

POWERLAGS® XF



JOB NAME:		DATE OF SUBMITTAL:
CONTACT NAME:		
COMPANY/CONTRACTOR NAME:		
ADDRESS:		
PHONE:	EMAIL:	

☐ Approved	☐ Approved as Noted	☐ Revise & Resubmit	☐ Rejected
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COMMENTS:

BY:

COMPANY NAME:

DATE:

PRODUCT SUBMITTAL

POWERLAGS® XF



SELECT ALL THAT APPLY FOR SUBMITTAL

Mark an X in the green columns to select part length, head type, and coating.

HEAD TYPE AND LENGTH



PARTIALLY THREADED					
LENGTH	PANCAKE HEAD			HEX HEAD	
	PART NAME	HCR®	YELLOW ZINC	PART NAME	HCR®
1/4" x 1½"	N/A	N/A	N/A	XFH250P112	
1/4" x 2"	N/A	N/A	N/A	XFH250P200	
1/4" x 2½"	XFP250P212			N/A	N/A
1/4" x 3"	XFP250P300			XFH250P300	
1/4" x 3½"	XFP250P312			N/A	N/A
1/4" x 4"	XFP250P400			N/A	N/A
1/4" x 4½"	XFP250P412			N/A	N/A
1/4" x 5"	XFP250P500			XFH250P500	
1/4" x 6"	XFP250P600			XFH250P600	
5/16" x 3"	XFP312P300			XFH312P300	
5/16" x 3½"	XFP312P312			XFH312P312	
5/16" x 4"	XFP312P400			XFH312P400	
5/16" x 4½"	XFP312P412			N/A	N/A
5/16" x 5"	XFP312P500			XFH312P500	
5/16" x 6"	XFP312P600			N/A	N/A
5/16" x 6¾"	XFP312P634		N/A	N/A	N/A
5/16" x 8"	XFP312P800		N/A	N/A	N/A
5/16" x 10"	XFP312P1000		N/A	N/A	N/A
5/16" x 12"	XFP312P1200		N/A	N/A	N/A
3/8" x 5"	XFP375P500			XFH375P500	
3/8" x 6"	XFP375P600			XFH375P600	
3/8" x 8"	XFP375P800		N/A	N/A	N/A
3/8" x 10"	XFP375P1000		N/A	N/A	N/A

NOTE: HCR® coating is for exterior use. Yellow zinc coating is for interior use.



PRODUCT SUBMITTAL

POWERLAGS® XF



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.



No. ESR-5358



PRODUCT SUBMITTAL

POWERLAGS® XF

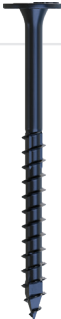
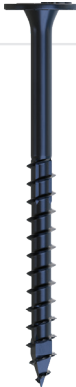
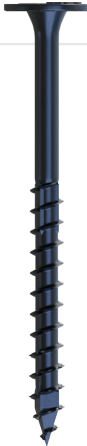


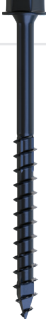
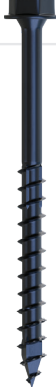
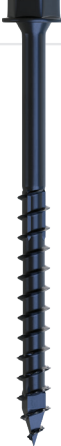
Backed by third-party testing and IRC/IBC code approvals, PowerLags® XF deliver confidence and peace of mind. They're an excellent choice for projects involving dimensional lumber, heavy-duty timbers, and engineered wood products. Whether you're building a new deck, adding a pergola, or working on other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

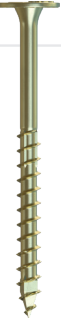
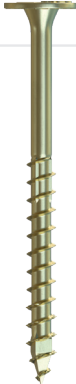
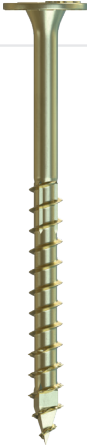
SOCKET, Partial Thread
HEX WASHER HEAD

DIA.	1/4"	5/16"	3/8"
DRIVE	 T40 2 1/2" 3" ■ ● 3 1/2" 4" ■ 4 1/2" 5" ● 6" ■ ●	 T40 3" ■ 3 1/2" ● 4" ▲ ■ 4 1/2" 5" ▲ ● 6" ■ ● 6 3/4" ● 8" 10" 12"	 T50 5" ● 6" ■ ● 8" 10"

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

INTERIOR

T-STAR, Partial Thread
LOW PROFILE PANCAKE HEAD

DIA.	1/4"	5/16"	3/8"
DRIVE	 T40 2 1/2" 3" ■ ● 3 1/2" 4" ■ 4 1/2" 5" ● 6" ■ ●	 T40 3" ■ 3 1/2" ● 4" ■ 4 1/2" 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



- ▲ TER No. 2403-114 Deck Ledger Attachment
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MATERIALS & COATINGS

YELLOW ZINC

“Yellow zinc” is tested and recognized for use in untreated and above ground contact pressure treated lumber for interior dry/damp general construction applications (e.g., AWPA UC1-UC2).

HCR®

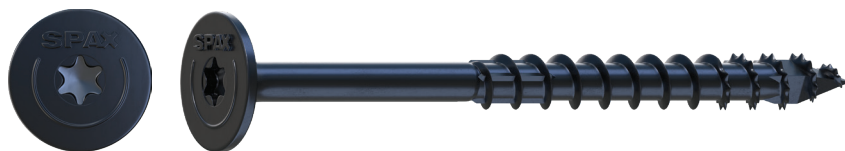
“HCR” is tested and recognized for use in ground contact pressure treated lumber for exterior freshwater general construction applications (e.g., AWPA UC1-UC4A, UCFA).

COATING		USE CATEGORY	BRIEF DESCRIPTION
YELLOW ZINC	HCR®		
✓	✓	UC1	Interior Dry
✓	✓	UC2	Interior Damp
X	✓	UC3A	Exterior Above Ground, Coated with Rapid Water Runoff
X	✓	UC3B	Exterior Above Ground, Uncoated or Poor Water Runoff
X	✓	UC4A	Ground Contact, General Use
X	X	UC4B	Ground Contact, Heavy Duty
X	X	UC4C	Ground Contact, Extreme Duty
X	X	UC5A	Marine Use, Northern Waters (Salt or Brackish Water)
X	X	UC5B	Marine Use, Central Waters (Salt or Brackish Water)
X	X	UC5C	Marine Use, Southern Waters (Salt or Brackish Water)
X	✓	UCFA	Interior Above Ground Fire Protection
X	X	UCFB	Exterior Above Ground Fire Protection

Information referenced from the AWPA site: <https://awpa.com/info/technical/codes>

PRODUCT SUBMITTAL

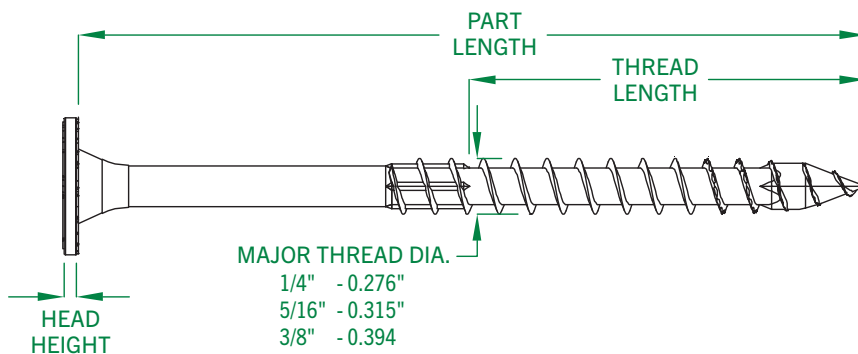
T-STAR PANCAKE HEAD HCR®



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. 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., AWPA UC1-UC4A, UCFA).



▲ 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	XFP250P212-BX1
				12	Project Pax	5	XFP250P212-BX12
				50	Contractor Pax	4	XFP250P212-BX50
				500	Bulk Pail	N/A	XFP250P212-BX500
1/4" x 3" ■ ●	1.535"	0.675" 0.055"	T40	1	Individual	50	XFP250P300-BX1
				12	Project Pax	5	XFP250P300-BX12
				50	Contractor Pax	4	XFP250P300-BX50
				200	Mini Bulk Pail	N/A	XFP250P300-BX200
				500	Bulk Pail	N/A	XFP250P300-BX500
1/4" x 3½"	2.010"	0.675" 0.055"	T40	1	Individual	50	XFP250P312-BX1
				12	Project Pax	5	XFP250P312-BX12
				50	Contractor Pax	4	XFP250P312-BX50
				500	Bulk Pail	N/A	XFP250P312-BX500



PRODUCT SUBMITTAL

T-STAR PANCAKE HEAD HCR®



▲ 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 4" ■	2.125"	0.675" 0.055"	T40	1	Individual	50	XFP250P400-BX1
				12	Project Pax	5	XFP250P400-BX12
				50	Contractor Pax	4	XFP250P400-BX50
				200	Mini Bulk Pail	N/A	XFP250P400-BX200
				500	Bulk Pail	N/A	XFP250P400-BX500
1/4" x 4½"	2.125"	0.675" 0.055"	T40	1	Individual	50	XFP250P412-BX1
				12	Project Pax	5	XFP250P412-BX12
				50	Contractor Pax	4	XFP250P412-BX50
				500	Bulk Pail	N/A	XFP250P412-BX500
1/4" x 5" ●	2.755"	0.675" 0.055"	T40	1	Individual	50	XFP250P500-BX1
				12	Project Pax	5	XFP250P500-BX12
				50	Contractor Pax	4	XFP250P500-BX50
				200	Mini Bulk Pail	N/A	XFP250P500-BX200
				500	Bulk Pail	N/A	XFP250P500-BX500
1/4" x 6" ■●	2.755"	0.675" 0.055"	T40	1	Individual	50	XFP250P600-BX1
				12	Project Pax	5	XFP250P600-BX12
				50	Contractor Pax	4	XFP250P600-BX50
				200	Mini Bulk Pail	N/A	XFP250P600-BX200
				500	Bulk Pail	N/A	XFP250P600-BX500
5/16" x 3" ■	1.535"	0.765" 0.060"	T40	1	Individual	25	XFP312P300-BX1
				12	Project Pax	5	XFP312P300-BX12
				50	Contractor Pax	4	XFP312P300-BX50
				250	Bulk Pail	N/A	XFP312P300-BX250
5/16" x 3½" ●	2.010"	0.765" 0.060"	T40	1	Individual	25	XFP312P312-BX1
				12	Project Pax	5	XFP312P312-BX12
				50	Contractor Pax	4	XFP312P312-BX50
				250	Bulk Pail	N/A	XFP312P312-BX250
5/16" x 4" ▲■	2.045"	0.765" 0.060"	T40	1	Individual	25	XFP312P400-BX1
				12	Project Pax	5	XFP312P400-BX12
				50	Contractor Pax	4	XFP312P400-BX50
				150	Mini Bulk Pail	N/A	XFP312P400-BX150
				250	Bulk Pail	N/A	XFP312P400-BX250
5/16" x 4½"	2.045"	0.765" 0.060"	T40	1	Individual	25	XFP312P412-BX1
				12	Project Pax	5	XFP312P412-BX12
				50	Contractor Pax	4	XFP312P412-BX50
				250	Bulk Pail	N/A	XFP312P412-BX250



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PRODUCT SUBMITTAL

T-STAR PANCAKE HEAD HCR®



▲ 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 5" ▲●	2.675"	0.765" 0.060"	T40	1	Individual	25	XFP312P500-BX1
				12	Project Pax	5	XFP312P500-BX12
				50	Contractor Pax	4	XFP312P500-BX50
				150	Mini Bulk Pail	N/A	XFP312P500-BX150
				250	Bulk Pail	N/A	XFP312P500-BX250
5/16" x 6" ■	2.675"	0.765" 0.060"	T40	1	Individual	25	XFP312P600-BX1
				12	Project Pax	5	XFP312P600-BX12
				50	Contractor Pax	4	XFP312P600-BX50
				150	Mini Bulk Pail	N/A	XFP312P600-BX150
				250	Bulk Pail	N/A	XFP312P600-BX250
5/16" x 6¾" ●	2.675"	0.765" 0.060"	T40	50	Contractor Pax	4	XFP312P634-BX50
				250	Bulk Pail	N/A	XFP312P634-BX250
5/16" x 8"	2.675"	0.765" 0.060"	T40	1	Individual	25	XFP312P800-BX1
				12	Project Pax	5	XFP312P800-BX12
				50	Contractor Pax	2	XFP312P800-BX50
				150	Bulk Pail	N/A	XFP312P800-BX150
5/16" x 10"	2.675"	0.765" 0.060"	T40	1	Individual	25	XFP312P1000-BX1
				12	Project Pax	5	XFP312P1000-BX12
				50	Contractor Pax	2	XFP312P1000-BX50
				150	Bulk Pail	N/A	XFP312P1000-BX150
5/16" x 12"	2.675"	0.765" 0.060"	T40	1	Individual	25	XFP312P1200-BX1
				50	Contractor Pax	2	XFP312P1200-BX50
				150	Bulk Pail	N/A	XFP312P1200-BX150
3/8" x 5" ●	3.190"	0.980" 0.070"	T50	1	Individual	15	XFP375P500-BX1
				12	Project Pax	5	XFP375P500-BX12
				25	Contractor Pax	4	XFP375P500-BX25
				150	Bulk Pail	N/A	XFP375P500-BX150
3/8" x 6" ■●	3.150"	0.980" 0.070"	T50	1	Individual	15	XFP375P600-BX1
				12	Project Pax	5	XFP375P600-BX12
				25	Contractor Pax	4	XFP375P600-BX25
				150	Bulk Pail	N/A	XFP375P600-BX150
3/8" x 8"	3.150"	0.980" 0.070"	T50	1	Individual	15	XFP375P800-BX1
				25	Contractor Pax	2	XFP375P800-BX25
				150	Bulk Pail	N/A	XFP375P800-BX150
3/8" x 10"	3.150"	0.980" 0.070"	T50	1	Individual	15	XFP375P1000-BX1
				150	Bulk Pail	N/A	XFP375P1000-BX150



PRODUCT SUBMITTAL

T-STAR PANCAKE HEAD HCR®



▲ 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.



PRODUCT SUBMITTAL

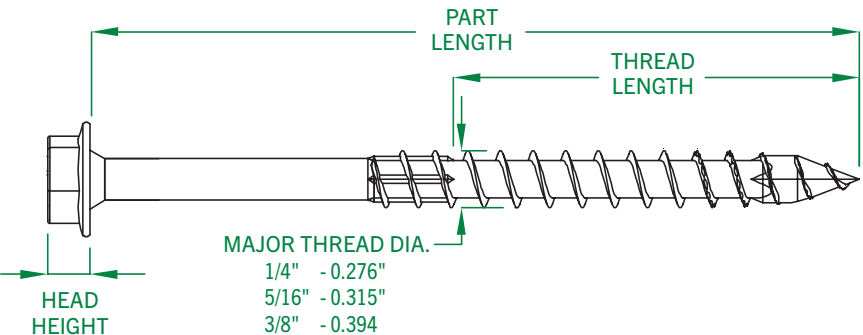
HEX WASHER HEAD HCR®



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. 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).



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	XFH250P112-BX1
				12	Project Pax	5	XFH250P112-BX12
1/4" x 2"	1.535"	0.545" 0.233"	3/8"	1	Individual	50	XFH250P200-BX1
				12	Project Pax	5	XFH250P200-BX12
				50	Contractor Pax	4	XFH250P200-BX50
				500	Bulk Pail	N/A	XFH250P200-BX500
1/4" x 3"	1.535"	0.545" 0.233"	3/8"	1	Individual	50	XFH250P300-BX1
				12	Project Pax	5	XFH250P300-BX12
				50	Contractor Pax	4	XFH250P300-BX50
				500	Bulk Pail	N/A	XFH250P300-BX500
1/4" x 5"	2.755"	0.545" 0.233"	3/8"	1	Individual	50	XFH250P500-BX1
				12	Project Pax	5	XFH250P500-BX12
				50	Contractor Pax	4	XFH250P500-BX50

PRODUCT SUBMITTAL

HEX WASHER HEAD HCR®



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 6"	2.755"	0.545" 0.233"	3/8"	1	Individual	50	XFH250P600-BX1
				12	Project Pax	5	XFH250P600-BX12
				50	Contractor Pax	4	XFH250P600-BX50
				500	Bulk Pail	N/A	XFH250P600-BX500
5/16" x 3"	1.535"	0.590" 0.280"	7/16"	1	Individual	25	XFH312P300-BX1
				50	Contractor Pax	4	XFH312P300-BX50
				250	Bulk Pail	N/A	XFH312P300-BX250
5/16" x 3½"	2.010"	0.590" 0.280"	7/16"	1	Individual	25	XFH312P312-BX1
				50	Contractor Pax	4	XFH312P312-BX50
				250	Bulk Pail	N/A	XFH312P312-BX250
5/16" x 4" ▲	2.045"	0.590" 0.280"	7/16"	1	Individual	25	XFH312P400-BX1
				12	Project Pax	5	XFH312P400-BX12
				50	Contractor Pax	4	XFH312P400-BX50
				250	Bulk Pail	N/A	XFH312P400-BX250
5/16" x 5" ▲	2.675"	0.590" 0.280"	7/16"	1	Individual	25	XFH312P500-BX1
				12	Project Pax	5	XFH312P500-BX12
				50	Contractor Pax	4	XFH312P500-BX50
				250	Bulk Pail	N/A	XFH312P500-BX250
3/8" x 5"	3.190"	0.748" 0.339"	1/2"	1	Individual	15	XFH375P500-BX1
				25	Contractor Pax	4	XFH375P500-BX25
				150	Bulk Pail	N/A	XFH375P500-BX150
3/8" x 6"	3.150"	0.748" 0.339"	1/2"	1	Individual	15	XFH375P600-BX1
				25	Contractor Pax	4	XFH375P600-BX25
				150	Bulk Pail	N/A	XFH375P600-BX150



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.

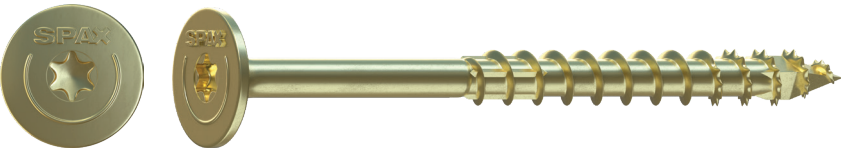
4 Lateral shear capacity is based upon a 1-1/2" side member and at least 1-1/2" penetration into the main member for the 1/4" and 5/16" diameters or 3-1/2" for the 3/8" or 1/2" diameters.

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.



PRODUCT SUBMITTAL

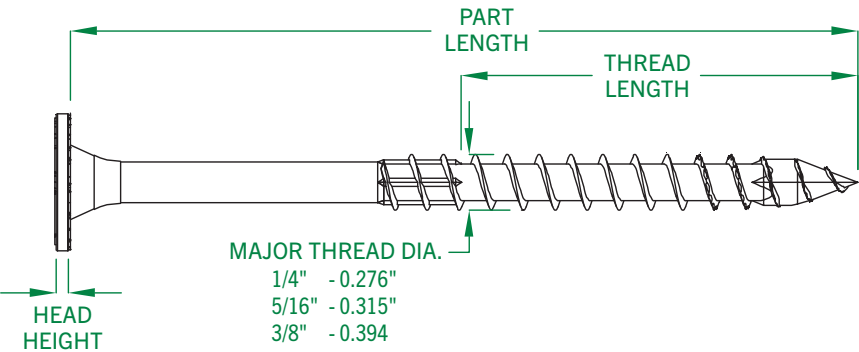
T-STAR PANCAKE HEAD YELLOW ZINC



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. 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., AWPA UC1-UC2).



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	XFP250P212-YZ1
				12	Project Pax	5	XFP250P212-YZ12
				50	Contractor Pax	4	XFP250P212-YZ50
				500	Bulk Pail	N/A	XFP250P212-YZ500
1/4" x 3" ■●	1.535"	0.675" 0.055"	T40	1	Individual	50	XFP250P300-YZ1
				12	Project Pax	5	XFP250P300-YZ12
				50	Contractor Pax	4	XFP250P300-YZ50
				500	Bulk Pail	N/A	XFP250P300-YZ500
1/4" x 3½"	2.010"	0.675" 0.055"	T40	1	Individual	50	XFP250P312-YZ1
				12	Project Pax	5	XFP250P312-YZ12
				50	Contractor Pax	4	XFP250P312-YZ50
				500	Bulk Pail	N/A	XFP250P312-YZ500



PRODUCT SUBMITTAL

T-STAR PANCAKE HEAD YELLOW ZINC



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

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

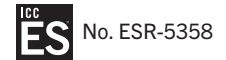
PRODUCT SELECTION

PART LENGTH	THREAD LENGTH	HEAD DIA. HEAD HT.	DRIVE/BIT SIZE	APPROX. QTY.	PKG. TYPE	MASTER QTY.	PART NO.
1/4" x 4" ■	2.125"	0.675" 0.055"	T40	1	Individual	50	XFP250P400-YZ1
				12	Project Pax	5	XFP250P400-YZ12
				50	Contractor Pax	4	XFP250P400-YZ50
				500	Bulk Pail	N/A	XFP250P400-YZ500
1/4" x 4½"	2.125"	0.675" 0.055"	T40	1	Individual	50	XFP250P412-YZ1
				12	Project Pax	5	XFP250P412-YZ12
				50	Contractor Pax	4	XFP250P412-YZ50
				500	Bulk Pail	N/A	XFP250P412-YZ500
1/4" x 5" ●	2.755"	0.675" 0.055"	T40	1	Individual	50	XFP250P500-YZ1
				12	Project Pax	5	XFP250P500-YZ12
				50	Contractor Pax	4	XFP250P500-YZ50
				500	Bulk Pail	N/A	XFP250P500-YZ500
1/4" x 6" ■ ●	2.755"	0.675" 0.055"	T40	1	Individual	50	XFP250P600-YZ1
				12	Project Pax	5	XFP250P600-YZ12
				50	Contractor Pax	4	XFP250P600-YZ50
				500	Bulk Pail	N/A	XFP250P600-YZ500
5/16" x 3" ■	1.535"	0.765" 0.060"	T40	1	Individual	25	XFP312P300-YZ1
				12	Project Pax	5	XFP312P300-YZ12
				50	Contractor Pax	4	XFP312P300-YZ50
				250	Bulk Pail	N/A	XFP312P300-YZ250
5/16" x 3½" ●	2.010"	0.765" 0.060"	T40	1	Individual	25	XFP312P312-YZ1
				50	Contractor Pax	4	XFP312P312-YZ50
				250	Bulk Pail	N/A	XFP312P312-YZ250
5/16" x 4" ■	2.045"	0.765" 0.060"	T40	1	Individual	25	XFP312P400-YZ1
				12	Project Pax	5	XFP312P400-YZ12
				50	Contractor Pax	4	XFP312P400-YZ50
				250	Bulk Pail	N/A	XFP312P400-YZ250
5/16" x 4½"	2.045"	0.765" 0.060"	T40	1	Individual	25	XFP312P412-YZ1
				50	Contractor Pax	4	XFP312P412-YZ50
				250	Bulk Pail	N/A	XFP312P412-YZ250
5/16" x 5" ●	2.675"	0.765" 0.060"	T40	1	Individual	25	XFP312P500-YZ1
5/16" x 6" ■	2.675"	0.765" 0.060"	T40	1	Individual	25	XFP312P600-YZ1
3/8" x 5" ●	3.190"	0.980" 0.070"	T50	1	Individual	15	XFP375P500-YZ1
				25	Contractor Pax	4	XFP375P500-YZ25
				150	Bulk Pail	N/A	XFP375P500-YZ150
3/8" x 6" ■ ●	3.150"	0.980" 0.070"	T50	1	Individual	15	XFP375P600-YZ1
				12	Project Pax	5	XFP375P600-YZ12
				25	Contractor Pax	4	XFP375P600-YZ25
				150	Bulk Pail	N/A	XFP375P600-YZ150



PRODUCT SUBMITTAL

T-STAR PANCAKE HEAD YELLOW ZINC



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.

