# FLX 390 TOP COAT

## Aliphatic Polyurethane elastic membrane (1K)

## DESCRIPTION

**FLX 390 TOP COAT** is a pigmented, color and UV-stable, highly permanent elastic, cold applied and cold curing, one component aliphatic polyurethane coating, used as a top-coat for protection over exposed, polyurethane waterproofing coatings. Cures by reaction with ground and air moisture over a unique moisture triggered chemical reaction. Protects very efficiently, especially if a dark final color is desired.

## USES

- Waterproofing of Roofs
- Waterproofing of balconies, terraces and verandas
- Waterproofing of pedestrian decks and walkways
- Protection of polyurethane foam insulation

Used over the **FLX 390 PU** on surfaces, with domestic pedestrian traffic (e.g. Roofs, Terraces, Residential Walkways) that require a glossy, color-stable and non-chalking finish.

## ADVANTAGES

- Simple application (roller or airless spray).
- One component.
- Increases the abrasion and wear resistance of the waterproofing membrane underneath.
- UV and Color stable.
- Gives a glossy and easy-to-clean surface.
- Resistant to water, heat and frost.
- Does not show the chalking effect of aromatic polyurethane coatings.
- Maintains its mechanical properties over a temperature span of -40°C to +90°C.
- The waterproofed surface can be walked on (domestic pedestrian traffic).

## APPLICATION

Careful surface preparation is essential for optimum finish and durability. The surface needs to be clean, dry and sound, free of any contamination, which may harmfully affect the adhesion of the membrane. Maximum moisture content should not exceed 5%. Substrate compressive strength should be at least 25MPa, cohesive bond strength at least 1.5MPa. New concrete structures need to dry for at least 28 days. Old, loose coatings, dirt, fats, oils, organic substances and dust need to be removed by a grinding machine. Possible surface irregularities need to be smoothened. Any loose surface pieces and grinding dust need to be thoroughly removed. WARNING: Do not wash surface with water! Waterproofing Membrane. Stir **FLX 390 TOP COAT** well before using. Apply the **FLX 390 TOP COAT** by roller or airless spray in one or two layers. Allow 3-6 hours (not more than 36 hours) to cure, between the two layers. For best results, the temperature during application and cure should be between 5°C and 35°C. Low temperatures retard cure while high temperature speed up curing. High humidity may affect the final finish. WARNING: The **FLX 390 TOP COAT** is slippery when wet. In order to avoid slipperiness during wet days, sprinkle suitable aggregates onto the still wet coating to create an anti-slip surface. WARNING: If on the surface where the FLX 390 system is applied, there are areas with ponding water, they should be cleaned on regular basis to avoid biological and microbial attack.

## CONSUMPTION

120 - 150 gr/m² in one or two layers. This coverage is based on practical application by roller onto a smooth surface in optimum conditions. Factors like surface porosity, temperature, humidity, application method and finish required can alter consumption.

## PACKAGING - STORAGE

**FLX 390 TOP COAT** is supplied in 20 kg, 10 kg and 5 kg metal pails. Pails should be stored in dry and cool rooms for up to 9 months. Protect the material against moisture and direct sunlight. Storage temperature: 5°-30°C. Products should remain in their original, unopened containers, bearing the manufacturers name, product designation, batch number and application precaution labels.

## PRECAUTIONS

**FLX 390 TOP COAT** contains isocyanates. See information supplied by the manufacturer. Please study the Safety Data sheet. PROFESSIONAL USE ONLY

## TECHNICAL DATA

| TECHNICAL CHARACTERISTICS | UNITS | STANDARD |
|---|---|---|
| Composition | Pigmented Aliphatic moisture triggered Polyurethane polymer. Solvent based | |
| Resistance to Water Pressure | No Leak | DIN EN 1928 |
| Elongation at break | 289 % | DIN EN ISO 527 |
| Tensile strength | 3,72 N/mm$^2$ | DIN EN ISO 527 |
| Elongation at break after 2000h of accelerated aging (DIN EN ISO 4892-3, 400 MJ/m$^2$) | 372 % | DIN EN ISO 527 |
| Tensile strength after 2000h of accelerated aging (DIN EN ISO 4892-3, 400 MJ/m$^2$) | 2,68 N/mm$^2$ | DIN EN ISO 527 |
| Gloss retention after 2000h of accelerated aging (DIN EN ISO 4892-3, 400 MJ/m$^2$) | Good | DIN 67530 |
| Surface chalking after 2000h of accelerated aging (DIN EN ISO 4892-3, 400 MJ/m$^2$) | No chalking observed. Chalking grade 0 | DIN EN ISO 4628-6 |
| Adhesion to the FLX 390 PU | > 2 N/mm$^2$ | ASTM D 903 |
| Hardness (Shore A Scale) | 65 | ASTM D 2240 (15'') |
| Solar Reflectance (SR) (white color) | 93.5% | ASTM E903-96 |
| UV accelerated ageing, in the presence of moisture | Passed - No significant changes | EOTA TR-010 |
| Hydrolysis (5% KOH, 7days cycle) | No significant elastomeric change | Inhouse Lab |
| Service Temperature | -40°C to +90°C | Inhouse Lab |
| Tack Free Time | 1-3 hours | Conditions: 20°C, 50% RH |
| Light Pedestrian Traffic Time | 12 hours | Conditions: 20°C, 50% RH |
| Final Curing time | 7 days | Conditions: 20°C, 50% RH |
| Chemical Properties | Good resistance against acidic and alkali solutions (5%), detergents, seawater and oils. | |

*Note: The measurements were made in laboratory environment under temperature of +23$^0$C, Relative Humidity 50 % and without ventilation. It is possible to vary depending on the conditions prevailing at the worksite, such as temperature, humidity, ventilation, absorbability of the substrate.*