

MAXX™ SteelBinder®

POWERFUL™ CORROSION DEFENSE// POWDER COAT SYSTEM
MAXX™ SELF-DRILLING// SEALS ANY ANGLE// HWH CUPPED HEAD
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.

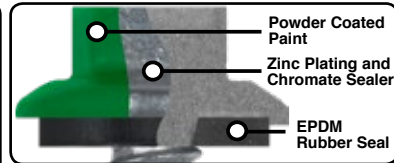
SIZE	HEAD STYLE	CARTON QTY.	WEIGHT/M
12-14 x 3/4"	5/16" CHWH**	2500	11.3
12-14 x 1"	5/16" CHWH**	2500	13.2
12-14 x 1-1/4"*	5/16" CHWH**	2500	14.8
12-14 x 1-1/2"	5/16" CHWH**	2000	15.5
12-14 x 2"	5/16" CHWH**	1500	18.8
12-14 x 2-1/2"	5/16" CHWH**	1500	21.0
12-14 x 3"	5/16" CHWH**	1000	24.6
1/4-14 x 7/8" 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.)	MATERIAL	MATERIAL													
		HRS PRIMED ONLY				AZ55 GALVALUME				G-90 GALVANIZED				HRS. PLATE	
		NOM. GAUGE	16	14	12	26	24	22	18	20	18	16	14	12	3/16"
#12		.060	.075	.105	.018	.024	.030	.048	.036	.048	.060	.075	.105	.187	.250
1/4" STITCH		927	958	1678	N/A	N/A	N/A	N/A	N/A	729	787	1041	1372	N/A	N/A
		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	29	26	24	22	20	21
#12		.014	.018	.024	.030	.036	.028	.014
1/4" STITCH		687	1090	1299	1562	N/A	N/A	N/A
		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™ NO RED RUST// ZINC ALUMINUM MOLDED HEAD
2+3 HYBRID™ 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

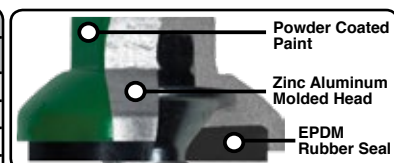
**CHWH-Cupped Hex Washer Head.

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.)	MATERIAL	MATERIAL													
		HRS PRIMED ONLY				AZ55 GALVALUME				G-90 GALVANIZED				HRS. PLATE	
		NOM. GAUGE	16	14	12	26	24	22	18	20	18	16	14	12	3/16"
#12		.060	.075	.105	.018	.024	.030	.048	.036	.048	.060	.075	.105	.187	.250
1/4"		927	958	1525**	N/A	N/A	N/A	N/A	N/A	729	787	1041	1372	N/A	N/A
		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	29	26	24	22	20	21
#12		.014	.018	.024	.030	.036	.028	.014
1/4"		803	1091	1393	1525**	N/A	N/A	N/A
		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.