

Trak-It® Gas Fastening System

PRODUCT DESCRIPTION

Trak-It is a gas-powered fastening system used for light-duty static applications, including 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 high performance system is designed for speed, efficiency and consistency. A fuel cell contains enough gas to install up to 800 to 1,200 fasteners. Operation of a gas powered fastening system does not require special safety training or licensing.

GENERAL APPLICATIONS AND USES

- Shoot metal track, lath or furring strips to concrete, block, brick and steel
- Lightweight design is great for overhead use
- Shoot sill plate to concrete foundation (C4 tool)

FEATURES AND BENEFITS

- Fast, safe and easy to use
- No licensing required
- Nose of tool fits in narrow channel
- 30,000 to 50,000 shots before cleaning is necessary
- No extra accessories required for shooting lath

APPROVALS AND LISTINGS

International Code Council Evaluation Service (ICC-ES) 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 and 09051-Fastenings. Power-actuated system shall be Trak-It as supplied by Powers Fasteners, Inc., Brewster, NY.

TOOL SPECIFICATIONS

Trak-It C3 Tool

Tool Body	Precision Moulded Aluminum and Plastic
Tool Length	13"
Tool Weight	8 lbs
Pin Length	1/2" to 1 1/2" Total Length
Pin Capacity	42
Approximate Shots per Fuel Cell	1,200 pins
Approximate Shots per Battery Charge	5,700

Trak-It C4 Tool

Tool Body	Precision Moulded Aluminum and Plastic
Tool Length	13"
Tool Weight	7 lbs
Pin Length	2 1/2" Total Length
Pin Capacity	42 pins
Approximate Shots per Fuel Cell	800 pins
Approximate Shots per Battery Charge	5,700 pins

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Trak-It C3 Tool



Trak-It C3-ST Tool
(Short Track)



Trak-It C4 Tool

SUITABLE BASE MATERIALS

Normal-Weight Concrete
 Structural Lightweight Concrete
 Hollow and Grouted CMU
 Brick Masonry
 Steel

GAS FASTENING

PIN SPECIFICATIONS

Fasteners for Trak-It C3 Tool

Pin	Available Lengths	Shank Diameter	Material	Hardness	Finish
1/2" Steel Pin (Step Shank with Rolled Point)	1/2"	0.120/0.102"	AISI 1060 to 1065	Rockwell Hardness 51 to 55	ASTM B633, SC1, Type III (Zn/Fe 5)
Standard Pins (Smooth Shank with Rolled Point)	3/4"	0.102"	AISI 1060 to 1065	Rockwell Hardness 51 to 55	ASTM B695, Class 5, Type I
	1"				
	1 1/4"				
	1 1/2"				
Standard Pins with Break-free Collation (Smooth Shank with Rolled Point)	3/4"	0.102"	AISI 1060 to 1065	Rockwell Hardness 51 to 55	ASTM B695, Class 5, Type I (3/4" pin has a Black Oxide Finish)
	1 1/4"				
	1 1/2"				
Perma-Seal Coated Standard Pins (Smooth Shank with Rolled Point)	3/4"	0.102"	AISI 1060 to 1065	Rockwell Hardness 51 to 55	Perma-Seal Coating
	1"				
Plywood to Steel (Spiral Knurl Shank with Rolled Point)	1 3/8" (k)	0.102"	AISI 1060 to 1065	Rockwell Hardness 51 to 55	ASTM B695, Class 5, Type I
Bullseye Pins (Step Shank with Rolled Point)	11/16"	0.120/0.102"	AISI 1060 to 1065	Rockwell Hardness 51 to 55	ASTM B633, SC1, Type III (Zn/Fe 5)
	3/4"				

All Trak-It pins have a 0.250" head diameters
(k) = knurled

Fasteners for Trak-It C4 Tool

Pin	Available Lengths	Shank Diameter	Material	Hardness	Finish
Sill Plate Pin	2 1/2"	0.137"	AISI 1060 to 1065	Rockwell Hardness 51 to 55	ASTM B695, Class 65, Type I

PERFORMANCE DATA

Allowable Load Capacities for Fasteners Installed in Normal-Weight Concrete¹

Shank Diameter <i>d</i> in. (mm)	Min. Embed. <i>h_v</i> in. (mm)	Min. Spacing in. (mm)	Min. Edge Distance in. (mm)	Minimum Concrete Compressive Strength (<i>f'_c</i>)							
				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.

Allowable Load Capacities for Fasteners Installed in Structural Lightweight Concrete¹

Shank Diameter <i>d</i> in. (mm)	Minimum Embedment <i>h_v</i> in. (mm)	Minimum Spacing in. (mm)	Minimum Edge Distance in. (mm)	Minimum Concrete Compressive Strength (<i>f'_c</i>)					
				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.

GAS FASTENING

PERFORMANCE DATA

Allowable Load Capacities for Fasteners Installed Through Metal Deck into Structural Lightweight Concrete^{1,2,3,4,5}

Shank Diameter <i>d</i> in. (mm)	Minimum Embedment <i>h_v</i> in. (mm)	Minimum Spacing in. (mm)	Minimum Edge Distance in. (mm)	Minimum Concrete Compressive Strength (<i>f'_c</i>)			
				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.
2. For fasteners installed through metal 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 metal 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.
5. Load capacities are also applicable to the Perma-Seal coated pins.

Allowable Load Capacities for Fasteners Installed in Concrete Masonry Units^{1,2,3}

Shank Diameter <i>d</i> in. (mm)	Minimum Embedment <i>h_v</i> in. (mm)	Minimum Spacing in. (mm)	Minimum Edge Distance in. (mm)	Hollow or Grouted (Any Location)	
				<i>f'_m</i> ≥ 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.
2. Tabulated load values are for fasteners installed in minimum 6-inch wide, 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.
3. Load capacities are also applicable to the Perma-Seal coated pins.

Allowable Load Capacities for 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.
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 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.
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.

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PERFORMANCE DATA

Ultimate and Allowable Load Capacities for Fasteners Installed through 2x Sill Plate into Normal-Weight Concrete¹

Shank Diameter <i>d</i>	Minimum Embedment <i>h_v</i>	Minimum Spacing	Minimum Edge Distance	<i>f'_c</i> ≥ 2,000 psi (13.8 MPa)			
				Ultimate load		Allowable Load	
				Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)
0.137 (3.48)	1 3/16 (30.2)	4 (101.6)	3 (76.2)	525 (2.4)	530 (2.4)	105 (0.47)	105 (0.47)

1. Tabulated values are applicable to the wood sill plate pins installed with the Trak-It C4 Tool.

ORDERING INFORMATION

Tools and Accessories

Trak-It C3 Tools

Cat. No.	Description	Standard Box	Standard Carton
55011	C3 Trak-It	1	1
55002	C3-ST Trak-It	1	1

Tool comes with case, charger and two batteries.



Trak-It C4 Tool

Cat. No.	Description	Standard Box	Standard Carton
55019	C4 Trak-It	1	1

Tool comes with case, charger and two batteries.



Trak-It Fuel Cells

Cat. No.	Description	Standard Box	Standard Carton
55010	Trak-It C3 Fuel Cell	20	80
55115	Trak-It C4 Fuel Cell	20	80

Both fuel cells work in temperatures down to 10°F.



Trak-It Pole Tools

Cat. No.	Description	Standard Box	Standard Carton
55048	6' Pole Tool and one Trak-It C3-ST (Short Trak) Tool	1	1
55051	8' Pole Tool and one Trak-It C3-ST (Short Trak) Tool	1	1
55053	6' Pole Tool	1	1
55055	8' Pole Tool	1	1



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ORDERING INFORMATION

Fasteners

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. 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
55022	3/4" Zinc	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 for a minimum level of corrosion resistance. 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. Plastic collation breaks completely free of pin during installation. Each box of pins come packaged with one fuel cell.



Perma-Seal Coated Standard Pins

Cat. No.	Description	Shank Diameter	Standard Box	Standard Carton
55038	3/4" Perma-Seal	0.102"	1,000	5,000
55039	1" Perma-Seal	0.102"	1,000	5,000

Perma-Seal coated pins are designed for use in areas where a greater level of corrosion resistance is required. Each box of pins come packaged with one fuel cell.



Plywood to Steel Pins (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. Each box of pins come packaged with one fuel cell.



Bullseye Pins (Step Shank with Rolled Point)

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

Designed for use in hard aggregate and precast concrete. Each box of pins come packaged with one fuel cell.



Wood Sill Plate C4 Pin and Stick-E Washer

Cat. No.	Description	Shank Diameter	Standard Box	Standard Carton
55130	3/4" Pin	0.145"	800	4,000
55132	1" Pin	0.145"	800	4,000
55145	2 1/2" Pin	0.137"	800	4,000
55150	1" Square Stick-E Washer	-	100	1,000

Each box of pins come packaged with one fuel cell

Stick-E Lathing Washer

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

An easy-to-use washer for securing wire lath to concrete and masonry. Washers fit snug onto the nose of the tool and do not require additional hardware.

Note: Powers Trak-It pins, fuel cells and tools are fully interchangeable with ITW Trakfast® products.

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