

5/16" Diameter UltraCon® Fasteners For Heavy-Duty Applications

Now the proven performance of the UltraCon® masonry fastening system is available in a new 5/16" diameter anchor. This larger size provides increased shear and tensile strength to meet the needs of more demanding applications in poured concrete, block, and brick, including:

- metal door framing
- window frames
- shelving and racking
- cable trays
- shutter systems
- pipe supports

Installation is fast and easy with Elco® masonry bits and 516 installation tools. When all three elements of the fastening system are used, consistent performance and maximum pull-out strengths can be realized.

UltraCon fasteners from Elco Construction Products are coated with silver Stalgard® finish to provide superior corrosion resistance.

Don't rely on standard-sized fasteners in non-standard applications. Choose the fastener designed for the job – the new 5/16" UltraCon® fastener from Elco Construction Products.

Head Styles:

- Hex head with oversized washer
- Phillips flat head
- TrimFit® hex head
- TrimFit® flat head

Finish

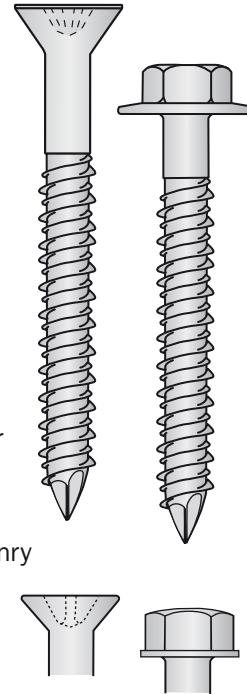
- Silver Stalgard® corrosion-resistant finish

Packaging

- Packed bulk with one 1/4 diameter drill bit

Installation

- 1/4" Elco® masonry drill bits and 516 drive sleeve (ELP400) for use with hammer drills. Hex-shanked SDS bits also available.



PULL-OUT AND SHEAR VALUES							
Anchor Diameter	Depth of Embedment	Hollow Block (1,872 p.s.i)		Concrete (3,513 p.s.i.)		Wood (specific gravity: .55)	
		pull-out	shear	pull-out	shear	pull-out	shear
5/16"	1"	-	-	851	1801	1454	1188
	1-1/4"	1145	1454	-	-	-	-
	1-1/2"	-	-	-	-	2472	1677
	1-3/4"	-	-	2643	3404	-	-
	2"	-	-	3347	-	3233	2407

NOTE: Indicated pullout and shear failure values were obtained in tests witnessed by independent test labs (see below). These figures are offered only as a guide and are not guaranteed in any way by Elco Construction Products. A safety factor of 4:1, or 25% of ultimate pullout value, is generally accepted as a safe working load; however, reference should always be made to applicable codes for the specific safe working ratio. Strength testing performed by Hurricane Engineering and Testing, Inc. (HETI) Miami, FL; Report Nos. HETI-01-5063 (wood), HETI-01-5069 (hollow block), and HETI-01-5013 (concrete).

For more information, please contact:



Elco Construction Products

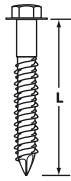
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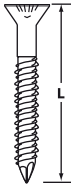
5/16" ULTRACON ANCHOR SELECTION GUIDE

L Drive Length	Head System	Head Style	Catalog Number	Tanged Bit	
				Dia	Length
Hex Head with Oversized Washer					
1-1/4"	hex	w/oversized washer	ELG476	1/4"	4-1/2"
1-3/4"	hex	w/oversized washer	ELG481	1/4"	4-1/2"
2-1/4"	hex	w/oversized washer	ELG486	1/4"	4-1/2"
2-3/4"	hex	w/oversized washer	ELG491	1/4"	4-1/2"
3-1/4"	hex	w/oversized washer	ELG496	1/4"	5-1/2"
3-3/4"	hex	w/oversized washer	ELG501	1/4"	5-1/2"
4"	hex	w/oversized washer	ELG506	1/4"	5-1/2"
5"	hex	w/oversized washer	ELG511	1/4"	7-1/2"



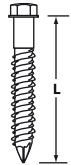
Phillips Flat Head

2-1/4"	phillips	flat	ELG941	1/4"	4-1/2"
2-3/4"	phillips	flat	ELG948	1/4"	4-1/2"
3-1/4"	phillips	flat	ELG960	1/4"	4-1/2"
4"	phillips	flat	ELG979	1/4"	5-1/2"
5"	phillips	flat	ELG992	1/4"	7-1/2"
6"	phillips	flat	ELG998	1/4"	7-1/2"



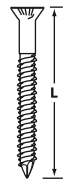
TrimFit® Hex Head

1-3/4"	hex	TrimFit® hex	ELG482	1/4"	4-1/2"
2-1/4"	hex	TrimFit® hex	ELG487	1/4"	4-1/2"
2-3/4"	hex	TrimFit® hex	ELG492	1/4"	4-1/2"
3-1/4"	hex	TrimFit® hex	ELG497	1/4"	5-1/2"
3-3/4"	hex	TrimFit® hex	ELG502	1/4"	5-1/2"



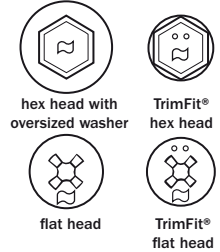
TrimFit® Flat Head

1-1/4"	phillips	TrimFit® flat	ELG925	1/4"	4-1/2"
1-3/4"	phillips	TrimFit® flat	ELG935	1/4"	4-1/2"
2-1/4"	phillips	TrimFit® flat	ELG945	1/4"	4-1/2"
2-3/4"	phillips	TrimFit® flat	ELG955	1/4"	4-1/2"
3-1/4"	phillips	TrimFit® flat	ELG965	1/4"	5-1/2"
3-3/4"	phillips	TrimFit® flat	ELG972	1/4"	5-1/2"
4"	phillips	TrimFit® flat	ELG976	1/4"	5-1/2"
5"	phillips	TrimFit® flat	ELG991	1/4"	7-1/2"



IDENTIFICATION

The Elco marking for hex, hex flange, phillips flat and TrimFit heads consists of the Elco logo as shown to the right. The TrimFit head has two dots opposite the logo to distinguish it from the standard flat head design.



TOOLS

516 Drive Tools



The 516 tool (ELP400) is a two step installation tool for use with all drive styles and lengths of 5/16" Ultracon fasteners. The standard 6" sleeve will install fasteners up to 4" long. For 5" and 6" long Ultracon fasteners, an 8" sleeve is required.

ELP400: 516 SPECIALTY TOOL COMPONENTS/REPLACEMENT PARTS

ELY400 516 drill bit adapter
 ELY450 #3 phillips bit
 ELY410 6" drive sleeve

Also available: ELY470 8" drive sleeve

Tanged Drill Bits

(for use with hammer drill)



Description	Catalog #
1/4 X 4-1/2"	ELT460
1/4 X 5-1/2"	ELT465
1/4 X 7-1/2"	ELT475

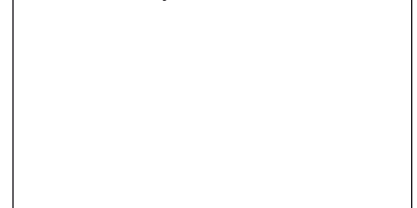
Hex-shanked SDS bits

(for use with rotary hammer drill)



Description	func. lgth.	Catalog #
1/4 X 6-3/4"	4"	ELT680
1/4 X 9-1/4"	6-1/2"	ELT690

Distributed By: _____



INSTALLATION

The 5/16" Ultracon® masonry fastening system consists of the Ultracon® fastener, the 516 installation tool and an Elco® carbide-tipped drill bit. Consistent performance and maximum pullout strength can be assured only when all three elements of the system are properly used.

Fastener Length and Diameter:

The length of the Ultracon fastener to be used is determined by combining 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 1-3/4" embedment be used in determining fastener length.

A = attachment thickness
 B = Ultracon® embedment
 (min. of 1", max. of 1-3/4")

A + B = Ultracon® length
 B + C = hole depth (must be at least 1/4" deeper than Ultracon® embedment)

Hole Depth:

A 1/4" Elco carbide-tipped drill bit is supplied with each box of 5/16" Ultracon® fasteners. The correct hole depth (B & C) can normally be obtained by drilling the full length of this bit. In all cases, the hole must be at least 1/4" deeper than the depth of the fastener embedment. Normal safety precautions should be observed when drilling the holes to avoid electrical installations, other utilities and reinforcement bars.

Hole Diameter:

The diameter of the drilled hole is also important to the performance of the Ultracon® masonry fastening system. To provide proper hole diameters, Elco® carbide-tipped drill bits are manufactured to closer standards than those called for in the American National Standard. Using Elco® carbide-tipped bits will help assure consistent fastener performance and maximum pullout strength.

