

# Home Shield PU Roofkoat

Elastomeric liquid applied membrane

Product composition: Home Shield PU Roofkoat is a one component liquid, solvent-free, cold applied water-proofing membrane that is highly elastic and UV resistant. It is economical as well as eco-friendly. The product complies with the requirement as laid out in **ASTM D 6083-97a**.

## **USP**

- UV resistant, prevents yellowing and weathering
- Highly elastic and crack bridging
- Non-toxic and VOC complaint water-based coating
- Ready to use one component
- Excellent adhesion on porous and non-porous substrates
- Seamless waterproofing membrane
- Water vapour permeable

## Usage area

• For roof waterproofing solutions in both new construction and refurbishment • For roofs with many detail and complex geometry when accessibility is limited • For cost efficient life cycle extension of leaking roofs • For reflective coating to enhance energy efficiency • For vertical walls as elastomeric undercoat and water-proofing barrier system.

#### DIRECTIONS FOR USE

## **Surface Preparation**

## For cementitious substrates

**New concrete** should be cured for at least 28 days and should have a pull – off strength 1.5 N/mm<sup>2</sup>.

**Cementitious or mineral based substrates** must be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and to achieve an open textured surface.

**Loose friable material and weak concrete** must be completely removed and surface defects such as blow-holes and voids must be fully exposed.

**Repairing of the substrate,** filling of joints, blow-holes/voids and surface levelling must be carried out using appropriate products.

**High spots** must be removed by grinding.

Out-gassing is a naturally occurring phenomenon of concrete that can produce pinholes in subsequently applied coatings. The concrete must be carefully assessed for moisture content, air entrapment, and surface finish prior to any coating work. Install the membrane either when the concrete temperature is falling or when stable to reduce out-gassing. It is beneficial to apply the embedment coat in the late afternoon or evening.

**Prime the substrate** and always use a reinforced system as and when required.

**Brick and stone:** Mortar joints must be sound and preferably flush pointed. Use localised reinforcement over joints and prime before applying HS PU Roofkoat.

**Slates, tiles, etc.:** Ensure all slates/tiles are sound and securely fastened, replacing broken or missing sections. Fully glazed tiles must be abraded prior to priming and subsequent treatment with HS PU Roofkoat.

**Bituminous felt:** Ensure that bituminous felt is firmly adhered or mechanically fixed to the substrate. Bituminous felt should not contain any badly degraded areas. Prime and always use a totally reinforced system.

**Bituminous coatings:** Bituminous coatings should not have sticky or mobile surfaces, volatile mastic or old coal tar coatings. Prime and always use a totally reinforced system.

**Metals:** Metals must be in sound condition. Abrade exposed surfaces to reveal bright metal. Use localised reinforcement over joints and fixings.

**Wooden substrates:** Timber and timber-based panel roof decks should be in good condition, firmly adhered, or mechanically fixed.

**Paints/Coatings:** Ensure the existing material is sound and firmly adhered. Remove all oxidized layers and use localised reinforcement over joints.

# **Application Method**

# Waterproofing without Geotextile Fleece

For UV-stable coating, for extending life of old roofs or as reflective coating to enhance energy efficiency.

Build up: HS PU Roofkoat is applied in two undiluted coats over a primer coat.

Substrates: Concrete, metals, wood and tiles

#### **Primer Coat**

50% dilution with water

Total thickness: ~ 0.3 – 0.5 mm [Primer Coat + 2 Undiluted Coats)

Total consumption:  $\sim 1.0 \text{ kg/m}^2$ 

## Waterproofing with Geotextile Fleece

For cost efficient waterproofing solutions in new construction and refurbishment projects.

**Build up:** HS PU Roofkoat is applied in two coats and reinforced with Geotextile Fleece and sealed with one or two additional coats of HS PU Roofkoat.

Substrates: Concrete, metals, wood and tiles

#### **Primer Coat**

50% dilution with water

Total thickness:~ 0.4 − 0.5 mm

Total consumption:~ 1.2 kg/m<sup>2</sup>

Geotextile Fleece is applied on areas with high movement, irregular substrate or for bridging cracks, joints and seams on the substrate as well as for details.

## TECHNICAL DATA

1	Form	Pasty
2	Colour	White
3	Chemical Base	Polyurethane modified acrylic dispersion
4	Density	1.25-1.30 Kg/l @ 30°C
5	Non-volatile Content	60% by weight approx.
6	Tensile Strength ASTM D2370-98	Free Film = > 1.5 N/mm <sup>2</sup> With Geotextile Fleece> 10 N/mm <sup>2</sup> expected approx.
7	Elongation at break ASTM D2370-98	Free Film = > 250% approx. With Geotextile Fleece = 40-60% expected approx.

8	Shelf Life	36 months In unopened, undamaged original container, protected from direct sunlight and frost, at 1°C - 35°C It is always advised to keep the materials away from direct sunlight for a prolonged period of time.
9	Toxicity& Fungi Resistance ASTM G21-96	Non-toxic & Zero rating
10	SRI (%) [Only applicable White base] ASTM E1980-11	>100
11	Transport	Non-hazardous
12	Packs	4ltr, 20ltr

# **PRECAUTIONS**

- · Accidental splashes on the skin must be washed off with soap and water
- If it comes in contact with eyes or mucous membranes, rinse with clean warm water and seek medical attention

## **ECOLOGY**

Do not dispose of into water or soil, but dispose it as per local regulations

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