



**SF20  
SOIL REINFORCEMENT GEOGRID**

SF20 is composed of high molecular weight, high tenacity multifilament polyester yarns that are woven into a stable network placed under tension. The high strength polyester yarns are coated with a PVC material. SR Geogrids are inert to biological degradation and are resistant to naturally encountered chemicals, alkalis and acids. SR Geogrids are typically used for soil reinforcement applications such as retaining walls, steepened slopes, embankments, sub-grade stabilization, embankments over soft soils and waste containment applications.

TENSILE PROPERTIES	TEST METHOD	MARV VALUES	
		(kN/m)	(LBS/FT)
Ultimate Strength (MD & CD)	ASTM D 6637	30.6	2,100
Creep Reduced Strength (MD & CD)	ASTM D 5262	20.3	1,391
Long Term Design Strength (MD & CD)	NCMA 97	17.6	1,204
Aperture Size (ins.)	Measured	19.0 x 24.0 (mm)	0.75 x 0.95 (in)

Reduction Factors:

- Creep (RF<sub>CR</sub>) 1.51
- Durability (RF<sub>D</sub>) 1.10
- Installation Damage\* (RF<sub>ID</sub>) 1.05

\* Soil Type 3

SYNTEEN Technical Fabrics, Inc Warranty Synteen Technical Fabrics warrants our products to be free from defects in material and workmanship when delivered to our customers and that our products meet our published specifications. If a product is found to be defective, and our customer gives notice to Synteen Technical Fabrics before installing the product, Synteen Technical Fabrics will replace the product without charge to our customer or refund the purchase price at Synteen Technical Fabrics election. Replacing the product or obtaining a refund are the buyer’s sole remedy for a breach and Synteen Technical Fabrics will not be liable for any consequential damage attributed to a defective product. This warranty is given in lieu of all other warranties, express or implied, including the implied warranty of merchantability or fitness for a particular purpose. There are no warranties which extend beyond the description provided herein.

July 2024





**SF35  
SOIL REINFORCEMENT GEOGRID**

SF35 is composed of high molecular weight, high tenacity multifilament polyester yarns that are woven into a stable network placed under tension. The high strength polyester yarns are coated with a PVC material. SR Geogrids are inert to biological degradation and are resistant to naturally encountered chemicals, alkalis and acids. SR Geogrids are typically used for soil reinforcement applications such as retaining walls, steepened slopes, embankments, sub-grade stabilization, embankments over soft soils and waste containment applications.

TENSILE PROPERTIES	TEST METHOD	MARV VALUES	
		(kN/m)	(LBS/FT)
Ultimate Strength (MD)	ASTM D 6637	55.8	3,825
Creep Reduced Strength (MD)	ASTM D 5262	36.9	2,533
Long Term Design Strength (MD)	NCMA 97	32.0	2,193
Aperture Size (ins.)	Measured	20.0 x 28.0 (mm)	0.79 x 1.10 (in)

Reduction Factors:

- Creep (RF<sub>CR</sub>) 1.51
- Durability (RF<sub>D</sub>) 1.10
- Installation Damage\* (RF<sub>ID</sub>) 1.05

\* Soil Type 3

SYNTEEN Technical Fabrics, Inc Warranty Synteen Technical Fabrics warrants our products to be free from defects in material and workmanship when delivered to our customers and that our products meet our published specifications. If a product is found to be defective, and our customer gives notice to Synteen Technical Fabrics before installing the product, Synteen Technical Fabrics will replace the product without charge to our customer or refund the purchase price at Synteen Technical Fabrics election. Replacing the product or obtaining a refund are the buyer’s sole remedy for a breach and Synteen Technical Fabrics will not be liable for any consequential damage attributed to a defective product. This warranty is given in lieu of all other warranties, express or implied, including the implied warranty of merchantability or fitness for a particular purpose. There are no warranties which extend beyond the description provided herein.

July 2024





**SF55**  
**SOIL REINFORCEMENT GEOGRID**

SF55 is composed of high molecular weight, high tenacity multifilament polyester yarns that are woven into a stable network placed under tension. The high strength polyester yarns are coated with a PVC material. SF Geogrids are inert to biological degradation and are resistant to naturally encountered chemicals, alkalis and acids. SF Geogrids are typically used for soil reinforcement applications such as retaining walls, steepened slopes, embankments, sub-grade stabilization, embankments over soft soils and waste containment applications.

TENSILE PROPERTIES	TEST METHOD	MARV VALUES	
		(kN/m)	(LBS/FT)
Ultimate Strength (MD)	ASTM D 6637	73.0	5,000
Creep Reduced Strength (MD)	ASTM D 5262	48.3	3,311
Long Term Design Strength (MD)	NCMA 97	41.8	2,866
Aperture Size (ins.)	Measured	21.0 x 28.0 (mm)	0.83 x 1.10 (in)

Reduction Factors:

- Creep (RF<sub>CR</sub>) 1.51
- Durability (RF<sub>D</sub>) 1.10
- Installation Damage\* (RF<sub>ID</sub>) 1.05

\* Soil Type 3

SYNTEEN Technical Fabrics, Inc Warranty Synteen Technical Fabrics warrants our products to be free from defects in material and workmanship when delivered to our customers and that our products meet our published specifications. If a product is found to be defective, and our customer gives notice to Synteen Technical Fabrics before installing the product, Synteen Technical Fabrics will replace the product without charge to our customer or refund the purchase price at Synteen Technical Fabrics election. Replacing the product or obtaining a refund are the buyer's sole remedy for a breach and Synteen Technical Fabrics will not be liable for any consequential damage attributed to a defective product. This warranty is given in lieu of all other warranties, express or implied, including the implied warranty of merchantability or fitness for a particular purpose. There are no warranties which extend beyond the description provided herein.

July 2024





**SF65  
SOIL REINFORCEMENT GEOGRID**

SF65 is composed of high molecular weight, high tenacity multifilament polyester yarns that are woven into a stable network placed under tension. The high strength polyester yarns are coated with a PVC material. SF Geogrids are inert to biological degradation and are resistant to naturally encountered chemicals, alkalis and acids. SF Geogrids are typically used for soil reinforcement applications such as retaining walls, steepened slopes, embankments, sub-grade stabilization, embankments over soft soils and waste containment applications.

TENSILE PROPERTIES	TEST METHOD	MARV VALUES	
		(kN/m)	(LBS/FT)
Ultimate Strength (MD)	ASTM D 6637	90.5	6,200
Creep Reduced Strength (MD)	ASTM D 5262	59.9	4,106
Long Term Design Strength (MD)	GRI GG4b	51.9	3555
Aperture Size (ins.)	Measured	20 x 25.4 (mm)	0.79 x 1.00 (in)

Reduction Factors:

- Creep (RF<sub>CR</sub>)                              1.51
- Durability (RF<sub>D</sub>)                              1.10
- Installation Damage\* (RF<sub>ID</sub>)              1.05

\* Soil Type 3

SYNTEEN Technical Fabrics, Inc Warranty Synteen Technical Fabrics warrants our products to be free from defects in material and workmanship when delivered to our customers and that our products meet our published specifications. If a product is found to be defective, and our customer gives notice to Synteen Technical Fabrics before installing the product, Synteen Technical Fabrics will replace the product without charge to our customer or refund the purchase price at Synteen Technical Fabrics election. Replacing the product or obtaining a refund are the buyer’s sole remedy for a breach and Synteen Technical Fabrics will not be liable for any consequential damage attributed to a defective product. This warranty is given in lieu of all other warranties, express or implied, including the implied warranty of merchantability or fitness for a particular purpose. There are no warranties which extend beyond the description provided herein.

July 2024





**SF80  
SOIL REINFORCEMENT GEOGRID**

SF80 is composed of high molecular weight, high tenacity multifilament polyester yarns that are woven into a stable network placed under tension. The high strength polyester yarns are coated with a PVC material. SF Geogrids are inert to biological degradation and are resistant to naturally encountered chemicals, alkalis and acids. SF Geogrids are typically used for soil reinforcement applications such as retaining walls, steepened slopes, embankments, sub-grade stabilization, embankments over soft soils and waste containment applications.

TENSILE PROPERTIES	TEST METHOD	MARV VALUES	
		(kN/m)	(LBS/FT)
Ultimate Strength (MD)	ASTM D 6637	116.7	8,000
Creep Reduced Strength (MD)	ASTM D 5262	77.3	5,298
Long Term Design Strength (MD)	GRI GG4b	66.9	4,587
Aperture Size (ins.)	Measured	21.0 x 29.0 (mm)	0.83 x 1.14 (in)

Reduction Factors:

- Creep (RF<sub>CR</sub>) 1.51
- Durability (RF<sub>D</sub>) 1.10
- Installation Damage\* (RF<sub>ID</sub>) 1.05

\* Soil Type 3

SYNTEEN Technical Fabrics, Inc Warranty Synteen Technical Fabrics warrants our products to be free from defects in material and workmanship when delivered to our customers and that our products meet our published specifications. If a product is found to be defective, and our customer gives notice to Synteen Technical Fabrics before installing the product, Synteen Technical Fabrics will replace the product without charge to our customer or refund the purchase price at Synteen Technical Fabrics election. Replacing the product or obtaining a refund are the buyer’s sole remedy for a breach and Synteen Technical Fabrics will not be liable for any consequential damage attributed to a defective product. This warranty is given in lieu of all other warranties, express or implied, including the implied warranty of merchantability or fitness for a particular purpose. There are no warranties which extend beyond the description provided herein.

July 2024





**SF90  
SOIL REINFORCEMENT GEOGRID**

SF90 is composed of high molecular weight, high tenacity multifilament polyester yarns that are woven into a stable network placed under tension. The high strength polyester yarns are coated with a PVC material. SF Geogrids are inert to biological degradation and are resistant to naturally encountered chemicals, alkalis and acids. SF Geogrids are typically used for soil reinforcement applications such as retaining walls, steepened slopes, embankments, sub-grade stabilization, embankments over soft soils and waste containment applications.

TENSILE PROPERTIES	TEST METHOD	MARV VALUES	
		(kN/m)	(LBS/FT)
Ultimate Strength (MD)	ASTM D 6637	131.3	9,000
Creep Limited Strength (MD)	ASTM D 5262	87.0	5,960
T <sub>al</sub> = Long Term Design Strength (MD)	NCMA 97	75.3	5,160
Aperture Size (ins.)	Measured	16 x 25.4 (mm)	0.63 x 1.00 (in)

Reduction Factors:

- Creep (RF<sub>CR</sub>)                            1.51
- Durability (RF<sub>D</sub>)                            1.10
- Installation Damage\* (RF<sub>ID</sub>)            1.05

\* Soil Type 3

SYNTEEN Technical Fabrics, Inc Warranty Synteen Technical Fabrics warrants our products to be free from defects in material and workmanship when delivered to our customers and that our products meet our published specifications. If a product is found to be defective, and our customer gives notice to Synteen Technical Fabrics before installing the product, Synteen Technical Fabrics will replace the product without charge to our customer or refund the purchase price at Synteen Technical Fabrics election. Replacing the product or obtaining a refund are the buyer's sole remedy for a breach and Synteen Technical Fabrics will not be liable for any consequential damage attributed to a defective product. This warranty is given in lieu of all other warranties, express or implied, including the implied warranty of merchantability or fitness for a particular purpose. There are no warranties, which extend beyond the description provided herein.

January 1, 2018





**SF95  
SOIL REINFORCEMENT GEOGRID**

SF95 is composed of high molecular weight, high tenacity multifilament polyester yarns that are woven into a stable network placed under tension. The high strength polyester yarns are coated with a PVC material. SF Geogrids are inert to biological degradation and are resistant to naturally encountered chemicals, alkalis and acids. SF Geogrids are typically used for soil reinforcement applications such as retaining walls, steepened slopes, embankments, sub-grade stabilization, embankments over soft soils and waste containment applications.

TENSILE PROPERTIES	TEST METHOD	MARV VALUES	
		(kN/m)	(LBS/FT)
Ultimate Strength (MD)	ASTM D 6637	138.7	9,500
Creep Limited Strength (MD)	ASTM D 5262	91.8	6,291
T <sub>al</sub> = Long Term Design Strength (MD)	NCMA 97	79.5	5,447
Aperture Size (ins.)	Measured	16 x 25.4 (mm)	0.63 x 1.00 (in)

Reduction Factors:

- Creep (RF<sub>CR</sub>)                      1.51
- Durability (RF<sub>D</sub>)                      1.10
- Installation Damage\* (RF<sub>ID</sub>)      1.05

\* Soil Type 3

SYNTEEN Technical Fabrics, Inc Warranty Synteen Technical Fabrics warrants our products to be free from defects in material and workmanship when delivered to our customers and that our products meet our published specifications. If a product is found to be defective, and our customer gives notice to Synteen Technical Fabrics before installing the product, Synteen Technical Fabrics will replace the product without charge to our customer or refund the purchase price at Synteen Technical Fabrics election. Replacing the product or obtaining a refund are the buyer's sole remedy for a breach and Synteen Technical Fabrics will not be liable for any consequential damage attributed to a defective product. This warranty is given in lieu of all other warranties, express or implied, including the implied warranty of merchantability or fitness for a particular purpose. There are no warranties, which extend beyond the description provided herein.

January 1, 2018





## SF110 SOIL REINFORCEMENT GEOGRID

**SF110** is composed of high molecular weight, high tenacity multifilament polyester yarns that are woven into a stable network placed under tension. The high strength polyester yarns are coated with a PVC material. SF Geogrids are inert to biological degradation and are resistant to naturally encountered chemicals, alkalis and acids. SF Geogrids are typically used for soil reinforcement applications such as retaining walls, steepened slopes, embankments, sub-grade stabilization, embankments over soft soils and waste containment applications.

TENSILE PROPERTIES	TEST METHOD	MARV VALUES	
		(kN/m)	(LBS/FT)
Ultimate Strength (MD)	ASTM D 6637	150.3	10,300
Creep Reduced Strength (MD)	ASTM D 5262	99.6	6,821
Long Term Design Strength (MD)	NCMA 97	86.2	5,906
Aperture Size (ins.)	Measured	20.0 x 28.0 (mm)	0.79 x 1.10 (in)

Reduction Factors:

- Creep (RF<sub>CR</sub>)    1.51
- Durability (RF<sub>D</sub>)    1.10
- Installation Damage\* (RF<sub>ID</sub>)                                  1.05

\* Soil Type 3

SYNTEEN Technical Fabrics, Inc Warranty Synteen Technical Fabrics warrants our products to be free from defects in material and workmanship when delivered to our customers and that our products meet our published specifications. If a product is found to be defective, and our customer gives notice to Synteen Technical Fabrics before installing the product, Synteen Technical Fabrics will replace the product without charge to our customer or refund the purchase price at Synteen Technical Fabrics election. Replacing the product or obtaining a refund are the buyer’s sole remedy for a breach and Synteen Technical Fabrics will not be liable for any consequential damage attributed to a defective product. This warranty is given in lieu of all other warranties, express or implied, including the implied warranty of merchantability or fitness for a particular purpose. There are no warranties which extend beyond the description provided herein.

July 2024







**SF180  
SOIL REINFORCEMENT GEOGRID**

**SF180** is composed of high molecular weight, high tenacity multifilament polyester yarns that are woven into a stable network placed under tension. The high strength polyester yarns are coated with a PVC material. SF Geogrids are inert to biological degradation and are resistant to naturally encountered chemicals, alkalis and acids. SF Geogrids are typically used for soil reinforcement applications such as retaining walls, steepened slopes, embankments, sub-grade stabilization, embankments over soft soils and waste containment applications.

TENSILE PROPERTIES	TEST METHOD	MARV VALUES	
		(kN/m)	(LBS/FT)
Ultimate Strength (MD)	ASTM D 6637	244.4	16,750
Creep Reduced Strength (MD)	ASTM D 5262	161.8	11,092
Long Term Design Strength (MD)	NCMA 97	140.1	9,604
Aperture Size (ins.)	Measured	13 x 25.4 (mm)	0.51 x 1.00 (in)

Reduction Factors:

- Creep (RF<sub>CR</sub>) 1.51
- Durability (RF<sub>D</sub>) 1.10
- Installation Damage\* (RF<sub>ID</sub>) 1.05

\* Soil Type 3

SYNTEEN Technical Fabrics, Inc Warranty Synteen Technical Fabrics warrants our products to be free from defects in material and workmanship when delivered to our customers and that our products meet our published specifications. If a product is found to be defective, and our customer gives notice to Synteen Technical Fabrics before installing the product, Synteen Technical Fabrics will replace the product without charge to our customer or refund the purchase price at Synteen Technical Fabrics election. Replacing the product or obtaining a refund are the buyer's sole remedy for a breach and Synteen Technical Fabrics will not be liable for any consequential damage attributed to a defective product. This warranty is given in lieu of all other warranties, express or implied, including the implied warranty of merchantability or fitness for a particular purpose. There are no warranties, which extend beyond the description provided herein.

July 2024





**SF190  
SOIL REINFORCEMENT GEOGRID**

SF190 is composed of high molecular weight, high tenacity multifilament polyester yarns that are woven into a stable network placed under tension. The high strength polyester yarns are coated with a PVC material. SF Geogrids are inert to biological degradation and are resistant to naturally encountered chemicals, alkalis and acids. SF Geogrids are typically used for soil reinforcement applications such as retaining walls, steepened slopes, embankments, sub-grade stabilization, embankments over soft soils and waste containment applications.

TENSILE PROPERTIES	TEST METHOD	MARV VALUES	
		(kN/m)	(LBS/FT)
Ultimate Strength (MD)	ASTM D 6637	321.0	22,000
Creep Reduced Strength (MD)	ASTM D 5262	212.6	14,569
Long Term Design Strength (MD)	NCMA 97	184.0	12,614
Aperture Size (ins.)	Measured	13 x 25.4 (mm)	0.51 x 1.00 (in)

Reduction Factors:

- Creep (RF<sub>CR</sub>) 1.51
- Durability (RF<sub>D</sub>) 1.10
- Installation Damage\* (RF<sub>ID</sub>) 1.05

\* Soil Type 3

SYNTEEN Technical Fabrics, Inc Warranty Synteen Technical Fabrics warrants our products to be free from defects in material and workmanship when delivered to our customers and that our products meet our published specifications. If a product is found to be defective, and our customer gives notice to Synteen Technical Fabrics before installing the product, Synteen Technical Fabrics will replace the product without charge to our customer or refund the purchase price at Synteen Technical Fabrics election. Replacing the product or obtaining a refund are the buyer’s sole remedy for a breach and Synteen Technical Fabrics will not be liable for any consequential damage attributed to a defective product. This warranty is given in lieu of all other warranties, express or implied, including the implied warranty of merchantability or fitness for a particular purpose. There are no warranties which extend beyond the description provided herein.

July 2024





## SF350 SOIL REINFORCEMENT GEOGRID

SF350 is composed of high molecular weight, high tenacity multifilament polyester yarns that are woven into a stable network placed under tension. The high strength polyester yarns are coated with a PVC material. SF Geogrids are inert to biological degradation and are resistant to naturally encountered chemicals, alkalis and acids. SF Geogrids are typically used for soil reinforcement applications such as retaining walls, steepened slopes, embankments, sub-grade stabilization, embankments over soft soils and waste containment applications.

TENSILE PROPERTIES	TEST METHOD	MARV VALUES	
		(kN/m)	(LBS/FT)
Ultimate Strength (MD)	ASTM D 6637	437.8	30,000
Creep Reduced Strength (MD)	ASTM D 5262	289.9	19,867
Long Term Design Strength (MD)	NCMA 97	251.0	17,201
Aperture Size (ins.)	Measured	10 x 25.4 (mm)	0.39 x 1.00 (in)

Reduction Factors:

- Creep (RF<sub>CR</sub>) 1.51
- Durability (RF<sub>D</sub>) 1.10
- Installation Damage\* (RF<sub>ID</sub>) 1.05

\* Soil Type 3

SYNTEEN Technical Fabrics, Inc Warranty Synteen Technical Fabrics warrants our products to be free from defects in material and workmanship when delivered to our customers and that our products meet our published specifications. If a product is found to be defective, and our customer gives notice to Synteen Technical Fabrics before installing the product, Synteen Technical Fabrics will replace the product without charge to our customer or refund the purchase price at Synteen Technical Fabrics election. Replacing the product or obtaining a refund are the buyer’s sole remedy for a breach and Synteen Technical Fabrics will not be liable for any consequential damage attributed to a defective product. This warranty is given in lieu of all other warranties, express or implied, including the implied warranty of merchantability or fitness for a particular purpose. There are no warranties, which extend beyond the description provided herein.

July 2024





**SR18  
SOIL REINFORCEMENT GEOGRID**

**SR18** is composed of high molecular weight, high tenacity multifilament polyester yarns that are woven into a stable network placed under tension. The high strength polyester yarns are coated with a PVC material. SF Geogrids are inert to biological degradation and are resistant to naturally encountered chemicals, alkalis and acids. SF Geogrids are typically used for soil reinforcement applications such as retaining walls, steepened slopes, embankments, sub-grade stabilization, embankments over soft soils and waste containment applications.

TENSILE PROPERTIES	TEST METHOD	MARV VALUES	
		(kN/m)	(LBS/FT)
Ultimate Strength (MD/CMD)	ASTM D 6637	24.81	1,700
		20.43	1,400
Creep Limited Strength (MD/CMD)	ASTM D 5262	15.70	1,076
		12.93	886
T <sub>al</sub> = Long Term Design Strength (MD/CMD)	NCMA 97	12.97	889
		10.68	732
Aperture Size (MD/CMD)	Measured	0.08 x 0.08 (in.)	
Ultraviolet Resistance (500 Hours)	ASTM D 4355	78%	

Reduction Factors:

- Creep (RF<sub>CR</sub>) 1.51
- Durability (RF<sub>D</sub>) 1.10
- Installation Damage\* (RF<sub>ID</sub>) 1.05

\* Soil Type 3

SYNTEEN Technical Fabrics, Inc Warranty Synteen Technical Fabrics warrants our products to be free from defects in material and workmanship when delivered to our customers and that our products meet our published specifications. If a product is found to be defective, and our customer gives notice to Synteen Technical Fabrics before installing the product, Synteen Technical Fabrics will replace the product without charge to our customer or refund the purchase price at Synteen Technical Fabrics election. Replacing the product or obtaining a refund are the buyer’s sole remedy for a breach and Synteen Technical Fabrics will not be liable for any consequential damage attributed to a defective product. This warranty is given in lieu of all other warranties, express or implied, including the implied warranty of merchantability or fitness for a particular purpose. There are no warranties, which extend beyond the description provided herein.

January 1, 2018