



# Multi-Set II<sup>®</sup> Drop-In Anchors

## Internally Threaded Heavy Duty Anchoring Systems

### Technical Data

#### Ultimate Shear and Tension Values (Lbs/kN) In Concrete\*

Bolt Dia. In. (mm)	Anchor Dia. In. (mm)	Minimum Embedment Depth In. (mm)	Anchor Type	f'c = 2000 PSI (13.8 MPa)		f'c = 4000 PSI (26.6 MPa)		f'c = 6000 PSI (41.4 MPa)	
				Tension Lbs. (kN)	Shear Lbs. (kN)	Tension Lbs. (kN)	Shear Lbs. (kN)	Tension Lbs. (kN)	Shear Lbs. (kN)
1/4" (6.4)	3/8 (9.5)	1 (25.4)	RM or RL-Carbon	1,680 (7.5)	1,080 (4.8)	2,360 (10.5)	1,200 (5.3)	2,980 (13.3)	1,300 (5.8)
3/8 (9.5)	1/2 (12.7)	1-5/8 (41.3)	or	2,980 (13.3)	3,160 (14.1)	3,800 (16.9)	2,500 (11.1)	6,240 (27.8)	1,860 (8.3)
1/2 (12.7)	1/2 (12.7)	2 (50.8)	SRM-18-8 S.S.	3,300 (14.7)	4,580 (20.4)	5,840 (26.0)	3,500 (15.6)	8,300 (36.9)	2,400 (10.7)
5/8 (15.9)	5/8 (15.9)	2-1/2 (63.5)	or	5,500 (24.5)	7,440 (33.1)	8,640 (38.4)	5,540 (24.6)	11,020 (49.0)	3,640 (16.2)
3/4 (19.1)	3/4 (19.1)	3-3/16 (81.0)	SSRM-316 S.S.	8,280 (36.8)	10,480 (46.6)	9,480 (42.2)	7,680 (34.2)	12,260 (54.5)	4,860 (21.6)

\* 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)	Minimum 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 or RL-Carbon	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)	or	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)	SRM-18-8 S.S. or	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)	SSRM-316 S.S.	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.

#### Ultimate Shear and Tension Values (Lbs/kN) For RX-38 (3/4 Embedment)\*

Size In. (mm)	Anchor Dia. In. (mm)	Embedment In. (mm)	f'c = 3000 PSI (20.7 MPa)		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)	3/4 (19.1)	1,987 (8.8)	2,903 (12.9)	1,908 (8.5)	2,525 (11.2)

\* The tabulated values are for RX-38 anchors installed at minimum of 12-diameters on center and minimum edge distance of six-diameters for 100% anchor efficiency. Spacing and edge distance may be reduced to six-diameters spacing and three-diameter edge distance provided the values are reduced 50%. Linear interpolation may be used for intermediate spacings and edge margins.

\* 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 = .70 For Shear In. (mm)
3/8 (9.5)	1/2 (12.7)	1-5/8 (39.7)	or	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	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)	SSRM-316 S.S.	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)	11-3/8 (284.2)	5-5/8 (142.9)

\* Spacing and edge distances shall be divided by 0.75 when anchors are placed in structural lightweight concrete. Linear interpolation may be used for intermediate spacing and edge distances.