

#### **TECHNICAL DATA SHEET**

TDS\_MISFR0031-1.b

## GEOLAND TTX 7, 9, 10 or 12

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### **CIMENTITIOUS GEOCOMPOSITE**

#### USE

GEOLAND TTX is a geocomposite made of cement-based mix, embedded and fixed between two layers of geotextile. Delivered in rolls and hydrated on site, GEOLAND TTX makes possible to obtain a fiber reinforced concrete slab with a smooth and regular surface used for:

- Erosion control use on slopes, ditches and canals,
- Mechanical protection use as a protection of geomembranes or as a temporary protection,
- Blinding concrete / reinforcement support,
- Temporary support.

Depending on the desired applications and the required property , the choice will be cement-based mix masses of either 7 kg/m $^2$  or 9 kg/m $^2$  or 10 kg/m $^2$  or 12 kg/m $^2$ .

Examples of many GEOLAND TTX applications are described in the product's commercial documentation.





#### **APPLICATION**

GEOLAND TTX is unrolled directly on the substrate, nailed if necessary, and hydrated by spraying water:

- Approx. 3.5 I/m<sup>2</sup> for GEOLAND TTX 7
- Approx. 4.5 l/m<sup>2</sup> for GEOLAND TTX 9
- Approx. 5 l/m² for GEOLAND TTX 10
- Approx. 6 l/m<sup>2</sup> for GEOLAND TTX 12

These quantities are indicative and depend of the weather conditions as the product needs to be kept wet for at least 48h.

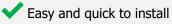
During curing, the cement-based mix reacts and hardens to obtain a thin concrete slab. The presence of needle punched synthetic fibers in the geosynthetic ensures excellent mechanical strength.

In case GEOLAND TTX is exposed to UV, the cover geotextile will disappear along the years giving way to a smooth surface of grey concrete.

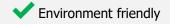
#### **DESCRIPTION**

GEOLAND TTX is a geocomposite made with two 100% polypropylene non-woven geotextiles (400 g/m² for the carrier layer and 200 g/m² for the cover layer) embedding an engineered special cement based mix. The whole is maintained by an intense needling process made in the plant.

SOPREMA prides itself in working with the highest quality products. We operate with quality assurance systems, and are certified ISO 9001.









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#### **CHARACTERISTICS**

ESSENTIAL CHARACTERISTICS	Standard	GEOLAND TTX 7	GEOLAND TTX 9	GEOLAND TTX 10	GEOLAND TTX 12	and
Thickness (mm)*	EN 9863-1	<b>7,00</b> (± 1 mm)	9,00 (±1 mm)	10,00 (±1 mm)	12,00 (±1 mm)	256 a
Mass per unit area (kg/m²)*	EN 1849-2	<b>7,55</b> (± 10%)	9,55 (± 10%)	10,55 (± 10%)	12,55 (± 10%)	13
Maximum tensile strength* Longitudinal (kN/m) Transversal (kN/m)	EN 10319	≥ 20 ≥ 20				EN 13255, EN (system 2+)
Elongation at break* Longitudinal (%) Transversal (%)	EN 10319	≥ 40 ≥ 40				
Static puncture resistance (N)**	EN 12236	≥ 3200	≥ 3500	≥ 3700	≥ 4000	325. 132.
Dynamic puncture resistance (mm)**	EN 13433	0			EN A	
Pyramid puncture resistance (kN)**	EN 14574	≥ 6 (± 10%)	≥ 7 (± 10%)	≥ 9 (± 10%)	≥ <b>10</b> (± 10%)	53, 1
Durability**	EN 12226	NPD				132
Dangerous substances	EN 12224	NPD				Ä

ADDITIONAL CHARACTERISTICS	Standard	GEOLAND TTX 7	GEOLAND TTX 9	GEOLAND TTX 10	GEOLAND TTX 12
Compressive strength (MPa)** (Cement based mix only)	ASTM C 109-2	40			
Setting start (min)	EN 196-3	> 90			
Fire resistance**	EN 13501- 1	B-s1, d0			
Index flux (m³/m²/sec)**	ASTM D5887-16	≤ 1,5.10-5			
Root resistance**	CEN/TS 14416	Pass			
Abrasion resistance (mm/1000 cycles)**	ASTM C1353	≤ 0.4			
Manning coefficient (n)**	ASTM D6460	≤ 0.022			

<sup>\*</sup> before hydration / \*\* cured 28 days

#### **PACKAGING**

	<del></del>
Size of the rolls	20 ml / 5 m – 20 ml / 2.5 m – 5 ml / 1 m

The rolls are individually wrapped. The rolls 5m and 2.5m wide are equipped with a single-use lifting strap. 1m wide rolls are placed on a pallet. On request, 2.5m wide rolls may be also placed on pallets.

#### **CE MARKING**

Unique identification code of the product-type: MISFR0031.

GEOLAND TTX is produced for SOPREMA Group and is CE marked in accordance with EN 13253:2017, EN 13254:2017, EN 13255:2017, EN 13256:2016 and EN 13257:2016.