K8 Exposed Roof Waterproofing

DESCRIPTION

K8 is a cold-applied, one-component waterborne liquid applied waterproofing membrane, highly elastic and UV-resistant. Suitable for use in hot climatic conditions.

USES

For exposed roof waterproofing solutions in both new construction and refurbishment projects.
For exposed roofs with many details and complex geometry when accessibility is limited.
Waterproofing underneath screeds in wet rooms.
For reflective coating to enhance energy efficiency by reducing cooling costs

CHARACTERISTICS / ADVANTAGES

UV resistant and resistant to yellowing and weathering
Highly elastic and crack-bridging
One component - ready to use Excellent adhesion on porous and non-porous substrates
Seamless, fully bonded waterproofing membrane
Water vapour permeable

PRODUCT INFORMATION

Composition Acrylic Dispersion
Packaging 20 kg plastic pails
Colour Grey, liquid form
Shelf life 12 months minimum from date of production if stored properly in original, unopened and undamaged sealed packaging.
Storage conditions Store in dry conditions in original packaging at temperatures between +5 °C and +30 °C. Protect from direct sunlight and frost.
Density 1.24 kg/l (ISO 2811)
Solid content by weight 55 %
Solid content by volume 44 %

TECHNICAL INFORMATION

Tensile Strength Free film: 1.8 N/mm$_2$ (28 d / 23°C) (ASTM D 638)
Elongation at Break Free film: 72 % (28 d / 23°C) (ASTM D 638)
Tensile Adhesion Strength 1.8 N/mm$_2$ (28 d / 23°C) (ASTM C 1583)
Water Absorption Depth of penetration of water under pressure: 3 mm (28 d / 23 °C)
(EN 12390-8)
Service Temperature -5 °C min. / +80 °C max.

SYSTEMS

System Structure
Build up: GoMix K8 (applied in minimum of 2 coats)
Substrates: Cementitious, brick, stone Primer: Please refer to related chapter
Dry film thickness: Minimum 0.35 mm, depending on application field, project specification and relevant standards

Total consumption: Minimum 1.0 kg/m2, depending on application field and project specification
Attention: Do not apply more than 0.8 kg/m2 GoMix K8 per coat for layers without reinforcement.

APPLICATION INFORMATION

Ambient Air Temperature +8 °C min. / +40 °C max.
Relative Air Humidity 80 % max.
Substrate Temperature +8 °C min. / +40 °C max.
Dew Point Beware of condensation. Surface temperature during application must be at least +3 °C above dew point.
Substrate Moisture Content < 6 % moisture content. No rising moisture according to ASTM (Polyethylene-sheet). No water / moisture / condensation on the substrate.
Substrate Pre-Treatment
Substrate Cementitious substrates, brick and stone
Primer GoMix K8 diluted with 10 % water.
Consumption [kg/m2] 0.3
These figures are theoretical and do not include for any additional material required due to surface porosity, surface profile, variations in level and wastage etc.

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION
All substrates must be prepared using abrasive blast cleaning, scarifying equipment or other suitable mechanical methods and cleaned using high pressure water jet.
Cementitious substrates: New concrete should be cured for at least 28 days and should have a pull-off strength ≥ 1.5 N/mm2. Loose friable material and weak concrete must be completely removed by mechanical means to achieve an open textured surface and all surface defects such as blowholes and voids must be fully exposed. Repairs to the substrate, filling of joints, blowholes/voids and surface leveling must be carried out using the appropriate GoMix products. Refer to GoMix Technical Department for further advice. High spots must be removed by for example grinding. Outgassing 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. Installing the GoMix K8 either when the concrete temperature is falling or stable can reduce outgassing. Prime the substrate before applying the GoMix K8 systems.
Brick and stone: Mortar joints must be sound and flush pointed. Use localised reinforcement over connection joints and prime before applying GoMix K8. For other substrates please contact GoMix Technical Department.
MIXING
Prior to application, stir GoMix K8 thoroughly for 1 minute in order to achieve a homogeneous mixture using a slow speed (300 - 500 rpm) drill and basket type paint mixer. Over mixing must be avoided to minimise air entrainment.
APPLICATION
Prior to the application of GoMix K8 the priming coat must have cured tack-free. Protect adjacent areas from splashes, over painting, damage etc. with an adhesive tape or plastic. GoMix K8 is applied in 2 – 6 coats as per the required system thickness. Prior to the application of each coat the indicated waiting times must be followed. Please note, always begin with detailing works prior to waterproofing

the horizontal surface. Tools: High Pressure Jet Washer (minimum 150 bar): If dust, vegetation, moss / algae or other contaminants are present on the existing roof, a power washer is required to clean the substrate prior to the application of GoMix K8. Existing chippings should be removed by hand or scabbling prior to power washing. Squeegee: Useful when removing excess water from the roof after overnight rain. Drill and paddle: GoMix K8 should be mixed for one minute using a slow speed (300-500 rpm) drill and basket type paint mixer. Solvent resistant short-piled roller: Used in the application of GoMix K8 to ensure a consistent thickness of the seamless GoMix K8. Thick hair brush: For application of GoMix K8 to all details and penetrations.

CLEANING OF EQUIPMENT

Clean all tools and application equipment with water immediately after use. Hardened / cured material can only be removed mechanically.

IMPORTANT CONSIDERATIONS

Do not apply GoMix K8 on substrates that have rising moisture. Always apply during falling ambient and substrate temperature. If applied during rising temperatures “pin holing” may occur from rising and expanding air. GoMix K8 may be flood tested when fully cured using 50 millimeter depth of water for a maximum period of 24 hours. Ensure that each coat of GoMix K8 is totally dry and the surface is without pinholes before applying further coats. Do not apply GoMix K8 if inclement weather such as rain, fog or extreme humidity (80 % maximum) causing condensation is expected. Ensure that the applied GoMix K8 has sufficient curing time (see curing times above) before any such inclement weather is expected. Do not allow temporary ponding or moisture (Dew, Condensation etc.) to remain between coats on any horizontal surfaces or until the final coating has totally cured. Brush or mop surface water away during this time. It is recommended to carry out Adhesion and Compatibility tests with the Primer prior to application of following coats. GoMix K8 should not be applied on areas subject to long-term ponding water. In cold climatic zones for Roofing structures with a pitch of less than 3 % appropriate drainage measures must have to be considered. If aesthetics are important and normal drying times are to be achieved, do not apply GoMix K8 top coats with consumption rates greater than 0.8 kg/m_2. GoMix K8 is not recommended for pedestrian traffic. In case pedestrian traffic is unavoidable, GoMix K8 shall be covered with appropriate paving materials. Do not apply cementitious products for example tile adhesives directly onto GoMix K8, contact GoMix Technical Department for more information. GoMix K8 is to be used mainly in exposed applications and is not for inverted buried roofing systems. GoMix K8 should not be subject to permanent water immersion. Whilst GoMix K8 is resistant to most commonly encountered atmospheric pollutants, propriety cleaning solutions and environmental spoilage, the suitability of the product for use in applications with increased chemical resistance requirements should first be established in consultation with our Technical Department. Overcoating GoMix K8 after 3 months exposure, requires adhesion tests.

BASIS OF PRODUCT DATA

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product