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Product Specification Tensar Biaxial Geogrid

- Biaxial Geogrid BX1100
- Biaxial Geogrid BX1120
- Biaxial Geogrid BX1200
- Biaxial Geogrid BX1220
- Biaxial Geogrid BX1300
- Biaxial Geogrid BX1500
- Biaxial Geogrid BX4100
- Biaxial Geogrid BX4200
- Biaxial Geogrid BX6100
- Biaxial Geogrid BX6200



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Product Specification - Biaxial Geogrid BX1100

Tensar International Corporation reserves the right to change its product specifications at any time. It is the responsibility of the specifier and purchaser to ensure that product specifications used for design and procurement purposes are current and consistent with the products used in each instance.

Product Type: Integrally Formed Biaxial Geogrid

Polymer: Polypropylene

Load Transfer Mechanism: Positive Mechanical Interlock

Primary Applications: Spectra System (Base Reinforcement, Subgrade Improvement)

Product Properties

Index Properties	Units	MD Values ¹	XMD Values ¹
 Aperture Dimensions² 	mm (in)	25 (1.0)	33 (1.3)
 Minimum Rib Thickness² 	mm (in)	0.76 (0.03)	0.76 (0.03)
 Tensile Strength @ 2% Strain³ 	kN/m (lb/ft)	4.1 (280)	6.6 (450)
 Tensile Strength @ 5% Strain³ 	kN/m (lb/ft)	8.5 (580)	13.4 (920)
 Ultimate Tensile Strength³ 	kN/m (lb/ft)	12.4 (850)	19.0 (1,300)
Structural Integrity			
 Junction Efficiency⁴ 	%	93	_
 Flexural Stiffness⁵ 	mg-cm	250,000	
 Aperture Stability⁶ 	m-N/deg	0.32	
Durability			
 Resistance to Installation Damage⁷ 	%SC / %SW / %GP	95 / 93 / 90	
 Resistance to Long Term Degradation⁸ 	%	100	
 Resistance to UV Degradation⁹ 	%	100	

Dimensions and Delivery

The biaxial geogrid shall be delivered to the jobsite in roll form with each roll individually identified and nominally measuring 3.0 meters (9.8 feet) or 4.0 meters (13.1 feet) in width and 75.0 meters (246 feet) in length. A typical truckload quantity is 185 to 250 rolls.

- 1. Unless indicated otherwise, values shown are minimum average roll values determined in accordance with ASTM D4759-02. Brief descriptions of test procedures are given in the following notes.
- Nominal dimensions.
- 3. Determined in accordance with ASTM D6637-10 Method A.
- 4. Load transfer capability determined in accordance with ASTM D7737-11.
- 5. Resistance to bending force determined in accordance with ASTM D7748-12, using specimens of width two ribs wide, with transverse ribs cut flush with exterior edges of longitudinal ribs, and of length sufficiently long to enable measurement of the overhang dimension.
- 6. Resistance to in-plane rotational movement measured by applying a 20 kg-cm (2 m-N) moment to the central junction of a 9 inch x 9 inch specimen restrained at its perimeter in accordance with GRI GG9.
- 7. Resistance to loss of load capacity or structural integrity when subjected to mechanical installation stress in clayey sand (SC), well graded sand (SW), and crushed stone classified as poorly graded gravel (GP). The geogrid shall be sampled in accordance with ASTM D5818 and load capacity shall be determined in accordance with ASTM D6637.
- 8. Resistance to loss of load capacity or structural integrity when subjected to chemically aggressive environments in accordance with EPA 9090 immersion testing.
- Resistance to loss of load capacity or structural integrity when subjected to 500 hours of ultraviolet light and aggressive weathering in accordance with ASTM D4355-05.



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Product Specification - Biaxial Geogrid BX1120

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Product Type: Integrally Formed Biaxial Geogrid

Polymer: Polypropylene

Load Transfer Mechanism: Positive Mechanical Interlock

Primary Applications: SierraScape System, ADD³ System (Exposed Wall Face Wrap)

Product Properties

Index Properties	Units	MD Values ¹	XMD Values ¹
 Aperture Dimensions² 	mm (in)	25 (1.0)	33 (1.3)
 Minimum Rib Thickness² 	mm (in)	0.76 (0.03)	0.76 (0.03)
 Tensile Strength @ 2% Strain³ 	kN/m (lb/ft)	4.1 (280)	6.6 (450)
 Tensile Strength @ 5% Strain³ 	kN/m (lb/ft)	8.5 (580)	13.4 (920)
 Ultimate Tensile Strength³ 	kN/m (lb/ft)	12.4 (850)	19.0 (1,300)
 Carbon Black Content 	%	2.0	
Structural Integrity			
 Junction Efficiency⁴ 	%	93	
 Flexural Stiffness⁵ 	mg-cm	250,000	
 Aperture Stability⁶ 	m-N/deg	0.32	
Durability			
 Resistance to Installation Damage⁷ 	%SC / %SW / %GP	95 / 93 / 90	
 Resistance to Long Term Degradation⁸ 	%	100	
 Resistance to UV Degradation⁹ 	%	100	

Dimensions and Delivery

The biaxial geogrid shall be delivered to the jobsite in roll form with each roll individually identified and nominally measuring 3.0 meters (9.8 feet) or 4.0 meters (13.1 feet) in width and 50.0 meters (164 feet) in length. A typical truckload quantity is 260 to 350 rolls

- 1. Unless indicated otherwise, values shown are minimum average roll values determined in accordance with ASTM D4759-02. Brief descriptions of test procedures are given in the following notes.
- 2. Nominal dimensions.
- 3. Determined in accordance with ASTM D6637-10 Method A.
- 4. Load transfer capability determined in accordance with ASTM D7737-11.
- 5. Resistance to bending force determined in accordance with ASTM D7748-12, using specimens of width two ribs wide, with transverse ribs cut flush with exterior edges of longitudinal ribs, and of length sufficiently long to enable measurement of the overhang dimension.
- 6. Resistance to in-plane rotational movement measured by applying a 20 kg-cm (2 m-N) moment to the central junction of a 9 inch x 9 inch specimen restrained at its perimeter in accordance with GRI GG9.
- 7. Resistance to loss of load capacity or structural integrity when subjected to mechanical installation stress in clayey sand (SC), well graded sand (SW), and crushed stone classified as poorly graded gravel (GP). The geogrid shall be sampled in accordance with ASTM D5818 and load capacity shall be determined in accordance with ASTM D6637.
- 8. Resistance to loss of load capacity or structural integrity when subjected to chemically aggressive environments in accordance with EPA 9090 immersion testing.
- Resistance to loss of load capacity or structural integrity when subjected to 500 hours of ultraviolet light and aggressive weathering in accordance with ASTM D4355-05.



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Product Specification - Biaxial Geogrid BX1200

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Product Type: Integrally Formed Biaxial Geogrid

Polymer: Polypropylene

Load Transfer Mechanism: Positive Mechanical Interlock

Primary Applications: Spectra System (Base Reinforcement, Subgrade Improvement)

Product Properties

Index Properties	Units	MD Values ¹	XMD Values ¹
 Aperture Dimensions² 	mm (in)	25 (1.0)	33 (1.3)
 Minimum Rib Thickness² 	mm (in)	1.27 (0.05)	1.27 (0.05)
 Tensile Strength @ 2% Strain³ 	kN/m (lb/ft)	6.0 (410)	9.0 (620)
 Tensile Strength @ 5% Strain³ 	kN/m (lb/ft)	11.8 (810)	19.6 (1,340)
 Ultimate Tensile Strength³ 	kN/m (lb/ft)	19.2 (1,310)	28.8 (1,970)
Structural Integrity			
 Junction Efficiency⁴ 	%	93	
 Flexural Stiffness⁵ 	mg-cm	750,000	
 Aperture Stability⁶ 	m-N/deg	0.65	
Durability			
 Resistance to Installation Damage⁷ 	%SC / %SW / %GP	95 / 93 / 90	
 Resistance to Long Term Degradation⁸ 	%	100	
 Resistance to UV Degradation⁹ 	%	100	

Dimensions and Delivery

The biaxial geogrid shall be delivered to the jobsite in roll form with each roll individually identified and nominally measuring 3.0 meters (9.8 feet) or 4.0 meters (13.1 feet) in width and 50.0 meters (164 feet) in length. A typical truckload quantity is 160 to 210 rolls.

- 1. Unless indicated otherwise, values shown are minimum average roll values determined in accordance with ASTM D4759-02. Brief descriptions of test procedures are given in the following notes.
- 2. Nominal dimensions.
- 3. Determined in accordance with ASTM D6637-10 Method A.
- 4. Load transfer capability determined in accordance with ASTM D7737-11.
- 5. Resistance to bending force determined in accordance with ASTM D7748-12, using specimens of width two ribs wide, with transverse ribs cut flush with exterior edges of longitudinal ribs, and of length sufficiently long to enable measurement of the overhang dimension.
- 6. Resistance to in-plane rotational movement measured by applying a 20 kg-cm (2 m-N) moment to the central junction of a 9 inch x 9 inch specimen restrained at its perimeter in accordance with GRI GG9.
- 7. Resistance to loss of load capacity or structural integrity when subjected to mechanical installation stress in clayey sand (SC), well graded sand (SW), and crushed stone classified as poorly graded gravel (GP). The geogrid shall be sampled in accordance with ASTM D5818 and load capacity shall be determined in accordance with ASTM D6637.
- 8. Resistance to loss of load capacity or structural integrity when subjected to chemically aggressive environments in accordance with EPA 9090 immersion testing.
- Resistance to loss of load capacity or structural integrity when subjected to 500 hours of ultraviolet light and aggressive weathering in accordance with ASTM D4355-05.



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Product Specification - Biaxial Geogrid BX1220

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Product Type: Integrally Formed Biaxial Geogrid

Polymer: Polypropylene

Load Transfer Mechanism: Positive Mechanical Interlock

Primary Applications: SierraScape System, ADD³ System (Exposed Wall Face Wrap)

Product Properties

Index Properties	Units	MD Values ¹	XMD Values ¹
 Aperture Dimensions² 	mm (in)	25 (1.0)	33 (1.3)
 Minimum Rib Thickness² 	mm (in)	1.27 (0.05)	1.27 (0.05)
 Tensile Strength @ 2% Strain³ 	kN/m (lb/ft)	6.0 (410)	9.0 (620)
 Tensile Strength @ 5% Strain³ 	kN/m (lb/ft)	11.8 (810)	19.6 (1,340)
 Ultimate Tensile Strength³ 	kN/m (lb/ft)	19.2 (1,310)	28.8 (1,970)
 Carbon Black Content 	%	2.0	
Structural Integrity			
 Junction Efficiency⁴ 	%	93	
 Flexural Stiffness⁵ 	mg-cm	750,000	
 Aperture Stability⁶ 	m-N/deg	0.65	
Durability			
 Resistance to Installation Damage⁷ 	%SC / %SW / %GP	95 / 93 / 90	
 Resistance to Long Term Degradation⁸ 	%	100	
 Resistance to UV Degradation⁹ 	%	100	

Dimensions and Delivery

The biaxial geogrid shall be delivered to the jobsite in roll form with each roll individually identified and nominally measuring 3.0 meters (9.8 feet) or 4.0 meters (13.1 feet) in width and 50.0 meters (164 feet) in length. A typical truckload quantity is 160 to 210 rolls.

- 1. Unless indicated otherwise, values shown are minimum average roll values determined in accordance with ASTM D4759-02. Brief descriptions of test procedures are given in the following notes.
- 2. Nominal dimensions.
- 3. Determined in accordance with ASTM D6637-10 Method A.
- 4. Load transfer capability determined in accordance with ASTM D7737-11.
- 5. Resistance to bending force determined in accordance with ASTM D7748-12, using specimens of width two ribs wide, with transverse ribs cut flush with exterior edges of longitudinal ribs, and of length sufficiently long to enable measurement of the overhang dimension.
- 6. Resistance to in-plane rotational movement measured by applying a 20 kg-cm (2 m-N) moment to the central junction of a 9 inch x 9 inch specimen restrained at its perimeter in accordance with GRI GG9.
- 7. Resistance to loss of load capacity or structural integrity when subjected to mechanical installation stress in clayey sand (SC), well graded sand (SW), and crushed stone classified as poorly graded gravel (GP). The geogrid shall be sampled in accordance with ASTM D5818 and load capacity shall be determined in accordance with ASTM D6637.
- 8. Resistance to loss of load capacity or structural integrity when subjected to chemically aggressive environments in accordance with EPA 9090 immersion testing.
- Resistance to loss of load capacity or structural integrity when subjected to 500 hours of ultraviolet light and aggressive weathering in accordance with ASTM D4355-05.



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Product Specification - Biaxial Geogrid BX1300

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Product Type: Integrally Formed Biaxial Geogrid

Polymer: Polypropylene

Load Transfer Mechanism: Positive Mechanical Interlock

Primary Applications: Spectra System (Base Reinforcement, Subgrade Improvement)

Product Properties

Index Properties	Units	MD Values ¹	XMD Values ¹
 Aperture Dimensions² 	mm (in)	46 (1.8)	64 (2.5)
 Minimum Rib Thickness² 	mm (in)	1.27 (0.05)	1.27 (0.05)
 Tensile Strength @ 2% Strain³ 	kN/m (lb/ft)	5.5 (380)	9.5 (650)
 Tensile Strength @ 5% Strain³ 	kN/m (lb/ft)	10.5 (720)	17.5 (1,200)
 Ultimate Tensile Strength³ 	kN/m (lb/ft)	16.0 (1,100)	28.0 (1,920)
Structural Integrity			
 Junction Efficiency⁴ 	%	93	
 Flexural Stiffness⁵ 	mg-cm	450,000	
 Aperture Stability⁶ 	m-N/deg	0.58	
Durability			
 Resistance to Installation Damage⁷ 	%SC / %SW / %GP	91 / 83 / 72	
 Resistance to Long Term Degradation⁸ 	%	100	
 Resistance to UV Degradation⁹ 	%	100	

Dimensions and Delivery

The biaxial geogrid shall be delivered to the jobsite in roll form with each roll individually identified and nominally measuring 4.0 meters (13.1 feet) in width and 50.0 meters (164 feet) in length. A typical truckload quantity is 180 rolls.

- 1. Unless indicated otherwise, values shown are minimum average roll values determined in accordance with ASTM D4759-02. Brief descriptions of test procedures are given in the following notes.
- 2. Nominal dimensions.
- 3. Determined in accordance with ASTM D6637-10 Method A.
- 4. Load transfer capability determined in accordance with ASTM D7737-11.
- 5. Resistance to bending force determined in accordance with ASTM D7748-12, using specimens of width two ribs wide, with transverse ribs cut flush with exterior edges of longitudinal ribs, and of length sufficiently long to enable measurement of the overhang dimension.
- 6. Resistance to in-plane rotational movement measured by applying a 20 kg-cm (2 m-N) moment to the central junction of a 9 inch x 9 inch specimen restrained at its perimeter in accordance with GRI GG9.
- 7. Resistance to loss of load capacity or structural integrity when subjected to mechanical installation stress in clayey sand (SC), well graded sand (SW), and crushed stone classified as poorly graded gravel (GP). The geogrid shall be sampled in accordance with ASTM D5818 and load capacity shall be determined in accordance with ASTM D6637.
- 8. Resistance to loss of load capacity or structural integrity when subjected to chemically aggressive environments in accordance with EPA 9090 immersion testing.
- Resistance to loss of load capacity or structural integrity when subjected to 500 hours of ultraviolet light and aggressive weathering in accordance with ASTM D4355-05.



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Product Specification - Biaxial Geogrid BX1500

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Product Type: Integrally Formed Biaxial Geogrid

Polymer: Polypropylene

Load Transfer Mechanism: Positive Mechanical Interlock

Primary Applications: Spectra System (Base Reinforcement, Subgrade Improvement)

Product Properties

Index Properties	Units	MD Values ¹	XMD Values ¹
 Aperture Dimensions² 	mm (in)	25 (1.0)	30.5 (1.2)
 Minimum Rib Thickness² 	mm (in)	1.78 (0.07)	1.78 (0.07)
 Tensile Strength @ 2% Strain³ 	kN/m (lb/ft)	8.5 (580)	10.0 (690)
 Tensile Strength @ 5% Strain³ 	kN/m (lb/ft)	17.5 (1,200)	20.0 (1,370)
 Ultimate Tensile Strength³ 	kN/m (lb/ft)	27.0 (1,850)	30.0 (2,050)
Structural Integrity			
 Junction Efficiency⁴ 	%	93	
■ Flexural Stiffness ⁵	mg-cm	2,000,000	
 Aperture Stability⁶ 	m-N/deg	0.75	
Durability			
 Resistance to Installation Damage⁷ 	%SC / %SW / %GP	95 / 93 / 90	
 Resistance to Long Term Degradation⁸ 	%	100	
 Resistance to UV Degradation⁹ 	%	100	

Dimensions and Delivery

The biaxial geogrid shall be delivered to the jobsite in roll form with each roll individually identified and nominally measuring 4.0 meters (13.1 feet) in width and 50.0 meters (164 feet) in length. A typical truckload quantity is 180 rolls.

- 1. Unless indicated otherwise, values shown are minimum average roll values determined in accordance with ASTM D4759-02. Brief descriptions of test procedures are given in the following notes.
- 2. Nominal dimensions.
- 3. Determined in accordance with ASTM D6637-10 Method A.
- 4. Load transfer capability determined in accordance with ASTM D7737-11.
- 5. Resistance to bending force determined in accordance with ASTM D7748-12, using specimens of width two ribs wide, with transverse ribs cut flush with exterior edges of longitudinal ribs, and of length sufficiently long to enable measurement of the overhang dimension.
- 6. Resistance to in-plane rotational movement measured by applying a 20 kg-cm (2 m-N) moment to the central junction of a 9 inch x 9 inch specimen restrained at its perimeter in accordance with GRI GG9.
- 7. Resistance to loss of load capacity or structural integrity when subjected to mechanical installation stress in clayey sand (SC), well graded sand (SW), and crushed stone classified as poorly graded gravel (GP). The geogrid shall be sampled in accordance with ASTM D5818 and load capacity shall be determined in accordance with ASTM D6637.
- 8. Resistance to loss of load capacity or structural integrity when subjected to chemically aggressive environments in accordance with EPA 9090 immersion testing.
- Resistance to loss of load capacity or structural integrity when subjected to 500 hours of ultraviolet light and aggressive weathering in accordance with ASTM D4355-05.



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Product Specification - Biaxial Geogrid BX4100

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Product Type: Integrally Formed Biaxial Geogrid

Polymer: Polypropylene

Load Transfer Mechanism: Positive Mechanical Interlock

Primary Applications: Spectra System (Base Reinforcement, Subgrade Improvement)

Product Properties

Index Properties	Units	MD Values ¹	XMD Values ¹
 Aperture Dimensions² 	mm (in)	33 (1.3)	33 (1.3)
 Minimum Rib Thickness² 	mm (in)	0.76 (0.03)	0.76 (0.03)
 Tensile Strength @ 2 % Strain³ 	kN/m (lb/ft)	4.0 (270)	5.5 (380)
 Tensile Strength @ 5% Strain³ 	kN/m (lb/ft)	8.0 (550)	10.5 (720)
 Ultimate Tensile Strength³ 	kN/m (lb/ft)	12.8 (880)	13.5 (920)
Structural Integrity			
 Junction Efficiency⁴ 	%	93	
 Flexural Stiffness⁵ 	mg-cm	250,000	
 Aperture Stability⁶ 	m-N/deg	0.28	
Durability			
 Resistance to Installation Damage⁷ 	%SC / %SW / %GP	90 / 83 / 70	
 Resistance to Long Term Degradation⁸ 	%	100	
 Resistance to UV Degradation⁹ 	%	100	

Dimensions and Delivery

The biaxial geogrid shall be delivered to the jobsite in roll form with each roll individually identified and nominally measuring 3.0 meters (9.8 feet) or 4.0 meters (13.1 feet) in width and 75.0 meters (246 feet) in length. A typical truckload quantity is 185 to 250 rolls.

- 1. Unless indicated otherwise, values shown are minimum average roll values determined in accordance with ASTM D4759-02. Brief descriptions of test procedures are given in the following notes.
- 2. Nominal dimensions.
- 3. Determined in accordance with ASTM D6637-10 Method A.
- 4. Load transfer capability determined in accordance with ASTM D7737-11.
- 5. Resistance to bending force determined in accordance with ASTM D7748-12, using specimens of width two ribs wide, with transverse ribs cut flush with exterior edges of longitudinal ribs, and of length sufficiently long to enable measurement of the overhang dimension.
- 6. Resistance to in-plane rotational movement measured by applying a 20 kg-cm (2 m-N) moment to the central junction of a 9 inch x 9 inch specimen restrained at its perimeter in accordance with GRI GG9.
- 7. Resistance to loss of load capacity or structural integrity when subjected to mechanical installation stress in clayey sand (SC), well graded sand (SW), and crushed stone classified as poorly graded gravel (GP). The geogrid shall be sampled in accordance with ASTM D5818 and load capacity shall be determined in accordance with ASTM D6637.
- 8. Resistance to loss of load capacity or structural integrity when subjected to chemically aggressive environments in accordance with EPA 9090 immersion testing.
- Resistance to loss of load capacity or structural integrity when subjected to 500 hours of ultraviolet light and aggressive weathering in accordance with ASTM D4355-05.



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Product Specification - Biaxial Geogrid BX4200

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Product Type: Integrally Formed Biaxial Geogrid

Polymer: Polypropylene

Load Transfer Mechanism: Positive Mechanical Interlock

Primary Applications: Spectra System (Base Reinforcement, Subgrade Improvement)

Product Properties

Index Properties	Units	MD Values ¹	XMD Values ¹
 Aperture Dimensions² 	mm (in)	33 (1.3)	33 (1.3)
 Minimum Rib Thickness² 	mm (in)	1.27 (0.05)	1.27 (0.05)
 Tensile Strength @ 2% Strain³ 	kN/m (lb/ft)	6 (410)	7.4 (510)
 Tensile Strength @ 5% Strain³ 	kN/m (lb/ft)	11.7 (800)	14.6 (1,000)
 Ultimate Tensile Strength³ 	kN/m (lb/ft)	20.5 (1,400)	23.5 (1,610)
Structural Integrity			
 Junction Efficiency⁴ 	%	93	
 Flexural Stiffness⁵ 	mg-cm	750,000	
 Aperture Stability⁶ 	m-N/deg	0.48	
Durability			
 Resistance to Installation Damage⁷ 	%SC / %SW / %GP	90 / 83 / 75	
 Resistance to Long Term Degradation⁸ 	%	100	
 Resistance to UV Degradation⁹ 	%	100	

Dimensions and Delivery

The biaxial geogrid shall be delivered to the jobsite in roll form with each roll individually identified and nominally measuring 3.0 meters (9.8 feet) or 4.0 meters (13.1 feet) in width and 50.0 meters (164 feet) in length. A typical truckload quantity is 150 to 240 rolls.

- 1. Unless indicated otherwise, values shown are minimum average roll values determined in accordance with ASTM D4759-02. Brief descriptions of test procedures are given in the following notes.
- 2. Nominal dimensions.
- 3. Determined in accordance with ASTM D6637-10 Method A.
- 4. Load transfer capability determined in accordance with ASTM D7737-11.
- 5. Resistance to bending force determined in accordance with ASTM D7748-12, using specimens of width two ribs wide, with transverse ribs cut flush with exterior edges of longitudinal ribs, and of length sufficiently long to enable measurement of the overhang dimension.
- 6. Resistance to in-plane rotational movement measured by applying a 20 kg-cm (2 m-N) moment to the central junction of a 9 inch x 9 inch specimen restrained at its perimeter in accordance with GRI GG9.
- 7. Resistance to loss of load capacity or structural integrity when subjected to mechanical installation stress in clayey sand (SC), well graded sand (SW), and crushed stone classified as poorly graded gravel (GP). The geogrid shall be sampled in accordance with ASTM D5818 and load capacity shall be determined in accordance with ASTM D6637.
- 8. Resistance to loss of load capacity or structural integrity when subjected to chemically aggressive environments in accordance with EPA 9090 immersion testing.
- 9. Resistance to loss of load capacity or structural integrity when subjected to 500 hours of ultraviolet light and aggressive weathering in accordance with ASTM D4355-05.



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Product Specification - Biaxial Geogrid BX6100

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Product Type: Integrally Formed Biaxial Geogrid

Polymer: Polypropylene

Load Transfer Mechanism: Positive Mechanical Interlock

Primary Application: Dimension System (Foundation Improvement)

Product Properties	Units	MD Values ¹	XMD Values ¹
Index Properties			
 1% Junction Tensile Modulus in Use² 	kN/m (lb/ft)	250 (17,000)	290 (20,000)
 2% Junction Tensile Modulus in Use² 	kN/m (lb/ft)	170 (11,750)	220 (15,000)
 Junction Strength in Use @ 1% Strain³ 	kN/m (lb/ft)	2.5 (170)	2.9 (200)
 Junction Strength in Use @ 2% Strain³ 	kN/m (lb/ft)	3.4 (240)	4.4 (300)
 Interaction Coefficient (Granular Soil) 		1.0	1.0
Structural Integrity			
 Flexural Stiffness⁴ 	mg-cm	250,000	
 Aperture Stability⁵ 	m-N/deg	0.28	
Durability			
 Resistance to Long Term Degradation⁶ 	%	100	
 Resistance to UV Degradation⁷ 	%	100	

Dimensions and Delivery

The biaxial geogrid shall be delivered to the jobsite in roll form with each roll individually identified and nominally measuring 4.0 meters (13.1 feet) in width and 75.0 meters (246 feet) in length. A typical truckload quantity is 185 rolls.

- 1. Unless indicated otherwise, values shown are minimum average roll values (MARV) determined in accordance with ASTM D4759-02. The column labeled MD Values represents results from testing the product in the Machine Direction. The column labeled XMD Values represents results from testing the product in the Cross-Machine (Transverse) Direction.
- 2. Determined in accordance with ASTM D6637-10 Method A.
- 3. Load transfer capability determined in accordance with ASTM D7737-11.
- 4. Resistance to bending force determined in accordance with ASTM D7748-12, using specimens of width two ribs wide, with transverse ribs cut flush with exterior edges of longitudinal ribs, and of length sufficiently long to enable measurement of the overhang dimension.
- 5. Resistance to in-plane rotational movement measured by applying a 20 kg-cm (2 m-N) moment to the central junction of a 9 inch x 9 inch specimen restrained at its perimeter in accordance with GRI GG9.
- 6. Resistance to loss of load capacity or structural integrity when subjected to chemically aggressive environments in accordance with EPA 9090 immersion testing.
- Resistance to loss of load capacity or structural integrity when subjected to 500 hours of ultraviolet light and aggressive weathering in accordance with ASTM D4355-05.



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Product Specification - Biaxial Geogrid BX6200

Tensar International Corporation reserves the right to change its product specifications at any time. It is the responsibility of the specifier and purchaser to ensure that product specifications used for design and procurement purposes are current and consistent with the products used in each instance.

Product Type: Integrally Formed Biaxial Geogrid

Polymer: Polypropylene

Load Transfer Mechanism: Positive Mechanical Interlock

Primary Application: Dimension System (Foundation Improvement)

Product Properties	Units	MD Values ¹	XMD Values ¹
Index Properties			
 1% Junction Tensile Modulus in Use² 	kN/m (lb/ft)	320 (22,000)	440 (30,000)
 2% Junction Tensile Modulus in Use² 	kN/m (lb/ft)	270 (18,200)	370 (25,000)
 Junction Strength in Use @ 1% Strain³ 	kN/m (lb/ft)	3.2 (220)	4.3 (300)
 Junction Strength in Use @ 2% Strain³ 	kN/m (lb/ft)	5.3 (370)	7.3 (500)
 Interaction Coefficient (Granular Soil) 		1.0	1.0
Structural Integrity			
 Flexural Stiffness⁴ 	mg-cm	750,000	
 Aperture Stability⁵ 	m-N/deg	0.47	
Durability			
 Resistance to Long Term Degradation⁶ 	%	100	
 Resistance to UV Degradation⁷ 	%	100	

Dimensions and Delivery

The biaxial geogrid shall be delivered to the jobsite in roll form with each roll individually identified and nominally measuring 4.0 meters (13.1 feet) in width and 50.0 meters (164 feet) in length. A typical truckload quantity is 150 rolls.

- 1. Unless indicated otherwise, values shown are minimum average roll values (MARV) determined in accordance with ASTM D4759-02. The column labeled MD Values represents results from testing the product in the Machine Direction. The column labeled XMD Values represents results from testing the product in the Cross-Machine (Transverse) Direction.
- 2. Determined in accordance with ASTM D6637-10 Method A.
- 3. Load transfer capability determined in accordance with ASTM D7737-11.
- 4. Resistance to bending force determined in accordance with ASTM D7748-12, using specimens of width two ribs wide, with transverse ribs cut flush with exterior edges of longitudinal ribs, and of length sufficiently long to enable measurement of the overhang dimension.
- 5. Resistance to in-plane rotational movement measured by applying a 20 kg-cm (2 m-N) moment to the central junction of a 9 inch x 9 inch specimen restrained at its perimeter in accordance with GRI GG9.
- 6. Resistance to loss of load capacity or structural integrity when subjected to chemically aggressive environments in accordance with EPA 9090 immersion testing.
- 7. Resistance to loss of load capacity or structural integrity when subjected to 500 hours of ultraviolet light and aggressive weathering in accordance with ASTM D4355-05.