

SELECTION CHART

Multi-Set II Drop-In Anchors



USER TYPE	APPLICATION	BASE MATERIAL	CORROSION RESISTANCE LEVEL	DROP-IN ANCHOR TYPE	PART NUMBER	SETTING TOOL PART NUMBER*	BOLT SIZE-THREADS PER INCH	DRILL BIT SIZE In. (mm)	THREAD DEPTH In. (mm)	EMBEDMENT MIN. HOLE DEPTH In. (mm)	QTY./WT. PER BOX lbs.	QTY./WT. PER MASTER CTN lbs.
	Trapeze/HVAC/Fire Sprinkler	Solid concrete/lightweight fill deck	Low	RM	RM-14	RT-114	1/4" - 20	3/8 (9.5)	3/8 (9.5)	1 (25.4)	100/ 2.6	1000/ 28
					RM-38	RT-138	3/8" - 16	1/2 (12.7)	1/2 (12.7)	1 - 5/8 (41.3)	50/ 3.4	500/ 36
					RM-12	RT-112	1/2" - 13	5/8 (15.9)	3/4 (19.1)	2 (50.8)	50/ 5.8	400/ 49
					RM-58	RT-158	5/8" - 11	7/8 (22.2)	1 (25.4)	2 - 1/2 (63.5)	25/ 7.8	125/ 41
	Concrete Cutting/Sawing Contractor/Misc. Metal	Solid concrete/lightweight fill deck	Low	RL (w/o lip)	RL-14	RT-114	1/4" - 20	3/8 (9.5)	3/8 (9.5)	1 (25.4)	100/ 2.6	1000/ 28
					RL-38	RT-138	3/8" - 16	1/2 (12.7)	1/2 (12.7)	1 - 5/8 (41.3)	50/ 3.4	500/ 36
					RL-12	RT-112	1/2" - 13	5/8 (15.9)	3/4 (19.1)	2 (50.8)	50/ 5.8	400/ 49
					RL-58	RT-158	5/8" - 11	7/8 (22.2)	1 (25.4)	2 - 1/2 (63.5)	25/ 7.8	125/ 41
	Trapeze/HVAC/Fire Sprinkler	Hollow-core precast or Post-tension	Low	RX	RX-38	RTX-138	3/8" - 16	1/2 (12.7)	1/2 (12.7)	3/4 (19.1)	100/ 3.5	1000/ 36

To set anchor below surface:

Drill hole deeper than anchor length. Thread bolt into anchor. Hammer anchor into hole until bolt head is at desired depth. Remove bolt and set anchor with setting tool.

PART NUMBER RT-138



For use with RM and RL.

PART NUMBER RTX-138



For use with RX-38 only.

* 1 setting tool per master carton.

** For continuous extreme low temperature, use stainless steel.

PERFORMANCE TABLES

Ultimate Shear and Tension Values (Lbs/kN) in Concrete*

BOLT DIA. In. (mm)	ANCHOR DIA. In. (mm)	MIN. EMBEDMENT DEPTH In. (mm)	ANCHOR TYPE	TENSION Lbs. (kN)			SHEAR Lbs. (kN)	
				f'c = 2000 PSI (13.8 MPa)	f'c = 4000 PSI (27.6 MPa)	f'c = 6000 PSI (41.4 MPa)	f'c ≥ 2000 PSI (13.8 MPa)	f'c ≥ 2000 PSI (13.8 MPa)
1/4 (6.4)	3/8 (9.5)	1 (25.4)	RM, RL or CL-Carbon	1,680 (7.5)	2,360 (10.5)	2,980 (13.3)	1,080 (4.8)	1,080 (4.8)
3/8 (9.5)	1/2 (12.7)	1-5/8 (41.3)		2,980 (13.3)	3,800 (16.9)	6,240 (27.8)	3,160 (14.1)	3,160 (14.1)
1/2 (12.7)	5/8 (15.9)	2 (50.8)	SRM-18-8 S.S. or SSRM-316 S.S.	3,300 (14.7)	5,840 (26.0)	8,300 (36.9)	4,580 (20.4)	4,580 (20.4)
5/8 (15.9)	7/8 (22.2)	2-1/2 (63.5)		5,500 (24.5)	8,640 (38.4)	11,020 (49.0)	7,440 (33.1)	7,440 (33.1)
3/4 (19.1)	1 (25.4)	3-3/16 (81.0)		8,280 (36.8)	9,480 (42.2)	12,260 (54.5)	10,480 (46.6)	10,480 (46.6)

* Allowable values are based upon a 4 to 1 safety factor. Divide by 4 for allowable load values.

Ultimate Shear and Tension Values (Lbs/kN) in Lightweight Concrete*

BOLT DIA. In. (mm)	ANCHOR DIA. In. (mm)	MIN. EMBEDMENT DEPTH In. (mm)	ANCHOR TYPE	LIGHTWEIGHT CONCRETE f'c = 3000 PSI (20.7 MPa)		LOWER FLUTE OF STEEL DECK WITH LIGHTWEIGHT CONCRETE FILL f'c = 3000 PSI (20.7 MPa)	
				TENSION Lbs. (kN)	SHEAR Lbs. (kN)	TENSION Lbs. (kN)	SHEAR Lbs. (kN)
3/8 (9.5)	1/2 (12.7)	1-5/8 (39.7)	RM, RL or CL-Carbon or SRM-18-8 S.S. or SSRM-316 S.S.	3,860 (17.2)	4,420 (19.6)	3,340 (14.9)	4,420 (19.6)
1/2 (12.7)	5/8 (15.9)	2 (50.8)		4,080 (18.1)	5,640 (25.1)	3,200 (14.2)	4,940 (22.0)
5/8 (15.9)	7/8 (22.2)	2-1/2 (63.5)		6,280 (27.9)	10,440 (46.4)	5,960 (26.5)	5,840 (26.0)
3/4 (19.1)	1 (25.4)	3-3/16 (81.0)		11,000 (48.9)	15,780 (70.2)	8,180 (36.4)	9,120 (40.6)

* Allowable values are based upon a 4 to 1 safety factor. Divide by 4 for allowable load values.

Recommended Spacing and Edge Distance Requirements*

BOLT DIA. In. (mm)	ANCHOR DIA. In. (mm)	EMBEDMENT DEPTH In. (mm)	ANCHOR TYPE	EDGE DISTANCE REQUIRED TO OBTAIN MAX. WORKING LOAD In. (mm)	MIN. EDGE DISTANCE AT WHICH LOAD FACTOR APPLIED =.80 FOR TENSION =.70 FOR SHEAR In. (mm)	SPACING REQUIRED TO OBTAIN MAX. WORKING LOAD In. (mm)	MIN. ALLOWABLE SPACING BETWEEN ANCHORS LOAD FACTOR APPLIED =.80 FOR TENSION =.55 FOR SHEAR In. (mm)
1/4 (6.4)	3/8 (9.5)	1 (25.4)	RM, RL or CL-Carbon	1-3/4 (44.5)	7/8 (22.2)	3-1/2 (88.9)	1-3/4 (44.5)
3/8 (9.5)	1/2 (12.7)	1-5/8 (41.3)		2-7/8 (73.0)	1-7/16 (36.5)	5-11/16 (144.5)	2-7/8 (73.0)
1/2 (12.7)	5/8 (15.9)	2 (50.8)	SRM-18-8 S.S. or SSRM-316 S.S.	3-1/2 (88.9)	1-3/4 (44.5)	7 (177.8)	3-1/2 (88.9)
5/8 (15.9)	7/8 (22.2)	2-1/2 (63.5)		4-3/8 (111.1)	2-3/16 (55.6)	8-3/4 (222.3)	4-3/8 (111.1)
3/4 (19.1)	1 (25.4)	3-3/16 (81.0)		5-5/8 (142.9)	2-13/16 (71.4)	11-3/16 (284.2)	5-5/8 (142.9)