#### **About Nilex**

Nilex is committed to unearthing better results. Whether it's for a civil, resource or environmental project, we offer the latest engineered and technically superior materials and techniques to save our customers time and money, and minimize the need to move or remove earth, and reduce the need for granular materials.

With over 35 years experience, a long-standing commitment to the environment and highly qualified staff, Nilex delivers the products and technologies that give clients an economic advantage with environmental benefit.

Simply stated, it's a better way of building.



Roads | MSE Walls & Slopes | Erosion & Sediment Control | Drainage | Containment

# GeoRidge<sup>®</sup> GeoRidge Bio<sup>®</sup>

Check Dams

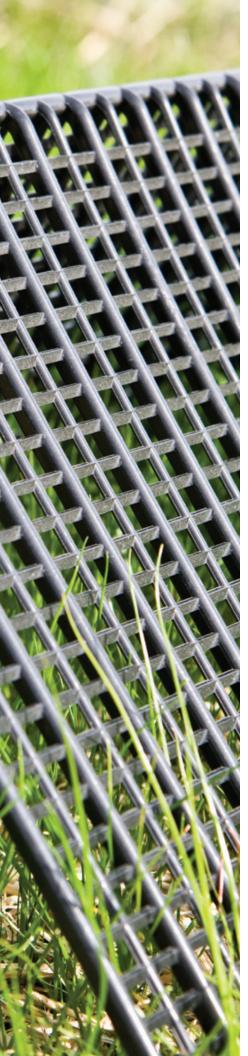








Unearthing better results.



## **GEORIDGE<sup>®</sup>** *The simple, sustainable alternative*

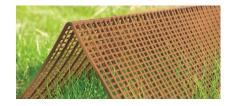
Nilex has developed a lightweight, sustainable alternative to conventional check dams. GeoRidge is a permeable plastic berm that has been designed for erosion and sediment control. It can be used with both permanent and biodegradable erosion blankets and is effective in reducing water velocity, spreading water over a wider area, trapping sediment, and aiding in revegetation. GeoRidge is intended to provide a temporary reduction in flow velocities until such time that vegetation is able to establish. By acting as an energy dissipater, GeoRidge reduces flow velocities causing silt to settle upstream of the check dam. The permeable design allows for the dissipation of energy both through and over the structure. Reduced water velocity also results in minimized downstream erosion. Compared to straw bales, rock check dams, wattles, and other synthetic devices, GeoRidge consistently delivers competitive erosion and sediment control results.

#### Applications

- Roadside channels/swales
- Stormwater Channels
- Slopes

#### Advantages

- Effective sediment trap
- Easy to install
- Lightweight, portable, and stackable
- Open structure allows vegetation to establish
- Simple anchoring system
- Reduces flow velocities
- Reusable GeoRidge
- Biodegradable GeoRidge Bio







#### When choosing GeoRidge<sup>®</sup>, there are two options available:

#### GeoRidge<sup>®</sup> (Standard)

GeoRidge is constructed of a durable UV stabilized High Density Polyethylene (HDPE), giving it very good resistance to UV and normally occurring soil conditions. GeoRidge should be removed once vegetation is established – it can be reused for future projects.

### GeoRidge Bio<sup>®</sup> (Biodegradable)

GeoRidge Bio is an excellent alternative to Nilex's standard GeoRidge product. Rather than removing once vegetation has been established, GeoRidge Bio breaks down over time. With the incorporation of technologically advanced additives, GeoRidge Bio check dams will degrade over an 18 to 24 month period (degradation time is dependent upon environmental conditions). The interaction with environmental conditions and naturally occurring micro-organisms causes degradation of the material.

#### **Specifications**

Property	Units	GeoRidge®	GeoRidge Bio®	
Polymer	_	High Density Polyethylene (HDPE) with UV Inhibitor	High Density Polyethylene (HDPE) with an additive to facilitate biodegradation over time	
Colour	—	Black Tan		
Porosity	%	35 - 40	35 - 40	
Length	m (ft)	1.01.0(3.28)(3.28)		
Height	m (ft)	0.225 (0.738)	0.225 (0.738)	
Weight	kg/lin.m (lb/ft)	1.01.0(2.1/3.28)(2.1/3.28)		

Disclaimer: The information provided by Nilex is believed to be correct and is generally based on information supplied by the manufacturers of the product offered. Any recommendations made by Nilex concerning uses or applications of our products are also believed to be reliable; however, as Nilex has no control over design execution, and field conditions of the project which incorporate the product. Nilex disclaims all warranties, expressed or implied, including, without limitation, the warranties of mechantability and/or fitness for a particular purpose.

#### GeoRidge<sup>®</sup>/GeoRidge Bio<sup>®</sup> and Turf Reinforcement Mats (TRMs)

Turf Reinforcement Mats (TRMs) are a cost effective and environmentally friendly alternative to hard armor erosion protection solutions such as concrete and riprap. They are designed to impart immediate erosion protection, enhance vegetation establishment, and provide longterm functionality by permanently reinforcing vegetation during and after maturation.

GeoRidge/GeoRidge Bio, when installed in a TRM reinforced channel, will aid in the revegetation process by slowing down the water velocities, allowing vegetation to establish sooner. Once vegetation is in place, the GeoRidge can be removed (GeoRidge Bio will degrade over time) and the TRM structure can be maintained without obstruction.





**PRODUCT SPECIFICATIONS** 

### GeoRidge<sup>®</sup>, GeoRidge<sup>®</sup> Bio

PROPERTY	UNITS	GeoRidge <sup>®</sup>	GeoRidge <sup>®</sup> Bio
Polymer	—	High Density Polyethylene (HDPE) with UV Inhibitor	High Density Polyethylene (HDPE) with Inhibitor. Contains an additive to promote biodegration over time.
Colour	_	Black	Tan
Porosity	%	35 - 40	35 - 40
Length	m (ft)	1.0 (3.28)	1.0 (3.28)
Height	m (ft)	0.225 (0.738)	0.225 (0.738)
Weight	kg/lin.m (lb/ft)	1.0 (2.1/3.28)	1.0 (2.1/3.28)

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