

KWIKSEAL MB WoodBinder

POWERFUL™ CORROSION DEFENSE POWDER COAT SYSTEM // **KS V-NECK™** PREVENTS TWIST OFF HEX WASHER HEAD // **KS LO-ROOT™** PATENTED XTREME HOLD™ THREAD DESIGN // **MB™** MICRO-BIT™ SELF DRILL POINT



- Fastener designed to attach steel roofing & siding used in post-frame & residential metal roofing applications.
- Threads transition from fine to coarse to generate superior holding strength in various wood substrates.
- Micro-Bit™ point reduces metal shavings that can embed themselves in the rubber washer.
- EPDM rubber is vulcanized to a steel washer to form an excellent seal even when driven at an angle.

ALL UNPAINTED WOODBINDER MB FASTENERS COME STANDARD WITH DURASEAL® PLUS ENHANCED CORROSION RESISTANCE COATING FOR PROPER INSTALLATION, THE USE OF IMPACT DRIVERS ARE NOT RECOMMENDED FOR POWDER COATED OR ANY WET PAINTED FASTENER

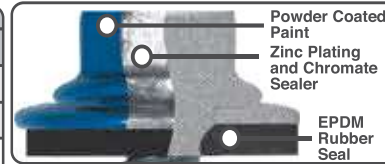
SIZE	HEAD STYLE	CARTON QTY.	WEIGHT/M
10 x 1"	1/4" HWH	3000	7.8
10 x 1-1/2"	1/4" HWH	2500	9.9
10 x 2"	1/4" HWH	2000	12.2
10 x 2-1/2"	1/4" HWH	1500	14.3
10 x 3"	1/4" HWH	1000	16.3
12 x 3/4" STITCH	1/4" HWH	2500	8.8

PULLOUT & PULLOVER VALUES ARE DETERMINED IN THE ST FASTENING SYSTEMS ENGINEERING LABORATORY & BASED UPON WOOD DENSITIES FOUND IN PRESENT DAY WOOD PRODUCTS.

TECHNICAL INFORMATION	DRILL POINT	MAJOR DIAMETER	MINOR DIAMETER	WASHER/HEAD DIAMETER	HEAD ACROSS FLATS	ULT. TENSILE STRENGTH	MIN. TORSIONAL STRENGTH	NOM. SHEAR STRENGTH
10-16/8	MICRO-BIT	.205/.191	.121/.116	.348/.322	NOM. .250"	1904 LBS.	56 IN.-LBS.	1547 LBS.
#12-14 STITCH	MICRO-BIT	.215/.209	.160/.153	.348/.322	NOM. .250"	2900 LBS.	88 IN.-LBS.	1962 LBS.

PULL OUT STRENGTH VALUE (LBS. ULT.)	MATERIAL	SUBSTRATE																
		HRS PRIMED ONLY			3/4" PLY		5/8" PLY		1/2" PLY		7/16" OSB		2X Y.PINE		2X SPF			
		NOM. GAUGE	16	14	12	(3)	(4)	(3)	(4)	(3)	(4)	(3)	(4)	(1)	(2)	(4)	(1)	(2)
10-16/8	N/A	N/A	N/A	N/A	636	N/A	441	N/A	368	N/A	210	N/A	713	1526	N/A	466	1216	N/A
#12-14 STITCH	N/A	N/A	N/A	N/A	N/A	N/A	297	N/A	329	N/A	217	N/A	N/A	495	N/A	N/A	N/A	162

PULL OVER STRENGTH VALUE (LBS. ULT.) (EPDM ONLY)	DESIGNATION	MATERIAL						
		AZ55 GALVALUME				G90	ALUMINUM	SLOT EDGE PANEL
		NOM. GAUGE	29	26	24	22	20	21
#10 W/ BONDED 12 MM WASHER	THICKNESS	.014	.018	.024	.030	.036	.028	.014
#12-14 STITCH W/ BONDED 12 MM WASHER	THICKNESS	.014	.018	.024	.030	.036	.028	.014



Hex Washer Head with EPDM rubber washer provides a watertight seal on roof applications. ST Fastening Systems sockets are designed to allow for the added thickness of the powder coat.



The combination of the Micro-Bit point & transition thread from fine to coarse generates superior drill speed in metal & holding strength in wood substrates.

NOTES: 1. All strength values shown below are ultimate values, expressed in LBS. Apply an appropriate safety factor to obtain design limit

ZXL MB WoodBinder

POWERFUL™ CORROSION DEFENSE POWDER COAT SYSTEM // **ZXL™** NO RED RUST™ ZAMAC DIE CAST HEAD // **KS LO-ROOT™** PATENTED XTREME HOLD™ THREAD DESIGN // **MB™** MICRO-BIT™ SELF DRILL POINT



- Fastener designed to attach steel roofing & siding used in post-frame & residential metal roofing applications.
- 5/16" cupped HWH with a molded ZAMAC Zinc-Aluminum alloy provides lifetime protection against red rust on the head & washer. (You may obtain a free copy of the written warranty upon request.)
- ZXL™ is an excellent choice for GALVALUME & other long-life metal roof panels.
- Threads transition from fine to coarse to generate superior holding strength in various wood substrates.
- Micro-Bit point reduces metal shavings that can embed themselves in the rubber washer.

FOR PROPER INSTALLATION, THE USE OF IMPACT DRIVERS ARE NOT RECOMMENDED FOR POWDER COATED OR ANY WET PAINTED FASTENER

PULLOUT & PULLOVER VALUES ARE DETERMINED IN THE ST FASTENING SYSTEMS ENGINEERING LABORATORY & BASED UPON WOOD DENSITIES FOUND IN PRESENT DAY WOOD PRODUCTS.

SIZE	HEAD STYLE	CARTON QTY.	WEIGHT/M
10 x 1"	5/16" CHWH**	3000	12.7
10 x 1-1/2"	5/16" CHWH**	2500	14.7
10 x 2"	5/16" CHWH**	2000	17.0
10 x 2-1/2"	5/16" CHWH**	1500	19.2
10 x 3"	5/16" CHWH**	1000	21.0
12 x 3/4" STITCH	5/16" CHWH**	2500	9.0

**CHWH-Cupped Hex Washer Head.
*** Tabulated value is the force at which the ZXL head breaks from the carbon steel body.



No Red-Rust Guaranteed!

TECHNICAL INFORMATION	DRILL POINT	MAJOR DIAMETER	MINOR DIAMETER	WASHER/HEAD DIAMETER	HEAD ACROSS FLATS	ULT. TENSILE STRENGTH	MIN. TORSIONAL STRENGTH	NOM. SHEAR STRENGTH
10-16/8	MICRO-BIT	.210/.191	.121/.116	.500"	NOM .312"	1575** LBS.	60 IN.-LBS.	1574 LBS.
#12-14 STITCH	MICRO-BIT	.215/.209	.160/.153	.500"	NOM .312"	1575** LBS.	88 IN.-LBS.	1962 LBS.

PULL OUT STRENGTH VALUE (LBS. ULT.)	MATERIAL	SUBSTRATE																
		HRS PRIMED ONLY			3/4" PLY		5/8" PLY		1/2" PLY		7/16" OSB		2X Y.PINE		2X SPF			
		NOM. GAUGE	16	14	12	(3)	(4)	(3)	(4)	(3)	(4)	(3)	(4)	(1)	(2)	(4)	(1)	(2)
10-16/8	N/A	N/A	N/A	N/A	636	N/A	441	N/A	368	N/A	210	N/A	713	1526	N/A	466	1216	N/A
#12-14 STITCH	N/A	N/A	N/A	N/A	N/A	N/A	297	N/A	329	N/A	217	N/A	N/A	495	N/A	N/A	N/A	162

PULL OVER STRENGTH VALUE (LBS. ULT.) (EPDM ONLY)	DESIGNATION	MATERIAL						
		AZ55 GALVALUME				G90	ALUMINUM	SLOT EDGE PANEL
		NOM. GAUGE	29	26	24	22	20	21
10-16/8 (EPDM ONLY)	THICKNESS	.014	.018	.024	.030	.036	.028	.014
#12-14 STITCH SD (EPDM ONLY)	THICKNESS	.014	.018	.024	.030	.036	.028	.014



The Zinc-Aluminum alloy HWH prevents red rust from ever starting. ST Fastening Systems spring retainer sockets are designed to allow for the added thickness of the powder coat and are recommended.



The combination of the Micro-Bit point & transition thread from fine to coarse generates superior drill speed in metal & holding strength in wood substrates.

NOTES: 1. All strength values shown below are ultimate values, expressed in LBS. Apply an appropriate safety factor to obtain design limit

#12 TYPE 17 WoodBinder® The OSB Screw



- OSB/Replacement Applications
- Deep, forceful threads that will grip into the soft fibers.
- Color matched Powderful™ coating
- KS V-Neck technology, Hex washer head
- Strip-Loc Thread to Point technology

FOR PROPER INSTALLATION, THE USE OF IMPACT DRIVERS ARE NOT RECOMMENDED FOR POWDER COATED OR ANY WET PAINTED FASTENER
 PULLOUT & PULLOVER VALUES ARE DETERMINED IN THE ST FASTENING SYSTEMS ENGINEERING LABORATORY & BASED UPON WOOD DENSITIES FOUND IN PRESENT DAY WOOD PRODUCTS. TECHNICAL DATA PROVIDED HEREIN IS TO BE USED AS A GUIDE FOR TYPICAL STRENGTH CHARACTERISTICS ONLY.
 AN APPROPRIATE FACTOR OF SAFETY MUST BE APPLIED BY THE USER TO OBTAIN ALLOWABLE LIMITS FOR DESIGN.
 ALL STRENGTH VALUES SHOWN ARE ULTIMATE VALUES, EXPRESSED IN POUNDS.
 DUE TO THE INCONSISTENCY OF OSB, THE #12 OSB SCREW WAS DEVELOPED TO REDUCE STRIPOUT TO ENABLE FULL PULLOUT VALUES TO BE OBTAINED.

POWERFUL™ CORROSION DEFENSE POWDER COAT SYSTEM // **KS V-NECK™** PREVENTS YUUST OFF HEX WASHER HEAD // **Strip-LOC™** THREAD 2 POINT TECHNOLOGY



SIZE	HEAD STYLE	CARTON QTY.	WEIGHT/M
#12 x 3/4"	HEX	2500	8.0
#12 x 1-1/2"	HEX	2500	10.1



TECHNICAL INFORMATION	DRILL POINT	MAJOR DIAMETER	MINOR DIAMETER	WASHER/HEAD DIAMETER	HEAD ACROSS FLATS	ULT. TENSILE STRENGTH	MIN. TORSIONAL STRENGTH	NOM. SHEAR STRENGTH
#12 TYPE 17	Sharp Point	.215/.210	.130/.135	.348/.322	.250 NOM	2450 LBS.	65 IN.-LBS.	2100 LBS.

PULL OUT STRENGTH VALUE (LBS. ULT.)	MATERIAL				SUBSTRATE											
	HRS PRIMED ONLY				3/4" PLY		5/8" PLY		1/2" PLY		7/16" OSB		2X Y.PINE		2X SPF	
	NOM. GAUGE	16	14	12	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
#12 TYPE 17	N/A	N/A	N/A	N/A	380	585	453	588	297	390	198	212	438	1090	378	739

NOTES: 1-1/2" LENGTH FULLY PENETRATES OSB AND PLYWOOD SHEETING

PULL OVER STRENGTH VALUE (LBS. ULT.) (EPDM ONLY)	DESIGNATION	MATERIAL			
		AZ55 GALVALUME			
	NOM. GAUGE	29	26	24	22
THICKNESS	.015	.019	.024	.032	
#12 TYPE 17 (EPDM WASHER ONLY)		378	629	721	N/A

BMT DENOTES BASE METAL THICKNESS AFTER REMOVAL OF PAINT FINISH AND METALLIC PROTECTIVE COATING.



NOTES: 26 AND 29 GA. VALUES SHOWN WERE OBTAINED USING 80 KSI STEEL SHEETING. 24, 22, AND 20 GA. VALUES WERE OBTAINED USING 50 KSI MINIMUM STEEL SHEETING.

ZXL #12 T-17 WoodBinder® The OSB Screw



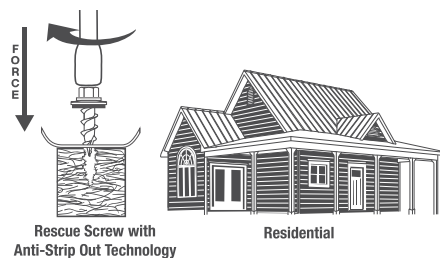
- OSB/Replacement Applications
- Deep, forceful threads that will grip into the soft fibers.
- Color matched Powderful™ coating
- ZXL™ is an excellent choice for GALVALUME & other long-life metal roof panels.
- Strip-Loc Thread to Point technology

FOR PROPER INSTALLATION, THE USE OF IMPACT DRIVERS ARE NOT RECOMMENDED FOR POWDER COATED OR ANY WET PAINTED FASTENER
 PULLOUT & PULLOVER VALUES ARE DETERMINED IN THE ST FASTENING SYSTEMS ENGINEERING LABORATORY & BASED UPON WOOD DENSITIES FOUND IN PRESENT DAY WOOD PRODUCTS. TECHNICAL DATA PROVIDED HEREIN IS TO BE USED AS A GUIDE FOR TYPICAL STRENGTH CHARACTERISTICS ONLY.
 DUE TO THE INCONSISTENCY OF OSB, THE #12 OSB SCREW WAS DEVELOPED TO REDUCE STRIPOUT TO ENABLE FULL PULLOUT VALUES TO BE OBTAINED.

POWERFUL™ CORROSION DEFENSE POWDER COAT SYSTEM // **ZXL™** NO RED RUST SANGAL DIE CAST HEAD // **Strip-LOC™** THREAD 2 POINT TECHNOLOGY



SIZE	HEAD STYLE	CARTON QTY.	WEIGHT/M
#12 x 1-1/2"	HEX	2500	10.1



TECHNICAL INFORMATION	DRILL POINT	MAJOR DIAMETER	MINOR DIAMETER	WASHER/HEAD DIAMETER	HEAD ACROSS FLATS	ULT. TENSILE STRENGTH	MIN. TORSIONAL STRENGTH	NOM. SHEAR STRENGTH
#12 TYPE 17	Sharp Point	.215/.210	.130/.135	.500	.305/.311	1575 LBS.*	65 IN.-LBS.	2100 LBS.

PULL OUT STRENGTH VALUE (LBS. ULT.)	MATERIAL				SUBSTRATE											
	HRS PRIMED ONLY				3/4" PLY		5/8" PLY		1/2" PLY		5/8" OSB		7/16" OSB		2X SPF	
	NOM. GAUGE	16	14	12	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
#12 TYPE 17	N/A	N/A	N/A	N/A	380	585	453	588	297	390	361	441	198	212	378	739

PULL OVER STRENGTH VALUE (LBS. ULT.) (EPDM ONLY)	DESIGNATION	MATERIAL			
		AZ55 GALVALUME			
	NOM. GAUGE	29	26	24	22
THICKNESS	.015	.019	.024	.032	
#12 TYPE 17 (EPDM WASHER ONLY)		658	927	1035	1386

NOTES: 1. *The tabulated value represents the ultimate tensile load at which the ZXL head breaks from the carbon steel fastener body. 2. 1-1/2" Length fully penetrates OSB and Plywood sheeting. 3. 26 and 29 GA values shown were obtained using 80 KSI steel sheeting, 24, 22, and 20 GA values were obtained using KSI minimum steel sheeting.



SS WoodBinder®



- 304 Stainless Steel cupped head & washer provide lifetime protection in the harshest environments. You may obtain a free copy of the written warranty upon request.
- 304 SS™ Woodbinder® is an excellent choice for use in animal confinement applications or for aluminum liner panel applications.
- Type A point necessitates a pre-drilled hole in steel, but not aluminum.

FOR PROPER INSTALLATION, THE USE OF IMPACT DRIVERS ARE NOT RECOMMENDED FOR POWDER COATED OR ANY WET PAINTED FASTENER

PULLOUT & PULLOVER VALUES ARE DETERMINED IN THE ST FASTENING SYSTEMS ENGINEERING LABORATORY & BASED UPON WOOD DENSITIES FOUND IN PRESENT DAY WOOD PRODUCTS.

THE USE OF 304 SS SCREWS MAY CAUSE BLISTERING ON ALUMINUM PANELS DUE TO THE MANY DIFFERENT ALLOYS FOUND. CHECK WITH THE ALUMINUM PANEL SUPPLIER FOR PROPER FASTENER RECOMMENDATION.

SIZE	HEAD STYLE	CARTON QTY.	WEIGHT/M
10 x 1"	1/4" CHWH	3000	9.0
10 x 1-1/2"	1/4" CHWH	2500	11.9
10 x 2"	1/4" CHWH	2000	14.0

TECHNICAL INFORMATION	DRILL POINT	MAJOR DIAMETER	MINOR DIAMETER	WASHER/HEAD DIAMETER	HEAD ACROSS FLATS	ULT. TENSILE STRENGTH	MIN. TORSIONAL STRENGTH	NOM. SHEAR STRENGTH
#10	30° SHARP POINT-A	.183/.189	.126/.132	.500	NOM .250"	1135 LBS.	48 IN.-LBS.	1034 LBS.

PULL OUT STRENGTH VALUE (LBS. ULT.)	NOM. GAUGE	THICKNESS	MATERIAL		SUBSTRATE												
			HRS PRIMED ONLY		(1) 1" PENETRATION		(2) 1 1/2" PENETRATION		(3) FULL PENETRATION		(4) 1/2" PENETRATION						
			3/4" PLY	5/8" PLY	1/2" PLY	7/16" OSB	2X Y.PINE		2X SPF								
#10	N/A	N/A	N/A	616	N/A	473	N/A	312	N/A	208	N/A	802	1176	N/A	678	913	N/A

PULL OVER STRENGTH VALUE (LBS. ULT.) (EPDM ONLY)	DESIGNATION	MATERIAL																
		AZ55 GALVALUME				G90	ALUMINUM	SLOT EDGE PANEL										
		NOM. GAUGE	THICKNESS	NOM. GAUGE	THICKNESS	NOM. GAUGE	THICKNESS	NOM. GAUGE	THICKNESS									
#10 (EPDM WASHER ONLY)		29	.014	26	.018	24	.024	22	.030	20	.036	21	.028	29	N/A	N/A	N/A	N/A



The Type A point will tap a predrilled hole in steel but will self-drill through aluminum liner panels.

NOTES: All strength values shown are ultimate values, expressed in LBS. Apply an appropriate safety factor to obtain design limits.

ST-XL MB WoodBinder®



- Designed as an alternative to the zinc-aluminum alloy head. It is also used to attach steel roofing used in post-frame & residential construction. The smaller cupped HWH provides an attractive low-profile appearance versus larger HWH fasteners.
- 304 Stainless Steel cap provides lifetime warranty against red rust on the head & washer. You may obtain a free copy of the written warranty upon request.
- ST-XL™ is an excellent choice for GALVALUME or other long-life metal roofs.
- The combination of a Micro-Bit™ drills 29 & 26 gauge consistently & eliminates the metal shavings that can embed themselves in the EPDM rubber washer.

FOR PROPER INSTALLATION, THE USE OF IMPACT DRIVERS ARE NOT RECOMMENDED FOR POWDER COATED OR ANY WET PAINTED FASTENER

PULLOUT & PULLOVER VALUES ARE DETERMINED IN THE ST FASTENING SYSTEMS ENGINEERING LABORATORY & BASED UPON WOOD DENSITIES FOUND IN PRESENT DAY WOOD PRODUCTS. THE

USE OF 304 SS SCREWS MAY CAUSE BLISTERING ON ALUMINUM PANELS DUE TO THE MANY DIFFERENT ALLOYS FOUND. CHECK WITH THE ALUMINUM PANEL SUPPLIER FOR PROPER FASTENER RECOMMENDATION.



SIZE	HEAD STYLE	CARTON QTY.	WEIGHT/M
9 x 1"	1/4" CHWH*	3000	9.0
9 x 1-1/2"	1/4" CHWH*	2500	11.9
9 x 2"	1/4" CHWH*	2000	14.0
9 x 2-1/2"	1/4" CHWH*	1500	16.0
9 x 3"	1/4" CHWH*	1000	18.4
12 x 3/4" STITCH	1/4" CHWH*	2500	16.0

*CHWH-Cupped Hex Washer Head.

ROLLING CHANGE

The new Micro-Bit will completely replace the Type 17 sharp point as current inventories are depleted. Sizes listed in GREEN will continue to be sharp points, as inventory levels of those turn over at a slower rate.

TECHNICAL INFORMATION	DRILL POINT	MAJOR DIAMETER	MINOR DIAMETER	WASHER/HEAD DIAMETER	HEAD ACROSS FLATS	ULT. TENSILE STRENGTH	MIN. TORSIONAL STRENGTH	NOM. SHEAR STRENGTH
#9	MICRO-BIT	.181/.178	.133/.127	.500	NOM .250"	2100 LBS.	48 IN.-LBS.	1800 LBS.
#12-14 STITCH	MICRO-BIT	.215/.209	.164/.157	.500	NOM .250"	2900 LBS.	88 IN.-LBS.	1962 LBS.

PULL OUT STRENGTH VALUE (LBS. ULT.)	NOM. GAUGE	THICKNESS	MATERIAL		SUBSTRATE												
			HRS PRIMED ONLY		(1) 1" PENETRATION		(2) 1 1/2" PENETRATION		(3) FULL PENETRATION		(4) 1/2" PENETRATION						
			3/4" PLY	5/8" PLY	1/2" PLY	7/16" OSB	2X Y.PINE		2X SPF								
#9	N/A	N/A	N/A	668	N/A	384	N/A	242	N/A	224	N/A	852	1030	N/A	604	855	N/A
#12-14 STITCH	N/A	N/A	N/A	N/A	260	N/A	233	N/A	202	N/A	164	N/A	N/A	331	N/A	N/A	237

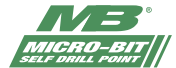
PULL OVER STRENGTH VALUE (LBS. ULT.) (EPDM ONLY)	DESIGNATION	MATERIAL															
		AZ55 GALVALUME				G90	ALUMINUM	SLOT EDGE PANEL									
		NOM. GAUGE	THICKNESS	NOM. GAUGE	THICKNESS	NOM. GAUGE	THICKNESS	NOM. GAUGE	THICKNESS								
#9 (EPDM WASHER)		29	.014	26	.018	24	.024	22	.030	20	.036	21	.028	29	N/A	N/A	N/A
#12-14 STITCH (EPDM WASHER)		378	629	721	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



The Micro-Bit point is fully threaded to the end and is designed for the quickest penetration through light gauge steel panels.

ST-XL has a 304 SS Cap on the head and washer. It will never red rust. Cupped head design provides low profile appearance.

ECLIPSE MB WoodBinder®



- Round head with 6-lobe recess driver provides an aesthetic, low-profile appearance on sidewall metal applications installed into wood girts.
- Micro-Bit™ point quickly penetrates steel siding and eliminates metal shaving that can embed themselves in the rubber washer.
- Undercut EPDM rubber washer provides a secure seal even when driven at an angle.
- T-25-W driver specially designed to fit securely in the 6-lobe recess with no cam-out or paint damage.

FOR PROPER INSTALLATION, THE USE OF IMPACT DRIVERS ARE NOT RECOMMENDED FOR POWDER COATED OR ANY WET PAINTED FASTENER

PULLOUT & PULLOVER VALUES ARE DETERMINED IN THE ST FASTENING SYSTEMS ENGINEERING LABORATORY & BASED UPON WOOD DENSITIES FOUND IN PRESENT DAY WOOD PRODUCTS.

SIZE	HEAD STYLE	CARTON QTY.	WEIGHT/M
10 x 1"	TRUSS	3000	8.0
10 x 1-1/2"	TRUSS	2500	10.1
10 x 2"	TRUSS	2000	12.2
10 x 2-1/2"	TRUSS	1500	15.4
10 x 3"	TRUSS	1000	17.2

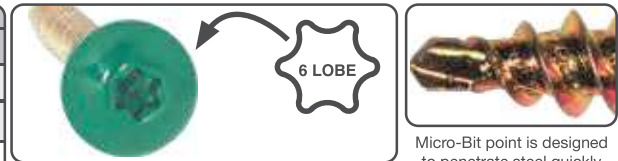
ROLLING CHANGE

The new Micro-Bit will completely replace the Type 17 sharp point as current inventories are depleted. Sizes listed in GREEN will continue to be sharp points, as inventory levels of those turn over at a slower rate.

TECHNICAL INFORMATION	DRILL POINT	MAJOR DIAMETER	MINOR DIAMETER	WASHER/HEAD DIAMETER	HEAD ACROSS FLATS	ULT. TENSILE STRENGTH	MIN. TORSIONAL STRENGTH	NOM. SHEAR STRENGTH
#10	MICRO-BIT	.206/.200	.126/.122	.500	N/A	2023 LBS.	75 IN.-LBS.	1653 LBS.

PULL OUT STRENGTH VALUE (LBS. ULT.)	NOM. GAUGE	MATERIAL			SUBSTRATE								(1) 1" PENETRATION (2) 1 1/2" PENETRATION			(3) FULL PENETRATION (4) 1/2" PENETRATION		
		HRS PRIMED ONLY			3/4" PLY		5/8" PLY		1/2" PLY		7/16" OSB		2X Y.PINE			2X SPF		
		THICKNESS	16	14	12	(3)	(4)	(3)	(4)	(3)	(4)	(3)	(4)	(1)	(2)	(4)	(1)	(2)
#10	N/A	N/A	N/A	N/A	536	N/A	420	N/A	379	N/A	190	N/A	929	N/A	N/A	640	N/A	N/A

PULL OVER STRENGTH VALUE (LBS. ULT.) (EPDM ONLY)	DESIGNATION	MATERIAL						
		AZ55 GALVALUME				G90	ALUMINUM	SLOT EDGE PANEL
		NOM. GAUGE	29	26	24	22	20	21
#10 (EPDM WASHER ONLY)	THICKNESS	.014	.018	.024	.030	.036	.028	.014
		688	879	N/A	N/A	N/A	N/A	N/A



The Truss head is 50% lower than a standard HWH & provides a very aesthetic appearance.



Micro-Bit point is designed to penetrate steel quickly wit no "point walking."



T-25-W Driver

#14 TYPE 17 WoodBinder®



- Designed to be used as a "rescue screw". This fastener will replace nails or smaller diameter fasteners that have loosened & backed out of steel roofing over time.
- 5/16" HWH with bonded sealing washer will completely cover existing hole, even if elongated by movement in the metal roof.
- Type 17 point will help clean the existing hole so that oversized threads can tap & generate maximum holding strength.
- EPDM rubber is vulcanized to the steel washer to prevent delamination & form an excellent seal even when driven at an angle.

FOR PROPER INSTALLATION, THE USE OF IMPACT DRIVERS ARE NOT RECOMMENDED FOR POWDER COATED OR ANY WET PAINTED FASTENER

PULLOUT & PULLOVER VALUES ARE DETERMINED IN THE ST FASTENING SYSTEMS ENGINEERING LABORATORY & BASED UPON WOOD DENSITIES FOUND IN PRESENT DAY WOOD PRODUCTS.

SIZE	HEAD STYLE	CARTON QTY.	WEIGHT/M
14 x 1"	5/16" HWH	2000	13.0
14 X 1-1/4"	5/16" HWH	2000	15.7
14 x 1-1/2"	5/16" HWH	1500	17.7
14 x 2"	5/16" HWH	1500	22.3
14 x 2-1/2"	5/16" HWH	1000	26.7

TECHNICAL INFORMATION	DRILL POINT	MAJOR DIAMETER	MINOR DIAMETER	WASHER/HEAD DIAMETER	HEAD ACROSS FLATS	ULT. TENSILE STRENGTH	MIN. TORSIONAL STRENGTH	NOM. SHEAR STRENGTH
#14-10	30° SHARP POINT-T-17	.254/.248	.185/.178	.398/.432	NOM .312"	4270 LBS.	125 IN.-LBS.	2997 LBS.

PULL OUT STRENGTH VALUE (LBS. ULT.)	NOM. GAUGE	MATERIAL			SUBSTRATE								(1) 1" PENETRATION (2) 1 1/2" PENETRATION			(3) FULL PENETRATION (4) 1/2" PENETRATION		
		HRS PRIMED ONLY			3/4" PLY		5/8" PLY		1/2" PLY		7/16" OSB		2X Y.PINE			2X SPF		
		THICKNESS	16	14	12	(3)	(4)	(3)	(4)	(3)	(4)	(3)	(4)	(1)	(2)	(4)	(1)	(2)
#14-10	N/A	800	1250	2017	723	N/A	487	N/A	391	N/A	227	N/A	856	1669	N/A	594	1235	N/A

PULL OVER STRENGTH VALUE (LBS. ULT.) (EPDM ONLY)	DESIGNATION	MATERIAL						
		AZ55 GALVALUME				G90	ALUMINUM	SLOT EDGE PANEL
		NOM. GAUGE	29	26	24	22	20	21
#14 -10 (14MM O.D. BONDED WASHER)	THICKNESS	.014	.018	.024	.030	.036	.028	.014
		495	780	1078	1355	1608	N/A	N/A
#14-10 (W/ NO WASHER)		N/A	722	1040	1197	1419	N/A	N/A



Hex Washer Head with EPDM rubber will completely cover the existing hole to provide a watertight seal.



The Type 17 point will clean the existing hole of metal burrs & the oversized threads will generate increased holding strength.

NOTES: All strength values shown below are ultimate values, expressed in LBS. Apply an appropriate safety factor to obtain design limits.

TAPPING WoodBinder®



- Tapping screws that are designed to be used in wood or light gauge metal in a pre-drilled hole. See Fastener Selection Guide on page 1 for proper drill bit sizes.
- Screws can be used as replacements for nails or screws that have loosened from wood or steel.
- 3/8" HWH with EPDM bonded sealing washer provides maximum pull over strength in high wind uplift applications.
- EPDM rubber & HWH with EPDM bonded washer is vulcanized to a steel washer to form an excellent seal & will cover any existing hole to prevent leaks from re-occurring.

FOR PROPER INSTALLATION, THE USE OF IMPACT DRIVERS ARE NOT RECOMMENDED FOR POWDER COATED OR ANY WET PAINTED FASTENER

PULLOUT & PULLOVER VALUES ARE DETERMINED IN THE ST FASTENING SYSTEMS ENGINEERING LABORATORY & BASED UPON WOOD DENSITIES FOUND IN PRESENT DAY WOOD PRODUCTS.

SIZE	POINT STYLE	HEAD STYLE	CARTON QTY.	WEIGHT /M
14 x 3/4"	TYPE A	3/8" HWH	2500	16.5
14 x 1"	TYPE A	3/8" HWH	2000	16.9
14 x 1-1/4"	TYPE A	3/8" HWH	2000	17.6
14 x 1-1/2"	TYPE A	3/8" HWH	1500	24.6
14 x 2"	TYPE A	3/8" HWH	1500	26.0
14 x 2-1/2"	TYPE A	3/8" HWH	1000	30.8
14 x 3"	TYPE A	3/8" HWH	1000	35.9

TECHNICAL INFORMATION	DRILL POINT	MAJOR DIAMETER	MINOR DIAMETER	WASHER/HEAD DIAMETER	HEAD ACROSS FLATS	ULT. TENSILE STRENGTH	MIN. TORSIONAL STRENGTH	NOM. SHEAR STRENGTH
#14-10 HWH TYPE A	30° SHARP POINT-A	.254/.248	.185/.178	.500	NOM .375"	4270 LBS.	125 IN.-LBS.	2997 LBS.

PULL OUT STRENGTH VALUE (LBS. ULT.)	NOM. GAUGE	MATERIAL								SUBSTRATE								
		HRS PRIMED ONLY				3/4" PLY		5/8" PLY		1/2" PLY		7/16" OSB		2X Y.PINE		2X SPF		
		THICKNESS	THICKNESS	THICKNESS	THICKNESS	(3)	(4)	(3)	(4)	(3)	(4)	(3)	(4)	(1)	(2)	(4)	(1)	(2)
#14-10 HWH TYPE A	16	.060	.075	.105	723	N/A	487	N/A	391	N/A	227	N/A	856	1669	N/A	594	1235	N/A

PULL OVER STRENGTH VALUE (LBS. ULT.) (EPDM ONLY)	DESIGNATION	MATERIAL													
		AZ55 GALVALUME				G90	ALUMINUM	SLOT EDGE PANEL							
		NOM. GAUGE	NOM. GAUGE	NOM. GAUGE	NOM. GAUGE	NOM. GAUGE	NOM. GAUGE	NOM. GAUGE	NOM. GAUGE						
#14-10 HWH TYPE A (16mm O.D. bonded washer)	N/A	29	26	24	22	20	21	29	N/A	1001	1206	1649	N/A	N/A	N/A

NOTES: For metal to metal tapping screws refer to page 7.

ZXL TAPPING WoodBinder®



- Type AB fasteners are designed to attach long-life roof panels such as GALVALUME that are used in pre-engineered metal building application. Type A fasteners are designed for use in wood framed buildings.
- Fasteners are also used in retrofit applications in which existing screws have stripped/backed out & need to be replaced with a larger diameter.
- 5/16" Cupped HWH ZAMAC Zinc-Aluminum Alloy provides lifetime protection against red rust on the head & washer face. A written warranty is available upon request.
- The head and washer face captures the rubber EPDM washer even when driven at an angle and is designed to maximize pull over strength.



SIZE	HEAD STYLE	CARTON QTY.	WEIGHT/M
14-10 x 1-1/2" A	5/16" CHWH	1500	23.0

FOR PROPER INSTALLATION, THE USE OF IMPACT DRIVERS ARE NOT RECOMMENDED FOR POWDER COATED OR ANY WET PAINTED FASTENER

PULLOUT & PULLOVER VALUES ARE DETERMINED IN THE ST FASTENING SYSTEMS ENGINEERING LABORATORY & BASED UPON WOOD DENSITIES FOUND IN PRESENT DAY WOOD PRODUCTS.

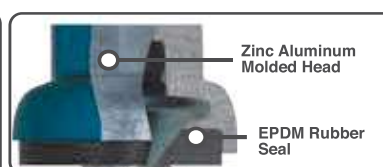


No Red-Rust Guaranteed!

TECHNICAL INFORMATION	DRILL POINT	MAJOR DIAMETER	MINOR DIAMETER	WASHER/HEAD DIAMETER	HEAD ACROSS FLATS	ULT. TENSILE STRENGTH	MIN. TORSIONAL STRENGTH	NOM. SHEAR STRENGTH
#14-10	30° SHARP POINT	.254/.248	.185/.178	.630	NOM .312"	1525** LBS.	125 IN.-LBS.	2997 LBS.

PULL OUT STRENGTH VALUE (LBS. ULT.)	NOM. GAUGE	MATERIAL								SUBSTRATE								
		HRS PRIMED ONLY				3/4" PLY		5/8" PLY		1/2" PLY		7/16" OSB		2X Y.PINE		2X SPF		
		THICKNESS	THICKNESS	THICKNESS	THICKNESS	(3)	(4)	(3)	(4)	(3)	(4)	(3)	(4)	(1)	(2)	(4)	(1)	(2)
#14-10	16	.060	.075	.105	707	N/A	554	N/A	391	N/A	238	N/A	828	1525**	N/A	594	1235	N/A

PULL OVER STRENGTH VALUE (LBS. ULT.) (EPDM ONLY)	DESIGNATION	MATERIAL														
		AZ55 GALVALUME				G90	ALUMINUM	SLOT EDGE PANEL								
		NOM. GAUGE	NOM. GAUGE	NOM. GAUGE	NOM. GAUGE	NOM. GAUGE	NOM. GAUGE	NOM. GAUGE	NOM. GAUGE							
#14-10 (EPDM WASHER ONLY)	N/A	29	26	24	22	20	21	29	N/A	886	1287	1525**	1525**	N/A	N/A	N/A



The Zinc-Aluminum alloy HWH prevents red rust from ever starting. ST Fastening Systems spring retainer sockets are designed to allow for the added thickness of the powder coat and are recommended.



TYPE A
The Type A is designed for wood. See Catalog page 1 for proper drill bit sizes.

- NOTES: 1. HRS* (Hot Rolled Steel)
 2. Pull over values calculated with EPDM rubber washer assembled to cupped head screw with .630" washer face.
 3. All strength values shown are ultimate values, express in LBS. Apply an appropriate safety factor to obtain design limits.
 4. ** Ultimate tensile strength value calculated at the point where the ZXL head breaks from the carbon steel body.