

SFS

← ConnexTite™ →

Structural

**Wood
Screws**



Structural wood screws

Ideal for single and multi-ply truss, column, header and joist applications



Features and Benefits

- Large flange head maximizes clamping force for the tightest connections.
 - Countersunk head provides flush finish with wood surface.
 - Aggressive thread design draws connections together for fast assembly.
 - Special point cuts through the densest lumber without splitting.
 - T-drive provides a positive stick fit allowing for one handed installation.
 - Proprietary coating meets or exceeds corrosion resistance of hot-dipped fasteners coated in accordance with ASTM A153.
 - Compatible with pressure treated lumber.
 - Approved for structural connections per IBC 1603.
 - Installs using standard impact gun or screw gun (2000-2500 rpm).
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Features

Head

Flange or countersunk head with deep T-drive recess provides positive drive.



Knurl

Reamer knurl reduces driving torque.



Point

Ribbed point eliminates splitting.



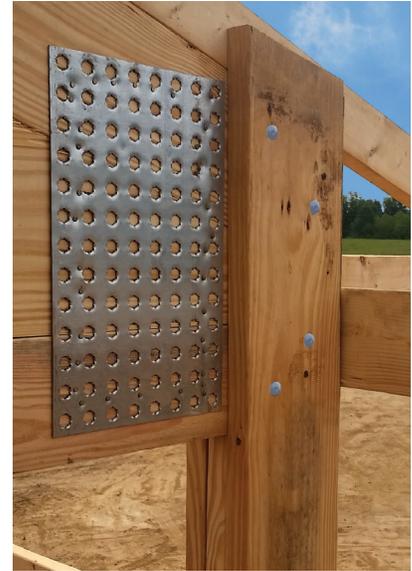
Applications

- Trusses
 - Headers
 - Columns
 - Purlins to roof
 - Joists
 - Support frames
 - Purlins to wall
 - Deck framing
 - Stair stringers
 - Structural insulated panels
 - Engineered lumber
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Advantage

ConnexTite™ vs. Carriage Bolt

Attachment Technique	Design Value	The ConnexTite Advantage
 (1) 1/2" × 6" Carriage Bolt	1150 lbs shear in SYP	Installation Time: 2 × Faster Installed Cost: 25% Lower Lateral Design: 83% Higher
 (4) 5/16" × 4" ConnexTite PF	2100 lbs shear in SYP	



Single Ply Truss
Three Ply Column

ConnexTite™ vs. 40D Ring Shank Nail

Attachment Technique	Design Value	The ConnexTite Advantage
 (2) 40D Ring Shank Nail	416 lbs Pull-out in SYP	Installation Time: 6 × Faster Installed Cost: 23% Lower Withdrawal Design: 6% Higher
 (1) 1/4" × 5-1/2" ConnexTite PF	440 lbs Pull-out in SYP	



2 × 4 Purlins on end to
Single Ply Roof Truss

Selection



Flange Head

Material No.	Diameter	Length	Drive	Thread	Package	Quantity
1616376	1/4"	1-1/2"	T25	Full	Pail	2000
1616377	1/4"	2-3/4"	T25	Full	Pail	800
1616378	5/16"	2-3/4"	T40	Part	Pail	500
1616379	5/16"	3-1/8"	T40	Full	Pail	500
1616380	5/16"	4"	T40	Part	Pail	400
1616381	5/16"	5-1/2"	T40	Part	Pail	300

Additional sizes available upon request.



Countersunk Head

Material No.	Diameter	Length	Drive	Thread	Package	Quantity
1618649	5/16"	2-3/4"	T40	Part	Pail	500
1618650	5/16"	4"	T40	Part	Pail	400

Additional sizes available upon request.

Drive Bits

Material No.	Drive Bit	Description
1298277	T-25 Drive Bit	1-15/16" long x 1/4" hex drive
1552532	T-40 Drive Bit	1-15/16" long x 1/4" hex drive

Technical Values

Dimensions and strength details

Fastener Name	Nominal Fastener Diameter	Head		Shank Diameter ¹ (in.)	Thread Diameter (in.)		Nominal Bending Yield (f_{yb} , psi)		Allowable Fastener Strength ³	
		Diameter (in.)	Height (in.)		Minor ²	Major	Transition Zone	Shank	Tensile (lbs)	Shear (lbs)
Flange Head	1/4"	0.552	0.094	0.173	0.148	0.244	201,611	237,010	970	485
	5/16"	0.709	0.148	0.228	0.207	0.315	167,894	178,866	1810	905
Counter-sunk Head	5/16"	0.583	–	0.228	0.207	0.315	167,894	178,866	1810	905

For SI: 1" = 25.4 mm, 1 lbf = 4.45 N, 1 psi = 6.895 kPa.

1. Shank diameter based on manufactured thickness. Finished dimensions are larger in the coated condition due to the proprietary coatings added.
2. Minor thread diameter value is calculated as the average of the upper and lower tolerances.

Withdrawal design values/face grain applications

Allowable Withdrawal Design Values by Species (Specific Gravity) (lbs.)

Nominal Fastener Diameter (in.)	Face Grain Applications		
	SPF (.42)	DF (.50)	SP (.55)
1/4"	95	135	220
5/16"	120	180	255

1. Values are stated in lbf/in of thread engagement.
2. Values shall be adjusted by all applicable adjustment factors per NDS Section 10.3 for wood screws.
3. Fastener penetration is that threaded length embedded in the main member, including the tip.

Evaluation Reports

For further technical information, and available fastener sizes, refer to TER 1609-08.

TER 1609-08 is a code compliance report that was written, published, and can be PE stamped by DrJ Engineering. This report summarizes the ConnexTite fastener's ability to meet the performance standards that are mandated by the International Building Code, as well as state and local building codes. DrJ Engineering is an ISO/IEC 171065 accredited product certification body that is deemed to be competent to perform product certifications in accordance with section 104.11.1 of the International Building Code. Technical information and state engineer stamps, visit: www.drjengineering.org/content/7/connexitetm

Head pull-through design values

Min. Side Member Thickness (in.)	Nominal Fastener Diameter (in.)	Flange Head Diameter (in.)	Counter-sunk Head Diameter (in.)	SPF (.42)		DF (.50)		SP (.55)	
				Flange	Counter-sunk	Flange	Counter-sunk	Flange	Counter-sunk
3/4"	1/4"	0.552	0.457	155	130	220	185	265	225
	5/16"	0.705	0.583	195	165	275	235	335	280
1-1/2"	1/4"	0.552	0.457	310	265	440	370	535	450
	5/16"	0.705	0.583	390	330	550	465	670	565

1. Values shall be adjusted by all applicable adjustment factors per NDS Section 10.3 for withdrawal of wood screws.

Lateral design values using dimensional lumber

Fastener Head Type	Nominal Fastener Diameter (in.)	Fastener Length (in.)	Side Member Thickness (in.)	Min. Penetration into Main Member (in.)	Lateral Design Values (lbs.) by Species (Specific Gravity) & Load Orientation					
					SPF (.42)		DF (.50)		SP (.55)	
					Z Para	Z Perp	Z Para	Z Perp	Z Para	Z Perp
Flange	1/4"	2-3/8"	1-1/2"	7/8"	115	90	140	110	160	125
		2-3/4"		1-1/4"	130	105	165	135	190	155
		3-1/8"		1-1/2"	145	115	175	140	190	155
		4"		2-1/2"	145	115	175	140	190	155
		> 4-3/4"		3-1/4"	145	115	175	140	190	155
	5/16"	2-3/4"	1-1/2"	1-1/4"	155	125	215	170	525	550
		3-1/8"		1-5/8"	175	140	245	195	525	550
		4"		2-1/2"	195	155	245	195	525	550
		4-3/4"		3-1/4"	195	155	245	195	525	550
		> 5-1/2"		4"	195	155	245	195	525	550
Countersunk	5/16"	3-1/8"	1-1/2"	1-5/8"	175	140	245	195	285	225
		3-1/2"		2"	195	155	245	195	285	225
		>4"		2-1/2"	195	155	245	195	285	225

1. Reference lateral design values apply to two-member single shear connections where both members are of the same specific gravity, and the fastener is oriented perpendicular to grain. Where the members are of different specific gravities, use the lower of the two.

2. Values shall be adjusted by all applicable adjustment factors per NDS.



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