



DELTAShield BITUSeal 1K

Single component, bitumen / polyurethane waterproofing membrane.

DESCRIPTION

DELTAShield BITUSeal 1K is a moisture cured polyurethane / bitumen resin designed for waterproofing of substructure surfaces both horizontal and vertical.

DELTAShield BITUSeal 1K dries to form a flexible, seamless, rubber like waterproof membrane.

TYPICAL USES

- ✓ Waterproofing of building foundations and below ground walls such as basements and underground car parks.
- ✓ Waterproofing of planter boxes.
- ✓ Waterproofing of wet areas.

FEATURES

- ✓ Simple application – roller, brush or airless sprayer.
- ✓ Thixotropic makes it suitable for horizontal and vertical surfaces.
- ✓ Completely seamless membrane. Zero welds, overlaps or joints.
- ✓ Cold applied and cold cured. No requirement for specialized application equipment.
- ✓ Conforms exactly to substrate shapes.
- ✓ Excellent crack bridging properties.
- ✓ Resistant to root penetration.
- ✓ Excellent adhesion to concrete.
- ✓ Resistant to continuous water exposure.
- ✓ Fast curing.



PRODUCT INFORMATION

| PROCESSING PROPERTIES | DATA |
|---|--|
| Mixing | Stir with a low-speed agitator. Avoid introducing air. |
| Material consumption | 1.5 – 2.0kgs / m ² |
| Recommended thickness per layer | Can be applied in one or 2 layers depending on substrate |
| Minimum overcoat window | When first layer is touch dry. |
| Maximum over coat window [h] | 48 |
| Tack free time (Increased temp and humidity reduces tack free time) | @25C / 60% humidity – 1 hour |
| Return to service | @25C / 60% humidity - 3 days |
| Full cure | 10 days |
| Temperature range for application (ambient) [°C] | 0 – 40 C |

Note: All data depends on site conditions. Ambient temperatures, substrate temperatures and humidity will all have an effect on stated data. Film thickness and application techniques can also affect the stated data.

| PHYSICAL PROPERTIES | DATA | |
|--|----------------------------|---|
| Water vapour permeability | (EN ISO 7783:2012) | μ = 2750 |
| Water permeability | (EN-1062-3: 2018) | W = 0,005 Kg/m ² x h ^{0,5} |
| Solids content | DIN EN 827 / ASTM D-2697 | 75% |
| Tensile strength [MPa] | ISO 37-2005 / ASTM D-638 | 2 |
| Elongation at break [%] | DIN 52455 / ASTM D-412 | 450 |
| Hardness [Shore A] | ISO 868-2003 / ASTM D-2240 | 38 |
| Crack bridging | In house lab | 4 mm |
| Pull off strength [N/mm ²] | ASTM D-903 | Concrete: 2 |
| Storage conditions [°C] | DIN EN 12701 | 10 – 30 (Avoid product freezing) |
| Shelf life | | Approximately 12 months unopened and stored correctly |



APPLICATION NOTES

- All substrates should be thoroughly cleaned and properly prepared before applying **DELTAShield BITUSeal 1K**. The concrete substrate should be in good condition, free from dust and loose particles. Cracks and crevices should be filled before applying **DELTAShield BITUSeal 1K**.
- Thoroughly stir the contents of the container using a slow RPM stirrer. Avoid using a high-speed stirrer and introducing air into the **DELTAShield BITUSeal 1K**. Some settling may occur during storage. Ensure all components are mixed homogeneously.
- Allow stirred product to sit for 5 minutes to allow entrapped air to release.
- **DELTAShield BITUSeal 1K** should be applied at 1.5 – 2kgs/m² in either one or two coats.
- Apply by airless sprayer, roller or brush.
- Once opened and stirred it is recommended that the contents of the packaging are used completely and not stored.

SAFETY AND HANDLING

- All applicators of **DELTAShield BITUSeal 1K** should be conversant with this product data sheet.
- Only professional applicators / contractors should apply **DELTAShield BITUSeal 1K**.
- **DELTAShield BITUSeal 1K** contains solvents and isocyanates. Ensure there are no ignition sources near the product or application area.
- Ensure sufficient ventilation is provided when applying **DELTAShield BITUSeal 1K**.
- Avoid eye and skin contact.
- Store chemical drums in a cool dry environment. Avoid storing chemicals for long periods in direct sunlight.
- Do not store chemicals next to food products.
- Ensure packaging is kept tightly sealed and avoid ingress of air and moisture.
- Once the container has been opened all the contents should be used.
- **DELTAShield BITUSeal 1K** can be cleaned using acetone solvent.

All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the user's responsibility to satisfy himself, by his own investigations and testing, the suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. Due to the large number of variables that can affect the product and the application process that are out of the control of DELTA Coatings International LLC no warranty of any kind, express or implied is given. The liability of DELTA Coatings International LLC for any claims is limited to the purchase value of the material.

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