

# MixGUARD® Flexi-3K

Premium performance heavy duty polyurethane modified water proof system

**MixGUARD® Flexi-3K** is a premium performance; heavy duty multi component Polyurethane modified polymer based components with Polyester fleece, Micro fiber reinforced cold applied water proof and weatherproof heavy duty high build membrane coating with heat and high level crack resistance properties. The system consists of Polyurethane modified Polymer based 7 layers in cold applied method and provides durable, flexible and has a high level of resistance to weathering agents like UV rays, sunlight, frost, rainfall etc. and the presence of polypropylene fiber in top coat and reinforced with polyester fiber fleece in base line imparts higher tensile strength and tear property and designed for large area slabs where high level structural crack, medium level expansion and contraction anticipated

## System specification with application methodology and consumption:

MixGUARD® Flexi-3K system can be applied by brush / roller or with an airless spray. A base surface stabilizing cum bonding coat of MixCOAT® AC300 – 2part modified with 1 part water and 3 part cement by volume and mix with a slow speed mixer machine fitted with suitable mixing paddle and spread @ 1.000L/Sq m. Place saturated MixFELT P50 (saturate and level the fleece with MixCOAT® AC300 modified with water and cement at a ratio of 2:1:1 @ 0.500 Liter slurry / Sq. m over the base primer with an overlapping of 100 mm and level and line finish with same slurry by brush) over the base primer coat with an overlapping of 100mm. Any Bulging or irregular fleece portion must be cut and place new piece with overlapping all sides by this slurry application. Then apply a base elastomeric liquid membrane coating with MixGUARD® BC – 1:3 mix ratio by weight (pre-measured no modification permitted) @ 1.000 Kg/Sq. m to cover the entire area. Keep 4 hours' time gap and then apply a coat of elastomeric water barrier MixCOAT® C450 at 0.250kg/Sq m and followed by an intermediate elastomeric flexible water proof coating with MixGUARD® HR @ 0.500 Kg/Sq. m and micro fiber reinforced abrasion top coat with MixGUARD® HX500 at a consumption of 0.500kg/Sq. m each. Keep a time gap of 3-4 hours at 25°C in between the coats and recommend 6 hours' time gap after application of MixGUARD® BC to subsequent coats

## Appropriation

- Highly recommended to waterproof large area roof and terrace slab – concrete, masonry, metal
- New and existing structures both slope and normal slabs where cracks developed and repaired and anticipating high level cracks in future
- Good for large area water proofing; factories, Industrial, commercial and residential roof

## Characteristics

Waterproof: high resistance to structural cracks  
Elastomeric – crack bridging; joint free system  
Excellent resistance to weathering agents  
Anti-algal and anti-fungal  
Suitable for pedestrian traffic, high abrasion, non-slip  
Non-toxic  
Good adhesion to substrate  
Cold applied – easy to apply Easy to clean  
Barrier against carbon dioxide, water, sulphates and chloride ions  
Breathable – water vapor can escape from the structure

## Technical Data & Properties

Appearance	: White/Grey viscous liquid components
System density	: 1.4gm/cc
System solids content	: 70% ± 2% by weight

The Construction Chemist...



FABCHEM



PYCHEM



mix.uk limited

# MixGUARD® Flexi-3K

Premium performance heavy duty polyurethane modified water proof system

Elongation at break ASTM D 638	: > 100%
Adhesion to substrate ASTM D 4541	: > 1.5 N/mm <sup>2</sup>
Water penetration DIN 1048	: no leak at 7bars (+ve side)
Tear resistance ASTM D 1004-76	: 23N/mm <sup>2</sup>
Tensile strength ASTM D 412-87	: 8N/mm <sup>2</sup>
Application temperature	: 5°C to 50°C
Dry film thickness	: 2000 to 2100μ
Touch dry	: 2 hrs. at 25 deg C
Full cure	: 100 hrs. at 25 <sup>0</sup> c

## Surface conditions

The system can be applied over old and new

HP Clay tiles, sound plastered / screed / RCC slab / existing asphalt or Acrylic

Note: Refer and strictly follow the detail surface preparation and system method of application for different surfaces and for further assistance contact FAB technical service department

## Product Management

**Surface preparation:** Good surface preparation practice is a key element to achieve optimum result, life and performance of any cold applied systems. New concrete or masonry substrates shall be at least 14 days old and preferable substrate moisture content is less than 5% prior to base surface stabilising primer application. It should be dry and free of any defects, sharp arises, dust, dirt, oil, grease, loose particles, curing compounds, form release agents etc. This can be achieved by wire brushing, grit blasting, high pressure hydro jetting etc. Asphalt based membranes completely removed from the substrate by mechanical scarifying or by any other mechanical way. If the Asphalt primer is in sound condition apply a coat of MixPRIME® SB300 / MixCOAT® AP600 (Bonding slurry coat at 1:1:1 modification with water and cement for obtaining bonding between base surface with PU or Asphalt stains which remain even after cleaning) as a bonding medium prior to the base coat application. In existing old terraces with Brick-bat-coba or cement screeds, the substrate must be thoroughly checked for its micro / hair line cracks for its soundness. Surface cracks must be filled with MixBUILD® GP or MixFLEX® AC and Hollow or damaged portions, sharp edges and wide cracks must be cut and repaired with MixBUILD® SR – Polymer modified repair mortar. Roofing tiles should be firmly bedded and grouted before application

**Mixing:** Stir MixGUARD® Flexi-3K components well with slow speed mixer machine with suitable mixing pad to get a homogeneous mix before applying

Application procedure: MixGUARD® Flexi-3K components can be applied by brush, roller or air less spray

Curing: MixGUARD® Flexi-3K components are self-curing and follow the time gap in between the coats to get an optimum result. Leave 100 hours for complete system curing prior to foot traffic

Cleaning: Immediately clean the tools with water

## Packing & Storage

MixGUARD® Flexi-3K components are available in 5/10/20 kg packs and it shall be stored in cool, dry and shaded conditions. Shelf life is 12 months when stored under cover, out of direct sunlight, protected from extreme temperatures and as per manufacturer's recommendations. In extreme tropical climate, the product shall be stored in cooled ambience

The Construction Chemist ...



FABCHEM



PYCHEM



mix.uk limited

# MixGUARD® Flexi-3K

Premium performance heavy duty polyurethane modified water proof system

**Health & Safety:** MixGUARD® Flexi-3K contains no hazardous substance. As with all construction chemical products, caution should always be exercised. Protective clothing such as gloves and goggles shall be worn whilst handling. Wearing long sleeve overall, safety shoes and face mask is recommended for maximum safety. Reseal all containers after use and ensure the product is stored as instructed on the safety section of the labeling. Treat any splashes to the skin or eyes with fresh water immediately. Should any of the products be accidentally swallowed, do not induce vomiting, but call for medical assistance immediately. For more details, please refer to the MSDS released on each product

Rev. MGF3K/NOV/2024/16/IN

The Construction Chemist...



FABCHEM



PYCHEM



mix.uk limited

Technical information given in this data sheet is true and exact to the best of our knowledge, laboratory upshot and hands- onapplication. The data sheets of all products are revised/updated regularly and hence ensure that the latest release is used for reference and recommendation. The date of publishing is as in this sheet. All data are mean of numerous tests, assessment and analysis conducted under laboratory ambiance. Climatic disparity in temperature, humidity, etc... and porosity of substrate may impinge on the values.

Corporate Office  
**PYCHEM Co. L.L.C**  
Post Box 23940, Sharjah  
United Arab Emirates  
Website:www.phychem-cc.com

Under Technical Collaboration with:  
**MIX UK Limited,**  
United Kingdom

**Registered Office**  
S.F.No.74/2,D.No.2/196-A  
Kalipalayam Road, Vellamadai  
Coimbatore-641110  
Tel: +91 422 2929313,  
E-mail: mail@fab-cc.com  
Website: fab-cc.com