

FLOOD CONTROL

TYPAR MATRIX™ 3D GEOTEXTILES: SUPERIOR TO SANDBAGS.

In catastrophic rain and emergency flood situations, there is an advanced alternative to traditional flood control techniques for holding back water. Introducing Typar Matrix™ 3D Geotextiles — an innovative product that can provide stronger, more effective flood control.



QUICK SET-UP. LESS MANPOWER.

Typar Matrix 3D Geotextiles offers incredibly quick set-up in comparison to sandbags and other traditional flood control techniques. The cellular system is made of a strong geotextile material. Once expanded — which is fast and easy — simply fill up the honeycomb “cells” with sand, rocks or another suitable ballast material to provide structural support. In minutes, you have a strong stabilization device that functions as a cohesive singular structure — as opposed to separate sandbag units that are more susceptible to structural failure.

In addition to speed of installation, another differentiator of Typar Matrix 3D Geotextiles is the manpower required for set-up. Using just three people and one skid steer front end loader, the fill rate is equivalent to 528 bags

per man-hour. The honeycomb design allows the system to be filled rapidly, then stacked to a height of 44". A 100' wall length at 44" high is equivalent to 6,600 sandbags.

EXTREME PERFORMANCE.

Typar Matrix 3D Geotextiles offers many advantages over sandbags:

- † **Easy to install** — designed for quick placement and filling.
- † **Works anywhere** — easy to set up, even on an incline.
- † **Durable** — singular and sturdy, honeycomb design expands on site.
- † **Easy to transport** — ships compact to remote areas, lightweight and portable.
- † **Requires less manpower** — uses less volunteers, while protecting more ground faster.

UNMATCHED STRUCTURAL STABILITY.

Constructed from time-proven Typar fabric, the cells contour to the land and hold infill materials in place — preventing mass movements of infill down a slope. And, when sand is used as a filler, the density reduces seepage through the system. Damage is rare, but if found during routine inspections, patching, reinforcement or replacement is easy.

TYPAR
MATRIX™
3D GEOTEXTILES

SEDIMENT CONTROL

TYPAR MATRIX™ 3D GEOTEXTILES: BEATS CONVENTIONAL METHODS

Now there's a better alternative to conventional sediment control devices used on construction sites. Presenting Typar Matrix™ 3D Geotextiles — an innovative product that can provide effective sediment control on work sites and help achieve lower turbidity levels in construction stormwater runoff.

EASY TO USE. QUICK TO INSTALL.

Typar Matrix 3D Geotextiles is a cellular system made of a strong, yet permeable geotextile material. Once expanded, simply fill up the honeycomb “cells” with suitable fill material to provide structural support. (Material will vary depending on structural practice.) In minutes, you have a strong stabilization device that not only is structurally stable during rainfall events, but also acts as a filter, dramatically reducing turbidity levels in construction stormwater runoff.

The product's 3D cells may be filled with mulch, sand or aggregate depending on the application. However, to specifically control turbidity levels in sheet-flow construction stormwater runoff, a mulch ballast with a polymer additive is recommended.

Typar Matrix 3D Geotextiles can also be used as a holding space for excess soil or landscape materials, or to help maintain the integrity of a work site's grade.

UNSURPASSED PERFORMANCE.

Typar Matrix 3D Geotextiles offers many advantages:

- † **Easy to install** — designed for quick placement and filling.
- † **Works anywhere** — easy to set up, even on an incline.
- † **Durable** — honeycomb design is expandable and sturdy.
- † **Easy to transport** — lightweight and portable.
- † **Highly effective** — filters construction stormwater runoff better than other conventional sediment control devices.



PROVEN TO ACHIEVE LOWER TURBIDITY LEVELS.

In independent tests performed by Civil and Environmental Consultants, Inc., Typar Matrix 3D Geotextiles achieved significantly lower turbidity levels in construction stormwater runoff compared to silt fences and conventional rock check dams. With new stricter runoff guidelines being implemented by the Environmental Protection Agency (EPA) in December of 2009, the Typar Matrix 3D Geotextiles System is an excellent option to meet the new guidelines.

TYPAR
MATRIX™
3D GEOTEXTILES

APPLICATIONS. Typar Matrix™ 3D Geotextiles can provide sediment control in a variety of structural practices.

- | | |
|-------------------------|---------------------------------|
| Check Dam | Inlet Protection |
| Filter Ring | Outlet Protection |
| Perimeter Control | Temporary Sediment Pond Outfall |
| Stream Buffer | Stream Bank Stabilization |
| Temporary Sediment Pond | Temporary Stream Relocation |
| Environmental Filter | Dewatering Structure |

PROPERTIES		UNIT	VALUE
CBR Puncture Resistance ASTM D1883		lbs	697
Grab Tensile Strength ASTM D4632	md	lbs	352
	cd	lbs	335
Elongation at Break ASTM D4632	md	%	67
	cd	%	61
Strip Tensile Strength ASTM D5035	md	lbs	112
	cd	lbs	112
Elongation at Break ASTM D5035	md	%	53
	cd	%	54
Trap Tear Strength ASTM D4533	md	lbs	77
	cd	lbs	67
Air Permeability ASTM D737		cfm/ft ²	10
Water Permeability ASTM D4491 Water Permittivity ASTM D4491		cm/sec	.009
		sec ⁻¹	.123
Thickness ASTM D1777		mils	28
Weight ASTM D5261		oz./yd ²	10
Probe Penetration ASTM D4833		lbs	116
Apparent Opening Size ASTM D4751		US Sieve	N/A



Fill Typar Matrix 3D cells with mulch, sand or other aggregate, depending on the application.



Building Wraps † Flashings † Construction Tape † Roof Wrap † Landscape Products † Geotextiles



TM3D-09002

Fiberweb, Inc.
70 Old Hickory Blvd.
Old Hickory, TN 37138 USA
#Z" "Z* &S)*" † 8J, (# Z* Z" (*
i i i žkbSā_

Typar® and Typar Matrix™ are trademarks of Fiberweb, Inc.

? SWP fZVGÆZž
© 2009 Fiberweb, Inc.



The fill rate with one skid steer front end loader and three people is equivalent to 528 sandbags per man-hour.

PROPERTIES		UNIT	VALUE
CBR Puncture Resistance ASTM DI883		lbs	697
Grab Tensile Strength ASTM D4632	md	lbs	352
	cd	lbs	335
Elongation at Break ASTM D4632	md	%	67
	cd	%	61
Strip Tensile Strength ASTM D5035	md	lbs	112
	cd	lbs	112
Elongation at Break ASTM D5035	md	%	53
	cd	%	54
Trap Tear Strength ASTM D4533	md	lbs	77
	cd	lbs	67
Air Permeability ASTM D737		cfm/ft ²	10
Water Permeability ASTM D4491		cm/sec	.009
Water Permittivity ASTM D4491		sec ⁻¹	.123
Thickness ASTM DI777		mils	28
Weight ASTM D5261		oz./yd ²	10
Probe Penetration ASTM D4833		lbs	116
Apparent Opening Size ASTM D4751		US Sieve	N/A



The honeycomb formation aids in energy transfer and absorption — while providing predictable and reliable stability protection.

TYPAR®
GEOTEXTILES

Building Wraps † Flashings † Construction Tape † Roof Wrap † Landscape Products † Geotextiles



TM3D-09001

Fiberweb, Inc.
70 Old Hickory Blvd.
Old Hickory, TN 37138 USA
#Z" "Z* &S)" † 8S, (# Z* Q Z" (*
i i i žkbSā_a_

Typar® and Typar Matrix™ are trademarks of Fiberweb, Inc.

? SWP fZVGÆZž

© 2009 Fiberweb, Inc.