# ZAC<sup>®</sup> Impax<sup>™</sup> — 3/8" or 5/16" HWH Alloy Capped

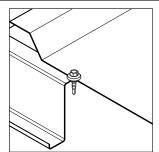
ZAC 3/8" or 5/16" HWH Zinc aluminum capped drill screws

- ZAC: the most widely used zinc aluminum capped fastener in the industry.
- Precision cold forged assuring superior point strength and the fastest drilling time performance through high strength steel and nested purlins.
- Integral cupped Hex Washer Head can never red rust.
- Designed and engineered to have low driving and thread engagement torque while providing maximum clamp load.

### **Application**

#### 12-14 ZAC Impax (3/8" or 5/16") Metal to metal

Drilling capacity: .035 – .210"
Thickness is based on normal, single thickness purlin/girt or multiple material thickness combined for total. Min projection: 3/16" of threads below substrate.





3/8" or 5/16" AF Zinc Aluminum Capped

Hex Washer Head

Thread Major Dia: .215 – .209 Thread Minor Dia: .164 – .157

Strength (lbs ult.):

Tensile: 2900 Torsional: 92 in-lbs Shear: 2050

**Pull-out (lbs ult.):** 12 ga (.105): 1524

14 ga (.075): 901 16 ga (.060): 665

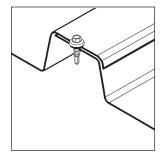
**Pull-over (lbs ult.):** 22 ga (.030): 1647 24 ga (.024): 1310 26 ga (.018): 794

#### 1/4-14 ZAC Impax Lap (3/8" or 5/16")

#### Panel to panel side lap

Drilling capacity: .030 – .095"

Some applications may require attaching light gage (24 – 26 ga) to sub-structural member. Composite thickness should not exceed .095" thickness.





3/8" or 5/16" AF Zinc Aluminum Capped

Hex Washer Head

Thread Major Dia: .246 – .240 Thread Minor Dia: .192 – .185

Strength (Ibs ult.): Tensile: 3800 Torsional: 150 in-lbs

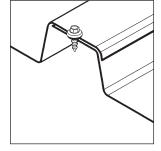
Shear: 2850 **Pull-out (lbs ult.):** 22 ga (.030): 379

24 ga (.024): 304 26 ga (.018): 204

# 12-14 ZAC Lap (3/8")

# Sharp point Panel to panel

Drilling capacity .030 – .060" Self-piercing points are not designed for attaching light gage (24 – 26 ga) to sub-structural member.





3/8" AF Zinc Aluminum Capped

Hex Washer Head

Thread Major Dia: .215 – .208 Thread Minor Dia: .164 – .157

Strength (lbs ult.):

Tensile: 2100 Torsional: 92 in-lbs Shear: 1800

Pull-out (lbs ult.)

22 ga (.030): 538 24 ga (.024): 430 26 ga (.018): 330

#### **Notes**

Dimensions are nominal inches unless noted. Self-drill pull-out values (pounds ultimate) are based on 57,000 psi hot rolled steel material. Lap self-drill pull-out values are based on 40,000 psi AZ55 Galvalume steel sheet material. Ultimate values listed are the result of laboratory testing (5083.14). The specific job conditions should be considered and appropriate safety factors applied when specifying the proper fasteners #12 fasteners 1" and longer have special long pilot lengths to accommodate nested purlins.

### **Continued on following page**

ZAC<sup>®</sup> Impax<sup>™</sup> — 3/8" or 5/16" HWH Alloy Capped

ZAC 3/8" or 5/16" HWH Zinc aluminum capped drill screws For metal to metal

## **Application**

### 1/4-14 ZAC Impax #2 Point and #3 Point

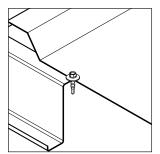
#### Metal to metal

Drilling capacity: #2 point: .050 - .150" #3 point: .050 - .210"

Thickness is based on normal, single thickness purlin/girt or multiple material thickness combined for total.

Min projection: 3/16" of threads

below substrate





#2 – 3/8" AF Hex Washer Head #3 – 5/16" AF Hex Washer Head Thread Major Dia: .246 – .240 Thread Minor Dia: .192 – .185

#### Strength (lbs ult.):

Tensile: 3800 Torsional: 150 in-lbs Shear: 2850

#### #2 Point Pull-out (lbs ult.):

12 ga (.105): 2088 14 ga (.075): 1312 16 ga (.060): 903

# **#3 Point Pull-out (lbs ult.):** 12 ga (.105): 1697

12 ga (.105): 1697 14 ga (.075): 1151 16 ga (.060): 687

# Pull-over with assembled seal washer (lbs ult.):

22 ga (.030): 1079 24 ga (.024): 884 26 ga (.018): 616

#### **Notes**

Dimensions are nominal inches unless noted. Self-drill pull-out values (pounds ultimate) are based on 57,000 psi hot rolled steel material. Lap self-drill pull-out values are based on 40,000 psi AZ55 Galvalume steel sheet material. Ultimate values listed are the result of laboratory testing. The specific job conditions should be considered and appropriate safety factors applied when specifying the proper fasteners #12 fasteners 1" and longer have special long pilot lengths to accommodate nested purlins.

Selection		ExampleCode				
		ZSD2-	#12x	1-1/2-	CHW3/8-	N
Description	Available Lengths (L)	Туре	Diameter	Length	Head Style	Washer
#12-14 ZAC Impax 3/8" AF Hex Washer Head	1", 1-1/4", 1-1/2", 2", 2-1/2", 3"	ZSD3-	#12x	L-	CHW3/8-	N
1/4-14 ZAC Impax Lap 3/8" AF Hex Washer Head	7/8"	ZSDL-	#14x	L-	CHW3/8-	N
#12-14 ZAC Lap Sharp Pt. 3/8" AF Hex Washer Head	3/4"	ZSDL-	#12x	L-	CHW3/8-	N
1/4-14 ZAC Impax SD2, 3/8" AF Hex Washer Head	1-1/4", 1-1/2"	ZSD2-	#14x	L-	CHW3/8-	N
#12-14 ZAC Impax 5/16" AF Hex Washer Head	1", 1-1/4", 1-1/2", 2"	ZSD3-	#12x	L-	CHW5/16-	N
1/4-14 ZAC Impax Lap 5/16" AF Hex Washer Head	7/8"	ZSDL-	#14x	L-	CHW5/16-	N
1/4-14 ZAC Impax SD3, 5/16" AF Hex Washer Head	1-1/4"	ZSD3-	#14x	L-	CHW5/16-	N

#### Installation

Tools:  $0-2000\,\mathrm{rpm}$  screw gun equipped with depth sensing nose piece.

### **Options**



