

Clip Fasteners

Clip attachment fasteners

For metal to metal, metal to wood

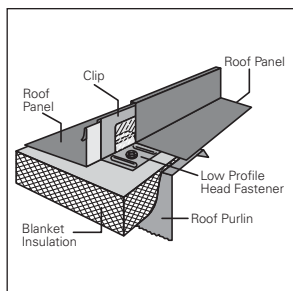
- Designed with unique head styles, drill point configurations and material types to meet performance requirements to attach standing seam roof clips.
- Engineered profile features preventing panel damage from fastener head contact.
- Engineered installation torque drive control for uniform installation performance.

Application

**#10 Type A: Pancake Head 2/2 Phillips Square Drive**  
Carbon Steel, Zinc Plated  
Metal to wood

**#10 Type A: Pancake Head Phillips Drive**  
300 Series Stainless Steel  
Metal to wood

**#10 Self-Drill: Pancake Head 2/2 Phillips Square Drive**  
Carbon Steel, Zinc Plated  
Metal to metal  
Min projection: 3/8" of threads below substrate



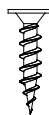
Head Height: .080 – .068  
Head Dia: .447 – .423  
Thread Major Dia: .194 – .188  
Thread Minor Dia: .133 – .126

**Strength (lbs ult.): Carbon Stainless**  
Tensile: 1825 1653  
Torsional: 48 in-lbs 50 in-lbs  
Shear: 1535 1587

**#10 Type A, Pull-out (lbs ult.):**  
SPF wood:  
1" penetration: 544  
1-1/2" penetration: 995

**#10 Self Drill, Pull-out (lbs ult.):**  
12 ga (.105): 1782  
14 ga (.075): 1072  
16 ga (.060): 782

**#12–8 XG Low Profile Head 2/2 Phillips Square Drive**  
Carbon Steel, Zinc Plated  
Metal to wood

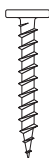


Head Height: .040 – .030  
Head Dia: .447 – .423  
Thread Major Dia: .215 – .209  
Thread Minor Dia: .133 – .127

**Strength (lbs ult.):**  
Tensile: 2183  
Torsional: 60 in-lbs  
Shear: 1946

**Performance (lbs ult.): Pull-out**  
SPF 1" Penetration 583  
SPF 1-1/2" Penetration 1029  
1x4" Pine 590  
3/4" Plywood 583  
5/8" Plywood 368  
1/2" Plywood 357  
23/32" OSB 412  
19/32" OSB 336  
15/32" OSB 225

**#12–8 XG Pancake Head 2/2 Phillips Square Drive**  
Carbon Steel, Zinc Plated  
Metal to wood



Head Height: .080 – .068  
Head Dia: .447 – .423  
Thread Major Dia: .215 – .209  
Thread Minor Dia: .133 – .127

**Strength (lbs ult.):**  
Tensile: 2183  
Torsional: 60 in-lbs  
Shear: 1946

**Performance (lbs ult.): Pull-out**  
SPF 1" Penetration 583  
SPF 1-1/2" Penetration 1029  
1x4" Pine 590  
3/4" Plywood 583  
5/8" Plywood 368  
1/2" Plywood 357  
23/32" OSB 412  
19/32" OSB 336  
15/32" OSB 225

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Application

**#12 Type A: Pancake Head**  
**2/2 Phillips Square Drive**  
**Carbon Steel , Zinc Plated**  
**Metal to wood**



Head Height: .080 – .068  
Head Dia: .447 – .423  
Thread Major Dia: .221 – .215  
Thread Minor Dia: .162 – .155  
**Strength (lbs ult.):**  
Tensile: 1940  
Torsional: 90 in-lbs  
Shear: 1805  
**Pull-out (lbs ult.):**  
SPF wood:  
1" penetration: 622

**#12 Self-Drill: Pancake Head SD2**  
**2/2 Phillips Square Drive**  
**Carbon Steel , Zinc Plated**  
**Metal to metal**

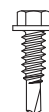
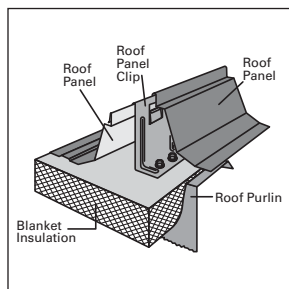
Drilling capacity: .035-.210  
Min projection: 3/8" of threads below substrate.



Head Height: .090 – .078  
Head Dia: .447 – .423  
Thread Major Dia: .215 – .209  
Thread Minor Dia: .164 – .157  
**Strength (lbs ult.):**  
Tensile: 2900  
Torsional: 92 in-lbs  
Shear: 2050  
**Pull-out (lbs ult.):**  
12 ga (.105): 1539  
14 ga (.075): 1010  
16 ga (.060): 724

**1/4 -14 SD2 HWH**

Drilling capacity (#2 point): .050 – .150  
Attachment thickness:  
Thickness is based on normal, single thickness purlin/girt or multiple material thickness combined for total.  
Min projection: 3/8" of threads below substrate



5/16" AF Hex Washer Head  
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

**12-24 SD5: Pancake Head**  
**2/2 Phillips Square Drive**  
**Carbon Steel, Zinc Plated**  
**Metal to metal**

Drilling capacity: .075 – .500  
Attachment thickness:  
Thickness is based on normal, single thickness purlin/girt or multiple material thickness combined for total.  
Min projection: 3/8" of threads below substrate



Head Height: .090 – .078  
Head Dia: .447 – .423  
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

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.  
**Fasteners installed in less than 1" of solid wood may have an increased potential for a 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 when forces are exerted upon the connection.**

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## Selection

Description	Available Lengths (L)	Example Code					
		CSTA-	S3-	#10x	1"	PC-	PH2
		Type	Material	Diameter	Length	Head Style	Drive
#10 Type A Pancake, Carbon Steel	1", 1-1/2", 2"	CSTA-	–	#10x	L-	PC-	PSQ
#10 Type A Pancake, 304 Stainless Steel	1", 2"	CSTA-	S3-	#10x	L-	PC-	PH2
#10-16 SD2 Pancake	1", 1-1/2", 2"	CSSD2-	–	#10x	L-	PC-	PSQ
#12-8 XG Low Profile	1", 1-1/2", 2"	CSXG-	–	#12x	L-	WF-	PSQ
#12-8 XG Pancake	1", 1-1/2", 2"	CSXG-	–	#12x	L-	PC-	PSQ
#12 Type A Pancake	1"	CSTA-	–	#12x	L-	PC-	PSQ
#12 SD2 Pancake	1"	CSSD2-	–	#12x	L-	PC-	PSQ
#12-24 SD5 Pancake	1-1/2"	CSSD5-	–	#12x	L-	PC-	PSQ
1/4-14 SD2, 5/16 AF HWH	1-1/4", 1-1/2"	SD2-	–	#14x	L-	HW5/16	–
1/4-14 SD2, 3/8 AF HWH	1"	SD2-	–	#14x	L-	HW3/8	–

## Installation

Tools: Wood application: 0-2500 rpm screw gun equipped with depth sensing nose piece.

Metal application: 0-2000 rpm screw gun equipped with depth sensing nose piece.

**Use of impact guns or hammer drills is not recommended.**