

Aggre-Gator[®]

300 Series Stainless Steel
Threaded Concrete Anchors



Miami-Dade County Product Control Approved-NOA No. 08-0813.06
High Velocity Hurricane Zone

Aggre-Gator® 300 Series Stainless Steel Bi-Metal Concrete Anchors

Owners, architects and, design engineers expect longer life cycles from buildings. Extended warranties and use of more sustainable materials add up to greater expectations for performance – from structural integrity to the purely aesthetic – of all building components.

The Solution: Aggre-Gator® 300 series (18-8) Stainless Steel Concrete Anchors

Aggre-Gator® fasteners bring the corrosion resistance of 300 series stainless steel and the efficiency of hardened steel tapping threads together in one unique fastener.

- Unmatched, multi-level corrosion resistance
- Quick and easy installs into concrete or masonry
- Perfect choice for exposed/wet areas/aggressive environments
- High performance for your most critical applications

To provide maximum, long-term corrosion resistance, Elco chose 300 series stainless steel for their Aggre-Gator® concrete anchors.

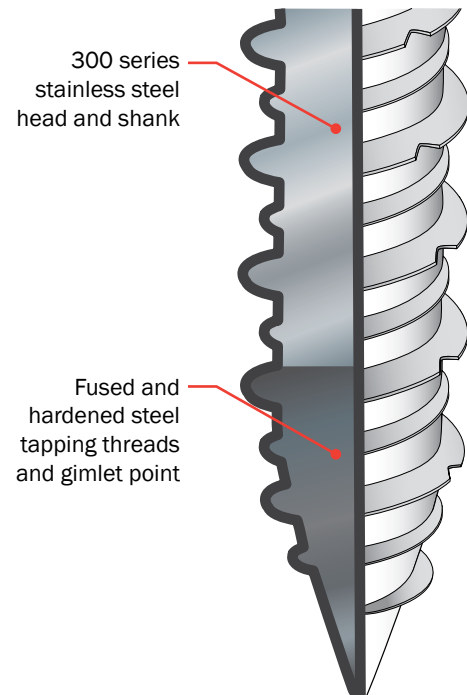
To allow for the most efficient installations, each Aggre-Gator™ anchor has a fused and hardened steel self-tapping point for quick and reliable fastening.

To combat the widest variety of corrosion scenarios involving dissimilar metals, each 300 series stainless steel Aggre-Gator® anchor has Stalgard® GB (Galvanic Barrier) coating. Stalgard® GB provides far greater galvanic protection for aluminum components than plain finish 300 series stainless fasteners.

To eliminate the potential for delayed, “embrittlement” fastener failures, such as Hydrogen Assisted Stress Corrosion Cracking (HASCC), our Aggre-Gator® anchors are made of 300 series stainless alloys that are virtually immune to this type of failure.

These features allow Aggre-Gator® anchors to deliver multi-level corrosion protection, over an extended service life in aggressive environments, and makes them the perfect choice for your most critical applications.

For the most demanding applications that other fasteners can't handle, Aggre-Gator® stainless steel concrete anchors are the one right choice.



Bi-metal Technology

Aggre-Gator®

300 Series Stainless Steel Bi-Metal Concrete Anchors



Selection Guide

	Dia.	L Length	Length Code†	Drive System	Head Style	Drill Bit Size (Carbide)	S 300 Series (18-8) Stainless Steel Length	ECP Catalog Number*	Pieces Per Box	Pieces Per ¼ Keg*
Hex Washer Head										
	1/4"	1-3/4"	A	5/16" hex	hex washer	3/16" X 3-1/2"	1-1/4"	EML315	50	2000
		2-1/4"	B			3/16" X 4-1/2"	1-3/4"	EML325	50	1500
		2-3/4"	C			3/16" X 4-1/2"	2-1/4"	EML335	50	1000
		3-1/4"	D			3/16" X 5-1/2"	2-3/4"	EML345	50	1000
		4"	F			3/16" X 5-1/2"	3-1/2"	EML365	50	500
TrimFit® Flat Head Fasteners										
	1/4"	1-3/4"	A	#3 Phillips	TrimFit® flat head	3/16" X 3-1/2"	1-1/4"	EMM310	50	2500
		2-1/4"	B			3/16" X 4-1/2"	1-3/4"	EMM320	50	1500
		2-3/4"	C			3/16" X 4-1/2"	2-1/4"	EMM330	50	1000
		3-1/4"	D			3/16" X 5-1/2"	2-3/4"	EMM340	50	1000
		4"	F			3/16" X 5-1/2"	3-1/2"	EMM360	50	500

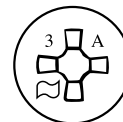
† Length code is marked on top of fastener head (see Identification below).

* Standard packaging: 50 anchors and 1 tanged masonry bit per box/six boxes per shipper.

Bulk Quantities: Packed in ¼ kegs as shown. Available upon request. Indicate Bulk Packaging by placing a "B" at the end of the Elco Catalog Number. Bulk packaging does not include masonry bits.

Identification

The head markings consists of the number "3", the length code, and the Elco® logo as shown to the right.



TrimFit®
head



hex washer
head



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Performance Data

Substrate: 2220 psi Concrete

Anchor Dia.	Min. Edge Dist.	Min. Spacing	Min. Embedment	Allowable Tension (lbs)
1/4"	1.25"	3.0"	1.000"	118
	2.50"	1.5"	1.000"	195
	1.25"	3.0"	1.375"	289
	2.50"	1.5"	1.375"	343
	1.25"	3.0"	1.750"	517
	2.50"	1.5"	1.750"	465
Anchor Dia.	Min. Edge Dist.	Min. Spacing	Min. Embedment	Allowable Shear (lbs)
1/4"	1.50"	3.0"	1.000"	204
	3.00"	1.5"	1.000"	259
	1.50"	3.0"	1.375"	259
	3.00"	1.5"	1.375"	413
	1.50"	3.0"	1.750"	318
	3.00"	1.5"	1.750"	488

Substrate: 3275 PSI Concrete

Anchor Dia.	Min. Edge Dist.	Min. Spacing	Min. Embedment	Allowable Tension (lbs)
1/4"	1.25"	3.0"	1.000"	248
	2.50"	1.5"	1.000"	263
	1.25"	3.0"	1.375"	389
	2.50"	1.5"	1.375"	251
	1.25"	3.0"	1.750"	295
	2.50"	1.5"	1.750"	319
Anchor Dia.	Min. Edge Dist.	Min. Spacing	Min. Embedment	Allowable Shear (lbs)
1/4"	1.50"	3.0"	1.000"	255
	3.00"	1.5"	1.000"	226
	1.50"	3.0"	1.375"	319
	3.00"	1.5"	1.375"	511
	1.50"	3.0"	1.750"	306
	3.00"	1.5"	1.750"	515

Substrate: 1x4 (3/4" Thick) Treated No. 2 SYP attached to 2220 psi Concrete

Anchor Dia.	Min. Edge Dist.	Min. Spacing	Min. Embedment	Allowable Shear (lbs)
1/4"	2.50"	3.0"	1.5"	200

Substrate: 2x4 (1-1/2" Thick) Treated No. 2 SYP attached to 2220 psi Concrete

Anchor Dia.	Min. Edge Dist.	Min. Spacing	Min. Embedment	Allowable Shear (lbs)
1/4"	2.50"	3.0"	1.75"	199

Substrate: Concrete Masonry Hollow Block

Anchor Dia.	Min. Edge Dist.	Min. Spacing	Min. Embedment	Allowable Tension (lbs)
1/4"	2.00"	3.0"	1.250"	195
	4.00"	3.0"	1.250"	221
Anchor Dia.	Min. Edge Dist.	Min. Spacing	Min. Embedment	Allowable Shear (lbs)
1/4"	2.00"	3.0"	1.250"	234
	4.00"	3.0"	1.250"	264

Substrate: Grout-Filled Concrete Block

Anchor Dia.	Min. Edge Dist.	Min. Spacing	Min. Embedment	Allowable Tension (lbs)
1/4"	2.00"	3.0"	1.250"	208
	4.00"	1.5"	1.250"	186
	2.00"	3.0"	2.00"	407
	4.00"	1.5"	2.00"	504
Anchor Dia.	Min. Edge Dist.	Min. Spacing	Min. Embedment	Allowable Shear (lbs)
1/4"	2.00"	3.0"	1.250"	259
	4.00"	1.5"	1.250"	352
	2.00"	3.0"	2.00"	591
	4.00"	1.5"	2.00"	597

NOTES

- Edge distances denoted herein shall be measured from the center of the anchor to the edge of the substrate in the direction of, as well as perpendicular to, the direction of the load. Spacing between anchors denoted herein shall be measured center-to-center of anchors.
- Allowable loads suggested herein are only valid when both the minimum anchor center-to-center spacing and the minimum edge distances are complied with.
- Allowable loads suggested herein equal 25% of the average ultimate laboratory test values obtained during testing performed as part of the requirements to obtain this NOA. Final determination of the appropriate working/design loads to be used in a specific project are the sole responsibility of the engineer of record or the architect of record specifying the use of the product.
- No increase in allowable stress has been incorporated into the values provided in the tables contained herein.
- Anchors approved under this product approval document have not been tested for use under combined loading.
- The concrete substrate into which these anchors will be attached shall conform to ACI 301 specifications with strength properties as specified herein.

- The hollow and grout-filled concrete block substrate into which these anchors will be attached shall be medium weight or normal weight concrete block conforming to ASTM C-90.
- Combination wood and concrete substrate shall consist of 1 x 4 nominal (3/4" thick) treated No. 2 Southern Yellow Pine attached to concrete substrate conforming to ACI 301 specifications with strength properties as specified herein, or 2 x 4 nominal (1-1/2" thick) treated No. 2 Southern Yellow Pine attached to concrete substrate conforming to ACI 301 specifications with strength properties as specified herein.

Due to a wide variety of application conditions or intervening factors not under our control, we assume no liability for the use of the information provided in this document. For additional product information and technical assistance, please contact Elco directly at 1-800-435-7213.

Aggre-Gator® 300 Series Stainless Steel Bi-Metal Concrete Anchors



Features

- Bi-metal technology – 300 (18-8) stainless steel head and shank
- Fused and hardened steel tapping threads and gimlet point
- Alternating, hi-low notched thread profile
- Silver-colored Stalgard® GB coating
- Hex washer head and TrimFit® flat head designs

Benefits

- Outstanding corrosion resistance
- Long service life
- High strength/ductility
- Offers greater galvanic compatibility in dissimilar metal applications
- Thread profile provides quick cutting and stability during installations
- Virtually immune to hydrogen-assisted stress corrosion cracking
- Head styles allow use in broadest variety of applications
- High in-place value over life of structures

Applications

- Exposed anchoring/coastal/wet areas
- Aluminum enclosures
- Hurricane shutters/windows/awnings/thresholds
- Curtain wall & window wall support anchors
- Stone facade support anchors
- ACQ treated wood

Whether your application is structural or purely aesthetic, you won't find a better or easier-to-install 300 series stainless steel concrete anchor with multi-level corrosion protection for your toughest construction applications.

For more information, contact Elco Construction Products or your distributor.



Elco Construction Products

800.435.7213

Fax: 563-387-3540

www.elcoconstruction.com

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Rev.03/11