

Impax™ — 1/4" Drill Screws

1/4-14 and 1/4-20 Impax 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.
- Impax #2 point is designed with a reduced drill point diameter to provide higher pullout in single purlin attachment.
- 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.
- Designed for insulated metal panel application

Application

1/4-14 Impax HWH #2 Point and #3 Point Metal to metal

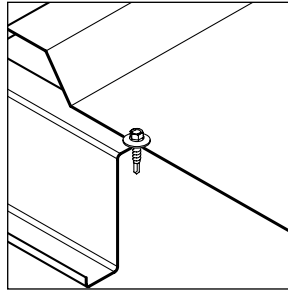
Drilling capacity:

#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 – 5/16" AF Hex Washer Head

#3 – 3/8" 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

14 ga (.075): 1151

16 ga (.060): 687

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

22 ga (.030): 1079

24 ga (.024): 884

26 ga (.018): 616

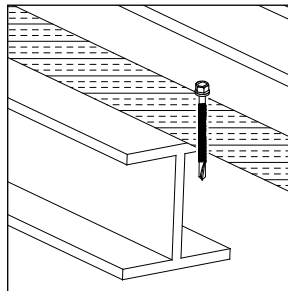
1/4-20 Impax HWH #5 Point Metal to metal

Drilling capacity:

.105 – .500"

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

Min projection: 3/16" of threads below substrate



3/8" AF Hex Washer Head

Thread Major Dia: .249 – .241

Thread Minor Dia: .200 – .184

Strength (lbs ult.):

Tensile: 4200

Torsional: 156 in-lbs

Shear: 2920

Pull-out (lbs ult.):

12 ga (.030): 1532

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

3/8" (.375): Exceeds tensile value

1/2" (.500): Exceeds tensile value

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

22 ga (.030): 1117

24 ga (.024): 988

26 ga (.018): 629

Test values obtained from lab report #5006.13

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.

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Selection

Description	Available Lengths (L)	Example Code				
		Type	Diameter	Length	Head Style	Washer
1/4-20 Impax SD5 with Bond Seal	3", 4", 5", 6", 7", 8"	SD5-	#14x	L-	HW3/8-	GB19/32
1/4-20 Impax SD5 No Washer	3", 4", 5", 6", 7", 8"	SD5-	#14x	L-	HW3/8-	–
1/4-14 Impax SD3 with Bond Seal	3/4", 1", 1-1/4", 1-1/2", 2", 2-1/2", 3", 4"	SD3-	#14x	L-	HW3/8-	GB19/32
1/4-14 Impax SD3 No Washer	3/4", 1", 1-1/4", 1-1/2", 2", 2-1/2", 3", 4"	SD3-	#14x	L-	HW3/8-	–
1/4-14 Impax SD2, 5/16" HWH with Bond Seal	1-1/4", 1-1/2"	SD2-	#14x	L-	HW5/16-	GB19/32
1/4-14 Impax SD2, 5/16" HWH No Washer	1-1/4", 1-1/2"	SD2-	#14x	L-	HW5/16-	–
1/4-14 Impax SD2, 3/8" HWH with Bond Seal	1", 1-1/2"	SD2-	#14x	L-	HW3/8-	GB19/32
1/4-14 Impax SD2, 3/8" HWH No Washer	1", 1-1/2"	SD2-	#14x	L-	HW3/8-	–

Installation

Tools: 0 – 2000 rpm screw gun equipped with depth sensing nose piece.

Options

Painted

