

## **Product Specifications for Tensar Biaxial Geogrids**

- Biaxial Geogrid BX1100
- Biaxial Geogrid BX1120
- Biaxial Geogrid BX1200
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- Biaxial Geogrid BX1500
- Biaxial Geogrid BXSQ100
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- Biaxial Geogrid BXSQ2020
- Biaxial Geogrid BXSQ2525
- Biaxial Geogrid BXSQ3030

## 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 Stabilization, Subgrade Improvement)

### Product Properties

#### Index Properties

	Units	MD Values <sup>1</sup>	XMD Values <sup>1</sup>
▪ Aperture Dimensions <sup>2</sup>	mm (in)	25 (1.0)	33 (1.3)
▪ Rib Thickness <sup>2</sup>	mm (in)	0.76 (0.03)	0.76 (0.03)
▪ Tensile Strength @ 2% Strain <sup>3</sup>	kN/m (lb/ft)	4.1 (280)	6.6 (450)
▪ Tensile Strength @ 5% Strain <sup>3</sup>	kN/m (lb/ft)	8.5 (580)	13.4 (920)
▪ Ultimate Tensile Strength <sup>3</sup>	kN/m (lb/ft)	12.4 (850)	19.0 (1,300)

#### Structural Integrity

▪ Junction Efficiency <sup>4</sup>	%	93	
▪ Overall Flexural Rigidity <sup>5</sup>	mg-cm	250,000	
▪ Aperture Stability <sup>6</sup>	m-N/deg	0.32	

#### Durability

▪ Resistance to Installation Damage <sup>7</sup>	%SC / %SW / %GP	95 / 93 / 90	
▪ Resistance to Long Term Degradation <sup>8</sup>	%	100	
▪ Resistance to UV Degradation <sup>9</sup>	%	100	

### Dimensions and Delivery

The biaxial geogrid shall be delivered to the job site in roll form with each roll individually identified and nominally measuring 3.8 meters (12.5 feet) in width and 100 meters (328 feet) in length.

### Notes

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/D7748M-14.
6. Resistance to in-plane rotational movement measured in accordance with ASTM D7864/D7864M-15.
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.

## Product Specification - Biaxial Geogrid BX1120

*Tensor 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:** SierraScape System, ADD<sup>3</sup> System (Exposed Wall Face Wrap)

### Product Properties

Index Properties	Units	MD Values <sup>1</sup>	XMD Values <sup>1</sup>
▪ Aperture Dimensions <sup>2</sup>	mm (in)	25 (1.0)	33 (1.3)
▪ Rib Thickness <sup>2</sup>	mm (in)	0.76 (0.03)	0.76 (0.03)
▪ Tensile Strength @ 2% Strain <sup>3</sup>	kN/m (lb/ft)	4.1 (280)	6.6 (450)
▪ Tensile Strength @ 5% Strain <sup>3</sup>	kN/m (lb/ft)	8.5 (580)	13.4 (920)
▪ Ultimate Tensile Strength <sup>3</sup>	kN/m (lb/ft)	12.4 (850)	19.0 (1,300)
▪ Carbon Black Content	%	2.0	
<b>Structural Integrity</b>			
▪ Junction Efficiency <sup>4</sup>	%	93	
▪ Overall Flexural Rigidity <sup>5</sup>	mg-cm	250,000	
▪ Aperture Stability <sup>6</sup>	m-N/deg	0.32	
<b>Durability</b>			
▪ Resistance to Installation Damage <sup>7</sup>	%SC / %SW / %GP	95 / 93 / 90	
▪ Resistance to Long Term Degradation <sup>8</sup>	%	100	
▪ Resistance to UV Degradation <sup>9</sup>	%	100	

### Dimensions and Delivery

The biaxial geogrid shall be delivered to the job site in roll form with each roll individually identified and nominally measuring 3.8 meters (12.5 feet) in width and 100 meters (328 feet) in length or 3 meters (9.8 feet) x 50 meters (164 feet).

### Notes

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/D7748M-14.
6. Resistance to in-plane rotational movement measured in accordance with ASTM D7864/D7864M-15.
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.

Tensor warrants that at the time of delivery the geogrid furnished hereunder shall conform to the specification stated herein. Any other warranty including merchantability and fitness for a particular purpose, are hereby excluded. If the geogrid does not meet the specifications on this page and Tensor is notified prior to installation, Tensor will replace the geogrid at no cost to the customer.

**This product specification supersedes all prior specifications for the product described above and is not applicable to any products shipped prior to February 1, 2013. (1.23)**

## Product Specification - Biaxial Geogrid BX1200

*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 Stabilization, Subgrade Improvement)

### Product Properties

Index Properties	Units	MD Values <sup>1</sup>	XMD Values <sup>1</sup>
▪ Aperture Dimensions <sup>2</sup>	mm (in)	25 (1.0)	33 (1.3)
▪ Rib Thickness <sup>2</sup>	mm (in)	1.27 (0.05)	1.27 (0.05)
▪ Tensile Strength @ 2% Strain <sup>3</sup>	kN/m (lb/ft)	6.0 (410)	9.0 (620)
▪ Tensile Strength @ 5% Strain <sup>3</sup>	kN/m (lb/ft)	11.8 (810)	19.6 (1,340)
▪ Ultimate Tensile Strength <sup>3</sup>	kN/m (lb/ft)	19.2 (1,310)	28.8 (1,970)
<b>Structural Integrity</b>			
▪ Junction Efficiency <sup>4</sup>	%	93	
▪ Overall Flexural Rigidity <sup>5</sup>	mg-cm	750,000	
▪ Aperture Stability <sup>6</sup>	m-N/deg	0.65	
<b>Durability</b>			
▪ Resistance to Installation Damage <sup>7</sup>	%SC / %SW / %GP	95 / 93 / 90	
▪ Resistance to Long Term Degradation <sup>8</sup>	%	100	
▪ Resistance to UV Degradation <sup>9</sup>	%	100	

### Dimensions and Delivery

The biaxial geogrid shall be delivered to the job site in roll form with each roll individually identified and nominally measuring 3.8 meters (12.5 feet) in width and 75.0 meters (246 feet) in length.

### Notes

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/D7748M-14.
6. Resistance to in-plane rotational movement measured in accordance with ASTM D7864/D7864M-15.
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.

## Product Specification - Biaxial Geogrid BX1300

Tensor 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 Stabilization, Subgrade Improvement)

### Product Properties

Index Properties	Units	MD Values <sup>1</sup>	XMD Values <sup>1</sup>
▪ Aperture Dimensions <sup>2</sup>	mm (in)	46 (1.8)	64 (2.5)
▪ Rib Thickness <sup>2</sup>	mm (in)	1.27 (0.05)	1.27 (0.05)
▪ Tensile Strength @ 2% Strain <sup>3</sup>	kN/m (lb/ft)	5.5 (380)	9.5 (650)
▪ Tensile Strength @ 5% Strain <sup>3</sup>	kN/m (lb/ft)	10.5 (720)	17.5 (1,200)
▪ Ultimate Tensile Strength <sup>3</sup>	kN/m (lb/ft)	16.0 (1,100)	28.0 (1,920)
<b>Structural Integrity</b>			
▪ Junction Efficiency <sup>4</sup>	%	93	
▪ Overall Flexural Rigidity <sup>5</sup>	mg-cm	450,000	
▪ Aperture Stability <sup>6</sup>	m-N/deg	0.58	
<b>Durability</b>			
▪ Resistance to Installation Damage <sup>7</sup>	%SC / %SW / %GP	91 / 83 / 72	
▪ Resistance to Long Term Degradation <sup>8</sup>	%	100	
▪ Resistance to UV Degradation <sup>9</sup>	%	100	

### Dimensions and Delivery

The biaxial geogrid shall be delivered to the job site in roll form with each roll individually identified and nominally measuring 3.8 meters (12.5 feet) in width and 50.0 meters (164 feet) in length.

### Notes

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/D7748M-14.
6. Resistance to in-plane rotational movement measured in accordance with ASTM D7864/D7864M-15.
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.

## Product Specification - Biaxial Geogrid BX1500

*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 Stabilization, Subgrade Improvement)

### Product Properties

Index Properties	Units	MD Values <sup>1</sup>	XMD Values <sup>1</sup>
▪ Aperture Dimensions <sup>2</sup>	mm (in)	25 (1.0)	30.5 (1.2)
▪ Rib Thickness <sup>2</sup>	mm (in)	1.78 (0.07)	1.78 (0.07)
▪ Tensile Strength @ 2% Strain <sup>3</sup>	kN/m (lb/ft)	8.5 (580)	10.0 (690)
▪ Tensile Strength @ 5% Strain <sup>3</sup>	kN/m (lb/ft)	17.5 (1,200)	20.0 (1,370)
▪ Ultimate Tensile Strength <sup>3</sup>	kN/m (lb/ft)	27.0 (1,850)	30.0 (2,050)
<b>Structural Integrity</b>			
▪ Junction Efficiency <sup>4</sup>	%	93	
▪ Overall Flexural Rigidity <sup>5</sup>	mg-cm	2,000,000	
▪ Aperture Stability <sup>6</sup>	m-N/deg	0.75	
<b>Durability</b>			
▪ Resistance to Installation Damage <sup>7</sup>	%SC / %SW / %GP	95 / 93 / 90	
▪ Resistance to Long Term Degradation <sup>8</sup>	%	100	
▪ Resistance to UV Degradation <sup>9</sup>	%	100	

### Dimensions and Delivery

The biaxial geogrid shall be delivered to the job site in roll form with each roll individually identified and nominally measuring 3.8 meters (12.5 feet) in width and 50.0 meters (164 feet) in length.

### Notes

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/D7748M-14.
6. Resistance to in-plane rotational movement measured in accordance with ASTM D7864/D7864M-15.
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.

## Product Specification - Biaxial Geogrid BXSQ100

**Product Type:** Integrally Formed Biaxial Geogrid  
**Polymer:** Polypropylene

### Product Properties

Index Properties	Units	MD Values <sup>1</sup>	XMD Values <sup>1</sup>
▪ Aperture Dimensions <sup>2</sup>	mm (in)	38 (1.5)	38 (1.5)
▪ Rib Thickness <sup>2</sup>	mm (in)	0.7 (0.03)	0.5 (0.02)
▪ Tensile Strength @ 2% Strain <sup>3</sup>	kN/m (lb/ft)	4.5 (310)	4.5 (310)
▪ Tensile Strength @ 5% Strain <sup>3</sup>	kN/m (lb/ft)	8.5 (580)	8.5 (580)
▪ Ultimate Tensile Strength <sup>3</sup>	kN/m (lb/ft)	12.5 (855)	12.5 (855)

### Structural Integrity

▪ Junction Efficiency <sup>4</sup>	%	93	
▪ Overall Flexural Rigidity <sup>5</sup>	mg-cm	160,000	
▪ Aperture Stability <sup>6</sup>	m-N/deg	0.32	

### Durability

▪ Resistance to Installation Damage <sup>7</sup>	%SC / %SW / %GP	95 / 93 / 90	
▪ Resistance to Long Term Degradation <sup>8</sup>	%	100	
▪ Resistance to UV Degradation <sup>9</sup>	%	100	

### Dimensions and Delivery

The biaxial geogrid shall be delivered to the job site in roll form with each roll individually identified and nominally measuring 3.8 meters (12.5 feet) in width and 75.0 meters (246 feet) in length.

### Notes

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/D7748M-14.
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.

Tensar warrants that at the time of delivery the geogrid furnished hereunder shall conform to the specification stated herein. Any other warranty including merchantability and fitness for a particular purpose, are hereby excluded. If the geogrid does not meet the specifications on this page and Tensar is notified prior to installation, Tensar will replace the geogrid at no cost to the customer.

The geogrid specified herein has not been tested, calibrated, or validated in relation to any design methodology for either unpaved roads or flexible pavements.

**This product specification supersedes all prior specifications for the product described above and is not applicable to any products shipped prior to January 1, 2015. (01.23)**

## Product Specification - Biaxial Geogrid BXSQ1515

**Product Type:** Integrally Formed Biaxial Geogrid

*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.*

**Polymer:** Polypropylene

### Product Properties

Index Properties	Units	MD Values <sup>1</sup>	XMD Values <sup>1</sup>
▪ Aperture Dimensions <sup>2</sup>	mm (in)	38 (1.5)	38 (1.5)
▪ Rib Thickness <sup>2</sup>	mm (in)	0.9 (0.035)	0.6 (0.025)
▪ Tensile Strength @ 2% Strain <sup>3</sup>	kN/m (lb/ft)	5.0 (340)	5.0 (340)
▪ Tensile Strength @ 5% Strain <sup>3</sup>	kN/m (lb/ft)	11 (750)	11 (750)
▪ Ultimate Tensile Strength <sup>3</sup>	kN/m (lb/ft)	15 (1030)	15 (1030)
<b>Structural Integrity</b>			
▪ Junction Efficiency <sup>4</sup>	%		93
▪ Overall Flexural Rigidity <sup>5</sup>	mg-cm		325,000
▪ Aperture Stability <sup>6</sup>	m-N/deg		0.38
<b>Durability</b>			
▪ Resistance to Installation Damage <sup>7</sup>	%SC / %SW / %GP		95 / 93 / 90
▪ Resistance to Long Term Degradation <sup>8</sup>	%		100
▪ Resistance to UV Degradation <sup>9</sup>	%		100

### Dimensions and Delivery

The biaxial geogrid shall be delivered to the job site in roll form with each roll individually identified and nominally measuring 3.8 meters (12.5 feet) in width and 100 meters (328 feet) in length.

### Notes

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/D7748M-14.
6. Resistance to in-plane rotational movement in accordance with ASTM D7864/D7864M-15.
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.

Tensar warrants that at the time of delivery the geogrid furnished hereunder shall conform to the specification stated herein. Any other warranty including merchantability and fitness for a particular purpose, are hereby excluded. If the geogrid does not meet the specifications on this page and Tensar is notified prior to installation, Tensar will replace the geogrid at no cost to the customer.

The geogrid specified herein has not been tested, calibrated, or validated in relation to any design methodology for either unpaved roads or flexible pavements.

**This product specification supersedes all prior specifications for the product described above and is not applicable to any products shipped prior to January 1, 2015. (01.23)**



## Product Specification - Biaxial Geogrid BXSQ2020

*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

### Product Properties

#### Index Properties

	Units	MD Values <sup>1</sup>	XMD Values <sup>1</sup>
▪ Aperture Dimensions <sup>2</sup>	mm (in)	38 (1.5)	38 (1.5)
▪ Rib Thickness <sup>2</sup>	mm (in)	1.1 (0.04)	0.8 (0.03)
▪ Tensile Strength @ 2% Strain <sup>3</sup>	kN/m (lb/ft)	6.5 (450)	6.5 (450)
▪ Tensile Strength @ 5% Strain <sup>3</sup>	kN/m (lb/ft)	13 (890)	13 (890)
▪ Ultimate Tensile Strength <sup>3</sup>	kN/m (lb/ft)	20 (1370)	20 (1370)

#### Structural Integrity

▪ Junction Efficiency <sup>4</sup>	%	93	
▪ Overall Flexural Rigidity <sup>5</sup>	mg-cm	700,000	
▪ Aperture Stability <sup>6</sup>	m-N/deg	0.45	

#### Durability

▪ Resistance to Installation Damage <sup>7</sup>	%SC / %SW / %GP	95 / 93 / 90	
▪ Resistance to Long Term Degradation <sup>8</sup>	%	100	
▪ Resistance to UV Degradation <sup>9</sup>	%	100	

### Dimensions and Delivery

The biaxial geogrid shall be delivered to the job site in roll form with each roll individually identified and nominally measuring 3.8 meters (12.5 feet) in width and 100 meters (328 feet) in length.

### Notes

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/D7748M-14.
6. Resistance to in-plane rotational movement in accordance with ASTM D7864/D7864M-15.
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.

Tensar warrants that at the time of delivery the geogrid furnished hereunder shall conform to the specification stated herein. Any other warranty including merchantability and fitness for a particular purpose, are hereby excluded. If the geogrid does not meet the specifications on this page and Tensar is notified prior to installation, Tensar will replace the geogrid at no cost to the customer.

The geogrid specified herein has not been tested, calibrated, or validated in relation to any design methodology for either unpaved roads or flexible pavements.

**This product specification supersedes all prior specifications for the product described above and is not applicable to any products shipped prior to January 1, 2015. (01.23)**

## Product Specification - Biaxial Geogrid BXSQ2525

*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

### Product Properties

Index Properties	Units	MD Values <sup>1</sup>	XMD Values <sup>1</sup>
▪ Aperture Dimensions <sup>2</sup>	mm (in)	38 (1.5)	38 (1.5)
▪ Rib Thickness <sup>2</sup>	mm (in)	1.1 (0.04)	0.8 (0.03)
▪ Tensile Strength @ 2% Strain <sup>3</sup>	kN/m (lb/ft)	8.9 (610)	8.9 (610)
▪ Tensile Strength @ 5% Strain <sup>3</sup>	kN/m (lb/ft)	16.9 (1160)	16.9 (1160)
▪ Ultimate Tensile Strength <sup>3</sup>	kN/m (lb/ft)	25 (1710)	25 (1710)

### Structural Integrity

▪ Junction Efficiency <sup>4</sup>	%		93
▪ Flexural Stiffness <sup>5</sup>	mg-cm		1,350,000
▪ Aperture Stability <sup>6</sup>	m-N/deg		0.6

### Durability

▪ Resistance to Installation Damage <sup>7</sup>	%SC / %SW / %GP		95 / 93 / 90
▪ Resistance to Long Term Degradation <sup>8</sup>	%		100
▪ Resistance to UV Degradation <sup>9</sup>	%		100

### Dimensions and Delivery

The biaxial geogrid shall be delivered to the job site in roll form with each roll individually identified and nominally measuring 3.8 meters (12.5 feet) in width and 50.0 meters (164 feet) in length.

### Notes

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 in accordance with ASTM D7864/D7864M-15.
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.

Tensar warrants that at the time of delivery the geogrid furnished hereunder shall conform to the specification stated herein. Any other warranty including merchantability and fitness for a particular purpose, are hereby excluded. If the geogrid does not meet the specifications on this page and Tensar is notified prior to installation, Tensar will replace the geogrid at no cost to the customer.

The geogrid specified herein has not been tested, calibrated, or validated in relation to any design methodology for either unpaved roads or flexible pavements.

**This product specification supersedes all prior specifications for the product described above and is not applicable to any products shipped prior to January 1, 2015. (01.23)**

## Product Specification - Biaxial Geogrid BXSQ3030

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

### Product Properties

Index Properties	Units	MD Values <sup>1</sup>	XMD Values <sup>1</sup>
▪ Aperture Dimensions <sup>2</sup>	mm (in)	38 (1.5)	38 (1.5)
▪ Rib Thickness <sup>2</sup>	mm (in)	2.2 (0.09)	1.5 (0.06)
▪ Tensile Strength @ 2% Strain <sup>3</sup>	kN/m (lb/ft)	10.5 (720)	10.5 (720)
▪ Tensile Strength @ 5% Strain <sup>3</sup>	kN/m (lb/ft)	21 (1440)	21 (1440)
▪ Ultimate Tensile Strength <sup>3</sup>	kN/m (lb/ft)	30 (2055)	30 (2055)
<b>Structural Integrity</b>			
▪ Junction Efficiency <sup>4</sup>	%		93
▪ Overall Flexural Rigidity <sup>5</sup>	mg-cm		2,000,000
▪ Aperture Stability <sup>6</sup>	m-N/deg		0.75
<b>Durability</b>			
▪ Resistance to Installation Damage <sup>7</sup>	%SC / %SW / %GP		95 / 93 / 90
▪ Resistance to Long Term Degradation <sup>8</sup>	%		100
▪ Resistance to UV Degradation <sup>9</sup>	%		100

### Dimensions and Delivery

The biaxial geogrid shall be delivered to the job site in roll form with each roll individually identified and nominally measuring 3.8 meters (12.5 feet) in width and 50.0 meters (164 feet) in length.

### Notes

- 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.
- Determined in accordance with ASTM D6637-10 Method A.
- Load transfer capability determined in accordance with ASTM D7737-11.
- Resistance to bending force determined in accordance with ASTM D7748/D7748M-14.
- Resistance to in-plane rotational movement measured in accordance with ASTM D7864/D7864M-15.
- 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.
- 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.

Tensar warrants that at the time of delivery the geogrid furnished hereunder shall conform to the specification stated herein. Any other warranty including merchantability and fitness for a particular purpose, are hereby excluded. If the geogrid does not meet the specifications on this page and Tensar is notified prior to installation, Tensar will replace the geogrid at no cost to the customer.

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# LOCATIONS & CONTACT INFO

## ASP ENTERPRISES

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Kansas City, MO 816.554.1191  
Wichita, KS 316.393.1554

Colorado Springs, CO 719.257.7840

Salt Lake City, UT 435.276.0820

# SOLUTIONS WE SUPPLY

## GEOSYNTHETICS

Filter Fabrics  
Stabilization Fabrics

### Geogrids

- Road Grids
- Wall Grids
- Slope Stabilization

### Specialty Fabrics

#### Composite Geomembranes

- GCLs, PVC, HDPE, LLDPE, EPDM, Granular Bentonite

## SEDIMENT CONTROL

### Inlet Protection

- Grated Inlet, Curb Inlet, Area Inlet Protection

### Ditch Checks

- Triangle Silt Dike
- GeoRidge

### Perimeter Protection

- High and Low-Porosity Silt Fence, Straw Wattles, Silt Socks
- Safety Fence

### Flocculants & Water Treatment

- Polymer-Based & Natural Flocculants

### Sediment Basin Skimmers

### Dewatering Bags

### Trackout Control

- FODS
- Rumble Grates

### Turbidity Curtains

## EROSION CONTROL

### Basic Hydraulically Applied Mulches

- Wood
- Paper
- Blends
- Straw

### High-Performance Hydraulically Applied Products

- BFM
- FGM
- Additives & Tackifiers

### Temporary Erosion Control Blankets

- Coir & Jute Mat/Nettings
- Short-Term ECBs
- Extended-Term ECBs

### Permanent Erosion Control Blankets

- Turf Reinforcement Mats
- HP-TRMs
- Anchor Reinforced Vegetation System

### Structural BMPs

- Transition Mats
- Geoweb Cellular Confinement
- Composite Vegetated Armor System
- Flex MSE Vegetated Wall System
- Articulated Concrete Block
- Gabions
- Grout-Filled Geotextile Mats

### Vegetation Establishment

- Native Seed & Turf Seed
- Fertilizers
- Organic Soil Additives
- Stratavault Soil Cells

## STORMWATER MANAGEMENT

### Water Quality

- Inlet Filter Boxes
- Pre-Treatment Chamber
- Nutrient Separating Baffle Boxes
- High-Flow Biofiltration Media
- Hydrodynamic Separators
- Stratavault

### Water Quantity

- Modular Underground Storage Systems
- Chamber Detention Systems

### Drainage

- HDPE Swale Liner
- Pipe & Fittings
- Drainage Composites
- Strip Drain

### Inlet Structures

- PVC
- Drain Basis, In-Line Drains
- Landscape

### Permeable Pavers

- Permeable Articulating Concrete Block
- Grass Pavers
- Gravel Pavers
- Concrete Pavers

## SPECIALTY

### Natural & Synthetic Coir Fiber Logs

### Vegetated Reinforced Soil Slopes

### Soil Anchors

### Root Barrier System

### AquaBlok

### Muscle Wall

We are full line distributors of construction materials for all project types. Contact us for assistance with a project. From specification and development to installation and completion, we're here to help with all of your site solution needs.

**GEOSYNTHETICS | EROSION CONTROL | STORMWATER MANAGEMENT  
SEDIMENT CONTROL | REVEGETATION & SOIL AMENDMENTS**