KingExtra® GT30

Nonwoven high performance geotextiles.

DESCRIPTION

Nonwoven geotextile made from staple fibers that are mechanically bonded by a needle punching process to produce a dimensionally stable network. The fibers used are 100% virgin white polyester, ultra-violet resistant with 256°C melting point.

APPLICATIONS

KingExtra GT30 is used in road and railway soil stabilization, waterways and seashore erosion control, asphalt pavement overlay crack relief, subsurface drainage systems, waterproofing membrane protection, landfill, landscaping, etc.

Separation between two dissimilar materials so that the integrity and functioning of both materials can remain intact or be improved.

Filtration by permitting water flow across the plane of the geotextile while retaining fine soil particles.

Transmission by providing water drainage and gas venting within the plane of the geotextile.

Sealing when impregnated with asphalt or resin to act as a moisture barrier.

Stress Absorption in pavement overlay when impreganted with asphalt.

Protection of geomembrane against puncture by absorbing the point stresses.

BIOLOGICAL AND CHEMICAL RESISTANCE

KingExtra GT30 is non-biodegradable, and have excellent resistance to chemicals and salts normally present in the soil. KingExtra GT30 is unaffected by prolonged contact with common organic solvents such as gasoline and diesel.

EXPOSURE TO SUNLIGHT

KingExtra GT30 have excellent UV resistance and exhibit strength retention of 70% on test for weathering resistance to EN12224. KingExtra GT30 is delivered in black PE wrap for protection against UV-rays during transit and storage. The recommended maximum time of exposure to direct sunlight is 15 days.

PERFORMANCE PROPERTIES

Hydraulic Properties include opening size, permeability, and transmissivity. For optimum filtration, the geotextile is required to meet two seemingly conflicting requirements: the geotextile pore spaces must be small enough to retain soil particles while also being large enough to permit relatively unimpeded water flow. KingExtra GT30 meet this requirement and have exceptionally high filtration properties due to the needle punching process, which produces a large number of small holes in the fabric structure.

This process provides KingExtra GT30 with superior filtration properties, offering a unique combination of high permeability that allows unimpeded flow of water across the fabric whilst maintaining a low opening size to retain the fine soil particles without becoming clogged over time.

Survivability Properties refer to the ability of the geotextile to withstand the installation stresses and to perform as intended in the design. The survivability properties include puncture resistance, dynamic puncture, CBR puncture and Mullen burst strengths. KingExtra GT30 due to its high elongation property, are inherently more resistant to installation damage than stiff low elongation fabrics.

The high elongatin property of KingExtra GT30 allows the fabric to adapt to the uneven contour of the matrix and transmit the installation stresses, unlike stiff geotextile fabrics with low elongation that tend to carry the installation loads and hence are required to meet a set of higher strength values compared with high elongation geotextiles. The geotextile fabric in the tensile and grab tests is stressed in a linear direction along its plane, and hence these index test values need necessarily be considered in conjunction with elongation values.

KINGKRETE®
We Create Future

KingExtra® GT30

Nonwoven high performance geotextiles.

TECHNICAL PROPERTIES

Properties:	Unit	PSF 100	PSF 125	PSF 150	PSF 200	PSF 250	PSF 300	PSF 350	PSF 400	PSF 500	PSF 600
CBR puncture: ASTM D6241	N	300	450	600	900	1200	1500	1800	2100	2700	3200
Puncture strength: ASTM D4833	N	82	99	133	225	284	346	440	530	600	720
Tensile strength: ASTM D4595	KN/m	2.5	3.5	4.5	6.5	8.0	9.5	11.0	12.5	16.0	19.0
Tensile elongation: ASTM D4595	%	50									
Grab tensile strength: ASTM D4632	N	225	280	340	480	600	750	900	1150	1400	1600
Grab elongation: ASTM D4632	%	50									
Trapezoidal tear: ASTM D4533	N	80	100	120	160	200	240	280	320	380	440
Cone drop resistance: (hole -Ø) [BS EN918]	mm	45	40	37	34	31	26	23	19	16	15
Permeability: ASTM D4491	cm/S	0.41	0.40	0.39	0.38	0.37					
Apparent openning size (AOS): ASTM D4751	mm	0.13	0.12	0.11	0.09	0.08	0.075				
UV resistance (retained @ 500 hours): ASTM D4355	%	70									
Softening point: ASTM D276	°C	230									
Thickness (2kp): ASTM 5199	mm	0.9	1.1	1.3	1.7	2.1	2.4	2.7	3.0	3.6	4.1
Roll width:	m		2/3								
Roll length:	m	300	250	200	150	120	100	85	75	60	50
Approx. load Q'ty per 40' HQ	Sq.m	72,000	60,000	48,000	36,000	28,800	24,000	20,400	18,000	14,400	12,000

STORAGE

Shelf life is 1 year when stored under cover, out of direct sunlight and protected from extremes of temperature.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult KingKrete's Technical Services Department.

HEALTH AND SAFETY

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs. Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Reseal containers after use. Use in well ventilated areas and avoid inhalation.

NOTE

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local KingKrete representative. KingKrete Inc. reserves the right to have the true cause of any difficulty determined by accepted test methods.

QUALITY AND CARE

All products originating from KingKrete's Middle East facility are manufactured under a management system independently certified to conform to the requirements of the quality standards ISO 9001, ISO 14001 and ISO 45001.

* Properties listed are based on laboratory-controlled tests.
® = Registered trademark of the KingKrete-Group in many countries.

KingExtra® GT30

Nonwoven high performance geotextiles.

Ref: KK-10032-MEA-R01 | Issue: 01.2026

STATEMENT OF RESPONSIBILITY	The technical information and application advice given in this KingKrete Inc. publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.
NOTE	Field service where provided does not constitute supervisory responsibility. Suggestions made by KingKrete Inc. either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not KingKrete Inc. are responsible for carrying out procedures appropriate to a specific application.

Disclaimer: the IAS mark relates to certified management system and not to the product mentioned on this datasheet