FREESTANDING BLOCKS
(FINISHED TEXTURE ON MORE THAN ONE FACE)

The Redi-Rock Freestanding blocks come in one width and stack in a vertical manner. The defining characteristic is that freestanding blocks have an aesthetic texture cast into multiple faces; the textured face is on at least the two longitudinal vertical faces, and also as required on one end or the top of the blocks. These blocks are machine-placed, wet-cast, precast modular block units manufactured from first purpose, non-reconstituted concrete and intended for constructing dry-stacked modular retaining wall systems. The block units are manufactured from structural-grade concrete mixes in accordance with ASTM C94 or ASTM C685 that produce a finished unit with excellent resistance to freeze-thaw, deicing chemical exposure, and submerged conditions in both fresh water and salt water applications. All Redi-Rock blocks are manufactured and distributed through an international network of individually-owned, licensed precast concrete manufacturers.

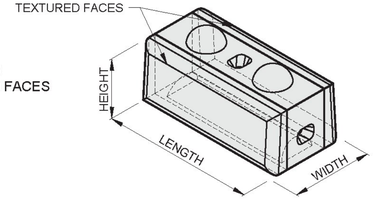
CONCRETE MIX PROPERTIES (1)

FREEZE THAW EXPOSURE CLASS (2)	MINIMUM 28 DAY COMPRESSIVE STRENGTH (3)	MAXIMUM WATER CEMENT RATIO	NOMINAL MAXIMUM AGGREGATE SIZE (10)	AGGREGATE CLASS DESIGNATION (4)	AIR CONTENT (5)
MODERATE	4,000 psi (27.6 MPa)	0.45	1.0 (25)	3M	4.5% ± 1.5%
SEVERE	4,000 psi (27.6 MPa)	0.45	1.0 (25)	3S	6.0% ± 1.5%
VERY SEVERE	4,500 psi (30.0 MPa)	0.40	1.0 (25)	4S	6.0% ± 1.5%
MAXIMUM WATER-SOLUBLE CHLORIDE ION (Cl^-) CONTENT IN CONCRETE, PERCENT BY WEIGHT OF CEMENT (6)					0.015
MAXIMUM CHLORIDE AS Cl^- CONCENTRATION IN MIXING WATER, PARTS PER MILLION					1000

MAXIMUM PERCENTAGE OF TOTAL CEMENTITIOUS MATERIALS BY WEIGHT (7, 9) (VERY SEVERE EXPOSURE CLASS ONLY)			
FLY ASH OR OTHER POZZOLANS PER ASTM C618	25	TOTAL ASH, POZZOLANS, SLAG, AND SILICA FUME (8)	50
SLAG CONFORMING TO ASTM C989	50	TOTAL ASH, POZZOLANS, AND SILICA FUME (8)	35
SILICA FUME CONFORMING TO ASTM C1240	10	ALKALI-AGGREGATE REACTIVITY MITIGATION PER ACI 201	

REFERENCE DIMENSIONS:

HEIGHT = VERTICAL DIMENSION OF TEXTURED FACE
LENGTH = LONGER HORIZONTAL DIMENSION PARALLEL TO TEXTURED FACES
WIDTH = HORIZONTAL DIMENSION PERPENDICULAR TO LONGER TEXTURED FACES



DIMENSIONAL TOLERANCES (10) (11)

HEIGHT	ALL BLOCKS	18 ± 3/16 (457 ± 5)
LENGTH	FULL BLOCKS	46⅛ ± ½ (1172 ± 13)
	HALF BLOCKS	22 13/16 ± ½ (579 ± 13)
WIDTH	23 -24 (584-610)	13 ± ½ (330 ± 13) FORM LINE TO FORM LINE, PLUS APPROX. 5 ⅜ (136) FACE TEXTURE ON LONG SIDES

(1) Concrete mix properties are in general accordance with ACI 318 durability requirements. Research has shown that concrete manufactured to these standards demonstrates good durability and performance. When these requirements are followed, specific freeze-thaw testing of the concrete is typically NOT required.
(2) Exposure class is as described in ACI 318.
(3) Test method ASTM C39.
(4) Defined in ASTM C33 Table 3 *Limits for Deleterious Substances and Physical Property Requirements of Coarse Aggregate for Concrete* .
(5) Test method ASTM C231.
(6) Test method ASTM C1218 at age between 28 and 42 days.
(7) The total cementitious material also includes ASTM C150, C595, C845, and C1157 cement. The maximum percentages shall include:
(a) Fly ash or other pozzolans in type IP, blended cement, ASTM C595, or ASTM C1157.
(b) Slag used in the manufacture of an IS blended cement, ASTM C595, or ASTM C1157.
(c) Silica fume, ASTM C1240, present in a blended cement.
(8) Fly ash or other pozzolans and silica fume shall constitute no more than 25 and 10 percent, respectively, of the total weight of the cementitious materials.
(9) Prescriptive limits shown may be waived for concrete mixes that demonstrate excellent freeze-thaw durability in a detailed and current testing program.
(10) All dimensions are shown in units of *inches (mm)*.
(11) Permissible defects: Chips smaller than 1.5 (38) in its largest dimension and cracks not wider than 0.012 (0.305) and not longer than 25% of the nominal height of the block; bug holes in the architectural face smaller than 0.75 (19); and bug holes, water marks, and color variation on non-architectural faces.