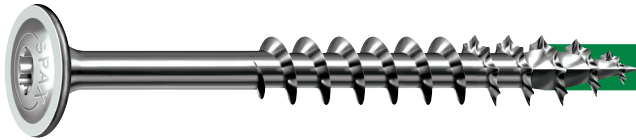




T-STAR WAFER HEAD HCR-X™

WINDOW SCREW



NEW!



MADE IN USA
WITH GLOBALLY
SOURCED MATERIALS

DESCRIPTION

SPAX® T-STAR Wafer Head fasteners with HCR-X™ coating provide a high-performance solution for securing window units to exterior substrates. Specifically engineered for the demands of the envelope, these fasteners feature a low-profile, large-diameter wafer head that delivers superior pull-down force and structural stability without the need for countersinking.

MATERIALS & COATING

Cold-rolled “carbon steel” wire heat treated and plated with a HCR-X™ finish to prevent red rust. “HCR-X™” is tested and recognized for use in ground contact pressure treated lumber for exterior, freshwater general construction applications (e.g., AWPA UC1-UC4A, UCFA). SPAX® recommends stainless steel fasteners for applications with cedar and redwoods.



LOW PROFILE WAFER HEAD

Provides a larger surface area and aesthetically clean look for the reliable installation of fine cabinetry.



UNIQUE 4CUT™ POINT

Prevents splitting and requires no pre-drilling in wood.



SERRATED THREADS

Allow for quicker, easier fastening.



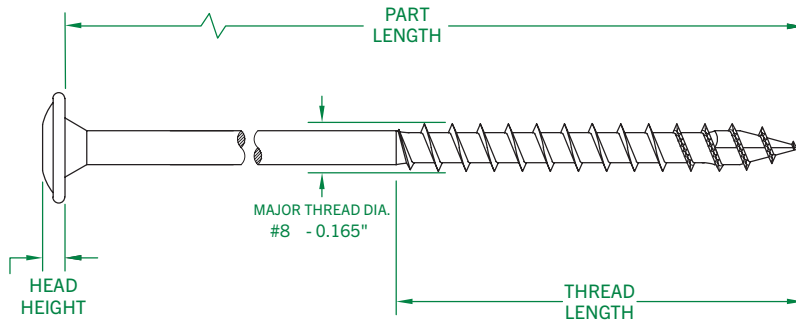
EXTERIOR



T-STAR WAFER HEAD HCR-X™



WINDOW SCREW



PRODUCT SELECTION

PART LENGTH	THREAD LENGTH		HEAD DIA. HEAD HT.	DRIVE/BIT SIZE	APPROX. QTY.	PKG. TYPE	MASTER QTY.	PART NO.
	FULL	PARTIAL						
#8 x 2"	N/A	1.250"	0.375" 0.080"	T20	80	Project Pax	5	XWT08P200V80
					400	Mini Pail	3	XWT08P200V400
					1000	Mini Bulk Pail	N/A	XWT08P200V1000

NOTE: Only sold in master cartons.



Project Pax



Mini Pail



Mini Bulk Pail

FASTENER LENGTH

PART LENGTH	HEAD	FASTENER
#8 x 2"		

MASONRY & CONCRETE PRE-DRILL SPECIFICATIONS

SCREW DIAMETER	DRILL BIT	WEIGHT
#8	1/8"	Light

NOTE: In masonry/concrete, pre-drill a hole at least 1/4" to 1/2" longer than the length of the screw (refer to chart). No anchor required. In sheet metal, no pre-drilling is required up to 24 gauge.

WINDOW SCREW

PERFORMANCE SPECIFICATIONS

DrJ TER No. 2010-02
Construction Screw Properties

DIAMETER	ALLOWABLE WITHDRAWAL (W) AND HEAD PULL-THROUGH (W_H) ^{1,2,3,4}					
	SOUTHERN PINE (SG=0.55)		DOUGLAS-FIR (SG=0.50)		HEM FIR & SPRUCE-PINE-FIR (SG=0.42)	
	WITHDRAWAL W (lbs./inch)	HEAD PULL-THROUGH W_H (lbs.)	WITHDRAWAL W (lbs./inch)	HEAD PULL-THROUGH W_H (lbs.)	WITHDRAWAL W (lbs./inch)	HEAD PULL-THROUGH W_H (lbs.)
#8	175	335	133	297	127	268

DIAMETER	ALLOWABLE WITHDRAWAL (W) AND HEAD PULL-THROUGH (W_H) ^{1,2}											
	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 W (lbs./inch)	HEAD PULL-THROUGH W_H (lbs.)	WITHDRAWAL W (lbs./inch)	HEAD PULL-THROUGH W_H (lbs.)	WITHDRAWAL W (lbs./inch)	HEAD PULL-THROUGH W_H (lbs.)	WITHDRAWAL W (lbs./inch)	HEAD PULL-THROUGH W_H (lbs.)	WITHDRAWAL W (lbs./inch)	HEAD PULL-THROUGH W_H (lbs.)	WITHDRAWAL W (lbs./inch)	HEAD PULL-THROUGH W_H (lbs.)
#8	51	146	83	190	162	319	36	86	48	110	52	131

¹ 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*.

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

³ 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.

⁴ 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 ¹ , f_y (psi)	ALLOWABLE STEEL STRENGTH (lbs)	
		TENSILE	SHEAR ²
#8	187,000	460	345

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

² 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 ^{4,5,6} , Z (lbf)				
	MINIMUM MAIN MEMBER PENETRATION ¹ (in)	MINIMUM SIDE MEMBER THICKNESS (in)	WOOD SPECIES (SPECIFIC GRAVITY ^{2,3})		
			SP (0.55)	DF-L (0.50)	SPF/HF (0.42)
#8 x 2"	1 1/4"	3/4"	80	70	55

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

¹ Penetration depth includes the length of tapered tip.

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

³ 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.

⁴ 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.

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

⁶ 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 ¹ (in)	MINIMUM SIDE MEMBER THICKNESS (in)	REFERENCE LATERAL SHEAR VALUE ^{1,3,4} , Z (lbf)	
			OSB ⁵ (0.50)	PLYWOOD ⁵ (0.39)
#8 x 2"	1 9/16"	7/16"	53	-
#8 x 2"	1 7/32"	15/32"	54	46
#8 x 2"	1 13/32"	19/32"	59	48
#8 x 2"	1 9/32"	23/32"	64	51

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

¹ 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.

² Penetration depth includes the length of the tapered tip.

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

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

⁵ 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.