



**THE ORIGINAL**  
**Tapcon**

*Advanced Threadform Technology™  
Easier to install—  
less torque required!*

**Approved for use in  
ACQ Treated Lumber**

## Tapcon Anchors — SPECIFIED FOR ANCHORAGE INTO CONCRETE, BRICK OR BLOCK

### ADVANTAGES

- Works in all masonry base materials
- Fast and easy—3 anchors per minute
- No hole spotting or inserts required
- Removable
- Slotted hex and phillips flat head styles
- Excellent corrosion protection—Climaseal™ coated
- Available in 410 Stainless Steel

### Tapcon Anchors

Hex Head style on Tapcon Anchors is available for majority of fixture anchoring needs

Climaseal™ Coating is standard on all Tapcon anchors to provide extended corrosion resistance

Now available in 410 Stainless Steel

Phillips Flat Head style is available when flush seating is necessary in countersink applications

Advanced Threadform cuts into masonry materials for greater pullout values

Lengths of Tapcon Anchors range from 1-1/4" to 4" in 3/16" and up to 6" in 1/4" diameters.

Nail-Type Point guides the anchor into the pre-drilled hole. Excellent for wood to concrete applications

Select a length that meets your application needs.

SELECTION CHART										
Tapcon® Anchors										
PART NO. 3/16" HEX HEAD	PART NO. 1/4" HEX HEAD	PART NO. 3/16" FLAT HEAD	PART NO. 1/4" FLAT HEAD	RECOMMENDED TAPCON LENGTH In. (mm)	FIXTURE THICKNESS INCHES	BIT LENGTH In. (mm)	BITS FOR 3/16" TAPCON PART NO.	BITS FOR 1/4" TAPCON PART NO.	BITS FOR 3/16" SDS BIT NO.	BITS FOR 1/4" SDS BIT NO.
HW3-114	HW4-114	PF3-114	PF4-114	1-1/4 (31.8)	0" - 1/4"	3-1/2 (88.9)	7900814	7901014	----	----
HW3-134	HW4-134	PF3-134	PF4-134	1-3/4 (44.5)	1/4" - 3/4"	3-1/2 (88.9)	7900814	7901014	----	----
HW3-214	HW4-214	PF3-214	PF4-214	2-1/4 (57.2)	3/4" - 1-1/4"	4-1/2 (114.3)	7900818	7901018	----	----
HW3-234	HW4-234	PF3-234	PF4-234	2-3/4 (69.9)	1-1/4" - 1-3/4"	4-1/2 (114.3)	7900818	7901018	----	----
HW3-314	HW4-314	PF3-314	PF4-314	3-1/4 (82.6)	1-3/4" - 2-1/4"	5-1/2 (139.7)	7900822	7901022	----	----
HW3-334	HW4-334	PF3-334	PF4-334	3-3/4 (95.3)	2-1/4" - 2-3/4"	5-1/2 (139.7)	7900822	7901022	----	----
HW3-400	HW4-400	PF3-400	PF4-400	4 (101.6)	2-1/2" - 3"	5-1/2 (139.7)	7900822	7901022	----	----
----	HW4-500	----	PF4-500	5 (127.0)	3-1/2" - 4"	6-1/2 (165.1)	----	7901026	----	7901060
----	HW4-600	----	PF4-600	6 (152.4)	4-1/2" - 5"	7-1/2 (190.5)	----	7901030	790059	7901059

All boxes of ITW Tapcon come packaged with matching carbide-tipped bit. Tapcon is packaged 100 pieces per box and 500 pieces per master carton except HW4-600 and PF4-600 (400 in master carton).

SELECTION CHART					
Tapcon® Stainless Steel Anchors					
PART NO. 3/16" HEX HEAD	PART NO. 1/4" FLAT HEAD	RECOMMENDED TAPCON LENGTH In. (mm)	FIXTURE THICKNESS INCHES	BIT LENGTH In. (mm)	DRILL BIT PART NO.
SHW4-114	SPF4-114	1-1/4 (31.8)	0" - 1/4"	3-1/2 (88.9)	7901014
SHW4-134	SPF4-134	1-3/4 (44.5)	1/4" - 3/4"	3-1/2 (88.9)	7901014
SHW4-214	SPF4-214	2-1/4 (57.2)	3/4" - 1-1/4"	4-1/2 (114.3)	7901018
SHW4-234	SPF4-234	2-3/4 (69.9)	1-1/4" - 1-3/4"	4-1/2 (114.3)	7901018
SHW4-314	SPF4-314	3-1/4 (82.6)	1-3/4" - 2-1/4"	5-1/2 (139.7)	7901022
SHW4-334	SPF4-334	3-3/4 (95.3)	2-1/4" - 2-3/4"	5-1/2 (139.7)	7901022

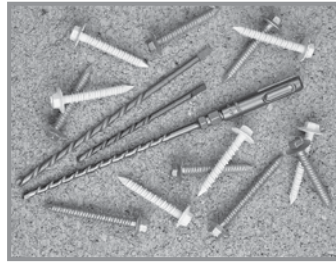
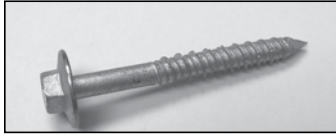
SELECTION CHART	
Tapcon® SDS Bits	
PART NUMBER	DESCRIPTION
790059	7" (SDS) Rotohammer Bits for use with 3/16" Tapcon
7901060	5" (SDS) Rotohammer Bits for use with 1/4" Tapcon
7901059	7" (SDS) Rotohammer Bits for use with 1/4" Tapcon



Choose from a variety of TAPCON to meet your specific needs!

**Maxi-Set Tapcon®**  
**Masonry Fastening System**

For Tapcon® applications that require more anchor bearing surface.



**Head Style**

5/16" across flats hex with 5/8" diameter flange.



**Applications**

- Shutters - protective and decorative.
- Screened porch and pool enclosures.
- Various sheet metal flashings.
- Decorative wrought iron.
- Wood nailers and plywood attachment.

**Stainless Steel Tapcon®**  
**Masonry Fastening System**

410 Stainless Steel. ClimaSeal Coated



**Approved for use in**  
**ACQ Treated Lumber**

**Technical Data**

PERFORMANCE TABLE											
Tapcon® Anchors				Ultimate Tension and Shear Values (Lbs/kN) in Hollow Block							
ANCHOR DIA. In. (mm)		ANCHOR EMBEDMENT In. (mm)		LIGHT WEIGHT BLOCK				MEDIUM WEIGHT BLOCK			
				TENSION Lbs. (kN)		SHEAR Lbs. (kN)		TENSION Lbs. (kN)		SHEAR Lbs. (kN)	
3/16	(4.8)	1	(25.4)	220	(1.0)	400	(1.8)	340	(1.5)	730	(3.2)
1/4	(6.4)	1	(25.4)	250	(1.1)	620	(2.8)	500	(2.2)	1,000	(4.4)

Safe working loads for single installation under static loading should not exceed 25% of the ultimate load capacity.  
NOTE: 3/16" Tapcon requires 5/32" bit, 1/4" Tapcon requires 3/16" bit.

PERFORMANCE TABLE							
Tapcon® Anchors		Allowable Edge and Spacing Distances Tapcon®					
PARAMETER	ANCHOR DIA. Inch	NORMAL WEIGHT CONCRETE			CONCRETE MASONRY UNITS (CMU)		
		FULL CAPACITY (Critical Distance Inches)	REDUCED CAPACITY (Minimal Distance Inches)	LOAD REDUCTION FACTOR	FULL CAPACITY (Critical Distance Inches)	REDUCED CAPACITY (Minimal Distance Inches)	LOAD REDUCTION FACTOR
Spacing Between Anchors - Tension	3/16	3	1-1/2	0.73	3	1-1/2	1.00
	1/4	4	2	0.66	4	2	0.84
Spacing Between Anchors - Shear	3/16	3	1-1/2	0.83	3	1-1/2	1.00
	1/4	4	2	0.82	4	2	0.81
Edge Distance - Tension	3/16	1-7/8	1	0.71	3	2	0.91
	1/4	2-1/2	1-1/4	0.78	4	2	0.88
Edge Distance - Shear	3/16	2-1/4	1-1.8	0.70	3	2	0.93
	1/4	3	1-1/2	0.59	4	2	0.80

For SI: 1 inch = 25.4 mm

PERFORMANCE TABLE												
Tapcon® Anchors			Ultimate Tension and Shear Values (Lbs/kN) in Concrete									
ANCHOR DIA. In. (mm)	MIN. DEPTH OF EMBEDMENT In. (mm)		f <sub>c</sub> = 2000 PSI (13.8 MPa)			f <sub>c</sub> = 3000 PSI (20.7 MPa)			f <sub>c</sub> = 4000 PSI (27.6 MPa)		f <sub>c</sub> = 5000 PSI (34.5 MPa)	
			TENSION Lbs. (kN)	SHEAR Lbs. (kN)	TENSION Lbs. (kN)	SHEAR Lbs. (kN)	TENSION Lbs. (kN)	SHEAR Lbs. (kN)	TENSION Lbs. (kN)	SHEAR Lbs. (kN)		
3/16 (4.8)	1	(25.4)	600 (2.7)	720 (3.2)	625 (2.8)	720 (3.2)	650 (2.9)	720 (3.2)	800 (3.6)	860 (3.8)		
	1-1/4	(31.8)	845 (3.7)	720 (3.2)	858 (3.8)	720 (3.2)	870 (3.9)	720 (3.2)	1,010 (4.5)	860 (3.8)		
	1-1/2	(38.1)	1,090 (4.8)	860 (3.8)	1,090 (4.8)	860 (3.8)	1,090 (4.8)	860 (3.8)	1,220 (5.4)	860 (3.8)		
	1-3/4	(44.5)	1,450 (6.5)	870 (3.9)	1,455 (6.5)	870 (3.9)	1,460 (6.5)	990 (4.4)	1,730 (7.7)	990 (4.4)		
1/4 (6.4)	1	(25.4)	750 (3.3)	900 (4.0)	775 (3.4)	900 (4.0)	800 (3.6)	1,360 (6.1)	950 (4.2)	1,440 (6.4)		
	1-1/4	(31.8)	1,050 (4.7)	900 (4.0)	1,160 (5.2)	900 (4.0)	1,270 (5.6)	1,360 (6.1)	1,515 (6.7)	1,440 (6.4)		
	1-1/2	(38.1)	1,380 (6.1)	1,200 (5.3)	1,600 (7.2)	1,200 (5.3)	1,820 (8.1)	1,380 (6.1)	2,170 (9.7)	1,670 (7.4)		
	1-3/4	(44.5)	2,020 (9.0)	1,670 (7.4)	2,200 (9.8)	1,670 (7.4)	2,380 (10.6)	1,670 (7.4)	2,770 (12.3)	1,670 (7.4)		

Safe working loads for single installation under static loading should not exceed 25% of the ultimate load capacity.



**LDT**

(3/8" & 1/2")

(5/8" & 3/4")

Sawtooth™

3/8" and 1/2" are available with *EnvireX* coating

**Uses standard drill bits—no special drill bits to purchase or lose!**

## ADVANTAGES

### SAVE TIME

#### EASILY INSTALLED

- Installs in less than half the time of wedge anchors or adhesive anchors
- Simply drill a pilot hole and drive the LDT anchor by hand or impact

#### EASILY REMOVED

- No torching or grinding required to remove anchors

### SAVE MONEY

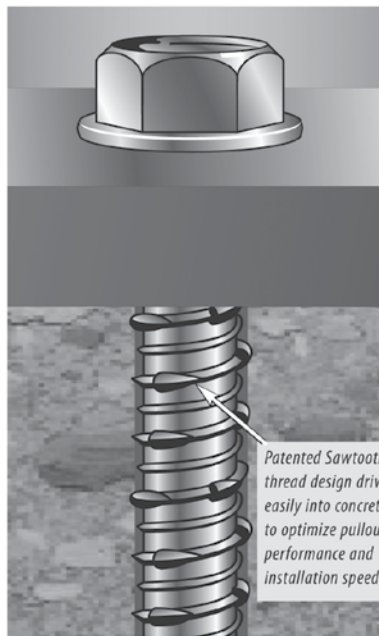
#### LOWER DRILL BIT COSTS

- Use standard ANSI bits instead of proprietary bits
- Single piece design, no nut and washer to assemble

#### USE STANDARD ANSI BITS

- No special proprietary bits to purchase or lose
- Reduce chances for anchor failure due to incorrect bit usage

## Sawtooth Threads™, now available on 5/8" and 3/4"



### IMPROVED PERFORMANCE IN LARGE DIAMETER HOLES

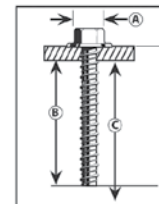
- Superior performance to wedge anchor
- Higher loads in shallow embedments
- Closer edge/spacing distance than mechanical anchors
- More threads for better thread engagement and higher pullout resistance
- Durable induction-hardened tip

### EASY INSTALLATION

- Easy 2-step installation, simply drill a pilot hole and drive
- Installs in less than half the time of a wedge anchor
- Efficient thread cutting
- Use standard drill bit sizes
- Single piece design—no nut and washer assembly
- Easily removed

### Selection Chart

LDT Size	ANSI Standard Drill Bit Diameter	Anchor Head (Socket Size) Diameter	Washer Diameter	Minimum Embedment	Hole Depth	USE IN		
						Concrete	CMU	
							Hollow	Grout-filled
LDT 3/8"	5/16"	9/16"	13/16"	1-1/2"	2-1/2"	YES	YES	YES
LDT 1/2"	7/16"	3/4"	1"	2-1/2"	3-1/2"	YES	NO	YES
LDT 5/8"	1/2"	13/16"	1-3/16"	2-3/4"	3-3/4"	YES	NO	YES
LDT 3/4"	5/8"	15/16"	1-5/16"	3-1/4"	4-1/4"	YES	NO	YES



© See catalog for effective lengths and length indication code.

LDT 3/8" and 1/2" are available with *EnvireX* coating

1,000 hours salt spray ASTM B117. Approved for use in ACQ and MCQ lumber\*

\*Excessive content of copper in the ACQ and MCQ lumber may affect the anchor finish.

## APPROVALS/LISTINGS

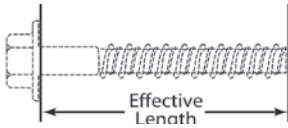
Miami-Dade County – #04-1025.08

Florida Building Code



# LARGE DIAMETER TAPCON (LDT) Technical Data

Visit our website for the most up-to-date product and technical information!



SELECTION CHART								
LDT Carbon and Stainless Steel		Carbon Steel with Zinc Plating: Meets ASTM B695 & B633 specifications for zinc plating of 5um = .0002" thickness. This coating is well suited for non-corrosive interior environments. Carbon Steel with EnvireX Coating: Provides additional corrosion protection for outdoor applications.						
PART NUMBER	PART NUMBER FOR CARBON STEEL ENVIREX COATING	PART NUMBER FOR 410 STAINLESS STEEL	ANCHOR DIA. In. (mm)	DRILL BIT DIA. In. (mm)	EFFECTIVE LENGTH In. (mm) (See detail on left)	MAX. THICKNESS OF MATERIALS TO BE FASTENED In. (mm)	QTY/WT PER BOX lbs.	QTY/WT PER MASTER CARTON lbs.
LDT-3816	---	SLDT-3816	3/8 (9.5)	5/16 (7.9)	1-3/4 (44.5)	1/4 (6.4)	50 / 3.0	400 / 24.0
LDT-3824	---	SLDT-3824	3/8 (9.5)	5/16 (7.9)	2-1/2 (63.5)	1 (25.4)	50 / 4.5	400 / 34.0
LDT-3830	LDT-3830X	SLDT-3830	3/8 (9.5)	5/16 (7.9)	3 (76.2)	1-1/2 (38.1)	50 / 5.0	400 / 40.0
LDT-3840	LDT-3840X	SLDT-3840	3/8 (9.5)	5/16 (7.9)	4 (101.6)	2-1/2 (63.5)	50 / 6.5	400 / 52.0
LDT-3850	LDT-3850X	SLDT-3850	3/8 (9.5)	5/16 (7.9)	5 (127.0)	3-1/2 (89.0)	40 / 7.5	320 / 60.0
LDT-1230	LDT-1230X	SLDT-1230	1/2 (12.7)	7/16 (11.1)	3 (76.2)	1 (25.4)	25 / 4.5	150 / 27.0
LDT-1240	LDT-1240X	SLDT-1240	1/2 (12.7)	7/16 (11.1)	4 (101.6)	2 (50.8)	25 / 6.0	150 / 36.6
LDT-1250	LDT-1250X	SLDT-1250	1/2 (12.7)	7/16 (11.1)	5 (127.0)	3 (76.2)	25 / 7.6	150 / 45.6
LDT-1260	---	---	1/2 (12.7)	7/16 (11.1)	6 (152.4)	4 (101.6)	20 / 9.0	120 / 54.0
LDT-5830	---	---	5/8 (15.9)	1/2 (12.7)	3 (76.2)	1/4 (6.4)	10 / 3.5	100 / 35.0
LDT-5840	---	---	5/8 (15.9)	1/2 (12.7)	4 (101.6)	1-1/4 (31.8)	10 / 4.0	100 / 40.0
LDT-5850	---	---	5/8 (15.9)	1/2 (12.7)	5 (127.0)	2-1/4 (57.1)	10 / 4.7	100 / 47.0
LDT-5860	---	---	5/8 (15.9)	1/2 (12.7)	6 (152.4)	3-1/4 (82.6)	10 / 5.4	50 / 27.0
LDT-3444	---	---	3/4 (19.1)	5/8 (15.9)	4-1/2 (114.3)	1-1/4 (31.8)	10 / 7.4	50 / 37.0
LDT-3454	---	---	3/4 (19.1)	5/8 (15.9)	5-1/2 (139.7)	2-1/4 (57.1)	10 / 8.1	50 / 40.5
LDT-3462	---	---	3/4 (19.1)	5/8 (15.9)	6-1/4 (158.8)	3 (76.2)	10 / 9.1	30 / 27.3

\* The stainless steel LDT's will be gold in color in order to differentiate them from the carbon steel anchors which are silver.

DESIGN GUIDE	
<b>For proper selection of anchor diameters based upon pre-drilled holes through base plates and fixtures to be fastened.</b>	
HOLE DIAMETER THROUGH FIXTURE In. (mm)	SUGGESTED LDT DIAMETER In. (mm)
7/16 (11.1)	3/8 (9.5)
1/2 (12.7)	3/8 (9.5)
9/16 (14.3)	1/2 (12.7)
5/8 (15.9)	1/2 (12.7)
3/4 (19.1)	5/8 (15.9)
7/8 (22.2)	3/4 (19.1)

LENGTH INDICATION CODE*	
CODE	LENGTH OF ANCHOR In. (mm)
A	1-1/2 < 2 (38.1 < 50.8)
B	2 < 2-1/2 (50.8 < 63.5)
C	2-1/2 < 3 (63.5 < 76.2)
D	3 < 3-1/2 (76.2 < 88.9)
E	3-1/2 < 4 (88.9 < 101.6)
F	4 < 4-1/2 (101.6 < 114.3)
G	4-1/2 < 5 (114.3 < 127.0)
H	5 < 5-1/2 (127.0 < 139.7)
I	5-1/2 < 6 (139.7 < 152.4)
J	6 < 6-1/2 (152.4 < 165.1)

\* Located on top of anchor for easy inspection.



# LARGE DIAMETER TAPCON (LDT) Technical Data

PERFORMANCE TABLE							
LDT Anchors		Ultimate Tension and Shear Values (Lbs/kN) in Concrete					
ANCHOR DIA. In. (mm)	EMBEDMENT DEPTH In. (mm)	f <sub>c</sub> = 2000 PSI (13.8 MPa)		f <sub>c</sub> = 3000 PSI (20.7 MPa)		f <sub>c</sub> = 4000 PSI (27.6 MPa)	
		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)
1/2 (12.7)	2 (50.8)	3,580 (15.9)	5,644 (25.1)	3,908 (17.4)	6,512 (29.0)	4,236 (18.8)	7,380 (32.8)
	3-1/2 (88.9)	7,252 (32.3)	6,436 (28.6)	8,044 (35.8)	7,288 (32.4)	8,836 (39.3)	8,140 (36.2)
	4-1/2 (114.3)	10,176 (45.3)	7,384 (32.8)	10,332 (46.0)	7,968 (35.4)	10,488 (46.7)	8,552 (38.0)
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)
	4-1/2 (114.3)	11,568 (51.5)	12,316 (54.8)	13,432 (59.8)	13,580 (60.4)	16,892 (75.1)	14,840 (66.0)
3/4 (19.1)	3-1/4 (82.6)	6,876 (30.6)	7,140 (31.8)	9,756 (43.4)	10,728 (47.7)	12,636 (56.2)	14,316 (63.6)
	4-1/2 (114.3)	10,304 (45.8)	13,120 (58.4)	14,424 (64.2)	16,868 (75.0)	18,540 (82.5)	20,612 (91.7)
	5-1/2 (139.7)	13,048 (58.0)	17,908 (79.7)	18,156 (80.8)	21,718 (96.9)	23,268 (103.5)	25,652 (114.1)



PERFORMANCE TABLE					
LDT Anchors		Ultimate Tension Load (Lbs/kN) in Concrete Block (anchors should be installed by hand in hollow block)			
ANCHOR DIA. In. (mm)	EMBEDMENT DEPTH In. (mm)	HOLLOW CONCRETE BLOCK		GROUT FILLED CONCRETE BLOCK	
		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)
1/2 (12.7)	2-1/2 (63.5)	---	---	5,924 (26.4)	6,680 (29.7)

PERFORMANCE TABLE					
LDT Anchors			Anchoring Overhead in 3000 PSI Lightweight LDT Anchors Concrete On Metal Deck		
ANCHOR	DRILL HOLE DIAMETER In. (mm)	EMBEDMENT DEPTH In. (mm)	3000PSI (20.7 MPa) CONCRETE		
			ULTIMATE TENSION LOAD Lbs. (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)

PERFORMANCE TABLE					
LDT Anchors		Recommended Edge & Spacing Requirements for Tension Loads* Carbon and Stainless 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)	SPACING DISTANCE REQUIRED TO OBTAIN MAX. WORKING LOAD In. (mm)	LOAD FACTOR APPLIED AT MIN. SPACING DISTANCE 3 Inches (76mm)
2 (50.8)	2 (50.8)	70%	6 (152.4)	44%	
2-1/2 (63.5)	3 (76.2)	70%	6 (152.4)	44%	
3-1/2 (88.9)	4 (101.6)	70%	6 (152.4)	44%	
1/2 (12.7)	2 (50.8)	2-1/4 (57.2)	65%	8 (203.2)	27%
	3-1/2 (88.9)	3 (76.2)	65%	8 (203.2)	27%
	4-1/2 (114.3)	4 (101.6)	65%	8 (203.2)	27%

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

For 5/8" and 3/4" LDT Anchors, the critical edge distance for these anchors is 10 times the anchor diameter. The edge distance of these anchors may be reduced to 1-3/4" provided a 0.65 load factor is used for tension loads, a 0.15 load factor is used for shear loads applied perpendicular to the edge, or a 0.60 load factor is used for shear loads applied parallel to the edge. Linear interpolation may be used for intermediate edge distances.

**Wedge-Bolt®** Screw Anchor  
Carbon Steel OT and 410 Stainless Steel

Carbon Steel Wedge-Bolt OT (ANSI)

410 Stainless Steel Wedge-Bolt (Blue Tip)

**HEAD STYLES**  
Hex Head

**ANCHOR MATERIALS**  
Zinc Plated Carbon Steel  
Type 410 Stainless Steel

**ANCHOR SIZE RANGE (TYP.)**  
1/4" through 3/4" diameter

## Hex Head Anchors

Size	Std. Box	Std. Ctn.
3/16" x 1-1/4"	100	500
3/16" x 1-3/4"	100	500
3/16" x 2-1/4"	100	500
3/16" x 2-3/4"	100	500
1/4" x 1-1/4"	100	500
1/4" x 1-3/4"	100	500
1/4" x 2-1/4"	100	500
1/4" x 3"	100	500
3/8" x 1-3/4"	50	250
3/8" x 2-1/2"	50	250
3/8" x 3"	50	250
3/8" x 4"	50	250
1/2" x 2"	50	200
1/2" x 2-1/2"	50	200
1/2" x 3"	50	150
1/2" x 4"	50	150
1/2" x 5"	50	100
1/2" x 6"	25	75
5/8" x 3"	25	100
5/8" x 4"	25	100
5/8" x 5"	25	75
5/8" x 6"	25	75
3/4" x 3"	20	60
3/4" x 4"	20	60
3/4" x 5"	20	60
3/4" x 6"	20	60
3/4" x 8"	10	40

\* The published length is measured from below the hex washer head to the end of the anchor.



PERFORMANCE DATA							
Ultimate Load Capacities for Wedge-Bolt OT installed in Normal-Weight Concrete at Critical Spacing and Edge Distances <sup>1,2,3,4</sup>							
Nominal Anchor Diameter <i>d</i> in. (mm)	Minimum Embedment Depth <i>h<sub>v</sub></i> in. (mm)	Minimum Concrete Compressive Strength ( <i>f<sub>c</sub></i> )					
		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 lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)
1/4 (6.4)	1 (25.4)	720 (3.2)	920 (4.0)	1,340 (6.0)	1,880 (8.3)	1,660 (7.5)	2,160 (9.6)
	1 1/2 (38.1)	1,440 (6.5)	2,000 (8.8)	2,140 (9.6)	2,080 (9.2)	2,480 (11.2)	2,260 (10.0)
	2 (50.8)	2,400 (10.8)	2,000 (8.8)	3,940 (17.7)	2,080 (9.2)	4,980 (22.4)	2,680 (11.9)
	2 1/2 (63.5)	3,520 (15.8)	2,000 (8.8)	4,660 (21.0)	2,080 (9.2)	5,260 (23.7)	2,680 (11.9)
3/8 (9.5)	1 1/2 (38.1)	1,900 (8.6)	2,760 (12.2)	2,520 (11.3)	3,440 (15.3)	3,040 (13.7)	5,600 (24.9)
	2 (50.8)	3,000 (13.5)	3,100 (13.7)	3,920 (17.6)	3,440 (15.3)	5,200 (23.4)	5,600 (24.9)
	2 1/2 (63.5)	4,100 (18.5)	3,440 (15.3)	5,320 (23.9)	3,440 (15.3)	7,340 (33.0)	5,600 (24.9)
	3 (76.2)	5,800 (26.1)	4,120 (18.3)	7,740 (34.8)	4,320 (19.2)	9,900 (44.6)	5,600 (24.9)
1/2 (12.7)	3 1/2 (88.9)	7,500 (33.8)	4,820 (21.4)	10,140 (45.6)	5,200 (23.1)	12,440 (56.0)	5,600 (24.9)
	2 (50.8)	2,860 (12.9)	4,960 (22.0)	3,940 (17.7)	5,680 (25.2)	4,780 (21.5)	7,600 (33.8)
	2 1/2 (63.5)	4,100 (18.5)	5,800 (25.8)	5,200 (23.4)	6,480 (28.8)	6,480 (29.2)	7,960 (35.4)
	3 (76.2)	5,920 (26.6)	6,200 (27.5)	7,800 (35.1)	7,240 (32.2)	9,380 (42.2)	7,960 (35.4)
5/8 (15.9)	3 1/2 (88.9)	6,060 (27.3)	8,020 (35.6)	8,480 (38.2)	8,160 (36.2)	11,900 (53.6)	8,600 (38.2)
	4 (101.6)	7,560 (34.0)	8,660 (39.0)	12,620 (56.8)	9,080 (40.9)	12,620 (56.8)	9,600 (43.2)
	2 1/2 (63.5)	3,420 (15.4)	7,200 (32.4)	4,720 (21.2)	10,240 (45.5)	6,900 (31.1)	10,180 (45.2)
	3 (76.2)	4,560 (20.5)	7,920 (35.2)	7,380 (33.2)	10,240 (45.5)	8,960 (40.3)	11,400 (50.7)
	3 1/2 (88.9)	5,720 (25.7)	8,640 (38.4)	10,040 (45.2)	10,240 (45.5)	11,040 (49.7)	11,400 (50.7)
3/4 (19.1)	4 (101.6)	8,240 (37.1)	9,540 (42.4)	12,760 (57.4)	11,140 (49.5)	14,320 (64.4)	12,020 (53.7)
	4 1/2 (114.3)	10,780 (48.5)	10,460 (46.5)	15,500 (69.9)	12,040 (53.5)	17,600 (79.2)	12,760 (56.7)
	5 (127.0)	13,300 (59.9)	11,360 (50.5)	18,220 (82.0)	12,960 (57.6)	20,860 (93.9)	13,480 (59.9)
	3 (76.2)	4,320 (19.4)	9,480 (42.1)	6,480 (29.2)	12,120 (53.9)	8,700 (39.2)	14,800 (65.8)
	3 1/2 (88.9)	5,720 (25.7)	10,460 (46.5)	9,320 (41.9)	14,820 (65.9)	11,360 (51.1)	16,400 (72.9)
	4 (101.6)	7,120 (32.0)	11,460 (50.9)	12,140 (54.6)	17,520 (77.9)	14,020 (63.1)	18,000 (80.0)

1. Tabulated load values are applicable for carbon steel anchors.  
2. The values listed above are ultimate load capacities which should be reduced by a minimum safety factor of 4.0 or greater to determine the allowable working load. Consideration of safety factors of 10 or higher may be necessary depending on the application, such as life safety or overhead.  
3. Critical and minimum spacing and edge distances as well as reduction factors for intermediate spacing and edge distances are listed in the Design Criteria section.  
4. Linear interpolation may be used to determine ultimate loads for intermediate embedments and compressive strengths.