



ENGINEERED
FASTENERS



SPAX POWERLAGS[®]

The high-performance, low-cost replacement for the conventional lag.



MADE IN U.S.A.



SPAX® POWERLAGS® SAY GOODBYE TO THE CONVENTIONAL LAG

PRODUCT FEATURES

SPAX PowerLags® offer the largest selection of code-recognized structural wood-to-wood fasteners in the industry. Featuring SPAX patented thread technology, they require no pre-drilling, and drive faster and easier than conventional lags and other structural screws.

- Independently tested DrJ Engineering Technical Evaluation Reports (TER No. 1912-07; Structural Wood Fastener Properties, TER No. 1711-01; Deck Ledger Attachment and TER No. 1802-03; Multi-ply: LVL Beams & Girder Truss Applications)
- Heat treated to Grade 5 durability
- Patented thread serrations require up to 40% less driving torque to increase installation speed while helping prevent cracking in logs
- Built-on washer head designs eliminate the need and extra cost of a separate washer
- Fastener length stamp on the head provides convenient identification without measuring and aids on-site inspections

Multi-Ply Application



Deck Ledger Attachment



BUILT-ON WASHER:

Head design eliminates need for a separate washer.

Provides the highest pull-through values in the industry.



HCR® (High Corrosion Resistance) is a double barrier coating tested and recognized for use in ground contact pressure treated lumber for exterior, freshwater general construction applications (e.g. AWPA UC1-UC4A, UCFA).

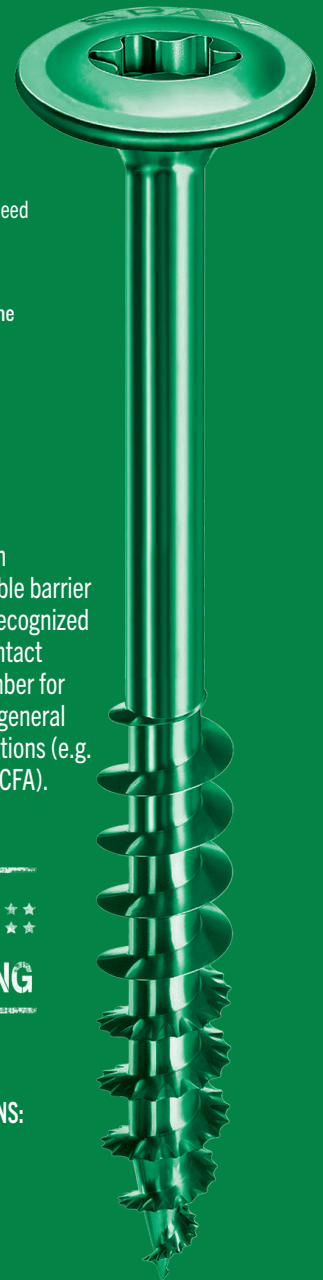
☆☆ NO ☆☆
PRE-DRILLING

*1/4" & 5/16"

PATENTED SERRATIONS:

Require up to 40% less driving torque.

Provides the highest withdrawal values in the industry.



MADE IN U.S.A.

SPAX® PowerLags®

HIGH PERFORMANCE

HIGH VALUE

THE LARGEST SELECTION OF CODE-RECOGNIZED STRUCTURAL WOOD-TO-WOOD FASTENERS IN THE INDUSTRY.

SPAX PowerLags offer an unparalleled level of fastening efficiency, reliability and value for structural wood assemblies and heavy carpentry. Available in two head styles, four diameters, lengths up to 12", and coating systems that include use in treated lumber, you can be sure you'll have the right fastener for the application. PowerLags' patented thread technology makes installation faster and easier, with connections that are building code recognized. Why settle for conventional lags or structural lag screws with limited selection and narrow application? Compare the performance and value of American-made SPAX PowerLags.

SPAX® PowerLags® are sold in project-friendly packaging quantities that help minimize your building material costs: by the piece, 25 or 50 count Contractor Packs, and Bulk Pails (by special order). Refer to the Product Selection Charts included in this brochure for the current available offering of Contractor Packs and Bulk Pails.



T-STAR WASHER HEAD PERFORMANCE SPECIFICATIONS

Per DrJ Report No. 1912-07

DIAMETER	LENGTH	ALLOWABLE WITHDRAWAL (W), HEAD PULL-THROUGH (W _H), LATERAL SHEAR PARALLEL TO GRAIN (Z), AND LATERAL SHEAR PERPENDICULAR TO GRAIN (Z _⊥) VALUES ^{1,2,3,4,5,6,7}											
		SOUTHERN PINE (G=0.55)				DOUGLAS-FIR (G=0.50)				HEM FIR & SPRUCE-PINE-FIR (G=0.42)			
		WITHDRAWAL		HEAD PULL-THROUGH		LATERAL SHEAR		WITHDRAWAL		HEAD PULL-THROUGH		LATERAL SHEAR	
		(W)	(W _H)	Z	Z _⊥	(W)	(W _H)	Z	Z _⊥	(W)	(W _H)	Z	Z _⊥
(lbs./inch)		(lbs.)		(lb./inch)		(lb./inch)		(lb./inch)		(lb./inch)		(lb./inch)	
1/4"	< 3"			305	285			265	235			250	225
	3.5"			390	370			360	340			315	285
	ALL OTHER LENGTHS	375	850	400	370	310	785	360	335	245	585	350	310
5/16"	< 3"			340	305			310	280			265	230
	3.5"			400	380			360	340			325	300
	ALL OTHER LENGTHS	415	965	440	405	300	840	405	375	250	665	380	355
3/8"	ALL	465	1245	530	485	300	1085	475	440	280	880	445	405

¹ "Withdrawal", "Head Pull-Through", and "Lateral Shear" design values shall be adjusted by all applicable adjustment factors per NDS Table 11.3.1.
² "Withdrawal" design values are to be multiplied by the length of the thread penetration into the side grain of the main member. Length includes tip.
³ "Withdrawal" design values are from the main member, and "Head Pull-Through" design values are based on a minimum of 1-1/2" side member thickness.
⁴ Tabulated "Withdrawal" and "Head Pull-Through" design values are for the wood species with the listed assigned specific gravities. Where the wood species assigned specific gravity is not listed, use the next lower assigned specific gravity values.
⁵ Tabulated "Lateral Shear" design values are for the wood species with the listed assigned specific gravities applied to both the main and side members. Where the members are different assigned specific gravities, use the lower of the two.
⁶ Tabulated "Lateral Shear" design values require fasteners must be oriented perpendicular to the side grain, and the underside of the fastener head be installed flush with the surface of the side member.
⁷ Tabulated "Lateral Shear" design values require a minimum fastener penetration into the main member of 1.375" for fasteners less than 4" and 2.375" for all other lengths.

NOTE: When comparing published performance data of comparable structural fasteners, one should pay close attention that the load capacities are shown as either "allowable" or "ultimate" values to ensure an accurate comparison. For your convenience, the performance specifications listed in the chart above are the "allowable load" that can be applied to determine the acceptable working load for the respective diameter SPAX PowerLag. These values are calculated by applying a safety factor to the "average ultimate load capacity" obtained from laboratory testing.

*Hex head values can be obtained online.

T-STAR WASHER HEAD POWERLAGS®



TER No. 1711-01
Deck Ledger
Attachment

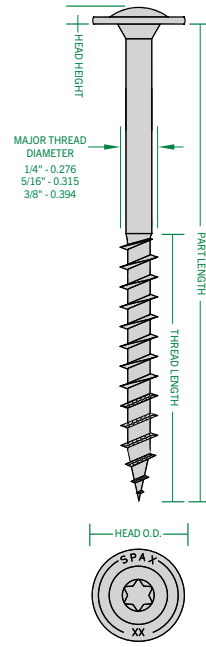
TER No. 1802-03
Multi-ply Sawn
Lumber Assemblies

TER No. 1802-03
Multi-ply Engineered
Wood (LVL, PSL,
LSL) Assemblies

YELLOW ZINC
FOR INTERIOR USE



HCR®
FOR EXTERIOR USE



PRODUCT SELECTION & SPECIFICATIONS					PART NUMBERS - YELLOW ZINC								PART NUMBERS - TREATED LUMBER/EXTERNAL APPLICATIONS															
DIA. X LENGTH	DRIVE BIT	THREAD LENGTH	HEAD HEIGHT	HEAD O.D.	INDIVIDUAL	YELLOW ZINC	PROJECT PAX*	YELLOW ZINC	CONTRACTOR PAX*	YELLOW ZINC	BULK PAIL	YELLOW ZINC	INDIVIDUAL	HCR® COATING	PROJECT PAX*	HCR® COATING	CONTRACTOR PAX*	HCR® COATING	BULK PAIL	HCR® COATING								
1/4" x 2-1/2"	T30	1.375"	0.097"	0.697"	1	4581020700637	12	45810207006343	50	4581020700635	500	3581020700630	1	4581820700637	12	45818207006343	50	4581820700635	500	3581820700630								
1/4" x 3"	T30	1.790"	0.097"	0.697"	1	4581020700767	12	45810207007643	50	4581020700765	500	3581020700760	1	4581820700767	12	45818207007643	50	4581820700765	500	3581820700760								
1/4" x 3-1/2"	T30	1.960"	0.097"	0.697"	1	4581020700907	12	45810207009043	50	4581020700905	500	3581020700900	1	4581820700907	12	45818207009043	50	4581820700905	500	3581820700900								
1/4" x 4"	T30	2.375"	0.097"	0.697"	1	4581020701007	12	45810207010043	50	4581020701005	500	3581020701000	1	4581820701007	12	45818207010043	50	4581820701005	500	3581820701000								
1/4" x 4-1/2"	T30	2.375"	0.097"	0.697"	1	4581020701557	12	45810207015543	50	4581020701555	500	3581020701550	1	4581820701557	12	45818207015543	50	4581820701555	500	3581820701550								
1/4" x 5"	T30	2.375"	0.097"	0.697"	1	4581020701277	12	45810207012743	50	4581020701275	500	3581020701270	1	4581820701277	12	45818207012743	50	4581820701275	500	3581820701270								
1/4" x 6"	T30	2.375"	0.097"	0.697"	1	4581020701527	12	45810207015243	50	4581020701525	500	3581020701520	1	4581820701527	12	45818207015243	50	4581820701525	500	3581820701520								
5/16" x 3"	T40	1.650"	0.140"	0.776"	■	1	4581020800767	■	12	45810208007643	■	50	4581020800765	■	250	3581020800760	■	1	4581820800767	■	12	45818208007643	■	50	4581820800765	■	250	3581820800760
5/16" x 3-1/2"	T40	2.050"	0.140"	0.776"	●	1	4581020800907	-	-	●	50	4581020800905	●	250	3581020800900	●	1	4581820800907	●	12	45818208009043	●	50	4581820800905	●	250	3581820800900	
5/16" x 4"	T40	2.375"	0.140"	0.776"	1	4581020801007	12	45810208010043	50	4581020801005	250	3581020801000	▲	1	4581820801007	▲	12	45818208010043	▲	50	4581820801005	▲	250	3581820801000				
5/16" x 4-1/2"	T40	2.375"	0.140"	0.776"	■	1	4581020801157	-	-	■	50	4581020801155	■	250	3581020801150	■	1	4581820801157	■	12	45818208011543	■	50	4581820801155	■	250	3581820801150	
5/16" x 5"	T40	2.375"	0.140"	0.776"	●	1	4581020801277	-	-	-	-	-	●▲	1	4581820801277	●▲	12	45818208012743	●▲	50	4581820801275	●▲	250	3581820801270				
5/16" x 6"	T40	2.375"	0.140"	0.776"	■	1	4581020801527	-	-	-	-	-	■	1	4581820801527	■	12	45818208015243	■	50	4581820801525	■	250	3581820801520				
5/16" x 6-3/4"	T40	2.375"	0.140"	0.776"	-	-	-	-	-	-	-	-	-	-	-	-	●	50	4581820801715	●	250	3581820801710						
5/16" x 8"	T40	2.375"	0.140"	0.776"	-	-	-	-	-	-	-	-	1	4581820802037	12	45818208020343	50	4581820802035	150	3581820802030								
5/16" x 10"	T40	2.375"	0.140"	0.776"	-	-	-	-	-	-	-	-	1	4581820802547	12	45818208025443	50	4581820802545	150	3581820802540								
5/16" x 12"	T40	2.375"	0.140"	0.776"	-	-	-	-	-	-	-	-	1	4581820803047	-	-	50	4581820803045	150	3581820803040								
3/8" x 5"	T50	3.150"	0.173"	0.970"	1	4581021001277	-	-	25	4581021001275	150	3581021001270	1	4581821001277	12	45818210012743	25	4581821001275	150	3581821001270								
3/8" x 6"	T50	3.150"	0.173"	0.970"	1	4581021001527	12	45810210015243	25	4581021001525	150	3581021001520	1	4581821001527	12	45818210015243	25	4581821001525	150	3581821001520								
3/8" x 8"	T50	3.150"	0.173"	0.970"	-	-	-	-	-	-	150	3581021002030	1	4581821002037	-	-	-	-	150	3581821002030								
3/8" x 10"	T50	3.150"	0.173"	0.970"	1	4581021002547	-	-	-	-	150	3581021002540	1	4581821002547	-	-	-	-	150	3581821002540								

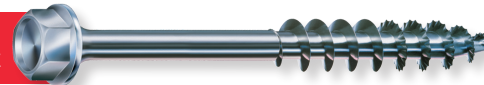
*NOTE: HCR® (High Corrosion Resistant) Coating is for exterior use and in treated lumber.

HEX WASHER HEAD POWERLAGS®

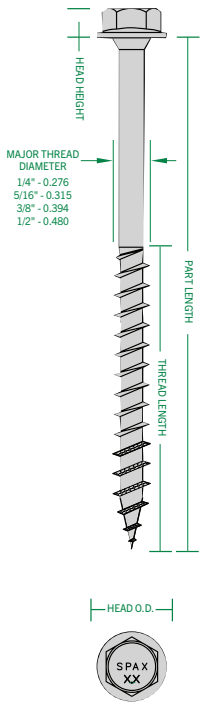
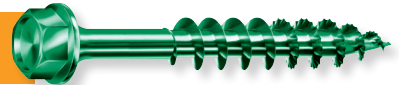


TER No. 1711-01
Deck Ledger
Attachment

ZINC
FOR INTERIOR USE



HCR®
FOR EXTERIOR USE



PRODUCT SELECTION & SPECIFICATIONS					PART NUMBERS - ZINC COATING						PART NUMBERS - TREATED LUMBER/EXTERNAL APPLICATIONS											
DIA. X LENGTH	DRIVE BIT	THREAD LENGTH	HEAD HEIGHT	HEAD O.D.	INDIVIDUAL	ZINC COATING	CONTRACTOR PAX*	ZINC COATING	BULK PAIL	ZINC COATING	INDIVIDUAL	HCR® COATING	PROJECT PAX*	HCR® COATING	CONTRACTOR PAX*	HCR® COATING	BULK PAIL	HCR® COATING				
1/4" x 1-1/2"	3/8"	Full	0.210"	0.545"	-	-	-	-	-	-	1	4571820700407	-	-	-	-	-	-				
1/4" x 2"	3/8"	1.770"	0.210"	0.545"	1	4571010700507	50	4571010700505	500	3571010700500	1	4571820700507	12	45718207005043	50	4571820700505	500	3571820700500				
1/4" x 3"	3/8"	2.360"	0.210"	0.545"	1	4571010700757	50	4571010700755	500	3571010700750	1	4571820700757	12	45718207007543	50	4571820700755	500	3571820700750				
1/4" x 3-1/2"	3/8"	2.360"	0.210"	0.545"	1	4571010700907	50	4571010700905	500	3571010700900	-	-	-	-	-	-	-	-				
1/4" x 4"	3/8"	2.375"	0.210"	0.545"	1	4571010701007	50	4571010701005	500	3571010701000	-	-	-	-	-	-	-	-				
1/4" x 4-1/2"	3/8"	2.375"	0.210"	0.545"	1	4571010701157	50	4571010701155	500	3571010701150	-	-	-	-	-	-	-	-				
1/4" x 5"	3/8"	2.375"	0.210"	0.545"	1	4571010701277	50	4571010701275	500	3571010701270	1	4571820701277	12	45718207012743	50	4571820701275	-	-				
1/4" x 6"	3/8"	2.375"	0.210"	0.545"	1	4571010701527	50	4571010701525	500	3571010701520	1	4571820701527	12	45718207015243	50	4571820701525	500	3571820701520				
5/16" x 3"	7/16"	2.360"	0.248"	0.591"	-	-	50	4571010800755	250	3571010800750	1	4571820800757	-	-	50	4571820800755	250	3571820800750				
5/16" x 3-1/2"	7/16"	2.993"	0.248"	0.591"	-	-	-	-	-	-	1	4571820800907	-	-	50	4571820800905	250	3571820800900				
5/16" x 4"	7/16"	2.993"	0.248"	0.591"	1	4571010801007	50	4571010801005	250	3571010801000	▲	1	4571820801007	▲	12	45718208010043	▲	50	4571820801005	▲	250	3571820801000
5/16" x 5"	7/16"	2.375"	0.248"	0.591"	-	-	-	-	-	-	▲	1	4571820801277	▲	12	45718208012743	▲	50	4571820801275	▲	250	3571820801270
3/8" x 5"	1/2"	3.150"	0.307"	0.748"	1	4571010101277	25	4571010101275	150	3571010101270	1	4571820101277	-	-	25	4571821001275	150	3571821001270				
3/8" x 6"	1/2"	3.150"	0.307"	0.748"	1	4571010101527	25	4571010101525	150	3571010101520	1	4571820101527	-	-	25	4571821001525	150	3571821001520				
3/8" x 8"	1/2"	3.150"	0.307"	0.748"	1	4571010102037	-	-	150	3571010102030	-	-	-	-	-	-	-	-				
1/2" x 5"	5/8"	3.150"	0.394"	0.858"	1	4571010121277	25	4571011201275	100	3571011201270	1	4571820121277	-	-	25	4571821201275	100	3571821201270				
1/2" x 6"	5/8"	3.150"	0.394"	0.858"	1	4571010121527	25	4571011201525	100	3571011201520	-	-	-	-	25	4571821201525	100	3571821201520				
1/2" x 8"	5/8"	3.150"	0.394"	0.858"	-	-	-	-	100	3571011202030	1	4571820122037	-	-	-	-	100	3571821202030				
1/2" x 10"	5/8"	3.150"	0.394"	0.858"	-	-	-	-	100	3571011202540	1	4571820122547	-	-	-	-	100	3571821202540				
1/2" x 12"	5/8"	3.150"	0.394"	0.858"	-	-	-	-	-	-	-	-	-	-	-	-	100	3571821203040				

*NOTE: HCR® (High Corrosion Resistant) Coating is for exterior use and in treated lumber.

SPAX[®] ENGINEERED FASTENERS



ALSO AVAILABLE Truss Attachment Fastener



SPAX[®] is a brand of ALTENLOH, BRINCK & CO. of Ennepetal, Germany, founded in 1823. Today, the SPAX brand represents a broad selection of engineered fasteners for the construction and automotive industries, and symbolizes the highest quality fastening solutions. It's one of the most recognized brands in Europe!

SPAX fasteners are sold nationwide through leading home improvement centers, hardware and fastener distribution chains, and in a growing number of lumber and building material dealers.



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MADE IN U.S.A.

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S-1600 Rev. 9/21