



# North Logan Residential Wall



***Miragrid 8XT uniaxial geogrid provides stability for large residential wall.***

**LOCATION:**

*North Logan, Utah*

**PRODUCT:**

*Miragrid 8XT Uniaxial Geogrid®*

**PROJECT PARTNERS:**

*Owner*

*Private residence*

*Consultant / Contractor*

*CMT Engineering / Caliber Design*

*Completion Date*

*November 2015*

A residential client in North Logan, Utah, was investigating options for designing and building a 24' x 175' wall to support the expansion of his backyard.

## Challenge

The client was looking to maximize the backyard space of his prominently-located home. However, as the site is located on top of a large sloped area, it required a Mechanically Stabilized Earth (MSE) wall to support the increased backyard area. The wall's original design incorporated a very expensive geogrid along with a block that was too heavy for its intended purpose. An alternative solution was needed to satisfy space, stability, architectural (aesthetic) and cost concerns.

## Solution

Working with our manufacturer - TenCate - the wall was redesigned using Miragrid 8XT uniaxial geogrid for its entire length. Miragrid XT uniaxial geogrids are well-suited for MSE wall applications and provide high, long-term design strengths and exceptional soil interaction. They are constructed of high-tenacity, high molecular weight, woven polyester to deliver long-term performance. Several different options were investigated for this project, but the Miragrid 8XT uniaxial geogrid was selected for the added stability it provided for the wall.

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## Installation

This 24' x 175' MSE wall project required approximately 5,607 square yards of uniaxial geogrid. The wall's engineered design required the geogrid to be attached to the wall every 18 inches, while extending about 15 feet into the earth; the top two layers went even further into the hillside. The installation of the wall took about two weeks with a small crew of three people - two to place the block and the geogrid, and one to drive the loader. Nilex provided technical support throughout the project via the manufacturer, who worked directly with the geotechnical engineer.

## Results

The newly-constructed MSE wall has given the client the most room available for his backyard. Not only does the new design offer structural stability using Miragrid 8XT uniaxial geogrid, it is also aesthetically pleasing and cost less than the client's original design.

## The Nilex Advantage

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, 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.

