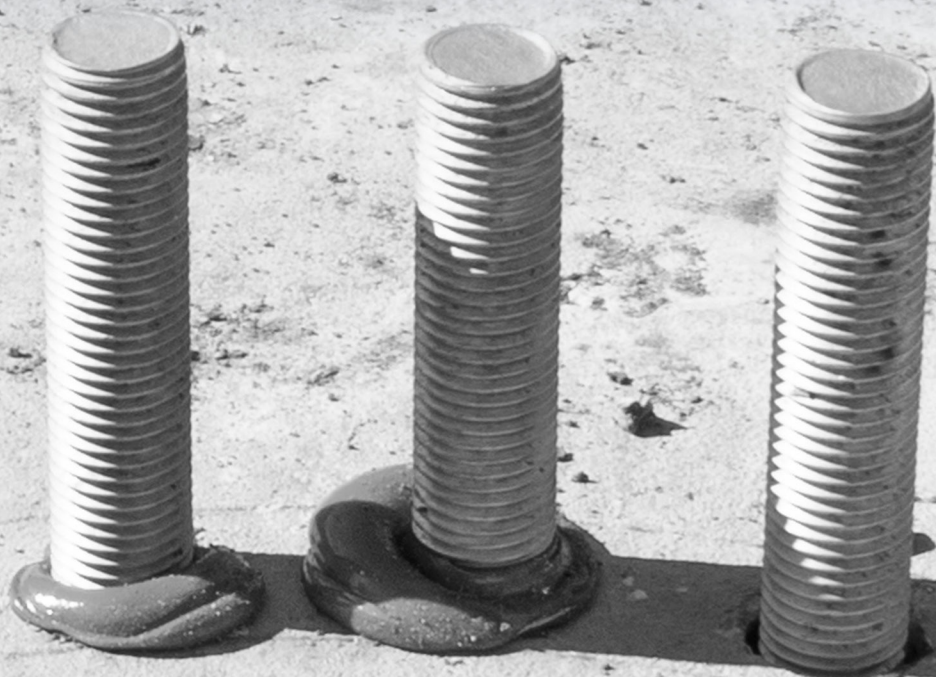


# ADHESIVE ANCHORING SYSTEMS

NEW  
APPROVALS

*ALLFASTENERS* <sup>®</sup> **A**

[Allfasteners.com/adhesive-anchoring.html](http://Allfasteners.com/adhesive-anchoring.html)



**HIGH PERFORMANCE STRUCTURAL PURE EPOXY**

# EF600

## HIGH PERFORMING STRUCTURAL ADHESIVE INJECTION SYSTEM

**EF600 High Performance Structural Pure Epoxy** is a two-part component 100% epoxy based chemical anchoring system. It's designed for the most demanding structural applications and rebar connections.

**EF600** can be used in dry, wet and submerged applications making it great for just about any application. Due to its high load-bearing capacity and longer working times, EF600 is ideal for deep embedment, large diameter holes and high ambient temperatures.

### BENEFITS & SPECIFICATIONS

- For Cracked & Uncracked Concrete
- Use with Core Drilled Holes
- Suitable for Dry, Wet or Flooded Holes
- Fast Cure Times
- Rated for Seismic Loads A-F
- Lead Compliant
- Made in the USA

### WORKING TIMES\*

Base Material Temp °F (°C)	110°F (43°C)	75°F (24°C)	43°F (6°C)
Working Time	3 mins	16 mins	45 mins
Cure Time	2 hrs	7 hrs	144 hrs

\*Condition (warm) cartridge to 40°F (4°C) - 95°F (35°C) for installation below 70°F (21°C). Storage: between 40°F (4°C) to 95°F (35°C).

### APPLICATIONS

- For Use with Multiple Anchor Types: Threaded Rod, Rebar & Internally Threaded Inserts
- Application: For Use with Rebar and Threaded Rod Fastening to Concrete
- **Compatible with Allfasteners' AFOS Design Software**



**MADE IN THE USA**



**CRACKED CONCRETE**



**SEISMIC A-F**



**CORE DRILLED HOLES**



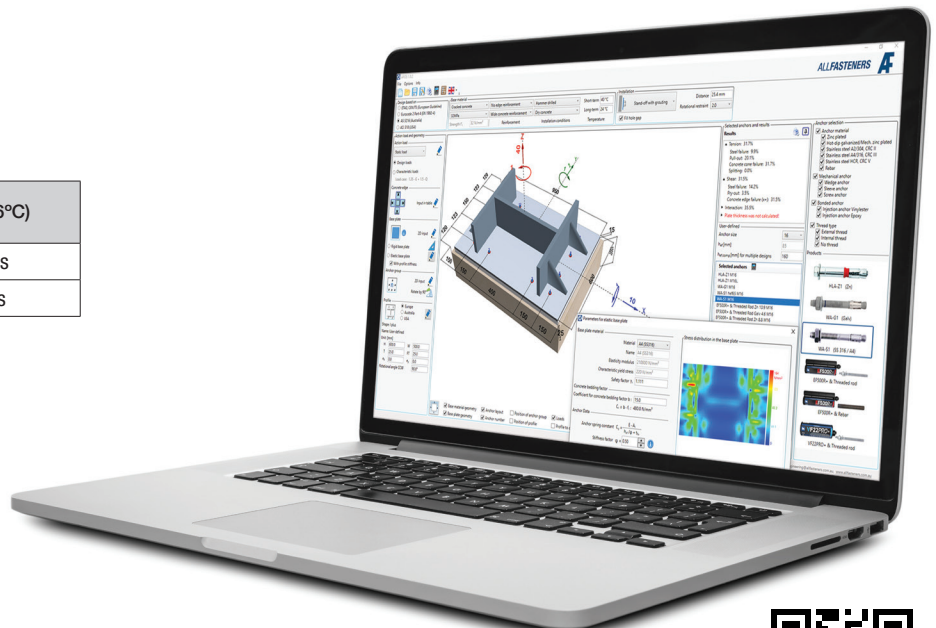
**UNCRAKED CONCRETE**



**FAST CURE**



**DRY, WET, FLOODED**





# ALLFASTENERS' APPROVALS



ICC ESR 4732



NJ DOT



NY STATE DOT



LEED Compliant



International Residential Code (IRC)



International Building Code (IBC)

Allfasteners proudly stands by their products, especially our Adhesive Anchoring Systems. **EF600** is not only one of our best chemical anchor to date, but also boasts some of our most prestigious approvals. These include, ICC-ES approvals, LEED compliancy, IRC and IBC compliancy and **now DOT approvals** for several locations.

**New Jersey Department of Transportation**  
Bureau Of Materials

Material: EPOXY BEDDING COMPOUND C881 TY 4  
Sample Type: QPL For Approval  
Project #:   
Project Name:   
Sample ID: TPJSADE214R091449  
Sampled By: Jamshid Sadeghaddi  
Sample Date: 04/27/2021  
Log Date: 04/27/2021

Product Name: EF600  
Intended Use:   
Type, Grade, Class:   
Lot Number:   
Manufacturer: ALLFASTENERS USA - CARLSTADT, NJ  
Sample Taken From:   
Marks on Sample: EF600

LB 414 - Analysis of Epoxy for Qualified Products List

Tests	Test Method	Date Tested	Result	Min	Max
Consistency Test, Flow (in) Grade 3 Epoxies Only	ASTM C 881	05/19/2021	0.000		0.25
Gel Time (min.) Manual Mixing Automatic Mixing	ASTM C 881	05/13/2021	NT 11	5	
Bond Strength (psi) @ 2 days @ 14 days	ASTM C 882	05/21/2021 06/02/2021	2880 3250	1000 1500	
Compressive Yield Strength (psi) @ 28 hours @ 72 hours @ 7 days	ASTM D 695	05/25/2021	NT 14640	10000	
Absorption (%)	ASTM D 570	06/11/2021	0.10		1.0
Contact Strength (psi) Type 7 Epoxies Only	ASTM C 881				

Remarks:

Sample Status: Pass / Comply  
Authorized By: Jamshid Sadeghaddi  
06/11/2021

NJDOT, P.O. Box 607, Trenton, NJ 08625-0607  
Current Date: 06/11/2021

NJDOT Form: LB414QPL

**State of New Jersey**  
DEPARTMENT OF TRANSPORTATION  
P.O. Box 600  
Trenton, New Jersey 08625-0600

DIANE GUTIERREZ-SCACCETTI  
Commissioner

IN REPLY PLEASE REFER TO:  
Allfasteners USA  
Medina, OH  
EF600

Department of Transportation (NJDOT) has considered your April 2021 request for Producer List (QPL) approval of the following product:

Compound - Type 4

3,250 psi at 14 days, compressive strength 14,640 psi at 7 days.

Test report for sample TPJSADE214R091449.

which are attached for your review, this material complies with New Jersey Department of Transportation requirements and approval is granted for use on NJDOT sponsored projects by the specifications. This approval is contingent upon continued quality testing by the Bureau of Materials. If you have any questions please call 609-5307.

Sincerely,

*Ryan Rathbun*  
Ryan Rathbun  
Aggregates and Cement Section  
for Edward Inman  
Manager, Bureau of Materials

Central File

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# EF600



## Get All The ACCESSORIES



**1:1 EPOXY APPLICATOR GUN 20OZ/600ML**

Part #	Size	Qty
13CAG600	20oz Applicator Gun	1



**NYLON SCREEN TUBE**

Part #	Size	Qty
1HBP	Multiple Sizes Available	1



**HOLE CLEARING HAND PUMP**

Part #	Qty
1BPUMP	1



**NYLON BRISTLE HOLE CLEARING BRUSH**

Part #	Size	Qty
11B012	1/2" Brush	1



**ENDURO SDS-PLUS 4 CUTTER BITS**

Part #	Size	Qty
5DSPE	Multiple Sizes Available	1



**EPOXY INJECTION MIXING NOZZLE**

Part #	Qty
1SN10	1

See more accessories on pages 8 through 11.

## A Full System for ALL APPLICATIONS

EF600 can be used in most substrates that require a high strength adhesive anchor including:

- Concrete
- Brick
- Cinder Block
- Masonry

Allfasteners also has the [Epoxy Calculator](#) to estimate the required number of cartridges needed for standard threaded stud sizes with EF600.

**Check out Allfasteners Epoxy Calculator**  
**on [allfasteners.com](http://allfasteners.com)**





# ALLFASTENERS' COMPARISON



ALLFASTENERS®



	EF600 ESR-4732	RE 500 V3 ESR-4094	PURE110+ ESR-3298	SET-XP ESR-2508
BUILDING CODE COMPLIANT (IBC/IRC)	✓	✓	✓	✓
MADE IN THE USA	✓	X	X	✓
WITHSTAND TEMPERATURES > 200°F	✓	X	X	X
CORE-DRILLED HOLES (SD)	✓	✓	X	X
NSF/ANSI 61 & 372 DRINKING WATER & LEAD FREE	✓	X	X	X
THREADED ROD, REBAR & INTERNALLY THREADED INSERTS	✓	✓	X	X
NO HOLE CLEANING W/VACUUM DRILL BITS	✓	✓	✓	✓
TESTED FOR USE WITH BATTERY DISPENSING TOOLS	✓	✓	✓	✓
FULL CURE @ 75°F IN 7 HOURS OR LESS	✓	✓	X	X
UNCRAKED BOND STRENGTH (AVG), 176+ SHORT TERM TEMP, NO SUSTAINED LOAD (PSI)	1,925	1,460	1,190	N/A*
CRACKED BOND STRENGTH (AVG), 176+ SHORT TERM TEMP, NO SUSTAINED LOAD (PSI)	1,170	855	880	N/A*

\*Simpson SET-XP limited to a maximum short-term temperature of 150°F and therefore is not applicable for this comparison to products which can be designed to higher temperatures.

Hilti is a registered trademark of Hilti Aktiengesellschaft Corporation | Simpson, SET-XP are registered trademarks of Simpson Strong-Tie Company, Inc. | Pure110+ & DeWalt are trademarks of Stanley Black & Decker.

# VF200PRO

## FAST CURE ANCHORING ADHESIVE INJECTION SYSTEM

**VF200PRO** is a two-part, high strength, styrene-free, vinyl ester adhesive anchoring system tested for use with threaded rod and reinforcing bar for cracked and uncracked concrete conditions in accordance with ACI 355.4 and ICC-ES AC308

Designed to anchor threaded rods & rebar in concrete for very high loads and critical fastenings. Features a high chemical resistance useful in corrosive environments (ACI 355.4), critical and overhead fixings. It can also be used in dry concrete or water-saturated concrete.

### BENEFITS & SPECIFICATIONS

- ICC-ES ESR-4632 for use in cracked and uncracked normal weight and lightweight concrete
- Resists static, wind and earthquake loading in tension and shear - (IBC Seismic Design Categories A through F)
- Full cure in 45 minutes at 70 °F (21 °C)
- Certified - Drinking Water System Components (NSF/ANSI 61) Joining and Sealing
- Resists sustained loads up to 161 °F (72 °C)
- Withstands freeze-thaw conditions

### SPECIFICATION

Anchoring adhesive shall be a two component, 10:1 ratio by volume, vinyl ester anchoring system supplied in pre-measured cartridges. Adhesive must meet the requirements of ICC-ES AC308, ACI 355.4 and ASTM C881-15 specification for Type I, II, IV, and V, Grade 3 Class A, B & C.

Adhesive must have a heat deflection temperature of 192 °F (89 °C) per ASTM D648 and have a compressive yield strength of 11,430 psi (78.8 MPa) at 75 °F (24 °C) after a 7 day cure per ASTM D695. Adhesive shall be VF200PRO from Allfasteners USA, LLC., Medina, Ohio.

Anchors shall be installed per the Manufacturer's Printed Installation Instructions (MPII) for VF200PRO anchoring system.



**CRACKED  
CONCRETE**



**SEISMIC  
A-F**



**CORE DRILLED  
HOLES**



**UNCRAKED  
CONCRETE**



**FAST  
CURE**



**DRY, WET,  
FLOODED**

### WORKING TIMES\*

Concrete Temp °F (°C)	Working Time	Full Cure Time
14 (-10)	90 min	24 hr
23 (-5)	90 min	14 hr
32 (0)	45 min	7 hr
41 (5)	25 min	2 hr
50 (10)	15 min	90 min
70 (21)	6 min	45 min
86 (30)	4 min	25 min
95 (35)	2 min	20 min
104 (40)	1.5 min	15 min

1. For installation between 14°F and 23°F (-10°C and -5°C) the cartridge temperature must be conditioned to between 70°F and 75°F (21°C and 24°C).
2. Store adhesive in dry cool location free from sun and rain.
3. Storage temperature is 41°F to 77°F (5°C to 25°C).



# ALLFASTENERS' APPROVALS



ICC ESR 4732



I DOT



LEED Compliant



International Residential Code (IRC)



International Building Code (IBC)

## STANDARDS & APPROVALS

- ICC ESR 4632
- Illinois DOT Approved
- Certified NSF/ANSI 61
- International Building Code (IBC)
- International Residential Code (IRC)
- ASTM C881 Type I, II, IV, V Grade 3; Class A, B, C, AASHTO M325
- USDA Compliant
- LEED Compliant

Allfasteners proudly stands by their products, especially our Adhesive Anchoring Systems. [VF200PRO](#) is not only one of our best chemical anchor to date, but also boasts some of our most prestigious approvals. These include, ICC-ES approvals, LEED compliancy, IRC and IBC compliancy and [now DOT approvals](#) for several locations.







## Get All The ACCESSORIES

**ALLFASTENERS** not only has the adhesive anchors for any application, but we also have the accessories needed to complete the task as well. From epoxy dispensers to threaded rod, our range of adhesive anchoring accessories is compiled with everything you will need.



### Dispensing Accessories

#### Caulking Applicator Gun 10oz/300ml

PART NO.	SIZE		
13CAG300	Applicator Gun - 10 oz., Caulk 18:1 Ratio	1	12



#### 1:1 Epoxy Applicator Gun 20oz/600ml

PART NO.	SIZE		
13CAG600	Applicator Gun - 10 oz., Caulk 18:1 Ratio	1	5



#### ChemPower Battery Operated Applicator Gun

PART NO.	DESCRIPTION	
9CCG300	ChemPower Battery Operated Applicator Gun	1



#### Plastic Extension Tubing

PART NO.	DESCRIPTION		
1E25-6	6 ft Plastic Tubing	1	6



#### Epoxy Injection Mixing Nozzle

PART NO.	DESCRIPTION	
1SN10	VF200PRO Mixing Nozzle	25





# ALLFASTENERS' ACCESSORIES




## Hole Clearing Accessories


### Nylon Bristle Hole Clearing Brush

PART NO.	BRUSH SIZE	DRILL SIZE	
11B012	1/2	3/8 or 1/2	1

### Wire Hole Clearing Brush

PART NO.	BRUSH SIZE	DRILL SIZE	
11SB038	7/16	3/8	1
11SB012	9/16	1/2	1
11SB058	11/16	5/8	1
11SB034	13/16	3/4	1



### Hole Clearing Hand Pump

PART NO.	DESCRIPTION	
1BPUMP	Blow pump for epoxy installation	1





## Insert Accessories

### Hollow Block Umbrella Insert

PART NO.	DESCRIPTION		
1HBU-38	Umbrella Insert for 1/4, 3/8 and 1/2 Rod	20	200



### Nylon Screen Tube with Hole Plug



PART NO.	SCREEN SIZE	ROD SIZE	DRILL SIZE		
1NST1250	M12 x 1-5/16	1/4 & 5/16	1/2	25	250
1NST1280	M12 x 3-1/8	1/4 & 5/16	1/2	25	125
1NST1685	M16 x 3-3/8	3/8 & 1/2	5/8	12	96
1NST16130	M16 x 5-1/8	3/8 & 1/2	5/8	12	60
1NST2085	M20 x 3-3/8	1/2 & 5/8	3/4	10	50





# ALLFASTENERS' ACCESSORIES

## Threaded Accessories



### Adhesive Anchor Rod Assembly - Zinc Plated

PART NO.	SIZE		
1SCMZ38418	3/8-16 x 4-1/8	25	250
1SCMZ38518	3/8-16 x 5-1/8	25	200
1SCMZ38638	3/8-16 x 6-3/8	25	125
1SCMZ12612	1/2-13 x 6-1/2	20	100
1SCMZ58712	5/8-11 x 7-1/2	10	40
1SCMZ3410	3/4-10 x 10	5	20

### Adhesive Anchor Rod Assembly - Hot Dip Galvanized

PART NO.	SIZE		
1SCMG38418	3/8-16 x 4-1/8	25	250
1SCMG38518	3/8-16 x 5-1/8	25	200
1SCMG38638	3/8-16 x 6-3/8	25	125
1SCMG12612	1/2-13 x 6-1/2	20	100
1SCMG58712	5/8-11 x 7-1/2	10	40
1SCMG3410	3/4-10 x 10	5	20

### Adhesive Anchor Rod Assembly - 316 Stainless Steel

PART NO.	SIZE		
1SCMS438418	3/8-16 x 4-1/8	25	250
1SCMS438518	3/8-16 x 5-1/8	25	200
1SCMS438638	3/8-16 x 6-3/8	25	125
1SCMS412612	1/2-13 x 6-1/2	20	100
1SCMS458712	5/8-11 x 7-1/2	10	40
1SCMS43410	3/4-10 x 10	5	20









## Drilling Accessories


### Enduro SDS-Plus 4 Cutter Bits

PART NO.	SIZE	USABLE LENGTH (IN)		
5DSPE-532-6	5/32 X 6-3/8	4-3/8	1	10
5DSPE-14-4	1/4 X 4-3/4	2-3/4	1	10
5DSPE-14-6	1/4 X 6-3/4	4-3/4	1	10
5DSPE-14-8	1/4 X 8-3/4	6-3/4	1	10
5DSPE-14-12	1/4 X 12-3/4	10-3/4	1	10
5DSPE-316-4	3/16 X 4-3/4	2-3/4	1	10
5DSPE-316-6	3/16 X 6-3/4	4-3/4	1	10
5DSPE-316-8	3/16 X 8-3/4	6-3/4	1	10
5DSPE-316-12	3/16 X 12-3/4	10-3/4	1	10
5DSPE-12-6	1/2 X 6-3/4	4-3/4	1	10
5DSPE-12-8	1/2 X 8-3/4	6-3/4	1	10
5DSPE-12-12	1/2 X 12-3/4	10-3/4	1	10




\*More Sizes Available

### Dustless SDS-Plus Multi-Cutter Carbide Drill Bit with Vacuum Attachment

PART NO.	SIZE	USABLE LENGTH (IN)	
5SPDL-12-16	1/2 x 10	16	1
5SPDL-916-16	9/16 x 10	16	1
5SPDL-58-16	5/8 x 10	16	1
5SPDL-34-16	3/4 x 10	16	1




### Dustless SDS-MAX Multi-Cutter Carbide Drill Bit with Vacuum Attachment

PART NO.	SIZE	USABLE LENGTH (IN)	
5XDL-12-24	1/2 x 16	24	1
5XDL-916-24	9/16 x 16	24	1
5XDL-58-24	5/8 x 16	24	1
5XDL-34-24	3/4 x 16	24	1
5XDL-78-24	7/8 x 16	24	1
5XDL-1-24	1 x 16	24	1
5XDL-118-24	1-1/8 x 16	24	1
5XDL-114-24	1-1/4 x 16	24	1
5XDL-138-24	1-3/8 x 16	24	1



### DeWalt® 10 Gallon Wet/Dry HEPA/RRP Dust Extractor

PART NO.	SIZE	USE WITH	
9DWV012	10 Gallon Wet/Dry Vacuum	Dustless Drill Bits	1



Locations Nationwide: **888.859.6060**



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