

Backfill Soil Type	Wall Height ft (m)	Block Size (Height x Width)		
		4" x 12"	6" x 12"	6" x 16"
Clay	2 (0.6)	none	none	none
	3 (0.91)	4	3	3
	4 (1.22)	6	4	4
	5 (1.52)	7	5	5
Sand	2 (0.6)	none	none	none
	3 (0.91)	4	3	none
	4 (1.22)	6	4	4
	5 (1.52)	7	5	5
Gravel	2 (0.6)	none	none	none
	3 (0.91)	4	3	none
	4 (1.22)	6	4	none
	5 (1.52)	7	5	5
	6 (1.83)	9	6	6

# Layers x W x length of wall = # of rolls  
180 square foot

Example: A SRW wall using 6" x 16" blocks in gravel backfill soil is 6 ft tall x 30 ft long.  
Derived from table: H = 6ft, W = 4ft, & 6 layers.  
 $6 \text{ layers} \times 4 \text{ ft} \times 30 \text{ ft} = 4 \text{ rolls}$   
180 sq ft per roll



### Mirafifi® 2XT Reinforcement Geogrid Design Guidelines

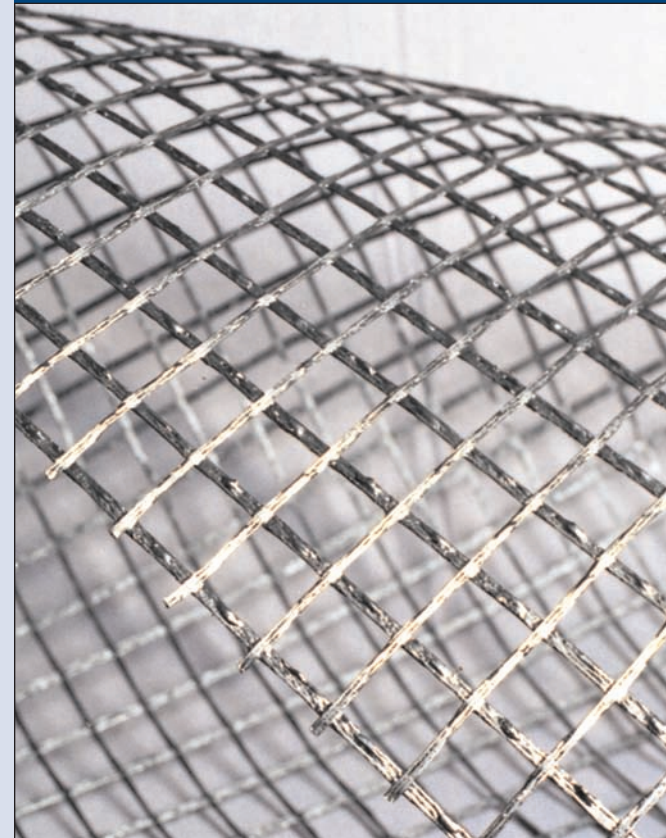
- Contact TenCate™ Geosynthetics before using Mirafifi® 2XT uniaxial geogrid in wall heights greater than values shown in chart.
- Place Mirafifi® 2XT uniaxial geogrid between every two retaining wall block rows.
- Provide adequate drainage and compacted fill per retaining wall block manufacturer's instructions.
- Chart is for estimating purpose only. Final design should be performed by a registered, professional engineer to meet all local codes and regulations. No provisions have been made for global/external stability, nor site topography.
- Follow all retaining wall block manufacturer's instructions for installation.
- Other soil types and loading conditions should be evaluated before construction to determine wall height limitations and reinforcement spacing.
- Any loading/surcharge conditions other than those shown above should be evaluated before construction to determine wall height limitations.
- Where "none" is shown in the estimating chart, no Mirafifi® 2XT uniaxial geogrid reinforcement is required to construct the wall under the conditions shown.

Mirafifi® is a registered trademark of TenCate™ Geosynthetics. Mirafifi® 2XT uniaxial geogrid is subject to Nicolon Corporation's limited warranty. Limited warranty may be obtained at mirafifi.com or by contacting your retailer or TenCate™ at (706) 693-2226.



## Mirafifi® 2XT

### Retaining Wall Reinforcement Geogrid



## Mirafifi® 2XT

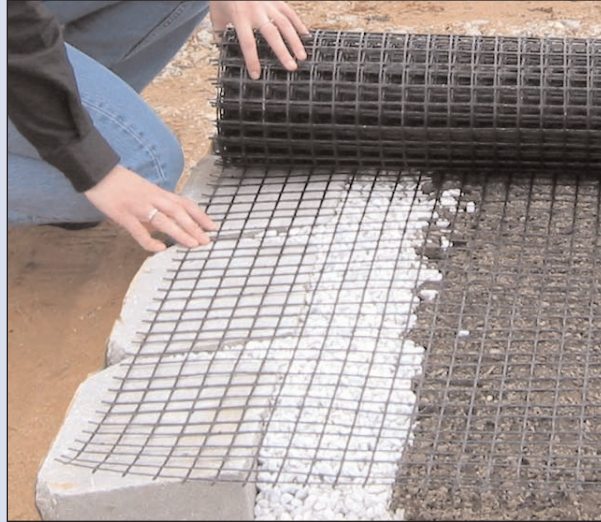
### Retaining Wall Reinforcement Geogrid



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# MIRAFI® 2XT RETAINING WALL REINFORCEMENT GEOGRID



## What is Mirafi® 2XT reinforcement geogrid?

A geogrid is an open mesh grid structure that is placed in horizontal layers to reinforce retaining walls. The geogrid acts as a “tie-back” to resist the outward movement of the retained soil. The geogrid holds the soil in place to allow the retaining wall to function.

## Why do I need Mirafi® 2XT geogrid?

The use of Mirafi® 2XT geogrid increases the wall height that can be constructed. The retained soil behind the retaining wall exerts tremendous pressure on the concrete blocks holding the soil in place. Mirafi® 2XT uniaxial geogrid is designed specifically to provide reinforcement to the soil reducing the outward pressure and allowing the wall height to be increased and to function properly.

## How is Mirafi® 2XT sold?

Mirafi® 2XT geogrid is packaged in 4ft x 45ft rolls. Each roll contains detailed installations.

## When do I need to use Mirafi® 2XT geogrid?

Mirafi® 2XT uniaxial geogrid should be used when the wall height at any location in the wall exceeds manufacturer’s gravity wall (wall without geogrid) recommendations. When building taller walls, the retained soil begins to exert enough outward force in the wall to push over the concrete blocks causing wall failure. A properly designed wall with Mirafi® 2XT geogrid as the reinforcement, will reduce this outward pressure allowing the wall to function as desired.

## Should I get a qualified professional to design my wall?

TenCate™ Geosynthetics recommends that a qualified professional engineer review all retaining wall projects for compliance with local codes, design standards, and regulations before construction.

## Can any open mesh grid be used for reinforcement?

No. Mirafi® 2XT geogrid is designed specifically to provide reinforcement for concrete block retaining walls. It

is produced with strong fibers that reinforce the entire soil structure. Other open mesh grids, such as safety fence or deer netting, are much weaker than Mirafi® 2XT geogrid and do not provide adequate reinforcement.

## How much Mirafi® 2XT geogrid do I need for my wall?

The quantity of Mirafi® 2XT uniaxial geogrid required depends on the wall height and length. An estimating chart is provided on the back of this flyer to help in determining the amount of geogrid required.

## How tall can I build a wall with Mirafi® 2XT geogrid?

The height of the wall that can be constructed with Mirafi® 2XT geogrid depends on block type and size, soil type, and surcharge on top of the wall. An estimating chart is provided on the back of this flyer to help in determining the amount of geogrid required. All concrete block units have a height limit that must not be exceeded. Check with the block manufacturer for more information on height limitations.

## How is Mirafi® 2XT geogrid installed?

Mirafi® 2XT uniaxial geogrid is placed in the soil every two block rows. The geogrid is “sandwiched” between the concrete blocks and placed back into the soil. Installation instructions are available in each bag of Mirafi® 2XT geogrid. Make sure to follow all local building codes and the retaining wall block manufacturer’s instructions for installation.

Protective & Outdoor Fabrics  
Aerospace Composites  
Armour Composites  
Geosynthetics  
Industrial Fabrics  
Synthetic Grass