



**BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION**

**MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908**

NOTICE OF ACCEPTANCE (NOA)

**Powers Fasteners, Inc.
2 Powers Square
New Rochelle, NY 10801**

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone.

DESCRIPTION: Wedge-Bolt Anchor.

APPROVAL DOCUMENT: Drawing No. 06-387, Sheets 1 of 1, titled "Wedge-Bolt Anchor" dated 05/18/06 with no revisions, prepared by Thornton Tomasetti Group signed and sealed by J. W. Knezevich, PE, bearing the Miami-Dade County Product Control Renewal stamp with the Notice of Acceptance (NOA) number and expiration date by the Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: None

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved or MDCPCA", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA renews NOA 00-0229.04 and consists of this page, evidence page as well as approval document mentioned above.

The submitted documentation was reviewed by **Candido F. Font, P.E.**



[Handwritten signature]
07/13/06

**NOA No. 05-0701.10
Expiration Date: May 1, 2011
Approval Date: July 13, 2006**

Powers Fasteners, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. **06-387**, Sheets 1 of 1, titled "Wedge-Bolt Anchor" dated 05/18/06 with no revision, prepared by Thornton Tomasetti Group signed and sealed by J. W. Knezevich PE.

B. TESTS

Laboratory	Test Report	Date	Signature
1. CEL OR72-0324	ASTM E488	03/24/00	L. W. Mattis, PE.
2. CEL OR72	ASTM E488	01/21/00	L. W. Mattis, PE.
3. CEL OR72-0516	ASTM E488	05/16/00	L. W. Mattis, PE.
4. ARL 30353	PA 114	10/10/02	C. A. Hamon, PE.
5. CEL OR72-4816	ASTM E488	08/16/04	L. W. Mattis PE.

C. CALCULATION

None

D. QUALITY ASSURANCE.

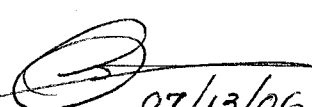
1. Building Code Compliance Office.

D. MATERIAL CERTIFICATIONS

1. ES Report # 1678 pages 1 through 13 of 13 prepared by ICC Evaluation Service, Inc on 12/0104 with Regional Office in Whittier CA 90601.

E. STATEMENTS

- 1 Code compliance letter issued by Thornton Tomasetti Group, on 05/18/06 signed and sealed by J. W. Knezevich PE.
- 2 No interest letter prepared by Thornton Tomasetti Group on 05/18/06 signed and sealed by J. W. Knezevich PE.


07/13/06
Candido F. Font, P.E.
Senior, Product Control Division
NOA No. 05-0701.10
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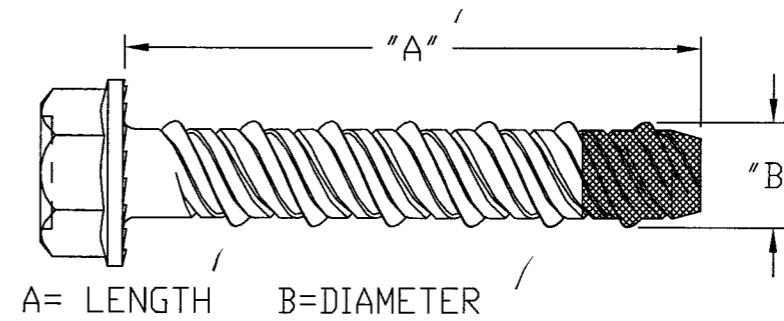
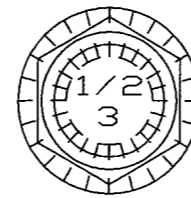
PRODUCT DESCRIPTION:

THE WEDGE-BOLT ANCHOR IS A UNIVERSAL HIGH STRENGTH CARBON STEEL ANCHOR DESIGNED FOR USE IN STONE AGGREGATE CONCRETE. IT IS A VERSATILE, HIGH PERFORMANCE ANCHOR THAT IS REMOVABLE. IT IS AVAILABLE WITH A FINISHED HEX WASHER HEAD IN 1/4", 3/8", 1/2", 5/8" AND 3/4" DIAMETERS. THE WEDGE-BOLT ANCHOR IS A ONE-PIECE UNIT FORMED FROM THROUGH HARDENED STEEL WITH A FINISHED HEX HEAD FORMED WITH AN INTEGRAL WASHER, A DUAL LEAD THREAD, AND A CHAMFERED TIP. THE CARBON STEEL VERSION OF THE ANCHOR IS ZINC-PLATED FOR CORROSION RESISTANCE WITH A SUPPLEMENTAL CHROMATE FINISH IN ACCORDANCE WITH ASTM B 633.

GENERAL NOTES:

1. THESE APPROVAL DOCUMENTS REPRESENT A POWER WEDGE-BOLT ANCHOR ANALYZED WITH THE PROVISION SET FOR THE ISSUANCE OF A NOTICE OF ACCEPTANCE (NOA) BY MIAMI-DADE COUNTY PRODUCT CONTROL DIVISION FOR THE HIGH VELOCITY HURRICANE ZONE (HVHZ) OF THE FLORIDA BUILDING CODE 2004 WITH 2005 SUPPLEMENT.
2. ANCHOR INSTALLATION SHALL BE MADE IN ACCORDANCE WITH THE MANUFACTURE'S PUBLISHED INSTALLATION INSTRUCTIONS AND THIS MIAMI-DADE COUNTY BCCO NOTICE OF ACCEPTANCE. THE WEDGE-BOLT ANCHOR HOLE MUST BE DRILLED USING A SPECIAL MATCHED TOLERANCE WEDGE-BIT. TO INSTALL THE ANCHOR, PRESS THE CHAMFERED TIP OF THE ANCHOR THROUGH THE FIXTURE INTO THE HOLE, AND TIGHTEN IT USING A SOCKET WRENCH OR IMPACT WRENCH. AS THE ANCHOR IS TIGHTENED INTO THE HOLE, THE REVERSE PARABOLIC DUAL LEAD THREADS UNDERCUT THE WALL OF THE HOLE. THE DUAL LEAD THREAD IS FORMED WITH A HIGH HELIX ANGLE FOR FAST ENTRY AND ADVANCING. A SPECIALLY DESIGNED RELIEF THREAD FORMED IN THE BODY OF THE ANCHOR ALLOWS EASY TIGHTENING. FOR EASE OF IDENTIFICATION AFTER INSTALLATION, THE HEAD OF THE ANCHOR IS STAMPED WITH BOTH THE DIAMETER AND LENGTH. ALLOWABLE TENSION AND SHEAR VALUES ARE NOTED IN TABLE 1.
3. NO INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS PRODUCT.
4. THESE APPROVAL DOCUMENTS ARE GENERIC AND DO NOT INCLUDE INFORMATION FOR SITE-SPECIFIC APPLICATION.
5. USE OF THESE APPROVAL DOCUMENTS SHALL COMPLY WITH CHAPTER 61G15-23 OF THE FLORIDA ADMINISTRATIVE CODE.
6. ANY MODIFICATIONS OR ADDITIONS TO THESE APPROVAL DOCUMENTS WILL VOID THE APPROVAL DOCUMENTS.

WEDGE-BOLT ANCHOR



Anchor Size (inches)	Embedment Depth (inches)	2000 psi Concrete		3000 psi Concrete		4000 psi Concrete		5000 psi Concrete		6000 psi Concrete	
		Tension (pounds)	Shear (pounds)	Tension (pounds)	Shear (pounds)	Tension (pounds)	Shear (pounds)	Tension (pounds)	Shear (pounds)	Tension (pounds)	Shear (pounds)
1/4	1	180	260	260	390	335	520	375	560	415	600
	1-1/2	360	550	450	550	535	550	580	590	620	625
	2	600	550	795	550	985	550	1,115	640	1,245	730
	2-1/2	880	550	1,025	550	1,165	550	1,240	640	1,315	730
3/8	1-1/2	475	845	555	1,010	630	1,170	695	1,440	760	1,710
	2	750	1,110	865	1,190	980	1,270	1,140	1,490	1,300	1,710
	2-1/2	1,025	1,370	1,180	1,370	1,330	1,370	1,585	1,540	1,835	1,710
	3	1,450	1,425	1,695	1,455	1,935	1,480	2,205	1,595	2,475	1,710
1/2	3-1/2	1,875	1,475	2,205	1,535	2,535	1,590	2,825	1,650	3,110	1,710
	2	715	1,430	850	1,570	985	1,705	1,090	1,945	1,195	2,185
	2-1/2	1,025	1,670	1,165	1,775	1,300	1,875	1,460	2,075	1,620	2,270
	3	1,480	1,790	1,715	1,945	1,950	2,095	2,150	2,185	2,345	2,270
5/8	3-1/2	1,515	2,165	1,820	2,220	2,120	2,270	2,550	2,335	2,975	2,400
	4	1,890	2,165	2,525	2,220	3,155	2,270	3,155	2,335	3,155	2,400
	2-1/2	855	1,800	1,020	2,255	1,180	2,705	1,455	3,030	1,725	3,350
	3	1,140	2,325	1,495	2,690	1,845	3,055	2,045	3,305	2,240	3,550
3/4	4	2,060	3,145	2,625	3,420	3,190	3,690	3,385	3,835	3,580	3,980
	5	3,325	3,750	3,940	4,010	4,555	4,270	4,885	4,355	5,215	4,440
	3	1,080	3,005	1,350	3,420	1,620	3,835	1,900	4,265	2,175	4,695
	4	1,780	3,630	2,410	4,590	3,035	5,550	3,270	5,630	3,505	5,705
3/4	5	2,835	4,690	3,295	5,400	3,755	6,110	4,305	6,150	4,850	6,190
	6	3,885	5,745	4,180	6,210	4,475	6,670	5,355	6,670	6,190	6,670

	DISTANCE FOR FULL ANCHOR CAPACITY (Critical Distance) ¹	DISTANCE FOR REDUCED ANCHOR CAPACITY (Minimum Distance) ²	REDUCTION FACTOR ³
SPACING BETWEEN ANCHORS - TENSION	12d ✓	4d ✓	0.50 ✓
SPACING BETWEEN ANCHORS - SHEAR	12d ✓	4d ✓	0.75 ✓
EDGE DISTANCE - TENSION	8d ✓	3d ✓	0.70 ✓
EDGE DISTANCE - SHEAR	12d ✓	3d ✓	0.15 ✓

- 1- The listed values are the minimum distances required to obtain the load values listed in Table No. 1. 'd' equals Anchor Diameter. When adjacent anchors are different sizes or embedments, use largest value of 'd'.
- 2- The listed values are the minimum distances at which the anchor can be set, when load values are adjusted appropriately.
- 3- Load values in the tables are multiplied by the reduction factor when anchors are installed at the minimum distance listed. Linear interpolation may be used for spacing or edge distances between the critical and minimum distances. Multiple reduction factors for more than one spacing or edge distance shall be calculated separately and multiplied.

1- Allowable Loads are based on Ultimate Load divided by a 4:1 safety factor.
2- Spacing and edge distance shall be in accordance with Table No. 2.

PRODUCT RENEWED as complying with the Florida Building Code
 Acceptance No. 05-070110
 Expiration Date 05/01/11
 By [Signature]
 Miami-Dade Product Control Division

Thornton-Tomasetti Group
 330 N. Andrews Ave., Suite 450 • Ft. Lauderdale, FL 33301
 Tel. (954) 522-3690 • Fax (954) 522-3691 • COA # 7519
 Website: www.TheTTGroup.com
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WEDGE-BOLT ANCHOR

POWERS FASTENERS
 2 Powers Square
 New Rochelle, NY 10801
 (914) 235-6300
 www.powers.com (914) 235-1913 fax

John W. Knezevich
 Professional Engineer
 FL License No.: PE 0041961

MAY 18 2006

no.	date	by	description

date 05/18/2006
 scale AS NOTED drawn by MCR
 design by JWK checked by VJK
 drawing no. 06-387
 sheet 1 of 1