

# T-STAR Washer Head Yellow Zinc

POWERLAGS®



INTERIOR

## DESCRIPTION

SPAX® T-STAR Washer Head construction fasteners with yellow zinc coating are intended for interior structural wood-to-wood connection applications. These fasteners are designed with a low profile, large diameter washer head for applications requiring additional surface area under the head for superior pull-down force. Ideal for framing attachment and multi-ply beam applications.

## MATERIALS & COATING

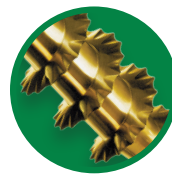
Cold-rolled “carbon steel” wire, heat treated and plated with a yellow zinc finish to prevent red rust. “Yellow zinc” is tested and recognized for use in above ground contact pressure treated lumber for interior dry/damp general construction applications (e.g., AWPA UC1-UC2).



### Built-on Washer Head

Eliminates the need and cost of a separate washer.

\*T-STAR drive reduces stripping.



### Patented Serrations

Allow for quicker, easier fastening.

\*40% lower driving torque.



### Reliable Connections

Heat treated for strength and durability.



TER No. 1912-07  
Structural Wood  
Fastener Properties



## TYPICAL INTERIOR APPLICATIONS

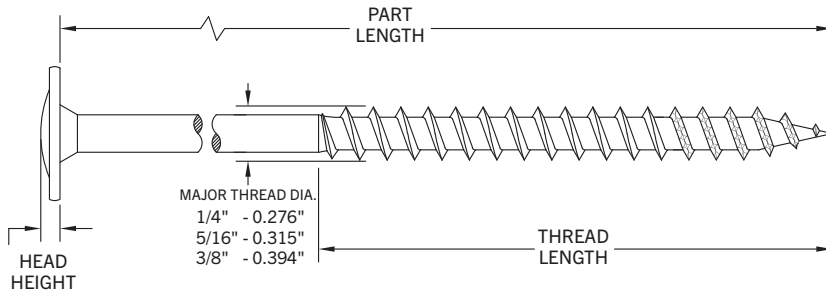
- Multi-ply sawn lumber assemblies
- Multi-ply engineered wood (LVL, PSL, LSL) assemblies
- Interior framing applications
- Shelving applications — interior buildings
- Indoor furniture



# T-STAR Washer Head Yellow Zinc



POWERLAGS®



## PRODUCT SELECTION



TER No. 1802-03  
Multi-ply Sawn  
Lumber Assemblies  
(see pg. 101)

TER No. 1802-03  
Multi-ply Engineered Wood  
(LVL, PSL, LSL) Assemblies  
(see pg. 101)

PART LENGTH	THREAD LENGTH	HEAD DIA. HEAD HT.	DRIVE/BIT SIZE	APPROX. QTY.	PKG. TYPE	MASTER QTY.	PART NO.
1/4" x 2-1/2"	1.375"	0.697" 0.097"	T30	1	Individual*	50	4581020700637
				12	Project Pax®	5	45810207006343
				50	Contractor Pax®	4	4581020700635
				500	Bulk Pail	N/A	3581020700630
1/4" x 3"	1.790"	0.697" 0.097"	T30	1	Individual*	50	4581020700767
				12	Project Pax®	5	45810207007643
				50	Contractor Pax®	4	4581020700765
				500	Bulk Pail	N/A	3581020700760
1/4" x 3-1/2"	1.960"	0.697" 0.097"	T30	1	Individual*	50	4581020700907
				12	Project Pax®	5	45810207009043
				50	Contractor Pax®	4	4581020700905
				500	Bulk Pail	N/A	3581020700900
1/4" x 4"	2.375"	0.697" 0.097"	T30	1	Individual*	50	4581020701007
				12	Project Pax®	5	45810207010043
				50	Contractor Pax®	4	4581020701005
				500	Bulk Pail	N/A	3581020701000
1/4" x 4-1/2"	2.375"	0.697" 0.097"	T30	1	Individual*	50	4581020701557
				12	Project Pax®	5	45810207015543
				50	Contractor Pax®	4	4581020701555
				500	Bulk Pail	N/A	3581020701550
1/4" x 5"	2.375"	0.697" 0.097"	T30	1	Individual*	50	4581020701277
				12	Project Pax®	5	45810207012743
				50	Contractor Pax®	4	4581020701275
				500	Bulk Pail	N/A	3581020701270
1/4" x 6"	2.375"	0.697" 0.097"	T30	1	Individual*	50	4581020701527
				12	Project Pax®	5	45810207015243
				50	Contractor Pax®	4	4581020701525
				500	Bulk Pail	N/A	3581020701520

\* Bit not included.

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TER No. 1802-03  
Multi-ply Sawn  
Lumber Assemblies  
(see pg. 101)

TER No. 1802-03  
Multi-ply Engineered Wood  
(LVL, PSL, LSL) Assemblies  
(see pg. 101)

## PRODUCT SELECTION

PART LENGTH	THREAD LENGTH	HEAD DIA. HEAD HT.	DRIVE/BIT SIZE	APPROX. QTY.	PKG. TYPE	MASTER QTY.	PART NO.
5/16" x 2-3/8"	1.375"	0.776" 0.140"	T40	500	Bulk Pail	N/A	3581020800600
5/16" x 3"	1.650"	0.776" 0.140"	T40	1	Individual*	25	4581020800767
				12	Project Pax®	5	45810208007643
				50	Contractor Pax®	4	4581020800765
				250	Bulk Pail	N/A	3581020800760
5/16" x 3-1/2"	2.050"	0.776" 0.140"	T40	1	Individual*	25	4581020800907
				50	Contractor Pax®	4	4581020800905
				250	Bulk Pail	N/A	3581020800900
5/16" x 4"	2.375"	0.776" 0.140"	T40	1	Individual*	25	4581020801007
				12	Project Pax®	5	45810208010043
				50	Contractor Pax®	4	4581020801005
				250	Bulk Pail	N/A	3581020801000
5/16" x 4-1/2"	2.375"	0.776" 0.140"	T40	1	Individual*	25	4581020801157
				50	Contractor Pax®	4	4581020801155
				250	Bulk Pail	N/A	3581020801150
5/16" x 5"	2.375"	0.776" 0.140"	T40	1	Individual*	25	4581020801277
5/16" x 6"	2.375"	0.776" 0.140"	T40	1	Individual*	25	4581020801527
3/8" x 5"	3.150"	0.970" 0.173"	T50	1	Individual*	15	4581021001277
				25	Contractor Pax®	4	4581021001275
				150	Bulk Pail	N/A	3581021001270
3/8" x 6"	3.150"	0.970" 0.173"	T50	1	Individual*	15	4581021001527
				12	Project Pax®	5	45810210015243
				25	Contractor Pax®	4	4581021001525
				150	Bulk Pail	N/A	3581021001520
3/8" x 8"	3.150"	0.970" 0.173"	T50	150	Bulk Pail	N/A	3581021002030
3/8" x 10"	3.150"	0.970" 0.173"	T50	1	Individual*	15	4581021002547
				150	Bulk Pail	N/A	3581021002540

NOTE: 3/8" fasteners require 0.175" pilot hole.  
\* Bit not included.



Individual



Project Pax®



Contractor Pax®



Bulk Pail



T-STAR Bit



# T-STAR Washer Head Yellow Zinc

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## BIT SELECTION

DRIVE BIT	BIT SIZE	MASTER QTY.	PART NO.
T30	1"	10	5000002016309
T40	1"	10	5000002016409
T50	1"	10	5000002016509



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

## FASTENER LENGTHS



TER No. 1802-03  
Multi-ply Saw  
Lumber Assemblies  
(see pg. 101)

TER No. 1802-03  
Multi-ply Engineered Wood  
(LVL, PSL, LSL) Assemblies  
(see pg. 101)

PART LENGTH	HEAD	FASTENER	PART LENGTH	HEAD	FASTENER
1/4" x 2-1/2"			5/16" x 3-1/2"		
1/4" x 3"			5/16" x 4"		
1/4" x 3-1/2"			5/16" x 4-1/2"		
1/4" x 4"			5/16" x 5"		
1/4" x 4-1/2"			5/16" x 6"		
1/4" x 5"			3/8" x 5"		
1/4" x 6"			3/8" x 6"		
5/16" x 2-3/8"			3/8" x 8"		
5/16" x 3"			3/8" x 10"		

## PERFORMANCE SPECIFICATIONS



TER No. 1912-07  
Structural Wood Fastener Properties

DIAMETER	LENGTH	ALLOWABLE WITHDRAWAL (W), HEAD PULL-THROUGH (W <sub>H</sub> ), LATERAL SHEAR PARALLEL TO GRAIN (Z <sub>  </sub> ), AND LATERAL SHEAR PERPENDICULAR TO GRAIN (Z <sub>⊥</sub> ) VALUES <sup>1,2,3,4,5,6,7</sup>											
		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		WITHDRAWAL	HEAD PULL-THROUGH	LATERAL SHEAR	
		(W)	(W <sub>H</sub> )	Z <sub>  </sub>	Z <sub>⊥</sub>	(W)	(W <sub>H</sub> )	Z <sub>  </sub>	Z <sub>⊥</sub>	(W)	(W <sub>H</sub> )	Z <sub>  </sub>	Z <sub>⊥</sub>
(lbs./inch)													
(lbs.)													
1/4"	< 3"	375	850	305	285	310	785	265	235	245	585	250	225
	3.5"			390	370			360	340			315	285
	ALL OTHER LENGTHS			400	370			360	335			350	310
5/16"	< 3"	415	965	340	305	300	840	310	280	250	665	265	230
	3.5"			400	380			360	340			325	300
	ALL OTHER LENGTHS			440	405			405	375			380	355
3/8"	ALL	465	1245	530	485	300	1085	475	440	280	880	445	405

<sup>1</sup> "Withdrawal", "Head Pull-Through", and "Lateral Shear" design values shall be adjusted by all applicable adjustment factors per NDS Table 11.3.1.

<sup>2</sup> "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.

<sup>3</sup> "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.

<sup>4</sup> 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.

<sup>5</sup> 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.

<sup>6</sup> 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.

<sup>7</sup> 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.