EROSION CONTROL MATERIALS
PRODUCT DATA

Photograph courtesy Propex GeoSolutions

FOR MORE INFORMATION

Geosynthetics magazine has provided information on the erosion control materials specification charts for comparative purposes only. Designers should contact manufacturers for additional details and to discuss site-specific considerations.

Information on the use and specification of erosion control products is also available from the Geosynthetic Materials Association (GMA).

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PUBLISHER'S NOTE

Geosynthetics magazine compiled all information included in the *2023 Geosynthetics Specifier's Guide* from information submitted by firms in the geosynthetics industry. Companies provided specifications voluntarily, and specification accuracy is the responsibility of the manufacturer. The appearance of a listing in this directory is not an endorsement of the company or product by *Geosynthetics* magazine or the Advanced Textiles Association (ATA). The *2023 Geosynthetics Specifier's Guide* is intended as a guide, and *Geosynthetics* magazine and ATA encourage readers to contact the companies listed for further information.

Companies design these products to solve erosion and sediment control problems, and to provide long-term stabilization by establishing and maintaining vegetative cover.

Erosion control products give engineers ready solutions for one of the fastest-growing design niches. Many of these products work with vegetation to form a biocomposite solution to erosion. The charts in this section are divided into degradable rolled erosion control products (RECPs), nondegradable RECPs and hard armor.

Degradable products are used to enhance the establishment of vegetation, such as on a rehabilitated lakeshore or alongside a recently constructed roadway. These products are used where vegetation alone will provide sufficient site protection once the erosion control product has degraded.

Nondegradable products provide long-term reinforcement of vegetation. They are used in more challenging erosion control applications where immediate, high-performance erosion protection is required. The materials extend the erosion resistance of soil, rock and other materials by permanently reinforcing the vegetative root structure.

The numbers

Companies that submitted product data chart lines were asked to provide data determined through industry-accepted testing methods. Companies were asked to sign a certificate of compliance verifying the accuracy of this data.

Product Name	RECP Type [1]	Composition			Performance/Design Values				Index Property
					Slope Applications		Channel Applications		
		Number of Nets	Net Type [2]	Matrix	Design "C" Factor (unvegetated)	Recommended maximum slope (H:V)	Design Shear Stress [3] Pa (lb/ft²) (unvegetated)	Functional Longevity [4] (months)	Tensile Strength kN/m (lb/ft) ASTM D 5035
Nedia Enterprises | www.nedia.com									
KoirWrap 1200	OWT	2	organic	woven coir (coconut fiber) & jute	0.003*	1:1	239 (5.0)*	>36 months*	27.7 x 20.6* (1968 x 1416)*
KoirWrap 1000	OWT	2	organic	woven coir (coconut fiber) & jute	0.002*	1:1	215 (4.5)*	>36 months*	22.06 x 15.05* (1512 x 1032)*
KoirMat 400	OWT	1	organic	woven coir (coconut fiber)	0.002*	1:1	153 (3.2)*	>36 months*	7.35 x 7.00* (504 x 480)*
KoirMat 700	OWT	1	organic	woven coir (coconut fiber)	0.002*	1:1	215 (4.5)*	>36 months*	22.06 x 15.05* (1512 x 1032)*
KoirMat 900	OWT	1	organic	woven coir (coconut fiber)	0.003*	1:1	239 (5.0)*	>36 months*	27.7 x 20.6* (1968 x 1416)*
Solmax International Inc. | www.solmax.com									
LANDLOK® S2	ECB	2	Synthetic	Straw	0.035	up to 3:1	96 (2)	up to 12 mos	2.8 x 1.7 (194 x 116)
LANDLOK® C2	ECB	2	Synthetic	Coconut	0.026	up to 1:1	96 (2)	up to 36 mos	3.7 x 2.6 (251 x 180)

[1] ECB = Erosion control blanket
MCN = Mulch control nettings
OWT = Open weave textile
TRM = Turf reinforcement mat

[2] Synthetic or organic netting
[3] For short duration (0.5 hour) peak flow events. For long duration flow design values, please contact the manufacturer.

[4] Longevity ranges:
≤ 3 months
3 – 12 months
12 – 24 months
24 – 36 months
> 36 months

* = typical
Companies were requested to provide minimum average roll values (MARV). All claims are the responsibility of the manufacturer.

« *Geosynthetics* recommends you contact the manufacturers before making any specifying/purchasing decisions »

Product Name	RECP Type [1]	Composition			Performance/Design Values		Index Property		
					Slope Applications	Channel Applications			
		Number of Nets	Net Type [2]	Matrix	Recommended max. slope (H:V)	Design Shear Stress [3] Pa (lb/ft2) (vegetated)	Thickness ASTM D 6525 mm (in)	Tensile Strength ASTM D 5035 kN/m (lb/ft)	UV Stability ASTM D 4355 (% tensile retention)
ACE Geosynthetics Inc. | www.geoace.com									
ACEFormer	AP (armour protection)	0 (woven)	Synthetic	PET/PET	NA	NA	600 (24)	60 x 60 (4106 x 4106)	NP
ACETube PP250-II (Black / Tan)	GTs (geotextile tube)	0 (woven)	Synthetic	PP	NA	NA	NP	250 x 250 (17124 x 17124)	NP
ACEMat R III	TRM	0 (woven)	Synthetic	3-D woven PP	NA	NA	10 (0.4)	60 x 50 (4110 x 3425)	NP
Hanes Geo Components | www.hanesgeo.com									
ScourStop transition mat	Transition mat	NA	NA	HDPE semi-rigid mat with 50% open area	NA	NA	11.7 (.46)	NA	87
Maccaferri Inc. | www.maccaferri.com/us									
MacMat R1 6822G0	TRM	1	Double Twist Hexagonal Steel Wire Mesh with a PoliMac coating	3D PP			12 (0.47)	31.3 (2143)	Stabilized
MacMat R1 8127G0	TRM	1	Double Twist Hexagonal Steel Wire Mesh with a PoliMac coating	3D PP			12 (0.47)	41.7 (2860)	Stabilized
MacMat R1 060S	TRM	1	PET woven geogrid	3D PP			15 (0.59)	60 (4111)	Stabilized
MacMat R1 005	TRM	1	PP biorented net	3D PP			11 (0.43)	4.5 (308)	Stabilized

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[4] = 1000 hrs exposure

[5] = 3000 hrs exposure

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Product Name	RECP Type [1]	Composition			Performance/Design Values		Index Property		
					Slope Applications	Channel Applications			
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Solmax International Inc. | www.solmax.com									
LANDLOK® 450	TRM	2	Synthetic	PP	stable slopes up to 1.5:1.0	479 (10)	12.7 (0.50)	6.2 x 5.1 (425 x 350)	80% @ 1,000 hrs
PYRAMAT® 25	TRM	0 (Woven)	NA	3-D Woven PP	stable slopes up to 1.0:1.0	575 (12)	6.35 (0.25)	29.2 x 26.3 (2,000 x 1,800)	90% @ 3,000 hrs
PYRAMAT®75	HPTRM	0 (Woven)	NA	3-D Woven PP	stable slopes up to 0.5:1.0	766 (16)	10.16 (0.40)	58.4 x 43.8 (4,000 x 3,000)	90% @ 6,000 hrs
TechFab India | www.techfabindia.com									
Gabion Mattress 3mx1mx0.30m (Zinc + PVC)	ECB	Double twisted net	8x10mm-steel wire mesh	NA	NA	NA	NA	NA	NA
Typar Geosynthetics | www.typargeosynthetics.com									
GrassProtecta	Transition Mat	NA	NA	HDPE flexible mat with 50% open area	0.5:1	>589.17 (>12.3)	10.92 (.43)	12 (826)	100
Willacoochee Industrial Fabrics Inc. | www.winfabusa.com									
WINFAB DIAMONDBACK 2018	TRM	0 (woven)	NA	3-D woven PP	0.5:1	576 (12)	6.4 (.25)	36.48 x 29.18 (2,500 x 2,000)	90% @ 3,000 hours
WINFAB DIAMONDBACK 4030	HPTRM	0 (woven)	NA	3-D woven PP	0.5:1	768 (16)	7.62 (.30)	59.81 x 45.23 (4,100 x 3,100)	95% @ 3,000 hours

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GEOSYNTHETICS CONFERENCE WATCH

NEW ADDITION TO THE SHORT COURSE LINEUP FOR GEOSYNTHETICS 2023

By Barbara J. Connett

Geosynthetics Conference 2023 now offers eight half-day short courses on Sunday, February 5, 2023. These in-depth courses feature detailed instruction in a small group setting. Each course provides four Professional Development Hours (PDH) and are included with full registrations at no extra cost. Check out GeosyntheticsConference.com/program/short-courses/ for the full lineup.

Sam Allen

Tamara Tuttle

J.P. Giroud, Ph.D.

NEW

Marketing in the Geosynthetics Industry

Sam Allen, President, International Geosynthetics Society (IGS) and TRI Environmental;
Tamara Tuttle, Atlas International Consulting

While the global geosynthetics industry is relatively small (an international geosynthetics conference may attract at most 2,500 people), it is uniquely intense with many companies providing services ranging from geosynthetic products, geosynthetic installations, and expertise related to geosynthetic design, application and testing. Most professionals in the geosynthetics industry have achieved much of their expertise during their professional career with a fortunate few having had geosynthetic-related curriculum in school.

The geosynthetic industry involves many with disparate educations ranging from classic geotechnical, civil and environmental engineering to technical backgrounds in chemistry, polymer engineering and materials science. Still others in our industry are solely trained based on multi-year experience with geosynthetic manufacturing, handling, installation and testing.

From a marketing and sales communication perspective, this dynamic industry poses an especially challenging environment to establish meaningful communication with our collective customers. Indeed, navigating the multiple geosynthetic-related associations and nonprofits, and their cultures and contributions can be daunting. Yet, these same organizations play a strategic role in standardizing and promoting geosynthetic technologies and applications—a key benefit to geosynthetic sales professionals. They stand as platforms for collective education and community-held expertise as compared with company-specific messaging promoting the unique attributes of a product or service.

So, how is one to sell products or services in such a dynamic and competitive industry?

This half-day course is appropriate for business development and sales professionals working in the geosynthetics industry. It is appropriate for new hires, young starters and seasoned professionals. Students will explore the different geosynthetic industry sales environments and how general and broad appreciation for the industry and its organizations can greatly enhance the success of sales efforts. Narratives commonly heard about geosynthetic types and features and their relative performance will be explored and evaluated in a non-competitive, safe environment. Healthy and positive sales techniques will be discussed and rehearsed. Students will gain an intense and expanded appreciation for the uniqueness and greatness of the global geosynthetics industry and its opportunities.

Correction

Robert M. Koerner Award and Lecture
"From zero leak at end of geomembrane installation to zero leakage in service"
Tuesday, Feb. 7 | 8–9:30 a.m.
J.P. Giroud, Ph.D., Past-President of the International Geosynthetics Society,
Member US National Academy of Engineering
Moderators: George Koerner, Ph.D., GSI; Barry Christopher Ph.D., P.E., M. ASCE;
Christopher Consulting and Jie Han, Ph.D., University of Kansas.

Dr. Giroud joins us live from France to present his lecture and answer your questions!

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ATA GEOSYNTHETICS CONFERENCE

The **bolded** advertisers are exhibitors at Geosynthetics Conference 2023, co-locating with the International Erosion Control Association (IECA) Annual Conference and Expo 2023, which will be held in Kansas City, MO. on Feb. 5–8, 2023.

For more information, please visit GeosyntheticsConference.com.

For exhibiting rates, call Amy Collins at +1 651 225 6970 or email her at amy.collins@textiles.org.

ATA GEOSYNTHETIC MATERIALS ASSOCIATION

The Geosynthetic Materials Association actively identifies, assesses, analyzes and acts upon market growth opportunities and issues that affect its member companies. The activities of the association are proactive in nature and focus on five areas: Engineering support • Business development • Education • Government relations • Geosynthetic industry promotion

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CALENDAR

FEBRUARY

ASTM Committee D35 on Geosynthetics

FEB. 1–3, 2023 | SAN ANTONIO, TEXAS

The winter biannual meeting of the ASTM Committee D35 on Geosynthetics will be held at the Grand Hyatt San Antonio.

astm.org

ATA GEOSYNTHETICS CONFERENCE

Geosynthetics Conference 2023/ IECA Annual Conference and Expo 2023

FEB. 5–8, 2023 | KANSAS CITY, MO.

The Geosynthetic Conference 2023, co-located with the International Erosion Control Association (IECA) Annual Conference and Expo 2023, will feature geotechnical practitioners, designers, contractors and installers all coming together for the North America's premier geosynthetics conference.

GeosyntheticsConference.com

GeoAfrica 4

FEB. 20–23, 2023 | CAIRO, EGYPT

The International Geosynthetic Society in Egypt (IGSE) will hold the 4th African Regional Conference on Geosynthetics (GeoAfrica 4) in Cairo, Egypt. Conference technical themes include reinforced soil walls and slopes, drainage and filtration, transportation applications, geosynthetics barriers, hydraulic/coastal applications, innovation, sustainable infrastructure, megaprojects, design and numerical modeling, and durability.

geoafrica2021.org

MARCH

ATA WOMEN IN TEXTILES SUMMIT

MARCH 1–3 | CHARLESTON, S.C.

The goal of the summit is to strengthen the advancement of women in the textile industry through an interactive forum that provides education, networking and dialogue about important issues affecting women in business.

textiles.org/women

Geo-Congress 2023

MARCH 26–29, 2023

In addition to the regular variety of presentations on challenging projects and research, Geo-Congress 2023 will feature multiple invited speakers on selected topics highlighting contributions by engineers and academia to address challenging geotechnical issues. The conference will include a wide range of knowledge-enhancing technical and panel sessions, short courses and workshops. Some of the special topics will include a state-of-the-art lecturer and a state-of-the-practice lecturer.

geocongress.org

JUNE

ASTM Committee D35 on Geosynthetics

JUNE 7-9, 2023 | DENVER, CO

The ASTM Committee D35 on Geosynthetics was formed in 1984. D35 meets twice each year, in January and June, with up to 100 members participating in 45 meetings over three days.

astm.org/meetings

SEPTEMBER

12th International Conference on Geosynthetics

SEPT. 17–21, 2023 | ROME, ITALY

The 12th International Conference on Geosynthetics will be held at Rome's Auditorium Parco della Musica. Presenters will address the most recent developments in geosynthetics, stimulating fruitful technical and scientific interaction among professionals.

12icg-roma.org

OCTOBER

GeoSaskatoon 2023

OCT. 1–4, 2023 | SASKATCHEWAN, CANADA

IGS-NA is partnering with the Saskatoon Geotechnical Section of the Canadian Geotechnical Society (CGS) for GeoSaskatoon 2023. IGS North America is working with GeoSaskatoon on endeavors that will connect people during the conference, reconnect them in Toronto at GeoAmericas 2024.

geosaskatoon2023.ca

NOVEMBER

Advanced Textiles EXPO

NOV. 1–3, 2023 | ORLANDO, FL

For a century, the Advanced Textiles Expo (formerly IFAI Expo) has been the industrial fabrics industry's flagship show. Expo is the place where industry stakeholders and leaders connect, learn and make purchases in order to grow their businesses. Connect with industry experts and peers, discover new products and applications, and advance your business with insights on market trends.

AdvancedTextilesExpo.com

PLANNING AHEAD

TRB Annual Meeting

JAN. 7–11, 2024 | WASHINGTON, D.C.

Expected to attract thousands of transportation professionals from around the world, the meeting program covers all transportation modes, with sessions and workshops addressing topics of interst to policy makers, administrators, practitioners, researchers and representatives of government, industry and academic institutions. Workshops take place on the first and last day of the meeting.

trb.org/annual meetings/FutureDates.aspx

GeoAmericas 2024

APRIL 28–MAY 1, 2024 | TORONTO, CANADA

IGS North America will host the 5th Pan-American Conference on Geosynthetics April 28–May 1, 2024, in Toronto. Open to members and non-members alike. Major topics include sustainability, energy, mining and transportation infrastructure.

geoamericas2024.org

The World of Coal Ash (WOCA)

MAY 13–16, 2024 | GRAND RAPIDS, MI

WOCA is an international conference organized by the American Coal Ash Association (ACAA) and the University of Kentucky Center for Applied Energy Research (CAER).

worldofcoalash.org

>> For more events, go to GeosyntheticsMagazine.com/events.

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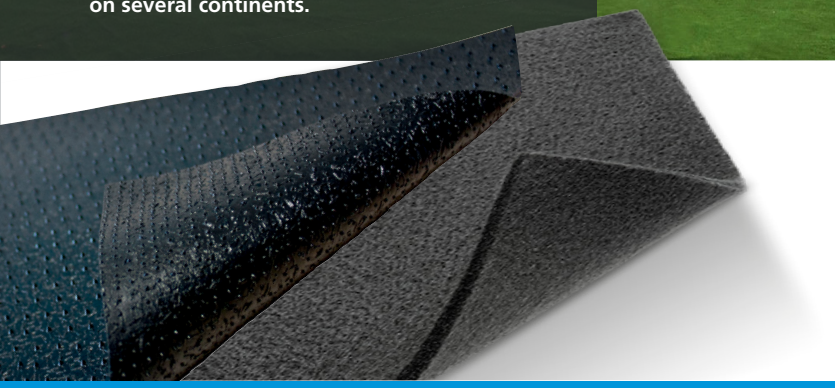

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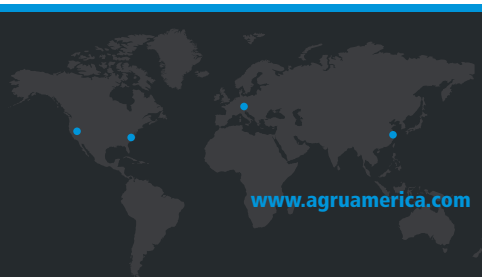

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