

APPLICATION

TRUFAST® SIP Fasteners are specifically engineered for attaching structural insulated panels (SIPs) and nailable insulation panels to wood and steel substrates. Featuring a large, pancake head style with a 6-lobe drive, TRUFAST SIP Fasteners drive quickly and smoothly, and draw panels securely without the need of a washer. Only TRUFAST offers three fastener styles for use in wood, corrugated steel and steel members without pre-drilling! Contact your panel manufacturer or distributor to ask for a test drive of a TRUFAST SIP Fastener and see why they're the #1 fastener in the SIP industry.

PRODUCT FEATURES

- Case-hardened and tempered for easy installation and long-term durability
- Large diameter, low profile pancake head provides excellent pull-through resistance without the need for a washer while eliminating “telegraphing” on shingles, metal panels, and other roof surface materials
- 6-lobe internal drive offers excellent bit engagement during installation, especially in high torque applications
- Widest selection of fastener lengths in the industry for proper sizing to panel thickness
- Choice of 3 thread/point styles for job-matched performance in wood, steel, or concrete/CMU substrates

CODE APPROVALS & LISTINGS

FM Global



Miami-Dade County



State of Florida-FL#: 4500

DrJ Certification
Technical Evaluation Reports
TER No. 1909-04
TER No. 2101-01



CE 2809
European Technical Assessment
ETA 19/0616
DOP No. DoPTru02-2022-01-03



MATERIAL SPECIFICATIONS

Material: Case-hardened & tempered carbon steel

Coating: TRU-KOTE™ Epoxy E-coat (black)

LEED® Eligible Recycled Content: 20%



SIPTP
Thread Point for Wood, Timber,
and Concrete/CMU Applications



SIPLD
Light-Duty Drill Point for
Corrugated Steel Deck, Wood,
& Concrete/CMU Applications

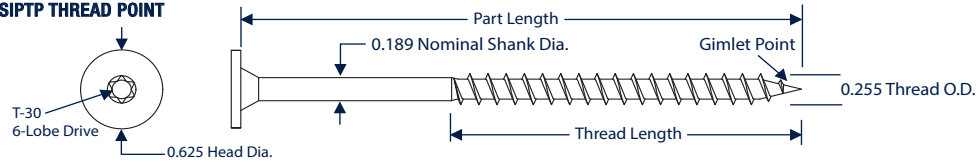


SIPHD
Heavy-Duty Drill Point for Thick
Steel Member Applications

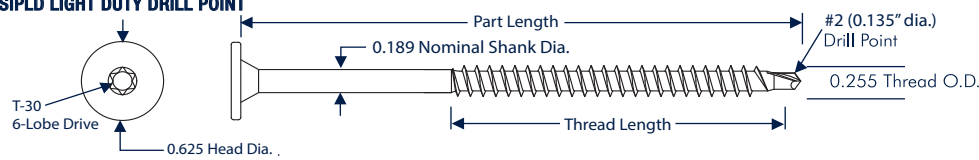


PRODUCT SPECIFICATIONS

SIPTP THREAD POINT

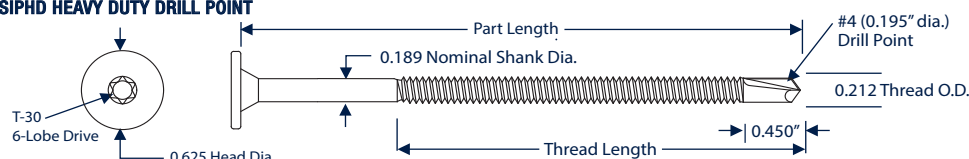


SIPLD LIGHT DUTY DRILL POINT



NOTE: For thread lengths 2.25", 3.25", and 4.25", drill point is 0.125"

SIPHD HEAVY DUTY DRILL POINT



NOTE: For thread lengths 2.25", 3.25", and 4.25", drill point is 0.125"

PRODUCT SELECTION – THREAD POINT (SIPTP)

Length	Thread Length	SIP TP Part #	Pkg. Qty.
2" (51 mm)	1.75"	SIPTP-2000	500/Pail
2-1/2" (64 mm)	1.75"	SIPTP-2500	500/Pail
3" (76 mm)	2.0"	SIPTP-3000	500/Pail
3-1/2" (89 mm)	2.0"	SIPTP-3500	500/Pail
4" (102 mm)	2.75"	SIPTP-4000	500/Pail
4-1/2" (114 mm)	2.75"	SIPTP-4500	500/Pail
5" (140 mm)	2.75"	SIPTP-5000	500/Pail
5-1/2" (140 mm)	2.75"	SIPTP-5500	500/Pail
6" (152 mm)	2.75"	SIPTP-6000	500/Pail
6-1/2" (165 mm)	2.75"	SIPTP-6500	500/Pail
7" (191 mm)	2.75"	SIPTP-7000	500/Pail
7-1/2" (191 mm)	2.75"	SIPTP-7500	500/Pail
8" (216 mm)	2.75"	SIPTP-8000	500/Pail
8-1/2" (216 mm)	2.75"	SIPTP-8500	250/Pail
9" (229 mm)	2.75"	SIPTP-9000	250/Pail
10" (254 mm)	2.75"	SIPTP-10000	250/Pail
11" (279 mm)	2.75"	SIPTP-11000	250/Pail
12" (305 mm)	2.75"	SIPTP-12000	250/Pail
13" (330 mm)	2.75"	SIPTP-13000	250/Box
14" (356 mm)	2.75"	SIPTP-14000	250/Box
15" (381 mm)	2.75"	SIPTP-15000	250/Box
16" (406 mm)	2.75"	SIPTP-16000	250/Box
18" (483 mm)	2.75"	SIPTP-18000	250/Box

PRODUCT SELECTION – LIGHT DUTY DRILL POINT (SIPLD)

Length	Thread Length	SIP LD Part #	Pkg. Qty.
2-1/4" (57 mm)	1.0"	SIPLD-2250	500/Pail
3" (76 mm)	2.75"	SIPLD-3000	500/Pail
3-1/4" (83 mm)	1.50"	SIPLD-3250	500/Pail
3-1/2" (89 mm)	2.75"	SIPLD-3500	500/Pail
4" (102 mm)	2.75"	SIPLD-4000	500/Pail
4-1/4" (108 mm)	2.0"	SIPLD4250	500/Pail
4-1/2" (114 mm)	2.75"	SIPLD-4500	500/Pail
5" (140 mm)	2.75"	SIPLD-5000	500/Pail
5-1/2" (140 mm)	2.75"	SIPLD-5500	500/Pail
6" (152 mm)	2.75"	SIPLD-6000	500/Pail
6-1/2" (165 mm)	2.75"	SIPLD-6500	500/Pail
7" (191 mm)	2.75"	SIPLD-7000	500/Pail
7-1/2" (191 mm)	2.75"	SIPLD-7500	500/Pail
8" (216 mm)	2.75"	SIPLD-8000	500/Pail
8-1/2" (216 mm)	2.75"	SIPLD-8500	250/Pail
9" (229 mm)	2.75"	SIPLD-9000	250/Pail
10" (254 mm)	2.75"	SIPLD-10000	250/Pail
11" (279 mm)	2.75"	SIPLD-11000	250/Pail
12" (305 mm)	2.75"	SIPLD-12000	250/Pail
13" (330 mm)	2.75"	SIPLD-13000	250/Box
14" (356 mm)	2.75"	SIPLD-14000	250/Box
15" (381 mm)	2.75"	SIPLD-15000	250/Box
16" (406 mm)	2.75"	SIPLD-16000	250/Box
18" (483 mm)	2.75"	SIPLD-18000	250/Box

PRODUCT SELECTION – HEAVY DUTY DRILL POINT (SIPHD)

Length	Thread Length	SIP HD Part #	Pkg. Qty.
2-1/4" (57 mm)	varies	SIPHD-2250	500/Pail
3-1/4" (83 mm)	2.75"	SIPHD-3250	500/Pail
4-1/4" (108 mm)	2.75"	SIPHD-4250	500/Pail
4-1/2" (114 mm)	2.75"	SIPHD-4500	500/Pail
5-1/4" (133 mm)	2.75"	SIPHD-5250	500/Pail
6" (152 mm)	2.75"	SIPHD-6000	500/Pail
8" (203 mm)	2.75"	SIPHD-8000	500/Pail
9-3/4" (248 mm)	2.75"	SIPHD-9750	500/Pail
11-3/4" (298 mm)	2.75"	SIPHD-11750	500/Pail
13-3/4" (349 mm)	2.75"	SIPHD-13750	250/Box

PERFORMANCE DATA

Note: All values provided are allowable values. For ultimate values, please contact us at 1-800-443-9602. For additional engineering performance values, please refer to DrJ TER No. 1909-04 available at <https://www.drjengineering.org/>. For additional information on the use of TRUFAST SIP fasteners in vented and non-vented nailable insulation panels in roofing applications, please refer to DrJ TER No. 2101-01.

PROPERTIES

Fastener	Property			
	Tensile (lbs.) AISI S904	Shear (lbs.) AISI S904	Bending Yield Strength - Fyb (psi) ASTM F1575	Corrosion Resistance ASTM D6294, ETAG 006
SIPTP	1185	860	185,000	<15% Red Rust after 30 cycles
SIPLD	1130	830		
SIPHD	1285	875		

SIP (LD, TP, HD) Fastener Head Pull-Through Values

Side Member Type	Side Member Nominal Thickness	Head Pull-Through (lb.)
OSB	23/32"	345
	19/32"	145
	1/2"	100
	7/16"	85
Plywood	23/32"	380
	19/32"	265
	15/32"	175
SPF	Dry Service Condition	380
DF-L	Dry Service Condition	555

PROPERTIES

SIP LD Pullout Values in Corrugated Steel Deck (lbs.)

Tensile Strength	24 ga.	22 ga.	20 ga.	18 ga.	16 ga.
45 ksi	65	95	115	180	230
70 ksi	95	135	165	250	330
90 ksi	115	145	190	285	375
110 ksi	140	175	225	320	415

SIP HD Pullout Values in Structural Steel Deck (lbs.)

Tensile Strength	16 ga.	14 ga.	12 ga.	1/8"	3/16"	1/4"
45 ksi	145	200	290	375	610	820
70 ksi	225	310	450	585	1030	1270
90 ksi	290	395	575	755	1245	1635
110 ksi	355	485	700	920	1460	2000

Withdrawal Values in Lumber and Engineered Wood, Edge Grain (lbs./in.)

Wood Type (Specific Gravity)	SPF (0.42)	DF-L (0.50)	LVL (0.50)
SIP TP	120	140	125
SIP LD	100	155	115

Withdrawal Values in Lumber and Engineered Wood, Face Grain (lbs./in.)

Wood Type (Specific Gravity)	SPF (0.42)	DF-L (0.50)	LVL (0.50)	LSL (0.50)
SIP TP	175	195	140	135
SIP LD	140	150	135	140



PROPERTIES

Lateral Load Resistance (lbs.)				
Fastener	Main Member	Side Member	Load per Fastener (lb.)	
SIP TP	SPF	8-1/4" SIP Panel	365	
SIP LD	22 ga. Steel Deck	8-1/4" SIP Panel	115	
		14" Nailbase Insulation (includes base layer(s) of insulation)	55	
		14" Vented Nailable Insulation (2" vent layer and 12" polyiso)	40	
SIP LD SIP TP	7/16" OSB	10-1/2" Nailbase Insulation (includes base layer(s) of insulation)	45	
		10-1/2" Vented Nailbase Insulation (2" ventilation and 8-1/2" polyiso)	50	
	1/2" Plywood	10-1/2" Nailbase Insulation (includes base layer(s) of insulation)	80	
		10-1/2" Nailable Insulation (2" ventilation and 8-1/2" polyiso)	80	
	19/32" minimum SPF	10-1/2" Nailbase Insulation Panel (includes base layer(s) of insulation)	90	
		10-1/2" Nailable Insulation (2" ventilation and 8-1/2" polyiso)	90	
	1" minimum SPF	10-1/2" Nailbase Insulation Panel (includes base layer(s) of insulation)	90	
		10-1/2" Nailable Insulation (2" ventilation and 8-1/2" polyiso)	90	
	1/8" Structural Steel		8-1/4" SIP Panel	370

PROPERTIES

Withdrawal Values in Engineered Wood Substrates (lbs.)*

Wood Type	OSB				Plywood		
	7/16"	1/2"	19/32"	23/32"	15/32"	19/32"	23/32"
SIPTP	45	40	60	110	85	130	155
SIPLD	45	50	70	155	80	120	180

*Fastener penetrates through bottom side of the board by 3/4"

Tension Values in Concrete & CMU (lbs.)

Compression Strength	2500 psi Concrete	4000 psi Concrete	5000 psi Concrete	CMU
SIPLD	70	155	160	80
SIPTP	100	165	165	175



INSTALLATION GUIDELINES

Fasteners are intended to mechanically attach structural insulated panels or composite insulation boards to various substrates.

- SIPLD (Light Duty) are for installation into wood, light gauge steel substrates (22 – 18 ga.), corrugated steel decking (22 – 18 ga.), concrete or CMU. For installation into concrete or CMU, predrill with 3/16 in. masonry bit. Install using a maximum 2,500 rpm screw gun.
- SIPTP (Thread Point) are for installation into wood, concrete or CMU. For installation into concrete or CMU, predrill with 3/16 in. masonry bit. Install using a low rpm/high torque screw gun.
- SIPHD (Heavy Duty) are for installation to 16 ga. to 3/8 in. steel members. For installation into steel greater than 3/8 in. thickness, predrill with a #8 bit (0.199 in.) Install using a maximum 2,000 rpm screw gun.

CAUTION: These fasteners shall not be struck with a hammer during installation.



FASTENING SOLUTIONS FOR COMMERCIAL ROOFING

Founded in 1981 in Bryan, OH, TRUFAST began manufacturing and distributing unique and better-performing fastening solutions for the commercial roofing industry. As our product offering grew to include other engineered fastening solutions and accessories, the TRUFAST brand solidified a reputation for high-quality products and outstanding customer service.

TRUFAST fasteners, adhesives, and accessories are sold through commercial roofing and building material distributors throughout North America and Western Europe, as well as supplied under the private labels of leading OEM commercial roofing system manufacturers. Customers can get TRUFAST products when and where they need them with four regional warehouse locations (Bryan, OH; Grand Prairie, TX; Jacksonville, FL; Chino, CA). Independent testing and certification assures customers that TRUFAST fasteners have been objectively tested and conform to the highest national and international standards (FM Global, Miami-Dade County Product Control, State of Florida, European Technical Approvals and NTA, Inc.).

Learn more about the complete TRUFAST product offering at www.trufast.com.



Bulletin No. TF-20041, Rev 1

DISCLAIMER

The information provided here is subject to change without notice. The performance specifications published in this TRUFAST® product literature are based on controlled laboratory tests and are intended as a guideline only. They are not guaranteed in any way by the ALTENLOH, BRINCK & CO. US, INC., since building design, engineering, and construction,

including workmanship and materials, are beyond the control of the manufacturer. The manufacturer recommends that pull-out tests be conducted to verify the substrate provides adequate pull-out values.