

## ING TechnoFix® DrainMate

TECHNOTRADE The Ultimate Geocomposite High-density polyethylene (HDPE)
Rolled Matrix Dimpled Drainage and Soil filter System.

### Description:

TechnoFix® DrainMate is a high-performance, high-strength Geocomposite drainage and protection sheet consisting of a three-dimensional layer of polypropylene geotextile fabric with continuous-filament yarn and a high-density polyethylene (HDPE) dimpled membrane. The filter fabric is bonded by thermofusion to the individual dimples of the molded polypropylene core to minimize fabric intrusion into the flow channels caused by overburden pressure. Due to the special orthogonal drainage channels, TechnoFix® DrainMate ensures excellent drainage and creates an air chamber that allows for higher volumes of water to be drained compared to traditional dimpled membranes. The action of the geotextile fabric ensures a constant filtering of soil particles and prevents the obstruction of drainage channels.

TechnoFix® DrainMate is designed for use in the horizontal plaza, roof deck and between-slab drainage applications where single-sided subsurface drainage is required.

TechnoFix® DrainMate also serves as a protection course when used in conjunction with Techno Builders Solutions® range of TechnoFlex®, TechnoPur®, TechnoProof® and TechnoSeal® Waterproofing Membranes

#### **Application Includes:**

TechnoFix® DrainMate is used for the protection and drainage of waterproofing membranes used on foundations, podium, deck slab which are subsequently backfilled. The product is also suitable for "dry" roof gardens where it replaces the traditional aggregate draining layer reducing installation time and reducing both the weight and thickness of the roof garden. It is an excellent general protective membrane for construction sites where drainage quality and mechanical resistance is important.

TechnoFix® DrainMate may also be used for following application-

- Relieve external water pressure from buried structures
- Highways Bridge abutment and wing wall drainage
- · Structural drainage on rail projects
- Drainage on Green Bridges
- Drainage behind retaining walls
- · Covered reservoir roofs and walls
- Tunnel drainage
- Roof garden drainage
- Relief of uplift pressure beneath tanks, slabs and culverts

#### Features:

- Easy installation for horizontal or vertical drainage applications (walls)
- High drainage capacity
- Economic protection- Acts as drainage protection against ground mechanical loads.
- Absorbs and filters water from land, enhancing the drainage system capacity
- Thinner drainage layers when compared to traditional aggregate drainage solutions.
- Reduced dead loads on structure means thinner slabs are possible.

#### **Application instruction**

In vertical applications, TechnoFix® DrainMate is fixed to the wall with profiles in the subbasement level, the direction of the bubbles should be faced to the wall. Plates joints should be put in a minimum of 20 cm overlap. If it is desired, overlap parts of the plates are fixed to each other by hot air hand welding or glued insulated tape. In horizontal applications, TechnoFix® DrainMate is laid to the ground, the direction of the bubbles should be faced to the ground. Plates joints should be put in a minimum of 30 cm overlap. If it is desired, overlap parts of the plates are fixed to each other by hot air hand welding or glued insulated tape.

#### **Typical Properties**

Technical Data	Value	Unit	Standard
Compressive strength	180 ±20%	kN/ m²	UNE EN ISO 604
Water permeability perpendicular to the vertical plane	0.12- 0.02	m/s	UNE EN ISO 11058
Water permeability perpendicular to the horizontal plane	0.002- 0.0002	m2/ s	UNE-EN ISO 12958
Air volume between nodules	5.9	l/m 2	-
Nodules number	1907	-	-
Service temperature range	-40 +80	°C	-
Longitudinal tensile strength	15.0 -4	kN/ m	UNE EN ISO 10319
Transversal tensile strength	15.0 -4	kN/ m	UNE EN ISO 10319
Longitudinal elongation	70±15	%	UNE EN ISO 10319
Transversal elongation	65±15	%	UNE EN ISO 10319
Static puncture resistance (CBR)	2.5 - 0.5	kN	UNE EN ISO 12236
Dynamic puncture resistance (cone)	10 +5	mm	UNE EN 13433
Characteristic aperture measurement	60 ± 5	μm	UNE EN ISO 12956
Water permeability perpendicular to the plane	0.12 - 0.02	m/s	UNE EN ISO 11058
Water flow capacity in the plane	0.5414	l/m. s	UNE-EN ISO 12958

\*All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

- Enhances the performance of structural waterproofing by providing an additional barrier that prevents the majority of the water reaching the liner.
- Good chemical resistances.

#### **Packaging**

Roll size - Length ~12.50 m, Width ~2 m Also available is different pack size on request.

#### **Storage & Shelf Life**

Dry and cool place, in original packaging, protect from UV radiation. Rolls must be transported upright and stowed. Pallets should not be placed on top and it should be stored away from direct heat sources. Shelf life is 5 years from date of production

#### Limitations

Limit ultraviolet exposure by backfilling within 30 days of installation. Any panels damaged during installation should be replaced immediately.

**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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Please note that this datasheet supersedes all previous versions.

#### **Health and Safety instructions**

TechnoFix® DrainMate should not come into contact with skin and eyes or be swallowed. Some people are sensitive to epoxy resins, hardeners and solvents. Gloves, goggles and barrier creams must be used. Ensure adequate ventilation and avoid inhalation of vapours. TechnoFix® DrainMate should be washed from skin immediately with soap and water. Should accidental eye contamination occur with any of the above products, it should be washed well with plenty of water and medical advice should be sought. If swallowed medical attention should be sought immediately. Vomiting should not be induced.

Protect yourself and others on the jobsite. 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. Provide adequate ventilation in volume and pattern in working area.

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

# **STERLING TECHNOTRADE INDIA PRIVATE LIMITED**The Specialist Construction Chemical Company®