



RIGIDGRID BX

RANGE BI-AXIAL GEOGRIDS FOR SOIL STABILIZATION & BASE REINFORCEMENT

The Checkmate RigidGrid BX range is manufactured out of Polypropylene by a unique punching and drawing process and provide an ideal solution for soil stabilization, sub- base reinforcement, foundation engineering and other highway challenges. RigidGrid BX range feature high tensile stiffness at low strains and excellent resistance to construction damage and environmental exposure. The geometry of the RigidGrid allows a strong positive mechanical interlock with the soil particles being reinforced. A significant saving in the fill thickness can be achieved by using the Checkmate RigidGrid BX range of products along with the improvement of resistance to rutting.

PHYSICAL PROPERTIES		UNIT	BX1515PP	BX2020PP	BX2525PP	BX3030PP	BX4040PP
APERTURE SIZE MD ⁽²⁾	Nominal	mm	49	43.7	37.9	41.4	38.7
APERTURE SIZE TD ⁽²⁾	Nominal	mm	40.4	41.9	37.6	38.9	40.5
ROLL WIDTH ⁽⁴⁾	Minimum	m	3.9	3.9	3.9	3.9	3.9
ROLL LENGTH ⁽⁴⁺⁵⁾	Minimum	m	50	50	50	50	50
ESTIMATED ROLL WEIGHT ⁽³⁾		kg/lbs	44kg/97lbs	53kg/117lbs	59kg/130lbs	77kg/169lbs	107kg/235lbs

CHECKMATE RIGIDGRID BX TYPICAL APPLICATIONS:

- Road sub-base Reinforcement
- Soil stabilization
- Improvement of access roads to oil platforms
- Railway Ballast Reinforcement over soft foundations
- Parking Lot stabilization
- Temporary Military Road improvement
- Secondary slope and wall reinforcement



RIGIDGRIDBX

TENSILE PROPERTIES		TEST METHOD	UNIT	BX1515PP	BX2020PP	BX2525PP	BX3030PP	BX4040PP
ULTIMATE TENSILE STRENGTH ⁽¹⁾	MD	ASTM D 6637	kN/m	17.7	24.8	28.7	33.2	39.5
	XD	ASTM D 6637	kN/m	15.2	19.4	26.0	31.1	38.9
STRAIN AT ULTIMATE ⁽²⁾	MD	ASTM D 6637	%	11.9	8.6	15.7	14.4	18.8
	XD	ASTM D 6637	%	7.8	8	9.8	6.9	9.9
TENSION AT 2% STRAIN ⁽¹⁾	MD	ASTM D 6637	kN/m	6.3	11.1	9.5	11.9	13.9
	XD	ASTM D 6637	kN/m	6.6	8.5	10.9	14.2	14.6
TENSION AT 5% STRAIN ⁽¹⁾	MD	ASTM D 6637	kN/m	12.3	20.7	19.5	22.7	28.1
	XD	ASTM D 6637	kN/m	12.4	16.0	20.1	26.7	28.8
JUNCTION STRENGTH ⁽²⁾	MD	GRI-GG2	kN/m	17.9	26.0	27.6	31.3	37.1
	XD	GRI-GG2	kN/m	15.6	19.9	23.6	29.0	35.7
FLEXURAL RIGIDITY ⁽²⁾	MD	ASTMD 1388 {modified} ⁽³⁾	mg-cm	452769	509221	1002145	1855537	3581386
	XD	ASTMD 1388 {modified} ⁽³⁾	mg-cm	165737	503875	1151286	2003278	3518476

CHECKMATE GEOSYNTHETICS

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NOTES:

- (1) MARV (Minimum Average Roll values determined in accordance with ASTM D4759)
- (2) Average
- (3) Flexural Rigidity measured using specimens longer than the standard specimen length described in ASTM D 1388
- (4) Typical
- (5) Custom Length Orders can be accommodated up request

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.