Tapping Screws — Carbon Steel

Self-tapping — Type A. AB, B
For metal to metal

- Carbon steel zinc-plated self-tapping fasteners are the original metal construction fastener that can be used in metal to metal and metal to wood applications.
- Tapping screws are available in long lengths for specialty applications.

Application

#14 Type A Assembled bondSeal Metal to metal

Attachment thickness: .044 – .075

Metal thickness Drill bit size
.021 – .026 1/8 (.125)
.027 – .050 3/16 (.187)

The hole size determines installation performance and pullout strength.

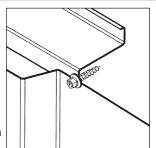
#8 (.199)

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

Min projection: 3/8" of threads

below substrate

.051 - .075





3/8" AF Hex Head

Thread Major Dia: .254 – .248 Thread Minor Dia: .185 – .178

Strength (lbs ult.):

Tensile: 3500 Torsional: 125 in-lbs Shear: 2400

Pull-out (lbs ult.):

14 ga (.075): 1318 16 ga (.060): 958 18 ga (.048): 605

Pull-over (lbs ult.):

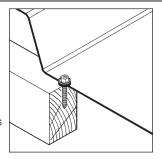
22 ga (.030): 1097 24 ga (.024): 810 26 ga (.018): 564

#14 Type A Milled Point Assembled bondSeal Metal to wood

Self-drilling metal thickness: Sheet .018 – .030

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

Min depth penetration into the wood sub structure: 1"





5/16" AF Hex Washer Head Thread Major Dia: .254 – .248 Thread Minor Dia: .185 – .178

Strength (lbs ult.):

Tensile: 3500 Torsional: 125 in-lbs Shear: 2400 **Pull-out (lbs ult.):**

1" SPF wood: 1013

Pull-over (lbs ult.): 22 ga (.030): 1097 24 ga (.024): 810 26 ga (.018): 564

1/4 Type AB and B Assembled bondSeal Metal to metal

Attachment thickness: .044 - .500

Metal thickness Drill bit size
AB .021 - .026 1/8 (.125)
AB .027 - .050 5/32 (.156)
AB .051 - .075 #8 (.199)
AB .075 - .110 #7 (.201)
B .065 - .085 #8 (.199)
B .085 - .115 #7 (.201)
B .115 - .375 #1 (.228)

B .115 – .375 #1 (.228)
B .375 – .500 #1 or larger, depending on hardness of steel

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

Min projection: 3/8" of threads

below substrate





3/8" AF Hex Head Thread Major Dia: .246 – .240 Thread Minor Dia: .192 – .185

Strength (lbs ult.):

Tensile: 3800 Torsional:142 in-lbs Shear: 2560

Pull-out (lbs ult.): 12 ga (.105): 2185

14 ga (.075): 1277 16 ga (.060): 879

Pull-over (lbs ult.):

22 ga (.030): 1094 24 ga (.024): 866 26 ga (.018): 600

Notes

Dimensions are nominal inches unless noted. Pull-out values (pounds ultimate) are based on 50,000 psi hot rolled 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.

Continued on following page

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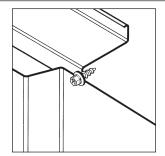
Self-tapping — Type A, AB, B
For metal to metal

Application

#17 Type AB Strip-out Repair Assembled bondSeal Metal to metal

Attachment thickness: .036 – .060 Min projection: 3/8" of threads

below substrate





3/8" AF Hex Head

Thread Major Dia: .295 – .285 Thread Minor Dia: .220 – .214

Strength (lbs ult.):

Tensile: 5136 Torsional: 220 in-lbs Shear: 4830

Pull-out (lbs ult.):

12 ga (.105): 1668 14 ga (.075): 986

Notes

Dimensions are nominal inches unless noted. Pull-out values (pounds ultimate) are based on 50,000 psi hot rolled 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.

Selection		ExampleCode				
		TA-	#14x	1-1/2-	H3/8-	GB19/32
Description	Available Lengths (L)	Type	Diameter	Length	Head Style	Washer
#14 Type A bondSeal	3/4", 1", 1-1/4", 1-1/2", 2", 2-1/2", 3", 3-1/2", 4", 5", 6"	TA-	#14x	L-	H3/8-	GB19/32
#14 Type A Milled Point bondSeal	1", 1-1/2", 2", 2-1/2", 3"	TAMP-	#14x	L-	HW5/16-	GB19/32
1/4-14 Type AB bondSeal	3/4", 1", 1-1/4", 1-1/2"	TAB-	#14x	L-	H3/8-	GB19/32
1/4-14 Type B bondSeal	3/4", 1", 1-1/2", 2", 2-1/2", 3", 3-1/2", 4", 5", 6"	TB-	#14x	L-	H3/8-	GB19/32
#17 Type AB bondSeal	3/4", 1", 1-1/2"	TAB-	#17x	L-	H3/8-	GB19/32

Installation

Tools: 0 – 1000 rpm screw gun equipped with depth sensing nose piece.

Use of impact guns or hammer drills is not recommended.

Options





