

### CHECKMATE RIGIDGRID™ BX PP

**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 BX 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.

TENSILE PROPERTIES		TEST METHOD	UNIT	BX1515PP	BX2020PP	BX2525PP	BX3030PP	BX4040PP
Ultimate Strength <sup>(1)</sup>	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 <sup>(2)</sup>	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 <sup>(1)</sup>	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 <sup>(1)</sup>	MD	ASTM D 5262	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 <sup>(2)</sup>	MD	GRI-GG <sub>2</sub>	kN/m	17.9	26.0	27.6	31.3	37.1
	XD	GRI-GG <sub>2</sub>	kN/m	15.6	19.9	23.6	29.0	35.7
Flexural Rigidity <sup>(2)</sup>	MD	ASTM D 1388 (Modified) <sup>(3)</sup>	mg-cm	472769	509221	1002145	1855537	3581386
	XD	ASTM D 1388 (Modified) <sup>(3)</sup>	mg-cm	165737	503875	1151286	2003278	3518476
PHYSICAL PROPERTIES			UNIT	BX1515PP	BX2020PP	BX2525PP	BX3030PP	BX4040PP
Aperture Size <sup>(2)</sup>	MD	Nominal	mm	30	30	30	33	36
	XD	Nominal	mm	30	30	30	33	36
Roll Width <sup>(4)</sup>		Minimum	m	3.9	3.9	3.9	3.9	3.9
Roll Length <sup>(4)(5)</sup>		Minimum	m	50	50	50	50	50
Estimated Roll Weight <sup>(4)</sup>			Kg/lbs	44/97	53/117	59/130	77/169	107/235

**NOTE:** (1) MARV Values, (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.

#### CHECKMATE RIGIDGRID BX PP 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

**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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GEOSYNTHETICS

### CHECKMATE RIGIDGRID™ BX2525PP

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 BX 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.

TENSILE PROPERTIES		TEST METHOD	UNIT	BX2525PP
Ultimate Strength <sup>(1)</sup>	MD	ASTM D 6637	kN/m	28.7
	XD	ASTM D 6637	kN/m	26.0
Strain at Ultimate <sup>(2)</sup>	MD	ASTM D 6637	%	15.7
	XD	ASTM D 6637	%	9.8
Tension at 2% Strain <sup>(1)</sup>	MD	ASTM D 6637	kN/m	9.5
	XD	ASTM D 6637	kN/m	10.9
Tension at 5% Strain <sup>(1)</sup>	MD	ASTM D 5262	kN/m	19.5
	XD	ASTM D 6637	kN/m	20.1
Junction Strength <sup>(2)</sup>	MD	GRI-GG <sub>2</sub>	kN/m	27.6
	XD	GRI-GG <sub>2</sub>	kN/m	23.6
Flexural Rigidity <sup>(2)</sup>	MD	ASTM D 1388 (Modified) <sup>(3)</sup>	mg-cm	1002145
	XD	ASTM D 1388 (Modified) <sup>(3)</sup>	mg-cm	1151286
Junction Efficiency		GRI-GG <sub>2</sub>	%	91.05
PHYSICAL PROPERTIES			UNIT	BX2525PP
Aperture Size <sup>(2)</sup>	MD	Nominal	mm	30
	XD	Nominal	mm	30
Roll Width <sup>(4)</sup>		Minimum	m	3.9
Roll Length <sup>(4)(5)</sup>		Minimum	m	50
Estimated Roll Weight <sup>(4)</sup>			Kg/lbs	59/130

**NOTE:** (1) MARV Values, (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.

#### CHECKMATE RIGIDGRID BX PP Typical Applications:

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