Case Study – Backyard Extension

Rochester, Minnesota Location:

Product: Classic® 8

Manufacturer: GLS Industries, Inc. - Rochester, Minnesota Rockwood Retaining Walls - Rochester, Minnesota Design Engineer: Contractor: Custom Retaining Walls - Rochester, Minnesota Total Area: 3,380 sq. ft. (314 sq. m), 30 ft. high (10m)



Design Challenge:

The rugged and steep slope that existed behind a private residence in Rochester, Minnesota needed a facelift. The space behind the home provided limited outdoor space for the family and was a distraction from the manicured grounds of the Rochester Country Club Golf Course, located directly behind their lot. The homeowners needed a retaining wall that would secure the slope and add value to their home.



Design Solution

The homeowners originally considered terracing the wall so a series of planters would cascade down the slope. However, during the design process, the geotechnical engineer made the recommendation that they consider an engineered wall that would result in a total height of 40' (12m). To show the design in perspective, a plate was utilized to visually show the homeowners how much more space would be added to their backyard with the new design.

Overlooking the fifteenth hole on the edge of the golf course, the formidable Classic® 8 wall extends the backyard by over 4,000 sq.ft. (372 sq. m). Five large pillar columns are placed on the perimeter and are spaced proportionately to one another on top of the wall. A decorative wrought iron fence is affixed to the top of the Universal Caps. This new space has created a open sitting area that is bound by a circular paver patio.

A stair step provides easy access to the front of the wall and golf course, as it follows the contour of the wall, on one side. 5' (1.5m) of wall was embedded to ensure the wall would not slide out at the base. Fifteen layers of grid were used - each layer extends 20' (3.6m) into the slope to help reinforce the wall.

The Result:

In all, the Classic 8 wall is approximately 160' (49m) in length - a total of 3,380 sq. ft. (314 sq. m). Perhaps, the most stunning view is from grade, where the wall now defines a once unruly slope. The wall provides aesthetic appeal and adds invaluable land space for the family to entertain, play, and observe their paradise from the comfort of their new backyard.



Classic® 8

Classic® 8 is the high performance block specifically designed for virtually every retaining wall need. The award winning design is preferred by architects, builders, developers, and engineers worldwide. It is known for its ease of installation, strength, and versatility. Whether the wall is supporting a roadway or being built along the shore of a lake, Classic 8 is the best solution for any type of wall application.



Straight or Radius Split

Size: 8" H x 18" W x 12" D 200mm x 450mm x 300mm

Weight: 85 lbs., 39 kg

Appearance Dependability **Efficiency**

