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

ANCHOR	EMBE	EMBEDMENT		f'c = 2000 PSI (13.8 MPa)			f'c = 3000 PSI (20.7 MPa)			f′c = 4000 PSI (27.6 MPa)				
DIA. In. (mm)	DEPTH In. (mm)		TENSION Lbs. (kN)		SHEAR Lbs. (kN)		TENSION Lbs. (kN)		SHEAR Lbs. (kN)		TENSION Lbs. (kN)		SHEAR Lbs. (kN)	
3/8 (9.5)	1-1/2	(38.1)	1,336	(5.9)	2,108	(9.4)	1,652	(7.3)	2,764	(12.3)	1,968	(8.8)	3,416	(15.2)
	2	(50.8)	1,492	(6.6)	3,036	(13.5)	2,024	(9.0)	3,228	(14.4)	2,552	(11.4)	3,420	(15.2)
	2-1/2	(63.5)	3,732	(16.6)	3,312	(14.7)	3,748	(16.7)	3,364	(15.0)	3,760	(16.7)	3,424	(15.2)
	3-1/2	(88.9)	5,396	(24.0)	3,312	(14.7)	6,624	(29.5)	3,368	(15.0)	7,852	(34.9)	3,428	(15.2)
5/8 (15.9)	2-3/4	(69.9)	5,276	(23.5)	8,656	(38.5)	6,560	(29.2)	11,064	(49.2)	7,844	(34.8)	13,476	(59.9)
	3-1/2	(88.9)	7,972	(35.5)	10,224	(45.5)	9,848	(43.8)	12,144	(54.0)	11,724	(52.2)	14,060	(62.5)

For allowable values use a 4 to 1 safety factor (Ultimate/4 or Ultimate*0.25)"

LDT Anchors Recommended Edge & Spacing Requirements for Shear Loads* Carbon Steel

ANCHOR DIA. In. (mm)		EMBEDMENT DEPTH In. (mm)		EDGE DISTANCE REQUIRED TO OBTAIN MAX. WORKING LOAD In. (mm)		LOAD FACTOR APPLIED AT MIN. EDGE DISTANCE 1-3/4 Inches (44mm)	REQUIRED MAX. WOR	DISTANCE TO OBTAIN KING LOAD (mm)	LOAD FACTOR APPLIED AT MIN. SPACING DISTANCE 3 Inches (76mm)	
3/8	(9.5)	1-1/2	(38.1)	3	(76.2)	25%	6	(152.4)	57%	
		2	(50.8)	4	(101.6)	25%	6	(152.4)	57%	
		2-1/2	(63.5)	5	(127.0)	25%	6	(152.4)	57%	
		3-1/2	(88.9)	5	(127.0)	25%	6	(152.4)	57%	
5/8	(15.9)	2-3/4	(69.9)	6-1/4	(158.8)	15%** / 60%***	10	(254.0)	75%	
		3-1/2	(88.9)	6-1/4	(158.8)	15%** / 60%***	10	(254.0)	75%	

* Edge and spacing distances shall be divided by .75 when anchors are placed in structural lightweight concrete. Linear interpolation may be used for intermediate spacing and edge distances.

** 15% = shear load applied perpendicular to the edge

*** 60% = shear load appied parallel to the edge

LDT Anchors Recommended Edge & Spacing Requirements for Shear Loads* Carbon Steel

ANCHOR DIA. In. (mm)		EMBEDMENT DEPTH In. (mm)		EDGE DISTANCE REQUIRED TO OBTAIN MAX. WORKING LOAD In. (mm)		LOAD FACTOR APPLIED AT MIN. EDGE DISTANCE 1-3/4 Inches (44mm)	REQUIRED MAX. WOR	DISTANCE TO OBTAIN KING LOAD (mm)	LOAD FACTOR APPLIED AT MIN. SPACING DISTANCE 3 Inches (76mm)	
3/8	(9.5)	1-1/2	(38.1)	3	(76.2)	25%	6	(152.4)	57%	
		2	(50.8)	4	(101.6)	25%	6	(152.4)	57%	
		2-1/2	(63.5)	5	(127.0)	25%	6	(152.4)	57%	
		3-1/2	(88.9)	5	(127.0)	25%	6	(152.4)	57%	
5/8	(15.9)	2-3/4	(69.9)	6-1/4	(158.8)	15%** / 60%***	10	(254.0)	75%	
		3-1/2	(88.9)	6-1/4	(158.8)	15%** / 60%***	10	(254.0)	75%	

* Edge and spacing distances shall be divided by .75 when anchors are placed in structural lightweight concrete. Linear interpolation may be used for intermediate spacing and edge distances.

** 15% = shear load applied perpendicular to the edge

*** 60% = shear load appied parallel to the edge

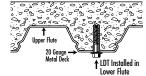
LDT Anchors (anchors should be installed by hand in hollow block)

ANCHOR DIA. In. (mm)		EMBEDMENT DEPTH	HOLLOW CO	NCRETE BLOCK	GROUT FILLED CONCRETE BLOCK			
		In. (mm)	TENSION Lbs. (kN)	SHEAR Lbs. (kN)	TENSION Lbs. (kN)	SHEAR Lbs. (kN)		
	3/8 (9.5)	1-1/2 (38.1)	916 (4.1)	3,176 (14.1)	1,592 (7.1)	3,900 (17.3)		

Allowable Tension and Shear* (Lbs/kN) in Concrete Block

ANCHOR DIA.		EMBEDMENT	noula de ins		NCRETE BLOCK		GROUT FILLED CONCRETE BLOCK			
	ln. (mm)	DEPTH In. (mm)	TENSION Lbs. (kN)		SHEAR Lbs. (kN)		TENSION Lbs. (kN)		SHEAR Lbs. (kN)	
	3/8 (9.5)	1-1/2 (38.1)	229	(1.0)	794	(3.5)	398	(1.8)	975	(4.3)

* Allowable values are based upon a 4 to 1 safety factor. (Ultimate/4)



LDT Anchors Anchoring Overhead in 3000 PSI Lightweight Concrete On Metal Deck

ANCHOR	DRILL HOLE	EMBEDMENT	3000PSI (20.7 MPa) CONCRETE					
	DIAMETER In. (mm)	ln. (mm)		FENSION LOAD 5. (kn)	ALLOWABLE WORKING LOAD Lbs. (kN)			
3/8" LDT	5/16 (7.9)	1-1/2 (38.1)	Upper Flute	2,889 (12.9)	722 (3.2)			
			Lower Flute	1,862 (8.3)	465 (2.1)			