

woodGrip™ Capped Fasteners

woodZAC® and woodMAC™
For metal to wood

woodZAC has all the performance features of standard woodGrip fasteners, plus a zinc alloy cap that can never red rust:

- 5/16" AF high Hex Washer Head for driving stability and a sharp point for quick installation.
- Assembled with sealing washers for weather tight seal.

woodMAC HiLo has all the performance features of standard woodGrips:

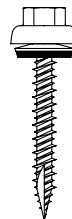
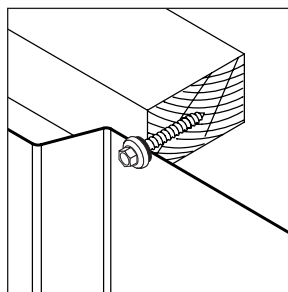
- 1/4" AF 300 series stainless capped HWH for a low profile head appearance that can never rust.
- Assembled with EPDM sealing washers for weather tight seal

Application

10–15 woodZAC HiLo HWH Mill Point

Assembled aluminum bondSeal Metal to wood

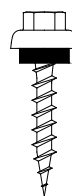
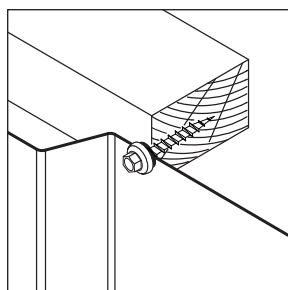
Drilling capacity: 24 ga (.024)
Self-drills through the metal panel and taps into wood substrate.
Min penetration in wood substrates should be no less than 1"



5/16" AF Zinc Alloy Capped Hex Washer Head
Thread Major Dia: .199 - .191
Thread Minor Dia: .133 - .127
Strength (lbs ult.):
Tensile: 1751
Torsional: 60 in-lbs min.
Shear: 1223

12–8 woodZAC XG HWH Sharp Point
Assembled EPDM washer Metal to Wood

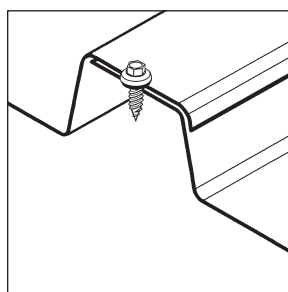
Drilling capacity: 24 ga (.024)
Self-drills through the metal panel and taps into wood substrate.
Min penetration in wood substrates should be no less than 1"



5/16" AF Zinc Alloy Capped Hex Washer Head
Thread Major Dia: .215 - .209
Thread Minor Dia: .133 - .127
Strength (lbs ult.):
Tensile: 1751
Torsional: 60 in-lbs min.
Shear: 1223

12 x 3/4" woodZAC LAP Sharp Point
Assembled EPDM washer Panel to panel side lap

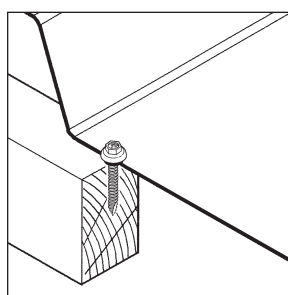
Panel to panel side lap, end lap and other stitch applications



5/16" AF Zinc Alloy Capped Hex Washer Head
Thread Major Dia: .215 - .208
Thread Minor Dia: .164 - .157
Strength (lbs ult.):
Tensile: 2100
Torsional: 92 in-lbs min.
Shear: 1800

1/4-14 ZAC Type AB Milled Point
Assembled EPDM washer Metal to metal 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"



3/8" AF Zinc Alloy Capped Hex Washer Head
Thread Major Dia: .246 - .240
Thread Minor Dia: .192 - .185
Strength (lbs ult.):
Tensile: 3800
Torsional: 142 in-lbs
Shear: 2500

Notes

Dimensions are nominal inches unless noted. The specific job conditions should be considered and appropriate safety factors applied when specifying the proper fasteners.

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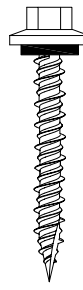
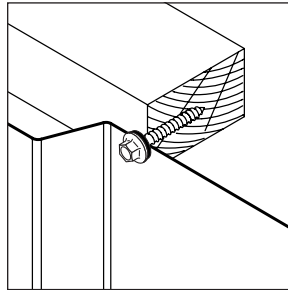
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Application

**10–15 woodMAC
HWH Mill Point
Assembled EPDM washer
Metal to wood**

Drilling capacity: 24 ga (.024)
Self-drills through the metal panel
and taps into wood substrate.
Min penetration in wood substrates
should be no less than 1"



1/4" Cupped Stainless Capped
Thread Major Dia: .199 – .191
Thread Minor Dia: .133 – .127

Strength (lbs ult.):

Tensile: 1751
Torsional: 60 in-lbs min.
Shear: 1223

Notes

Dimensions are nominal inches unless noted. The specific job conditions should be considered and appropriate safety factors applied when specifying the proper fasteners.

woodGrip and woodZAC pull out strength values may vary from tabulated loads depending upon specific wood density variations. 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.

Fasteners installed in less than 1" of solid wood may have an increased potential for sealing or connection failure over time. This may be due to the fasteners being stripped out during installation and/or due to the lack of adequate wood fiber material to hold the fastener in place during thermal movement cycles or other forces which may be exerted upon the connection.

Test values obtained from lab reports 4899.12, 4954.12, 4381.07

Performance Pounds Ultimate

Description		Pull-out (lbs ult.) Wood: Spruce, Pine, Fir	Pull-over
#10 woodZAC HiLo Aluminum bondSeal	1-1/2" Penetration	820	29 ga: 577
	1" Penetration	524	26 ga: 637
			24 ga: 800
#10 woodMAC HiLo EPDM Washer	1-1/2" Penetration	820	29 ga: 380
	1" Penetration	524	26 ga: 500
			24 ga: 710
1/4-14 ZAC Type AB EPDM Washer	1" Penetration	1013	26 ga: 600
			24 ga: 866
			22 ga: 1094

Performance Pounds Ultimate

Description		Pull-out (lbs ult.)	Strip Out* (in lbs)	Pull-over
#12 woodZAC XG EPDM Washer	SPF 1" Penetration	583	68	26 ga (70 ksi): 637
	SPF 1-1/2" Penetration	1029	79	29 ga (110 ksi): 577
	1 x 4" Pine	590	51	24 ga (70 ksi): 800
	3/4" Plywood	583	65	–
	5/8" Plywood	368	42	–
	1/2" Plywood	357	53	–
	23/32" OSB	412	76	–
	19/32" OSB	336	64	–
	15/32" OSB	225	41	–

* Strip-out values were determined by the dynamic strip-out test, wherein fasteners were driven through a 24 gage panel into the applicable substrate at 2500 rpm until stripout occurred. The strip-out values listed above represent the average maximum strip-out measured by the digital data acquisition system when the fastener was driven into the given substrate.

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Selection

		Example Code				
		ZWHLMP-	#10x	1-1/2-	CHW5/16-	AB1/2
Description	Available Lengths (L)	Type	Diameter	Length	Head Style	Washer
#10-15 woodZAC HiLo bondSeal	1", 1-1/2", 2", 2-1/2", 3"	ZWHLMP-	#10x	L-	CHW5/16-	AB1/2
#12-8 woodZAC XG EPDM Washer	1", 1-1/2", 2", 2-1/2", 3"	ZWXG-	#12x	L-	CHW5/16-	N
#12 woodZAC Lap EPDM Washer	3/4"	ZSDL-	#12x	L-	CHW5/16-	N
#10-15 woodMAC HiLo EPDM Washer	1", 1-1/2", 2", 2-1/2", 3"	MWHLMP-	#10x	L-	HW1/4-	N
1/4-14 ZAC Type 17-AB EPDM Washer	1", 1-1/4", 1-1/2", 2", 2-1/2"	ZTABMP-	#14x	L-	CHW3/8-	N

Installation

Tools: 0 – 2500 rpm screw gun equipped with depth sensing nose piece.

Use of impact guns or hammer drills is not recommended.

Options

vistaCoat®



Painted



The details stated are results of tests and/or calculations and therefore are non-binding and do not represent guaranties or warranted characteristics for not specified applications.
All calculations therefore have to be checked and approved by the responsible planner ahead of execution. The user is responsible to assure compliance with all applicable laws and regulations.