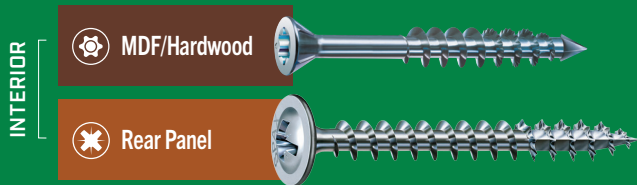


# SPECIALTY FASTENERS



## MDF/HARDWOOD & REAR PANEL



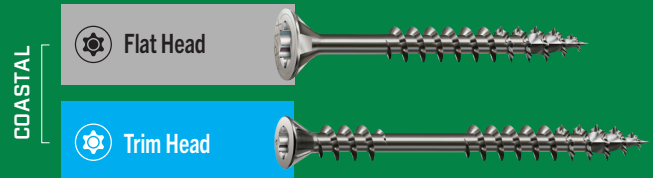
### Applications

- MDF Panels and Cabinet Frame Assembly
- Attaching back panels to bookcases, storage units and cabinetry without deforming



TER No. 2010-02  
Construction Screw  
Properties

## STAINLESS STEEL



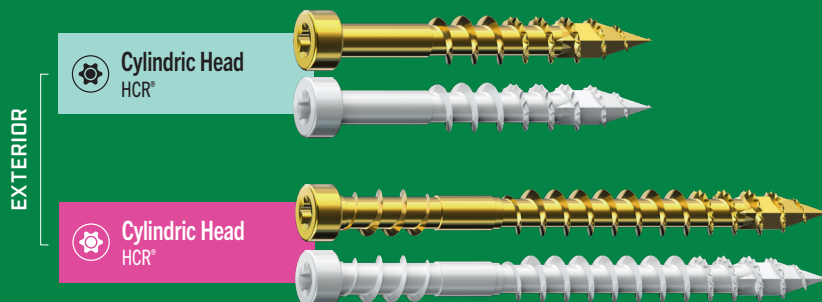
### Applications

- Wood decks
- Railings
- Fencing
- Other exterior wood applications
- Cedar and redwood applications



TER No. 2010-02  
Construction Screw  
Properties

## FINISHING TRIM ATTACHMENT



### Applications

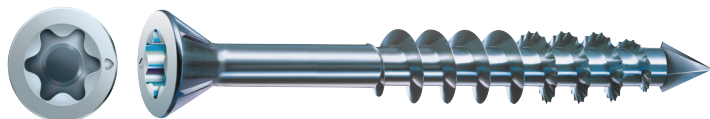
- Baseboards
- Window and door trim
- Crown moulding
- Cabinetry
- Stairs and railings



TER No. 2001-01  
POWERTRIM®  
Screw Properties

# T-STAR *plus* Trim Head Zinc MDF/Hardwood

## Specialty Fasteners



### DESCRIPTION

SPAX® MDF/Hardwood T-STAR *plus* Trim Head fasteners with zinc coating are designed for use in delicate and thin lumber used in interior finishing applications. The unique *CUT*™ Point provides a pre-drilling feature for easy installation in hardwood trim and medium density fiberboards. These fasteners are often used in fine woodworking and cabinet assembly.

### MATERIALS & COATING

Cold-rolled “carbon steel” wire, heat treated and plated with a zinc finish to prevent red rust. “Clear 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).



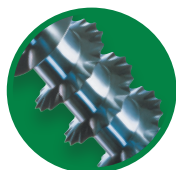
#### Trim Head with Cutting Ribs

Facilitates a flush or countersunk installation for desired aesthetics.



#### Unique *CUT*™ Point

Prevents splitting and requires no pre-drilling in wood.



#### Patented Serrations

Allow for quicker, easier fastening.



#### T-STAR *plus* Drive

“The PRO’s Choice” drive system provides superior bit engagement, eliminates camming out and facilitates overhead driving.



### TYPICAL INTERIOR APPLICATIONS

- Hardwood connections for furniture
- Interior finishing with thin lumber
- Cabinet connections with MDF (medium-density fiberboard) and hardwoods
- Wood railing connections
- Installing interior door jambs
- Wood chair spindle connections/repair

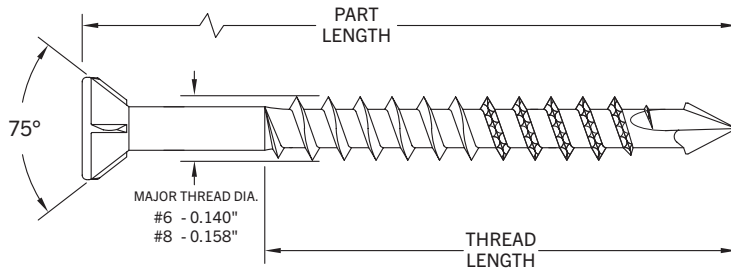


# T-STAR *plus* Trim Head Zinc MDF/Hardwood

## Specialty Fasteners



INTERIOR



## PRODUCT SELECTION

PART LENGTH	THREAD LENGTH		HEAD SIZE	DRIVE/BIT SIZE	APPROX. QTY.	PKG. TYPE	MASTER QTY.	PART NO.
	FULL	PARTIAL						
#6 x 1-1/2"	N/A	1.060"	0.230"	T15+	300	1 lb. Box	5	4351010350404
#8 x 1-3/4"	N/A	1.160"	0.270"	T20+	200	1 lb. Box	5	4351010400454
#8 x 2-1/2"	N/A	1.380"	0.270"	T20+	154	1 lb. Box	5	4351010400604

NOTE: Only sold in master cartons.



1 lb. Box



T-STAR *plus* Bit

## BIT SELECTION

DRIVE BIT	BIT SIZE	MASTER QTY.	PART NO.
T20+	1"	10	5000009185209
	2"	10	5000009285209

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



## FASTENER LENGTHS

PART LENGTH	HEAD	FASTENER	PART LENGTH	HEAD	FASTENER
#6 x 1-1/2"			#8 x 2-1/2"		
#8 x 1-3/4"					

# T-STAR *plus* Trim Head Zinc MDF/Hardwood

## Specialty Fasteners



### PERFORMANCE SPECIFICATIONS



TER No. 2010-02  
Construction Screw Properties

DIAMETER	ALLOWABLE WITHDRAWAL (W) AND HEAD PULL-THROUGH ( $W_H$ ) <sup>1,2,3,4</sup>					
	SOUTHERN PINE (SG=0.55)		DOUGLAS-FIR (SG=0.50)		HEM FIR & SPRUCE-PINE-FIR (SG=0.42)	
	WITHDRAWAL	HEAD PULL-THROUGH	WITHDRAWAL	HEAD PULL-THROUGH	WITHDRAWAL	HEAD PULL-THROUGH
	W (lbs./inch)	$W_H$ (lbs.)	W (lbs./inch)	$W_H$ (lbs.)	W (lbs./inch)	$W_H$ (lbs.)
#6	124	N/A	108	N/A	64	N/A
#8	124	240	114	161	106	149

DIAMETER	ALLOWABLE WITHDRAWAL (W) AND HEAD PULL-THROUGH ( $W_H$ ) <sup>1,2</sup>											
	PLYWOOD 15/32" (0.39)		PLYWOOD 19/32" (0.39)		PLYWOOD 23/32" (0.50)		OSB 15/32" (0.50)		OSB 19/32" (0.50)		OSB 23/32" (0.50)	
	WITHDRAWAL	HEAD PULL-THROUGH	WITHDRAWAL	HEAD PULL-THROUGH	WITHDRAWAL	HEAD PULL-THROUGH	WITHDRAWAL	HEAD PULL-THROUGH	WITHDRAWAL	HEAD PULL-THROUGH	WITHDRAWAL	HEAD PULL-THROUGH
	W (lbs./inch)	$W_H$ (lbs.)	W (lbs./inch)	$W_H$ (lbs.)	W (lbs./inch)	$W_H$ (lbs.)	W (lbs./inch)	$W_H$ (lbs.)	W (lbs./inch)	$W_H$ (lbs.)	W (lbs./inch)	$W_H$ (lbs.)
#6	46	57	73	63	144	114	36	40	41	45	41	45
#8	68	77	75	80	179	139	37	53	41	53	64	56

<sup>1</sup> Tabulated withdrawal and head pull-through design values (W) and ( $W_H$ ) are shown at a  $C_D = 1.0$ . Tabulated withdrawal and head pull-through values shall be adjusted by all applicable adjustment factors per *NDS Table 11.3.1*.

<sup>2</sup> Full withdrawal strength is calculated by multiplying the length of thread embedded in the main member by the tabulated reference withdrawal values.

<sup>3</sup> Head pull-through values for #6 diameter and larger in Southern pine, Douglas-Fir, Hem Fir and Spruce-Pine-Fir are minimum 1.0" side member thickness.

<sup>4</sup> Head pull-through values for #8 diameter and larger in Southern Pine, Douglas-Fir, Hem-Fir and Spruce-Pine-Fir are minimum 1.5" side member thickness.

<sup>5</sup> For wood species with an assigned specific gravity between 0.42 and 0.50, use the tabulated values for specific gravity of 0.42. For wood species with an assigned specific gravity between 0.50 and 0.55, use the tabulated values for specific gravity of 0.50. For wood species with an assigned specific gravity greater than or equal to 0.55, use the tabulated values for specific gravity of 0.55.

DIAMETER	BENDING YIELD STRENGTH <sup>1</sup> , $f_y$ (psi)	ALLOWABLE STEEL STRENGTH (lbs)	
		TENSILE	SHEAR <sup>2</sup>
#6	196,000	270	270
#8	171,000	340	305

<sup>1</sup> Bending yield strength,  $f_y$ , is determined in accordance with *ASTM F1575* using minor thread diameter when fastener is tested in thread section.

<sup>2</sup> Shear strength is determined in accordance with *AISI S904* using minor thread diameter when fastener is tested in threaded section.

DIAMETER	REFERENCE LATERAL SHEAR VALUE <sup>4,5,6</sup> , Z (lbf)				
	MINIMUM MAIN MEMBER PENETRATION <sup>1</sup> (in)	MINIMUM SIDE MEMBER THICKNESS (in)	WOOD SPECIES (SPECIFIC GRAVITY <sup>2,3</sup> )		
			SP (0.55)	DF-L (0.50)	SPF/HF (0.42)
#6 x 1-1/2"	3/4"	3/4"	37	50	57
#8 x 1-3/4"	1"	3/4"	51	69	79
#8 x 2-1/2"	1"	1-1/2"	57	74	81

Sl: 1 in = 25.4 mm, 1 lbf = 4.45 N

<sup>1</sup> Penetration depth includes the length of tapered tip.

<sup>2</sup> The species applies to both the main and the side members. Where the Members are different specific gravities, use the lower of the two.

<sup>3</sup> For wood species with an assigned specific gravity between 0.42 and 0.50, use the tabulated values for specific gravity of 0.42. For wood species with an assigned specific gravity between 0.50 and 0.55, use the tabulated values for specific gravity of 0.50. For wood species with an assigned specific gravity greater than or equal to 0.55, use the tabulated values for specific gravity of 0.55.

<sup>4</sup> The fastener orientation shall be perpendicular to the grain, and the underside of the fastener head shall be installed flush with the surface of the side member.

<sup>5</sup> Lateral design values apply to both perpendicular grain ( $Z_{\perp}$ ) and parallel to grain ( $Z_{\parallel}$ ) orientations.

<sup>6</sup> Tabulated lateral design values shall be adjusted by all applicable adjustment factors per *NDS 11.3.1*.

DIAMETER	REFERENCE LATERAL SHEAR VALUE, Z (lbf)			
	MINIMUM MAIN MEMBER PENETRATION <sup>1</sup> (in)	MINIMUM SIDE MEMBER THICKNESS (in)	REFERENCE LATERAL SHEAR VALUE <sup>1,3,4</sup> , Z (lbf)	
			OSB <sup>5</sup> (0.50)	PLYWOOD <sup>5</sup> (0.39)
#6 x 1-1/2"	1-1/16"	7/16"	41	-
#6 x 1-1/2"	1-1/32"	15/32"	42	35
#6 x 1-1/2"	29/32"	19/32"	42	35
#6 x 1-1/2"	25/32"	23/32"	43	34
#8 x 1-3/4"	1-5/16"	7/16"	51	-



DIAMETER	REFERENCE LATERAL SHEAR VALUE, Z (lbf)			
	MINIMUM MAIN MEMBER PENETRATION <sup>1</sup> (in)	MINIMUM SIDE MEMBER THICKNESS (in)	REFERENCE LATERAL SHEAR VALUE <sup>1,3,4</sup> , Z (lbf)	
			OSB <sup>5</sup> (0.50)	PLYWOOD <sup>5</sup> (0.39)
#8 x 1-3/4"	1-9/32"	15/32"	52	44
#8 x 1-3/4"	1-5/32"	19/32"	57	46
#8 x 1-3/4"	1-1/32"	23/32"	59	48
#8 x 2-1/2"	2-1/16"	7/16"	51	-
#8 x 2-1/2"	2-1/32"	15/32"	52	44
#8 x 2-1/2"	1-29/32"	19/32"	57	46
#8 x 2-1/2"	1-25/32"	23/32"	63	49

SI: 1 in = 25.4 mm, 1 lbf = 4.45 N

<sup>1</sup> Reference lateral design values apply to two-member single shear connections where the side member is OSB or plywood, the main member is SPF (SG = 0.42), and the fastener is installed in the face of the member and oriented perpendicular to the grain. The underside of the fastener head shall be installed flush with the surface of the side member.

<sup>2</sup> Penetration depth includes the length of the tapered tip.

<sup>3</sup> Lateral design values apply to both perpendicular to grain ( $Z_{\perp}$ ) and parallel to grain ( $Z_{\parallel}$ ) orientations.

<sup>4</sup> Tabulated lateral design values shall be adjusted by all applicable adjustment factors per *NDS Table 11.3.1*.

<sup>5</sup> OSB shall comply with *DOC PS 2* and have a minimum specific gravity of 0.50. Plywood shall comply with *DOC PS 1* and have a minimum specific gravity of 0.39.