



ENGINEERED
FASTENERS

EXCEPTIONAL SPEED DEMANDS EXTREME ENGINEERING

POWERLAGS® 



4CUT™ POINT
NEXT GENERATION



**EXCEPTIONALLY
FAST!**



MADE IN USA
WITH GLOBALLY
SOURCED MATERIALS

MEET THE NEXT GENERATION IN STRUCTURAL FASTENERS

PowerLags® XF excels with ease in structural wood-to-wood connections. From innovative 4CUT™ technology to proprietary thread serrations to superior bit fit on a low-profile pancake head, every millimeter is optimized to deliver category-defining performance.



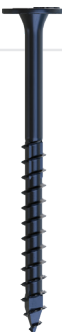
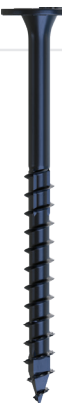
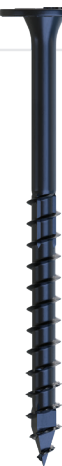
THE ULTIMATE FUSION OF DRIVING SPEED AND INSTALLATION EASE

Backed by third-party testing and IRC/IBC code approvals, PowerLags® XF deliver confidence and peace of mind. They're an excellent choice for projects involving dimensional lumber, heavy-duty timbers, and engineered wood products. Whether you're building a new deck, adding a pergola, or working on other demanding outdoor structures, SPAX PowerLags® XF offer a superior alternative to traditional lag bolts.

EXTERIOR & TREATED LUMBER

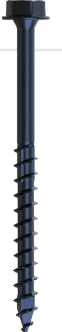
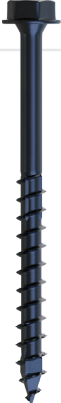
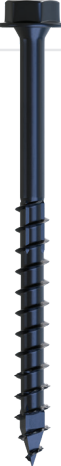
T-STAR, Partial Thread
LOW PROFILE PANCAKE HEAD

PAGES
3-7

DIA.	1/4"	5/16"	3/8"
DRIVE	 T40 2½" 3" ■ ● 3½" 4" ■ 4½" 5" ● 6" ■ ●	 T40 3" ■ 3½" ● 4" ▲ ■ 4½" 5" ▲ ● 6" ■ 6¾" ● 8" 10" 12"	 T50 5" ● 6" ■ ● 8" 10"

SOCKET, Partial Thread
HEX WASHER HEAD

PAGES
8-11

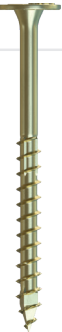
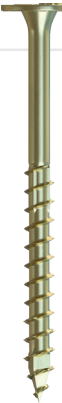
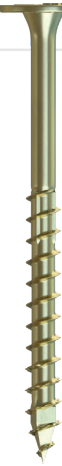
1/4"	5/16"	3/8"
 3/8" 1½" 2" 3" ■ ● 5" ● 6" ■ ●	 7/16" 3" ■ 3½" ● 4" ▲ ■ 5" ▲ ●	 1/2" 5" ● 6" ■ ●

1/2" diameter XS products on page 12.

INTERIOR

T-STAR, Partial Thread
LOW PROFILE PANCAKE HEAD

PAGES
15-18

DIA.	1/4"	5/16"	3/8"
DRIVE	 T40 2½" 3" ■ ● 3½" 4" ■ 4½" 5" ● 6" ■ ●	 T40 3" ■ 3½" ● 4" ■ 4½" 5" ● 6" ■	 T50 5" ● 6" ■ ●

- ▲ TER No. 2403-114 Deck Ledger Attachment
- TER No. 2410-103 Multi-ply Sawn Lumber Assemblies
- TER No. 2410-103 Multi-ply Engineered Wood (SCL) Assemblies

T-STAR PANCAKE HEAD HCR®

POWERLAGS® XF



DESCRIPTION

SPAX® PowerLags® XF T-STAR Pancake Head structural fasteners with HCR® coating create strong, reliable wood-to-wood connections. They deliver a superior drive experience highlighted by a fast start and 10% faster installation times than other structural fasteners. This fastener's large diameter low profile pancake head with T-STAR recess has been paired with an optimized thread design to provide noticeable clamping and holding power. Ideal for deck ledger attachment, multi-ply beams and other exterior structural applications.

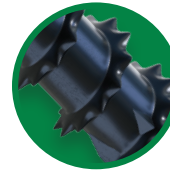
MATERIALS & COATING

Cold-rolled carbon steel wire heat treated and plated with an HCR® (High Corrosion Resistance) double barrier coating. HCR is tested and recognized for use in ground contact pressure treated lumber for exterior, freshwater general construction applications (e.g., AWPAC UC1-UC4A, UCFA).



LOW PROFILE PANCAKE HEAD

Provides a flush finish with high clamping force.



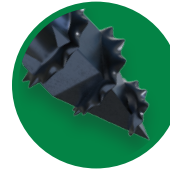
SERRATED THREADS

Allows for quicker, easier fastening.



UPPER 4CUT™ [4" AND UP]

Bores out the hole in wood for faster speed and lower tool torque.



UNIQUE 4CUT™ POINT

Prevents splitting and requires no pre-drilling in wood.



TYPICAL EXTERIOR APPLICATIONS

- Multi-ply structural composite lumber beam assembly
- Multi-ply sawn lumber assembly
- Exterior treated lumber pergolas & gazebos
- Landscaping timber
- Outdoor furniture
- Exterior fencing posts
- Exterior out buildings
- Deck ledger to residential band joist attachment



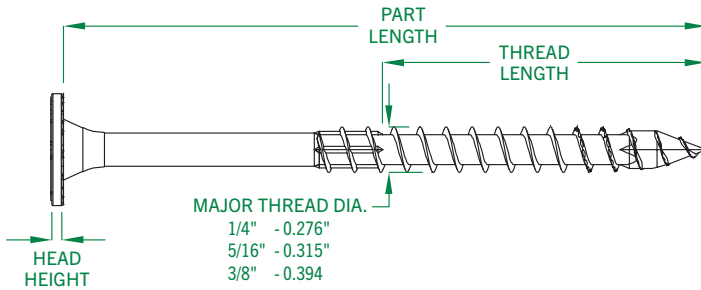
T-STAR PANCAKE HEAD HCR®

POWERLAGS® XF



ENGINEERED
FASTENERS

EXTERIOR



▲ TER No. 2403-114
Deck Ledger
Attachment

■ TER No. 2410-103
Multi-ply Sawn
Lumber Assemblies

● TER No. 2410-103
Multi-ply Engineered Wood
(SCL) Assemblies

PRODUCT SELECTION

PART LENGTH	THREAD LENGTH	HEAD DIA. HEAD HT.	DRIVE/BIT SIZE	APPROX. QTY.	PKG. TYPE	MASTER QTY.	PART NO.
1/4" x 2½"	1.535"	0.675" 0.055"	T40	1	Individual*	50	XFP250P212B1
				12	Project Pax	5	XFP250P212B12
				50	Contractor Pax	4	XFP250P212B50
				500	Bulk Pail	N/A	XFP250P212B500
1/4" x 3" ■ ●	1.535"	0.675" 0.055"	T40	1	Individual*	50	XFP250P300B1
				12	Project Pax	5	XFP250P300B12
				50	Contractor Pax	4	XFP250P300B50
				200	Mini Bulk Pail	N/A	XFP250P300B200
				500	Bulk Pail	N/A	XFP250P300B500
1/4" x 3½"	2.010"	0.675" 0.055"	T40	1	Individual*	50	XFP250P312B1
				12	Project Pax	5	XFP250P312B12
				50	Contractor Pax	4	XFP250P312B50
				500	Bulk Pail	N/A	XFP250P312B500
1/4" x 4" ■	2.125"	0.675" 0.055"	T40	1	Individual*	50	XFP250P400B1
				12	Project Pax	5	XFP250P400B12
				50	Contractor Pax	4	XFP250P400B50
				200	Mini Bulk Pail	N/A	XFP250P400B200
				500	Bulk Pail	N/A	XFP250P400B500
1/4" x 4½"	2.125"	0.675" 0.055"	T40	1	Individual*	50	XFP250P412B1
				12	Project Pax	5	XFP250P412B12
				50	Contractor Pax	4	XFP250P412B50
				500	Bulk Pail	N/A	XFP250P412B500
1/4" x 5" ●	2.755"	0.675" 0.055"	T40	1	Individual*	50	XFP250P500B1
				12	Project Pax	5	XFP250P500B12
				50	Contractor Pax	4	XFP250P500B50
				200	Mini Bulk Pail	N/A	XFP250P500B200
				500	Bulk Pail	N/A	XFP250P500B500
1/4" x 6" ■ ●	2.755"	0.675" 0.055"	T40	1	Individual*	50	XFP250P600B1
				12	Project Pax	5	XFP250P600B12
				50	Contractor Pax	4	XFP250P600B50
				200	Mini Bulk Pail	N/A	XFP250P600B200
				500	Bulk Pail	N/A	XFP250P600B500

NOTE: 2" bit included in 1/4" and 5/16" diameter packages. 1" bit included in 3/8" diameter packages.

*Bit not included.



POWERLAGS® XF



▲ TER No. 2403-114
Deck Ledger
Attachment

■ TER No. 2410-103
Multi-ply Sawn
Lumber Assemblies

● TER No. 2410-103
Multi-ply Engineered Wood
(SCL) Assemblies

PRODUCT SELECTION

PART LENGTH	THREAD LENGTH	HEAD DIA. HEAD HT.	DRIVE/BIT SIZE	APPROX. QTY.	PKG. TYPE	MASTER QTY.	PART NO.
5/16" x 3" ■	1.535"	0.765" 0.060"	T40	1	Individual*	25	XFP312P300B1
				12	Project Pax	5	XFP312P300B12
				50	Contractor Pax	4	XFP312P300B50
				250	Bulk Pail	N/A	XFP312P300B250
5/16" x 3½" ●	2.010"	0.765" 0.060"	T40	1	Individual*	25	XFP312P312B1
				12	Project Pax	5	XFP312P312B12
				50	Contractor Pax	4	XFP312P312B50
				250	Bulk Pail	N/A	XFP312P312B250
5/16" x 4" ▲ ■	2.045"	0.765" 0.060"	T40	1	Individual*	25	XFP312P400B1
				12	Project Pax	5	XFP312P400B12
				50	Contractor Pax	4	XFP312P400B50
				150	Mini Bulk Pail	N/A	XFP312P400B150
				250	Bulk Pail	N/A	XFP312P400B250
5/16" x 4½" ●	2.045"	0.765" 0.060"	T40	1	Individual*	25	XFP312P412B1
				12	Project Pax	5	XFP312P412B12
				50	Contractor Pax	4	XFP312P412B50
				250	Bulk Pail	N/A	XFP312P412B250
5/16" x 5" ▲ ●	2.675"	0.765" 0.060"	T40	1	Individual*	25	XFP312P500B1
				12	Project Pax	5	XFP312P500B12
				50	Contractor Pax	4	XFP312P500B50
				150	Mini Bulk Pail	N/A	XFP312P500B150
				250	Bulk Pail	N/A	XFP312P500B250
5/16" x 6" ■	2.675"	0.765" 0.060"	T40	1	Individual*	25	XFP312P600B1
				12	Project Pax	5	XFP312P600B12
				50	Contractor Pax	4	XFP312P600B50
				150	Mini Bulk Pail	N/A	XFP312P600B150
				250	Bulk Pail	N/A	XFP312P600B250
5/16" x 6¾" ●	2.675"	0.765" 0.060"	T40	50	Contractor Pax	4	XFP312P634B50
				250	Bulk Pail	N/A	XFP312P634B250
5/16" x 8"	2.675"	0.765" 0.060"	T40	1	Individual*	25	XFP312P800B1
				12	Project Pax	5	XFP312P800B12
				50	Contractor Pax	2	XFP312P800B50
				150	Bulk Pail	N/A	XFP312P800B150
5/16" x 10"	2.675"	0.765" 0.060"	T40	1	Individual*	25	XFP312P1000B1
				12	Project Pax	5	XFP312P1000B12
				50	Contractor Pax	2	XFP312P1000B50
				150	Bulk Pail	N/A	XFP312P1000B150

NOTE: 2" bit included in 1/4" and 5/16" diameter packages. 1" bit included in 3/8" diameter packages.

*Bit not included.

**T-STAR PANCAKE HEAD HCR®****POWERLAGS® XF****ENGINEERED
FASTENERS****EXTERIOR**TER No. 2403-114
Deck Ledger
AttachmentTER No. 2410-103
Multi-ply Sawn
Lumber AssembliesTER No. 2410-103
Multi-ply Engineered Wood
(SCL) Assemblies**PRODUCT SELECTION**

PART LENGTH	THREAD LENGTH	HEAD DIA. HEAD HT.	DRIVE/BIT SIZE	APPROX. QTY.	PKG. TYPE	MASTER QTY.	PART NO.
5/16" x 12"	2.675"	0.765" 0.060"	T40	1	Individual*	25	XFP312P1200B1
				50	Contractor Pax	2	XFP312P1200B50
				150	Bulk Pail	N/A	XFP312P1200B150
3/8" x 5" 	3.190"	0.980" 0.070"	T50	1	Individual*	15	XFP375P500B1
				12	Project Pax	5	XFP375P500B12
				25	Contractor Pax	4	XFP375P500B25
				150	Bulk Pail	N/A	XFP375P500B150
3/8" x 6"  	3.150"	0.980" 0.070"	T50	1	Individual*	15	XFP375P600B1
				12	Project Pax	5	XFP375P600B12
				25	Contractor Pax	4	XFP375P600B25
				150	Bulk Pail	N/A	XFP375P600B150
3/8" x 8"	3.150"	0.980" 0.070"	T50	1	Individual*	15	XFP375P800B1
				25	Contractor Pax	2	XFP375P800B25
				150	Bulk Pail	N/A	XFP375P800B150
3/8" x 10"	3.150"	0.980" 0.070"	T50	1	Individual*	15	XFP375P1000B1
				150	Bulk Pail	N/A	XFP375P1000B150

NOTE: 2" bit included in 1/4" and 5/16" diameter packages. 1" bit included in 3/8" diameter packages.

*Bit not included.



Individual



Project Pax®



Contractor Pax®



Mini Bulk Pail



Bulk Pail



T-STAR Bit

BIT SELECTION

DRIVE BIT	BIT SIZE	MASTER QTY.	PART NO.
T40	1"	10	5000002016409
T50	1"	10	5000002016509

NOTE: Only sold in master cartons. Made in Taiwan.



T-STAR PANCAKE HEAD HCR®

POWERLAGS® XF

SPAX® ENGINEERED FASTENERS


▲ TER No. 2403-114
Deck Ledger
Attachment

■ TER No. 2410-103
Multi-ply Sawn
Lumber Assemblies

● TER No. 2410-103
Multi-ply Engineered Wood
(SCL) Assemblies

FASTENER LENGTHS

PART LENGTH	HEAD	FASTENER	PART LENGTH	HEAD	FASTENER
1/4" x 2½"			5/16" x 5" ▲ ●		
1/4" x 3" ■ ●			5/16" x 6" ■		
1/4" x 3½"			5/16" x 6¾" ●		
1/4" x 4" ■			5/16" x 8"		
1/4" x 4½"			5/16" x 10"		
1/4" x 5" ●			5/16" x 12"		
1/4" x 6" ■ ●			3/8" x 5" ●		
5/16" x 3" ■			3/8" x 6" ■ ●		
5/16" x 3½" ●			3/8" x 8"		
5/16" x 4" ▲ ■			3/8" x 10"		
5/16" x 4½"					



No. ESR-5358

PERFORMANCE SPECIFICATIONS

NOMINAL DIAMETER	ALLOWABLE ¹ WITHDRAWAL ² , HEAD PULL-THROUGH ³ , SHEAR LOADED PARALLEL TO THE GRAIN ⁴ (Z), AND SHEAR LOADED PERPENDICULAR TO THE GRAIN ⁴ (Z _⊥)														
	SOUTHERN PINE ⁵ (G=0.55)					DOUGLAS-FIR ⁵ (G=0.5)					HEM FIR & SPRUCE-PINE FIR ⁵ (G=0.42)				
	WITHDRAWAL ²	HEAD PULL-THROUGH ³		Z ⁴	Z _⊥ ⁴	WITHDRAWAL ²	HEAD PULL-THROUGH ³		Z ⁴	Z _⊥ ⁴	WITHDRAWAL ²	HEAD PULL-THROUGH ³		Z ⁴	Z _⊥ ⁴
		PANCAKE	HEX				PANCAKE	HEX				PANCAKE	HEX		
	(LB/IN.)	(LB)	(LB)	(LB)	(LB)	(LB/IN.)	(LB)	(LB)	(LB)	(LB)	(LB/IN.)	(LB)	(LB)	(LB)	(LB)
1/4"	170	620	450	250	220	170	550	400	240	195	140	450	300	210	155
5/16"	167	630	500	280	215	170	530	460	260	190	140	520	360	220	145
3/8"	238	920	620	330	240	205	760	620	305	220	170	610	510	270	185
1/2"	292	-	720	400	280	280	-	660	375	260	210	-	580	330	220

1 Based upon ASD design loads. Values shall be multiplied by the applicable adjustment values provided in the 2024 National Design Specification (NDS) for Wood Construction.

2 Withdrawal values are pounds per inch of thread including the tip but excluding the length of the upper 4CUT™. Minimum penetration into the main member is 1-1/2" for the 1/4" and 5/16" diameters, 2" for the 3/8" diameter, and 3" for the 1/2" diameter.

3 Head pull-through values are based upon a 1-1/2" side member.

4 Lateral shear capacity is based upon a 1-1/2" side member and at least 1-1/2" penetration into the main member for the 1/4" and 5/16" diameters or 3-1/2" for the 3/8" or 1/2" diameters.

5 Tabulated values are based upon the specific gravities in the NDS. For specific gravities not listed, use the next lower value. When the connection has two different species, use the lower specific gravity.



HEX WASHER HEAD HCR®

POWERLAGS® XF



MADE IN USA
WITH GLOBALLY
SOURCED MATERIALS

DESCRIPTION

SPAX® PowerLags® XF Hex Washer Head structural fasteners with HCR® coating create strong, reliable wood-to-wood connections. They deliver a superior drive experience highlighted by a fast start and 10% faster installation times than other structural fasteners. These fasteners are designed with a hex head conventional driver system along with a built-on washer for applications requiring additional surface area under the head for noticeable clamping and holding power. Ideal for deck ledger attachment. Often used for blind, high torque applications where you need additional engagement from socket to screw head.

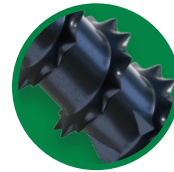
MATERIALS & COATING

Cold-rolled carbon steel wire heat treated and plated with an HCR® (High Corrosion Resistance) double barrier coating. HCR is tested and recognized for use in ground contact pressure treated lumber for exterior, freshwater general construction applications (e.g., AWPAC UC1-UC4A, UCFA).



BUILT-ON WASHER HEAD

Eliminates the need and cost of a separate washer.



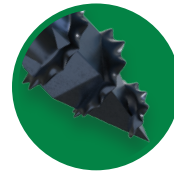
SERRATED THREADS

Allows for quicker, easier fastening.



UPPER 4CUT™ [4" AND UP]

Bores out the hole in wood for faster speed and lower tool torque.



UNIQUE 4CUT™ POINT

Prevents splitting and requires no pre-drilling in wood.



TYPICAL EXTERIOR APPLICATIONS

- Deck ledger to residential band joist attachments
- Exterior treated lumber pergolas and gazebos
- Landscaping timber
- Outdoor furniture
- Exterior fencing posts
- Exterior out buildings

EXTERIOR

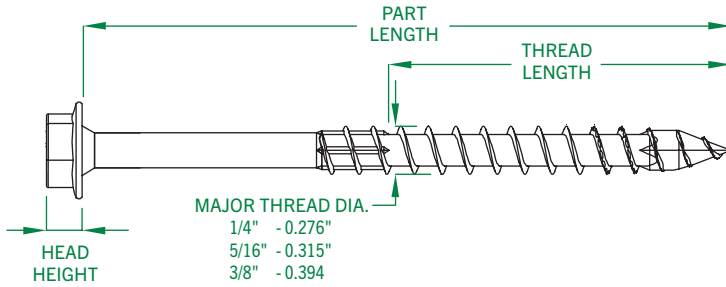


HEX WASHER HEAD HCR®

POWERLAGS® XF



ENGINEERED
FASTENERS



TER No. 2403-114
Deck Ledger
Attachment

PRODUCT SELECTION

PART LENGTH	THREAD LENGTH	HEAD DIA. HEAD HT.	DRIVE/BIT SIZE	APPROX. QTY.	PKG. TYPE	MASTER QTY.	PART NO.
1/4" x 1½"	1.535"	0.545" 0.233"	3/8"	1	Individual*	50	XFH250P112B1
				12	Project Pax	5	XFH250P112B12
1/4" x 2"	1.535"	0.545" 0.233"	3/8"	1	Individual*	50	XFH250P200B1
				12	Project Pax	5	XFH250P200B12
				50	Contractor Pax	4	XFH250P200B50
				500	Bulk Pail	N/A	XFH250P200B500
1/4" x 3"	1.535"	0.545" 0.233"	3/8"	1	Individual*	50	XFH250P300B1
				12	Project Pax	5	XFH250P300B12
				50	Contractor Pax	4	XFH250P300B50
				500	Bulk Pail	N/A	XFH250P300B500
1/4" x 5"	2.755"	0.545" 0.233"	3/8"	1	Individual*	50	XFH250P500B1
				12	Project Pax	5	XFH250P500B12
				50	Contractor Pax	4	XFH250P500B50
1/4" x 6"	2.755"	0.545" 0.233"	3/8"	1	Individual*	50	XFH250P600B1
				12	Project Pax	5	XFH250P600B12
				50	Contractor Pax	4	XFH250P600B50
				500	Bulk Pail	N/A	XFH250P600B500
5/16" x 3"	1.535"	0.590" 0.280"	7/16"	1	Individual*	25	XFH312P300B1
				50	Contractor Pax	4	XFH312P300B50
				250	Bulk Pail	N/A	XFH312P300B250
5/16" x 3½"	2.010"	0.590" 0.280"	7/16"	1	Individual*	25	XFH312P312B1
				50	Contractor Pax	4	XFH312P312B50
				250	Bulk Pail	N/A	XFH312P312B250
5/16" x 4" ▲	2.045"	0.590" 0.280"	7/16"	1	Individual*	25	XFH312P400B1
				12	Project Pax	5	XFH312P400B12
				50	Contractor Pax	4	XFH312P400B50
				250	Bulk Pail	N/A	XFH312P400B250
5/16" x 5" ▲	2.675"	0.590" 0.280"	7/16"	1	Individual*	25	XFH312P500B1
				12	Project Pax	5	XFH312P500B12
				50	Contractor Pax	4	XFH312P500B50
				250	Bulk Pail	N/A	XFH312P500B250

*Bit not included.

EXTERIOR

**HEX WASHER HEAD HCR®****POWERLAGS® XF****ENGINEERED
FASTENERS**TER No. 2403-114
Deck Ledger
Attachment**EXTERIOR****PRODUCT SELECTION**

PART LENGTH	THREAD LENGTH	HEAD DIA. HEAD HT.	DRIVE/BIT SIZE	APPROX. QTY.	PKG. TYPE	MASTER QTY.	PART NO.
3/8" x 5"	3.190"	0.748" 0.339"	1/2"	1	Individual*	15	XFH375P500B1
				25	Contractor Pax*	4	XFH375P500B25
				150	Bulk Pail*	N/A	XFH375P500B150
3/8" x 6"	3.150"	0.748" 0.339"	1/2"	1	Individual*	15	XFH375P600B1
				25	Contractor Pax*	4	XFH375P600B25
				150	Bulk Pail*	N/A	XFH375P600B150

*Bit not included.



Individual



Project Pax®



Contractor Pax®



Bulk Pail



Hex Driver Bit

TER No. 2403-114
Deck Ledger
Attachment**FASTENER LENGTHS**

PART LENGTH	HEAD	FASTENER	PART LENGTH	HEAD	FASTENER
1/4" x 1½"			5/16" x 3½"		
1/4" x 2"			5/16" x 4" ▲		
1/4" x 3"			5/16" x 5" ▲		
1/4" x 5"			3/8" x 5"		
1/4" x 6"			3/8" x 6"		
5/16" x 3"					



PERFORMANCE SPECIFICATIONS

NOMINAL DIAMETER	ALLOWABLE ¹ WITHDRAWAL ² , HEAD PULL-THROUGH ³ , SHEAR LOADED PARALLEL TO THE GRAIN ⁴ (Z ⁴), AND SHEAR LOADED PERPENDICULAR TO THE GRAIN ⁴ (Z _⊥ ⁴)														
	SOUTHERN PINE ⁵ (G=0.55)					DOUGLAS-FIR ⁵ (G=0.5)					HEM FIR & SPRUCE-PINE FIR ⁵ (G=0.42)				
	WITHDRAWAL ²	HEAD PULL-THROUGH ³		Z ⁴	Z _⊥ ⁴	WITHDRAWAL ²	HEAD PULL-THROUGH ³		Z ⁴	Z _⊥ ⁴	WITHDRAWAL ²	HEAD PULL-THROUGH ³		Z ⁴	Z _⊥ ⁴
		PANCAKE	HEX				PANCAKE	HEX				PANCAKE	HEX		
	(LB/IN.)	(LB)	(LB)	(LB)	(LB)	(LB/IN.)	(LB)	(LB)	(LB)	(LB)	(LB/IN.)	(LB)	(LB)	(LB)	(LB)
1/4"	170	620	450	250	220	170	550	400	240	195	140	450	300	210	155
5/16"	167	630	500	280	215	170	530	460	260	190	140	520	360	220	145
3/8"	238	920	620	330	240	205	760	620	305	220	170	610	510	270	185
1/2"	292	-	720	400	280	280	-	660	375	260	210	-	580	330	220

1 Based upon ASD design loads. Values shall be multiplied by the applicable adjustment values provided in the 2024 National Design Specification (NDS) for Wood Construction.

2 Withdrawal values are pounds per inch of thread including the tip but excluding the length of the upper *4CUT*[™]. Minimum penetration into the main member is 1-1/2" for the 1/4" and 5/16" diameters, 2" for the 3/8" diameter, and 3" for the 1/2" diameter.

3 Head pull-through values are based upon a 1-1/2" side member.

4 Lateral shear capacity is based upon a 1-1/2" side member and at least 1-1/2" penetration into the main member for the 1/4" and 5/16" diameters or 3-1/2" for the 3/8" or 1/2" diameters.

5 Tabulated values are based upon the specific gravities in the NDS. For specific gravities not listed, use the next lower value. When the connection has two different species, use the lower specific gravity.



HEX WASHER HEAD HCR® 1/2" DIA.

POWERLAGS® XS



MADE IN USA
WITH GLOBALLY
SOURCED MATERIALS

DESCRIPTION

SPAX® PowerLags® XS Hex Washer Head construction fasteners with HCR® coating are intended for wood-to-wood connections in exterior structural applications when attaching treated lumber components. These fasteners are designed with a hex head conventional driver system along with a built-on washer for applications requiring additional surface area under the head for superior pull-down force. Ideal for deck ledger attachment. Often used for blind, high torque applications where you need additional engagement from socket to screw head.

MATERIALS & COATING

Cold-rolled carbon steel wire heat treated and plated with an HCR® (High Corrosion Resistance) double barrier coating. HCR is tested and recognized for use in ground contact pressure treated lumber for exterior, freshwater general construction applications (e.g., AWPAC UC1-UC4A, UCFA).



BUILT-ON WASHER HEAD

Eliminates the need and cost of a separate washer.



SERRATED THREADS

Allow for quicker, easier fastening.



RELIABLE CONNECTIONS

Heat treated for strength and durability.



TER No. 1912-07
Structural Wood
Fastener Properties



TYPICAL EXTERIOR APPLICATIONS

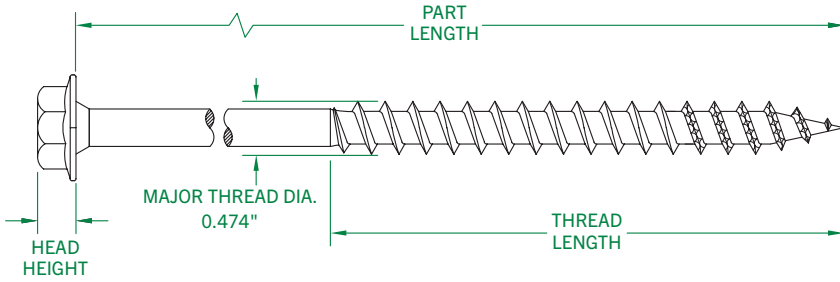
- Exterior treated lumber pergolas & gazebos
- Landscaping timber
- Outdoor furniture
- Exterior fencing posts
- Exterior out buildings

EXTERIOR



HEX WASHER HEAD HCR[®] 1/2" DIA.

POWERLAGS[®] XS



EXTERIOR

PRODUCT SELECTION

PART LENGTH	THREAD LENGTH	HEAD DIA. HEAD HT.	DRIVE/BIT SIZE	APPROX. QTY.	PKG. TYPE	MASTER QTY.	PART NO.
1/2" x 5"	3.150"	0.861" 0.394"	5/8"	1	Individual*	10	XSH500P500B1
				25	Contractor Pax*	4	XSH500P500B25
				100	Bulk Pail*	N/A	XSH500P500B100
1/2" x 6"	3.150"	0.861" 0.394"	5/8"	25	Contractor Pax*	4	XSH500P600B25
				100	Bulk Pail*	N/A	XSH500P600B100
1/2" x 8"	3.150"	0.861" 0.394"	5/8"	1	Individual*	10	XSH500P800B1
				100	Bulk Pail*	N/A	XSH500P800B100
1/2" x 10"	3.150"	0.861" 0.394"	5/8"	1	Individual*	10	XSH500P1000B1
				100	Bulk Pail*	N/A	XSH500P1000B100
1/2" x 12"	3.150"	0.861" 0.394"	5/8"	100	Bulk Pail*	N/A	XSH500P1200B100

NOTE: Upper 4CUT[™] and 4CUT[™] Point features not available for 1/2" Hex diameters.

*Bit not included.



Individual



Contractor Pax[®]



Bulk Pail



HEX WASHER HEAD HCR® 1/2" DIA.

POWERLAGS® XS



ENGINEERED
FASTENERS

EXTERIOR

FASTENER LENGTHS

PART LENGTH	HEAD	FASTENER	PART LENGTH	HEAD	FASTENER
1/2" x 5"			1/2" x 10"		
1/2" x 6"			1/2" x 12"		
1/2" x 8"					



No. ESR-5358

PERFORMANCE SPECIFICATIONS

NOMINAL DIAMETER	ALLOWABLE ¹ WITHDRAWAL ² , HEAD PULL-THROUGH ³ , SHEAR LOADED PARALLEL TO THE GRAIN ⁴ (Z), AND SHEAR LOADED PERPENDICULAR TO THE GRAIN ⁴ (Z _⊥)														
	SOUTHERN PINE ⁵ (G=0.55)					DOUGLAS-FIR ⁵ (G=0.5)					HEM FIR & SPRUCE-PINE FIR ⁵ (G=0.42)				
	WITHDRAWAL ²	HEAD PULL-THROUGH ³		Z ⁴	Z _⊥ ⁴	WITHDRAWAL ²	HEAD PULL-THROUGH ³		Z ⁴	Z _⊥ ⁴	WITHDRAWAL ²	HEAD PULL-THROUGH ³		Z ⁴	Z _⊥ ⁴
		PANCAKE	HEX				PANCAKE	HEX				PANCAKE	HEX		
	(LB/IN.)	(LB)	(LB)	(LB)	(LB)	(LB/IN.)	(LB)	(LB)	(LB)	(LB)	(LB/IN.)	(LB)	(LB)	(LB)	(LB)
1/4"	170	620	450	250	220	170	550	400	240	195	140	450	300	210	155
5/16"	167	630	500	280	215	170	530	460	260	190	140	520	360	220	145
3/8"	238	920	620	330	240	205	760	620	305	220	170	610	510	270	185
1/2"	292	-	720	400	280	280	-	660	375	260	210	-	580	330	220

1 Based upon ASD design loads. Values shall be multiplied by the applicable adjustment values provided in the 2024 National Design Specification (NDS) for Wood Construction.

2 Withdrawal values are pounds per inch of thread including the tip but excluding the length of the upper 4CUT[®]. Minimum penetration into the main member is 1-1/2" for the 1/4" and 5/16" diameters, 2" for the 3/8" diameter, and 3" for the 1/2" diameter.

3 Head pull-through values are based upon a 1-1/2" side member.

4 Lateral shear capacity is based upon a 1-1/2" side member and at least 1-1/2" penetration into the main member for the 1/4" and 5/16" diameters or 3-1/2" for the 3/8" or 1/2" diameters.

5 Tabulated values are based upon the specific gravities in the NDS. For specific gravities not listed, use the next lower value. When the connection has two different species, use the lower specific gravity.



T-STAR PANCAKE HEAD YELLOW ZINC

POWERLAGS® XF



MADE IN USA
WITH GLOBALLY
SOURCED MATERIALS

DESCRIPTION

SPAX® PowerLags® XF T-STAR Pancake Head structural fasteners with yellow zinc coating create strong, reliable wood-to-wood connections. They deliver a superior drive experience highlighted by a fast start and 10% faster installation times than other structural fasteners. This fastener's large diameter low profile pancake head with T-STAR recess has been paired with an optimized thread design to provide noticeable clamping and holding power. Ideal for framing attachment, multi-ply beams/trusses and other interior structural applications.

MATERIALS & COATING

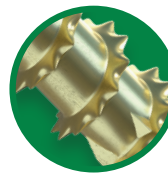
Cold-rolled carbon steel wire, heat treated and plated with a yellow zinc finish to prevent red rust. Yellow zinc is tested and recognized for use in above ground contact pressure treated lumber for interior dry/damp general construction applications (e.g., AWPAC UC1-UC2).

INTERIOR



LOW PROFILE PANCAKE HEAD

Provides a flush finish with high clamping force.



SERRATED THREADS

Allows for quicker, easier fastening.



UPPER 4CUT™ [4" AND UP]

Bores out the hole in wood for faster speed and lower tool torque.



UNIQUE 4CUT™ POINT

Prevents splitting and requires no pre-drilling in wood.



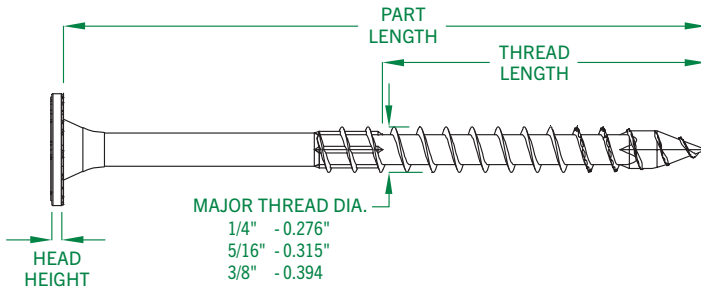
TYPICAL INTERIOR APPLICATIONS

- Multi-ply sawn lumber assemblies
- Multi-ply structural composite lumber assemblies
- Interior framing applications
- Shelving applications – interior buildings
- Indoor furniture



T-STAR PANCAKE HEAD YELLOW ZINC

POWERLAGS® XF



TER No. 2410-103
Multi-ply Sawn
Lumber Assemblies

TER No. 2410-103
Multi-ply Engineered Wood
(SCL) Assemblies

INTERIOR

PRODUCT SELECTION

PART LENGTH	THREAD LENGTH	HEAD DIA. HEAD HT.	DRIVE/BIT SIZE	APPROX. QTY.	PKG. TYPE	MASTER QTY.	PART NO.
1/4" x 2½"	1.535"	0.675" 0.055"	T40	1	Individual*	50	XFP250P212Y1
				12	Project Pax	5	XFP250P212Y12
				50	Contractor Pax	4	XFP250P212Y50
				500	Bulk Pail	N/A	XFP250P212Y500
1/4" x 3" ■●	1.535"	0.675" 0.055"	T40	1	Individual*	50	XFP250P300Y1
				12	Project Pax	5	XFP250P300Y12
				50	Contractor Pax	4	XFP250P300Y50
				500	Bulk Pail	N/A	XFP250P300Y500
1/4" x 3½"	2.010"	0.675" 0.055"	T40	1	Individual*	50	XFP250P312Y1
				12	Project Pax	5	XFP250P312Y12
				50	Contractor Pax	4	XFP250P312Y50
				500	Bulk Pail	N/A	XFP250P312Y500
1/4" x 4" ■	2.125"	0.675" 0.055"	T40	1	Individual*	50	XFP250P400Y1
				12	Project Pax	5	XFP250P400Y12
				50	Contractor Pax	4	XFP250P400Y50
				500	Bulk Pail	N/A	XFP250P400Y500
1/4" x 4½"	2.125"	0.675" 0.055"	T40	1	Individual*	50	XFP250P412Y1
				12	Project Pax	5	XFP250P412Y12
				50	Contractor Pax	4	XFP250P412Y50
				500	Bulk Pail	N/A	XFP250P412Y500
1/4" x 5" ●	2.755"	0.675" 0.055"	T40	1	Individual*	50	XFP250P500Y1
				12	Project Pax	5	XFP250P500Y12
				50	Contractor Pax	4	XFP250P500Y50
				500	Bulk Pail	N/A	XFP250P500Y500
1/4" x 6" ■●	2.755"	0.675" 0.055"	T40	1	Individual*	50	XFP250P600Y1
				12	Project Pax	5	XFP250P600Y12
				50	Contractor Pax	4	XFP250P600Y50
				500	Bulk Pail	N/A	XFP250P600Y500
5/16" x 3" ■	1.535"	0.765" 0.060"	T40	1	Individual*	25	XFP312P300Y1
				12	Project Pax	5	XFP312P300Y12
				50	Contractor Pax	4	XFP312P300Y50
				250	Bulk Pail	N/A	XFP312P300Y250

NOTE: 2" bit included in 1/4" and 5/16" diameter packages. 1" bit included in 3/8" diameter packages.

*Bit not included.



T-STAR PANCAKE HEAD YELLOW ZINC

POWERLAGS® XF



ENGINEERED FASTENERS



TER No. 2410-103
Multi-ply Sawn
Lumber Assemblies

TER No. 2410-103
Multi-ply Engineered Wood
(SCL) Assemblies

PRODUCT SELECTION

PART LENGTH	THREAD LENGTH	HEAD DIA. HEAD HT.	DRIVE/BIT SIZE	APPROX. QTY.	PKG. TYPE	MASTER QTY.	PART NO.
5/16" x 3½"	2.010"	0.765" 0.060"	T40	1	Individual*	25	XFP312P312Y1
				50	Contractor Pax	4	XFP312P312Y50
				250	Bulk Pail	N/A	XFP312P312Y250
5/16" x 4"	2.045"	0.765" 0.060"	T40	1	Individual*	25	XFP312P400Y1
				12	Project Pax	5	XFP312P400Y12
				50	Contractor Pax	4	XFP312P400Y50
				250	Bulk Pail	N/A	XFP312P400Y250
5/16" x 4½"	2.045"	0.765" 0.060"	T40	1	Individual*	25	XFP312P412Y1
				50	Contractor Pax	4	XFP312P412Y50
				250	Bulk Pail	N/A	XFP312P412Y250
5/16" x 5"	2.675"	0.765" 0.060"	T40	1	Individual*	25	XFP312P500Y1
5/16" x 6"	2.675"	0.765" 0.060"	T40	1	Individual*	25	XFP312P600Y1
3/8" x 5"	3.190"	0.980" 0.070"	T50	1	Individual*	15	XFP375P500Y1
				25	Contractor Pax	4	XFP375P500Y25
				150	Bulk Pail	N/A	XFP375P500Y150
3/8" x 6"	3.150"	0.980" 0.070"	T50	1	Individual*	15	XFP375P600Y1
				12	Project Pax	5	XFP375P600Y12
				25	Contractor Pax	4	XFP375P600Y25
				150	Bulk Pail	N/A	XFP375P600Y150

NOTE: 2" bit included in 1/4" and 5/16" diameter packages. 1" bit included in 3/8" diameter packages.

*Bit not included.



Individual



Project Pax®



Contractor Pax®



Bulk Pail



T-STAR Bit

BIT SELECTION

DRIVE BIT	BIT SIZE	MASTER QTY.	PART NO.
T40	1"	10	5000002016409
T50	1"	10	5000002016509

NOTE: Only sold in master cartons. Made in Taiwan.





T-STAR PANCAKE HEAD YELLOW ZINC

POWERLAGS® XF



ENGINEERED
FASTENERS



TER No. 2410-103
Multi-ply Sawn
Lumber Assemblies

TER No. 2410-103
Multi-ply Engineered Wood
(SCL) Assemblies

INTERIOR

FASTENER LENGTHS

PART LENGTH	HEAD	FASTENER	PART LENGTH	HEAD	FASTENER
1/4" x 2½"			5/16" x 3½"		
1/4" x 3"			5/16" x 4"		
1/4" x 3½"			5/16" x 4½"		
1/4" x 4"			5/16" x 5"		
1/4" x 4½"			5/16" x 6"		
1/4" x 5"			3/8" x 5"		
1/4" x 6"			3/8" x 6"		
5/16" x 3"					



No. ESR-5358

PERFORMANCE SPECIFICATIONS

NOMINAL DIAMETER	ALLOWABLE ¹ WITHDRAWAL ² , HEAD PULL-THROUGH ³ , SHEAR LOADED PARALLEL TO THE GRAIN ⁴ (Z), AND SHEAR LOADED PERPENDICULAR TO THE GRAIN ⁴ (Z _⊥)														
	SOUTHERN PINE ⁵ (G=0.55)					DOUGLAS-FIR ⁵ (G=0.5)					HEM FIR & SPRUCE-PINE FIR ⁵ (G=0.42)				
	WITHDRAWAL ²	HEAD PULL-THROUGH ³		Z ⁴	Z _⊥ ⁴	WITHDRAWAL ²	HEAD PULL-THROUGH ³		Z ⁴	Z _⊥ ⁴	WITHDRAWAL ²	HEAD PULL-THROUGH ³		Z ⁴	Z _⊥ ⁴
		PANCAKE	HEX				PANCAKE	HEX				PANCAKE	HEX		
	(LB/IN.)	(LB)	(LB)	(LB)	(LB)	(LB/IN.)	(LB)	(LB)	(LB)	(LB)	(LB/IN.)	(LB)	(LB)	(LB)	(LB)
1/4"	170	620	450	250	220	170	550	400	240	195	140	450	300	210	155
5/16"	167	630	500	280	215	170	530	460	260	190	140	520	360	220	145
3/8"	238	920	620	330	240	205	760	620	305	220	170	610	510	270	185
1/2"	292	-	720	400	280	280	-	660	375	260	210	-	580	330	220

1 Based upon ASD design loads. Values shall be multiplied by the applicable adjustment values provided in the 2024 National Design Specification (NDS) for Wood Construction.

2 Withdrawal values are pounds per inch of thread including the tip but excluding the length of the upper 4CUT[®]. Minimum penetration into the main member is 1-1/2" for the 1/4" and 5/16" diameters, 2" for the 3/8" diameter, and 3" for the 1/2" diameter.

3 Head pull-through values are based upon a 1-1/2" side member.

4 Lateral shear capacity is based upon a 1-1/2" side member and at least 1-1/2" penetration into the main member for the 1/4" and 5/16" diameters or 3-1/2" for the 3/8" or 1/2" diameters.

5 Tabulated values are based upon the specific gravities in the NDS. For specific gravities not listed, use the next lower value. When the connection has two different species, use the lower specific gravity.

MULTI-PLY [SAWN LUMBER ASSEMBLIES]
TER No. 1802-03

UPLIFT TRUSS/ RAFTER CONNECTION
TER No. 1910-02

WINDOW INSTALL

FRAMING

MULTI-PLY ENGINEERED WOOD ASSEMBLIES
(LVL, PSL, USL) TER No. 1802-03

CABINET HANGING

PERGOLA ASSEMBLY

DECK LEDGER ATTACHMENT
TER No. 1711-01

SUBFLOOR

DECK BOARD FASTENING

DECK POST

DRIVING INNOVATION INTO EVERY CONNECTION

For any home project, SPAX® Engineered Fasteners help you drive with more speed, greater strength and lasting beauty. Rely on us to amplify your craft. **Find the right fastener for your job at [SPAX.us/Products](https://www.spax.us/Products).**

CONNECT WITH US!



SPAX.US

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