



GEOQUEST



ArmaGrid – BX_{PET}
COATED POLYESTER BIAxIAL GEOGRIDS



ArmaGrid – BX_{PET} is a high strength and low strain biaxial knitted geogrid manufactured with high tenacity polyester yarns.

Applications

- **Basal Reinforcement:** ArmaGrid – BX_{PET} is used as basal reinforcement to support shallow embankments, foundations or other heavily loaded platforms on soft soil, by enhancing load distribution in two directions, maintaining structural integrity and reducing differential settlement.
- **Subgrade and Subbase Stabilisation:** Improvement of sub-grade and sub-base performance in roads, railways and airport runways, taxiways and aprons by incorporating the ArmaGrid – BX_{PET} within appropriate interlayers.

Technical Parameters

Properties	Test Methods	Units	AG-BX _{PET} 30	AG-BX _{PET} 40	AG-BX _{PET} 60	AG-BX _{PET} 80	AG-BX _{PET} 100
Minimum Average Roll Valueⁱ							
Physical Properties							
Material			Polyester				
Mass per unit area	ASTM D 5261	g/ m ²	273	256	342	608	645
Aperture Size in Machine Direction ⁱⁱ		mm	24	24	17	20	30
Aperture Size in Cross Direction ⁱⁱ		mm	23	21	21	20	30
Mechanical Properties							
Ultimate Tensile Strength MD ^v	ASTM D 6637-Method A	kN/m	30	40	60	80	100
Ultimate Tensile Strength CD ^v		kN/m	30	40	60	80	100
Creep Reduction Factor (114 years design life)	ASTM D 6637-Method A	at 20°C	1.39	1.39	1.39	1.39	1.39
		at 30°C	1.44	1.44	1.44	1.44	1.44
Partial Factor-installation damage	ASTM D 5818	Particle size < 5mm (Silty Sand)	1.1	1.1	1.1	1.02	1.02
		Particle size < 35mm (Gravelly Sand)	1.12	1.12	1.12	1.06	1.06
		Particle size < 125mm (Sandy Gravel)	1.19	1.19	1.19	1.16	1.16
Partial Factor- environmental Effects	GRI-GG7, GRI-GG8 Environment	4 < pH < 9	1.10	1.10	1.10	1.10	1.10
Standard Packaging							
Roll Dimensions (width) ⁱⁱⁱ		m	1.9	1.9	1.9	1.9	1.9
Roll Dimensions (length) ⁱⁱⁱ		m	100	100	100	100	100
Roll Area ^{iv}		m ²	190	190	190	190	190
Weight per Roll ⁱⁱⁱ		kg	53	62	85	111	124

ⁱ All the values mentioned are of minimum average roll values (MARV)

ⁱⁱ Tolerance ±1mm

ⁱⁱⁱ These values are subject to ±1% variation

^{iv} Other roll sizes available

^v MD- Machine Direction, CD- Cross Machine Direction

NOTES

A. All prescribed values are minimum unless otherwise mentioned and tested in GAI-LAP accredited laboratories.

B. These properties may change at the time of handling, storage and shipping.

C. Customized rolls with varying lengths or master rolls can be manufactured.

D. The above values are subject to change as per discretion of the company

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