# MasterJoint® WP 307 (Yapfleks® 307)

Cement and Acrylic Based Dual Part Semi-Flexible Waterprofing Material

## Material Description

MasterJoint® WP 307 is a cement and acrylic based dual part waterproofing material used on concrete and cement based plasters, and applied from the inside or outside against leaking and surface waters.

Complies with the EN 1504-2

## Areas of Application

- Indoor and outdoor areas for vertical and horizontal applications
- In insulation of foundations. In supporting walls.
- In terraces (on condition of protecting the top)
- In wet volumes like WC, bathroom, kitchen, and balcony
- In semi-olympic swimming pools
- In water tanks
- In facilities like spa and hamams. In insulation of flower gardens

## Characteristics and Benefits

- Semi-flexible and water impermeable. Easy to prepare and apply.
- Applied by brush or spraying machine. Long working time.
- Forms a water impermeable layer under grouts and ceramics with high adhesion performance and half-flexible structure.
- Forms a jointless, seamless, permanent, water impermeable coating.
- Resistant to chemicals and salt solutions in soil. Water vapor permeable.
- Resistant to freezing-thawing cycle.

## 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

| Technical Properties | | |
|---|---|---|
| Structure of the Material<br>MasterJoint® WP 307 Part A<br>MasterJoint® WP 307 Part B | Mineral sealant, polmer modified admixtures and special cement<br>Copolymer acrylic dispersion | |
| Color | Gray | |
| Adhesion Strength | ≥ 0,8 N/mm$^2$ | KR |
| 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<br>7 days | |
| Period to Wait Before Coating Its<br>Top By Plaster<br>By Ceramic | <br>3 days<br>3 days | |

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

# MasterJoint® WP 307 (Yapfleks® 307)

Cement and Acrylic Based Dual Part Semi-Flexible Waterprofing Material

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 307) is poured into a clean mixing container and powder part A (MasterJoint® WP 307) 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 307 | Part A | Part B |
|---|---|---|
| Mixture Water | 20 kg | 5 kg |
| Density of Mixture | 1,85 kg/liter | |

## (C) Processing

Prepared MasterJoint® WP 307 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.

## Consumption

First Layer: 1.40 kg/m$^2$ mixture
Second Layer: 1.20 kg/m$^2$ mixture
Third Layer: 1.00 kg/m$^2$ mixture

## Point to Consider

- If surface temperature is below +5°C or over +25°C in MasterJoint® WP 307 application, then suitable temperatures must be waited for. Also application should not be made in very hot, rainy or windy weathers.
- In outer surface applications, the surface has to be protected from sun, wind, frost or rain during the first 24 hours.
- MasterJoint® WP 307 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.
- 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.
- 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 307 is hardened, it can only be removed from the surface mechanically.

## Packaging

MasterJoint® WP 307 is available in a 25 kg set.
Part A: 20 kg polyethylene reinforced kraft bag
Part B: 5 kg tin

# MasterJoint® WP 307 (Yapfleks® 307)

Cement and Acrylic Based Dual Part Semi-Flexible Waterprofing Material

## Shelf Life

12 months after the production date under appropriate storing conditions. Part B of MasterJoint® WP 307 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.

## Contact

MBT Teknik Yapı Kimyasalları San. ve Tic. A.Ş.
Eyüp Sultan Mah. Sekmen Cad. Hayy 1000A No:26/8
Sancaktepe, İstanbul
Tel: 0216 561 35 45 www.mbt-tech.tr

CE

| |
|---|
| 2184 |
| MBT TEKNİK YAPI KİMYASALLARI SAN. VE TİC. A.Ş. |
| Eyüp Sultan Mah. Sekmen Cad. HAYY 1000A No:26 K:5 D:8, 34885 Sancaktepe, İstanbul, Türkiye |
| 25 |
| DOP NO 2102002 |
| 2184-CPR-0450 |
| MasterJoint® WP 307 (Yapfleks® 307) |
| TS EN 1504-2:2004<br>Nem kontrolü 2.2, Artan direnç 8.2<br>2.2 Moisture control, 8.2 Increasing resistivity |
| Beton için yüzey koruma sistemleri<br>Surface protection systems for concrete |
| Kaplama uygulaması<br>Coating application |

| | |
|---|---|
| Kapiler Su Emme ve Su Geçirgenliği<br>(Capillary Absorption and Permeability to water) | w<0,1 kg /m².√h |
| Su Buharı Geçirgenliği<br>(Permeability of water vapour) | Sınıf I<br>(Class I) |
| Çekip koparma deneyi yoluyla yapışma dayanımı<br>(Adhesion strength by pull-off test) | Çatlak kapatma veya esnek sistemler<br>(trafik yükü olmadan) ≥ 0,8 N/mm²<br>Crack-bridging or/flexible systems<br>(without traffic load) |
| Yangına karşı tepki<br>(Reaction to fire) | B-s1 ,d0 |
| Tehlikeli maddeler<br>(Dangerous substances) | Madde 5.3 'e uygun<br>(Comply with clause 5.3) |