



Lease Life
to Man-Made
Structures

SUPERSHIELD

INFRON

Abrasion and Wear Resistant Water-Based
Protective Coatings



PRODUCT DESCRIPTION

SUPERSHIELD INFRON is a one-component, waterborne, liquid-applied coating designed to provide exceptional abrasion and wear resistance. It is suitable for a variety of applications, including top coats for protective membranes on buildings and infrastructure exposed to wear and weathering, hygiene coatings for the food and pharmaceutical industries, and as a laminate coating for enhancing and protecting wood and steel surfaces. INFRON is formulated with **SUPERSHIELD WAPELASTIC TECHNOLOGY**, which integrates long-chain polyurethane macromolecules into a water-based medium to create a stable dispersion. This advanced technology merges the high performance of polyurethane with the ease of application of a one-component, water-based coating. Utilizing a 100% aliphatic polyurethane dispersion, WAPELASTIC TECHNOLOGY delivers excellent sheen, UV resistance, and long-term protection. Upon application, SUPERSHIELD INFRON forms a seamless, durable coating that provides efficient, long-lasting protection.

RECOMMENDED USES

- Used as a top coat over the coating membranes subjected to pedestrian traffic
- Floor coating for covered and open car park decks
- Hygiene coating for floors and walls
- Protective coating for bridges, flyovers, tunnels, and rail roads
- Laminate coating for steel and wood
- Protection of polyurethane foam insulation
- Waterproofing of most surfaces exposed to wear and weathering conditions

FEATURES AND BENEFITS

- Resistant to abrasion and wear conditions, yet flexible
- Forms a fully bonded, seamless waterproofing coating
- One-component, water-based, and VOC-compliant
- High sheen with excellent weather, U.V. light, and water resistance
- Water vapor permeable
- High solar reflectance
- Excellent resistance to carbonation and chemicals
- Low and high-temperature stability and accommodating movements



TECHNICAL DATA

General Characteristics		
PROPERTY	VALUE	
Color and Appearance	Transparent Liquid	
Service Temperature	-30°C to + 80°C	
VOC Content	<100g/l (Low VOC Content)	
Performance Characteristics		
TEST NAME	TEST METHOD	PERFORMANCE
Water Permeability	EN 1062-6	> SD 50m
Permeability to water vapour	EN ISO 7783-1,2	Class I SD< 5m
Elongation at Break	ASTM D412	> 150%
Tensile Strength	ASTM D412	13 N/mm²
Abrasion Resistance (Taber Abraser)	ASTM D 4060	0.11 gms/ 1000 cycles
Hardness (Shore D Scale)	ASTM D 2240	(15") >30
Capillary Absorption and Permeability to water	EN 1062-3	W < 0.1
Strength of Adhesion to indirect traction	EN 1542	≥ 0.8 N/mm²
Thermogravimetry	EN ISO 11358	+5% of reference with respect to loss of mass @ 600°C
Infrared spectrum	EN 1767	Position and relative intensities of the main absorption band matches with reference



APPLICATION GUIDELINES

Surface Preparation

Careful surface preparation is essential for optimum finish and durability. The surface needs to be clean, dry, and sound, free of any contamination that may harmfully affect the adhesion of the membrane. The maximum moisture content should not exceed 8%. New concrete structures need to dry for at least 28 days. Old, loose coatings, dirt, fats, oils, organic substances, and dust need to be removed by appropriate methods. Possible surface irregularities need to be smoothed. Any loose surface pieces and grinding dust need to be thoroughly removed.

Consumption

0.2–0.4 kg/m² applied in one or two layers. This coverage is based on application by roller onto a smooth surface in optimum conditions. Factors like surface porosity, temperature, and application method can alter consumption.

Top Coat Application

Stir well before using. Apply SUPERSHIELD INFRON over the prepared substrate by brush, roller, or airless spray in one or two layers, depending on the future wear conditions expected. Allow 3–6 hours (not more than 24 hours) to cure between the two layers.

Note: When used for vertical applications on infrastructure, as hygiene coatings, or as laminate coatings on concrete and wood, SUPERSHIELD INFRON can be used as a self-priming coating by diluting SUPERSHIELD INFRON with 20% water for the first coat.

Curing

The SUPERSHIELD INFRON coating should be air-cured for a minimum of 4 to 6 days and protected from water or rain for a minimum of 18 hours.

LIMITATIONS

- If there are areas with ponding water on the surface where the SUPERSHIELD INFRON system is applied, they should be cleaned regularly to avoid biological and microbial attack.
- Do not apply the SUPERSHIELD INFRON in negative (degC) temperatures or when rain or frost is imminent in the next 48 hours. For best results, the temperature during application and cure should be between 5°C and 35°C. Low temperatures retard curing, while high temperatures speed up curing. High humidity (fog or dew conditions) retards cure and affects the curing times.
- SUPERSHIELD INFRON may be slippery when wet. To avoid slipperiness during wet days, sprinkle suitable aggregates onto the still-wet coating to create an anti-slip surface. Please contact Supershield for more information.

HEALTH AND SAFETY

SUPERSHIELD INFRON contains chemicals that may cause skin irritation. For personal precaution, protective gloves and goggles are recommended to be worn during the handling of this product. If the product gets in contact with the eyes, flush immediately with clean water and seek medical assistance if symptoms persist.

STORAGE

SUPERSHIELD INFRON should be stored in dry and cool rooms in their original, unopened containers for up to 18 months. Protect the material against frost and direct sunlight. Storage temperature: 5°C–30°C.



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PACKAGING

20 kg pails.

WARRANTY

Supershield warrants that its products will be free from material defects and will comply with the specifications provided in their respective technical data sheets. If any product is proven to be defective, Supershield's liability will be limited to the replacement of the product. Supershield will not be liable for any incidental or consequential damages. No other warranties, express or implied, shall apply, including warranties of merchantability or fitness for a particular purpose. It is the user's responsibility to determine the suitability of the product for their intended use and to assume all risks and liabilities associated with its application. Supershield reserves the right to alter the properties of its products without prior notice.