MIAMI-DADE

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING

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

CONTRACTOR LICENSING SECTION
(305) 375-2527 FAX (305) 375-2558

CONTRACTOR ENFORCEMENT DIVISION
(305) 375-2966 FAX (305) 375-2908

PRODUCT CONTROL DIVISION
(305) 375-2902 FAX (305) 372-6339

PRODUCT CONTROL NOTICE OF ACCEPTANCE

Illinois Tool Works Inc. /Division of Buildex
1349 West Bryn Mawr Avenue
Itasca ,IL 60143

Your application for Notice of Acceptance (NOA) of:
Tapcon Concrete Anchors
under Chapter 8 of the Code of Miami-Dade County governing the use of Alternate Materials and Types of Construction, and completely described herein, has been recommended for acceptance by the Miami-Dade County Building Code Compliance Office (BCCO) under the conditions specified herein.

This NOA shall not be valid after the expiration date stated below. BCCO reserves the right to secure this product or material at any time from a jobsite or manufacturer's plant for quality control testing. If this product or material fails to perform in the approved manner, BCCO may revoke, modify, or suspend the use of such product or material immediately. BCCO reserves the right to revoke this approval, if it is determined by BCCO that this product or material fails to meet the requirements of the South Florida Building Code.

The expense of such testing will be incurred by the manufacturer.

ACCEPTANCE NO.: 01-0124.08
EXPIRES: 02/20/2003

Raul Rodriguez
Chief Product Control Division

THIS IS THE COVERSHEET, SEE ADDITIONAL PAGES FOR SPECIFIC AND GENERAL CONDITIONS
BUILDING CODE & PRODUCT REVIEW COMMITTEE

This application for Product Approval has been reviewed by the BCCO and approved by the Building Code and Product Review Committee to be used in Miami-Dade County, Florida under the conditions set forth above.

Francisco J. Quintana, R.A.
Director
Miami-Dade County
Building Code Compliance Office

APPROVED: 10/04/2001

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Illinois Tool Works, Inc. / Division of Buildex.

ACCEPTANCE NO: 01-0124.08

APPROVED: OCT 0 4 2001

EXPIRES: 02/20/2003

NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS

1. SCOPE

1.1 This revises the Notice of Acceptance No. 00-0118.02 which was issued on 03/31/2000. It approves concrete anchors as described in Section 2 of this Notice of Acceptance, designed to comply with the South Florida Building Code (SFBC), 1994 Edition for Miami-Dade County. For the locations where the actual loads as determined by SFBC Chapter 23, do not exceed the allowable load indicated in the approved drawings.

2. PRODUCT DESCRIPTION

2.1 The **Tapcon Masonry Fasteners** shall be fabricated and used in strict compliance with the following documents: Drawing No. 01-372, titled "Tapcon Masonry Fasteners", prepared by Knezevich & Associates, Inc. dated 06/22/01 sheet 1 of 1, with last revision on 08/23/01, bearing the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade Product Control Division. These documents shall hereinafter be referred to as the approved drawings.

3. LIMITATIONS

3.1 Allowable loads are for 3000 psi Concrete and Concrete blocks .

4. INSTALLATION

4.1 The concrete anchor shall be installed in strict compliance with the installation instructions published by ITW Buildex.

5. LABELING

5.1 Each concrete anchors shall have a mark identifying the manufacturer and each box of anchors shall have a permanent label with the manufacturer's name or logo, city, state and the following statement: "Miami-Dade County Product Control Approved".

6. BUILDING PERMIT

6.1 Application for Building Permit shall be accompanied by copies of the following:

6.1.1 This Notice of Acceptance

6.1.2 Duplicate copies of the approved drawings as identified in Section 2 of this Notice of Acceptance, clearly marked to show the hangers and angles selected for the proposed installation.

6.1.3 Any other document required by the Building Official or the SFBC in order to properly evaluate the installation of these products.

Candido Font, PE, Sr. Product Control Examiner
Product Control Division

Illinois Tool Works, Inc. / Division of Buildex.

ACCEPTANCE NO: 01-0124.08

APPROVED: OCT 0 4 2001

EXPIRES: 02/20/2003

NOTICE OF ACCEPTANCE STANDARD CONDITIONS

1. Renewal of this Acceptance (approval) shall be considered after a renewal application has been filed and the original submitted documentation, including test supporting data, engineering documents, are no older than eight (8) years.

2. Any and all approved products shall be permanently labeled with the manufacturer's name, city, state, and the following statement: "Miami-Dade County Product Control Approved", or as specifically stated in the specific conditions of this Acceptance.

3. Renewals of Acceptance will not be considered if:
   a) There has been a change in the South Florida Building Code affecting the evaluation of this product and the product is not in compliance with the code changes;
   b) The product is no longer the same product (identical) as the one originally approved;
   c) If the Acceptance holder has not complied with all the requirements of this acceptance, including the correct installation of the product;
   d) The engineer who originally prepared, signed and sealed the required documentation initially submitted is no longer practicing the engineering profession.

4. Any revision or change in the materials, use, and/or manufacture of the product or process shall automatically be cause for termination of this Acceptance, unless prior written approval has been requested (through the filing of a revision application with appropriate fee) and granted by this office.

5. Any of the following shall also be grounds for removal of this Acceptance:
   a) Unsatisfactory performance of this product or process.
   b) Misuse of this Acceptance as an endorsement of any product, for sales, advertising or any other purpose.

6. The Notice of Acceptance 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 Notice of Acceptance is displayed, then it shall be done in its entirety.
7. A copy of this Acceptance as well as approved drawings and other documents, where it applies, shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at all time. The engineer need not reseal the copies.

8. Failure to comply with any section of this Acceptance shall be cause for termination and removal of Acceptance.

9. This Notice of Acceptance consists of pages 1, 2 and this last page 3.

Candido Font, PE, Sr. Product Control Examiner
Product Control Division

END OF THIS ACCEPTANCE

Illinois Tool Works, Inc. / Division of Buildex.

ACCEPTANCE NO: 01-0124.08

APPROVED: OCT 0 4 2001

EXPIRES: 02/20/2003

NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS
(For File ONLY. Not part of NOA)

A DRAWINGS:

1. Drawings prepared by Knezevich & Associates, Inc, titled "Tapcon Masonry Fasteners", Drawing No: 01-372, dated 06/22/01, sheet 1 of 1, with last revision on 08/23/01signed and sealed by V. J. Knezevich, PE.

B TEST:

	Test report.	Test Number	Date	Signature.
1.	HETI 00-4160	ASTM E 488	10/25/00	H. M. Medina PE.
2.	HETI 00-4092	ASTM E 488	02/25/00	H. M. Medina PE.
3.	HETI 00-4153	ASTM E 488	10/25/00	H. M. Medina PE.
4.	HETI 00-4072	ASTM E 488	02/25/00	H. M. Medina PE.
5.	HETI 01-5029	ASTM E 488	05/07/01	H. M. Medina PE.
6.	HETI 01-5027	ASTM E 488	05/07/01	H. M. Medina PE.

C CALCULATIONS:

N/A

D MATERIAL CERTIFICATIONS:

1. Test report of compressive test per ASTM C39, No. HETI 01-C109 of Cores from poured Concrete Slab, dated 01/16/2001, prepared by Hurricane Engineering & Testing, Inc., signed and sealed by H. M. Medina PE.
2. Test report of tensile test No. HETI T006 of ¼" x 2 ¼" HWH410 SS Concrete Anchors, dated 03/13/200, prepared by Hurricane Engineering & Testing, Inc., signed and sealed by H. M. Medina PE.
3. Test report of corrosion testing per Protocol PA 114 Appendix E, test No. 25-7654-PS, dated 05/22 & 06/03/96, prepared by Material Testing Services, signed and sealed by J. M. Bridenstine PE.

E STATEMENTS:

1. Letter of code compliance issued by Knezevich & Associates, Inc. on 06/21/2001, signed and sealed by V. J. Knezeich PE.

Candido Font, PE, Sr. Product Control Examiner
Product Control Division

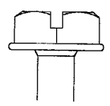
ITW BUILDEX TAPCON

DESCRIPTION

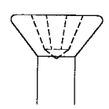
ITW BUILDEX TAPCON ANCHORS ARE MANUFACTURED FROM HEAT TREATED STEEL AND HAVE AN ALTERNATING HIGH LOW THREAD FORM. THESE ANCHORS HAVE BEEN TESTED FOR CORROSION RESISTANCE ACCORDING TO PA114.

TAPCON HEAD STYLES

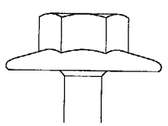
SLOTTED HEX WASHER HEAD



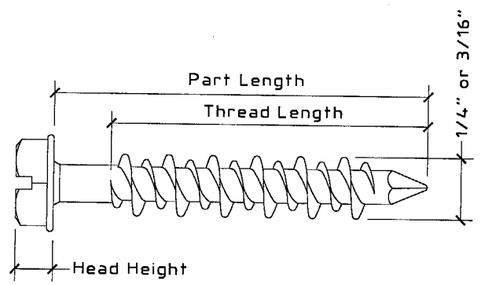
PHILLIPS FLAT HEAD



MAXI-SET HEX WASHER HEAD



SCOTS STAINLESS STEEL HEAD WITH WASHER



410 STAINLESS STEEL HEAD MARKINGS

CARBON STEEL HEAD MARKINGS

NOTES:

1.) ANCHOR INSTALLATION SHALL BE MADE IN ACCORDANCE WITH ITW BUILDEX PUBLISHED INSTALLATION INSTRUCTIONS IN THE PRODUCT & RESOURCE BOOK AND THIS MIAMI-DADE COUNTY, FLORIDA B.C.C.O. NOTICE OF ACCEPTANCE.

2.) CONCRETE WILL CONFORM TO AMERICAN CONCRETE INSTITUTE MANUAL OF CONCRETE PRACTICE ACI 301.

3.) CONCRETE BLOCKS SHALL CONFORM TO ASTM C-90.

4.) REFERENCE HURRICANE ENGINEERING & TESTING INC. TEST REPORTS:

HETI 00 4072 DATED 02/25/00 ✓
HETI 00 4153 DATED 10/25/00 ✓
HETI 00 4160 DATED 10/25/00 ✓
HETI 00 4092 DATED 02/25/00 ✓
HETI 01 5027 DATED 05/07/01 ✓
HETI 01 5029 DATED 05/07/01 ✓

3/16" DIA. TAPCON

1) FOR 3/16" TAPCON, PILOT HOLE DIAMETER SHALL BE 0.171" AND DRILLED 1/4" LONGER THAN THE NECESSARY EMBEDMENT.
2) ALLOWABLE LOADS ARE BASED ON ULTIMATE TEST LOAD DIVIDED BY 4.
3) RECOMMENDED CENTER TO CENTER DISTANCE OF 2-1/4" IS REQUIRED FOR 100% EFFICIENCY AND 1-1/8" FOR 50% EFFICIENCY.

1/4" DIA. TAPCON

1) FOR ALL 1/4" TAPCON, PILOT HOLE DIAMETER SHALL BE 0.200" AND DRILLED 1/4" LONGER THAN THE NECESSARY EMBEDMENT.
2) ALLOWABLE LOADS ARE BASED ON ULTIMATE TEST LOAD DIVIDED BY 4.
3) RECOMMENDED CENTER TO CENTER DISTANCE OF 3" IS REQUIRED FOR 100% EFFICIENCY AND 1-1/2" FOR 50% EFFICIENCY.

3/16" DIAMETER
CARBON STEEL TAPCON
ALLOWABLE LOADS (lbs.)

MIN. 3192 P.S.I. CONCRETE				
	EDGE DISTANCE			
	1-1/8"		2-5/8"	
EMBEDMENT	TENSION	SHEAR	TENSION	SHEAR
1" ✓	128	147	128	157
1-3/4" ✓	354	160	354	229

CONCRETE BLOCK				
	EDGE DISTANCE			
	1-1/8"		2-5/8"	
EMBEDMENT	TENSION	SHEAR	TENSION	SHEAR
1-1/4"	94	112	99	197

1/4" DIAMETER
410 STAINLESS STEEL TAPCON
ALLOWABLE LOADS (lbs.)

MIN. 3192 P.S.I. CONCRETE				
	EDGE DISTANCE			
	1"		2-1/2"	
EMBEDMENT	TENSION	SHEAR	TENSION	SHEAR
1"	166	148	166	275
1-3/4"	466	189	547	472

CONCRETE BLOCK				
	EDGE DISTANCE			
	1"		2-1/2"	
EMBEDMENT	TENSION	SHEAR	TENSION	SHEAR
1-1/4"	148	107	160	279

1/4" DIAMETER
CARBON STEEL TAPCON
ALLOWABLE LOADS (lbs.)

MIN. 3192 P.S.I. CONCRETE				
	EDGE DISTANCE			
	1"		2-1/2"	
EMBEDMENT	TENSION	SHEAR	TENSION	SHEAR
1"	209	115	212	297
1-3/4"	510	115	575	384

CONCRETE BLOCK				
	EDGE DISTANCE			
	1"		2-1/2"	
EMBEDMENT	TENSION	SHEAR	TENSION	SHEAR
1-1/4"	117	94	195	264

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE OCT 04 2001
BY
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 01-0124.08

08/23/01 09:53

KNEZEVICH & ASSOCIATES, INC.
CONSULTING ENGINEERS • PRODUCT TESTING
1260 N. UNIVERSITY DRIVE, SUITE 180 • FORT LAUDERDALE, FL 33322
TEL: (954) 382-2800 • FAX: (954) 382-2989 • FLORIDA COA #3205
WEBSITE: WWW.KNEZEVICH.COM • E-MAIL: KA@KNEZEVICH.COM
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TAPCON MASONRY FASTENERS

ITW Buildex
Buildex Division of Illinois Tool Works Inc.
1349 West Bryn Mawr Avenue Itasca, IL 60143
630.595.3500 FAX 630.595.3549

V.J. KNEZEVICH
PROFESSIONAL ENGINEER
FL License No: PE 0010983

AUG 23 2001

revisions			
no	date	by	description
1	08/23/01	AS	DESCRIPTION NOTE

date 06/22/01
scale AS NOTED | drawn by AV
design by AS | checked by VJK
drawing no. 01-372
sheet 1 of 1