

Impax™ — Heavy Metal Thickness — Structural Drill Screws

12-24 Impax 4.5 and 5 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.
- Delivers ultimate performance in medium and heavy gage applications.

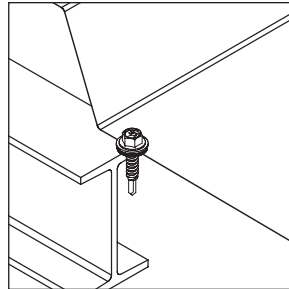
- Designed and engineered to have low driving and thread engagement torque and provide maximum clamp load.
- Corrosion resistant coating system.

Application

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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.):

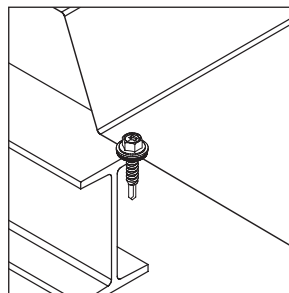
12 ga (.105): 1378
3/16" (.187): Exceeds tensile value
1/4" (.250): Exceeds tensile value

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.

Painted



ZAC®



MAC™

