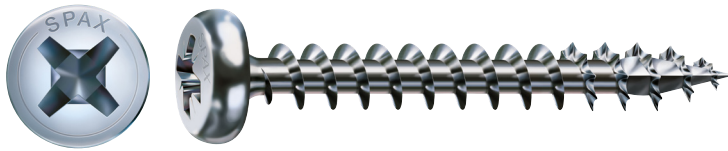


SPAX® Unidrive Pan Head Zinc

Multi-Material Pan Head



DESCRIPTION

SPAX® Unidrive Pan Head fasteners with zinc coating are designed for use in multiple material connections often found inside residential buildings. Most of these screws are used to attach thin metal fixtures/brackets with pre-drilled holes to wood or concrete/masonry substrates where countersinking the head is not wanted. The wide heads utilize a large bearing surface which allows for a firm hold on the side member and reduces over-penetration of the head in to the main member. These fasteners often replace hex-head type fasteners for better clearance and more aesthetically pleasing finish look.

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).

INTERIOR



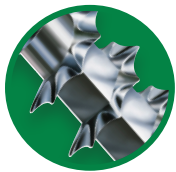
Pan Head

Provides excellent draw down and holding performance.



Unique 4CUT™ Point

Prevents splitting and requires no pre-drilling in wood.



Patented Serrations

Allow for quicker, easier fastening.
U.S. Patent No. 7,101,133

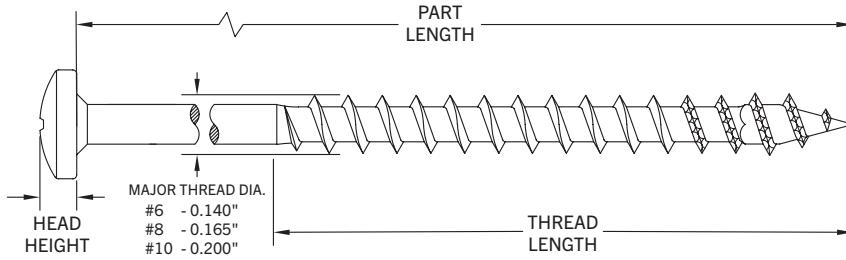


TYPICAL INTERIOR APPLICATIONS

- Attachment of metal conduit straps to wood or concrete/masonry
- Attachment of metal electrical boxes to wood or concrete/masonry
- Medium duty usage for attaching small metal angle brackets

Unidrive Pan Head Zinc

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PRODUCT SELECTION

PART LENGTH	THREAD LENGTH		HEAD DIA. HEAD HT.	PHILLIPS #	SQUARE #	APPROX. QTY.	PKG. TYPE	MASTER QTY.	PART NO.
	FULL	PARTIAL							
#6 x 1/2"	Full	N/A	0.270" 0.090"	2	1	50	Retail Pax**	10	4111010350132
						500	1 lb. Box	5	4111010350134
#6 x 5/8"	Full	N/A	0.270" 0.090"	2	1	50	Retail Pax**	10	4111010350162
						445	1 lb. Box	5	4111010350164
						2500	Mini Pail	3	3111010350168
#6 x 3/4"	Full	N/A	0.270" 0.090"	2	1	400	1 lb. Box	5	4111010350204
#8 x 5/8"	Full	N/A	0.305" 0.105"	2	2	320	1 lb. Box	5	4111010400164
						35	Retail Pax**	10	4111010400202
						280	1 lb. Box	5	4111010400204
#8 x 3/4"	Full	N/A	0.305" 0.105"	2	2	1500	Mini Pail	3	3111010400208
						30	Retail Pax**	10	4111010400252
						225	1 lb. Box	5	4111010400254
#8 x 1-1/4"	Full	N/A	0.305" 0.105"	2	2	30	Retail Pax**	10	4111010400322
						200	1 lb. Box	5	4111010400324
						25	Retail Pax**	10	4111010400402
#8 x 1-1/2"	Full	N/A	0.305" 0.105"	2	2	180	1 lb. Box	5	4111010400404
						140	1 lb. Box	5	4111010400504
#8 x 2"	Full	N/A	0.305" 0.105"	2	2	25	Retail Pax**	10	4111010500162
						175	1 lb. Box	5	4111010500164
#10 x 5/8"	Full	N/A	0.380" 0.125"	2	2	20	Retail Pax**	10	4111010500202
						160	1 lb. Box	5	4111010500204
						20	Retail Pax**	10	4111010500252
#10 x 3/4"	Full	N/A	0.380" 0.125"	2	2	135	1 lb. Box	5	4111010500254

NOTE: Only sold in master cartons.
* Bit not included.

INTERIOR

Unidrive Pan Head Zinc

Multi-Material Pan Head



Retail Pax®



1 lb. Box



Mini Pail



#2 Phillips / #2 Square Bit

BIT SELECTION

DRIVE BIT	BIT SIZE	MASTER QTY.	PART NO.
#2 Phillips / #2 Square	1"	10	5000009190009

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



INTERIOR

FASTENER LENGTHS

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

MASONRY & CONCRETE PRE-DRILL SPECIFICATIONS

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.

SCREW DIAMETER	DRILL BIT	WEIGHT
#6	Not Recommended	Not Recommended
#8	1/8"	Light
#10	5/32"	Medium

PERFORMANCE SPECIFICATIONS

DrU 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	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	140	179	133	150	105	125
#8	175	157	133	157	127	123
#10	190	315	176	238	144	177

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	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	-	73	-	144	-	36	-	41	-	41	-
#8	51	120	83	120	162	212	36	68	48	78	52	110
#10	90	151	92	177	186	293	54	78	54	78	66	110

- 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*.
- Full withdrawal strength is calculated by multiplying the length of thread embedded in the main member by the tabulated reference withdrawal values.
- 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.
- 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.
- 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
#6	198,000	310	265
#8	187,000	460	345
#10	187,000	690	545

- Bending yield strength, f_y , is determined in accordance with *ASTM F1575* using minor thread diameter when fastener is tested in thread section.
- 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 1-1/2"	3/4"	3/4"	70	59	43
#8 x 2"	1-1/4"	3/4"	80	70	55

- SI: 1 in = 25.4 mm, 1 lbf = 4.45 N
- Penetration depth includes the length of tapered tip.
 - The species applies to both the main and the side members. Where the Members are different specific gravities, use the lower of the two.
 - 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.
 - 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.
 - Lateral design values apply to both perpendicular grain (Z_{\perp}) and parallel to grain (Z_{\parallel}) orientations.
 - Tabulated lateral design values shall be adjusted by all applicable adjustment factors per *NDS 11.3.1*.

INTERIOR



Unidrive Pan Head Zinc

Multi-Material Pan Head



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 1-1/4"	13/16"	7/16"	40	-
#8 x 1-1/4"	25/32"	15/32"	40	33
#8 x 1-1/4"	21/32"	19/32"	42	32
#8 x 1-1/2"	1-1/16"	7/16"	51	-
#8 x 1-1/2"	1-1/32"	15/32"	50	44
#8 x 1-1/2"	29/32"	19/32"	49	41
#8 x 1-1/2"	25/32"	23/32"	51	39
#8 x 2"	1-9/16"	7/16"	53	-
#8 x 2"	1-17/32"	15/32"	54	46
#8 x 2"	1-13/32"	19/32"	59	48
#8 x 2"	1-9/32"	23/32"	64	51

SI: 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.

INTERIOR