DURAVEX Paints

TECHNICAL DATA SHEET (TDS)



Duravex FibreFuse is a high-build, fibre-infused elastomeric waterproofing coating formulated to provide a seamless, flexible, and durable waterproofing barrier without the need for a separate reinforcing membrane in standard applications. The product incorporates non-woven reinforcing fibres uniformly dispersed throughout the coating to enhance film strength, crack-bridging ability, and resistance to movement. Once cured, FibreFuse forms a tough, elastic, weather-resistant membrane capable of accommodating normal substrate movement while preventing water ingress. FibreFuse is suitable for both new construction and maintenance applications on correctly prepared substrates.

FIBREFUSE

KEY PROPERTIES

- Fibre-infused, membrane-free waterproofing system.
- High elasticity and crack-bridging capability.
- Seamless, flexible, and weather-resistant film.
- Excellent adhesion to properly prepared substrates.
- UV-resistant and suitable for exterior exposure.
- Single-component, ready-for-use product.
- Water-based with easy water clean-up.
- Suitable for complex details, joints, and irregular surfaces.

PRODUCT USES

FibreFuse is recommended for waterproofing of suitably prepared:

- Flat and low-slope roofs with positive falls and effective drainage.
- Parapet walls, upstands, and flashings.
- Roof ridges, laps, seams, and screw or fastener penetrations.
- Concrete roofs, slabs, and structural decks.
- Cementitious roof tiles and fibre-cement sheeting.
- Gutters and downpipes (where water flow is free-draining and not permanently ponding).
- Walls, upstands, and vertical waterproofing details.
- Maintenance coating over existing compatible, sound acrylic waterproofing systems, subject to adhesion testing and surface preparation.

Important: Roof slopes must be sufficient to promote effective water run-off. A minimum slope of approximately 2–4° is recommended, and slopes must be uniform to prevent water accumulation and localised ponding. FibreFuse is not designed for permanent or prolonged ponding water, and performance may be adversely affected where adequate drainage is not provided.

TECHNICAL INFORMATION

Product Type:	Fibre-infused elastomeric acrylic
Appearance:	Viscous, fibre-reinforced coating
Finish:	Low sheen / matt
Colours:	Grey
Total Solids Content (TSC):	± 55 %
Specific Gravity	± 1.20 – 1.25
Viscosity	± 120 – 150 KU @ 25 °C
Application Method	Brush or roller
Typical Spread Rate	± 1.25 m^2/L (two-coat system / total system coverage)
Touch Dry	± 1 – 2 hours
Recoat Time	± 6 – 12 hours
Light Rain Resistance	± 6 hours
Full Cure	± 7 days
Cleaning	Water while wet
Flammability	Non-flammable

APPLICATION & SURFACE PREPARATION

1.1 GENERAL SURFACE PREPARATION

All substrates must be structurally sound, clean, dry, and suitably prepared prior to the application of Duravex FibreFuse.

Surfaces must be free from dust, dirt, oil, grease, curing compounds, laitance, loose material, biological growth (algae, moss), salts, and any other contaminants that may impair adhesion.

Loose, flaking, or poorly bonded existing coatings must be completely removed by mechanical means such as scraping, wire brushing, grinding, or high-pressure washing, as appropriate.

Heavily contaminated surfaces must be cleaned using a suitable detergent or surface cleaner, thoroughly rinsed with clean water, and allowed to dry fully before coating.

Important: FibreFuse must only be applied to dry substrates. Residual moisture within the substrate may adversely affect adhesion and long-term performance.

1.2 SUBSTRATE-SPECIFIC PREPARATION

Concrete, Cement Screeds & Masonry

- New concrete, screeds, or cementitious substrates must be allowed to cure for a minimum of 28 days.
- Surfaces must be dense, well-compacted, and free of laitance or surface weakness.
- Highly porous or friable substrates should be primed with Duravex BondPro Bonding Liquid to reduce suction and improve adhesion prior to coating.

Previously Painted Acrylic Waterproofing

- Existing acrylic waterproofing coatings must be sound, firmly adhered, and compatible.
- Remove all loose, chalky, or degraded material and clean thoroughly.
- Areas of exposed substrate must be prepared and primed as per the relevant substrate requirements.

Metal Surfaces

- All metal surfaces must be free from oil, grease, and contaminants.
- Rust must be removed back to clean, bright metal by mechanical means.
- Prime prepared metal surfaces with Duravex IronPrime Metal Etch Primer and allow to dry in accordance with its Technical Data Sheet before applying FibreFuse.

Cracks, Joints & Detailing

- Static hairline cracks may be bridged directly with the FibreFuse system.
- Cracks wider than approximately 5 mm must be routed, cleaned, and repaired with a suitable flexible repair compound prior to coating.
- Joints, laps, seams, penetrations, corners, and high-movement or high-risk detailing areas should be reinforced by embedding a suitable reinforcing fabric into the first coat of FibreFuse while wet.

1.3 APPLICATION PROCEDURE

Duravex FibreFuse is supplied ready for use and must not be diluted. No water, solvents, or additives may be added under any circumstances.

1. Stir Duravex FibreFuse thoroughly before use to ensure even fibre dispersion throughout the product.
2. Apply the first coat evenly by brush or roller at approximately ±0.4 L/m², ensuring full coverage of the substrate and all detailing areas.
3. While the first coat is still wet, embed reinforcing fabric where specified, and saturate fully to eliminate air pockets.
4. Allow the first coat to dry for 6–12 hours, depending on ambient temperature, humidity, and airflow.
5. Apply the second coat at right angles to the first, also at approximately ±0.4 L/m², to achieve uniform film build and consistent reinforcement.
6. A minimum total system coverage of ±1.25 m² per litre over two coats is required to achieve the specified waterproofing membrane thickness.
7. Additional coats may be applied in areas subject to increased exposure, movement, or where additional film build is required.

2. LIMITATIONS & IMPORTANT NOTES

- Do not apply if rain is imminent or during adverse weather conditions.
- Do not apply below 5 °C or above 35 °C.
- FibreFuse must not be applied beneath or over tiled surfaces, including ceramic, slate, clay, or slurry tile systems, nor in areas subject to permanent, continuous, or long-term ponding water.
- Not intended for trafficable surfaces.
- Always conduct a test application to confirm suitability and adhesion.

3. MAINTENANCE

To maintain long-term performance, it is recommended that the FibreFuse waterproofing system be inspected periodically and that a maintenance coat be applied every five (5) years, subject to normal wear, environmental exposure, and service conditions.

4. HEALTH, SAFETY & HANDLING

- Avoid contact with skin and eyes.
- Wear appropriate personal protective equipment during application.
- Ensure adequate ventilation during application and drying.
- In case of eye or skin contact, rinse immediately with clean water.
- If swallowed, seek medical advice immediately.
- Refer to the Safety Data Sheet (SDS) for full health and safety information.

5. DISCLAIMER

The information contained in this Technical Data Sheet is based on laboratory testing, industry knowledge, and practical application experience and is provided in good faith as a general guide.

Product performance is dependent on factors beyond the manufacturer's control, including substrate condition, surface preparation, application method, environmental conditions, and workmanship. No guarantee or warranty of performance or suitability for any particular purpose is given or implied.

The manufacturer shall not be liable for any direct, indirect, incidental, or consequential loss or damage arising from the use or application of this product. Product specifications may be amended without prior notice. It is the responsibility of the user to ensure that the latest version of this Technical Data Sheet is consulted prior to application.

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