

Boa™ Coil Expansion Anchors

**Heavy-Duty,
Reusable
Fastening**



Standard replacement coils for 1/2", 5/8", and 3/4" diameter bolts

DESCRIPTION/SUGGESTED SPECIFICATIONS

Expansion Type Anchors — SPECIFIED FOR ANCHORAGE INTO CONCRETE



The Boa™ Coil is a high performance expansion anchor providing through fixture fastening and easy removal to keep the job moving. It's reusable with the coil replacement anchors making this anchor a low cost solution.

Ideal combination of value, performance and reusability make the Boa Coil the choice for Forming and tilt-wall contractors

ADVANTAGES

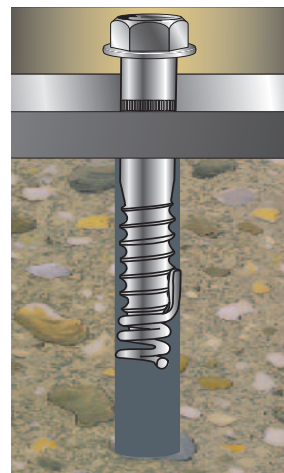
- Easy installation
- Removable
- Reusable
- High shear strength
- Grade 5 Bolt

APPLICATIONS

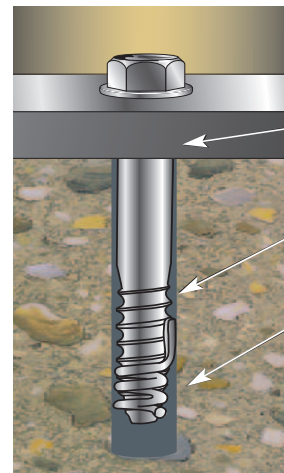


- Concrete formwork
- Load bearing angles, beams and columns
- Machinery holddown
- Jersey barrier
- Glare screens
- Light rail/commuter work

FEATURES



Before Torque



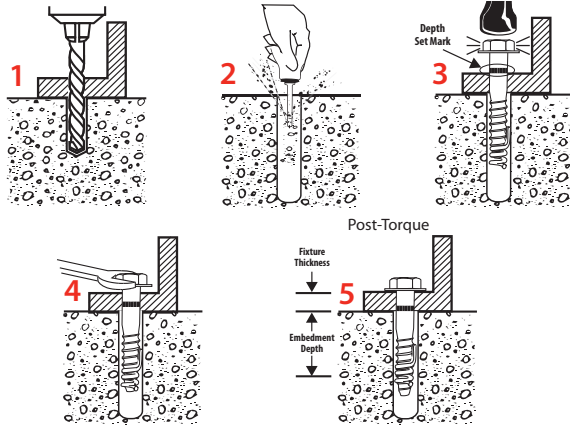
After Torque

Fast Installation —
through fixture installation

Resistant to cyclic loading

Expansion coil locks into concrete to give cast-in type performance

INSTALLATION STEPS



NOTE: To achieve maximum loads the installation process needs to be carried out as follows:

- Using the fixture as a template, drill the correct diameter and depth hole.
- Remove debris with vacuum or hand pump.
- Insert the assembled Boa Coil anchor. (The coil anchor tab points up the anchor.) Tap anchor down to depth set mark and stop.
- Tighten until washer is firmly held to the fixture and stop. Number of turns to set anchor: 1/2" 3-4 turns, 5/8" and 3/4" 4-5 turns. Ensure washer is tight and snug fit.
- The Boa Coil anchor is ready to take load. (The bolt can be removed leaving the coil in the hole.)

The Boa coil anchor can be reused up to 3 times in new holes.

SELECTION CHART

Boa Coil Anchors

PART NO.	ANCHOR DIA In. (mm)	SOCKET SIZE In.	DRILL BIT DIA. In. (mm)	EFFECTIVE LENGTH In. (mm)	FIXTURE THICKNESS AT MINIMUM EMBEDMENT TO BE FASTENED In. (mm)	QTY/WT PER BOX Lbs.	QTY/WT PER MASTER CTN Lbs.
RHCA-1230	1/2 (12.7)	3/4	1/2 (12.7)	3 (76.2)	3/8 (9.5)	25 / 4.5	150 / 27.2
RHCA-1240	1/2 (12.7)	3/4	1/2 (12.7)	4 (101.6)	1-3/8 (35.0)	25 / 5.9	150 / 35.6
RHCA-1254	1/2 (12.7)	3/4	1/2 (12.7)	5-1/2 (139.7)	2-7/8 (73.0)	25 / 7.8	150 / 46.9
RHCA-5834	5/8 (15.9)	15/16	5/8 (15.9)	3-1/2 (88.9)	3/8 (9.5)	20 / 8.8	120 / 52.5
RHCA-5850	5/8 (15.9)	15/16	5/8 (15.9)	5 (127.0)	1-7/8 (47.6)	15 / 8.5	90 / 51.0
RHCA-3444	3/4 (19.1)	1-1/8	3/4 (19.1)	4-1/2 (114.3)	1/4 (6.4)	10 / 6.4	60 / 38.3
RHCA-3460	3/4 (19.1)	1-1/8	3/4 (19.1)	6 (152.4)	1-3/4 (44.5)	10 / 8.2	60 / 49.1



Replacement coil available for easy re-use with Red Head Boa Coil Anchors only.

COIL REPLACEMENT PART NO.	QTY/WT PER BOX Lbs.	QTY/WT PER MASTER CTN Lbs.
RHC-12 (1/2")	100 / 2.8	600/16.9
RHC-58 (5/8")	100 / 2.2	600/13.1
RHC-34 (3/4")	100 / 1.3	600/7.5

PERFORMANCE TABLES

Boa Coil Anchors

Ultimate concrete/steel capacity in concrete (1)

ANCHOR DIAMETER In. (mm)	HOLE DIA. In. (mm)	EFFECTIVE EMBEDMENT DEPTH In. (mm)	FIXTURE HOLE DIA. In. (mm)	TURNS TO SET ANCHOR	ULTIMATE CONCRETE CAPACITY (2) (3)						ULTIMATE STEEL STRENGTH (4) LBS. (kN)	
					2,000 PSI (13.8 MPa)		4,000 PSI (27.6 MPa)		6,000 PSI (41.4 MPa)		TENSION Lbs. (kN)	SHEAR Lbs. (kN)
					TENSION (5) Lbs. (kN)	SHEAR Lbs. (kN)	TENSION (5) Lbs. (kN)	SHEAR Lbs. (kN)	TENSION (5) Lbs. (kN)	SHEAR Lbs. (kN)		
1/2 (12.7)	1/2 (12.7)	2 (50.8)	9/16 (14.3)	3-4	4,039 (17.9)	6,070 (27.0)	5,715 (25.4)	8,590 (38.2)	6,994 (31.1)	10,516 (46.8)	19,384 (86.2)	14,456 (64.3)
		3 (76.2)	9/16 (14.3)	3-4	7,403 (32.9)	12,082 (53.7)	10,471 (46.6)	17,089 (76.0)	12,822 (57.0)	20,937 (93.1)		
5/8 (15.9)	5/8 (15.9)	2-3/8 (60.3)	11/16 (17.5)	4-5	5,291 (23.5)	8,800 (39.1)	7,483 (33.3)	12,445 (55.4)	9,162 (40.8)	15,242 (67.8)	30,152 (134.1)	21,937 (97.6)
		3-7/8 (98.4)	11/16 (17.5)	4-5	10,855 (48.3)	19,999 (89.0)	15,355 (68.3)	28,285 (125.8)	18,802 (83.6)	34,636 (154.0)		
3/4 (19.1)	3/4 (19.1)	3-1/4 (82.6)	13/16 (20.6)	4-5	8,479 (37.7)	16,567 (73.7)	11,991 (53.3)	23,427 (104.2)	14,682 (65.3)	28,690 (127.6)	43,360 (192.9)	32,031 (142.5)
		4-1/2 (114.3)	13/16 (20.6)	4-5	13,555 (60.3)	27,239 (121.2)	19,171 (85.3)	38,518 (171.3)	23,478 (104.4)	47,173 (209.8)		

(1) Use lower value of either concrete or steel (2) Concrete capacity based on Concrete Capacity Design method and verified by test data (3) Influence factors must be applied to concrete strength values (4) Steel strength based on .57 Fu Ag for shear and 0.75 Fu Ag for tension (5) Test results when reused four times; maximum 20% reduction in tensile capacity; no reduction in shear

Boa Coil Anchors

Allowable concrete/steel capacity in concrete (1)

ANCHOR DIAMETER In. (mm)	HOLE DIA. In. (mm)	EFFECTIVE EMBEDMENT DEPTH In. (mm)	FIXTURE HOLE DIA. In. (mm)	TURNS TO SET ANCHOR	RECOMMENDED WORKING LOADS IN CONCRETE (2) (3)						ALLOWABLE STEEL STRENGTH (4) LBS. (kN)	
					2,000 PSI (13.8 MPa)		4,000 PSI (27.6 MPa)		6,000 PSI (41.4 MPa)		TENSION Lbs. (kN)	SHEAR Lbs. (kN)
					TENSION (5) Lbs. (kN)	SHEAR Lbs. (kN)	TENSION (5) Lbs. (kN)	SHEAR Lbs. (kN)	TENSION (5) Lbs. (kN)	SHEAR Lbs. (kN)		
1/2 (12.7)	1/2 (12.7)	2 (50.8)	9/16 (14.3)	3-4	1,011 (4.5)	1,517 (6.7)	1,430 (6.4)	2,147 (9.5)	1,751 (7.8)	2,629 (11.7)	8,529 (37.9)	5,579 (24.8)
		3 (76.2)	9/16 (14.3)	3-4	1,852 (8.2)	3,020 (13.4)	2,619 (11.6)	4,272 (19.0)	3,208 (14.3)	5,234 (23.3)		
5/8 (15.9)	5/8 (15.9)	2-3/8 (60.3)	11/16 (17.5)	4-5	1,324 (5.9)	2,200 (9.8)	1,872 (8.3)	3,111 (13.8)	2,293 (10.2)	3,810 (16.9)	13,266 (59.0)	8,466 (37.7)
		3-7/8 (98.4)	11/16 (17.5)	4-5	2,715 (12.1)	5,000 (22.2)	3,840 (17.1)	7,071 (31.5)	4,703 (20.9)	8,660 (38.5)		
3/4 (19.1)	3/4 (19.1)	3-1/4 (82.6)	13/16 (20.6)	4-5	2,121 (9.4)	4,141 (18.4)	2,999 (13.3)	5,556 (24.7)	3,673 (16.3)	7,172 (31.9)	19,078 (84.9)	12,362 (55.0)
		4-1/2 (114.3)	13/16 (20.6)	4-5	3,390 (15.1)	6,810 (30.3)	4,794 (21.3)	9,630 (42.8)	5,872 (26.2)	11,793 (52.4)		

(1) Use lower value of either concrete or steel (2) Safety factor 4 (3) Influence factors must be applied to concrete strength values (4) Steel strength based on .22 Fu Ag for shear and 0.33 Fu Ag for tension (5) Test results when reused four times; maximum 20% reduction in tensile capacity; no reduction in shear