



## Monoprufe RTU 401

### Trafficable UV Resistant Elastomeric Waterproof Membrane

#### Description

Monoprufe RTU 401 offers a cold applied, seamless, UV stable and foot trafficable membrane. It is a surface applied roof and wall finish with excellent waterproofing, elasticity, bond and long term durability characteristics.

Monoprufe RTU 401 is decorative and provides an architectural finish. It is available in a range of standard colours including Grey, White, Green and Yellow. Monoprufe RTU 401 can be applied onto a broad range of substrates. Good bond performance can be achieved onto metal, sound cementitious screeds, renders and concrete.



#### Benefits

- ✔ Water based – safe to use and environmental friendly
- ✔ Can withstand foot traffic
- ✔ Decorative and practical
- ✔ No discolouration, no yellowing
- ✔ UV stable
- ✔ Low VOC

#### Uses

- ✔ Flat roof
- ✔ External wall
- ✔ Metal roof
- ✔ Deck
- ✔ Canopies

#### Key Performance Indicators

- ✔ Tensile strength : Approx. 2.5 MPa
- ✔ Vapour permeable : < 5 Perms
- ✔ Elastomeric : Approx. 300% elongation
- ✔ Tear strength : Approx. 20 N/mm

## Specification Clause

The Waterproofing Surface Finish shall be Monoprufe RTU 401 manufactured by Ronacrete (Far East) Limited, tel (852) 2865 5872. All materials shall be applied strictly in accordance with the manufacturer's instructions.

### Technical Performance

Resin	Polyurethane acrylic copolymer
Density	1.20 ± 0.1 kg/litre
Solid content	> 60% by weight
Elongation (ASTM D412)	Approx. 300%
Tensile strength (ASTM D412)	Approx. 2.5 MPa
Tear strength (ASTM D624)	Approx. 20 N/mm
Aging test (80°C, 168 hrs)	
ASTM D573-04	
a. Tensile strength	> 4.5 MPa
b. Elongation	> 140%
c. Tear strength	> 40 N/mm
Water vapor transmission (Perms)	< 5
ASTM E96 Method B	

### Packaging

Monoprufe RTU 401 is supplied in 20 kg drum.

## Application (\*Please Refer to the Method Statement and MSDS)

### Preparation

Monoprufe RTU 401 must be applied onto clean cool metal or sound concrete, screed or similarly supportive ceramic substrate. The substrate should be dry, clean, free of oil, grease and other removable contaminants. Open textured surfaces like mortar or concrete should be primed with a 1:3 mixture of Ronascreed Primer and water to ensure a good bond. Brush apply the primer at application of 0.3 kg/m<sup>2</sup> approximately. New concrete should be left for 28 days before applying Monoprufe RTU 401.

For best results Monoprufe RTU 401 should be applied in 2- 3 coats at 1 kg/m<sup>2</sup>/coat (for roofing application) and 0.75 kg/m<sup>2</sup>/coat (for wall application). A fibre reinforced detailing coat should be used over open joints, corners and interfaces and where differential movement may induce additional stress in the membrane.

### Mixing

Monoprufe RTU 401 is supplied pre-blended and ready to use however after storage you may find some slight separation of components inside the bucket. This is normal and the product can be restored by a simple remixing using a slow speed mixer or light hand mixing with a spatula.

### Detailing coat

For areas where excessive movement may be expected Ronacrete insists on using Monoprufe fabric with Monoprufe RTU 401 to reinforce those areas.

In this case cut the fabric to the size and shape necessary in advance and apply onto the first coat as soon as it has been applied. i.e. while the first coat is still wet. A simple patting motion with the brush should be enough to bring the resin through the fabric.

Allow this first coat to dry for at least 4 hours or until it can receive foot traffic without sustaining damage.

Monoprufe fabric can be cut for application across simple joints with an overlap of at least 50mm each side or left at 250 mm wide for an overlap to 125 mm each side for the more complex areas and corners.

### First Coat

Brush or squeegee & roll the first coat throughout the entire area to be treated. If the surface has been primed then the primer must be dry before commencing the application. Work the material into the surface concentrating on the rough areas and aiming to apply approx 1 kg/m<sup>2</sup> for floor application and 0.75 kg/m<sup>2</sup> for wall. Allow the first coat to dry for 8 hours before applying the second and final coat.

### Second and Final Coat

After drying of the first coat apply a second coat of Monoprufe RTU 401 in direction at right angles to the first coat by spray equipment, brush, squeegee or roller at coverage rate of 1 kg/m<sup>2</sup> for floor application and 0.75 kg/m<sup>2</sup> for wall. If necessary, apply the final coat in the same method as the second coat once the second coat is dried for 8 hours.

### Curing

Curing time will depend on the ambient conditions but the surface should be left undisturbed at least until the next day and preferably 2 to 3 days. This will be especially important at temperatures below 20°C. Lots of ventilation is also important, for work carried out undercover or indoors fans will help to shorten the curing time.

### Consumption Rate

A typical 2 coat application will require about 2 kg materials for floor application and 1.5 kg for wall application per m<sup>2</sup> area. The consumption rate will be varied with surface porosity and texture.

### Tools and Equipment

Tools and equipment should be washed in clean water after use. Painted surfaces, metal and glass should be protected during application.

### Shelf Life and Storage

Monoprufe RTU 401 should be stored at temperatures between 10°C and 30°C. Shelf life is 12 months.

### Health and Safety

Monoprufe RTU 401 is low VOC and non hazardous but avoid splashing onto skin and in eyes. Wash any splashes off with water as soon as possible. Rubber gloves and eye shields may be worn.

In case of skin contact, wash immediately with water.

In case of eye contact, flush with copious quantities of water and seek medical advice if irritation persists.

In case of ingestion, do not induce vomiting. Drink plenty of water and seek medical advice.

### Technical Service and Support

Ronacrete provide free technical advice and support during design and installation of all systems for flooring, concrete repair, bonding, bedding and waterproofing. If you need any further information or a full technical data sheet, contact the Ronacrete Technical Department on (852) 2866 4365 or visit our web site [www.ronacrete.com.hk](http://www.ronacrete.com.hk).

### Guarantee

Ronacrete products are guaranteed fit for purpose and of merchantable quality.

### SIKA HONGKONG LTD

Rm. 1507-12, 15/F, Block A,  
New Trade Plaza,  
6 On Ping Street,  
Shatin, N.T., Hong Kong.

### Contact

Tel : +852 2686 8108  
Fax : +852 2645 3671  
E-mail : [marketing@hk.sika.com](mailto:marketing@hk.sika.com)  
[www.sika.com.hk](http://www.sika.com.hk)