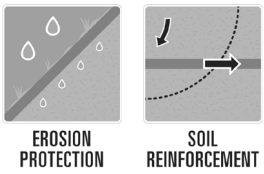
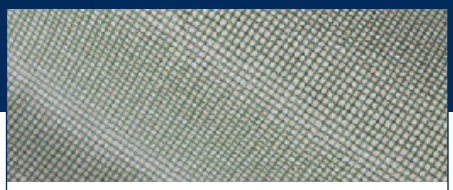
TENCATE Mirafi®



Miramesh® Biaxial Geosynthetics

for Green Permanent MSE Wall and Slope Applications



Miramesh® GR Biaxial Geosynthetics

Miramesh® TR Biaxial Geosynthetics

OUR COMPANY

TenCate develops and produces materials that function to increase performance, reduce costs and deliver measurable results by working with our customers to provide advanced solutions.

OUR PRODUCT

TenCate Miramesh® geosynthetics provide surface erosion protection and secondary reinforcement in MSE structures. The erosion protection facilitates establishment of vegetation and provides structural support for the forming of battered and vertical face MSE walls and oversteepened slopes. The secondary reinforcement facilitates compaction and prevents surficial sloughing at the slope face.

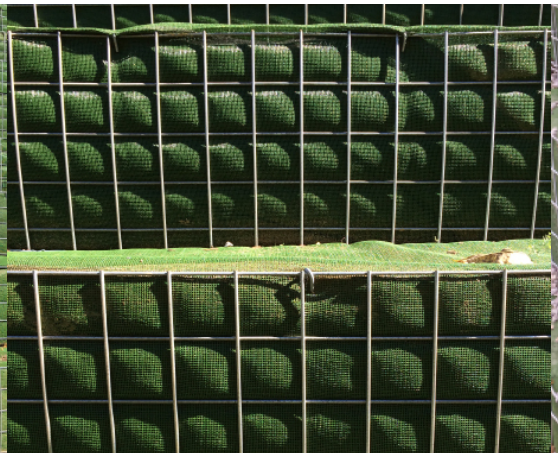
The Difference Miramesh® Biaxial Geosynthetics Make:

- Strength. Biaxial strength to provide uniform design strengths and facilitate one layer installation for secondary reinforcement and face erosion protection.
- Vegetation Support. Vegetation testing shows Miramesh® geosynthetics perform better than biaxial geogrids and geotextiles in providing a suitable platform for plant growth. The uniquely designed aperture construction allows for retention of soil particles, while encouraging vegetation growth.
- Flexible. Easily conforms to the slope or wall face to provide a stable platform vegetation.
- Color. Available in green and black color.
- Design Life. Available in 75 to 100 year permanent design life exposed to sunlight.

Miramesh® GR: The original Miramesh® geosynthetic. Miramesh® GR is a green mesh facing to provide an instant green face prior to vegetation growth. It is UV coated to provide 75 to 100 year design life for permanent MSE wall face and slope face.

Miramesh® TR: A black mesh facing offering high biaxial tensile strengths with standard UV protection offering economical facing before vegetation growth. Miramesh® TR may act as a temporary or permanent face wrap based on the MSE structure type.

Miramesh® has been used successfully on MSE walls and slopes providing an alternative facing to hard armor concrete and masonry block facing. Miramesh® may also be used under permeable pavers and channel blocks as a separation layer below the units or to separate dissimilar aggregate layers. The unique benefits of Miramesh® geosynthetics allow it to be used in many civil engineering applications based on the project needs. Please contact your TenCate representative for more detailed information.



TENCATE GEOSYNTHETICS

TENCATE Mirafi®

Miramesh® Biaxial Geosynthetics

for Green Permanent MSE Wall and Slope Applications

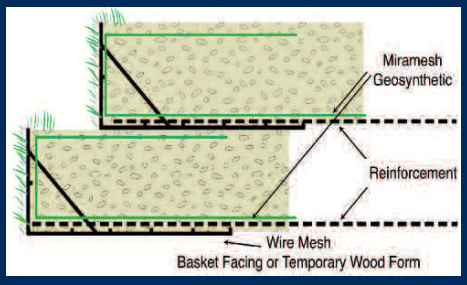
MECHANICAL PROPERTIES	TEST METHOD	UNIT	GR	TR
(MINIMUM AVERAGE ROLL VALUES)			(PATENT #7,740,420)	
Tensile Strength MD @ Ultimate	ASTM D4595	lbs/ft (kN/m)	1440 (21.0)	2100 (30.6)
Tensile Strength CD @ Ultimate	ASTM D4595	lbs/ft (kN/m)	1733 (25.3)	2100 (30.6)
Creep Reduced Strength MD	ASTM D5262	lbs/ft (kN/m)	471 (6.9)	686 (10.0)
Creep Reduced Strength CD	ASTM D5262	lbs/ft (kN/m)	566 (8.3)	--
Long Term Allowable Design Load[1] MD	GRI GT-7	lbs/ft (kN/m)	407 (5.9)	594 (8.7)
Long Term Allowable Design Load[1] CD	GRI GT-7	lbs/ft (kN/m)	490 (7.2)	--
Aperture Size MD	--	in (mm)	0.08 (2)	0.08 (2)
Aperture Size CD	--	in (mm)	0.08 (2)	0.12 (3)
Color	--	--	Green	Black
Flame Resistance	NFPA-701 California State Fire Marshall		--	--
UV Resistance (at 500 hours)[3]	ASTM D4355	% Strength Retained	100	90
Design Life	See Note[2] below	years	75	--

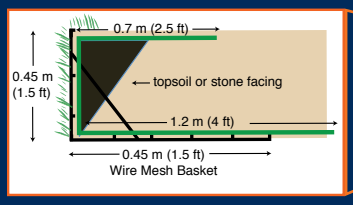
PACKAGING (TYPICAL)			GR	TR
Roll Width	---	ft (m)	8.0 (2.4)	8.0 (2.4)
Roll Length	---	ft (m)	150 (45.7)	150 (45.7)
Roll Weight (Typical)	---	lbs (kg)	51 (23)	52 (24)
Roll Area		yd^2 (m^2)	133 (110)	133 (110)

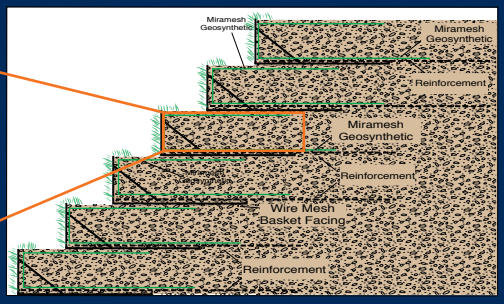
Note[1]: Long Term Allowable Design values are for sand, slit, and clay. Creep Reduction Factor based on 75-year design life.
Note[2]: Extrapolated from the average half-life based on ASTM D7238 (QUV). Data also found on Mirafi® UV Durability Technical Note.

Miramesh® SG Notes:
Note[1]: Miramesh physical properties do not apply to tufted area.
Note[2]: Long Term Allowable Design values are for sand, slit, and clay. Creep Reduction Factor based on 75-year design life.
Note[3]: UV Resistance is for tufted area only.
Note[4]: Extrapolated from the average half-life based on ASTM D7238 (QUV). Data also found on Mirafi® UV Durability Technical Note.
Note[5]: Aperture size only applies to untufted area.
Note[6]: Weight is for composite of tufed and untufed area.

Miramesh® Biaxial Geosynthetics







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