

PET WOVEN GEOTEXTILES FOR REINFORCEMENT



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WAYS TO FOLLOW

Product:

The Quinitex® geotextiles represent a highly specialized combination of twisted polyester yarn with a high modulus of elasticity and extremely advanced weaving technology that has been implemented over these last twenty years. Quinitex® has strong edges, and as such, the rolls can be sewn “side by side”.

Strength of materials:

QuiniTex® has a range of products that are highly resistant at low elongation. The Quinitex® geotextiles fatigue resistance complies with the most relevant CEN/ISO standards.

Durability:

As proven by numerous tests, polyester (PET) is an extremely strong and stable polymeric material. As such, the QuiniTex® PET geotextiles, obtained by a high performance weaving process, possess excellent characteristics as regards creep, resistance to mechanical damage, UV resistance and degradation caused by chemical and biological agents.

Friction:

QuiniTex® products have properties that afford it excellent resistance to friction for all kinds of filling materials. The friction resistance characteristics can be determined by consulting the Qiniimar Design Guidelines.

QuiniTex® geotextiles can be used in numerous applications of soil reinforcement. They are particularly adaptable to jobs subject to extremely high loads and in the presence of coarse materials (granular materials used in embankments and earthworks). QuiniTex® PET geotextiles are particularly suitable in jobs where the functions of reinforcement and separation are needed simultaneously. The design principles within the different fields of application are outlined in the Quinimar Design Guidelines.

Earthworks and soils of weak support

QuiniTex® geotextiles allow for the reduction of differential slumps and reduce the probability of collapse of support soils. QuiniTex® geotextiles enable reduction in the transfer of the cutting force of the support soil and increase the load resistance by over 50%. QuiniTex® is also used in building embankments. It can be used simultaneously with other reinforcement techniques, such as building vertical embankments.

Retaining walls and very steep slopes

QuiniTex® geotextiles can be used for building retaining walls and very steep slopes without exterior support. The use of other materials like facades after these applications is only for esthetic and protection purposes (e.g. protection of the geotextiles from UVs) when normally cement blocks, natural rock or concrete or wood panels are used. Quinitex® geotextiles can also be used in combination with biodegradable solutions used to build facades covered in vegetation.

Roads and railways:

QuiniTex® geotextiles can be used to reduce deformation resulting from traffic of the base layers of weak soils. QuiniTex® geotextiles are especially recommended in applications where reinforcement and separation of soils are simultaneously needed and where weak deformation is acceptable (e.g. access roads).

Synergy between QuiniRoad® PET geogrids and woven QuiniTex® geotextiles, in some cases can be beneficial for consolidating construction (e.g. railway foundations). QuiniTex® geotextiles are appropriate for carrying out earthworks in weak soils.

QuiniTex® geotextiles used for environmental purposes:

Given their high resistance combined with their filtration properties, QuiniTex® geotextiles are also used for applications such as anti-sludge and anti-pollution curtains or can be used as bags for filtering marine

Referência	Resistência à tracção MD - kN/m	Resistência à tracção CD - kN/m	Massa específica g/m2
QuiniTex 50/50	50	50	225
QuiniTex 70/70	70	70	230
QuiniTex 100/50	100	50	240
QuiniTex 100/100	100	100	310
QuiniTex 150/50	150	50	320
QuiniTex 150/150	150	150	475
QuiniTex 200/50	200	50	400
QuiniTex 200/200	200	200	620
QuiniTex 300/50	300	50	560
QuiniTex 400/30	400	30	650
QuiniTex 400/50	400	50	720
QuiniTex 400/100	400	100	800
QuiniTex 500/50	500	50	900
QuiniTex 600/50	600	50	1150
QuiniTex 650/50	650	50	1170
QuiniTex 800/50	800	50	1400
QuiniTex 800/100	800	100	1450
QuiniTex 1000/50	1000	50	1900

