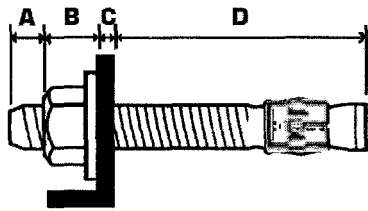


WEDGE ANCHOR SPECIFICATIONS

LENGTH IDENTIFICATION CODE

		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Anchor Size	From:	1-1/2"	2"	2-1/2"	3"	3-1/2"	4"	4-1/2"	5"	5-1/2"	6"	6-1/2"	7"	7-1/2"	8"	8-1/2"	9"	9-1/2"	10"	11"	12"	13"	14"	15"	16"	17"	18"
	Up to: (not included)	2"	2-1/2"	3"	3-1/2"	4"	4-1/2"	5"	5-1/2"	6"	6-1/2"	7"	7-1/2"	8"	8-1/2"	9"	9-1/2"	10"	11"	12"	13"	14"	15"	16"	17"	18"	19"

SELECTION & INSTALLATION

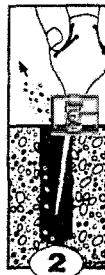


Choosing Proper Anchor Length:

- A.** 3 turns of nut (approx. 1/2 bolt dia.) +
B. Nut & washer thickness (approx. 1 bolt dia.) +
C. Fixture thickness +
D. Minimum embedment (min. 4-1/2 bolt dia.)
 = **Minimum Anchor Length**

If minimum anchor length falls between 2 sizes, use longer size.

The **maximum recommended anchor embedment** should be 80% of the base material thickness. If a concrete slab is 10" thick, an 8" depth would be the maximum recommended anchor embedment.



Installation Steps:

1 Use a carbide bit (ANSI B94, 12) the same size as the bolt diameter. Drill hole deeper than bolt embedment (min. 4.5 dia.). Do not use core bits. Maintain accurate hole size

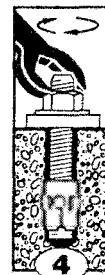
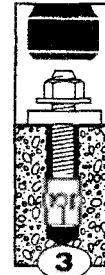
2 Clean hole of debris.

3 Add washer and thread nut flush with top of bolt. Drive bolt into hole through item to be fastened.

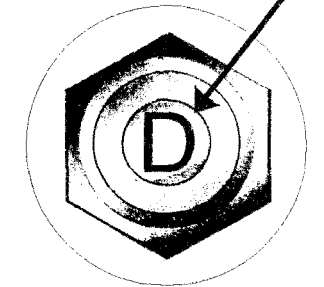
4 To set, tighten nut 3 to 4 full turns or consult chart for guide installation torque.

NOTE: Using in concrete cured less than 28 days will greatly reduce anchor strength.

WARNING: WEAR SAFETY GOGGLES



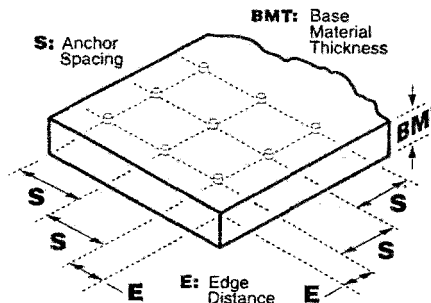
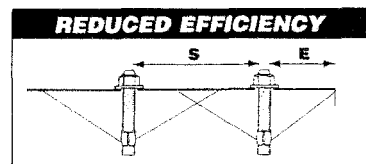
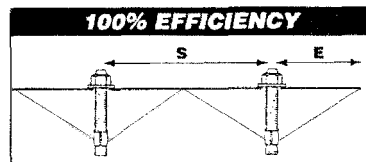
Length Identification
Stamped on bolt head



POSITIONING FOR MAXIMUM EFFICIENCY

ANCHOR SPACING (Center to Center Spacing)

To obtain the maximum tension and shear load, a spacing, S = 12 anchor diameters (12d) should be used. When using the minimum recommended anchor spacing, S = 6 anchor diameters (6d) the load should be reduced by 50%. The following table lists the load reduction factor for each anchor diameter (d), based on the center to center anchor spacing.



EDGE DISTANCE (Center to Edge Spacing)

To obtain the maximum tension and shear load, an edge distance, E = 12 anchor diameters (12d) should be used. When using the minimum recommended edge distance, E = 6 anchor diameters (6d), the tension load should be reduced by 50% and the shear load by 20%. The following table lists the load reduction factor for each anchor diameter (d) based on the anchor center to edge distance.

ANCHOR SPACING (S) in inches

dia = d	12d	11d	10d	9d	8d	7d	6d
1/4"	3"	2-3/4"	2-1/2"	2-1/4"	2"	1-3/4"	1-1/2"
5/16"	3-3/4"	3-3/8"	3-1/8"	2-7/8"	2-1/2"	2-1/4"	1-7/8"
3/8"	4-1/2"	4-1/8"	3-3/4"	3-3/8"	3"	2-5/8"	2-1/4"
1/2"	6"	5-1/2"	5"	4-1/2"	4"	3-1/2"	3"
5/8"	7-1/2"	6-7/8"	6-1/4"	5-5/8"	5"	4-3/8"	3-3/4"
3/4"	9"	8-1/4"	7-1/2"	6-3/4"	6"	5-1/4"	4-1/2"
7/8"	10-1/2"	9-5/8"	8-3/4"	7-7/8"	7"	6-1/8"	5-1/4"
1"	12"	11"	10"	9"	8"	7"	6"
1-1/4"	15"	13-3/4"	12-1/2"	11-1/4"	10"	8-3/4"	7-1/2"

REDUCTION FACTOR - ANCHOR CAPACITY

Tension/Shear	1.00	0.91	0.83	0.75	0.65	0.55	0.5
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The minimum recommended base material thickness when using Wedge Anchors is 125% of the embedment to be used.

EDGE DISTANCE (E) in inches

dia = d	12d	11d	10d	9d	8d	7d	6d
1/4"	3"	2-3/4"	2-1/2"	2-1/4"	2"	1-3/4"	1-1/2"
5/16"	3-3/4"	3-3/8"	3-1/8"	2-7/8"	2-1/2"	2-1/4"	1-7/8"
3/8"	4-1/2"	4-1/8"	3-3/4"	3-3/8"	3"	2-5/8"	2-1/4"
1/2"	6"	5-1/2"	5"	4-1/2"	4"	3-1/2"	3"
5/8"	7-1/2"	6-7/8"	6-1/4"	5-5/8"	5"	4-3/8"	3-3/4"
3/4"	9"	8-1/4"	7-1/2"	6-3/4"	6"	5-1/4"	4-1/2"
7/8"	10-1/2"	9-5/8"	8-3/4"	7-7/8"	7"	6-1/8"	5-1/4"
1"	12"	11"	10"	9"	8"	7"	6"
1-1/4"	15"	13-3/4"	12-1/2"	11-1/4"	10"	8-3/4"	7-1/2"

REDUCTION FACTOR - ANCHOR CAPACITY

Tension	1.00	0.91	0.83	0.75	0.65	0.55	0.5
Shear	1.00	0.97	0.94	0.91	0.89	0.83	0.8