very

Başlangıç çekme yapışma mukavemeti (Initial tensile adhesion strength)	≥ 0,5 N / mm²
Suya daldırıldıktan sonra çekme yapışma mukavemeti (Tensile adhesion strength after water contact)	≥ 0,5 N / mm²
Isıyla yaşlandırıldıktan sonra çekme yapışma mukavemeti (Tensile adhesion strength after heat ageing)	≥ 0,5 N / mm²
Donma-çözünme çevrimlerinden sonra çekme yapışma mukavemeti (Tensile adhesion strength after freeze-thaw cycles)	≥ 0,5 N / mm²
Kireçli su ile temas ettikten sonra çekme yapışma mukavemeti (Tensile adhesion strength after contact with lime water)	≥ 0,5 N / mm²
Su Geçirimsizlik (Waterproofing)	≤ 20 g Penetrasyon Yok (No penetration)
Çatlak köprüleme yeteneği normal şartlarda (Crack bridging ability under standard conditions)	≥ 0,75 mm
Klorlu su ile temas ettikten sonra çekme yapışma mukavemeti (Tensile adhesion strength after contact with chlorinated water)	≥ 0,5 N / mm²
Çatlak Köprüleme (Düşük Sıcaklıkta -5°C) (Crack bridging ability at low temperature(-5°C))	≥ 0,75 mm
Çatlak Köprüleme (Düşük Sıcaklıkta '-20°C') (Crack bridging ability at low temperature(-20°C))	≥ 0,75 mm

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DOP NO 2101001

2184-CPR-0450

MasterJoint™ WP 306 (Yapfleks® 306)

TS EN 1504-2
Nem kontrolü 2.2, Artan direnç 8.2
2.2 Moisture control, 8.2 Increasing resistivity

Beton için yüzey koruma sistemleri
Surface protection systems for concrete

Kaplama uygulaması
Coating application

Kapiler Su Emme ve Su Geçirgenliği (Capillary Absorption and Permeability to water)	w<0,1 kg /m².√h
Su Buharı Geçirgenliği (Permeability of water vapour)	Sınıf 1 (Class 1)
Çekip koparma deneyi yoluyla yapışma dayanımı (Adhesion strength by pull-off test)	Rijit Sistemler (trafik yükü ile) > 2,0 N/mm² Rigid Systems With trafficking >2,0 N/mm²
Yangına karşı tepki (Reaction to fire)	C-s1,d0
Tehlikeli maddeler (Dangerous substances)	Madde 5.3 'e uygun (Comply with clause 5.3)