

TechnoFlex® AquaShield 550

Single component Liquid applied Polyurethane resin based Elastomeric Waterproofing Membrane.

Description:

TechnoFlex® AquaShield 550 is high build moisture curing elastomeric polyurethane waterproofing membrane. Once cured it forms a tough, seamless, elastomeric, waterproof membrane, with high tensile strength and tenacious adhesion to a variety of substrates. TechnoFlex® AquaShield 550 is designed for use on horizontal and vertical surfaces, covered by a protective screed or render.

TechnoFlex® AquaShield 550 is specially formulated for easy roller application of all permanently flexible, tough, high build, long-life waterproof barriers. TechnoFlex® AquaShield 550 system maintain their watertight integrity and prevent the passage of liquid under dynamic, static, continuous, or intermittent hydrostatic pressure.

Typical applications include

TechnoFlex® AquaShield 550 is designed to waterproof most applications within the building and construction industry including-

- Shower recess and wet areas (floor & upturns)
- Decks, balconies, terraces and podiums
- Retaining walls
- Planters and landscaped areas
- Structural slabs
- Water retaining structures, fountains & swimming pools
- Roofs
- Decks
- Terraces, balconies

Features and Benefits

- Waterproof- Protects structure from water penetration
- Elastomeric- Permits nominal expansion and contraction of the structure
- Inert when cured- Resists bacterial attack and salts found in ground waters
- Monolithic Single pack and one coat finish liquid-applied- Eliminates lapping, seaming, and precutting
- Tough and durable- Long-term protection
- Chemical resistant- Highly resistant to aging, diluted acids, bases, salts, chemical substances, mildew, and weather conditions.

Method of Application

Surface preparation

Ensure the substrate is structurally sound, free of surface laitance, oils, grease, dirt, moss, lichen, and loose material. The surface should be smooth and free from sharp projections and loose debris, and any material which would hinder adhesion. Brush down and clean off, leaving a sound substrate providing adequate bond for the applied slurry.

Preparation is usually carried out using mechanical tools such as scrabbles for floors and bush hammers for vertical surfaces. Static cracks greater in width than 1mm must be chased out, dampened down and repaired with a dry pack consistency of TechnoCem™ RM. Prior to priming use TechnoCem™ RM to achieve a smooth and level surface by filling holes and irregularities.

Priming

Priming of good quality, dense concrete is not necessary. For absorbent surfaces such as porous concrete a mixture of 1 part TechnoFlex® AquaShield 550 and 1 part xylene is used to seal the surface. Bitumen and asphalt surfaces require priming with TechnoFlex® AquaShield 550 Primer as a barrier to protect the membrane.

TechnoFlex® AquaShield 550 Primer can be applied by brush or roller and allow to cure for 4-8 hours after application. Do not allow primer to harden completely before proceeding with TechnoFlex® AquaShield 550 application. All movement joints should be masked and then over coated with TechnoFlex® AquaShield 550 extending 150 mm each side of the tape.

Shrinkage and non-moving cracks should be pretreated with TechnoFlex® AquaShield 550 extending 75 mm either side of the crack. All critical right angle bends must have a cant strip or fillet installed prior to application of TechnoFlex® AquaShield 550. Any pretreated areas must be cured overnight before general application of the membrane.

Coating Application

TechnoFlex® AquaShield 550 is a cold applied and ready to use material, it does not need to dilution. It can be applied with brush, roller, airless pump or trowel. Depending on weather conditions, it dries in approximately 5-6 hours.

Technical Properties	
Appearance	Liquid, Black in colour
Elongation (%) (ASTM D412-90)	550 - 700
Tack Free Time @ 25° C	12 hours
Final Curing time at 25°C	2 days at 1.5mm thickness
Specific Gravity	1.15 to 1.17
Solid Content %	90% ± 3%
Shore A Hardness	60 ± 5
Crack bridging (ASTM C836)	No cracking, splitting pinholes or any other type of failure was observe at 1.5 mm
Tensile Strength (ASTM D412-90)	1.60 (N/mm ²)
Adhesion to concrete	Excellent
All values are subject to 5-10 % tolerance	

Health and Safety instructions

Cause eye and skin irritation. If eye or skin contact, get immediate medical attention. If swallowed, do not induce vomiting. Call a physician or poison control center. Never give anything by mouth to an unconscious person.

Wash hands thoroughly after handling. Wear protective clothing, gloves & eye and face protection. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse. Dispose of unused, contents, container and other contaminated wastes in accordance with local, state, federal and provincial regulations. Keep container closed when not in use. Keep out of the reach of children.

Please contact with Sterling Technotrade's technical service department for further information and support.

Product only for professional use.

Coverage

Approx. 1.65 kg/m² for 1.5mm mm wet film thickness layer.

Packing

20 Kg Pack

Storage

TechnoFlex® AquaShield 550 has a shelf life of 12months if unopened containers stored in cool dry place.

Cleanup Information

Clean tools and equipment with water immediately after use. Dried material can only be removed with industrial type solvents or mechanically.

Cautions / Limitations

- It may be harmful with skin contact.
- Do not apply in freezing conditions or during precipitation.
- Protect applied materials from rain, freezing, foot traffic and continuous high humidity until completely dry.
- Do not use when air and surface temperatures are below +5°C and above +40°C.

Additional information

Techno Builders Solutions® By Sterling Technotrade India Pvt.Ltd -The Specialist Construction Chemicals Company® range of associated products includes high performance concrete Admixtures, Adhesives, Protective Coatings, Concrete Repairs, Industrial Flooring, Grouts & Anchors, Joint Sealants, Surface Treatments, curing compounds, repair mortars, release agents, Grinding Aids & Waterproofing.

*Separate datasheet are available on these products.

DISCLAIMER: The product information & application details given by the company & its agents has been provided in good faith & meant to serve only as a general guideline during usage. Users are advised to carry out tests & take trials to ensure on the suitability of products meeting their requirement prior to full scale usage of our products. Since the correct identification of the problems, quality of other materials used and the on-site workmanship are factors beyond our control, there are no expressed or implied guarantee / warranty as to the results obtained. The company does not assume any liability or consequential damage for unsatisfactory results, arising from the use of our products.

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