DURAVEX Paints

TECHNICAL DATA SHEET (TDS)



PaveShield is a traffic-resistant acrylic paving coating formulated with an advanced pure acrylic resin system. It delivers excellent abrasion resistance, strong adhesion to correctly prepared substrates, and outstanding UV, weather, and alkali resistance. The coating forms a tough, durable protective finish with long-term colour retention. Fastdrying and easy to apply, PaveShield is ideal for driveways, walkways, patios, and general paving exposed to harsh outdoor conditions.

PAVESHIELD

KEY PROPERTIES

- Expertly formulated coating with inherent mould and algae resistance.
- Water-based acrylic system for easy application and clean-up.
- Excellent resistance to UV exposure, alkali attack, and harsh weather conditions.
- Formulated with an advanced pure acrylic resin system for long-term durability.
- Semi-matt (low sheen) finish designed to disguise surface irregularities.
- High abrasion resistance suitable for paving, driveways, and walkways.
- Water-resistant protective film with strong colour retention.
- High opacity for effective hiding and uniform coverage.

PRODUCT USES

- Driveways, walkways, patios, and general exterior paving areas.
- Paving around swimming pools (non-slip properties dependent on surface profile).
- Concrete and clay paving bricks, including interlocking pavers.
- Cast concrete surfaces such as window sills and slabs.
- New, properly cured cementitious substrates.
- Previously painted concrete, brick, and stone surfaces, provided sound adhesion and correct preparation.

TECHNICAL INFORMATION

Product Type:	Water-based pure acrylic resin system.
Finish:	Semi-matt (low sheen).
Application Methods:	Brush, roller, or airless spray.
Cleaning of Equipment:	Clean with water while the product is still wet.
Thinning:	Product supplied ready for use. No dilution required.
Typical Spread Rate:	±6–8 m² per litre per coat (actual coverage depends on surface texture and porosity).
Drying and Cure Times: (At ±25 °C and 50% relative humidity)	Touch dry: ±1 hour | Recoating time: ±4 hours | Light foot traffic: after 24 hours | Full cure: 7 days. Drying and curing times are dependent on temperature, humidity, air movement, and substrate condition.
Viscosity:	±105–110 Krebs Units (KU)
pH:	8.5 - 9.5
Specific Gravity / Relative Density:	±1.30 kg per litre
Total Solids Content (TSC):	±50%
Heat Stability:	Pass
Flash Point:	Non-flammable (water-based).
Colour Range:	Midnight Black, Urban Charcoal, Merlot Red, Signal Red, Tuscan Clay, Earth Brown, Cedar Green.
Packaging Sizes:	5L and 20L
Storage:	Store in a cool, dry area away from direct sunlight and frost. Ensure containers are sealed when not in use.

APPLICATION & SURFACE PREPARATION

1. GENERAL APPLICATION REQUIREMENTS

The performance and durability of PaveShield are directly dependent on correct surface preparation and adherence to the specified application conditions. All substrates must be structurally sound, dry, clean, and free from contaminants that may impair adhesion.

Application must **not** take place under the following conditions:

- Substrate moisture content exceeding 15%.
- Rainfall occurring or forecast during application or curing.
- Inadequate surface drainage or areas subject to standing or ponding water.
- Ambient or substrate temperatures outside the specified limits.

2. SUITABLE SUBSTRATES

PaveShield is suitable for application to the following correctly prepared surfaces:

- Concrete paving and cementitious screeds.
- Clay and concrete paving bricks, including interlocking pavers.
- Cast concrete surfaces such as slabs and window sills.
- Previously painted concrete, brick, or stone surfaces, provided existing coatings are sound and well adhered.

3. NEW OR UNCOATED CEMENTITIOUS SURFACES

3.1 Substrate Curing

New cementitious substrates must be allowed to cure for a minimum of 28 days prior to coating to ensure sufficient moisture release and reduction of surface alkalinity.

3.2 Surface Conditioning

Surfaces shall be free of laitance, dust, oils, grease, and curing residues. Laitance shall be removed using a suitable concrete etching solution or proprietary cleaning agent, followed by thorough rinsing with clean water. The surface must be allowed to dry completely for at least 24 hours before further treatment.

3.3 Weak or Powdery Surfaces

Substrates exhibiting friable or powdery characteristics must be stabilised using a compatible water-based acrylic bonding liquid, such as Duravex BondPro Bonding Liquid. The bonding layer must be allowed to dry fully in accordance with the manufacturer's instructions before application of PaveShield.

4. PREVIOUSLY COATED SURFACES

Previously painted or coated surfaces must be inspected for adhesion and overall integrity. All loose, flaking, or deteriorated material shall be removed. Surfaces shall be cleaned and degreased using an appropriate cleaning agent, rinsed thoroughly, and allowed to dry completely. Smooth or glossy surfaces shall be lightly abraded to provide a mechanical key. Where the existing coating is porous, aged, chalking, patch-repaired, or where adhesion is uncertain, the surface shall be primed using Duravex BondPro Bonding Liquid prior to application of PaveShield. The use of Duravex BondPro Bonding Liquid is mandatory on previously coated surfaces that are chalking, powdery, friable, highly porous, patch-repaired, or where the coating history or substrate condition cannot be reliably established. BondPro must be applied in accordance with the manufacturer's instructions and allowed to dry fully before overcoating.

5. SURFACE DEFECTS AND REPAIRS

Cracks, voids, blowholes, and surface imperfections shall be opened, cleaned, and repaired using suitable acrylic repair materials. Repairs must be fully cured and sanded smooth prior to application of the coating system.

6. PRIMING

On porous, repaired, friable, or stabilised substrates, priming shall be carried out using Duravex BondPro Bonding Liquid only. BondPro must be applied in accordance with the manufacturer's instructions and allowed to dry fully before application of PaveShield. PaveShield is supplied ready for use and must not be diluted.

7. MIXING

PaveShield shall be thoroughly mixed using a flat-blade paddle or mechanical mixer prior to application to ensure homogeneity. Where multiple batches are used, material shall be intermixed prior to application to ensure colour uniformity and consistency of finish.

8. APPLICATION METHOD

Apply PaveShield using a suitable brush, roller, or airless spray equipment. Apply two (2) uniform coats at the recommended spread rate of ±6–8 m² per litre per coat, depending on surface texture and porosity. Allow adequate drying time between coats.

9. APPLICATION CONDITIONS

- Recommended application temperature: 10°C to 30°C.
- Maximum allowable temperature: 35°C.
- Application should be avoided during early morning condensation, late afternoon cooling, or periods of excessive heat.
- Application should cease when weather conditions are unstable or rain is imminent.

10. DRYING AND CURING

Drying and curing times are based on ±25°C and 50% relative humidity and may vary depending on environmental conditions:

- Touch dry: ± 1 hour
- Recoating time: ± 4 hours
- Light foot traffic: after 24 hours
- Full cure: 7 days

11. CLEANING OF EQUIPMENT

All application equipment must be cleaned with clean water immediately after use while the product is still wet.

12. HEALTH, SAFETY AND HANDLING

Avoid skin and eye contact. Appropriate personal protective equipment should be worn during handling and application. Ensure adequate ventilation during application and drying. In the event of skin or eye contact, rinse immediately with clean water and seek medical advice if irritation persists. If swallowed, do not induce vomiting. Rinse mouth with clean water and seek medical attention immediately, providing the product information where possible.

Users must refer to the applicable Paveshield Safety Data Sheet (SDS) for comprehensive information regarding health effects, safe handling practices, personal protective equipment, storage, disposal, and emergency measures prior to use.

13. STORAGE

Store in a cool, dry area away from direct sunlight and frost. Containers must be kept tightly sealed when not in use.

14. LIFE EXPECTANCY

When applied in accordance with the recommendations contained in this Technical Data Sheet and subjected to normal residential pedestrian and light vehicular traffic, PaveShield may provide a service life of up to five (5) years. Actual service life will vary depending on substrate condition, traffic levels, environmental exposure, surface preparation, and ongoing maintenance.

15. DISCLAIMER

The information contained in this Technical & Safety Data Sheet is based on laboratory testing and practical experience and is provided in good faith as a general guide. Product performance is dependent on factors beyond the manufacturer's control, including surface condition, 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 as technology develops. It is the responsibility of the user to ensure that the latest version of this Technical & Safety Data Sheet is consulted prior to application.

COMPATIBLE DURAVEX PRODUCTS



BondPro Bonding Liquid

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