# Impax<sup>™</sup> — Heavy Metal Thickness — Structural Drill Screws

12-24 Impax 4.5 and 5 self-drill

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

- Designed and engineered to have low driving and thread engagement torque and provide maximum clamp load.
- Zinc plated and coated with Silver Sentri for extended corrosion resistance.



## **Application**

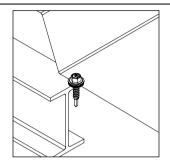
## 12-24 Impax 4.5 Metal to metal

Drilling capacity: .075 – .375 Thickness is based on normal, single thickness purlin/girt or multiple material thickness combined for total.

Thread length: 12-24 x 1-1/4": .650

Min projection: 3/16" of threads

below substrate





5/16" AF Hex Washer Head Thread Major Dia: .216 — .210 Thread Minor Dia: .186 — .181

Strength (lbs ult.):

Tensile: 3450
Torsional: 100 in-lbs
Shear: 2420

Pull-out (lbs ult.):

12 ga (.105): 1378

3/16" (.187): Exceeds tensile value 1/4" (.250): Exceeds tensile value

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

22 ga (.030): 1049 24 ga (.024): 861 26 ga (.018): 584





## 12-24 Impax 5

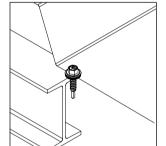
**Metal to metal**Drilling capacity: .075 – .500

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

Thread length: 12-24 x 1-1/4": .520 12-24 x 1-1/2": .770 12-24 x 2": 1.020

Min projection: 3/16" of threads

below substrate





5/16" AF Hex Washer Head Thread Major Dia: .216 — .210 Thread Minor Dia: .186 — .181

Strength (lbs ult.):

Tensile: 3450 Torsional: 100 in-lbs Shear: 2420

Pull-out (lbs ult.):

12 ga (.105): 1378

3/16" (.187): Exceeds tensile value 1/4" (.250): Exceeds tensile value

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

22 ga (.030): 1049 24 ga (.024): 861 26 ga (.018): 584

#### Notes

Dimensions are nominal inches unless noted. Self-drill pull out values (pounds ultimate) are based on 57,000 psi hot rolled steel 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.

#### **Selection**

Length	Part No. Bond Seal (15 mm)	Part No. No Washer
Impax 4.5		
12-24 x 1-1/4"	S4661-EDF	S4661F
Impax 5		
12-24 x 1-1/4"	S4668-EDF	S4668F
12-24 x 1-1/2"	S4741-EDF	S4741F
12-24 x 2"	A2841-EDF	A2841F

#### Installation

Tools: 0 - 2000 rpm screwdriver equipped with depth sensing nosepiece.

### **Options**













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