



TechnoBit® Durothane CT

Two-pack Coal Tar Pitch modified polyurethane waterproofing Protective & Waterproof Polyurethane Coating system.

Description:

TechnoBit® Durothane CT is a two-component polyurethane protective and waterproof coating system modified with premium quality extended coal tar which cures by reaction with atmospheric moisture and forms a seamless highly elastic and solid membrane for all below and above the grade waterproofing specifications.

TechnoBit® Durothane CT is designed with a high solid content of premium quality coal tar pitch, polyurethane and additives which gives a high film build-up and has good adhesion to a wide range of substrates including all types of metal and concrete. **TechnoBit® Durothane CT** used for achieving protective, anticorrosive coating and air-tightness and perfect waterproofing on a multitude of surfaces and substrates such as steel pipelines, structures and other steel and concrete surfaces where salt corrosion is severe.

Application Includes:

TechnoBit® Durothane CT is recommended for use in the following areas of application:-

As waterproofing and damp proofing of below and above the grade structural members. This may include;

- Positive side waterproofing of below the raft foundation
- Positive side waterproofing of retaining walls
- Positive side waterproofing of podium slabs
- Positive side waterproofing of roof slabs, balconies
- Damp proofing of basements
- Waterproofing of sunken portions

As Protective Coating for steel structure. This may include;

- Structures in marine atmosphere.
- Coating for steel structure which is immersed or exposed to splash zones, high humidity, sewage, or buried environments.
- UV resistance top coat over epoxy system

Features & Benefits:

- **Durability:** Superior durability and thermal stability
- **Waterproof:** Forms a seamless and tough waterproof barrier on curing
- **Flexibility:** Superior flexibility and elongation
- **Crack Bridging:** Superior crack bridging ability
- **Adhesion:** Excellent adhesion to wide level of masonry and cementitious substrates
- **Chemicals Resistance:** Superior resistance to chemicals, mild acids and alkali, corrosive soil conditions, resistance against saline water and high sulphate resistance.
- **Application:** Easy to apply coating by brush or spray.

Applications Instructions

Substrate Preparation

All surfaces must be smooth, sound and free from debris, loose or flaking material and areas of standing water. Surfaces must be free from contamination such as oil, grease, dust, loose particles and organic growth. Concrete surfaces must be fully cured, laitence free and free from any traces of shuttering, release oils and curing compounds. All surfaces should then be grit blasted to remove all foreign matter and open up blow-holes, and provide a suitable key for **TechnoBit® Durothane CT**. All blow holes and imperfections should be filled with **TechnoSeal®EPA**, epoxy putty.

Mixing

Stir drums of individual components of **TechnoBit® Durothane CT** thoroughly to a homogenous and uniform mix a slow speed mixture (approx.400rpm) fitted with a suitable mixing paddle. Ensure that there is no entrapped air. Then mix the entire component A and component B, which are pre-weighed. After stirring, wait for the product to settle in order to let entrapped air escape.

Place the spiral blade at the bottom of the container before starting the mixer. This will help avoiding inducting air into the mass. Slowly move the stirrer head up to the surface while stirring. Do not remove the blade while still it is spinning. This procedure is continued for 5 minutes up and down to have a homogeneous mixing. Allow the combined mix to sit for an induction time of 20 minutes. Stir again gently with a hand stirrer to ensure uniformity before application.

Application

Prime surface with **TechnoSeal® PrimePlus**.

Apply **TechnoBit® Durothane CT** with a nylon brush, or a flat pile felt roller, to the prepared substrate at a thickness of 100 microns WFT (45 microns DFT). Allow **TechnoBit® Durothane CT** first coat to dry for 2-4 hours at 30°C and then apply the second coat. The material should be applied @ 0.2 Kg/Sq.Mtr/100 Mic/2 Coats.

When applying **TechnoBit® Durothane CT** as a topcoat over any of the **TechnoCoat®**, **TechnoFloor®** and **Techno Builders Solutions®** range of epoxy systems, it must be applied after 6 hours but within 24 hours of applying the epoxy.

Note: When applying, if the moisture content in the substrate is more than 3%, blistering of the coating may occur. Test a small area of the surface (minimum 1.5m²) before general application to ensure desired performance results, aesthetics and coverage rates and to verify application technique. Allow 5-7 days for the product to fully react before evaluating.

Typical Properties at 30°C

Wet Film Thickness, micron	~100 microns/coat
Dry film thickness	~ 45-50 microns/coat
Mixed density	1.315 g/cc
Recoat time at 30°C	2- 4 hours
Pot life at 30°C	1 hour
Initial cure at 30°C	16 hours

Curing:

This coating will become tack free in approximately 2-4 hours and be fully cured in 5 days.

Cleaning

Tools and equipments should be cleaned within the pot life of the grout with **TechnoFix® Cleanzol Plus** or **TechnoFix® Eco Cleaner**. Cured material can only be removed mechanically.

Packaging:

TechnoBit® Durothane CT is supplied in 5, 10 and 20 kg premeasured packaged composite packs. Packaging size may vary subject to local regulations and requirements.

Storage & Shelf Life:

12 months from date of production if kept in undamaged and unopened original sealed containers and store at protected area from direct sunshine in dry and cool condition at temperatures between 10°C-30°C.

Coverage:

The theoretical coverage is 8-9m² /kg/litre/coat at 45-50 microns DFT (100 microns WFT). However practical coverage may vary depending on the porosity of substrate, application thickness etc.

Final cure at 30°C	5 days
No. of coats	2
Adhesive bond strength	> 1.5 N/mm ²
Tensile strength (ASTM D412)	> 3N/mm ²
Elongation (ASTM 2370) :	> 50%
Mix ratio (Parts by weight)	4(R):1(H)
Chemical resistance % ASTM C 267	Excellent resistance to most industrial chemicals

Health & Safety Instructions:

TechnoBit® Durothane CT, TechnoFix® Cleanzol Plus and TechnoFix® Eco Cleaner should not come in contact with skin or eyes nor should they be swallowed. Avoid inhalation of vapours and ensure adequate ventilation. Some people are sensitive to resins, hardeners and solvents. Wear suitable protective clothing, gloves and eye/ face protection. Should accidental skin contact occur, remove immediately with a resin removing cream followed by washing with soap and water-do not use solvent. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. If swallowed seek medical attention immediately - do not induce vomiting.

Ensure adequate ventilation in volume and pattern in working area and do not smoke during use. Consider property in proximity of the application area to prevent loss or damage. Protect your jobsite from unauthorized persons. Store all materials and equipment safely and out of reach of children and animals. Observe container labels, SDS, applicable laws and regulations and all instructions before using the product and equipment.

*Further protection: emergency showers and eyewash stations. Get immediate medical attention as needed.

Product only for professional use.

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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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.

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