

BLOCK LIBRARY

One System, Four Textures, Endless Solutions

The Redi-Rock system is robust, and each of the components can be seamlessly integrated into a cohesive retaining wall design. With the ability to get any block in the Redi-Rock arsenal in four, natural stone textures, it means that technical agility comes with just the right aesthetic touch.

Each local manufacturer produces Redi-Rock in colors that match their natural terrain using molds crafted from real stone and first-use, architectural-grade, precast concrete. That means Redi-Rock walls have detail, durability, and design power—a combination that's hard to come by.

Check out the faces of Redi-Rock's endless solutions: LEDGESTONE, COBBLESTONE, LIMESTONE, AND KINGSTONE.





LEDGESTONE

The rugged relief of Ledgestone blocks give projects a random, stacked stone appearance. With up to 115 square feet (10.5 square meters) of non-repeating texture, it'll be tough to tell all that large block power is behind that pretty face. It's a win-win.

COBBLESTONE

When it comes to classic good looks, Cobblestone is where it's at. Each one-ton block features the appearance of six smaller blocks, creating a timeless aesthetic. Sometimes, the linear appeal of a smaller stacked stone provides the enduring impact you're looking for in a wall.

LIMESTONE

The six square feet (0.5 square meters) of face per Limestone block leaves a large, lasting impression. Crafted from real split limestone, the quarried stone texture means there's no need to sacrifice on style for function—you can get both at a grand scale! Striking a balance between the grandiose scale of Limestone and rugged relief of Ledgestone, Kingstone appears weathered by water and time like the crown of a natural stone outcropping. With each Redi-Rock block looking like a large, quarried stone, Kingstone will transform retaining walls into castle-worthy walls.





redi-rock.com © 2020 Redi-Rock International, LLC edi-rock.com © 2020 Redi-Rock International, LLC

KINGSTONE



Redi-Rock Design Resource Manual V20 | 37

RETAINING BLOCKS

(FINISHED TEXTURE ON ONE FACE)

The Redi-Rock Retaining wall blocks come in multiple widths and configurations. The defining characteristic is that Retaining blocks have an aesthetic texture cast into only ONE face, and the textured face is the only side exposed to view in the finished wall. 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)

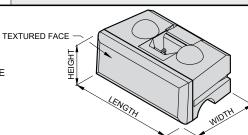
FREEZE THAW EXPOSURE CLASS ⁽²⁾	MINIMUM 28 DAY MAXIMUM WATER NOMINAL MAXIMUM AGGREGATE CLASS COMPRESSIVE STRENGTH ⁽³⁾ CEMENT RATIO AGGREGATE SIZE ⁽¹⁰⁾ DESIGNATION ⁽⁴⁾			AIR CONTE	NT ⁽⁵⁾		
MODERATE	4,000 psi (27.6 MPa)	0.45 1.0 (25) 3M			4.5% ± 1.	5%	
SEVERE	4,000 psi (27.6 MPa)	0.4	0.45 1.0 (25)			6.0% ± 1.	5%
VERY SEVERE	4,500 psi (30.0 MPa)	4,500 psi (30.0 MPa) 0.40			4S	6.0% ± 1.	5%
MAXIMUM WATER-SOLUBLE CHLORIDE ION (CI) CONTENT IN CONCRETE, PERCENT BY WEIGHT OF CEMENT (6.7)					0.15		
MAXIMUM CHLORIDE AS	CI ⁻ CONCENTRATION IN MIXING	WATER, P	ARTS PER	MILLION		1000	
MAXIMUM PERCENTAGE	OF TOTAL CEMENTITIOUS MAT	ERIALS BY	WEIGHT (8	^{3,10)} (VERY SEVERE EXPOS	URE CLASS ONLY)		
FLY ASH OR OTHER POZZOLANS PER ASTM C618 25 TOTAL ASH, POZZOLANS, SLAG, AND SILICA FUME ⁽⁹⁾					50		
SLAG CONFORMING TO ASTM C989 50 TOTAL ASH, POZZOLANS, AND SILICA FUME ⁽⁹⁾					35		
SILICA FUME CONFORMING TO ASTM C1240 10 ALKALI-AGGREGATE REACTIVITY MITIGATION PER ACI 2					201		

REFERENCE DIMENSIONS:

HEIGHT = VERTICAL DIMENSION OF TEXTURED FACE

LENGTH = HORIZONTAL DIMENSION PARALLEL TO TEXTURED FACE

WIDTH = HORIZONTAL DIMENSION PERPENDICULAR TO TEXTURED FACE



DIMENSIONAL TOLERANCES (11) (12)

HEIGHT	ALL BLOCKS	$18 \pm \frac{3}{16} (457 \pm 5)$ or $36 \pm \frac{3}{16} (914 \pm 5)$
LENGTH	FULL BLOCKS	46 ¹ / ₈ ± ¹ / ₂ (1172 ± 13)
	HALF BLOCKS	22 ¹³ / ₁₆ ± ½ (579 ± 13)
WIDTH	28" (710) BLOCKS	22% ± 1/2 (575 ± 13) FORM LINE TO BACK OF BLOCK, PLUS APPROXIMATELY 5% (136) FACE TEXTURE
	41" (1030) BLOCKS	$35\% \pm \frac{1}{2}$ (892 ± 13) FORM LINE TO BACK OF BLOCK, PLUS APPROXIMATELY 5% (136) FACE TEXTURE
	60" (1520) BLOCKS	$54\frac{5}{8} \pm \frac{1}{2}$ (1387 ± 13) FORM LINE TO BACK OF BLOCK, PLUS APPROXIMATELY $5\frac{3}{8}$ (136) FACE TEXTURE
	52" (1320) XL BLOCKS	$46\frac{5}{8} \pm \frac{1}{2}$ (1184 ± 13) FORM LINE TO BACK OF BLOCK, PLUS APPROXIMATELY $5\frac{3}{8}$ (136) FACE TEXTURE
	72" (1830) XL BLOCKS	$66\frac{5}{8} \pm \frac{1}{2}$ (1692 ± 13) FORM LINE TO BACK OF BLOCK, PLUS APPROXIMATELY $5\frac{3}{8}$ (136) FACE TEXTURE
	96" (2440) XL BLOCKS	$90\% \pm \frac{1}{2}$ (2302 ± 13) FORM LINE TO BACK OF BLOCK, PLUS APPROXIMATELY 5% (136) FACE TEXTURE

⁽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.

 $^{\rm (6)}\,$ Test method ASTM C1218 at age between 28 and 42 days.

(7) Where used in high sulfate environments or where alkali-silica reactivity is and issue, watesoluble chloride shall be limited to no more than trace amounts (from impurities in concrete-making components, not intended constituents.)

(8) 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.

⁽⁹⁾ 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.

(10) Prescriptive limits shown may be waived for concrete mixes that demonstrate excellent freeze-thaw durability in a detailed and current testing program.

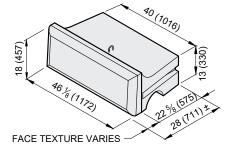
⁽¹¹⁾ All dimensions are shown in units of *inches (mm*).

(12) Permissible defects: Chips smaller than 1.5" (38mm) in its largest dimension and cracks not wider than 0.012" (0.305mm) and not longer than 25% of the nominal height of the block; bug holes in the architectural face smaller than 0.75" (19mm); and bug holes, water marks, and color variation on non-architectural faces.

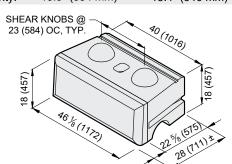
redi-rock.com © 2020 Redi-Rock International, LLC

RETAINING BLOCKS Block Library

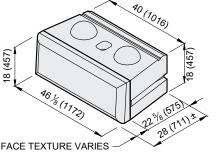
Face Texture: Cobble / Limestone Kings	stone / Le
	lb (530 k
Block Volume: 8.57 ft ³ (0.243 m ³) 8.07	ft ³ (0.229
Center of Gravity: 14.9" (378mm) 14.2"	(362mm



exture:	Cobble /
Weight:	1610 lb (1
Volume:	11.28 ft ³
of Gravity:	13.9" (35

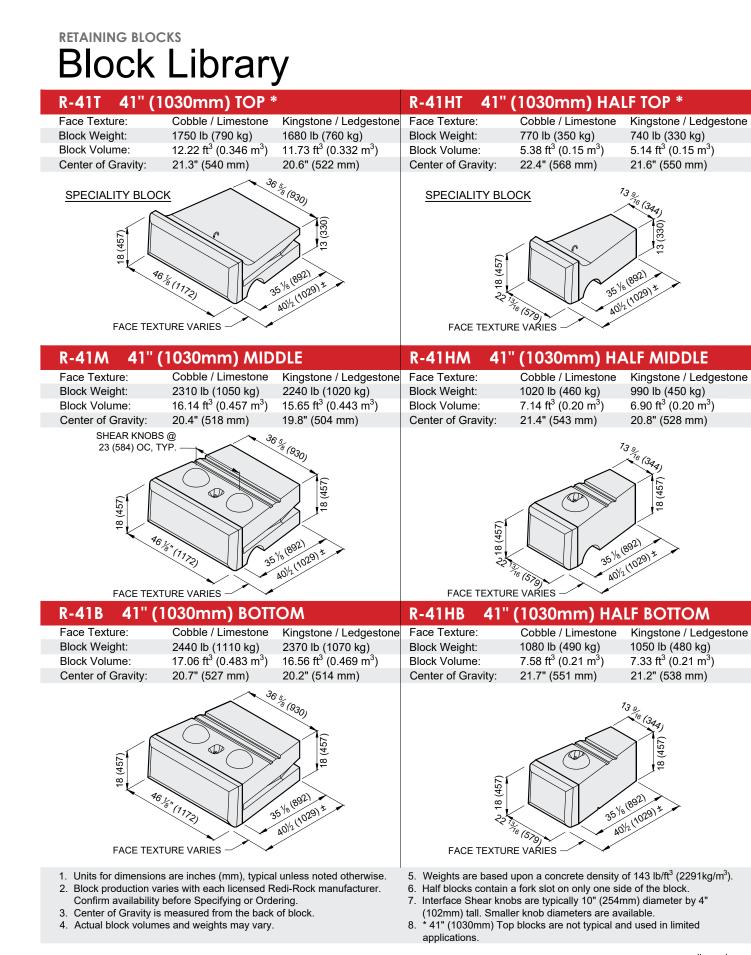


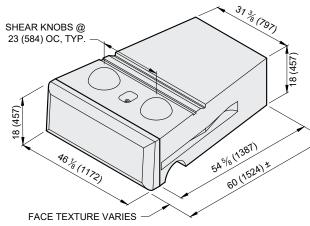
DIUCK LIDIALY					
R-28T 28" (7	710mm) TOP		R-28HT 28"	' (710mm) HALF	TOP
Face Texture: Block Weight: Block Volume: Center of Gravity:	Cobble / Limestone 1230 lb (557 kg) 8.57 ft ³ (0.243 m ³) 14.9" (378mm)	Kingstone / Ledgestone 1160 lb (530 kg) 8.07 ft ³ (0.229 m ³) 14.2" (362mm)	Face Texture: Block Weight: Block Volume: Center of Gravity:	Cobble / Limestone 570 lb (260 kg) 4.01 ft ³ (0.113 m ³) 15.3" (389 mm)	Kingstone / Ledgestone 540 lb (240 kg) 3.76 ft ³ (0.106 m ³) 14.7" (373 mm)
(<u>19</u>) 81 FACE		22 % (513) 28 /1/11 ± 28 /1/11 ±	FACE TEXTURE VA	76 13 76 (93) (0000) 20 % (515) 20 % (515) 20 % (515) 20 % (515) 20 % (515)	
R-28M 28"	(710mm) MIDD	LE	R-28HM 28	5" (710mm) HAL	F MIDDLE
Face Texture: Block Weight: Block Volume: Center of Gravity:	Cobble / Limestone 1610 lb (730 kg) 11.28 ft ³ (0.319 m ³) 13.9" (354 mm)	Kingstone / Ledgestone 1540 lb (700 kg) 10.78 ft ³ (0.305 m ³) 13.4" (340 mm)	Face Texture: Block Weight: Block Volume: Center of Gravity:	Cobble / Limestone 750 lb (340 kg) 5.23 ft ³ (0.148 m ³) 14.3" (364 mm)	Kingstone / Ledgestone 710 lb (320 kg) 4.98 ft ³ (0.141 m ³) 13.8" (350 mm)
23 (5 (422) 81	AR KNOBS @ 384) OC, TYP. 46 1/8 (1172) ACE TEXTURE VARIES	22 5/8 (171) 2 22 5/8 (171) 2 28 (171) 2	FACE TEXTURE	2633) 28 (T1)	▲ - 0 (40 0)
R-28B 28" (710mm) BOTT	OM	R-28HB 28'	' (710mm) HALF	BOTTOM
Face Texture: Block Weight:	Cobble / Limestone 1740 lb (790 kg)	Kingstone / Ledgestone 1670 lb (760 kg)	Face Texture: Block Weight:	Cobble / Limestone 810 lb (370 kg)	Kingstone / Ledgestone 770 lb (350 kg)
Block Volume:	12.19 ft ³ (0.345 m ³)	11.70 ft ³ (0.331 m ³)	Block Volume:	5.66 ft ³ (0.160 m ³)	5.41 ft ³ (0.153 m ³)
Center of Gravity: 14.0" (355 mm) 13.5" (343 mm) Center of Gravity: 14.3" (364 mm) 13.8" (352 mm) $13.8" (352 mm)$					13.8" (352 mm)
 Block production va Confirm availability Center of Gravity is 	ns are inches (mm), typica aries with each licensed F before Specifying or Ord s measured from the back les and weights may yay	edi-Rock manufacturer. ering.	 6. Half blocks contain 7. Interface Shear known 	I upon a concrete density of a fork slot on only one side obs are typically 10" (254m ller knob diameters are ava	e of the block. m) diameter by 4"



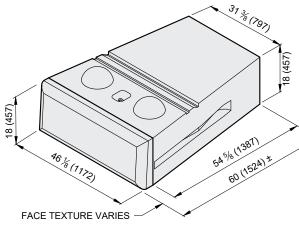
- 4. Actual block volumes and weights may vary.

⁽c) Silica fume, ASTM C1240, present in a blended cement.

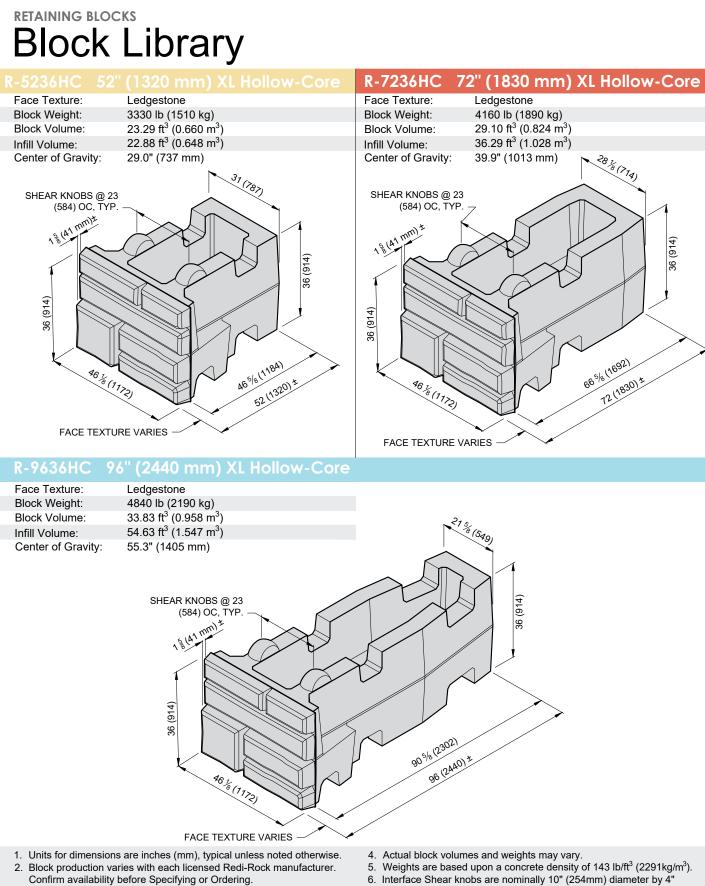




Blook Elbrary						
R-60M 60" ((1520mm) MID	DLE	R-60HM	60" (1520mm) H	ALF MIDDLE	
Face Texture:	Cobble / Limestone	Kingstone / Ledgestone	Face Texture:	Cobble / Limestone	Kingstone / Ledgestone	
Block Weight:	3290 lb (1490 kg)	3220 lb (1460 kg)	Block Weight:	1340 lb (610 kg)	1300 lb (590 kg)	
Block Volume:	23.00 ft ³ (0.651 m ³)	22.49 ft ³ (0.637 m ³)	Block Volume:	9.34 ft ³ (0.264 m ³)	9.09 ft ³ (0.258 m ³)	
Center of Gravity:	31.0" (786 mm)	30.4" (772 mm)	Center of Grav	ity: 33.7" (856 mm)	33.1" (840 mm)	
SHEAR KNOBS @ 23 (584) OC, TYP. –		54 ⁵ / ₈ (1387) 54 ⁵ / ₈ (1387) 60 (1524) [±]	(125) 81 FACE TEX	TURE VARIES	54. ⁵ (1,387) 60 (1,524) ± 60 (1,524) ±	
	(1520mm) BOT Cobble / Limestone		R-60HB Face Texture:	60" (1520mm) HA	ALF BOTTOM Kingstone / Ledgestone	
Face Texture: Block Weight:	3420 lb (1550 kg)	Kingstone / Ledgestone 3350 lb (1520 kg)	Block Weight:	1400 lb (630 kg)	1360 lb (620 kg)	
Block Volume:	23.90 ft ³ (0.677 m ³)	23.40 ft ³ (0.663 m ³)	Block Volume:	9.77 ft ³ (0.277 m ³)	9.52 ft ³ (0.270 m ³)	
Center of Gravity:		31.0" (788 mm)	Center of Grav		33.7" (856 mm)	
 Block production va Confirm availability Center of Gravity is 	s are inches (mm), typica ries with each licensed R before Specifying or Orde measured from the back es and weights may vary.	edi-Rock manufacturer. ering.	 6. 60" (1520 mm 7. Half blocks co 8. Interface She 	based upon a concrete density n) are typically used at the bott ontain a fork slot on only one si ar knobs are typically 10" (254 Smaller knob diameters are av	om of taller walls. ide of the block. mm) diameter by 4"	



redi-rock.com © 2020 Redi-Rock International, LLC

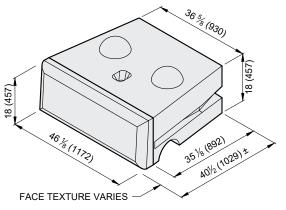


3. Center of Gravity is measured from the back of block, excluding stone infill.

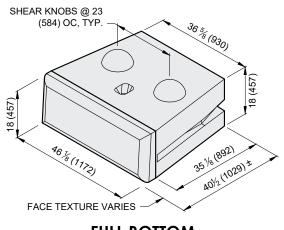
(102 mm) tall.

RETAINING BLOCKS Block Library

R-419M	41"	(1030mm) MIDE		n) SETBACK	R-419HM
Face Texture:	Cobble / Limestone	Kingstone / Ledgestone		Cobble / Limestone	Kingstone / Ledgestone
Block Weight:	2320 lb (1050 kg)	2250 lb (1020 kg)	Block Weight:	1030 lb (470 kg)	1000 lb (450 kg)
Block Volume:	$16.21 \text{ ft}^3 (0.46 \text{ m}^3)$	$15.72 \text{ ft}^3 (0.44 \text{ m}^3)$	Block Volume:	7.20 ft^3 (0.20 m^3)	6.96 ft ³ (0.20 m ³)
Center of Gravity:	20.2" (514 mm)	19.7" (500 mm)	Center of Gravity:	21.3" (540 mm)	20.7" (525 mm)
FACE TEXT		40/2 (1029) ±	(LSF) 81 FACE TEXTUR	⁷⁶ (579)	18 (421) 18 (421) 18 (421) 18 (421) 19 (42
FACE TEXTURE VARIES			FACE TEXTUR	E VARIES —	
FULL MIDDLE					E
D 410D	4.7.11				D 410U
R-419B Face Texture:	Cobble / Limestone	(1030mm) BOTT Kingstone / Ledgestone		Cobble / Limestone	R-419HE Kingstone / Ledgeston
Block Weight:	2450 lb (1110 kg)	2380 lb (1080 kg)	Block Weight:	1090 lb (500 kg)	1060 lb (480 kg)
Block Volume:	$17.13 \text{ ft}^3 (0.48 \text{ m}^3)$	$16.63 \text{ ft}^3 (0.47 \text{ m}^3)$	Block Volume:	$7.63 \text{ ft}^3 (0.22 \text{ m}^3)$	$7.39 \text{ ft}^3 (0.21 \text{ m}^3)$
Center of Gravity:	20.6" (523 mm)	20.1" (510 mm)	Center of Gravity:	21.6" (548 mm)	21.0" (534 mm)
SHEAR KNOBS (584) OC	5 @ 23 5, TYP.	5 5 8 (930)			73 o_
18 (457)		35 % (892) 40/2 (1029) ±	FACE TEXTUR	6 (579)	401/2 (1029) ±
FAGE TEXT	FULL BOTTOM			HALF BOTTO	M
					v i
 Block production v Confirm availability Center of Gravity is 	ns are inches (mm), typica aries with each licensed R y before Specifying or Orde s measured from the back bes and weights may yary.	edi-Rock manufacturer. ering.	6. Half blocks contair	a fork slot on only one s	v of 143 lb/ft ³ (2291kg/m ³). ide of the block. Imm) diameter by 4" (102



R-419M	41"	(1030mm) MIDD	0LE 9" (230mn	n) SETBACK	R-419HM
Face Texture:	Cobble / Limestone	Kingstone / Ledgestone	Face Texture:	Cobble / Limestone	Kingstone / Ledgestone
Block Weight:	2320 lb (1050 kg)	2250 lb (1020 kg)	Block Weight:	1030 lb (470 kg)	1000 lb (450 kg)
Block Volume:	16.21 ft ³ (0.46 m ³)	15.72 ft ³ (0.44 m ³)	Block Volume:	7.20 ft ³ (0.20 m ³)	6.96 ft ³ (0.20 m ³)
Center of Gravity:	20.2" (514 mm)	19.7" (500 mm)	Center of Gravity:	21.3" (540 mm)	20.7" (525 mm)
18 (457)		40/2 (1029) ± (1421)		76 (579)	13 0 10 10 10 10 10 10 10 10 10 10 10 10 1
FACE TEXTURE VARIES			FACE TEXTURE VARIES		
					•
R-419B		(1030mm) BOTT			R-419HB
Face Texture:	Cobble / Limestone	Kingstone / Ledgestone	Face Texture:	Cobble / Limestone	Kingstone / Ledgestone
Block Weight:	2450 lb (1110 kg)	2380 lb (1080 kg)	Block Weight:	1090 lb (500 kg)	1060 lb (480 kg)
Block Volume:	17.13 ft ³ (0.48 m ³)	16.63 ft ³ (0.47 m ³)	Block Volume:	7.63 ft ³ (0.22 m ³)	7.39 ft ³ (0.21 m ³)
Center of Gravity:	20.6" (523 mm)	20.1" (510 mm)	Center of Gravity:	21.6" (548 mm)	21.0" (534 mm)
SHEAR KNOBS (584) OC	, TYP.	40/2 (1029) ± (368) * 35 40/2 (1029) * 35 40	FACE TEXTUR	6 (579)	401/10201 ± 18(457) 40/2 (1020
	FULL BOTTOM			HALF BOTTO	Μ
 Block production va Confirm availability Center of Gravity is 	ns are inches (mm), typica aries with each licensed R / before Specifying or Orde s measured from the back hes and weights may vary	l unless noted otherwise. edi-Rock manufacturer. ering.	6. Half blocks contair	n a fork slot on only one s	r of 143 lb/ft ³ (2291kg/m ³). ide of the block. mm) diameter by 4" (102



- 4. Actual block volumes and weights may vary.

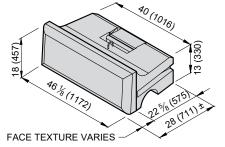
redi-rock.com

© 2020 Redi-Rock International, LLC

BIOON		<u>y</u>			
R-609M	60"	(1520mm) MIDI		n) SETBACK	R-609HM
Face Texture:	Cobble / Limestone	Kingstone / Ledgestone		Cobble / Limestone	Kingstone / Ledgestone
Block Weight:	3300 lb (1500 kg)	3230 lb (1460 kg)	Block Weight:	1340 lb (610 kg)	1310 lb (590 kg)
Block Volume:	23.06 ft ³ (0.65 m ³)	22.56 ft ³ (0.64 m ³)	Block Volume:	9.37 ft ³ (0.26 m ³)	9.12 ft ³ (0.26 m ³)
Center of Gravity:	30.9" (785 mm)	30.3" (770 mm)	Center of Gravity:	33.6" (855 mm)	33.0" (839 mm)
SHEAR KNOBS @ (584) OC, TY		3739(795)			8 3 (C13)
18 (457) 96 96 97 97		5A ^{5/8} (1/387) 50 1/524) ±	18 (457)		54 5/8 (1387) 18 (421)
FACE TEXTUR			FACE TEXTURE		
FACE TEXTOR			FACE TEXTORE	VARIES - ×	
	FULL MIDDLE			HALF MIDDLI	E
R-609B	60''	(1520mm) BOTT		m) SETBACK	R-609HB
Face Texture:	Cobble / Limestone	Kingstone / Ledgestone	Face Texture:	Cobble / Limestone	Kingstone / Ledgestone
Block Weight:	3430 lb (1550 kg)	3360 lb (1520 kg)	Block Weight:	1400 lb (640 kg)	1370 lb (620 kg)
Block Volume:	23.97 ft ³ (0.68 m ³)	23.47 ft ³ (0.66 m ³)	Block Volume:	9.80 ft ³ (0.28 m ³)	9.55 ft ³ (0.27 m ³)
Center of Gravity:	31.5" (800 mm)	30.9" (786 mm)	Center of Gravity:	34.2" (869 mm)	33.6" (854 mm)
46 Je (17) FACE TEXTUR	\checkmark	54 5/6 (1387) 54 5/6 (1387) 60 (1524) ±	FACE TEXTURE	579	A 5/8 (1387) 18 (421) 18 (421) 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2
	FULL BOTTON	I		HALF BOTTO	м
 Block production v Confirm availability Center of Gravity is 	ns are inches (mm), typica aries with each licensed F / before Specifying or Orc s measured from the back les and weights may vary	ering. c of block.	 Half blocks contain Interface Shear known (2010) 	upon a concrete density a fork slot on only one si obs are typically 10" (254) cks are typically used at t	de of the block. mm) diameter by 4" (102

RETAINING BLOCKS Block Library

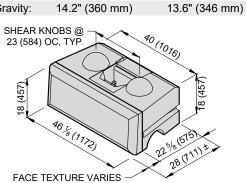
R-28PCT 28	3" (710mm) PC	ТОР
Face Texture:	Cobble / Limestone	Kingstone / Ledges
Block Weight:	1170 lb (530 kg)	1100 lb (500 kg)
Block Volume:	8.16 ft ³ (0.231 m ³)	7.66 ft ³ (0.217 m ³)
Center of Gravity:	15.3" (388 mm)	14.6" (372 mm)
	<u> </u>	



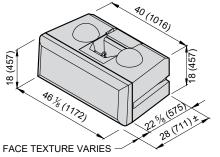
R-28PCM 28" (710mm) PC MIDDLE

Face Texture: Block Weight: Block Volume: Center of Gravity:

Cobble / Limestone Kingstone / Ledgestone Face Texture: 1520 lb (690 kg) 1450 lb (660 kg) 10.62 ft³ (0.301 m³) 10.12 ft³ (0.287 m³)



R-28PCB	28" (710mm) PC	BOTTOM
Face Texture:	Cobble / Limestone	Kingstone / Ledge
Block Weight:	1620 lb (740 kg)	1550 lb (700 kg)
Block Volume:	11.34 ft ³ (0.321 m ³)	10.85 ft ³ (0.307 m ³
Center of Gravity	/: 14.2" (362 mm)	13.7" (349 mm)
	. ,	,



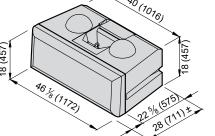
- 1. Units for dimensions are inches (mm), typical unless noted otherwise.
- 2. Block production varies with each licensed Redi-Rock manufacturer.
- 3. Center of Gravity is measured from the back of block.
- 4. Actual block volumes and weights may vary.

4. Actual block volumes and weights may vary.

redi-rock.com

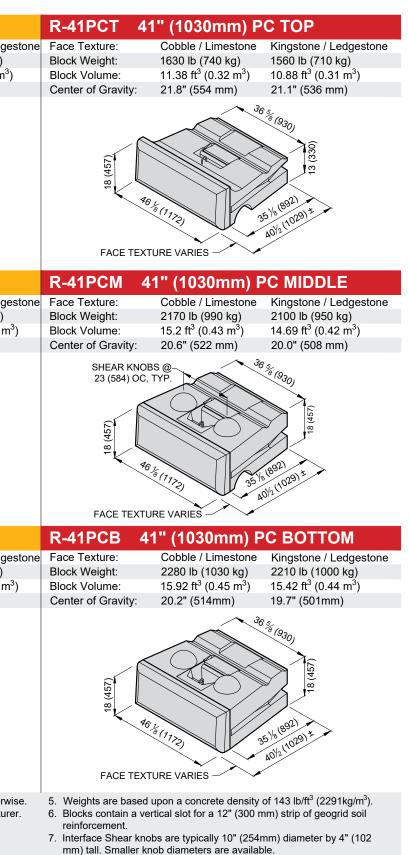
© 2020 Redi-Rock International, LLC

8. 60" (1520 mm) Blocks are typically used at the bottom of taller walls

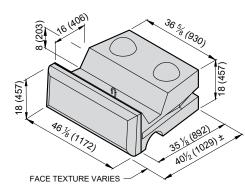


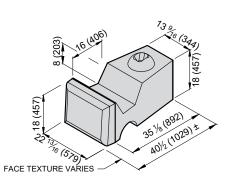
Confirm availability before Specifying or Ordering.

redi-rock.com



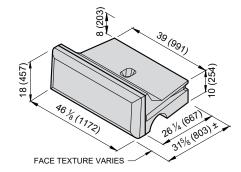
R-41PL 41" (1030mm) PLANTER		R-41HPL	41" (1030mm) H	ALF PLANTER	
Face Texture:	Cobble / Limestone	Kingstone / Ledgestone	Face Texture:	Cobble / Limestone	Kingstone / Ledgestone
Block Weight:	2010 lb (910 kg)	1930 lb (880 kg)	Block Weight:	880 lb (400 kg)	840 lb (380 kg)
Block Volume:	14.02 ft ³ (0.40 m ³)	13.53 ft ³ (0.38 m ³)	Block Volume:	6.14 ft ³ (0.17 m ³)	5.89 ft ³ (0.17 m ³)
Center of Gravity:	19.1" (485 mm)	18.4" (468 mm)	Center of Gravity:	20.2" (513 mm)	19.5" (495 mm)



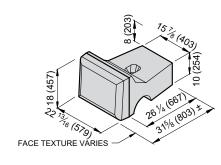


R-MT MODIFIED TOP			R-MHT MO	DIFIED HALF 1	ГОР
Face Texture:	Cobble / Limestone	Kingstone / Ledgestone	Face Texture:	Cobble / Limestone	Kingstone / Ledgestone
Block Weight:	1200 lb (540 kg)	1130 lb (510 kg)	Block Weight:	710 lb (320 kg)	640 lb (290 kg)
Block Volume:	8.38 ft ³ (0.24 m ³)	7.88 ft ³ (0.22 m ³)	Block Volume:	4.95 ft ³ (0.14 m ³)	4.45 ft ³ (0.13 m ³)
Center of Gravity:	17.9" (455 mm)	17.2" (438 mm)	Center of Gravity:	20.7" (527 mm)	19.8" (504 mm)

SPECIALITY BLOCK



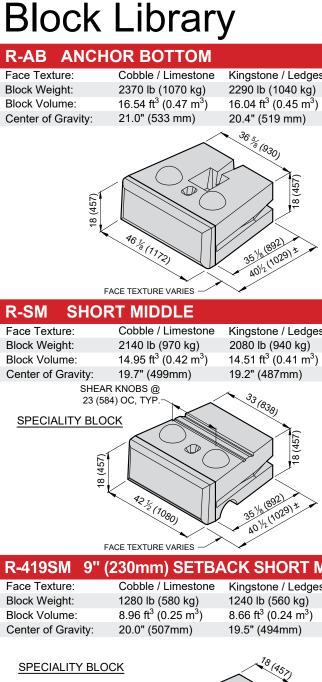
SPECIALITY BLOCK



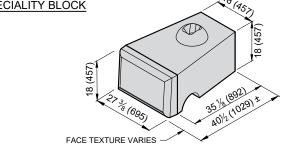
1. Units for dimensions are inches (mm), typical unless noted otherwise. 5. Weig

- 2. Block production varies with each licensed Redi-Rock manufacturer. Confirm availability before Specifying or Ordering.
- 3. Center of Gravity is measured from the back of block.
- 4. Actual block volumes and weights may vary.

- Weights are based upon a concrete density of 143 lb/ft³ (2291kg/m³).
 Half blocks contain a fork slot on only one side of the block.
- nan blocks contain a fork slot on only one side of the block.
 Interface Shear knobs are typically 10" (254 mm) diameter by 4" (102 mm) tall.



RETAINING BLOCKS



- 1. Units for dimensions are inches (mm), typical unless noted otherwise
- Block production varies with each licensed Redi-Rock manufacture Confirm availability before Specifying or Ordering.
- 3. Center of Gravity is measured from the back of block.
- 4. Actual block volumes and weights may vary.

redi-rock.com

© 2020 Redi-Rock International, LLC

redi-rock.com

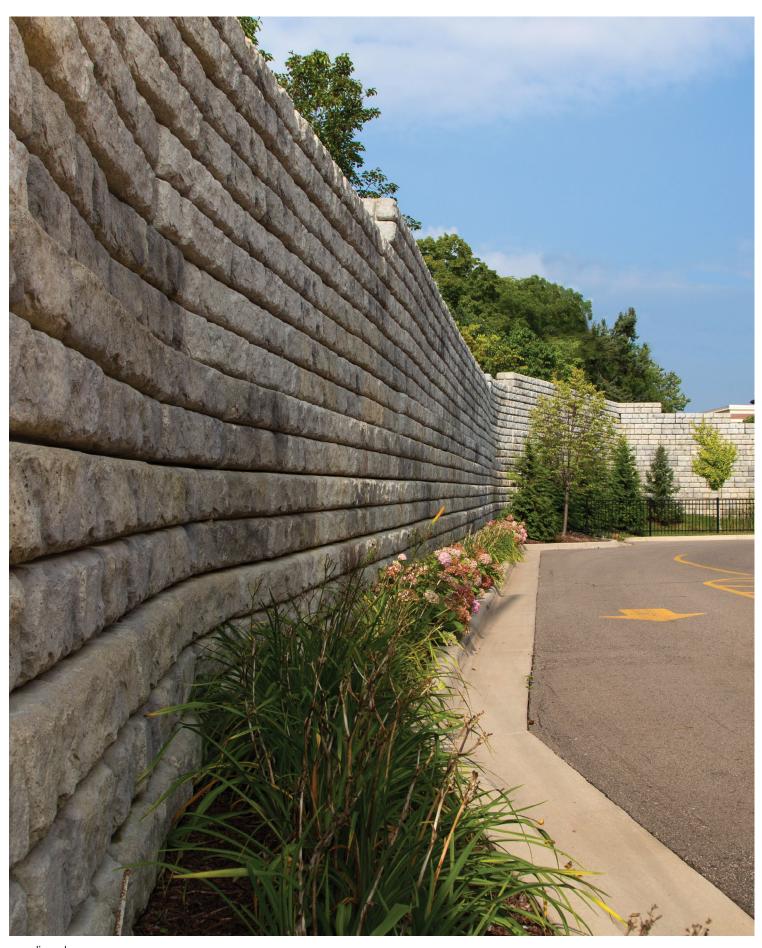
© 2020 Redi-Rock International, LLC

	R-AM ANC	HOR MIDDLE	
stone	Face Texture:	Cobble / Limestone	Kingstone / Ledgestone
	Block Weight:	2240 lb (1010 kg)	2160 lb (980 kg)
	Block Volume:	15.63 ft ³ (0.44 m ³)	15.13 ft ³ (0.43 m ³)
	Center of Gravity:	20.6" (523 mm)	20.0" (509 mm)
	18 (457)	36 5 (G 1/2) 35 /6 40/2	18 (457)
	FACE TEXTU	RE VARIES	
	R-ST SHO	RT TOP	
stone	Face Texture:	Cobble / Limestone	Kingstone / Ledgestone
	Block Weight:	1110 lb (500 kg)	1050 lb (480 kg)
	Block Volume:	7.77 ft ³ (0.22 m ³)	7.33 ft ³ (0.21 m ³)
	Center of Gravity:	13.7" (349mm)	13.2" (336mm)
	SPECIALITY BL	1080) 28 515 28 10 28 10 2	(0000 E1
MID	R-419ST 9"	(230mm) SETR	ACK SHORT TOP
stone		Cobble / Limestone	Kingstone / Ledgestone
SUTE	Block Weight:	710 lb (320 kg)	660 lb (300 kg)
	Block Volume:	$4.94 \text{ ft}^3 (0.14 \text{ m}^3)$	4.64 ft ³ (0.13 m ³)
	Center of Gravity:	13.9" (352mm)	13.3" (339mm)
	SPECIALITY BL	27 3 8 (695) 22 5/8 (5/5) 28 (1/1) 28 (1/1)	13 (330
			C ((O II) (0 ² ()
ise. er.	 27" (695) wide blo block. These are s and is only used in Interface Shear kn 	cks contain a fork slot on peciality blocks and may n double 90 degree corne	have limited availability r applications. Imm) diameter by 4" (102

R-28SDT		9" (230 mm) S	TEPDOWN TOP		R-41SDT
Face Texture:	Cobble / Limestone	Kingstone / Ledgestone	Face Texture:	Cobble / Limestone	Kingstone / Ledgestone
Block Weight:	600 lb (270 kg)	500 lb (230 kg)	Block Weight:	840 lb (380 kg)	740 lb (340 kg)
Block Volume:	4.2 ft ³ (0.12 m ³)	3.4 ft ³ (0.10 m ³)	Block Volume:	5.9 ft ³ (0.17 m ³)	5.1 ft ³ (0.14 m ³)
	46 1/2 2 2 5 8 (11/2) 2 5 EXTURE VARIES	8 (515) 28 (711) ±	4	S 1/8 (11/2) TURE VARIES	35 /8 (892) 401/2 (1029) ±

Units for dimensions are inches (mm), typical unless noted otherwise.
 Block production varies with each licensed Redi-Rock manufacturer. Confirm availability before Specifying or Ordering.

- Architectural faces on the blocks have varying texture.
 Actual block volumes and weights may vary.
 Weights are based upon a concrete density of 143 lb/ft³ (2291 kg/m³).



redi-rock.com © 2020 Redi-Rock International, LLC

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.

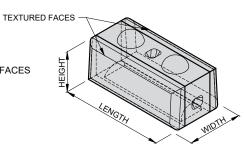
CONCRETE MIX PROPERTIES (1)

FREEZE THAW EXPOSURE CLASS ⁽²⁾	MINIMUM 28 DAY COMPRESSIVE STRENGTH ⁽³⁾	MAXIMUN CEMEN		NOMINAL MAXIMUM AGGREGATE SIZE ⁽¹⁰⁾	AGGREGATE CLASS DESIGNATION ⁽⁴⁾	AIR CONTE	NT ⁽⁵⁾	
MODERATE	4,000 psi (27.6 MPa)	4,000 psi (27.6 MPa) 0.4		1.0 (25)	3M	4.5% ± 1.	.5%	
SEVERE	4,000 psi (27.6 MPa) 0.4		45	1.0 (25)	35	6.0% ± 1.	5%	
VERY SEVERE	Y SEVERE 4,500 psi (30.0 MPa) 0.		40	1.0 (25)	4S	6.0% ± 1.	5%	
MAXIMUM WATER-SOLU	MAXIMUM WATER-SOLUBLE CHLORIDE ION (CI) CONTENT IN CONCRETE, PERCENT BY WEIGHT OF CEMENT ^(6,7) 0.15							
MAXIMUM CHLORIDE AS	CI ⁻ CONCENTRATION IN MIXING	WATER, P	ARTS PER	MILLION		1000		
MAXIMUM PERCENTAGE	OF TOTAL CEMENTITIOUS MAT	ERIALS BY	WEIGHT (8	^{3,10)} (VERY SEVERE EXPOS	URE CLASS ONLY)			
FLY ASH OR OTHER POZZOLANS PER ASTM C618 25 TOTAL ASH, POZZOLANS, SLAG, AND SILICA FUME ⁽⁹⁾ 50							50	
SLAG CONFORMING TO ASTM C989				TOTAL ASH, POZZOLANS, AND SILICA FUME ⁽⁹⁾			35	
SILICA FUME CONFORM		10	ALKALI-AGGREGATE REACTIVITY MITIGATION PER ACI 201			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 (11) (12)

HEIGHT	ALL BLOCKS	$18 \pm \frac{3}{16} (457 \pm 5)$
LENGTH	FULL BLOCKS	46 ¹ / ₈ ± ¹ / ₂ (1172 ± 13)
	HALF BLOCKS	22 ¹ ³ / ₁₆ ± ¹ / ₂ (579 ± 13)
WIDTH	23 -24 (584-610)	13 ± $\frac{1}{2}$ (330 ± 13) FORM LINE TO FORM LINE, PLUS APPROX. 5% (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) Where used in high sulfate environments or where alkali-silica reactivity is and issue, watesoluble chloride shall be limited to no more than trace amounts (from impurities in concrete-making components, not intended constituents.)

(8) The total cementitious material also includes ASTM C150, C595, C845, and C1157 cement. The maximum percentages shall include:

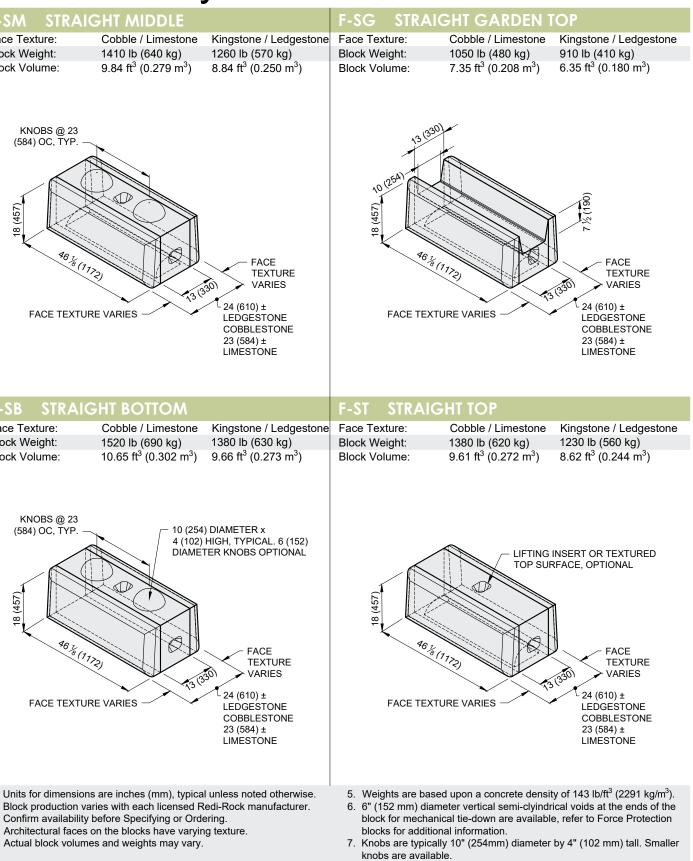
- (a) Fly ash or other pozzolans in type IP, blended cement, ASTM C595, or ASTM C1157.
- (b) Slag used in the manufacture of an IS blended cement, ASTM C595, or ASTM C1157.
- (c) Silica fume, ASTM C1240, present in a blended cement.
- (9) Fly ash or other pozzolans and silica fume shall constitute no more than 25 and 10 percent, respectively, of the total weight of the cementitious materials.
- ⁽¹⁰⁾ Prescriptive limits shown may be waived for concrete mixes that demonstrate excellent freeze-thaw durability in a detailed and current testing program.

⁽¹¹⁾ All dimensions are shown in units of *inches (mm*).

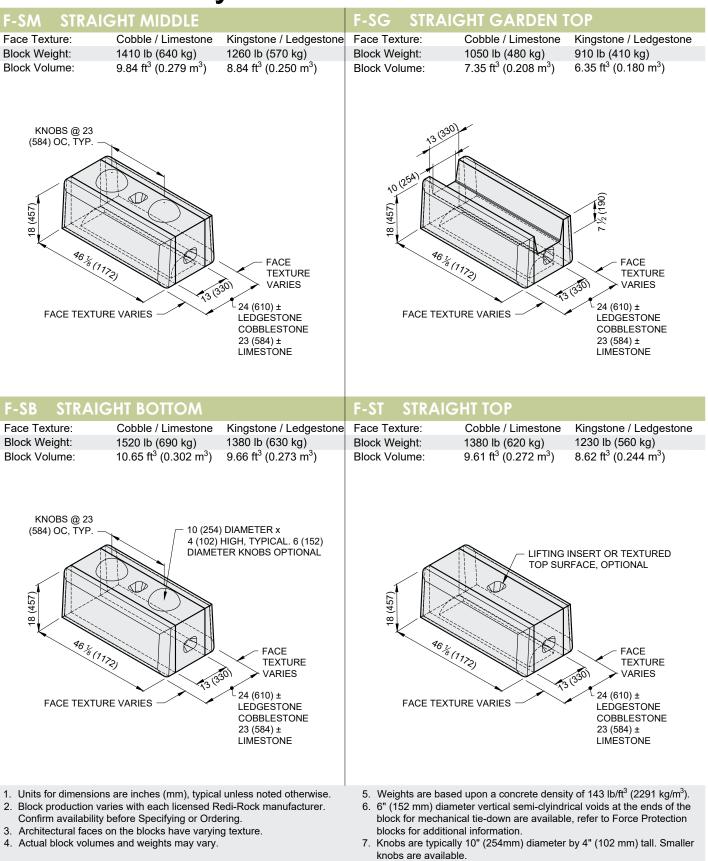
(12) Permissible defects: Chips smaller than 1.5 (38) in its largest dimension and cracks not wider than 0.012 (0.305) and not longer than 25% of the nominal height of the block; bug holes in the architectural face smaller than 0.75 (19); and bug holes, water marks, and color variation on non-architectural faces.

FREESTANDING BLOCKS Block Library

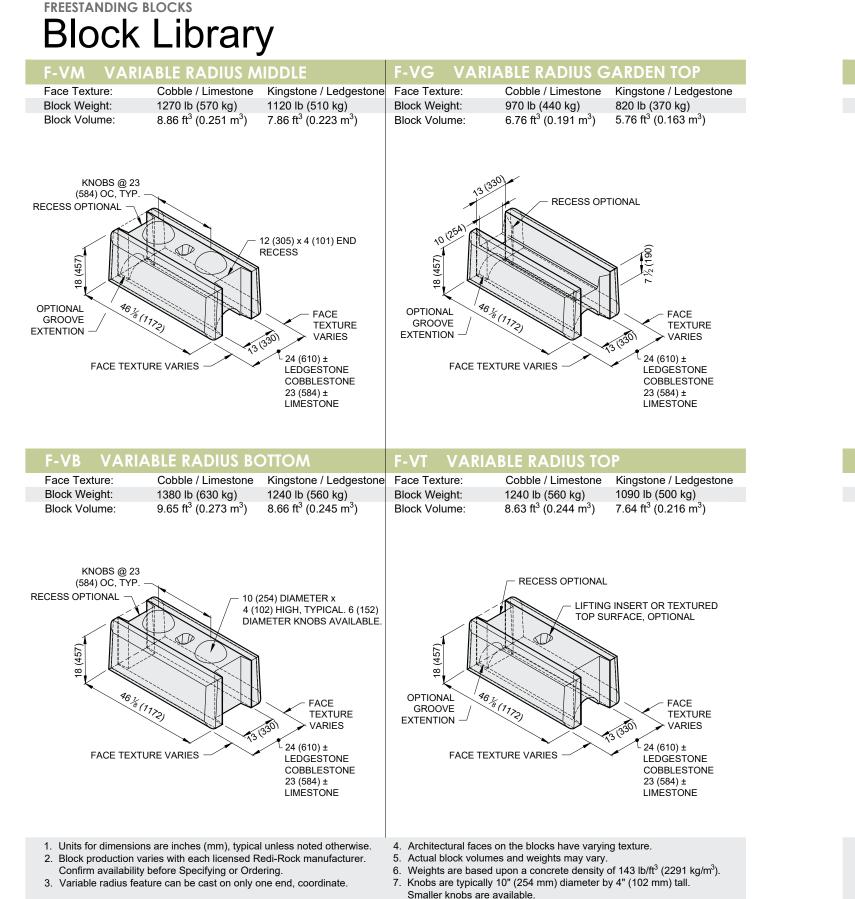
Cobble / Limestone	Kingstone / Ledg
1410 lb (640 kg)	1260 lb (570 kg)
9.84 ft ³ (0.279 m ³)	8.84 ft ³ (0.250 m
	1410 lb (640 kg)



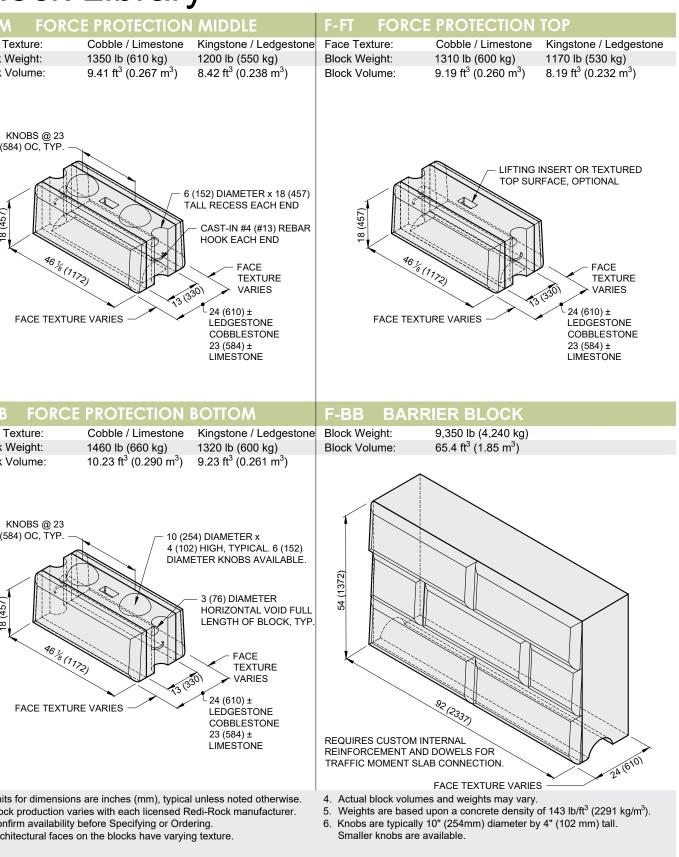
F-SB STRAIG	HT BOTTOM	
Face Texture:	Cobble / Limestone	Kingstone / Ledgest
Block Weight:	1520 lb (690 kg)	1380 lb (630 kg)
Block Volume:	10.65 ft ³ (0.302 m ³)	9.66 ft ³ (0.273 m ³)



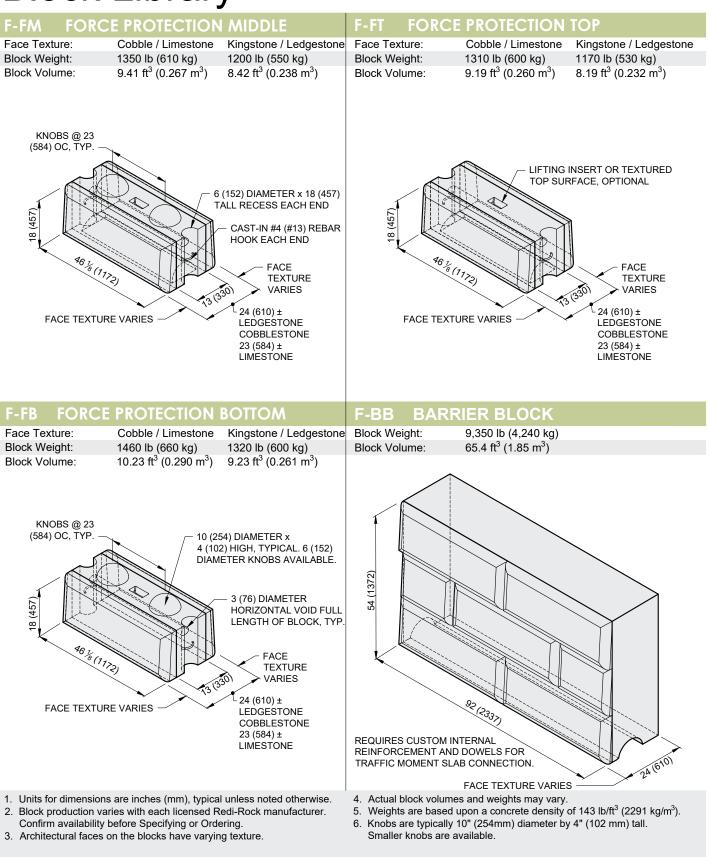
- - 2. Block production varies with each licensed Redi-Rock manufacturer.



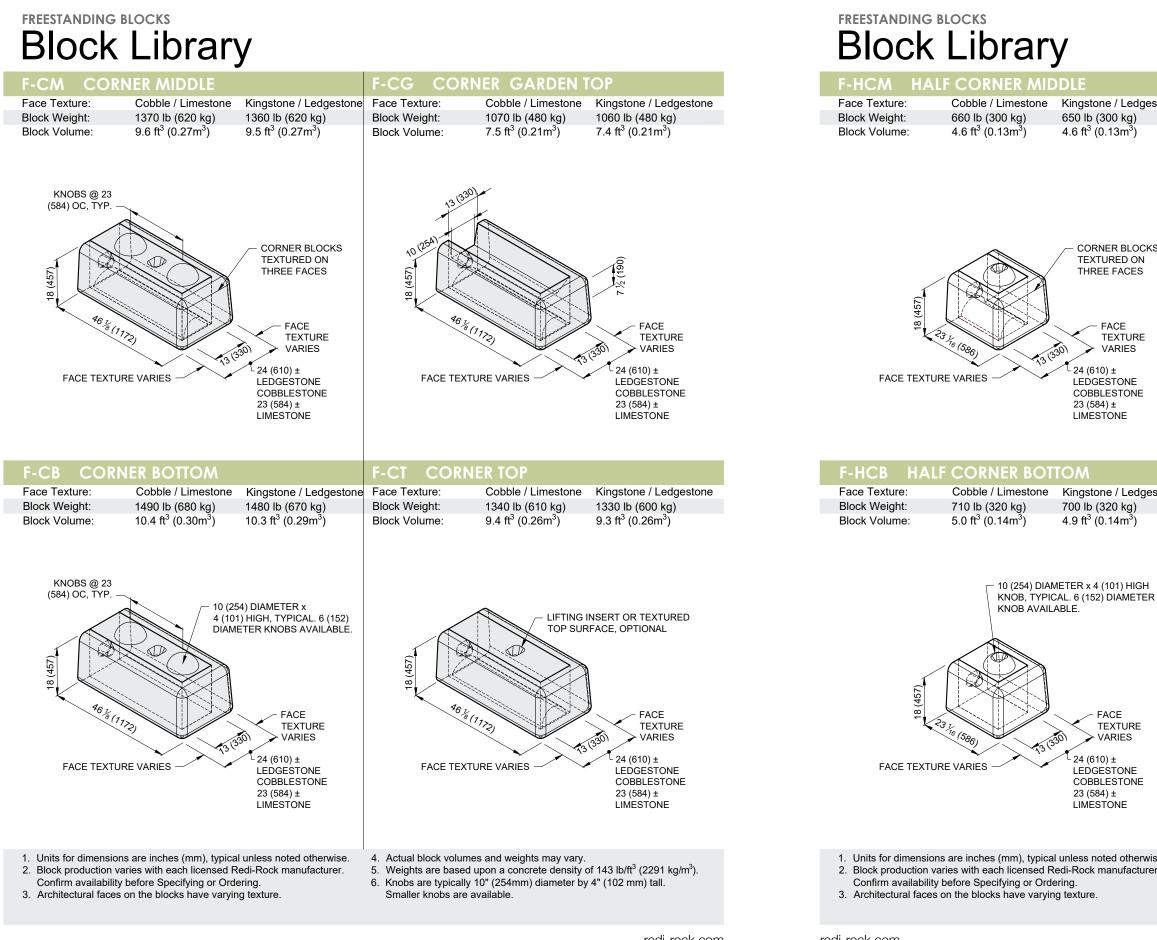
Face Texture:	Cobble / Limestone	Kingstone / Ledge
Block Weight:	1350 lb (610 kg)	1200 lb (550 kg)
Block Volume:	9.41 ft ³ (0.267 m ³)	8.42 ft ³ (0.238 m ³



F-FB FORC	E PROTECTION	BOTTOM
Face Texture:	Cobble / Limestone	Kingstone / Ledgest
Block Weight:	1460 lb (660 kg)	1320 lb (600 kg)
Block Volume:	10.23 ft ³ (0.290 m ³)	9.23 ft ³ (0.261 m ³)

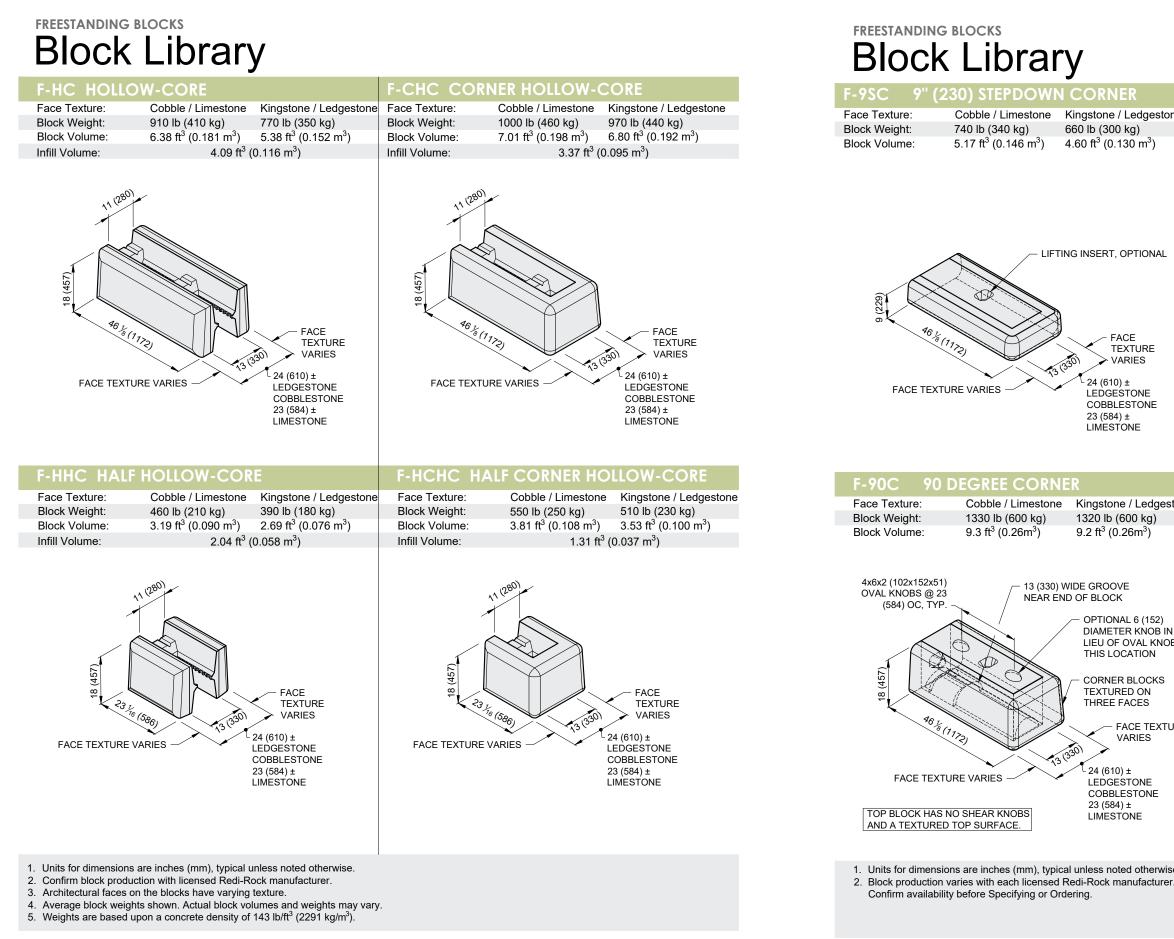


52 | Redi-Rock Design Resource Manual V20



© 2020 Redi-Rock International, LLC

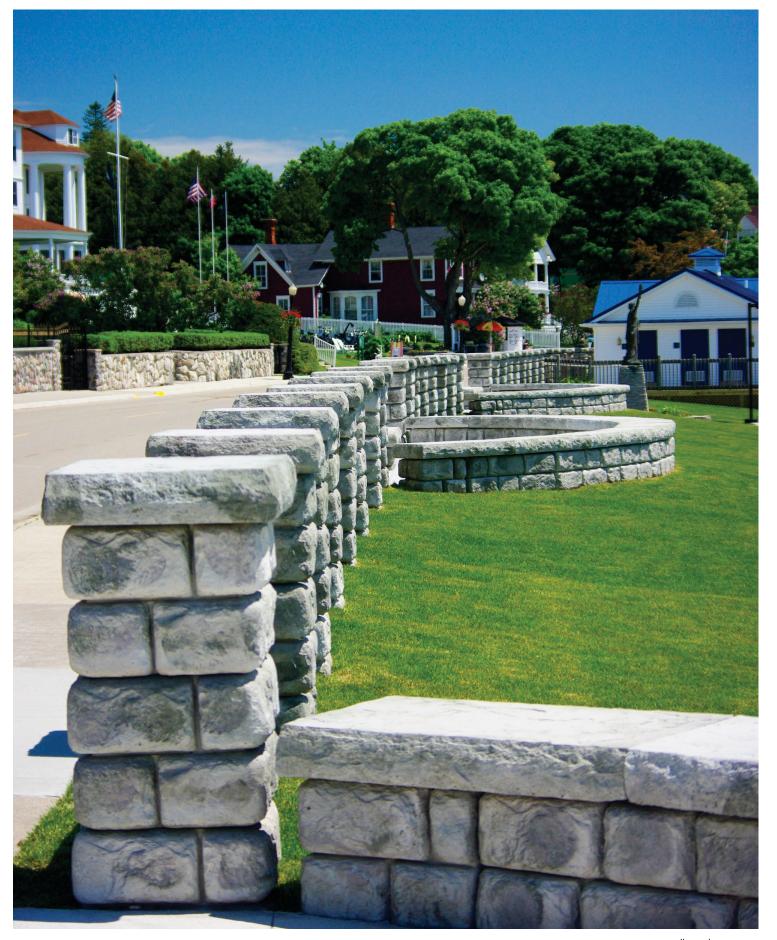
		ALF CORNER GA	
stone		Cobble / Limestone	0 0
	Block Weight: Block Volume:	530 lb (240 kg) 3.7 ft ³ (0.11m ³)	530 lb (240 kg) 3.7 ft ³ (0.10m ³)
	Block Volume:	3. <i>t</i> it (0.11iii)	3. <i>r</i> it (0.10iii)
S	18 (167)		FACE TEXTURE VARIES 24 (610) ± LEDGESTONE COBBLESTONE 23 (584) ± LIMESTONE
	F-HCT НА	LF CORNER TOP	
stone		Cobble / Limestone	Kingstone / Ledgestone
310110	Block Weight:	640 lb (290 kg)	630 lb (290 kg)
	Block Volume:	4.5 ft ³ (0.13m ³)	4.4 ft ³ (0.13m ³)
२			NG INSERT OR TEXTURED SURFACE, OPTIONAL
	FACE TE		FACE TEXTURE VARIES 24 (610) ± LEDGESTONE COBBLESTONE 23 (584) ± LIMESTONE
ise. er.	5. Weights are bas	umes and weights may vary. ed upon a concrete density c ally 10" (254mm) diameter by re available.	of 143 lb/ft ³ (2291 kg/m ³). 4" (102 mm) tall.



redi-rock.com © 2020 Redi-Rock International, LLC redi-rock.com © 2020 Redi-Rock International, LLC

	F-9SG	9" (230) STEPDOWN	GARDEN
one	Face Texture		
	Block Weigh Block Volum		470 lb (210 kg) 3.30 ft ³ (0.093 m ³)
	40 (254) (622) 6	46 1/ 1/2	FACE TEXTURE VARIES 24 (610) ± LEDGESTONE 23 (584) ± LIMESTONE
stone			
0.0110			
N)B			
URE			
se. er.	 Architectur Actual bloc 	al faces on the blocks have varyin k volumes and weights may vary.	g texture.

Weights are based upon a concrete density of 143 lb/ft³ (2291 kg/m³).



58 | Redi-Rock Design Resource Manual V20

redi-rock.com © 2020 Redi-Rock International, LLC

ACCESSORY BLOCKS (COLUMNS, STEPS, AND CAPS)

The Redi-Rock Column and Accessory blocks come in multiple widths and configurations. The defining characteristic is that these blocks have an aesthetic texture cast into two or more faces, and create columns, caps, and steps that complement both Retaining and Freestanding 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 features that coordinate with retaining walls. 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⁾	MAXIMUN CEMEN		NOMINAL MAXIMUM AGGREGATE SIZE ⁽¹⁰⁾	AGGREGATE CLASS DESIGNATION ⁽⁴⁾	AIR CONTE	NT ⁽⁵⁾
MODERATE	4,000 psi (27.6 MPa)	0.4	45	1.0 (25)	3M	4.5% ± 1.	.5%
SEVERE	4,000 psi (27.6 MPa)	0.4	45	1.0 (25)	35	6.0% ± 1.	5%
VERY SEVERE	4,500 psi (30.0 MPa)	0.4	40	1.0 (25)	4S	6.0% ± 1.	5%
MAXIMUM WATER-SOLUBLE CHLORIDE ION (CI ⁻) CONTENT IN CONCRETE, PERCENT BY WEIGHT OF CEMENT ^(6,7) 0.15							
MAXIMUM CHLORIDE AS	CI ⁻ CONCENTRATION IN MIXING	WATER, P	ARTS PER	MILLION		1000	
MAXIMUM PERCENTAGE OF TOTAL CEMENTITIOUS MATERIALS BY WEIGHT ^(8,10) (VERY SEVERE EXPOSURE CLASS ONLY)							
FLY ASH OR OTHER POZZOLANS PER ASTM C618 25 TOTAL ASH, POZZOLANS, SLAG, AND SILICA FUME ⁽⁹⁾ 50						50	
SLAG CONFORMING TO ASTM C989				TOTAL ASH, POZZOLANS, AND SILICA FUME ⁽⁹⁾ 35			35
SILICA FUME CONFORMING TO ASTM C1240				ALKALI-AGGREGA	TE REACTIVITY MITIG	ATION PER ACI	201

REFERENCE DIMENSIONS:

HEIGHT = VERTICAL DIMENSION OF TEXTURED FACE LENGTH = LONGER HORIZONTAL DIMENSION OF TEXTURED FACE WIDTH = SHORTER HORIZONTAL DIMENSION

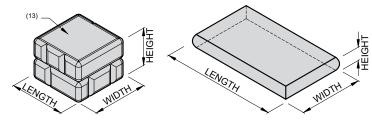
DIMENSIONAL TOLERANCES (11)(12)

	COLUMN BLOCKS	CAP/ STEP BLOCKS
HEIGHT	$18 \pm \frac{3}{16} (457 \pm 5)$	$6 \pm \frac{3}{16} (152 \pm 5)$
LENGTH	24 ± ½ (610 ± 13)	VARIES $\pm \frac{1}{2}$ (VARIES ± 13)
WIDTH	24 ± ½ (610 ± 13)	$28\frac{1}{2}\pm\frac{1}{2}$ (724 ± 13)

⁽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.
- $^{\rm (6)}\,$ Test method ASTM C1218 at age between 28 and 42 days.
- impurities in concrete-making components, not intended constituents.)
- (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.

- ⁽¹¹⁾ All dimensions are shown in units of *inches (mm)*.
- ⁽¹³⁾ Column blocks have a smooth troweled finish on horizontal faces.



COLUMN BLOCK



(7) Where used in high sulfate environments or where alkali-silica reactivity is and issue, watesoluble chloride shall be limited to no more than trace amounts (from

(8) The total cementitious material also includes ASTM C150, C595, C845, and C1157 cement. The maximum percentages shall include:

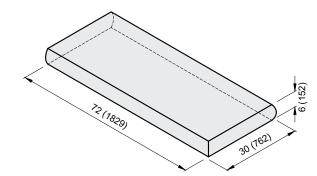
(9) Fly ash or other pozzolans and silica fume shall constitute no more than 25 and 10 percent, respectively, of the total weight of the cementitious materials. ⁽¹⁰⁾ Prescriptive limits shown may be waived for concrete mixes that demonstrate excellent freeze-thaw durability in a detailed and current testing program.

(12) Permissible defects: Chips smaller than 1.5" (38mm) in its largest dimension and cracks not wider than 0.012" (0.305mm) and not longer than 25% of the nominal height of the block; bug holes in the architectural face smaller than 0.75" (19mm); and bug holes, water marks, and color variation on non-architectural faces.

ACCESSORIES (CAP AND STEP BLOCKS) **Block Library**

A-2SC TWO-SIDED	A-4SC FOUR-SIDED	A-COL8 COLUMN - 8"
Block Weight: 630 lb (290 kg)	Block Weight: 670 lb (300 kg)	Block Weight: 730 lb (330 kg)
Block Volume: 4.42 ft ³ (0.125 m ³)	Block Volume: 4.65 ft ³ (0.132 m ³)	Block Volume: 5.1 ft ³ (0.14 m ³)
96 J. (1772) 28 1/2 (7724)	Reg 1/2 (1263) 28 1/2 (1263) 28 1/2 (12A)	CENTERED THRU TAPERED HOLE 8-10 (200-250) DIAMETERS

A-3SC72	THREE-SIDED 72"
Block Weight:	1040 lb (470 kg)
Block Volume:	7.3 ft ³ (0.21 m ³)



1. Units for dimensions are inches (mm), typical unless noted otherwise.

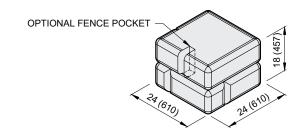
2. Block production varies with each licensed Redi-Rock manufacturer. Confirm availability before Specifying or Ordering.

- 3. Actual block volumes and weights may vary.
- 4. Weights are based upon a concrete density of 143 lb/ft³ (2291 kg/m³).

A-COLS	COLUMN - SOLID CORE
Block Weight:	830 lb (380 kg)
Block Volume:	5.8 ft ³ (0.16 m ³)

ACCESSORIES (COLUMN BLOCKS)

Block Library



1. Units for dimensions are inches (mm), typical unless noted otherwise.

- 2. Block production varies with each licensed Redi-Rock manufacturer. Confirm availability before Specifying or Ordering.
- 3. Actual block volumes and weights may vary.

60 | Redi-Rock Design Resource Manual V20

