

CHECKMATE FLEXGRID™ BX PET BI-AXIAL (BX) GEOGRIDS

Checkmate FlexGrid BX series is specifically designed for improved performance in soil stabilization, base reinforcement and soil reinforcement applications. FlexGrid BX geogrids are manufactured with high molecular weight, high tenacity polyester yarns by precision knitting process. The FlexGrid is dimensionally stable with uniform network of apertures providing significant tensile reinforcement capacity in two principal directions. Checkmate has conducted numerous geogrid / soil interaction, Pull out & direct shear tests for FlexGrid BX PET family of products in reputed independent laboratories, to clearly demonstrate the efficient use of these products in the roadway system applications.

The FlexGrid BX is engineered to be mechanically and chemically stable, in both harsh construction installation phase and in aggressive soil environments (pH level 2.0 – 12.0). FlexGrids are biologically unaffected by soil micro-organisms. A black PVC saturation coating provides further chemical, mechanical, as well as ultraviolet protection.

TENSILE PROPERTIES		TEST METHOD	UNIT	BX10PET	BX20PET	BX35PET	BX50PET
Ultimate Tensile Strength ⁽¹⁾	MD	ASTM D 6637	Lb/ft /kN/m	1631.25 / 23.8	2179.57 / 31.8	2974.36 / 43.4	4461.95 / 65.1
	XD	ASTM D 6637	Lb/ft /kN/m	1631.25 / 23.8	2179.57 / 31.8	2974.36 / 43.4	4461.95 / 65.1
Tension at 2% Strain ⁽¹⁾	MD	ASTM D 6637	Lb/ft /kN/m	479.78 / 7.0	630.56 / 9.2	788.21 / 11.5	1062.37 / 15.5
	XD	ASTM D 6637	Lb/ft /kN/m	452.36 / 6.6	616.86 / 9.0	753.94 / 11.0	1014.39 / 14.8
Tension at 5% Strain ⁽¹⁾	MD	ASTM D 6637	Lb/ft /kN/m	651.13 / 9.5	808.77 / 11.8	1028.10 / 15.0	1439.34 / 21.0
	XD	ASTM D 6637	Lb/ft /kN/m	644.27 / 9.4	788.21 / 11.5	1007.53 / 14.7	1384.50 / 20.2
PHYSICAL PROPERTIES							
Aperture Size ⁽²⁾	MD	Nominal	In/mm	1.11 / 28.2	1.11 / 28.2	1.22 / 31.0	1.22 / 31.0
	XD	Nominal	In/mm	1.11 / 28.2	1.11 / 28.2	1.22 / 31.0	1.22 / 31.0
Roll Length ⁽³⁾		Minimum	ft/m	49.22/15	49.22/15	49.22/15	49.22/15
				164.04 /50	164.04 /50	164.04 /50	164.04 /50
				328.08/100	328.08/100	328.08/100	328.08/100
Roll Width ⁽³⁾		Minimum	ft/m	4.92 / 1.5	4.92 / 1.5	4.92 / 1.5	4.92 / 1.5
				8.20 / 2.5	8.20 / 2.5	8.20 / 2.5	8.20 / 2.5
				16.40 / 5.0	16.40 / 5.0	16.40 / 5.0	16.40 / 5.0

NOTE: (1) Marv (Minimum Average Roll Values) determined in accordance with ASTM D 4759 Values; (2) average (3) typical. Standard roll lengths are shown; the products may be fabricated to custom lengths to suit the contractor's requirements.

NOTE: This specification sheet supersedes all prior specifications for FLEXGRID and is not applicable to any product shipped prior to April 1, 2008.

CHECKMATE FLEXGRID™ BX PET Typical Applications:

- Step slope reinforcement
- Reinforced soil retaining walls and bridge abutments
- Gabion retaining walls
- Vegetated retaining walls
- Ecoscape Wall Systems
- Landfill expansion projects
- Railway embankments
- Veneer reinforcement
- Earth bunds around oil tanks

Disclaimer: Checkmate reserves the right to change these specifications without notice and at its sole discretion. The user of this specification sheet is required to obtain formal confirmation from Checkmate of the current specification of the product it intends to use.



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