

## Aesthetics and Performance



The look, size and durability of massive natural stone and the long-term performance of a fully engineered structural wall.



# ReCon Retaining Wall Systems

ReCon Retaining Wall Systems, Inc. is an industry leader in supplying aesthetically pleasing and structurally superior retaining wall solutions. ReCon focuses on providing value to its customer, including:

- Engineering and testing for tall gravity walls and taller geogrids walls.
- Solutions that accommodate wall needs rather than dictate them.
- Durability (wet-cast, air-entrained).
- Five texture options.
- Product shape and size choices that work.



*Let us bring value to your project.*

## Features and Benefits:

- **Large Size and Mass**
- **Tall Gravity Walls**
  - Unique tongue-and-groove lock-and-placement design, combined with massive size and weight, permits wall heights up to 20+ ft. (6m) without reinforcing geogrid. Eliminates the time and cost associated with excavation and soil replacement when reinforcing geogrid is required.
  - Significantly taller ReCon Walls can be built by incorporating geogrids, setback or tiers.
- **Durability**
  - Made of wet-cast, air-entrained concrete with a minimum psi of 4,000 (28 MPa). The durability required in environments prone to the challenges of freeze/thaw cycles, road salts or brackish water.
- **Faster Installation**
  - Walls can be constructed quickly using equipment generally available to contractors (skid steers or backhoes), maximizing productivity and minimizing manual labor. No mortar, no pins.
- **Engineered and Tested**
  - A ReCon Wall can be professionally engineered and designed (using shear and geogrid connection data unique to ReCon) for wall performance that is generally unavailable for natural stone walls.
- **Customized Design and Aesthetics**
  - The natural stone finish has several different textures, which prevents repetition in the overall wall pattern. Stains are readily available and easily applied in the field after installation to achieve a natural look that will last for years.
  - Block comes in multiple depths, to optimize design efficiency by providing the mass when required or eliminating it when not required to save material and freight cost.
  - Tapered block design allows both inside and outside 90-degree corners or curves.
  - Caps or special top units that allow greenscape within four inches of the finished wall's face are available for top-of-wall finishing options.



## Block Specifications

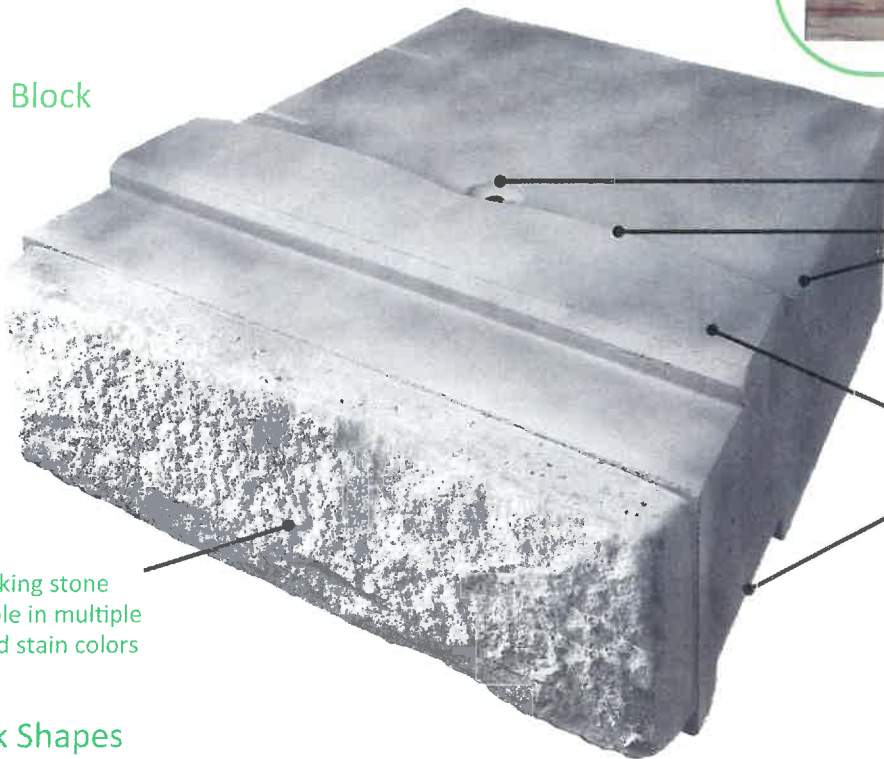
- **Block Face:** 5.33 sq. ft. (0.5m<sup>2</sup>), or 48 in. x 16 in. (120 cm x 40 cm)
- **Available Depths:** 24", 39", 45", 60", 66", 72", 78", 84" (60, 100, 115, 150, 170, 185, 200 or 210 cm)
- **Mass:** 1,000 to 4100 pounds (450 kg to 1900 kg) per block.
- **Concrete:** Minimum of 4,000 psi (28MPa)
- **Lifting Device:** Lifting insert loop
- **Turning Radius:** Approximately 15 feet (4.5 m) (varies with wall height)
- **Retaining Wall Batter:** 3.6 degrees automatically built into the system. Can be adjusted to 7.2 degrees with the use of field-installed spacers. Can be adjusted from 9 to 26 degrees with the use of the ReCon Channel Block.

## Texture & Color Options

ReCon block is available in North Shore Granite, Le Sueur County Limestone, Rustic (8-in. [20 cm] coursing), Old World and Weathered Edge. Natural stone finishes have several different textures, which prevents repetition in the overall wall pattern. Stains are readily available and easily applied in the field to achieve a natural look that will last for years. Some textures are special order. Check for availability.



## Full Block



Natural-looking stone face available in multiple textures and stain colors

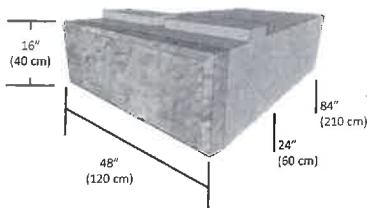
Lifting inset loop

Taper of block and unique curved tongue permit turning radius of about 15 ft. (4.5m)

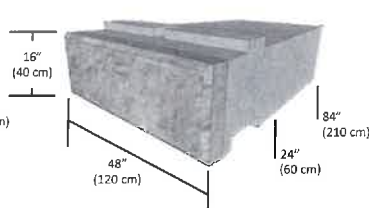
Unique tongue-and-groove lock and placement for safe and secure walls

## Block Shapes

### FULL BASE BLOCK



### FULL MIDDLE BLOCK



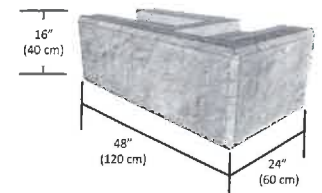
### FULL TOP BLOCK

Top of block is recessed (starting behind the 4" (11 cm) texture on top of block at the face). Permits planting of sod to within 4" (11 cm) of front of the retaining wall.



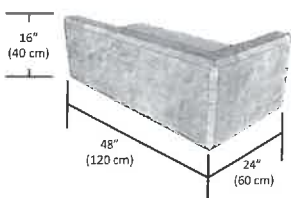
### REVERSIBLE CORNER BLOCK

90° corners.

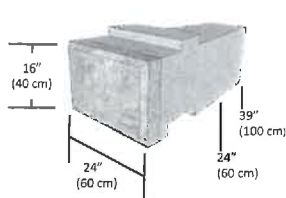


### CORNER TOP BLOCK

Top of block is recessed.

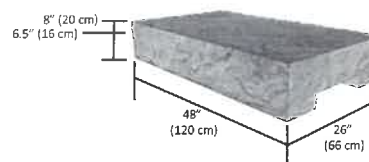


### HALF BLOCK



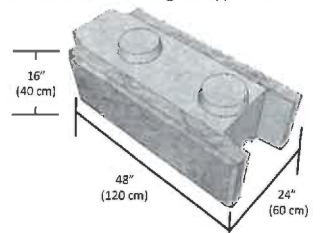
### CAPSTONE

Alternate top-of-wall treatment used in



### FENCE/GUARDRAIL BLOCK

Double sided for above grade applications.



## Engineering and Installation Guidelines

### Design and Specification

A ReCon Wall requires a site-specific design and analysis prepared by a registered professional engineer. ReCon has a comprehensive set of tools to aid architects and engineers in the specification and design of a ReCon Wall.



A block being set in place with a backhoe and chain.



A block being set in place with a skid steer.

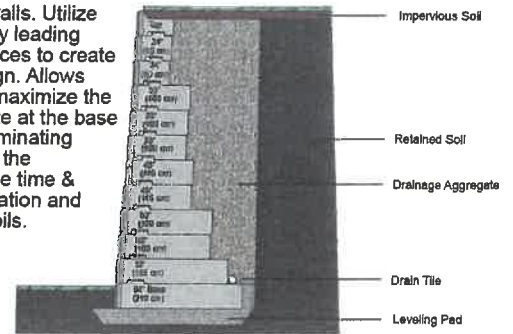
### Installation Steps

- Excavate and prepare soil foundation.
- Prepare leveling pad: A level and compacted base is essential for proper wall installation.
- Install and level base course: Individual blocks are then set in place using the lifting insert loop. The lifting insert loop is attached to a cable suspended from a backhoe or other lifting equipment.
- Drain tile
- Drainage aggregate
- Install additional courses.
- Place geogrids (if required).
- Install additional courses.
- Backfill and compact.
- Check compaction regularly.

For more product and installation information on the ReCon Wall system, please contact your local ReCon licensed producer or visit us on the web at [www.reconwalls.com](http://www.reconwalls.com).

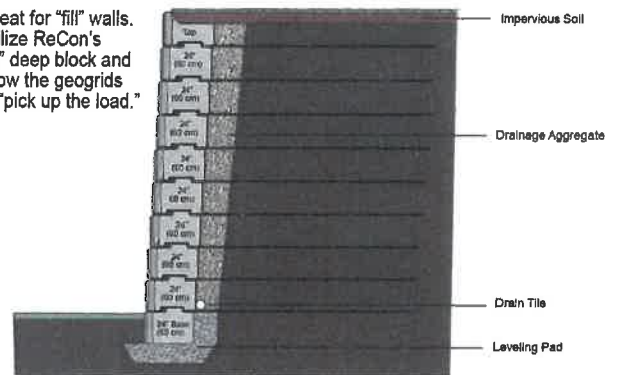
## Typical Gravity Retaining Wall Section

Great for "cut" walls. Utilize ReCon's industry leading block depth choices to create an efficient design. Allows the designer to maximize the usable real estate at the base of the wall by eliminating geogrids. Allows the contractor to save time & money on excavation and compaction of soils.



## Typical Geogrid Retaining Wall Section

Great for "fill" walls. Utilize ReCon's 24" deep block and allow the geogrids to "pick up the load."



The installation steps represent a basic outline for a ReCon Wall installation and are not meant to serve as a complete construction or installation guide. Every ReCon Wall must be designed by a registered professional engineer. Design and other industry professionals can view online or download a complete ReCon design and construction reference manual at [www.reconwalls.com](http://www.reconwalls.com).

ReCon Block is produced and marketed pursuant to a license agreement with ReCon Wall Systems, Inc., 7600 West 27th St., #229, St. Louis Park, MN 55426. Patents issued: US 6,829,867 B2 and US 7,341,685 B2.



**ReCon**<sup>TM</sup>  
Retaining Walls

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