

FortFlex - 9000

Epoxy Tank Lining

FortFlex 9000 A high performance, epoxy lining designed to cure at low temperatures and exhibit excellent resistance properties to a wide variety of chemicals and corrosives. Maintains flexibility and toughness better than standard epoxies of this class. Exhibits excellent adhesion, sag resistance and corrosion resistance. It is a high 100 % solids, flake filled, premium epoxy coating designed for internal steel and concrete substrates with high impact resistance, superior bonding ability to steel and concrete, resistance to broad range of chemicals.

USES

- Chemical storage Tanks
- Oil Storage Tanks
- Waste water applications
- Cold Water reservoir
- Industrial and Residential Water tank

CHEMICALS RESISTANCE

FortFlex 9000 is resistant to a broad range of chemicals such as fuels, salts, alkalies, some solvent, and many acids (including concentrated sulphuric acid).

PHYSICAL DATA

Tensile strength	:	7500 psi (ASTM D-638)
Flexural strength	:	10800 psi (ASTM D-790)
Flexural Modulus of Elasticity	:	5.9 psi x 10 ⁶ (ASTM D-790)
Hardness	:	75 (ASTM D-2240n shore D)
Bond strength	:	1700 psi
Pot life	:	45-60 minutes at 24oC
Shelf Life	:	6 months at 24oC
Cure time	:	Dry to touch 12 hours at 24oC (approx) Firm 24 hours at 24oC (Approx)
Flammability	:	Nonflammable.

SURFACE PREPARATION

Steel

Immediately prior to application of the coating or lining, the steel substrate must be clean of all oil, grease, dirt, mill scale, rust, flash rust, corrosion products, salts solvents, chlorides, other chemicals, and existing coatings.

All welds must be smooth and continuous, no skip welds. All weld splatter, buckshot, laminations, and slivers must be removed and ground smooth; undercuts and pinholes must be ground smooth and filled with weld metal. All projections, sharp edges, high points and fillets must be ground smooth to a radius of at least 1/8 in and all corners must be likewise rounded.



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All pitting, gouges, scratches, and other defects must be repaired either by welding or by filling with repair materials that are compatible with the coating or lining system and suitable for the intended service conditions. All surfaces to be coated or lined be readily accessible. The steel must be blasted to a minimum near white metal finish (SSPC SP10) with a 100 micron dense, sharp anchor profile free of peening, as measured by ASTM D4417.

Concrete

Immediately prior to application of coating, concrete substrate must be adequately cured (generally, at least 28 days), structurally sound, free of all dirt, dust, debris, oil, grease, fats, chemical contamination, salts, solvents, surface hardeners, incomplete curing compounds and foam release agents, laitance and efflorescence. Concrete surface must be dry.

Locate all expansion joints, controls joints, floor drains, equipment base plates, and mid-floor termination points. Handle them as per construction details.

Concrete is a very porous material. As it warms during the day it expels air, or 'outgases'. Coating applied while concrete is out gassing will likely develop bubbles and pinholes.

To avoid this, the material should be applied when the temperature of the concrete is falling. Usually this is from late afternoon into the night. Stop applying the material well before dawn. So it has time to set up firm to touch before out gassing begins. This may be anywhere from 1-6 hours, depending upon the weather conditions. In addition, it is good idea to shade the work area from direct sunlight. Do not apply material when temperature will fall within 3°C of the dew point.

Priming may be required in situations where out gassing could be a problem.

APPLICATION

MIXING

Use a jiffy type mixer. When operating the mixer avoid plunging it up and down in the bucket. The can fold air into the resin, which may cause bubbles to form in the coating after it has been applied. Individually stir each separate Part A and Part B component to a smooth, uniform consistency and colour.

Spray: Immediately before applying a spray coat, stripe all continuous welds and edges with a brush-coat to assure adequate protection of the areas. All spray equipment should be clean and in proper working order

COVERAGE: 1.0 litre of coating applied wet at 350micron thick (2 coats applied at 175 micron each) will cover 3-4 square meter.

CURING

Surface temperature

24°C Dry to touch – 12 hours, Final cure – 36 hours before immersion

32°C Dry to touch – 4 hours, Final cure – 24 hours before immersion

SAFETY

Handle with care, before and after use. Follow local safety regulations. All skin contact with resin products should be avoided. Barrier creams should be used and operatives should wear protective clothing for further information please request the Material Safety Data Sheet of this product.

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