



MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
 11805 SW 26 Street, Room 208
 Miami, Florida 33175-2474
 T (786) 315-2590 F (786) 315-2599
www.miamidade.gov/economy

**DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
 BOARD AND CODE ADMINISTRATION DIVISION
 NOTICE OF ACCEPTANCE (NOA)**

**Elco Construction Products, Div. of Infastech
 1304 Kerr Drive
 Decorah, IA 52101**

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER-Product Control Section 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 Section (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. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section 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: 1/4" Crete-Flex® SS4 Concrete and Masonry Anchors

APPROVAL DOCUMENT: Drawing No. **14-1818**, titled "1/4" Crete-Flex® SS4 Concrete and Masonry Anchors", sheet 1 of 1, dated 04/03/2008, with last revision dated 12/20/2017, prepared by Engineering Express, signed and sealed by Frank L. Bennardo, P.E., bearing the Miami-Dade County Product Control revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: None

LABELING: Each box 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 and revises NOA # 15-0226.09** and consists of this page 1, evidence pages E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by **Carlos M. Utrera, P.E.**



Handwritten signature and date: 04/09/2018

NOA No: 17-1227.18
 Expiration Date: April 14, 2023
 Approval Date: March 08, 2018
 Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's

A. DRAWINGS “Submitted under NOA # 15-0226.09”

1. Drawing No. **14-1818**, titled “1/4” Crete-Flex® SS4 Concrete and Masonry Anchors”, sheet 1 of 1, dated 04/03/2008, with last revision dated 09/29/2014, prepared by Engineering Express, signed and sealed by Frank L. Bennardo, P.E.

B. TESTS “Submitted under NOA # 11-0428.01”

	Test Report No.	Standard	Date	Signature
1.	HETI-08-A262	ASTM E488-96	03/17/08	Candido F. Font, P.E.
2.	HETI-08-A264	ASTM E488-96	03/17/08	Candido F. Font, P.E.
3.	HETI-08-A279	ASTM E488-96	03/18/08	Candido F. Font, P.E.
4.	HETI-08-A281	ASTM E488-96	03/18/08	Candido F. Font, P.E.
5.	HETI-08-T147	ASTM E8-01	08/05/08	Candido F. Font, P.E.
6.	HETI-08-C101B	ASTM C39-03	03/25/08	Candido F. Font, P.E.

“Submitted under NOA # 99-1227.13”

1.	CTC 99-008	ASTM E488	02/14/98	G. Dotzler, P.E.
2.	CTC 98-039	ASTM E488	09/12/98	G. Dotzler, P.E.
3.	HETI 98-3023	ASTM E488	06/18/98	H. M. Medina, P.E.

C. CALCULATIONS

1. None.

D. MATERIAL CERTIFICATIONS

1. None.

E. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER)

F. STATEMENTS “Submitted under NOA # 15-0226.09”

1. Statement letter of code conformance to the 5th edition (2014) FBC issued by Engineering Express, dated 09/29/2014, signed and sealed by Frank L. Bennardo, P.E.

“Submitted under NOA # 12-0126.09”

2. Statement letter of code conformance to 2007 and 2010 FBC, issued by Engineering Express, dated 12/05/2011, signed and sealed by Frank L. Bennardo, P.E.

“Submitted under NOA # 08-0527.16”

3. Statement letter of no financial interest issued by Engineering Express, dated 05/16/2008, signed and sealed by Frank L. Bennardo, P.E.


04/09/2018

Carlos M. Utrera, P.E.
Product Control Examiner
NOA No: 17-1227.18
Expiration Date: April 14, 2023
Approval Date: March 08, 2018

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. **14-1818**, titled "1/4" Crete-Flex® SS4 Concrete and Masonry Anchors", sheet 1 of 1, dated 04/03/2008, with last revision dated 12/20/2017, prepared by Engineering Express, signed and sealed by Frank L. Bennardo, P.E..

B. TESTS

1. None.

C. CALCULATIONS

1. None.

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER)

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

1. Statement letter of code conformance to 6th edition (2017) FBC, prepared by Engineering Express, dated 12/21/2017, signed and sealed by Frank L. Bennardo, P.E.



04/09/2018

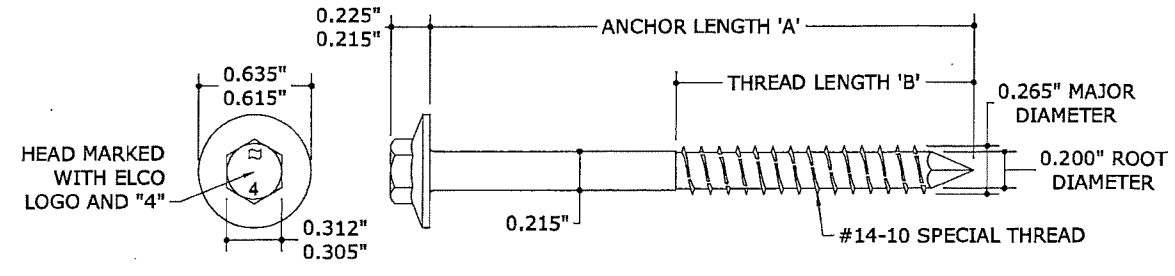
Carlos M. Utrera, P.E.
Product Control Examiner
NOA No: 17-1227.18
Expiration Date: April 14, 2023
Approval Date: March 08, 2018

1/4" CRETE-FLEX[®] SS4 MASONRY SCREWS

FRANK L. BENNARDO, P.E.
 LICENSE No. PE0046549
 12/21/2017
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER

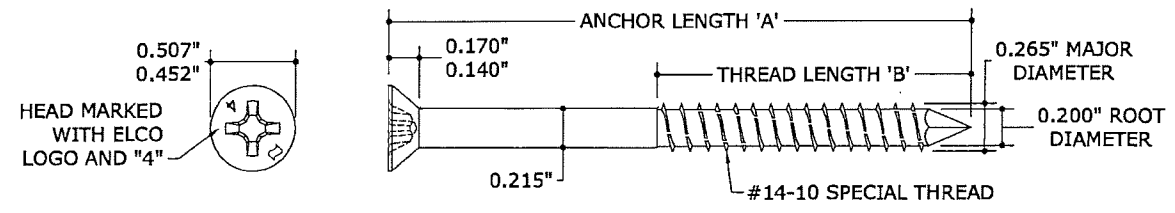
ENGINEERING EXPRESS
 CORPORATE OFFICE:
 160 SW 12th AVE, SUITE 106
 DEERFIELD BEACH, FL 33442
 P: (954) 354-0660 F: (954) 354-0443
 E: HELLO@ENGINEERINGEXPRESS.COM
 ENGINEERINGEXPRESS.COM
 CERT OF AUTH #9885

'A'	'B'
1.750"	1.660"
2.250"	1.750"
2.750"	1.750"



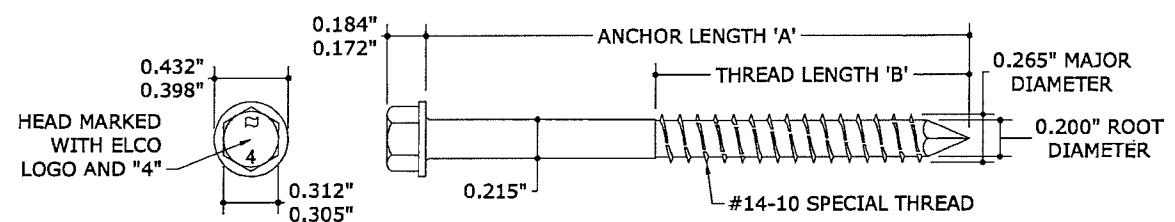
1 HEX FLANGE HEAD (HFH)
 1'-0" = 1'-0"

'A'	'B'
1.250"	1.000"
1.750"	1.500"
2.250"	1.750"
2.750"	1.750"
3.250"	1.750"
3.750"	1.750"
4.000"	1.750"



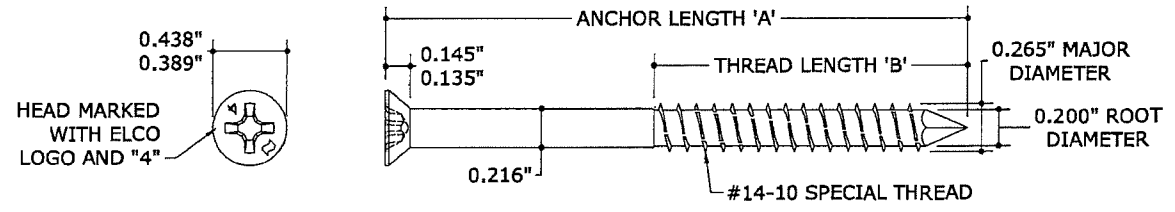
2 PHILLIPS FLAT HEAD (PFH)
 1'-0" = 1'-0"

'A'	'B'
1.250"	1.160"
1.750"	1.660"
2.250"	1.750"
2.750"	1.750"
3.250"	1.750"
3.750"	1.750"
4.000"	1.750"



3 HEX WASHER HEAD (HWH)
 1'-0" = 1'-0"

'A'	'B'
1.125"	1.000"
2.250"	1.500"
2.750"	1.750"
3.250"	1.750"



4 TRIM FIT
 1'-0" = 1'-0"

GENERAL NOTES:

- THIS PRODUCT HAS BEEN DESIGNED & TESTED IN ACCORDANCE WITH THE THE FLORIDA BUILDING CODE SIXTH EDITION (2017) AND THE FOLLOWING STANDARDS: ASTM E488 & TAS 114. THIS PRODUCT IS INTENDED FOR USE WITHIN AND OUTSIDE THE HIGH VELOCITY HURRICANE ZONE.
- ANCHORS ARE MANUFACTURED FROM 410 STAINLESS STEEL AND SHALL HAVE A CORROSION-RESISTANT SILVER-COLORED STALGARD COATING.
- ANCHOR INSTALLATION SHALL BE MADE IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS AND THIS NOTICE OF ACCEPTANCE.
- CONCRETE SHALL CONFORM TO ACI 301 SPECIFICATIONS, WITH STRENGTH PROPERTIES AS SPECIFIED HEREIN. HOLLOW CONCRETE BLOCK SHALL CONFORM TO ASTM C-90.
- ANCHORS SHALL NOT BE INSTALLED INTO CRACKED CONCRETE AS DEFINED IN ACI 355.2.
- ALLOWABLE LOADS TO 3350 PSI MINIMUM CONCRETE SUBSTRATE ARE BASED ON THE ULTIMATE LOADS DIVIDED BY 4. ALLOWABLE LOADS TO ASTM C90 CONCRETE BLOCK ARE BASED ON THE ULTIMATE LOADS DIVIDED BY 5.
- PILOT HOLES SHALL BE DRILLED USING A 7/32" MASONRY DRILL BIT, AND SHALL BE A MINIMUM 1/4" DEEPER THAN THE REQUIRED EMBEDMENT DEPTH.
- ANCHORS NOTED HEREIN HAVE A TENSILE YIELD STRENGTH OF $F_y = 127.4$ ksi AND A TENSILE ULTIMATE STRENGTH OF $F_u = 189.7$ ksi.

ALLOWABLE ANCHOR CAPACITIES:

	EMBEDMENT	EDGE DISTANCE	SPACING	TENSION	SHEAR
CONCRETE 3350 PSI MINIMUM	1"	1"	6" O.C.	150 LB	125 LB
		1-3/4"	6" O.C.	165 LB	215 LB
		2-1/2"	6" O.C.	190 LB	265 LB
	1-3/4"	1"	1-1/2" O.C.	320 LB	
			3" O.C.	388 LB	178 LB
		6" O.C.	390 LB	310 LB	
		1-3/4"	6" O.C.	525 LB	450 LB
		2-1/2"	3" O.C.	314 LB	467 LB
		6" O.C.	625 LB	645 LB	
	2"	1"	6" O.C.	390 LB	310 LB
		1-3/4"	6" O.C.	525 LB	450 LB
		2-1/2"	6" O.C.	680 LB	645 LB
C90 CONCRETE BLOCK	1-1/4"	1"	6" O.C.	156 LB	84 LB
		1-3/4"	6" O.C.	232 LB	264 LB
		2-1/2"	1-1/2" O.C.	101 LB	213 LB
	6" O.C.	101 LB	247 LB		
	6" O.C.	244 LB	264 LB		
	1-5/8"	1"	6" O.C.	248 LB	108 LB

* LINEAR INTERPOLATION MAY BE PERFORMED FOR ANCHOR CAPACITIES BETWEEN THE ANCHOR SPACINGS LISTED ABOVE.

PRODUCT REVISED
 as complying with the Florida Building Code
 NOA-No. **17-1227.18**
 Expiration Date **04/14/2023**
 By *[Signature]*
 Miami-Dade Product Control

ELCO
 ELCO CONSTRUCTION PRODUCTS, DIV. OF INFASSTECH
 1304 KERR DRIVE
 DECORAH, IA 52101
 1/4" CRETE-FLEX[®] SS4
 CONCRETE AND MASONRY ANCHORS
 MIAMI-DADE NOTICE OF ACCEPTANCE

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	KL	CL	04/03/08
REV. PER BNC COMMENTS	KL	FLB	03/09/11
REV. PAGE BORDER	KL	FLB	06/12/11
2010 FBC	KL	FLB	12/05/11
2013 FBC	RWN	TSB	09/29/14
2017 FBC	RWN	TSB	12/20/17

THIS DOCUMENT IS THE PROPERTY OF FRANK L. BENNARDO, P.E. AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF FRANK L. BENNARDO, P.E. * ALTERATIONS, ADDITIONS, HIGHLIGHTING, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

14-1818
 SCALE: -
 PAGE DESCRIPTION:
 1

V:\Projects\14-1818 Renew 2013 FBC 19-0219.02 Crete-Flex[®] SS4 Conc. & Masonry Anchors-Renewal NOA\WP\2017 FBC Update\14-1818b Crete-Flex SS4 Masonry Screws.dwg
 rickn
 12/21/2017 - 2:38pm