# Impax<sup>™</sup> — Performance Self-Drill

12-14 Impax and 1/4-14 Impax lap self-drill

For metal to metal

- Precision cold forged assuring superior point strength and the fastest drilling time performance through high strength steel and nested purlins.
- Ultimate performance in light, medium and heavy gage applications.

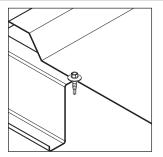
- Designed and engineered to have low driving and thread engagement torque and provide maximum clamp load.
- Corrosion resistant coating system.

## **Application**

#### 12-14 Impax SD3 Assembled bondSeal 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





5/16" AF Hex Washer Head Thread Major Dia: .215 – .209 Thread Minor Dia: .164 – .157

Strength (Ibs ult.): Tensile: 2900 Torsional: 92 in-lbs Shear: 2050 Pull-out (Ibs ult.):

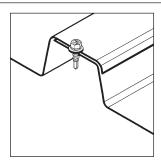
12 ga (.109): 1524 14 ga (.075): 901 16 ga (.060): 665

Pull-over with Bond Seal (lbs ult.):

22 ga (.030): 1249 24 ga (.024): 1056 26 ga (.018): 654

#### 1/4-14 Impax Lap Assembled bondSeal 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".





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

Tensile: 3800 Torsional: 150 in-lbs Shear: 2850 *Pull-out (lbs ult.):*-22 ga (.030): 379 24 ga (.024): 304 26 ga (.018): 204

Strength (lbs ult.):

#### **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.

Selection		Example Code				
		SD3-	#12x	1-1/2-	HW5/16-	GB19/32
Description	Available Lengths (L)	Туре	Diameter	Length	Head Style	Washer
#12-14 Impax SD3 bondSeal	3/4", 1", 1-1/4", 1-1/2", 2", 2-1/2", 3", 4"	SD3-	#12x	L-	HW5/16-	GB19/32
#12-14 Impax SD3 No Washer	3/4", 1", 1-1/4", 1-1/2", 2", 2-1/2", 3", 4"	SD3-	#12x	L-	HW5/16-	_
1/4-14 Impax Lap bondSeal	7/8"	SDL-	#14x	L-	HW5/16-	GB9/16
1/4-14 Impax Lap No Washer	7/8"	SDL-	#14x	L-	HW5/16-	_

### Installation

Tools: 0-2000 rpm screw gun equipped with depth sensing nose piece. Use of impact guns or hammer drills is not recommended.







