

PRODUCT SUBMITTAL / SUBSTITUTION REQUEST

TO:

PROJECT:

SPECIFIED ITEM:

Section

Page

Paragraph

Description

PRODUCT SUBMITTAL / SUBSTITUTION REQUESTED:

The attached submittal package includes the product description, specifications, drawings, and performance data for use in the evaluation of the request.

SUBMITTED BY:

Name:

Signature:

Company:

Address:

Date:

Telephone:

Fax:

FOR USE BY THE ARCHITECT AND/OR ENGINEER

Approved **Approved as Noted** **Not Approved**

(If not approved, please briefly explain why the product was not accepted.)

By:

Date:

Remarks:

Trak-It® C3 *Gas Fastening System*

PRODUCT DESCRIPTION

The Trak-It C3 gas fastening system was developed for use in light-duty static applications, including attaching drywall track to concrete, block or steel, lath to concrete or block, furring strips to concrete or block, and plywood to concrete or block base materials. The system is designed for speed, efficiency and consistency. Operation of a gas fastening system does not require licensing.

GENERAL APPLICATIONS AND USES

- Attaching steel track to concrete, block or steel
- Attaching plywood to concrete or block
- Attaching lath to concrete, block or steel
- Attaching furring strips to concrete or block

FEATURES AND BENEFITS

- + No licensing required
- + Each fuel cell contains enough gas to install up to 1,000 fasteners
- + Available for use with Stick-E™ accessories
- + Short or long track versions

APPROVALS AND LISTINGS

International Code Council, Evaluation Service (ICC-ES), ESR-2036 (Formerly ER-6157)
City of Los Angeles (COLA) Research Report LARR-25523

GUIDE SPECIFICATIONS

CSI Divisions: 03151—Concrete Anchoring, 04081—Masonry Anchorage, 05090—Metal Fastenings, 06090—Wood and Plastic Fastenings, 09260—Finishes. Gas fastening systems shall be Trak-It as supplied by Powers Fasteners, Inc.

TOOL SPECIFICATIONS

Trak-It C3 Tool

Tool Body	Precision Moulded Aluminum and Plastic
Tool Length	17"
Tool Weight	8 lbs
Pin Length	1-1/2" total length
Pin Capacity	42 pins (22 pins - short track)
Power Capacity	90 Joules
Approximate Shots per Fuel Cell	1,000 pins
Approximate Shots per Battery Charge	5,500

SECTION CONTENTS Page No.

General Information..... 1
Tool Specification 1
Performance Data..... 2
Pin Specifications 4
Ordering Information 4



Trak-It C3 Tool



**Trak-It C3-ST Tool
(Short Track)**

SUITABLE BASE MATERIALS

Normal-Weight Concrete
Structural Lightweight Concrete
Concrete Masonry
Steel

PERFORMANCE DATA

Allowable Load Capacities for Trak-It C3 Fasteners Installed in Normal-Weight Concrete¹

Shank Diameter in. (mm)	Min. Embed. in. (mm)	Min. Spacing in. (mm)	Min. Edge Distance in. (mm)	Minimum Concrete Compressive Strength (f'_c)							
				2,000 psi (13.8 MPa)		3,000 psi (20.7 MPa)		4,000 psi (27.6 MPa)		5,000 psi (34.5 MPa)	
				Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)
0.102 (2.59)	5/8 (15.9)	4 (101.6)	3 (76.2)	70 (0.31)	80 (0.36)	75 (0.33)	90 (0.40)	80 (0.36)	100 (0.44)	85 (0.38)	110 (0.49)
	3/4 (19.1)	4 (101.6)	3 (76.2)	80 (0.36)	130 (0.58)	105 (0.47)	170 (0.76)	130 (0.58)	210 (0.93)	155 (0.69)	250 (1.11)
	7/8 (22.2)	4 (101.6)	3 (76.2)	80 (0.36)	160 (0.71)	105 (0.47)	190 (0.85)	130 (0.58)	220 (0.98)	155 (0.69)	250 (1.11)
	1 (25.4)	4 (101.6)	3 (76.2)	80 (0.36)	190 (0.85)	105 (0.47)	210 (0.93)	130 (0.58)	230 (1.02)	155 (0.69)	250 (1.11)

1. Allowable load capacities listed are calculated using a safety factor of 5.0 or greater. Consideration of safety factors of 10 or higher may be necessary depending on the application, such as life safety or overhead.

Allowable Load Capacities for Trak-It C3 Installed in Structural Lightweight Concrete¹

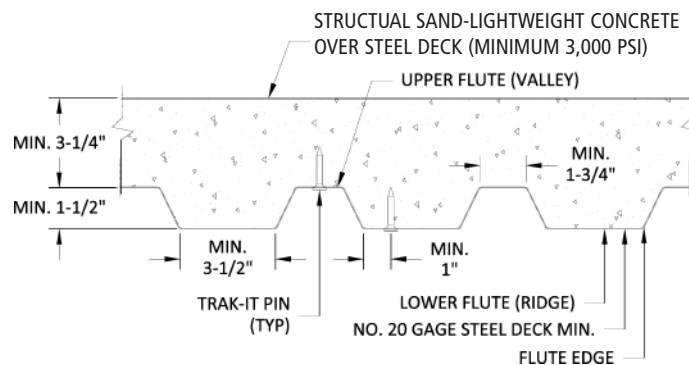
Shank Diameter in. (mm)	Min. Embedment in. (mm)	Minimum Spacing in. (mm)	Minimum Edge Distance in. (mm)	Minimum Concrete Compressive Strength (f'_c)					
				3,000 psi (20.7 MPa)		4,000 psi (27.6 MPa)		5,000 psi (34.5 MPa)	
				Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)
0.102 (2.59)	3/4 (19.1)	4 (101.6)	6 (152.4)	100 (0.44)	120 (0.53)	110 (0.49)	190 (0.85)	110 (0.49)	255 (1.13)
	7/8 (22.2)	4 (101.6)	6 (152.4)	110 (0.49)	125 (0.56)	120 (0.53)	190 (0.85)	120 (0.53)	260 (1.16)
	1 (25.4)	4 (101.6)	6 (152.4)	110 (0.49)	130 (0.58)	120 (0.53)	190 (0.85)	120 (0.53)	265 (1.18)

1. Allowable load capacities listed are calculated using a safety factor of 5.0 or greater. Consideration of safety factors of 10 or higher may be necessary depending on the application, such as life safety or overhead.

Allowable Load Capacities for Trak-It C3 Fasteners Installed Through Steel Deck into Structural Lightweight Concrete^{1,2,3,4}

Shank Diameter in. (mm)	Min. Embedment in. (mm)	Minimum Spacing in. (mm)	Minimum Edge Distance in. (mm)	Minimum Concrete Compressive Strength (f'_c)			
				3,000 psi (20.7 MPa)		4,000 psi (27.6 MPa)	
				Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)
0.102 (2.59)	3/4 (19.1)	4 (101.6)	1 (25.4)	80 (0.36)	105 (0.47)	85 (0.38)	115 (0.51)
	7/8 (22.2)	4 (101.6)	1 (25.4)	85 (0.38)	120 (0.53)	90 (0.40)	130 (0.58)

1. Allowable load capacities listed are calculated using a safety factor of 5.0 or greater. Consideration of safety factors of 10 or higher may be necessary depending on the application, such as life safety or overhead.
2. For fasteners installed through steel deck, the minimum edge distance is 1 inch from the edge of the deck rib and 6 inches from the end of the deck. Allowable shear loads may be applied in any direction.
3. Fasteners are permitted to be installed in the lower or upper flute of the steel deck provided that proper installation procedures are maintained.
4. The allowable values are applicable to fasteners installed through the underside of a steel deck at the ribs and into minimum 3,000 psi structural lightweight concrete. The steel deck must have a minimum base-metal thickness of 0.034 inch (20 gage) with a minimum yield point, F_y , of 33,000 psi and conform to the Steel Deck Institute requirements for Standard Wide Rib Deck.



GAS FASTENING

PERFORMANCE DATA

Allowable Load Capacities for Trak-It C3 Fasteners Installed in Concrete Masonry Units^{1,2}

Shank Diameter in. (mm)	Min. Embedment in. (mm)	Minimum Spacing in. (mm)	Minimum Edge Distance in. (mm)	Hollow or Grouted (Any Location)	
				$f'_m \geq 1,500$ psi (10.4 MPa)	
				Tension lbs. (kN)	Shear lbs. (kN)
0.102 (2.59)	7/8 (22.2)	4 (101.6)	3 3/4 (95.3)	65 (0.29)	80 (0.36)
	1 (25.4)	4 (101.6)	3 3/4 (95.3)	65 (0.29)	120 (0.53)

1. Allowable load capacities listed are calculated using a safety factor of 5.0 or greater. Consideration of safety factors of 10 or higher may be necessary depending on the application, such as life safety or overhead.
2. Tabulated load values are for fasteners installed in minimum 6-inch wide, Minimum Grade N, Type II lightweight, medium and normal-weight concrete masonry units conforming to ASTM C 90. The face shell thickness of the concrete masonry units shall be a minimum of 1-1/4 inch.

Allowable Load Capacities for Trak-It C3 Fasteners Installed in ASTM A 36 Steel^{1,2,3}

Fastener Type (Style)	Minimum Spacing in. (mm)	Minimum Edge Distance in. (mm)	Nominal Steel Thickness							
			3/16"		1/4"		3/8"		1/2"	
			Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)
1/2 inch Steel Pin	1 (25.4)	1/2 (12.7)	115 (0.51)	260 (1.16)	165 (0.73)	260 (1.16)	175 (0.78)	255 (1.13)	175 (0.78)	205 (0.91)

1. Allowable load capacities listed are calculated using a safety factor of 5.0 or greater. Consideration of safety factors of 10 or higher may be necessary depending on the application, such as life safety or overhead.
2. Steel members must have a minimum yield strength, f_y , of 36,000 psi
3. Fasteners installed in 1/2-inch-thick steel must have a minimum embedment depth of 3/8-inch.

Allowable Load Capacities for Trak-It C3 Fasteners Installed in ASTM A 572 Steel^{1,2,3}

Fastener Type (Style)	Minimum Spacing in. (mm)	Minimum Edge Distance in. (mm)	Nominal Steel Thickness							
			3/16"		1/4"		3/8"		1/2"	
			Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)
1/2 inch Steel Pin	1 (25.4)	1/2 (12.7)	145 (0.64)	290 (1.29)	175 (0.78)	290 (1.29)	215 (0.96)	270 (1.20)	165 (0.73)	250 (1.11)

1. Allowable load capacities listed are calculated using a safety factor of 5.0 or greater. Consideration of safety factors of 10 or higher may be necessary depending on the application, such as life safety or overhead.
2. Steel members must have a minimum yield strength, f_y , of 50,000 psi
3. Fasteners installed in 1/2-inch-thick steel must have a minimum embedment depth of 3/8-inch.

Allowable Load Capacities for Trak-It C3 Plywood Pin Installed Through Plywood into Steel Track¹

Fastener Type (Style)	Shank Diameter in. (mm)	16 Gage Steel Track Tension lbs. (kN)	18 Gage Steel Track Tension lbs. (kN)
Plywood to Steel Pin	0.102 (2.59)	65 (0.29)	40 (0.18)

1. Allowable load capacities listed are calculated using a safety factor of 5.0 or greater. Consideration of safety factors of 10 or higher may be necessary depending on the application, such as life safety or overhead.

Allowable Negative Transverse Loads Using Plywood/Densglass® Pin and Denz-Tight™ Washer Fasteners¹

Fastener Type (style)	Sheathing	Minimum Steel Stud Thickness (gage)	Minimum Stud Spacing (inches)	Fastener Spacing (inches)	Allowable Negative Pressure (psf)
Plywood/Densglass® 0.102" Diameter	Densglass® Gold	16	24	6-1/2	50

1. Allowable load capacities are based on a minimum safety factor of 3.0. Densglass® is a registered trademark of Georgia Pacific

GAS FASTENING

ORDERING INFORMATION

C3 Tools and Accessories

Trak-It C3 Tools

Cat No.	Description	STD Box	STD Ctn.
55011	C3 Trak-It	1	1
55002	C3-ST Trak-It	1	1

Tool comes with case, charger and two batteries.



Trak-It Fuel Cell

Cat No.	Description	STD Box	STD Ctn.
55010	C3 Trak-It Fuel Cell	20	80

Fuel cell works in temperatures down to 10°F.



Trak-It Pole Tools

Cat No.	Description	STD Box	STD Ctn.
55048	6' Pole Tool & One Trak-It C3-ST (Short Track) Tool	1	1
55051	8' Pole Tool & One Trak-It C3-ST (Short Track) Tool	1	1
55053	6' Pole Tool	1	1
55055	8' Pole Tool	1	1



1/2" Steel Pin (Step Shank with Rolled Point)

Cat. No.	Description	Shank Diameter	Standard Box	Standard Carton
55020	1/2" Steel Pin	0.120/0.102"	1,000	5,000

Designed for use in A36 and A572 steel beams, purlins, and bar joist. All pins are zinc plated for minimum level of corrosion resistance (mild service condition).

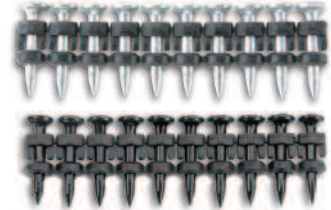
Each box of pins come packaged with one fuel cell.



Standard Pins (Smooth Shank with Rolled Point)

Cat. No.	Description	Shank Diameter	Standard Box	Standard Carton
55022B	3/4" Black	0.102"	1,000	5,000
55024	1" Zinc	0.102"	1,000	5,000
55026	1 1/4" Zinc	0.102"	1,000	5,000
55028	1 1/2" Zinc	0.102"	1,000	5,000

Designed for use in concrete and masonry. All pins are zinc plated or coated with black oxide for a minimum level of corrosion resistance (mild service condition). Each box of pins come packaged with one fuel cell.



Standard Pins with Break-free Collation (Smooth Shank with Rolled Point)

Cat. No.	Description	Shank Diameter	Standard Box	Standard Carton
55032	3/4" Black	0.102"	1,000	5,000
55033	1" Zinc	0.102"	1,000	5,000
55034	1 1/4" Zinc	0.102"	1,000	5,000
55035	1 1/2" Zinc	0.102"	1,000	5,000

Designed for use in concrete and masonry. All pins are zinc plated or coated with black oxide for a minimum level of corrosion resistance (mild service condition). Plastic collation breaks completely free of pin during installation.

Each box of pins come packaged with one fuel cell.



Plywood/Densglass® to Steel Pin (Spiral Knurl Shank with Rolled Point)

Cat. No.	Description	Shank Diameter	Standard Box	Standard Carton
55036	1 3/8" Zinc	0.102"	1,000	5,000

Designed for use to attach plywood to light gage steel framing. All pins are zinc plated for a minimum level of corrosion resistance (mild service condition). Each box of pins come packaged with one fuel cell.



Stick-E Pins (Step Shank)

Cat. No.	Description	Shank Diameter	Standard Box	Standard Carton
55080	780 Step Shank Pin	0.120/0.102"	1,000	5,000
55081	1" Step Shank Pin	0.120/0.088"	1,000	5,000
55087	730 Step Shank Pin	0.120/0.102"	1,000	5,000
55085	680 Step Shank Pin	0.120/0.102"	1,000	5,000

Designed for use in hard aggregate and precast concrete. All pins are zinc plated for minimum level of corrosion resistance (mild service condition). Each box of pins come packaged with one fuel cell.



Trak-It® C4 High Performance Gas Fastening System

PRODUCT DESCRIPTION

The Trak-It C4 and C4EX gas fastening systems were developed for use in high volume production applications. Powerful rugged tools for fastening wood to concrete or steel. The systems are designed for speed, increased power and durability. The C4 CZ tool was designed for use with single shot powder pins together with gas fastening technology. Operation of a gas fastening system does not require licensing.

GENERAL APPLICATIONS AND USES

- Attaching wood to concrete, block or steel
- Attaching Steel to concrete, block or steel
- Attaching Plywood to Steel
- Attaching Steel track to concrete

FEATURES AND BENEFITS

- + No licensing required
- + Increased power and durability
- + Handles up to 2-9/16" length fasteners
- + Each fuel cell contains enough gas to install up to 800 fasteners
- + Pin diameter range 0.102" to 0.145"

APPROVALS AND LISTINGS

International Code Council , Evaluation Service (ICC-ES), ESR-2249

GUIDE SPECIFICATIONS

CSI Divisions: 03151–Concrete Anchoring, 04081-Masonry Anchorage, 05090-Metal Fastenings, 06090-Wood and Plastic Fastening. Gas fastening systems shall be Trak-It as supplied by Powers Fasteners, Inc.

TOOL SPECIFICATIONS

Trak-It C4 Tool/C4EX Tool

Tool Body	Precision Moulded Aluminum and Plastic
Tool Length	17-3/4"
Tool Weight	9.7 lbs
Pin Length	2-9/16" Total Length
Pin Capacity	42 pins
Power Capacity	120 Joules (C4) , 150 Joules (C4EX)
Approximate Shots per Fuel Cell	800 pins
Approximate Shots per Battery Charge	5,500

Trak-It C4CZ Single Shot Tool

Tool Body	Precision Moulded Aluminum and Plastic
Tool Length	17-3/4"
Tool Weight	9.7 lbs
Pin Length	3" Total Length
Pin Capacity	Single Shot
Power Capacity	150 Joules
Approximate Shots per Fuel Cell	800 pins
Approximate Shots per Battery Charge	5,500

SECTION CONTENTS Page No.

General Information..... 5
 Tool Specification 5
 Performance Data 6
 Pin Specifications 8
 Ordering Information 9



Trak-It C4 Tool



Trak-It C4EX Tool



Trak-It C4CZ Tool

SUITABLE BASE MATERIALS

Normal-Weight Concrete
 Structural Lightweight Concrete
 Concrete Masonry
 Steel

GAS FASTENING

PERFORMANCE DATA

Allowable Load Capacities for Trak-It C4 Fasteners Installed in Normal Weight Concrete^{1,2,3}

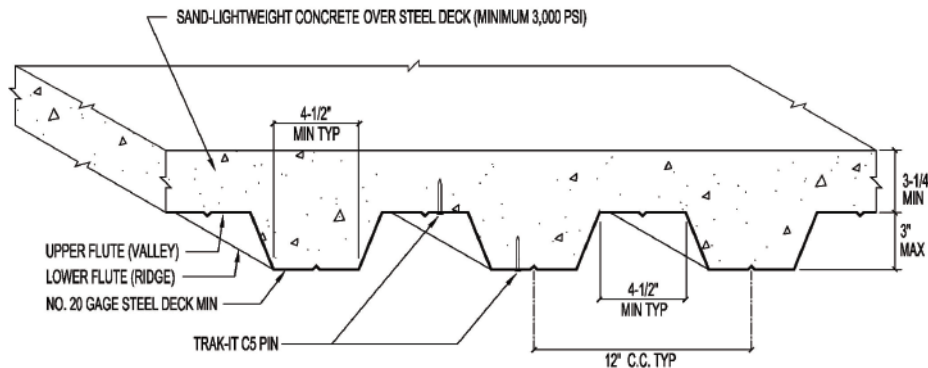
Shank Type	Shank Diameter in. (mm)	Minimum Embedment inches (mm)	Minimum Spacing inches (mm)	Minimum Edge Distance inches (mm)	Minimum Concrete Compressive Strength (f'c)			
					2,500 psi (17.2 mPa)		3,000 psi (20.7 mPa)	
					Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)
Straight	0.145 (3.68)	3/4 (19.1)	4 (101.6)	3 (76.2)	65 (0.29)	105 (0.47)	70 (0.31)	110 (0.49)
Straight	0.145 (3.68)	7/8 (22.2)			125 (0.56)	105 (0.47)	135 (0.60)	110 (0.49)
Step	0.145 (3.68)	3/4 (19.1)	4 (101.6)	3 (76.2)	80 (0.36)	220 (0.98)	90 (0.40)	235 (1.04)
Step	0.145 (3.68)	1 (25.4)			130 (0.58)	245 (1.09)	140 (0.62)	270 (1.20)
Taper	0.137 (3.48)	3/4 (19.1)	4 (101.6)	1-3/4 (44.5)	80 (0.36)	90 (0.40)	90 (0.40)	100 (0.44)
Taper	0.137 (3.48)	1 (25.4)	4 (101.6)	1-3/4 (44.5)	90 (0.40)	70 (0.31)	100 (0.44)	80 (0.36)

1. Allowable load capacities listed are calculated using a safety factor of 5.0 or greater. Consideration of safety factors of 10 or higher may be necessary depending on the application, such as life safety or overhead.
2. The concrete thickness must be a minimum of 3 times the embedment depth of the fastener.
3. The tabulated allowable load values are for the fastener only. Wood or steel members connected to the steel substrate must be investigated in accordance with accepted design criteria.

Allowable Load Capacities for Trak-It C4 Fasteners Installed in Lightweight Concrete and Structural Sand-Lightweight Concrete over Steel Deck^{1,2,3,4}

Shank Type	Shank Diameter in. (mm)	Minimum Embedment inches (mm)	Minimum Spacing inches (mm)	Minimum Edge Distance inches (mm)	Location	Minimum Concrete Compressive Strength (f'c)			
						2,500 psi (17.2 mPa)		3,000 psi (20.7 mPa)	
						Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)
Straight	0.145 (3.68)	3/4 (19.1)	4 (101.6)	1-1/8 (28.6)	Top	110 (0.49)	150 (0.67)	120 (0.53)	165 (0.73)
					Lower Flute	70 (0.31)	180 (0.80)	80 (0.36)	200 (0.89)
					Upper Flute	100 (0.44)	205 (0.91)	110 (0.49)	220 (0.98)

1. Allowable load capacities listed are calculated using a safety factor of 5.0 or greater. Consideration of safety factors of 10 or higher may be necessary depending on the application, such as life safety or overhead.
2. The steel deck must have a minimum base material thickness of No. 20 gage.
3. Concrete thickness must be a minimum of 3 times the embedment depth of the fastener. i.e. minimum yield strength, Fy, of 33 ksi, and conform to the Steel Deck Institute requirements for Standard Wide Rib Deck, Type B.
4. The tabulated allowable load values are for the fastener only. Wood or steel members connected to the steel substrate must be investigated in accordance with accepted design criteria.



PERFORMANCE DATA

Allowable Load Capacities for Trak-It C4 Fasteners Installed in ASTM A36 Steel (minimum $f_{ut} = 58$ ksi)¹

Fastener Type (Style)	Shank Diameter inches (mm)	Minimum Spacing inches (mm)	Minimum Edge Distance inches (mm)	Minimum Steel Member Thickness inches (mm)	Tension lbs (kN)	Shear lbs (kN)
1/2" Steel Pin	0.120 (3.05)	1 (25.4)	1/2 (12.7)	1/4 (6.4)	245 (1.09)	100 (0.44)
.680 Steel Pin	0.120 (3.05)				270 (1.20)	170 (0.75)
.730 Steel Pin	0.120 (3.05)				330 (1.46)	235 (1.04)
1" Steel Pin	0.145 (3.68)				360 (1.60)	360 (1.60)
1-1/4" Steel Pin	0.145 (3.68)				390 (1.73)	310 (1.38)
2" Steel Pin	0.145 (3.68)				240 (1.06)	280 (1.24)
2" Steel Pin (ACQ)	0.145 (3.68)				170 (0.75)	280 (1.24)

1. Allowable load capacities listed are calculated using a safety factor of 5.0 or greater. Consideration of safety factors of 10 or higher may be necessary depending on the application, such as life safety or overhead.

Allowable Load Capacities for C4 Coated Step Shank ACQ Pin in Normal-Weight Concrete ^{1,2}

Fastener Type (Style)	Minimum Embedment in. (mm)	Minimum Concrete Compressive Strength	
		4,000 psi (27.6 mPa)	
		Tension lbs. (kN)	Shear lbs. (kN)
C4 Coated Step Shank ACQ Pin	3/4 (19.1)	200 (0.89)	280 (1.24)

1. Allowable load capacities listed are calculated using a safety factor of 5.0 or greater. Consideration of safety factors of 10 or higher may be necessary depending on the application, such as life safety or overhead.

2. Tabulated values are listed for the fastener only. Wood or steel members connected to the concrete substrate must be investigated in accordance with accepted design criteria.

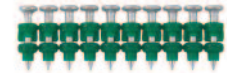
ORDERING INFORMATION

C4 Pins - Straight and Taper Pins

Cat No.	Description	Shank Diameter	STD Box	STD Ctn.
55111	3/4" Pin	0.102	800	4000
55113	1" Pin	0.102	800	4000
55130	3/4" Straight Shank Pin	0.145	800	4000
55132	1" Straight Shank Pin	0.145	800	4000
55124	2-1/4" Pin	0.102	800	4000
55128	2-1/2" Pin	0.102	800	4000
55145	2-9/16" Taper Pin	0.137	800	4000
55147	2-9/16" Taper Pin w/ Washer	0.137	800	4000
55161	.500 Pin, (K)	0.120	800	4000
55163	.680 Pin, (K)	0.102	800	4000
55165	.730 Pin, (K)	0.120	800	4000
55116	1-1/4" Pin	0.102	800	4000
55118	1-1/2" Pin	0.102	800	4000
55172	1" Wood / Steel Pin, (K)	0.145	800	4000
55173	1-1/4" Wood / Steel Pin, (K)	0.145	800	4000
55174	2" Wood / Steel Pin, (K)	0.145	800	4000

(K) = knurled
Each box of pins come packaged with one fuel cell.

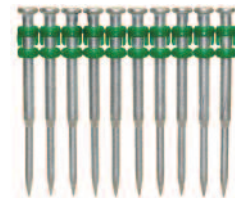
55149	1" Square Washer (Stick E)	-	800	-
-------	----------------------------	---	-----	---



C4 Step Shank Pins

Cat No.	Description	Shank Diameter	STD Box	STD Ctn.
55134	1-1/4" Step Shank Pin	0.145/0.102	800	4000
55136	1-1/2" Step Shank Pin	0.145/0.102	800	4000
55141	1-7/8" Step Shank Pin, (K)	0.145/0.102	800	4000
55138	2-3/8" Step Shank Pin	0.145/0.102	800	4000
55140	2-1/2" Step Shank Pin	0.145/0.102	800	4000
55139	2-1/4" Step Shank Pin	0.145/0.102	800	4000

(K) = knurled
Each box of pins come packaged with one fuel cell.



C4 Coated Step Shank Pins (ACQ)

Cat No.	Description	Shank Diameter	STD Box	STD Ctn.
55167	1" Step Shank Pin ACQ, (K)	0.145	800	4000
55169	1-1/4" Step Shank Pin ACQ, (K)	0.145	800	4000
55171	2" Step Shank Pin ACQ, (K)	0.145	800	4000

(K) = knurled
Each box of pins come packaged with one fuel cell.



GAS FASTENING

ORDERING INFORMATION

Cat No.	Description	STD Box	STD Ctn.
55160	C4 Insulation Washer	500	–



Cat No.	Description	Shank Diameter	STD Box	STD Ctn.
55180	2-1/4" Duplex Kicker Pin	0.131"	800	4,000



Tools and Accessories

Trak-It C4 Tools

Cat No.	Description	STD Box	STD Ctn.
55112	C4 Trak-It	1	1
55127	C4 EX Trak-It	1	1
55133	C4 CZ Trak-It	1	1



Tools comes with case, charger and two batteries.

Trak-It C4 Fuel Cell

Cat No.	Description	STD Box	STD Ctn.
55115	C4 Trak-It Fuel Cell	12	72



Fuel cell works in temperatures down to 10°F.

GAS FASTENING


Stick-E *Accessories for Trak-It C3*

PRODUCT DESCRIPTION


The Stick-E fastening system uses Trak-It C3 gas technology with specially designed accessories for fastening typical applications encountered by electricians and mechanical contractors. The Stick-E fastening system allows direct fastening through the fixture with the magazine pin and accessory eliminating the need for drilling or anchoring.

APPLICATIONS GUIDE


Cable Tie Donut

Application	For attaching small and large diameter cable ties to all types of walls and ceilings including wood, steel beams, concrete and block. Ideal for strapping wires and cable for hanging temporary lighting fixtures from all base materials. (fits ties up to 1/4" wide.)	
Contractor(s)	Electricians	
Suggested Pin Size(s)	780 Trak-It Step Shank Pins	


Mini Conduit Clip

Application	For attaching conduit and piping to steel beams, wood and concrete ceilings.	
Contractor(s)	Electricians	
Suggested Pin Size(s)	780 Trak-It Step Shank Pins	


Conduit Clip (One Hole Strap)

Application	For attaching conduit and light duty pipe to walls and ceilings of any base material including wood, steel beams, concrete and steel purlins.	
Contractor(s)	Electricians	
Suggested Pin Size(s)	780 Trak-It Step Shank Pins	


Bridal Ring

Application	For suspending single or multiple wires and cable in runs from overhead ceilings of all base materials including wood, steel beams, concrete and steel purlins.	
Contractor(s)	Electricians	
Suggested Pin Size(s)	780 Trak-It Step Shank Pins 1" Trak-It Step Shank Pins	

BX Clip


Application	For attaching BX cable to walls and ceilings of any base material including wood, steel beams, concrete and steel purlins.	
Contractor(s)	Cable Installers, Telecommunication Installers, Electricians	
Suggested Pin Size(s)	780 Trak-It Step Shank Pins	

Strap Washer


Application	For attaching duct straps to suspend HVAC ductwork onto ceiling of various base materials.	
Contractor(s)	Sheet Metal Contractors	
Suggested Pin Size(s)	780 Trak-It Step Shank Pins	

APPLICATIONS GUIDE


Rebar Basket Clip

Application	For attaching rebar to existing concrete or wood forms prior to a pour. Most popular in road and bridge construction and repair.	
Contractor(s)	Concrete Contractors	
Suggested Pin Size(s)	780 Trak-It Step Shank Pins	


Rod Hanger

Application	Attaching rod overhead to steel beams, wood or concrete ceilings for the purpose of suspending utilities, cable trays, conduit and pipe.	
Contractor(s)	Electricians, Plumbers, Mechanical Contractors	
Suggested Pin Size(s)	780 Trak-It Step Shank Pins Break-Free Pins	


Right Angle Clip

Application	For suspending acoustical ceiling systems or light fixtures.	
Contractor(s)	Acoustical and Ceiling Contractors	
Suggested Pin Size(s)	780 Trak-It Step Shank Pins Break-Free Pins	


Insulation Washer

Application	For attaching exterior foam insulation to all base materials including wood, steel and concrete.	
Contractor(s)	Insulation Contractors, Waterproofers	
Suggested Pin Size(s)	780 Trak-It Step Shank Pins Break-Free Pins 1 1/4" Break Free Rolled Point Trak-It Pins (most base materials) 1 1/2" Break Free Rolled Point Trak-It Pins (most base materials)	


Lathing Washer

Application	For attaching wire lath to wood, steel, concrete or block for the purpose of troweling stucco in exterior applications or plaster in interior applications. Can also be used as a general purpose washer.	
Contractor(s)	Drywall, Plaster, Exterior Siding Contractors	
Suggested Pin Size(s)	780 Trak-It Step Shank Pins 1" Break Free Rolled Point Trak-It Pins (most base materials) 1 1/4" Break Free Rolled Point Trak-It Pins (most base materials)	

Stainless Steel Sealing Washer

Application	For attaching waterproofing membrane to foundations and roofing applications.	
Contractor(s)	Insulation Contractors, Waterproofers, Roofers	
Suggested Pin Size(s)	3/4" Perma-Seal Coated Rolled Point Trak-It Pins (most base materials) 1" Perma-Seal Coated Rolled Point Trak-It Pins (most base materials)	

Denz-Tight™ Washer

Application	For attaching Densglass® exterior sheathing to steel studs.	
Contractor(s)	Drywall Contractors	
Suggested Pin Size(s)	1-3/8" Plywood/Densglass® Pins	

* Densglass® is a registered trademark of Georgia Pacific.

GAS FASTENING

PERFORMANCE DATA

Ultimate Load Capacities for Stick-E Accessories Installed with 780 Pin into Concrete, Concrete Block, or Lightweight Concrete over Steel Deck^{1,2}

Stick-E	Minimum Embed. Depth <i>h_v</i> in. (mm)	Ultimate Load	
		Tension lbs. (kN)	Shear lbs. (kN)
Conduit Clip	3/4 (19.1)	80 (0.35)	60 (0.27)
BX Clip	3/4 (19.1)	80 (0.35)	70 (0.31)
Bridal Ring	3/4 (19.1)	325 (1.44)	200 (0.89)
Cable Tie	3/4 (19.1)	50 (0.22)	60 (0.27)
Insulation Washer	3/4 (19.1)	300 (1.33)	400 (1.78)
Rebar Clip	3/4 (19.1)	275 (1.22)	275 (1.22)
Strap Washer	3/4 (19.1)	275 (1.22)	400 (1.78)
Rod Hanger	3/4 (19.1)	420 (1.86)	N/A
Right Angle Clip	3/4 (19.1)	300 (1.33)	400 (1.78)

- The values listed above are ultimate load capacities which should be reduced by a minimum safety factor of 5.0 or greater to determine the allowable working load. Consideration of safety factors of 10.0 or higher may be necessary depending on the application, such as life safety or overhead.
- Minimum 2,000 psi Concrete or Concrete Block at time of installation.

Ultimate Load Capacities for Stick-E Accessories Installed with 780 Pin into A36 and A572 Steel¹

Stick-E	Minimum Embedment Depth <i>h_v</i> in. (mm)	Ultimate Load					
		A36 Steel		A572 Steel		A572 Steel	
		(3/16" Thick)		(1/8" Thick)		(12 Gage)	
		Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)
Conduit BX Clip	3/4 (19.1)	80 (0.35)	70 (0.35)	80 (0.35)	70 (0.35)	80 (0.35)	70 (0.35)
Bridal Ring	3/4 (19.1)	325 (1.44)	200 (0.89)	325 (1.44)	200 (0.89)	325 (1.44)	200 (0.89)
Cable Tie	3/4 (19.1)	50 (0.22)	60 (0.27)	50 (0.22)	60 (0.27)	50 (0.22)	60 (0.27)
Strap Washer	3/4 (19.1)	275 (1.22)	400 (1.78)	275 (1.22)	400 (1.78)	275 (1.22)	400 (1.78)
Rod Hanger	3/4 (19.1)	420 (1.86)	N/A	420 (1.86)	N/A	420 (1.86)	N/A

- The values listed above are ultimate load capacities which should be reduced by a minimum safety factor of 5.0 or greater to determine the allowable working load. Consideration of safety factors of 10.0 or higher may be necessary depending on the application, such as life safety or overhead.

Ultimate Load Capacities for Electrical Boxes Installed with 780 Trak-It Step Shank Pin into Concrete or Concrete Block^{1,2,3}

Trak-It Pin	Minimum Embed. Depth <i>h_v</i> in. (mm)	Number of Pins (Per Box)	Maximum Spacing in. (mm)	Fastening Pattern	Ultimate Load		
					Tension lbs. (kN)	Shear Vert. Axis lbs. (kN)	Shear Horiz. Axis lbs. (kN)
780	5/8 (15.9)	2	1 (25.5)	Line	640 (2.85)	975 (4.34)	850 (3.78)
		3	2 (50.9)	Triangle	720 (3.20)	1,115 (4.96)	1,055 (4.69)
		4	2 (50.9)	Square/Diamond	900 (4.00)	1,840 (8.18)	1,840 (8.18)

- The values listed above are ultimate load capacities which should be reduced by a minimum safety factor of 5.0 or greater to determine the allowable working load. Consideration of safety factors of 10.0 or higher may be necessary depending on the application, such as life safety or overhead.

- Installations for Nominal 16 Gage Electrical Boxes, All Finishes.
- Minimum 2,000 psi Concrete or Concrete Block at time of installation.

GAS FASTENING

ORDERING INFORMATION
Stick-E Mini Conduit Clip

Cat. No.	Description	Standard Box	Standard Carton
55064	Mini Conduit Clip 1/2"	100	1,000
55066	Mini Conduit Clip 3/4"	100	1,000
55068	Mini Conduit Clip 1"	100	1,000

Stick-E Cable Tie Donut

Cat. No.	Description	Standard Box	Standard Carton
55076	Cable Tie Donut	100	1,000

Stick-E Conduit Clip (One Hole Strap)

Cat. No.	Description	Standard Box	Standard Carton
55059	Conduit Clip 1/2"	100	1,000
55061	Conduit Clip 3/4"	100	1,000
55063	Conduit Clip 1"	100	1,000

Stick-E BX Clip

Cat. No.	Description	Standard Box	Standard Carton
55054	Stick-E 3/8" BX Clips	100	1,000

Stick-E Bridal Ring

Cat. No.	Description	Standard Box	Standard Carton
55094	Bridal Ring 1 1/4"	100	1,000
55095	Bridal Ring 1 1/2"	100	1,000
55096	Bridal Ring 2"	100	1,000

Stick-E Strap Washer

Cat. No.	Description	Standard Box	Standard Carton
55062	Strap Washer 1/2" Diameter	100	1,000

Stick-E Rod Hanger

Cat. No.	Description	Standard Box	Standard Carton
55050	Rod Hanger 1/4"	100	1,000
55052	Rod Hanger 3/8"	100	1,000

Stick-E Rebar Basket Clip

Cat. No.	Description	Standard Box	Standard Carton
55070	#3 and #4 Bar	100	1,000

Stick-E Right Angle Clip

Cat. No.	Description	Standard Box	Standard Carton
55092	Right Angle Clip (Wirehole 0.278")	100	1,000

Stick-E Insulation Washer

Cat. No.	Description	Standard Box	Standard Carton
55042	Insulation Washer 1 7/16"	100	1,000

Stick-E Lathing Washer

Cat. No.	Description	Standard Box	Standard Carton
55040	Lathing Washer 1" with holes	100	1,000

Stick-E Stainless Steel Sealing Washer

Cat. No.	Description	Standard Box	Standard Carton
55043	SS Sealing Washer 3/4"	100	1,000

Stick-E Denz-Tight™ Washer

Cat. No.	Description	Standard Box	Standard Carton
55157	Denz-Tight™ Washer	100	1,000


GAS FASTENING