

## MAXX™ SteelBinder®

**POWERFUL** CORROSION DEFENSE POWDER COAT SYSTEM  
**MAXX** SELF-DRILLING  
**2+3 HYBRID** NO POINT WALKING SELF-DRILL POINT



- Fastener designed to attach metal roof and sidewall panels used in pre-engineered metal building applications.
- #12 Diameter 5/16" Cupped HWH self-drilling fastener easily penetrates steel up to .210" in thickness with no "point walking." 1/4" Stitch will securely fasten panel sidelaps up to 18 ga. panel thickness with no strip-out when installed correctly.
- Cupped head & washer encapsulate EPDM rubber washer & provide a secure seal even when driven at an angle.

ALL UNPAINTED MAXX STEELBINDER® 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.

PULLOUT & PULLOVER VALUES ARE DETERMINED IN THE ST FASTENING SYSTEMS ENGINEERING LABORATORY USING STEEL PANELS/FRAMING & WOOD DENSITIES WHOSE STRUCTURAL PROPERTIES ARE FOUND IN PRESENT DAY PRODUCTS.

SIZE	HEAD STYLE	CARTON QTY.	WEIGHT/M
12-14 x 3/4"	5/16" CHWH**	2500	11.3
12-14 x 1"	5/16" CHWH**	2500	13.2
12-14 x 1-1/4"*	5/16" CHWH**	2500	14.8
12-14 x 1-1/2"	5/16" CHWH**	2000	15.5
12-14 x 2"	5/16" CHWH**	1500	18.8
12-14 x 2-1/2"	5/16" CHWH**	1500	21.0
12-14 x 3"	5/16" CHWH**	1000	24.6
1/4-14 x 7/8" STITCH*	5/16" CHWH**	2500	13.4

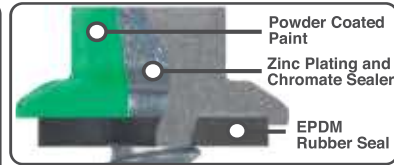
\*Current sizes available with powder coating

\*\*CHWH-Cupped Hex Washer Head

TECHNICAL INFORMATION	DRILL POINT (DIA)	MAJOR DIAMETER	MINOR DIAMETER	WASHER FACE DIAMETER	HEAD ACROSS FLATS	NOM. TENSILE STRENGTH	MIN. TORSIONAL STRENGTH	NOM. SHEAR STRENGTH
#12	.181/.177	.215/.209	.164/.157	.560/.545	NOM .312"	2900 LBS.	92 IN.-LBS.	1962 LBS.
1/4" STITCH	.156/.150	.246/.240	.192/.185	.560/.545	NOM .312"	3800 LBS.	150 IN.-LBS.	2850 LBS.

PULL OUT STRENGTH VALUE (LBS. ULT.)	NOM. GAUGE	MATERIAL													
		HRS PRIMED ONLY				AZ55 GALVALUME				G-90 GALVANIZED				HRS. PLATE	
		16	14	12	26	24	22	18	20	18	16	14	12	3/16"	1/4"
#12		927	958	1678	N/A	N/A	N/A	N/A	N/A	729	787	1041	1372	N/A	N/A
1/4" STITCH		N/A	N/A	N/A	342	378	418	1038	620	N/A	N/A	N/A	N/A	N/A	N/A

PULL OVER STRENGTH VALUE (LBS. ULT.)	DESIGNATION	MATERIAL													
		AZ55 GALVALUME		G90	ALUMINUM	SLOT EDGE PANEL									
		NOM. GAUGE	THICKNESS	29	26	24	22	20	21	29					
#12		.014	.018	.024	.030	.036	.028	.014	687	1090	1299	1562	N/A	N/A	N/A
1/4" STITCH		.014	.018	.024	.030	.036	.028	.014	746	960	1261	1376	N/A	N/A	N/A



Drill point is designed to penetrate steel quickly with no "point walking"

Cupped HWH head design improves Pull over strength versus standard HWH & Bonded Washer. ST Fastening Systems sockets are designed to allow for the added thickness of the powder coat.

- NOTES:
- HRS (Hot Rolled Steel)
  - Pull over values calculated with EPDM rubber washer assembled to cupped head screw with .555" washer face.
  - All strength values shown are ultimate values, expressed in LBS. Apply an appropriate safety factor to obtain design limits.

## ZXL SteelBinder®

**POWERFUL** CORROSION DEFENSE POWDER COAT SYSTEM  
**ZXL** SELF-DRILLING  
**2+3 HYBRID** NO RED RUST NO POINT WALKING SELF-DRILL POINT



- Fastener designed to attach long-life metal roof panels such as GALVALUME that are used in pre-engineered metal building applications.
- 5/16" Cupped HWH ZAMAC Zinc-Aluminum Alloy provides lifetime protection against red rust on the head. You may obtain a free copy of the written warranty upon request.
- Washer face design helps to capture rubber EPDM washer even when driven at an angle.
- #12 & 1/4" diameter drill point easily penetrates steel thickness up to .210" with no "point walking". 1/4" Diameter Stitch securely fasten panel sidelaps up to 18 ga. panel thickness with no strip-out.
- Head & washer face are designed to maximize pull over strength.

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
12-14 x 1"	5/16" CHWH**	2000	16.9
12-14 x 1-1/4"	5/16" CHWH**	2000	18.8
12-14 x 1-1/2"	5/16" CHWH**	2000	22.0
12-14 x 2"	5/16" CHWH**	1500	23.1
12-14 x 3"	5/16" CHWH**	1000	31.0
1/4-14 x 1-1/4"	5/16" CHWH**	1500	24.1
1/4-14 x 7/8" STITCH	5/16" CHWH**	2000	17.2

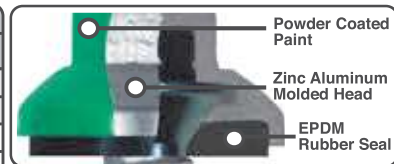
\*\*CHWH-Cupped Hex Washer Head.

PULLOUT & PULLOVER VALUES ARE DETERMINED IN THE ST FASTENING SYSTEMS ENGINEERING LABORATORY USING STEEL PANELS/FRAMING & WOOD DENSITIES WHOSE STRUCTURAL PROPERTIES ARE FOUND IN PRESENT DAY PRODUCTS.

TECHNICAL INFORMATION	DRILL POINT (DIA)	MAJOR DIAMETER	MINOR DIAMETER	WASHER FACE DIAMETER	HEAD ACROSS FLATS	NOM. TENSILE STRENGTH	MIN. TORSIONAL STRENGTH	NOM. SHEAR STRENGTH
#12	.181/.177	.215/.209	.164/.157	.630	NOM .312"	1525** LBS.	92 IN.-LBS.	1962 LBS.
1/4"	.156/.150	.246/.240	.192/.185	.630	NOM .312"	1525** LBS.	150 IN.-LBS.	2850 LBS.

PULL OUT STRENGTH VALUE (LBS. ULT.)	NOM. GAUGE	MATERIAL													
		HRS PRIMED ONLY				AZ55 GALVALUME				G-90 GALVANIZED				HRS. PLATE	
		16	14	12	26	24	22	18	20	18	16	14	12	3/16"	1/4"
#12		927	958	1525**	N/A	N/A	N/A	N/A	N/A	729	787	1041	1372	N/A	N/A
1/4"		N/A	N/A	N/A	342	378	418	1038	620	N/A	N/A	N/A	N/A	N/A	N/A

PULL OVER STRENGTH VALUE (LBS. ULT.)	DESIGNATION	MATERIAL													
		AZ55 GALVALUME		G90	ALUMINUM	SLOT EDGE PANEL									
		NOM. GAUGE	THICKNESS	29	26	24	22	20	21	29					
#12		.014	.018	.024	.030	.036	.028	.014	803	1091	1393	1525**	N/A	N/A	N/A
1/4"		.014	.018	.024	.030	.036	.028	.014	813	1436	1525**	1525**	N/A	N/A	N/A



Drill point is designed to penetrate steel quickly with no "point walking"

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

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

## HG SteelBinder®



- Fastener lengths over 1-1/4" are designed to penetrate steel thickness up to .500".
- Thread to point ratio engineered to provide maximum pull out strength in heavy gauge steel.
- EPDM rubber is vulcanized to steel washer. Moisture has no place to penetrate. The washer provides a secure seal even when driven at an angle.
- Applications include metal deck to structural steel or bar joists, & retrofit clips to structural steel.
- Fastener is also available without a bonded sealing 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 USING STEEL PANELS/FRAMING & WOOD DENSITIES WHOSE STRUCTURAL PROPERTIES ARE FOUND IN PRESENT DAY PRODUCTS.

SIZE	HEAD STYLE	CARTON QTY.	WEIGHT/M
12-24 x 1-1/4"	HWH	2500	12.6
12-24 x 1-1/2"	HWH	2000	16.2
12-24 x 2"	HWH	1500	22.1

LENGTHS LONGER THAN 2 INCHES ARE AVAILABLE BUT NON-STANDARD. CALL FOR PRICE AND AVAILABILITY.

TECHNICAL INFORMATION	DRILL POINT (DIA)	MAJOR DIAMETER	MINOR DIAMETER	WASHER FACE DIAMETER	HEAD ACROSS FLATS	NOM. TENSILE STRENGTH	MIN. TORSIONAL STRENGTH	NOM. SHEAR STRENGTH
#12-24	.199/.195	.215/.209	.164 REF	.432/.398	NOM .312"	2803 LBS.	100 IN.-LBS.	1999 LBS.

PULL OUT STRENGTH VALUE (LBS. ULT.)	MATERIAL																	
		HRS PRIMED ONLY				AZ55 GALVALUME				G-90 GALVANIZED				HRS. PLATE				
		NOM. GAUGE	THICKNESS	16	14	12	26	24	22	18	20	18	16	14	12	3/16"	1/4"	
#12-24		N/A	.060	.075	.105	.018	.024	.030	.048	.036	.048	.060	.075	.105	.187	.250	2556	3298

PULL OVER STRENGTH VALUE (LBS. ULT.)	DESIGNATION	MATERIAL																
		AZ55 GALVALUME				690	ALUMINUM	SLOT EDGE PANEL										
		NOM. GAUGE	THICKNESS	29	26	24	22	20	21	29								
#12-24 W/ 14 MM BONDED WASHER		N/A	.014	.018	.024	.030	.036	.028	.014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
(.398/.432 HWH DIA.)		N/A	.014	.018	.024	.030	.036	.028	.014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



HWH with EPDM bonded washer provides a secure seal to prevent leaks.



Sharp drill point & long flute length assures proper clearance of heavy gauge metal before any thread engagement begins.

- NOTES: 1. HRS (Hot Rolled Steel)  
2. All strength values shown are ultimate values, expressed in LBS. Apply an appropriate safety factor to obtain design limits.

## ZXL HG SteelBinder®



- Fastener is designed to attach long-life metal roof panels such as GALVALUME to structural steel joists up to .500" thick.
- 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 & washer face captures the rubber EPDM washer even when driven at an angle & are designed to maximize Pull over strength.
- For structural steel applications, a screwgun with RPM under 2000 is recommended for best performance.

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 USING STEEL PANELS/FRAMING & WOOD DENSITIES WHOSE STRUCTURAL PROPERTIES ARE FOUND IN PRESENT DAY PRODUCTS.

SIZE	HEAD STYLE	CARTON QTY.	WEIGHT/M
12-24 x 1-1/4"	5/16" CHWH	2000	25.8/M



No Red-Rust Guaranteed!

TECHNICAL INFORMATION	DRILL POINT (DIA)	MAJOR DIAMETER	MINOR DIAMETER	WASHER FACE DIAMETER	HEAD ACROSS FLATS	NOM. TENSILE STRENGTH	MIN. TORSIONAL STRENGTH	NOM. SHEAR STRENGTH
12-24	.199/.195	.215/.209	.164 REF	.630	NOM .312"	1525** LBS.	100 IN.-LBS.	1999 LBS.

PULL OUT STRENGTH VALUE (LBS. ULT.)	MATERIAL																
		HRS PRIMED ONLY				AZ55 GALVALUME				G-90 GALVANIZED				HRS. PLATE			
		NOM. GAUGE	THICKNESS	16	14	12	26	24	22	18	20	18	16	14	12	3/16"	1/4"
12-24		N/A	.060	.075	.105	.018	.024	.030	.048	.036	.048	.060	.075	.105	.187	.250	1525**LBS

PULL OVER STRENGTH VALUE (LBS. ULT.)	DESIGNATION	MATERIAL															
		AZ55 GALVALUME				690	ALUMINUM	SLOT EDGE PANEL									
		NOM. GAUGE	THICKNESS	29	26	24	22	20	21	29							
12-24		637	.014	.018	.024	.030	.036	.028	.014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



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



Sharp drill point & long flute length assures proper clearance of heavy gauge metal before any thread engagement begins.

- NOTES: 1. HRS (Hot Rolled Steel)  
2. Pull over values calculated with EPDM rubber washer assembled to cupped head screw with .555" washer face.  
3. All strength values shown are ultimate values, expressed in LBS. Apply an appropriate safety factor to obtain design limits.  
4. \*\* The value tabulated is the force at which the ZXL head breaks from the carbon steel body.

## ECLIPSE SteelBinder®



- Truss Head with 6-lobe recess driver provides an aesthetic, low-profile appearance on sidewall metal applications installed into metal girts.
- Self-drilling point penetrates steel thickness up to .210"
- Undercut EPDM rubber washer provides a secure seal even when driven at an angle.
- T-30W driver is designed to fit securely into the 6-lobe recess to prevent bit "cam-out."

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
12-14" x 3/4"	TRUSS	2500	10.7
12-14" x 1-1/4"	TRUSS	2500	14.1
1/4"-14" x 7/8" STITCH	TRUSS	2500	13.0

PULLOUT & PULLOVER VALUES ARE DETERMINED IN THE ST FASTENING SYSTEMS ENGINEERING LABORATORY USING STEEL PANELS/FRAMING & WOOD DENSITIES WHOSE STRUCTURAL PROPERTIES ARE FOUND IN PRESENT DAY PRODUCTS.

TECHNICAL INFORMATION	DRILL POINT (DIA)	MAJOR DIAMETER	MINOR DIAMETER	WASHER FACE DIAMETER	NOM. TENSILE STRENGTH	ULT. TORSIONAL STRENGTH	NOM. SHEAR STRENGTH
#12	.180/.175	.215/.209	.164/.157	.544 T-30 6-Lobe Truss	2900 LBS.	92 IN-LBS.	1962 LBS.
#14	.156/.150	.246/.240	.192/.185	.533/.551 T-30 6-Lobe Truss	3800 LBS.	150 IN-LBS.	2850 LBS.

PULL OUT STRENGTH VALUE (LBS. ULT.)	NOM. GAUGE	MATERIAL													
		HRS PRIMED ONLY			AZ55 GALVALUME				G-90 GALVANIZED				HRS. PLATE		
		16	14	12	26	24	22	18	20	18	16	14	12	3/16"	1/4"
#12	THICKNESS	.060	.075	.105	.018	.024	.030	.048	.036	.048	.060	.075	.105	.187	.250
		927	958	1678	N/A	N/A	N/A	N/A	N/A	729	787	1041	1372	N/A	N/A
#14		N/A	N/A	N/A	342	378	418	1038	620	1038	N/A	N/A	N/A	N/A	N/A

PULL OVER STRENGTH VALUE (LBS. ULT.)	DESIGNATION	MATERIAL						
		AZ55 GALVALUME				G90	ALUMINUM	SLOT EDGE PANEL
		29	26	24	22	20	21	29
#12	THICKNESS	.014	.018	.024	.030	.036	.028	.014
		687	1090	1299	1562	N/A	N/A	N/A
#14		746	960	1261	1376	N/A	N/A	N/A



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

Drill point is designed to penetrate steel quickly with no "point walking"

- NOTES: 1. \*HRS (Hot Rolled Steel)  
 2. Pull over values calculated with EPDM rubber washer assembled to cupped head screw with .544" washer face.  
 3. All strength values shown are ultimate values, expressed in LBS. Apply an appropriate safety factor to obtain design limits

## HWH SteelBinder®



- Self-drilling screws that are designed for general construction applications.
- Drill points are designed to penetrate a wide variety of metal thicknesses.
- Applications include HVAC, roof deck to steel framing, and roof clips to steel framing.

SIZE	HEAD STYLE	CARTON QTY.	WEIGHT/M
8-18 x 1/2"	1/4" HWH	10000	3.6
8-18 x 5/8" w/Nibbs	1/4" HWH	10000	4.0
10-16 x 5/8"	5/16" HWH	5000	5.7
10-16 x 3/4"	5/16" HWH	2500	6.3
10-16 x 1"	5/16" HWH	2500	7.6
12-14 x 3/4"	5/16" HWH	2500	8.4
12-14 x 1"	5/16" HWH	2500	10.0
12-14 x 1-1/4"	5/16" HWH	2500	11.8
12-14 x 1-1/2"	5/16" HWH	2000	13.3
12-14 x 2"	5/16" HWH	1500	16.7
12-14 x 2-1/2"	5/16" HWH	1500	21.4
12-14 x 3"	5/16" HWH	1000	25.0

SIZE	HEAD STYLE	CARTON QTY.	WEIGHT/M
1/4-14 x 7/8" Stitch	5/16" HWH	2500	8.8
1/4-14 x 3/4"	3/8" HWH	2500	12.5
1/4-14 x 1"	3/8" HWH	2500	15.2
1/4-14 x 1-1/4"	3/8" HWH	2000	17.5
1/4-14 x 1-1/2"	3/8" HWH	1500	19.6
1/4-14 x 2"	3/8" HWH	1000	23.8
1/4-14 x 2-1/2"	3/8" HWH	1000	30.0
1/4-14 x 3"	3/8" HWH	1000	33.2
1/4-14 x 4"	3/8" HWH	500	41.9
1/4-14 x 5"	3/8" HWH	500	50.7
1/4-14 x 6"	3/8" HWH	250	53.0

TECHNICAL INFORMATION	DRILL POINT (DIA)	MAJOR DIAMETER	MINOR DIAMETER	WASHER FACE DIAMETER	HEAD ACROSS FLATS	NOM. TENSILE STRENGTH	MIN. TORSIONAL STRENGTH	NOM. SHEAR STRENGTH
#1/4-14 (3/8" AF)	.216/.210	.246/.240	.192/.185	.520/.480	NOM .375"	3697 LBS.	150 IN-LBS.	2682 LBS.
#12-14 (5/16" AF)	.180/.175	.215/.209	.164/.157	.432/.398	NOM .312"	2900 LBS.	92 IN-LBS.	1962 LBS.
#1/4-14 (5/16" AF)	.156/.150	.246/.240	.192/.185	.432/.398	NOM .312"	3697 LBS.	150 IN-LBS.	2682 LBS.

PULL OUT STRENGTH VALUE (LBS. ULT.)	NOM. GAUGE	MATERIAL													
		HRS PRIMED ONLY			AZ55 GALVALUME				G-90 GALVANIZED				HRS. PLATE		
		16	14	12	26	24	22	18	20	18	16	14	12	3/16"	1/4"
#14-14 (3/8" AF)	THICKNESS	.060	.075	.105	.018	.024	.030	.048	.036	.048	.060	.075	.105	.187	.250
		986	1070	2003	342	418	486	1038	620	868	890	1107	1327	N/A	N/A
#12-14 (5/16" AF)		927	958	1678	N/A	N/A	N/A	N/A	N/A	729	787	1041	1372	N/A	N/A
#14-14 (5/16" AF)		986	1070	2003	342	418	486	1038	620	868	890	1107	1327	N/A	N/A

PULL OVER STRENGTH VALUE (LBS. ULT.)	DESIGNATION	MATERIAL						
		AZ55 GALVALUME				G90	ALUMINUM	SLOT EDGE PANEL
		29	26	24	22	20	21	29
#14-14 (3/8" AF) BONDED WASHER (16mm)	THICKNESS	.014	.018	.024	.030	.036	.028	.014
		N/A	1001	1206	1649	N/A	N/A	N/A
#12-14 (5/16" AF) BONDED WASHER (14mm)		N/A	780	1078	1355	1608	N/A	N/A
#14-14 (5/16" AF) STITCH BONDED WASHER (14mm)		N/A	892	1076	1243	1916	N/A	N/A

#10 and 1/4" HWH are available with or without a bonded sealing washer. The #12 HWH is available only without a sealing washer. The #12 MAXX™ Steelbinder fastener is available for applications requiring a washer.

PULLOUT & PULLOVER VALUES ARE DETERMINED IN THE ST FASTENING SYSTEMS ENGINEERING LABORATORY USING STEEL PANELS/FRAMING & WOOD DENSITIES WHOSE STRUCTURAL PROPERTIES ARE FOUND IN PRESENT DAY PRODUCTS.

- NOTES: 1. \*HRS (Hot Rolled Steel)  
 2. All values shown are ultimate values, expressed in LBS. Apply an appropriate safety factor to obtain design limits.

## TAPPING SteelBinder®



- Tapping screws that are designed to be used in light gauge metal 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 screws that have loosened from steel.
- 5/16" HWH with EPDM bonded sealing washer provides maximum pull over strength in high wind uplift applications.
- EPDM rubber & HH with EPDM bonded sealing 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

SIZE	POINT STYLE	HEAD STYLE	CARTON QTY.	WEIGHT /M
17 x 3/4"	TYPE AB	5/16" HWH	2000	14.0
17 x 1"	TYPE AB	5/16" HWH	2000	18.0
17 x 1-1/4"	TYPE AB	5/16" HWH	2000	22.0
17 x 1-1/2"	TYPE AB	5/16" HWH	1500	25.9

PULLOUT & PULLOVER VALUES ARE DETERMINED IN THE ST FASTENING SYSTEMS ENGINEERING LABORATORY USING STEEL PANELS/FRAMING & WOOD DENSITIES WHOSE STRUCTURAL PROPERTIES ARE FOUND IN PRESENT DAY PRODUCTS.

TECHNICAL INFORMATION	DRILL POINT (DIA)	MAJOR DIAMETER	MINOR DIAMETER	WASHER FACE DIAMETER	HEAD ACROSS FLATS	NOM. TENSILE STRENGTH	MIN. TORSIONAL STRENGTH	NOM. SHEAR STRENGTH
17-14	45° Sharp Point	.280/.273	NOM .220"	N/A	NOM .375"	5160 LBS.	220 MIN.	3952 LBS.

PULL OUT STRENGTH VALUE (LBS. ULT.)	NOM. GAUGE	MATERIAL													
		HRS PRIMED ONLY				AZ55 GALVALUME				G-90 GALVANIZED				HRS. PLATE	
		16	14	12	26	24	22	18	20	18	16	14	12	3/16"	1/4"
17-14	THICKNESS	.060	.075	.105	.018	.024	.030	.048	.036	.048	.060	.075	.105	.187	.250
17-14		1409	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1119	N/A	N/A	N/A	N/A	N/A

PULL OVER STRENGTH VALUE (LBS. ULT.)	DESIGNATION	MATERIAL						
		AZ55 GALVALUME				G90	ALUMINUM	SLOT EDGE PANEL
		29	26	24	22	20	21	29
17-14	NOM. GAUGE	.014	.018	.024	.030	.036	.028	.014
17-14	THICKNESS	.014	.018	.024	.030	.036	.028	.014
17-14		556	890	1197	1290	N/A	N/A	N/A

NOTES: 1. For metal to wood tapping screws refer to page 12.

## ZXL™ TAPPING SteelBinder®



- 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 & washer face captures the rubber EPDM washer even when driven at an angle & are designed to maximize Pull over strength.

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 USING STEEL PANELS/FRAMING & WOOD DENSITIES WHOSE STRUCTURAL PROPERTIES ARE FOUND IN PRESENT DAY PRODUCTS.

SIZE	HEAD STYLE	CARTON QTY.	WEIGHT/M
1/4-14 x 3/4" AB	5/16" CHWH	2000	18.2
1/4-14 x 1" AB	5/16" CHWH	2000	19.6
1/4-14 x 1-1/4" AB	5/16" CHWH	2000	21.0
17-14 x 1" AB	5/16" CHWH	1500	23.0



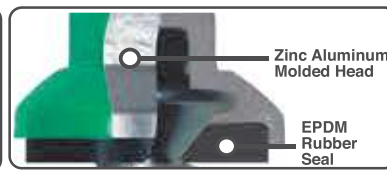
TECHNICAL INFORMATION	DRILL POINT (DIA)	MAJOR DIAMETER	MINOR DIAMETER	WASHER FACE DIAMETER	HEAD ACROSS FLATS	NOM. TENSILE STRENGTH	MIN. TORSIONAL STRENGTH	NOM. SHEAR STRENGTH
1/4-14	30° Sharp Point	.246/.240	.192/.185	.630	NOM .312"	1525** LBS.	150 MIN.	2850 LBS.
17-14	45° Sharp Point	.282/.273	.220 NOM.	.630	NOM .312"	1525** LBS.	220 MIN.	3952 LBS.

PULL OUT STRENGTH VALUE (LBS. ULT.)	NOM. GAUGE	MATERIAL													
		HRS PRIMED ONLY				AZ55 GALVALUME				G-90 GALVANIZED				HRS. PLATE	
		16	14	12	26	24	22	18	20	18	16	14	12	3/16"	1/4"
1/4-14	THICKNESS	.060	.075	.105	.018	.024	.030	.048	.036	.048	.060	.075	.105	.187	.250
1/4-14		1181	1265	1525**	N/A	N/A	N/A	N/A	N/A	1055	1073	1396	1525**	N/A	N/A
17-14		1409	1429	1525**	N/A	N/A	N/A	N/A	N/A	1119	N/A	N/A	N/A	N/A	N/A

PULL OVER STRENGTH VALUE (LBS. ULT.)	DESIGNATION	MATERIAL						
		AZ55 GALVALUME				G90	ALUMINUM	SLOT EDGE PANEL
		29	26	24	22	20	21	29
1/4-14 (.630 DIA)	NOM. GAUGE	.014	.018	.024	.030	.036	.028	.014
1/4-14 (.630 DIA)	THICKNESS	.014	.018	.024	.030	.036	.028	.014
1/4-14 (.630 DIA)		886	1287	1525**	1525**	N/A	N/A	N/A
17-14 (.630 DIA)		696	1101	1205	1446	N/A	N/A	N/A

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.



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

The AB thread form is designed to provide maximum pull out strength in steel in a pre-drilled hole. See Catalog page 1 for proper drill bit sizes.