

Crete-Flex[®] SS4 Masonry Fastening System

Extraordinary Corrosion Resistance and Fastener Performance

From Elco Construction Products, a leading manufacturer of threaded masonry fasteners, comes a new generation of high-performance 410 stainless steel masonry fasteners. Crete-Flex[®] SS4 fasteners deliver corrosion resistance, installation consistency and reliable performance.

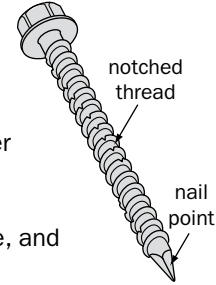
Superior Corrosion Resistance

Crete-Flex[®] masonry anchors take advantage of a specialty heat treatment to maximize corrosion resistance. Then our Silver Stalgard[®] finish is applied to provide a multi-layered barrier to visible and galvanic corrosion. Even after 2,000 hours in a salt spray cabinet (per ASTM B117), Crete-Flex[®] fasteners show no signs of red rust.

For outstanding performance in applications of metal, wood or other materials to concrete, brick or hollow block, rely on the proven Crete-Flex[®] SS4 Masonry Fastening System.

Features

- 410 stainless steel
- #14 diameter
- Heavy-duty, v-notched thread with larger cross-sectional area (25% greater than other commonly-used masonry fasteners)
- Hex washer, flat, hex flange, and TrimFit[®] heads available
- Nail point
- Silver Stalgard[®] corrosion-resistant finish
- Installed with a commercial-grade hammer drill or rotary hammer, a specially-sized Crete-Flex[®] carbide-tipped drill bit, and a 1000 or Crete-Flex[®] installation tool






Benefits

- Enhanced corrosion resistance
- Increased shear values
- Easy and consistent installation

Approvals/Listings:

- Miami-Dade Product Control Approved: Miami-Dade County, Florida, Notice of Acceptance No. 99-1227.13

SELECTION GUIDE										
Fastener* Length.	1-1/4"	1-3/4"	2-1/4"	2-3/4"	3-1/4"	3-3/4"	4"	5"	6"	
 Hex Washer Head 5/16" hex .425" washer O.D.	EMF310	EMF330	EMF350	EMF370	EMF390	EMF410	EMF430	EMF450	EMF470	
 Phillips Flat Head #3 phillips	EMF690	EMF710	EMF730	EMF750	EMF770	EMF790	EMF810	EMF830	EMF850	
 Hex Flange Head 5/16" hex 5/8" washer O.D.	EMF340	EMF360								

Standard Packaging: 100 fasteners and one tanged masonry drill bit per box. **Bulk Quantities:** Available upon request.

Masonry Drill Bits	Application
7/32 x 4-1/2" Tanged Elco Cat. No. EMC100	Crete-Flex [®] fasteners up through 2-3/4"
7/32 x 5-1/2" Tanged Elco Cat. No. EMC110	Crete-Flex [®] fasteners up through 4"
7/32 x 7-1/2" Tanged Elco Cat. No. EMC115	Crete-Flex [®] fasteners up through 6"
7/32 x 5-1/2" Hex-shanked SDS Elco Cat. No. EMC120	Crete-Flex [®] fasteners up through 2-1/4"
7/32 x 7" Hex-shanked SDS Elco Cat. No. EMC130	Crete-Flex [®] fasteners up through 4"
7/32 x 6 x 8-1/4" SDS** Elco Cat. No. EMC140	Crete-Flex [®] fasteners up through 5"
7/32 x 9 x 11" SDS** Elco Cat. No. EMC150	Crete-Flex [®] fasteners up through 6"

*Diameter Information: O.D. = #14 (.268"); I.D. = .201"

** MC140 and EMC150 drill bits are NOT shanked

Product Information
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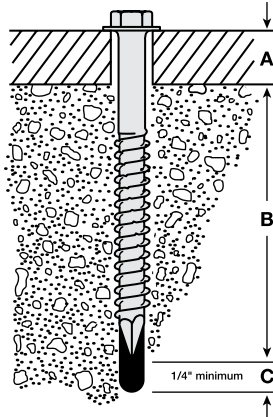
Installation Instructions

The Crete-Flex® Masonry Fastening System consists of Crete-Flex® anchors and Elco® carbide-tipped drill bits.

To determine the proper length Crete-Flex anchor for an application, combine the thickness of the attachment (A) with the desired depth of embedment in the masonry material (B). It is recommended that a minimum of 1" and a maximum of 2" embedment be used in determining fastener length. (Refer to Selection Guide on other side).

Use of 7/32" carbide drill bit should be used for optimum performance. Elco drill bits for Ultracon® applications, with a smaller diameter (.204"), should not be substituted.

Consistent performance and maximum pull-out values can be assured only when genuine Elco drill bits are used along with a 1000 tool (Elco Cat. No. ELP100) or a Crete-Flex® tool (Elco Cat. No. EMC900). With the Elco® drill bit installed in the drill or rotary hammer, drill the depth of (A) + (B) + (C).



With the drill tool still in its hammer mode, drive the Crete-Flex® anchor using an appropriate hex or phillips drive tool until properly seated with the work surface. For installations using a rotary hammer drill, Elco offers two hex-shanked SDS masonry drill bits that can be used in conjunction with the 1000 installation tool: EMC120 for fasteners up to 2-1/4" in length, and EMC130 for lengths up to 4".

Performance and Technical Data

Testing in Concrete Beam COMPRESSIVE STRENGTH = 3350 PSI TEST REPORT NO.: HETI-98-3023

Hurricane Engineering & Testing, Inc., Miami, FL

Test	Edge Distance	Embedment	Ultimate Load Lbs.
Pull-out	2.5"	1.00"	762
Pull-out	2.5"	1.75"	2505
Shear	2.5"	2.00"	2729
Shear	2.5"	1.75"	2591

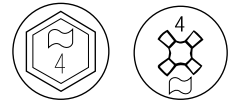
Testing in Concrete Block Compressive Strength = 2070 PSI Test Report No.: 98-039 Construction Testing Corp., Miami, FL

Test	Edge Distance	Embedment	Ultimate Load Lbs.
Pull-out	1.0"	1.25"	780
Pull-out	2.5"	1.25"	1216
Shear	1.0"	1.25"	424
Shear	2.5"	1.25"	1324

These values are offered only as a guide, therefore, an appropriate safety factor should be applied to these values. For additional details and information, call 800.435.7213.

Inspection

In-place inspection can be made by identifying the special Crete-Flex® head marking. This marking consists of an Elco® logo along with a "4" as shown to the right.



Important Product and Warranty Information!

- As with all cutting tools and fasteners, normal safety precautions should be observed to avoid electrical installations, other utilities and reinforcement bars. Careful use will provide the utmost in safety and reliability.
- The wearing of safety glasses by users and persons in the vicinity is required by Federal Law.
- Complete Crete-Flex® product information, code approvals and technical application assistance is available from Elco Construction Products by calling 800.435.7213.

This literature was prepared as a summary of the Crete-Flex® Masonry Fastening System and is not, therefore, intended to describe all hazards, limitations, warnings, precautions, etc., pertaining to the use of the product. The information and data presented herein are believed to be accurate and reliable. However, due to the wide variety of possible intervening factors, the suitability of the product for the use intended is the sole responsibility of the user. Specifications and other information contained herein supersede all previously published material and are subject to change without notice.

All Crete-Flex® anchors are warranted to be manufactured free from defects in material and workmanship. Under this warranty, Elco Construction Products will provide, at no charge, replacement product for any Crete-Flex® anchor proven to be defective when installed in accordance with our published recommendations and in applications considered by us as suitable for this product. This warranty is in lieu of any and all warranties, express or implied, and in no case will Elco Construction Products be liable for incidental, liquidated or consequential damages.



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