



Building Blocks have been used for centuries to construct homes, office buildings, churches, and many other structures. Early building blocks were hewn from stone into appropriate shapes that were assembled together, typically using mortar, to form a wall. In modern times, various types of concrete blocks have been developed, which are typically formed by pouring cement-based concrete mixture into

a form and allowing the concrete to cure. This type of concrete block is strong and makes for a sturdy wall, but installing a traditional concrete block requires a skilled mason who must manually lift each block, and set each block using mortar to secure the blocks in place, creating a very labor intensive process.

One application for concrete blocks is the construction of retaining walls. Retaining walls are required when there is a body of earth that needs to be held in place. While several different block designs have been used, most of these are relatively small blocks that a construction worker must manually lift and put in place. Most require mortar or a peg system to secure these blocks in place. What is needed is a larger block that is especially well-suited for retaining walls that has a large surface, that may be lifted into place using a crane or other suitable equipment, and that may be stacked onto each other without the use of mortar. This allows a wall to be quickly and efficiently constructed using much less skilled labor. It would also be desirable for the block to have an attractive, finished look that does not require covering or painting, but that also could be stained to look like many different types of rock or stones or to match a desired color scheme.

We have developed an alternative to typical small block and MSE panel retaining walls. Stone Strong Systems is the first precast block in the industry to be fully engineered both structurally and geotechnically and are based on an innovative 5,800 lb main block that is 3' by 8' with a 24 SF face. Also available is an 18" by 4' block, with a 6 SF face, a 3 SF face block to accommodate smaller walls, and various accessories; all components of this complete system are designed to work seamlessly together. The smaller blocks allow for a tighter turning radius or vertical and horizontal adjustments as needed. Stone Strong Systems features a void in the middle of the blocks allowing for free draining aggregate inside the void creating an internal drainage system. Minimal aggregate material is required behind the blocks, due to this internal drainage system, saving considerable time in installation and excavation costs. Stone Strong walls are designed to meet the height requirements of large retaining walls and with proper engineering may go as high as 40 feet. Gravity walls can be built 12 to 15 feet high without geogrid reinforcement, depending on site and soil conditions. This eliminates the possibility of utility crews cutting into the geo-grid when installing utility lines along public right of ways causing possible wall failure.

Stone Strong Blocks are produced with air entrained 4,000 PSI concrete which allows for zero internal reinforcement and protects the block during the freeze/thaw cycle.

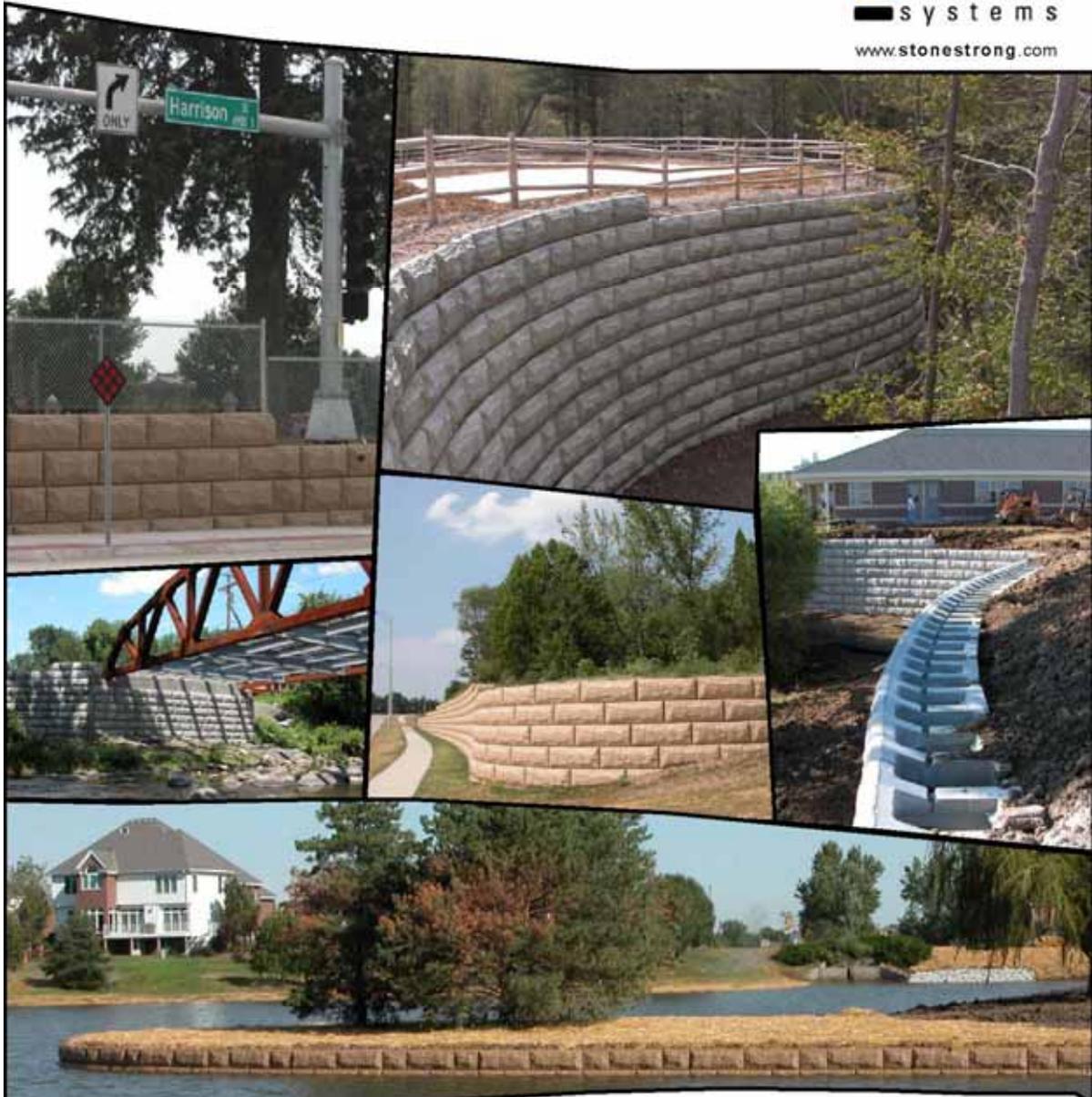
Contractors now have access to a product with which they can set up to 1,200-1,400 sf per day, using small crews and just a couple pieces of equipment, eliminating the intense labor required to assemble most other systems. These relatively large size blocks allow for quick construction; one or more lift and alignment devices in the blocks allow the block to be lifted using a suitable lifting apparatus. The block includes one or more recessed portions in the bottom surface of the block positioned to align the block with the previously-laid block. The voids in the blocks extend from top to bottom of wall allowing fill material to be placed in the voids to strengthen the wall.

Stone Strong Systems offers an aesthetically pleasing and versatile product. Information given to area engineers and architects have had very positive responses. Engineers look at the overall square footage and strength of the block while architects favor the realistic stone faces and the variety they represent. Stone Strong Systems is structurally engineered and designed to meet the requirements for State DOT specifications. Stone Strong Blocks are currently being used for several regional projects, as well as national highway, railroad, and shoreline projects.

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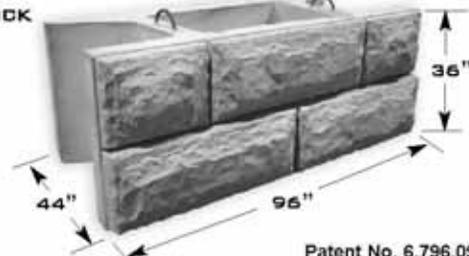


www.stonestrong.com



24 SF BLOCK

SYSTEM COMPONENTS INCLUDE: BLOCKS OF 24SF, 6SF, 3SF, END UNIT, DUAL FACE UNIT, CORNER COLUMN UNIT (90° AND 45°) STEP BLOCK AND CAP BLOCK.



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