This drawing is for reference only. Determination of the suitability and/or manner of use of any details contained in this document is the sole responsibility of the design engineer of record. Final project designs, including all construction details, shall be prepared by a licensed professional engineer using the actual conditions of the proposed site.
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The Redi-Rock retaining blocks are available with multiple shear knob size and location options, to permit wall batter design flexibility. This detail depicts alternating 16\(\frac{1}{8}\) (422 mm) Planter and 1\(\frac{1}{8}\) (41 mm) Standard setback blocks, however designs are possible using more than one Standard setback block between Planter blocks. The regular repetition of combinations of different setback blocks within a wall profile can have structural and aesthetic significance. Abrupt changes in wall batter that carry over multiple blocks are not recommended.

Grade to Drain Surface
Water Away From Wall

Top Block

Planter Block Troughs May Be: Omitted
During Block Manufacturing (Creating a Solid
Block), Filled With Planting Material, Filled
With Stone, or Site Filled With Concrete.

Effective Wall Setback
Varies, Depending Upon
Combination of Blocks
Used to Construct Wall.

Exposed Wall
Height

Min. Bury Depth

Leveling Pad

Move Blocks Forward During Installation
to Engage Shear Knobs ( Typical)

Infill Stone (No. 57 or Equivalent)
Fill Between Adjacent Blocks and at
least 12" (305 mm) Behind Blocks

28" (710 mm)

Redi-Rock Blocks with Knobs in the
Standard 1\(\frac{1}{8}\) (41 mm) Setback Position

Redi-Rock Planter Blocks with Knobs in the
16\(\frac{1}{8}\) (422 mm) Planter Setback Position

Non-Woven Geotextile Fabric (If Specified
by Engineer Based on Site Soil Conditions)

Perforated Sock Drain
(As specified by Engineer)

Leveling Pad (As specified by Engineer)

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B. Lindfors

Jan 28, 2016

1 of 1
Typical Reinforced Wall Section

Note:
One degree or zero degree batter angle walls are available using blocks with
7 ½” (190 mm) or 6 ¾” (171 mm) knobs
(Specialty items)

Setback = 1 ½” (41 mm)
(5° batter angle on wall)

Non-woven geotextile fabric
Grade to drain surface water away from wall

12” (305 mm) wide strip of geogrid wrapped through block
and extending full length (L) back into reinforced fill zone
(Typical)

Reinforced Soil

(L)

(Length of geogrid strip - Typical)

Non-woven geotextile fabric
(If specified by Engineer)

Move blocks forward during installation to engage shear knobs
(Typical)

Fill vertical core slot and wedge between adjacent blocks with drainage aggregate
(Typical)

Drainage aggregate

28” (710 mm) PC Middle block (Typical)
28” (710 mm) PC Bottom block

Drain (As specified by Engineer)
Leveling pad (As specified by Engineer)

Exposed wall
(Height varies with design)

Retained soil

Only use strips of Mirafl geogrid
that have been factory cut and
are certified for width and
strength by TenCate Mirafl.

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*Final designs for construction must be prepared by a registered Professional Engineer using the actual conditions of the proposed site.*

*Final wall design must address both internal and external drainage and shall be evaluated by the Professional Engineer who is responsible for the wall design.*
BLOCK-TO-BLOCK SETBACK OPTIONS

NO SCALE

Five degree (5°) setback
(Standard)

Available with:
- 28" (710 mm) blocks, 41" (1030 mm) blocks, and 60" (1520 mm) blocks
- 28" (710 mm) PC blocks (shown here) and 41" (1030 mm) PC blocks

One degree (1°) setback
(Specialty)

Available with:
- 28" (710 mm) blocks, 41" (1030 mm) blocks, and 60" (1520 mm) blocks
- 28" (710 mm) PC blocks (shown here) and 41" (1030 mm) PC blocks

Zero (0°) setback
(Specialty)

Available with:
- 28" (710 mm) blocks, 41" (1030 mm) blocks, and 60" (1520 mm) blocks
- 28" (710 mm) PC blocks (shown here) and 41" (1030 mm) PC blocks

The block-to-block setback available with Redi-Rock is controlled by the size and location of the shear knobs (domes) cast into the blocks. While the 10° (254 mm) diameter knob and the 1 5/8" (41 mm) setback position is the most common configuration, Redi-Rock has three different knob sizes and three different locations available.

DRAWN BY: JRJ
APPROVED BY: JRJ
DATE: 06-22-2015

Block Setback Options
Normal Batter

REDI-ROCK
05481 US 31 SOUTH, CHARLEVOIX, MI 49720
(888) 222-8401 ext 2010 • engineering@redi-rock.com
www.redirock.com

FILE: 4 Block Setback Options Normal Batter 062215.dwg
BLOCK-TO-BLOCK SETBACK OPTIONS
NO SCALE

9" (230 mm) Setback Blocks

22 3/4" (578 mm)
10" (254 mm)
13 3/4" (340 mm)
4" (102 mm)
4 1/2" (114 mm)

Setback = 9 3/4" (238 mm)
(27.5° batter angle on wall)
Move blocks forward during installation to engage shear knobs (Typical)

Available with:
- 41" (1030 mm) blocks (shown here) and 60" (1520 mm) blocks
- Not available in PC blocks

Planter Blocks

30" (762 mm)
10" (254 mm)
13 3/4" (340 mm)
4" (102 mm)
4 1/2" (114 mm)

Setback = 16 1/4" (422 mm)
Move blocks forward during installation to engage shear knobs (Typical)

Available with:
- 41" (1030 mm) blocks (shown here) and 60" (1520 mm) blocks
- Not available in PC blocks

Redi-Rock has two options for large batter retaining walls. Both options are created by relocating the knob so that it is further back in the Redi-Rock blocks compared to our smaller batter walls (5" and less). There are two knob locations further back in the block which create the 9" (230 mm) setback block and the planter block. Blocks made with knobs in either of these locations almost exclusively use 10" (254 mm) diameter knobs.
Sample Plan and Profile Gravity Wall

LEGEND:
- BLOCK SERIES (RETAINING, FREESTANDING, ACCESSORY)
- BLOCK SIZE (28, 41, & 60)
- BLOCK TYPE (BOTTOM, MIDDLE, TOP of CORNER GARDEN)
- GRADE DROPS ALONG EXPOSED TEXTURED SIDE OF CORNER GARDEN BLOCK (TYPICAL)
- PROPOSED FINISH GRADE AT TOP OF WALL
- PROPOSED FINISH GRADE AT TOE OF WALL

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