



# EVALUATION REPORT

Number: 805

Originally Issued: 10/10/2023

Revised: 10/28/2024

Valid Through: 10/31/2025

**S-5! METAL ROOF INNOVATIONS, LTD.**  
**12730 Black Forest Rd**  
**Colorado Springs, CO 80908**  
**(888)-825-3432**  
[www.S-5.com](http://www.S-5.com)

## COLORGARD® METAL ROOF SNOW GUARD AND S-5! STANDING SEAM CLAMPS

**CSI Division and Section:**  
**05 00 00 METALS**  
**05 05 23 Metal Fastenings**

### 1.0 RECOGNITION

The S-5! ColorGard® system recognized in this report has been evaluated for use as a roof mounted snow retention system. The S-5! Standing Seam clamps have been evaluated for attachment methods to standing seam roofs. The structural performance properties of the ColorGard® snow retention system and S-5! Standing Seam Clamps comply with the intent of the provisions of the following codes and regulations:

- 2021, 2018, 2015, and 2012 International Building Code® (IBC)
- 2021, 2018, 2015, and 2012 International Residential Code® (IRC)
- 2023 Florida Building Code, Building (FBC, Building) – Supplement attached
- 2023 Florida Building Code, Residential (FBC, Residential) – Supplement attached

### 2.0 LIMITATIONS

Use of the S-5! ColorGard® system and S-5! Standing Seam clamps recognized in this report is subject to the following limitations:

**2.1** The ColorGard® system shall be installed in accordance with the applicable code, the manufacturer's published installation instructions, and this report. Where there is a conflict, the most restrictive requirements shall govern.

**2.2** The registered design professional shall prepare calculations and drawings when required by the statutes of the jurisdiction in which the project is to be constructed.

**2.3** The ColorGard® system and standing seam clamps shall be structurally compatible with the standing seam metal roof. Compatibility shall be determined by an independent engineering review. Galvanic compatibility shall be

determined based on engineering judgment, the snow retention system and the standing seam metal roof system, the building configuration, and in-service environmental conditions. The independent engineering review shall include, but is not limited to, verification of the panel material properties specified and the panel material properties values found in this report for compatibility. Schematics and drawings for S-5! products are the responsibility of the design engineer and shall be presented to the building official for approval.

**2.4** System components, including attachment fasteners, shall be fabricated from corrosion-resistant metals having a service life expectancy at least equivalent to the roof itself.

**2.5** Linear thermal expansion of the snow retention system shall be considered and accommodated by system design. Thermal cycling of the metal roof system shall not be impeded by the snow retention system attachment.

**2.6** The performance of the S-5! standing seam clamps when used to install equipment which introduces vibration is outside the scope of this report.

**2.7** The ColorGard® system and standing seams clamps recognized in this report are represented by S-5! in Colorado Springs, Colorado, and produced by S-5! manufacturing facility in Iowa Park, TX.

### 3.0 PRODUCT USE

**3.1 General:** The S-5! ColorGard® system is used to retain or restrain the movement of snow and ice, also known as snow-guard system.

**3.2 Design:** The S-5! ColorGard® system and standing seam clamps allowable stress design (ASD) capacities are indicated in Tables 1 and 2 of this report. Table 1 details the allowable loads for the seam clamps which attach to standing seam roof. The clamps may also be used to attach to cross members in the ColorGard® system. Table 2 details the allowable loads for the VersaClip™. Tables 3 through 8 of this report details the allowable loads for the cross members for various lengths, span conditions, and profiles. The system design capacity shall be limited to the least design capacity of the specified cross member, clamps, and VersaClip™, as applicable to the design and installation. The snow rail values found in this report have been evaluated for roof snow loads of 20 psf (0.96 kPa) to 140 psf (6.7 kPa) and roof slopes of 0 degrees to 45 degrees.

ColorGard® Crossmembers and their splices are designed for a deflection of L/60. ColorGard® Crossmember splices, with crossmembers, utilize a minimum of two clamps (single span), and within a distance of L/4 from any attachment

The product described in this Uniform Evaluation Service (UES) Report has been evaluated as an alternative material, design or method of construction in order to satisfy and comply with the intent of the provision of the code, as noted in this report, and for at least equivalence to that prescribed in the code in quality, strength, effectiveness, fire resistance, durability and safety, as applicable, in accordance with Section 104.2.3 of the 2024 IBC and Section 104.11 of previous editions. This document shall only be reproduced in its entirety.

Copyright © 2024 by International Association of Plumbing and Mechanical Officials. All rights reserved. Printed in the United States. Ph: 1-877-4IESRPT • Fax: 909.472.4171  
web: [www.uniform-es.org](http://www.uniform-es.org) • 4755 East Philadelphia Street, Ontario, California 91761-2816 – USA



# EVALUATION REPORT

Number: 805

Originally Issued: 10/10/2023

Revised: 10/28/2024

Valid Through: 10/31/2025

where L is the crossmember span. ColorGard® Crossmember splices, with crossmembers, utilizes a minimum of three (3) clamps (double span), shall not be installed within a distance of L/8 from the center roof attachment and within a distance of L/4 from any attachment where L is the crossmember span. ColorGard® Crossmember splices, with crossmembers, utilizes a minimum of four (4) or more clamps (three (3) or more span), shall not be installed within a distance of L/8 or L/4 from the center roof attachment and within a distance of L/6 from any end attachment where L is the crossmember span. A splice may be placed at any location in the span when the crossmember is continuous over two attachments on either side of the splice. ColorGard® Crossmembers may have a maximum cantilever length of 8 inches (203 mm).

Design load forces imposed on metal roof standing seam panels and their connections are assumed to be accounted for in the structural design and attachment of the roof panels. Snow retention systems shall not be used where the Roof Slope Factor, Cs, for unobstructed slippery surfaces was/is used in roof structure design in accordance with Section 7.4 of ASCE 7.

Standing seam clamps described in this report may be used in applications which require the attachment of nonstructural components when the design is in accordance with this report. Fasteners used to attach nonstructural components to the clamps shall have a minimum embedment of 0.375 inches and designed in accordance with Section 2.2 and 2.3 of this report.

## 3.3 Installation:

**3.3.1 S-5! ColorGard® Crossmembers:** The S-5! ColorGard® Crossmembers shall be attached to the clamps with a minimum of 13 ft-lbs (18 Nm). Where splices are required, the dimple in the splice piece allows for a 0.175 inch (4.5 mm) space between adjoining sections to allow for linear thermal expansion of the cross members.

**3.3.2 Clamps:** Clamps' set screws shall be installed to the torque specified in Table 1 of this report. The calibration certificate of the torque wrench installing clamp set screws shall be available at the job site for review. Clamps used in the ColorGard® system shall not exceed a spacing of 32 inches (813 mm).

## 4.0 PRODUCT DESCRIPTION

**4.1 ColorGard® System:** The ColorGard® system is manufactured from 6000 series aluminum. The ColorGard® Crossmembers are manufactured from 6005A T61 Aluminum with a minimum yield strength of 35 ksi (6.89 mPa). The hardware is manufactured from A2-70 stainless steel. The system is illustrated in Figure 1 of this report.

**4.2 ColorGard® Snow Rail Crossmembers:** The ColorGard® Crossmembers are manufactured from 6005A T61 Aluminum with a minimum yield strength of 35 ksi. The

crossmembers come in nominal 92 inch (2,337 mm) long sections. ColorGard® Crossmembers are illustrated in Figure 2 of this report. The cross members may be inter-connected through the use of a splice.

**4.2.1 Punched ColorGard® Snow Rail Crossmember:** The Punched ColorGard® Crossmember is slotted every 4 inches (102 mm) on center for roof seams spaced divisible by 4 inches (102 mm). The slotted configuration is attached directly to S-5! Clamps using the M8 x 17 mm (0.67 inch) AISI 304 bolt provided with the clamps.

**4.2.2 Unpunched ColorGard® Snow Rail Crossmember:** The Unpunched ColorGard® Crossmember can be used with any roof seams spaced width which is not divisible by 4 inches (102 mm) or if the roof seam is untrue. The unpunched roof seam utilizes the VersaClip™ and M8 x 17 mm (0.67 inch) AISI 304 bolt provided with the clamps to attach the crossmember to a S-5! Clamp.

**4.3 VersaClip™:** The VersaClip™ slides onto the Unpunched ColorGard® Crossmember and is used to attach the clamp to crossmember. The VersaClip™ is manufactured from 6005a T61 Aluminum and utilizes the clamp bolt for attachment. The VersaClip™ is illustrated in Figure 3 of this report.

**4.4 S-5! Clamps and Mini Clamps:** The S-5! clamps are manufactured from 6061 T6 Aluminum with a minimum yield strength of 35 ksi (241 Mpa) The clamps utilize a set (2) screws to attach the clamp to the standing seam of metal roofs. Clamps are illustrated in Figure 4 of this report.

**4.4.1 S-5-E and S-5-E Mini Clamps:** The S-5-E and S-5-E Mini are the S-5! Clamps used on double folded standing seam metal roof profile popular in Europe and other countries. The "E" in the product name stands for "European".

**4.4.2 S-5-H90 and S-5-H90 Mini Clamps:** The S-5-H90 and S-5-H90 are the S-5! Clamps used on standing seam panels with single folded seams having a horizontal seam dimension greater than 0.65 inches (16.5 mm). The "H" in the product name stands for "horizontal seam".

**4.4.3 S-5-N Clamp:** The S-5-N is the S-5! Clamp used on standing seams panels with popular 1-inch (25 mm) nail strip profiles. The "N" in the product name stands for "nail strip".

**4.4.4 S-5-N1.5 Clamp:** The S-5-N1.5 is the S-5! Clamp used on standing seams panels with popular 1½-inches (38mm) nail strip profiles. The "N" in the product name stands for "nail strip".

**4.4.5 S-5-S and S-5-S Mini Clamps:** The S-5-S and S-5-S Mini are the S-5! Clamps designed for vertical snap together profiles with vertical dimensions of 1½ -inches (38 mm) and 1¾ inches (44 mm). This clamp can be used for traditional single-folded (angle-seam) horizontal profiles of 1 inch



# EVALUATION REPORT

Number: 805

Originally Issued: 10/10/2023

Revised: 10/28/2024

Valid Through: 10/31/2025

(25mm) and 1½-inches (38 mm) seam height dimensions. The “S” in the product name stands for “snap-lock”.

**4.4.6 S-5-T and S-5-T Mini Clamps:** The S-5-T and S-5-T Mini are the S-5! Clamps specifically designed for profiles featuring a “T” shaped seam configuration. The two-piece design allows it to be installed anywhere along the seam.

**4.4.7 S-5-V and S-5-V Mini Clamps:** The S-5-V and the S-5-V Mini are the S-5! Clamps designed for most machine-folded seams in the vertical orientation. The “V” in the product name stands for “vertical”.

**4.4.8 S-5-Z and S-5-Z Mini Clamps:** The S-5-Z and S-5-Z Mini are the S-5! Clamps designed for round “bulb” seam configurations. The “Z” stands for “Zip Rib”.

**4.5 Accessories:** Optional accessories such as the SnoClip™ and SnapClip™ can be used to retard migration of snow beneath the crossmembers. The performance and interaction between the clips and crossmembers are outside the scope of this report.

## 5.0 IDENTIFICATION

The ColorGard® system and S-5! Standing Seam Clamps are identified by the (S-5!) name and trademark (S-5!), product name, and evaluation report number (ER-805). The IAPMO Uniform Evaluation Service Mark of Conformity may also be used as shown below:



IAPMO UES ER-805

## 6.0 SUBSTANTIATING DATA

**6.1** Test reports are from laboratories in compliance with ISO/IEC 17025.

**6.2** Data in accordance with IAPMO UES Evaluation Criteria for Standing Seam Metal Roof-Mounted Rail-Type Snow Retention Systems (EC-29), Approved November 2018.

**6.3** Engineering Analysis.

**6.4** Load testing for standing seam clamps.

## 7.0 STATEMENT OF RECOGNITION

This evaluation report describes the results of research completed by IAPMO Uniform Evaluation Service on the S-5! ColorGard® and S-5! Standing Seam Clamps to assess conformance to the codes shown in Section 1.0 of this report and serves as documentation of the product certification. Products are manufactured at locations noted in Section 2.7 of this report under a quality control program with periodic inspection under the supervision of IAPMO UES.

For additional information about this evaluation report please visit  
[www.uniform-es.org](http://www.uniform-es.org) or email us at [info@uniform-es.org](mailto:info@uniform-es.org)



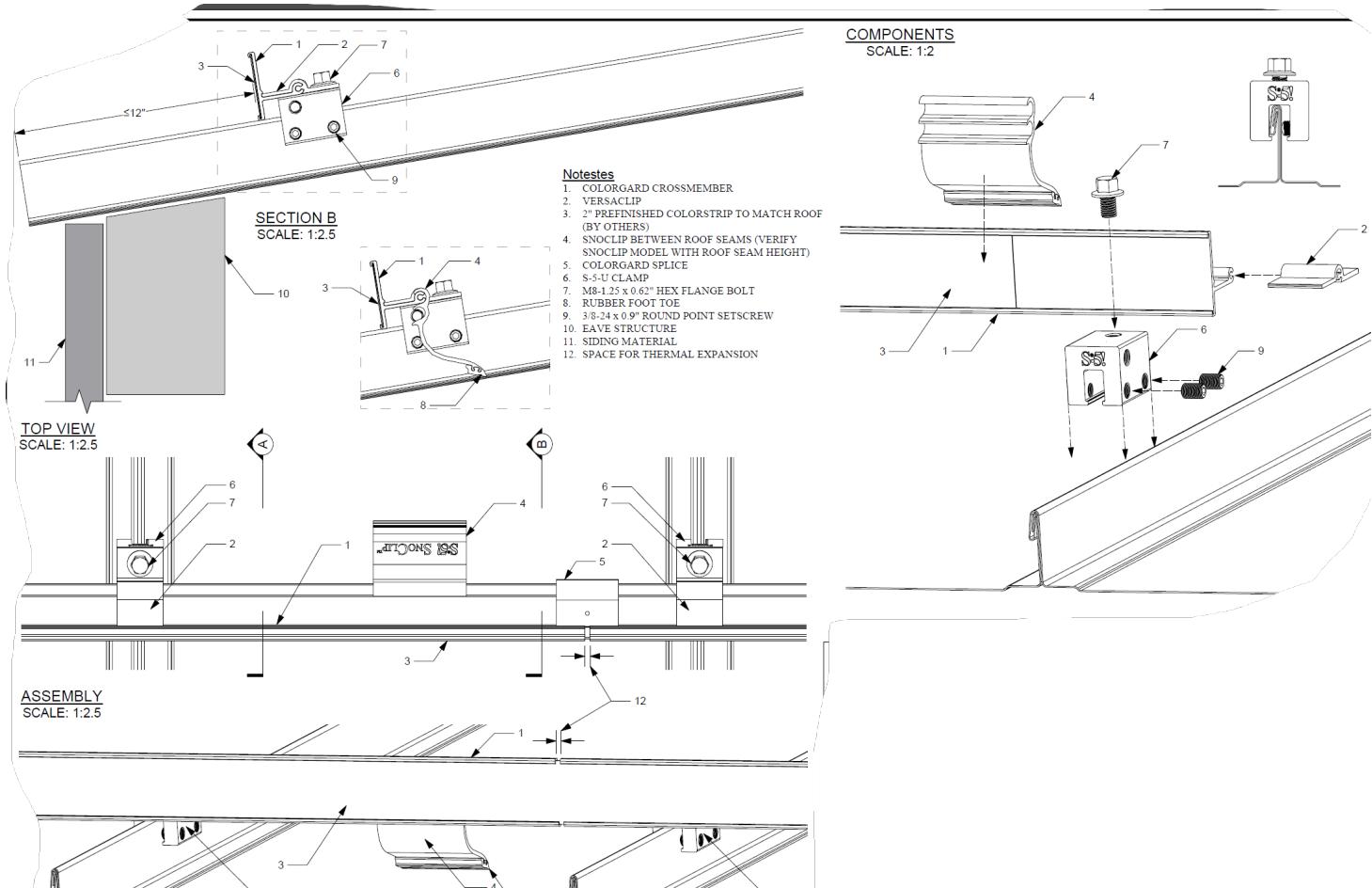
# EVALUATION REPORT

Number: 805

Originally Issued: 10/10/2023

Revised: 10/28/2024

Valid Through: 10/31/2025



COMPONENTS  
SCALE: 1:2

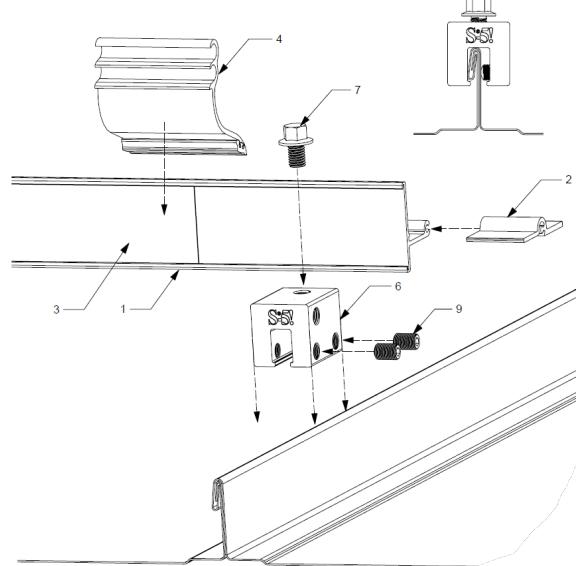
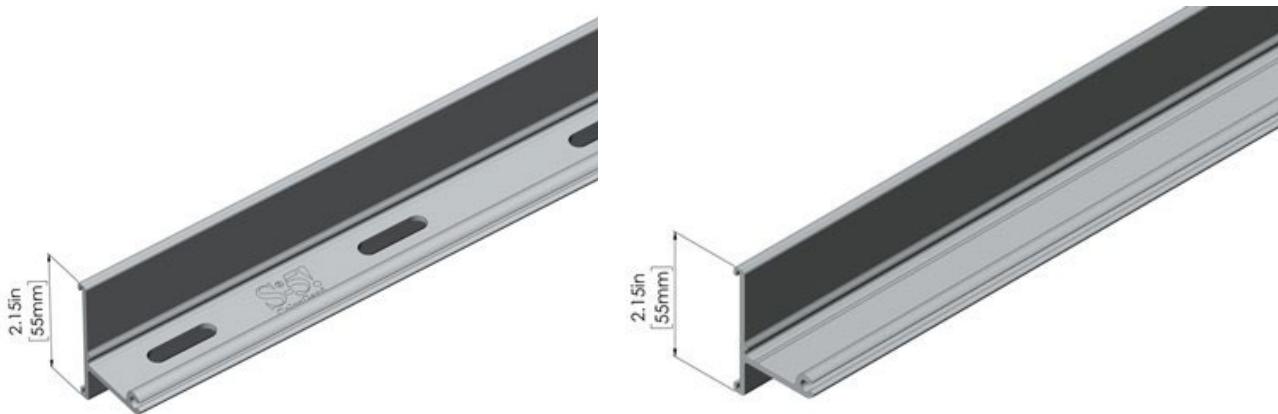


FIGURE 1 – General Assembly of ColorGard®



Punched

Unpunched

FIGURE 2 – ColorGard® Crossmembers



# EVALUATION REPORT

Number: 805

Originally Issued: 10/10/2023

Revised: 10/28/2024

Valid Through: 10/31/2025



FIGURE 3 – VersaClip™

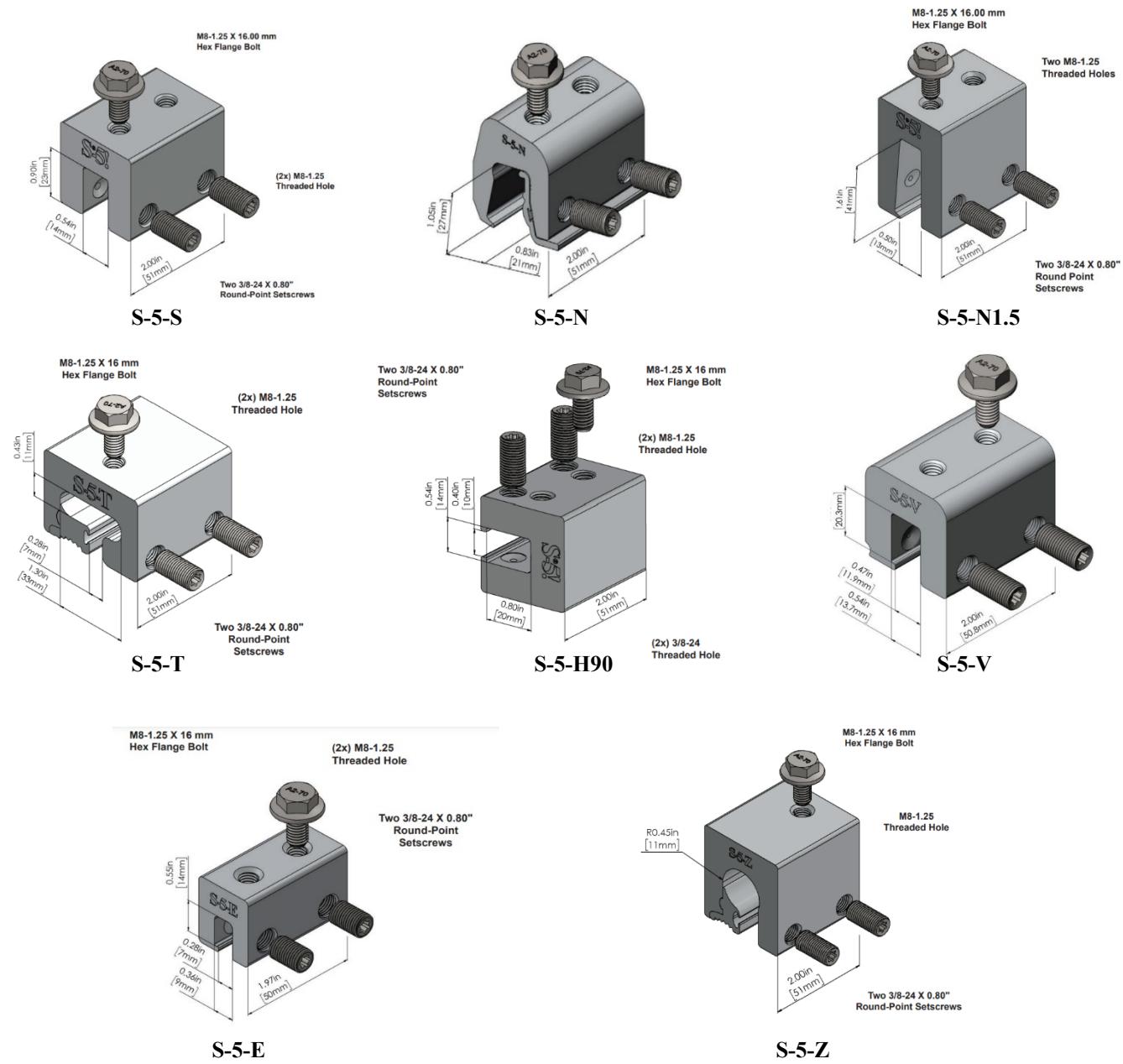


FIGURE 4 – S-5! Clamps



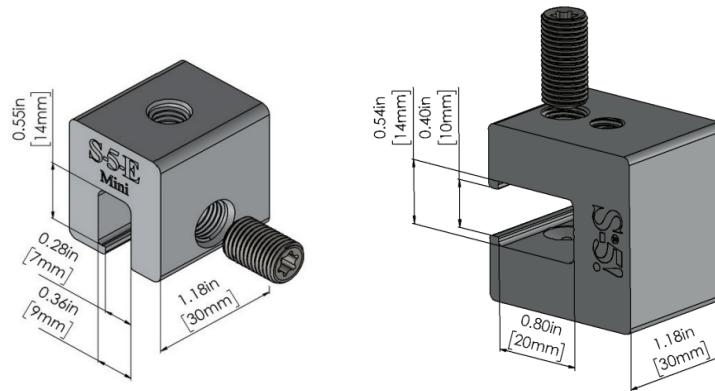
# EVALUATION REPORT

Number: 805

Originally Issued: 10/10/2023

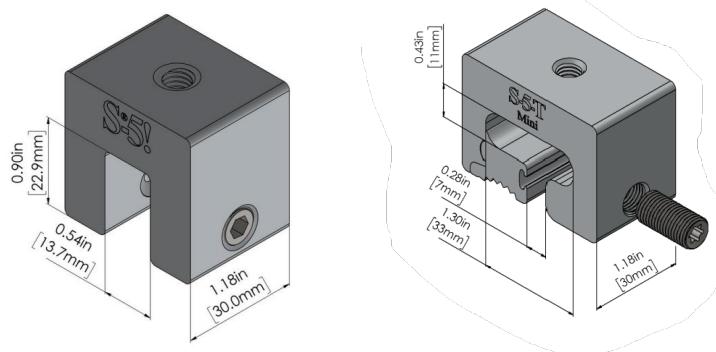
Revised: 10/28/2024

Valid Through: 10/31/2025



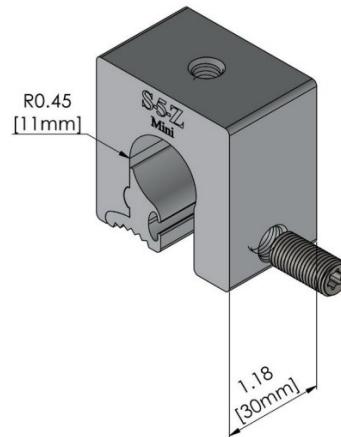
S-5-E Mini

S-5-H90 Mini



S-5-S Mini

S-5-T Mini



S-5-V Mini

**FIGURE 4 – S-5! Clamps (continued)**



# EVALUATION REPORT

Number: 805

Originally Issued: 10/10/2023

Revised: 10/28/2024

Valid Through: 10/31/2025

**TABLE 1 - S-5! Seam Clamps Allowable Loads**  
(continued on next page)

S-5! Clamp	Standing Seam Metal Roof Information			Uncoated Base Metal Thickness (inches)	Installed Torque (in-lb)	Allowable Connection Capacity Parallel to Seam (lbs)	Allowable Connection Capacity Perpendicular to Seams- Uplift (lbs)
	Roof Manufacturer	Manufacturer Product Designation	Yield Strength (ksi)				
S-5-S	Bridger Steel	Tru Snap 24 Ga	57.1	0.0258	130-150	741	560
S-5-S		Tru Snap 26 Ga	45.8	0.0203	130-150	637	-
S-5-N		Bridger Steel, SL-16 24Ga	56.3	0.0259	130-150	685	-
S-5-N		Bridger Steel, SL-16 26Ga	45.1	0.0207	130-150	578	-
S-5-N 1.5	The Bryer Company	Truloc 24 Ga	45.8	0.023	130-150	480	-
S-5-N 1.5		Truloc 26 Ga	53.5	0.0174	130-150	407	-
S-5-N		Proseam 24 Ga	53.5	0.0216	130-150	626	-
S-5-N		Proseam 26 Ga	56.8	0.017	130-150	445	-
S-5-T	Garland	R-mer Span 0.04 inch Aluminum	25.9	0.04	130-150	1125	862
S-5-T		R-Mer Span 24 Ga G90 PVDF	52.3	0.024	130-150	845	-
S-5-H90	MBCI	BattenLok HS 22ga Steel w AZ55 and Galvalume Plus	54.1	0.0304	160-180	953	1436
S-5-H90		BattenLok HS 24ga Steel w AZ55 and Galvalume Plus	62.3	0.024	130-150	866	1427
S-5-V		UltraDeck 24Ga Steel w AZ55 and Galvalume Plus	54.8	0.024	130-150	808	915
S-5-V		UltraDeck 22Ga Steel w AZ55 and Galvalume Plus	54	0.03	160-180	788	-
S-5-V		SuperLok 22ga Steel w AZ55 and Galvalume Plus	54	0.03	160-180	1151	1692
S-5-V		SuperLok 24ga Steel w AZ55 and Galvalume Plus	63.2	0.024	130-150	916	-
S-5-V		Double-Lok 22ga Steel w AZ55 and Galvalume Plus	55.2	0.03	160-180	1324	1261
S-5-V		Double-Lok 24ga Steel w AZ55 and Galvalume Plus	60.1	0.024	130-150	1173	-
S-5-S		LokSeam 22Ga W/AZ55	53.1	0.03	160-180	1205	1081
S-5-S		LokSeam 24Ga W/AZ55	54.5	0.024	130-150	910	941
S-5-N	McElroy Metals	Meridian 26 ga	50.2	0.0207	130-150	495	-
S-5-N		Meridian 24 ga	58	0.0253	130-150	578	-
S-5-E	Merchant and Evans	Ziplock 1.5" 0.04 Aluminum	20	0.04	130-150	720	840
S-5-E		Ziplock 1.5" 0.032 Aluminum	25	0.0328	130-150	647	-
S-5-V		Ziplock 2" 22 Ga	52.9	0.0318	160-180	1132	1934
S-5-V		Ziplock 2" 24Ga	53.6	0.0245	130-150	996	1254
S-5-V		Ziplock 2" 0.04 Aluminum	20.4	0.0397	130-150	872	-
S-5-V		Ziplock 2" 0.032 Aluminum	25	0.0328	130-150	696	-
S-5-Z		Zip Rip 20 Ga steel	50.6	0.0393	160-180	1249	1680
S-5-Z		Zip Rip 22 Ga steel PVDF	51.4	0.0333	160-180	1161	1382
S-5-Z		Zip Rip 24 Ga Galvalume Steel	51.9	0.0248	130-150	948	921
S-5-Z		Zip Rip 0.050 AI	31.2	0.0495	130-150	1243	1298
S-5-Z		Zip Rip 0.04 AI	30.4	0.0413	130-150	1079	1093
S-5-Z		Zip Rip 0.032 AI	29.7	0.0321	130-150	-	897
S-5-N	New Tech Machinery Corp.	FF100 24ga	60.8	0.024	130-150	561	-
S-5-NH 1.5	Scheffe Roofing	FF150 26 Ga Steel AZ55	55	0.016	130-150	324	-
S-5-N	Sheet Metal Supply	Ns-1 24 Ga steel w/g90 and PVDF	45.8	0.024	130-150	676	-
S-5-T	Vicwest	Tradition 150 22 Ga	47.1	0.0306	160-180	1303	-
S-5-S		Tradition 150 24 Ga	57	0.0246	130-150	545	-

For SI: 1-inch=25.4 mm; 1psf=0.0479 kPa, 1 lb=4.45 N, 1 in-lb =112.98 Nmm

<sup>1</sup> Values in this table shall be used in the system capacity and general performance as defined in Sections 2.4 and Section 3 of this report.



# EVALUATION REPORT

Number: 805

Originally Issued: 10/10/2023

Revised: 10/28/2024

Valid Through: 10/31/2025

**TABLE 1 –S-5! Seam Clamps Allowable Loads- Mini Clamps (continued)**

S-5! Clamp	Standing Seam Metal Roof Information			Uncoated Base Metal Thickness (inches)	Installed Torque (in-lb)	Allowable Connection Capacity Parallel to Seam (lbs)	Allowable Connection Capacity Perpendicular to Seams-Uplift (lbs)
	Roof Manufacturer	Manufacturer Product Designation	Yield Strength (ksi)				
S-5-T Mini	Garland	R-mer Span 0.04 inch Aluminum	25.9	0.04	130-150	798	693
S-5-H90 Mini		BattenLok HS 22ga Steel w AZ55 and Galvalume Plus	54.1	0.0304	160-180	711	1309
S-5-H90 Mini		BattenLok HS 24ga Steel w AZ55 and Galvalume Plus	62.3	0.024	130-150	657	1149
S-5-V Mini		UltraDeck 24Ga Steel w AZ55 and Galvalume Plus	54.8	0.024	130-150	-	559
S-5-V Mini		SuperLok 22ga Steel w AZ55 and Galvalume Plus	54	0.03	160-180	787	1398
S-5-V Mini		SuperLok 24ga Steel w AZ55 and Galvalume Plus	63.2	0.024	130-150	638	1170
S-5-V Mini		Double-Lok 22ga Steel w AZ55 and Galvalume Plus	55.2	0.03	160-180	893	-
S-5-V Mini		Double-Lok 24ga Steel w AZ55 and Galvalume Plus	60.1	0.024	130-150	762	-
S-5-S Mini		LokSeam 22Ga W/AZ55	53.1	0.03	160-180	805	-
S-5-S Mini		LokSeam 24Ga W/AZ55	54.5	0.024	130-150	-	660
S-5-E Mini	MBCI	Ziplock 1.5" 0.04 Aluminum	20	0.04	130-150	-	557
S-5-E Mini		Ziplock 1.5" 0.032 Aluminum	25	0.0328	130-150	556	607
S-5-V Mini		Ziplock 2" 22 Ga	52.9	0.0318	160-180	724	1580
S-5-V Mini		Ziplock 2" 0.04 Aluminum	20.4	0.0397	130-150	713	728
S-5-V Mini		Ziplock 2" 0.032 Aluminum	25	0.0328	130-150	527	-
S-5-Z Mini		Zip Rip 20 Ga steel	50.6	0.0393	160-180	1015	937
S-5-Z Mini		Zip Rip 22 Ga steel PVDF	51.4	0.0333	160-180	-	769
S-5-Z Mini		Zip Rip 24 Ga Galvalume Steel	51.9	0.0248	130-150	-	633
S-5-Z Mini		Zip Rip 0.050 Al	31.2	0.0495	130-150	854	766
S-5-Z Mini		Zip Rip 0.04 Al	30.4	0.0413	130-150	820	689
S-5-Z Mini		Zip Rip 0.032 Al	29.7	0.0321	130-150	726	554
S-5-S Mini	Sheet Metal Supply	Tradition 100 22 Ga	57	0.0246	130-150	-	285

For SI: 1-inch=25.4 mm; 1psf=0.0479 kPa, 1 lb=4.45 N, 1 in-lb =112.98 Nmm

<sup>1</sup> Values in this table shall be used in the system capacity and general performance as defined in Sections 2.4 and Section 3 of this report.

**TABLE 2 - ColorGard® VersaClip™ Allowable Loads<sup>1</sup>**

Product	Allowable Connection Capacity to Crossmember to clamp parallel to seams (lbs)
VersaClip™	1409

<sup>1</sup> Values in this table shall be used in the system capacity and general performance as defined in Sections 2.4 and Section 3 of this report.



# EVALUATION REPORT

Number: 805

Originally Issued: 10/10/2023

Revised: 10/28/2024

Valid Through: 10/31/2025

**TABLE 3 - ColorGard® Snow Rail (unpunched) Single Span Maximum Span (inches) Between Clamps<sup>1</sup>**

Roof Snow Load (psf)	TABLE 3		Horizontal Roof Retention Length (ft)																		
	Roof		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	Pitch	Slope	Snow Rail (unpunched) Maximum Single Span (inches) Between Clamps																		
25 and below	1 in 12 to 12 in 12	4.5 to 45																			
30	1 in 12 to 10 in 12	4.5 to 40																			
	11 in 12	42.50																			31
	12 in 12	45.00																			30
	1 in 12 to 8 in 12	4.5 to 33.75																			
35	9 in 12	37.00																			31
	10 in 12	40.00																			30
	11 in 12	42.50																			29
	12 in 12	45.00																			28
	1 in 12 to 6 in 12	4.5 to 26.5																			
40	7 in 12	30.50																			31
	8 in 12	33.75																			30
	9 in 12	37.00																			29
	10 in 12	40.00																			28
	11 in 12	42.50																			27
	12 in 12	45.00																			26
	1 in 12 to 5 in 12	4.5 to 22.5																			
45	6 in 12	26.50																			31
	7 in 12	30.50																			29
	8 in 12	33.75																			28
	9 in 12	37.00																			27
	10 in 12	40.00																			26
	11 in 12	42.50																			25
	12 in 12	45.00																			25
50	1 in 12 to 5 in 12	4.5 to 22.5																			
	6 in 12	26.50																			30
	7 in 12	30.50																			28
	8 in 12	33.75																			27
	9 in 12	37.00																			25
	10 in 12	40.00																			25
	11 in 12	42.50																			24
55	12 in 12	45.00																			23
	1 in 12 to 4 in 12	4.5 to 18.5																			
	5 in 12	22.50																			31
	6 in 12	26.50																			28
	7 in 12	30.50																			26
	8 in 12	33.75																			25
	9 in 12	37.00																			24
60	10 in 12	40.00																			23
	11 in 12	42.50																			23
	12 in 12	45.00																			22
	1 in 12 to 4 in 12	4.5 to 18.5																			
	5 in 12	22.50																			29
	6 in 12	26.50																			28
	7 in 12	30.50																			25
65	8 in 12	33.75																			24
	9 in 12	37.00																			23
	10 in 12	40.00																			22
	11 in 12	42.50																			22
	12 in 12	45.00																			21
	1 in 12 to 3 in 12	4.5 to 14																			
	4 in 12	18.50																			31
65	5 in 12	22.50																			28
	6 in 12	26.50																			26
	7 in 12	30.50																			24
	8 in 12	33.75																			23
	9 in 12	37.00																			22
	10 in 12	40.00																			22
	11 in 12	42.50																			21



# EVALUATION REPORT

Number: 805

Originally Issued: 10/10/2023

Revised: 10/28/2024

Valid Through: 10/31/2025

Roof Snow Load (psf)	Roof		Horizontal Roof Retention Length (ft)																		
	Pitch	Slope	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
			Snow Rail (unpunched) Maximum Single Span (inches) Between Clamps																		
	12 in 12	45.00	32		31	29	28	27	26	25	24	23	22	21	20						
70	1 in 12 to 3 in 12	4.5 to 14	32																		
	4 in 12	18.50	32																31	30	30
	5 in 12	22.50	32																29	28	27
	6 in 12	26.50	32																26	25	25
	7 in 12	30.50	32																24	23	23
	8 in 12	33.75	32																22	21	21
	9 in 12	37.00	32																21	20	20
	10 in 12	40.00	32																21	21	21
	11 in 12	42.50	32																20	19	19
	12 in 12	45.00	32		31	30	28	27	26	25	24	23	22	21	21	20	19	19	19	19	
75	1 in 12 to 3 in 12	4.5 to 14	32																31	30	29
	4 in 12	18.50	32																29	28	27
	5 in 12	22.50	32																26	25	25
	6 in 12	26.50	32																24	23	23
	7 in 12	30.50	32																22	21	21
	8 in 12	33.75	32																20	19	19
	9 in 12	37.00	32																19	19	19
	10 in 12	40.00	32																19	19	19
	11 in 12	42.50	32																19	19	19
	12 in 12	45.00	32		30	29	27	26	25	24	23	22	21	21	20	19	19	19	19	19	
80	1 in 12 to 3 in 12	4.5 to 14	32																31	30	29
	4 in 12	18.50	32																28	27	28
	5 in 12	22.50	32																25	24	25
	6 in 12	26.50	32																23	22	23
	7 in 12	30.50	32																22	21	22
	8 in 12	33.75	32																21	21	21
	9 in 12	37.00	32																20	19	20
	10 in 12	40.00	32																19	19	19
	11 in 12	42.50	32																19	19	19
	12 in 12	45.00	32		31	29	28	26	25	24	23	22	21	21	20	19	19	19	19	18	
85	1 in 12 to 2 in 12	4.5 to 9.5	32																		31
	3 in 12	14.00	32																		27
	4 in 12	18.50	32																25	24	24
	5 in 12	22.50	32																23	22	23
	6 in 12	26.50	32																22	21	22
	7 in 12	30.50	32																21	20	21
	8 in 12	33.75	32																20	19	20
	9 in 12	37.00	32																19	19	19
	10 in 12	40.00	32																19	19	19
	11 in 12	42.50	32																18	18	18
90	1 in 12 to 2 in 12	4.5 to 9.5	32																31	30	30
	3 in 12	14.00	32																27	26	26
	4 in 12	18.50	32																24	23	24
	5 in 12	22.50	32																22	21	22
	6 in 12	26.50	32																21	20	21
	7 in 12	30.50	32																20	19	20
	8 in 12	33.75	32																19	19	19
	9 in 12	37.00	32																19	19	19
	10 in 12	40.00	32																19	19	19
	11 in 12	42.50	32																18	18	18
95	1 in 12 to 2 in 12	4.5 to 9.5	32																31	30	29
	3 in 12	14.00	32																27	26	25
	4 in 12	18.50	32																24	23	23
	5 in 12	22.50	32																22	21	22
	6 in 12	26.50	32																21	20	21
	7 in 12	30.50	32																20	19	20
	8 in 12	33.75	32																19	19	19
	9 in 12	37.00	32																19	19	19
	10 in 12	40.00	32																18	18	18
	11 in 12	42.50	32																18	18	18



# EVALUATION REPORT

Number: 805

Originally Issued: 10/10/2023

Revised: 10/28/2024

Valid Through: 10/31/2025

Roof Snow Load (psf)	Roof		Horizontal Roof Retention Length (ft)																		
	Pitch	Slope	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
			Snow Rail (unpunched) Maximum Single Span (inches) Between Clamps																		
	11 in 12	42.50	32		30	28	26	25	23	22	22	21	20	19	19	18	18	17	17	17	
100	12 in 12	45.00	32	31	29	27	25	24	23	22	21	20	20	19	18	18	17	17	17	17	
	1 in 12 to 2 in 12	4.5 to 9.5	32																		
	3 in 12	14.00	32																		
	4 in 12	18.50	32																		
	5 in 12	22.50	32																		
	6 in 12	26.50	32	31	30	28	27	26	25	24	23	22	21	20	19	18	17	17	17	17	
	7 in 12	30.50	32	31	29	28	26	25	24	23	22	21	20	19	18	17	17	17	19	19	
	8 in 12	33.75	32	30	28	27	25	24	23	22	21	20	19	18	17	17	17	19	19	19	
	9 in 12	37.00	32	31	29	27	25	24	23	22	21	20	19	18	17	17	17	18	18	18	
	10 in 12	40.00	32	30	28	26	25	23	22	21	20	19	18	17	17	17	17	18	18	17	
110	11 in 12	42.50	32	31	29	27	25	24	23	22	21	20	19	18	17	17	17	17	17	17	
	12 in 12	45.00	32	30	28	26	25	23	22	21	20	19	18	17	17	17	17	17	17	16	
	1 in 12 to 2 in 12	4.5 to 9.5	32																		
	3 in 12	14.00	32																		
	4 in 12	18.50	32																		
	5 in 12	22.50	32																		
	6 in 12	26.50	32	30	28	26	25	24	23	22	21	20	19	18	17	17	17	17	17	20	
	7 in 12	30.50	32	30	28	27	25	24	23	22	21	20	19	18	17	17	17	19	19	19	
	8 in 12	33.75	32	31	29	27	25	24	23	22	21	20	19	18	17	17	17	18	18	18	
	9 in 12	37.00	32	30	28	26	25	24	23	22	21	20	19	18	17	17	17	17	17	17	
120	10 in 12	40.00	32	29	27	25	24	22	21	20	19	18	17	17	17	17	17	16	16	16	
	11 in 12	42.50	32	31	28	26	24	23	22	21	20	19	18	17	17	17	16	16	15	15	
	12 in 12	45.00	32	30	28	26	24	23	21	20	19	18	17	17	17	16	16	15	15	15	
	1 in 12	4.50	32																		
	2 in 12	9.50	32																		31
	3 in 12	14.00	32																		26
	4 in 12	18.50	32	31	29	28	26	25	24	23	22	21	20	19	18	17	17	17	17	17	
	5 in 12	22.50	32	31	29	28	26	25	24	23	22	21	20	19	18	17	17	17	17	17	
	6 in 12	26.50	32	30	28	27	25	24	23	22	21	20	19	18	17	17	17	17	17	17	
	7 in 12	30.50	32	31	29	27	25	24	23	22	21	20	19	18	17	17	17	17	17	17	
130	8 in 12	33.75	32	31	29	27	25	24	23	22	21	20	19	18	17	17	17	17	17	17	
	9 in 12	37.00	32	30	28	26	24	23	22	21	20	19	18	17	17	17	17	17	17	17	
	10 in 12	40.00	32	29	27	25	23	22	21	20	19	18	17	17	17	17	17	16	16	16	
	11 in 12	42.50	32	31	28	26	24	23	22	21	20	19	18	17	17	17	16	16	15	15	
	12 in 12	45.00	32	30	28	26	24	23	21	20	19	18	17	17	17	16	16	15	15	15	
	1 in 12	4.50	32																		
	2 in 12	9.50	32																		30
	3 in 12	14.00	32	31	29	28	26	25	24	23	22	21	20	19	18	17	17	17	17	17	
	4 in 12	18.50	32	31	29	27	25	24	23	22	21	20	19	18	17	17	17	17	17	17	
	5 in 12	22.50	32	31	29	28	26	25	24	23	22	21	20	19	18	17	17	17	17	17	
140	6 in 12	26.50	32	30	28	26	25	24	23	22	21	20	19	18	17	17	17	17	17	17	
	7 in 12	30.50	32	30	28	26	25	23	22	21	20	19	18	17	17	17	17	17	17	17	
	8 in 12	33.75	32	29	27	25	24	22	21	20	19	18	17	17	17	17	16	16	16	16	
	9 in 12	37.00	32	31	28	26	24	23	21	20	19	18	17	17	17	16	16	15	15	15	
	10 in 12	40.00	32	30	27	25	23	22	21	20	19	18	17	17	17	16	16	15	15	15	
	11 in 12	42.50	32	29	26	24	23	21	20	19	18	17	16	16	15	15	15	15	15	14	
	12 in 12	45.00	32	31	28	26	24	22	21	20	19	18	17	17	17	16	15	15	15	14	



## EVALUATION REPORT

Number: 805

**Originally Issued: 10/10/2023**

Revised: 10/28/2024

**Valid Through: 10/31/2025**

**TABLE 4 - ColorGard® Snow Rail (unpunched) Double Span Maximum Span (inches) Between Clamps<sup>1</sup>**



# EVALUATION REPORT

Number: 805

Originally Issued: 10/10/2023

Revised: 10/28/2024

Valid Through: 10/31/2025

TABLE 4			Horizontal Roof Retention Length (ft)																			
Roof Snow Load (psf)	Roof		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
	Pitch	Slope	Snow Rail (unpunched) Maximum Double Span (inches) Between Clamps																			
	12 in 12	45.00	32	31	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
70	1 in 12 to 3 in 12	4.5 to 14	32	31	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
	4 in 12	18.50	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	5 in 12	22.50	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	6 in 12	26.50	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	7 in 12	30.50	32	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
	8 in 12	33.75	32	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
	9 in 12	37.00	32	31	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
	10 in 12	40.00	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	11 in 12	42.50	32	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
	12 in 12	45.00	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
75	1 in 12 to 3 in 12	4.5 to 14	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	4 in 12	18.50	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	5 in 12	22.50	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	6 in 12	26.50	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	7 in 12	30.50	32	31	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
	8 in 12	33.75	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	9 in 12	37.00	32	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
	10 in 12	40.00	32	31	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
	11 in 12	42.50	32	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
	12 in 12	45.00	32	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
80	1 in 12 to 3 in 12	4.5 to 14	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	4 in 12	18.50	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	5 in 12	22.50	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	6 in 12	26.50	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	7 in 12	30.50	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	8 in 12	33.75	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	9 in 12	37.00	32	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
	10 in 12	40.00	32	31	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
	11 in 12	42.50	32	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
	12 in 12	45.00	32	31	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
85	1 in 12 to 2 in 12	4.5 to 9.5	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	3 in 12	14.00	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	4 in 12	18.50	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	5 in 12	22.50	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	6 in 12	26.50	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	7 in 12	30.50	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	8 in 12	33.75	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	9 in 12	37.00	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	10 in 12	40.00	32	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
	11 in 12	42.50	32	31	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
90	1 in 12 to 2 in 12	4.5 to 9.5	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	3 in 12	14.00	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	4 in 12	18.50	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	5 in 12	22.50	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	6 in 12	26.50	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	7 in 12	30.50	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	8 in 12	33.75	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	9 in 12	37.00	32	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
	10 in 12	40.00	32	31	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
	11 in 12	42.50	32	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
95	1 in 12 to 2 in 12	4.5 to 9.5	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	3 in 12	14.00	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	4 in 12	18.50	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	5 in 12	22.50	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	6 in 12	26.50	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	7 in 12	30.50	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	8 in 12	33.75	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	1



# EVALUATION REPORT

Number: 805

Originally Issued: 10/10/2023

Revised: 10/28/2024

Valid Through: 10/31/2025

Roof Snow Load (psf)	Roof		Horizontal Roof Retention Length (ft)																		
	Pitch	Slope	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
			Snow Rail (unpunched) Maximum Double Span (inches) Between Clamps																		
100	1 in 12 to 2 in 12	4.5 to 9.5																			
	3 in 12	14.00																			
	4 in 12	18.50																			
	5 in 12	22.50																			
	6 in 12	26.50																			
	7 in 12	30.50																			
	8 in 12	33.75																			
	9 in 12	37.00																			
	10 in 12	40.00																			
	11 in 12	42.50																			
	12 in 12	45.00																			
110	1 in 12 to 2 in 12	4.5 to 9.5																			
	3 in 12	14.00																			
	4 in 12	18.50																			
	5 in 12	22.50																			
	6 in 12	26.50																			
	7 in 12	30.50																			
	8 in 12	33.75																			
	9 in 12	37.00																			
	10 in 12	40.00																			
	11 in 12	42.50																			
	12 in 12	45.00																			
120	1 in 12	4.50																			
	2 in 12	9.50																			
	3 in 12	14.00																			
	4 in 12	18.50																			
	5 in 12	22.50																			
	6 in 12	26.50																			
	7 in 12	30.50																			
	8 in 12	33.75																			
	9 in 12	37.00																			
	10 in 12	40.00																			
	11 in 12	42.50																			
	12 in 12	45.00																			
130	1 in 12	4.50																			
	2 in 12	9.50																			
	3 in 12	14.00																			
	4 in 12	18.50																			
	5 in 12	22.50																			
	6 in 12	26.50																			
	7 in 12	30.50																			
	8 in 12	33.75																			
	9 in 12	37.00																			
	10 in 12	40.00																			
	11 in 12	42.50																			
	12 in 12	45.00																			
140	1 in 12	4.50																			
	2 in 12	9.50																			
	3 in 12	14.00																			
	4 in 12	18.50																			
	5 in 12	22.50																			
	6 in 12	26.50																			
	7 in 12	30.50																			
	8 in 12	33.75																			
	9 in 12	37.00																			
	10 in 12	40.00																			
	11 in 12	42.50																			
	12 in 12	45.00																			

For SI: 1-inch=25.4 mm; 1psf=0.0479 kPa

<sup>1</sup> Values in this table shall be used in the system capacity and general performance as defined in Sections 2.4 and Section 3 of this report.



# EVALUATION REPORT

Number: 805

Originally Issued: 10/10/2023

Revised: 10/28/2024

Valid Through: 10/31/2025

**TABLE 5 - ColorGard® Snow Rail (unpunched) Triple Span Maximum Span (inches) Between Clamps<sup>1</sup>**

Roof Snow Load (psf)	TABLE 5		Horizontal Roof Retention Length (ft)																			
	Roof	Pitch	Slope	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
				Snow Rail (unpunched) Maximum Triple Span (inches) Between Clamps																		
30 and below	1 in 12 to 12 in 12	4.5 to 45																				
35	1 in 12 to 11 in 12	4.5 to 42.5																				
	12 in 12	45.00																				31
40	1 in 12 to 9 in 12	4.5 to 37																				
	10 in 12	40.00																				31
	11 in 12	42.50																				30
	12 in 12	45.00																				29
45	1 in 12 to 7 in 12	4.5 to 30.5																				
	8 in 12	33.75																				31
	9 in 12	37.00																				30
	10 in 12	40.00																				29
	11 in 12	42.50																				28
	12 in 12	45.00																				28
50	1 in 12 to 6 in 12	4.5 to 26.5																				
	7 in 12	30.50																				31
	8 in 12	33.75																				30
	9 in 12	37.00																				29
	10 in 12	40.00																				28
	11 in 12	42.50																				27
	12 in 12	45.00																				26
55	1 in 12 to 6 in 12	4.5 to 26.5																				
	7 in 12	30.50																				30
	8 in 12	33.75																				28
	9 in 12	37.00																				27
	10 in 12	40.00																				26
	11 in 12	42.50																				26
	12 in 12	45.00																				25
60	1 in 12 to 5 in 12	4.5 to 22.5																				
	6 in 12	26.50																				30
	7 in 12	30.50																				28
	8 in 12	33.75																				27
	9 in 12	37.00																				26
	10 in 12	40.00																				25
	11 in 12	42.50																				24
	12 in 12	45.00																				24
65	1 in 12 to 4 in 12	4.5 to 18.5																				
	5 in 12	22.50																				31
	6 in 12	26.50																				29
	7 in 12	30.50																				27
	8 in 12	33.75																				26
	9 in 12	37.00																				25
	10 in 12	40.00																				24
	11 in 12	42.50																				24
70	1 in 12 to 4 in 12	4.5 to 18.5																				
	5 in 12	22.50																				30
	6 in 12	26.50																				28
	7 in 12	30.50																				26
	8 in 12	33.75																				25
	9 in 12	37.00																				24
	10 in 12	40.00																				23
	11 in 12	42.50																				23
75	1 in 12 to 4 in 12	4.5 to 18.5																				
	5 in 12	22.50																				29
	6 in 12	26.50																				27
	7 in 12	30.50																				25
	8 in 12	33.75																				24
	9 in 12	37.00																				23
	10 in 12	40.00																				22



# EVALUATION REPORT

Number: 805

Originally Issued: 10/10/2023

Revised: 10/28/2024

Valid Through: 10/31/2025

TABLE 5			Horizontal Roof Retention Length (ft)																		
Roof Snow Load (psf)	Roof		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	Pitch	Slope	Snow Rail (unpunched) Maximum Triple Span (inches) Between Clamps																		
	11 in 12	42.50	32										31	30	28	27	26	25	24	24	23
80	12 in 12	45.00	32										30	29	28	27	26	25	24	23	22
	1 in 12 to 3 in 12	4.5 to 14	32																		21
	4 in 12	18.50	32																		31
	5 in 12	22.50	32																		28
	6 in 12	26.50	32										31	30	29	28	27	26	25	26	
	7 in 12	30.50	32										30	29	28	27	26	25	24	24	
	8 in 12	33.75	32										30	29	28	27	26	25	25	24	23
	9 in 12	37.00	32										30	29	28	27	26	25	24	23	22
	10 in 12	40.00	32										31	29	28	27	26	25	24	23	22
	11 in 12	42.50	32										30	29	28	27	26	25	24	23	22
	12 in 12	45.00	32										31	29	28	27	26	25	24	23	22
85	1 in 12 to 3 in 12	4.5 to 14	32																		21
	4 in 12	18.50	32																	30	
	5 in 12	22.50	32										31	30	29	28	27	26	25	24	23
	6 in 12	26.50	32										30	29	28	27	26	25	24	23	22
	7 in 12	30.50	32									31	30	29	28	27	26	25	24	23	
	8 in 12	33.75	32						31	30	29	28	27	26	25	24	23	22	21	20	
	9 in 12	37.00	32					30	29	28	27	26	25	24	23	22	21	20	19	18	
	10 in 12	40.00	32				31	29	28	27	26	25	24	23	22	21	20	19	18	17	
	11 in 12	42.50	32		30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	
	12 in 12	45.00	32	31	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	
90	1 in 12 to 3 in 12	4.5 to 14	32										31	30	29	28	27	26	25	24	23
	4 in 12	18.50	32									31	30	29	28	27	26	25	24	23	
	5 in 12	22.50	32								31	30	29	28	27	26	25	24	23	22	
	6 in 12	26.50	32						31	30	29	28	27	26	25	24	23	22	21		
	7 in 12	30.50	32				31	30	29	28	27	26	25	24	23	22	21	20			
	8 in 12	33.75	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16		
	9 in 12	37.00	32	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15		
	10 in 12	40.00	32	31	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15		
	11 in 12	42.50	32	30	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14		
	12 in 12	45.00	32	31	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15		
95	1 in 12 to 3 in 12	4.5 to 14	32									31	30	29	28	27	26	25	24	23	
	4 in 12	18.50	32								31	30	29	28	27	26	25	24	23		
	5 in 12	22.50	32							31	30	29	28	27	26	25	24	23	22		
	6 in 12	26.50	32					31	30	29	28	27	26	25	24	23	22	21			
	7 in 12	30.50	32	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15		
	8 in 12	33.75	32	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15		
	9 in 12	37.00	32	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15		
	10 in 12	40.00	32	31	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15		
	11 in 12	42.50	32	30	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14		
	12 in 12	45.00	32	31	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15		
100	1 in 12 to 3 in 12	4.5 to 14	32								31	30	29	28	27	26	25	24	23	22	
	4 in 12	18.50	32							31	30	29	28	27	26	25	24	23	22		
	5 in 12	22.50	32						31	30	29	28	27	26	25	24	23	22	21		
	6 in 12	26.50	32					31	30	29	28	27	26	25	24	23	22	21	20		
	7 in 12	30.50	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16		
	8 in 12	33.75	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16		
	9 in 12	37.00	32	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15		
	10 in 12	40.00	32	31	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15		
	11 in 12	42.50	32	31	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15		
	12 in 12	45.00	32	31	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15		
110	1 in 12 to 2 in 12	4.5 to 9.5	32							31	30	29	28	27	26	25	24	23	22	21	
	3 in 12	14.00	32						31	30	29	28	27	26	25	24	23	22	21		
	4 in 12	18.50	32					31	30	29	28	27	26	25	24	23	22	21	20		
	5 in 12	22.50	32				31	30	29	28	27	26	25	24	23	22	21	20	19		
	6 in 12	26.50	32	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15		
	7 in 12	30.50	32	31	30	29	28	27	26	25	24	23	22	21							



# EVALUATION REPORT

**Number: 805**

**Originally Issued: 10/10/2023**

Revised: 10/28/2024

**Valid Through: 10/31/2025**

Roof Snow Load (psf)		Roof		Horizontal Roof Retention Length (ft)																		
				2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
		Pitch	Slope	Snow Rail (unpunched) Maximum Triple Span (inches) Between Clamps																		
12 in 12		45.00	32		30	28	26	25	24	23	22	21	20	20	19	19	18	18	18	18	18	18
120	1 in 12 to 2 in 12	4.5 to 9.5	32																		31	
	3 in 12	14.00	32																		30	
	4 in 12	18.50	32																		29	
	5 in 12	22.50	32																		28	
	6 in 12	26.50	32																		27	
	7 in 12	30.50	32																		26	
	8 in 12	33.75	32																		25	
	9 in 12	37.00	32																		24	
	10 in 12	40.00	32																		23	
	11 in 12	42.50	32																		22	
	12 in 12	45.00	32																		21	
130	1 in 12 to 2 in 12	4.5 to 9.5	32																		20	
	3 in 12	14.00	32																		19	
	4 in 12	18.50	32																		18	
	5 in 12	22.50	32																		17	
	6 in 12	26.50	32																		16	
	7 in 12	30.50	32																		15	
	8 in 12	33.75	32																		14	
	9 in 12	37.00	32																		13	
	10 in 12	40.00	32																		12	
	11 in 12	42.50	32																		11	
	12 in 12	45.00	32																		10	
140	1 in 12 to 2 in 12	4.5 to 9.5	32																		9	
	3 in 12	14.00	32																		8	
	4 in 12	18.50	32																		7	
	5 in 12	22.50	32																		6	
	6 in 12	26.50	32																		5	
	7 in 12	30.50	32																		4	
	8 in 12	33.75	32																		3	
	9 in 12	37.00	32																		2	
	10 in 12	40.00	32																		1	
	11 in 12	42.50	32																		0	
	12 in 12	45.00	32		31	29	27	25	23	22	21	20	19	19	18	18	17	17	16	16	16	15

For SI: 1-inch=25.4 mm; 1psf=0.0479 kPa

<sup>1</sup> Values in this table shall be used in the system capacity and general performance as defined in Sections 2.4 and Section 3 of this report.

**TABLE 6 - ColorGard® Snow Rail (punched) Single Span Maximum Span (inches) Between Clamps<sup>1</sup>**

TABLE 6			Horizontal Roof Retention Length (ft)																		
Roof Snow Load (psf)	Roof		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	Pitch	Slope	ColorGard®	Snow Rail (punched)	Single Span Maximum Span (inches)	Between Clamps															
20	1 in 12 to 12 in 12	4.5 to 45																32			
25	1 in 12 to 10 in 12	4.5 to 40																32			
	11 in 12	42.50																32			31
	12 in 12	45.00																32			31
30	1 in 12 to 8 in 12	4.5 to 33.75																32			
	9 in 12	37.00																32			31 30
	10 in 12	40.00																32		31	30 29
	11 in 12	42.50																32		31	30 29
	12 in 12	45.00																32		31	30 29 28
35	1 in 12 to 6 in 12	4.5 to 26.5																32			
	7 in 12	30.50																32			31 31
	8 in 12	33.75																32			31 30 29
	9 in 12	37.00																32		31	31 30 29 28
	10 in 12	40.00																32		31	30 29 28 27
	11 in 12	42.50																32		31	30 29 28 27 26
	12 in 12	45.00																32		31	30 29 28 27 27 26



# EVALUATION REPORT

Number: 805

Originally Issued: 10/10/2023

Revised: 10/28/2024

Valid Through: 10/31/2025

Roof Snow Load (psf)	Roof		Horizontal Roof Retention Length (ft)																		
	Pitch	Slope	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
			ColorGard® Snow Rail (punched) Single Span Maximum Span (inches) Between Clamps																		
40	1 in 12 to 5 in 12	4.5 to 22.5																			
	6 in 12	26.50																		31	31
	7 in 12	30.50																	31	30	29
	8 in 12	33.75																	31	30	28
	9 in 12	37.00																	29	27	26
	10 in 12	40.00																	28	27	25
	11 in 12	42.50																	26	25	25
	12 in 12	45.00																	25	24	24
45	1 in 12 to 4 in 12	4.5 to 18.5																			
	5 in 12	22.50																			31
	6 in 12	26.50																	30	30	29
	7 in 12	30.50																	28	28	27
	8 in 12	33.75																	26	26	26
	9 in 12	37.00																	25	25	25
	10 in 12	40.00																	24	25	24
	11 in 12	42.50																	23	23	23
50	1 in 12 to 4 in 12	4.5 to 18.5																			
	5 in 12	22.50																	30	30	30
	6 in 12	26.50																	29	28	27
	7 in 12	30.50																	26	26	26
	8 in 12	33.75																	25	25	24
	9 in 12	37.00																	24	23	23
	10 in 12	40.00																	23	23	23
	11 in 12	42.50																	22	23	22
55	1 in 12 to 4 in 12	4.5 to 14																			
	4 in 12	18.50																			31
	5 in 12	22.50																	30	29	28
	6 in 12	26.50																	27	26	26
	7 in 12	30.50																	25	24	24
	8 in 12	33.75																	24	23	23
	9 in 12	37.00																	22	22	22
	10 in 12	40.00																	21	22	22
60	1 in 12 to 3 in 12	4.5 to 14																			
	4 in 12	18.50																			31
	5 in 12	22.50																	30	29	28
	6 in 12	26.50																	26	26	25
	7 in 12	30.50																	24	23	23
	8 in 12	33.75																	22	23	22
	9 in 12	37.00																	21	22	21
	10 in 12	40.00																	20	21	20
65	1 in 12 to 3 in 12	4.5 to 14																			
	4 in 12	18.50																			31
	5 in 12	22.50																	30	29	28
	6 in 12	26.50																	26	26	25
	7 in 12	30.50																	24	23	22
	8 in 12	33.75																	22	23	21
	9 in 12	37.00																	21	22	20
	10 in 12	40.00																	20	21	20
70	1 in 12 to 3 in 12	4.5 to 14																			
	4 in 12	18.50																			28
	5 in 12	22.50																	27	26	26
	6 in 12	26.50																	25	24	24
	7 in 12	30.50																	23	22	22
	8 in 12	33.75																	21	22	21
	9 in 12	37.00																	20	21	20
	10 in 12	40.00																	19	20	19
70	1 in 12 to 2 in 12	4.5 to 9.5																			
	3 in 12	14.00																			31
	4 in 12	18.50																			27
	5 in 12	22.50																	26	26	25
	6 in 12	26.50																	24	24	23
70	7 in 12	30.50																	22	22	22



# EVALUATION REPORT

Number: 805

Originally Issued: 10/10/2023

Revised: 10/28/2024

Valid Through: 10/31/2025

TABLE 6			Horizontal Roof Retention Length (ft)																		
Roof Snow Load (psf)	Roof		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	Pitch	Slope	ColorGard® Snow Rail (punched) Single Span Maximum Span (inches) Between Clamps																		
			8 in 12	33.75	32		31	29	28	27	26	25	24	23	22	22	21	21	21	21	
75	9 in 12	37.00		32		31	30	28	27	26	25	24	23	22	21	21	20	20	20	20	
	10 in 12	40.00		32		30	29	27	26	25	24	23	22	21	21	20	20	19	19	19	
	11 in 12	42.50		32		30	28	26	25	24	23	22	21	21	20	20	19	19	19	19	
	12 in 12	45.00		32		31	29	27	26	25	24	23	22	21	20	20	19	19	19	18	
	1 in 12 to 2 in 12	4.5 to 9.5																			
	3 in 12	14.00																	31	30	
	4 in 12	18.50																	28	27	
	5 in 12	22.50																	25	24	
	6 in 12	26.50																	23	22	
	7 in 12	30.50																	21	21	
	8 in 12	33.75																	20	20	
80	9 in 12	37.00																	19	19	
	10 in 12	40.00																	18	18	
	11 in 12	42.50																	18	18	
	12 in 12	45.00																	18	18	
	1 in 12 to 2 in 12	4.5 to 9.5																			
	3 in 12	14.00																	29	29	
	4 in 12	18.50																	26	26	
	5 in 12	22.50																	24	23	
	6 in 12	26.50																	22	21	
	7 in 12	30.50																	20	20	
	8 in 12	33.75																	19	19	
85	9 in 12	37.00																	18	18	
	10 in 12	40.00																	17	17	
	11 in 12	42.50																	17	17	
	12 in 12	45.00																	17	17	
	1 in 12 to 2 in 12	4.5 to 9.5																			
	3 in 12	14.00																	28	28	
	4 in 12	18.50																	25	25	
	5 in 12	22.50																	23	23	
	6 in 12	26.50																	21	21	
	7 in 12	30.50																	19	19	
	8 in 12	33.75																	18	18	
90	9 in 12	37.00																	17	17	
	10 in 12	40.00																	16	16	
	11 in 12	42.50																	16	16	
	12 in 12	45.00																	16	16	
	1 in 12 to 2 in 12	4.5 to 9.5																			
	3 in 12	14.00																	28	28	
	4 in 12	18.50																	25	25	
	5 in 12	22.50																	22	22	
	6 in 12	26.50																	21	20	
	7 in 12	30.50																	19	19	
	8 in 12	33.75																	18	18	
95	9 in 12	37.00																	17	17	
	10 in 12	40.00																	16	16	
	11 in 12	42.50																	16	16	
	12 in 12	45.00																	16	16	
	1 in 12 to 2 in 12	4.5 to 9.5																			
	3 in 12	14.00																	27	27	
	4 in 12	18.50																	24	23	
	5 in 12	22.50																	22	21	
	6 in 12	26.50																	20	20	
	7 in 12	30.50																	19	19	
	8 in 12	33.75																	18	18	
100	9 in 12	37.00																	17	17	
	10 in 12	40.00																	16	16	
	11 in 12	42.50																	16	16	
	12 in 12	45.00																	16	16	
100	1 in 12 to 2 in 12	4.5 to 9.5																			
	3 in 12	14.00																	26	26	



# EVALUATION REPORT

Number: 805

Originally Issued: 10/10/2023

Revised: 10/28/2024

Valid Through: 10/31/2025

TABLE 6		Horizontal Roof Retention Length (ft)																			
Roof Snow Load (psf)	Roof		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	Pitch	Slope	ColorGard® Snow Rail (punched) Single Span Maximum Span (inches) Between Clamps																		
			4 in 12	18.50	32				31	30	28	27	26	26	25	24	23	23	22	21	21
110	1 in 12	4.50			32																
	2 in 12	9.50			32															31	30
	3 in 12	14.00			32															26	25
	4 in 12	18.50			32				31	29	28	27	26	25	24	23	22	22	21	21	22
	5 in 12	22.50			32			31	30	28	27	26	25	24	23	22	21	21	20	20	
	6 in 12	26.50			32		31	29	27	26	25	24	23	22	21	20	20	19	19	18	
	7 in 12	30.50			32		29	27	26	24	23	22	21	20	20	19	19	18	18	17	
	8 in 12	33.75			32		30	28	26	25	23	22	21	20	20	19	19	18	18	17	16
	9 in 12	37.00			32		29	27	25	24	22	21	20	20	19	19	18	18	17	17	16
	10 in 12	40.00			32		31	28	26	24	23	22	21	20	19	18	18	17	16	16	15
	11 in 12	42.50			32		30	27	25	24	22	21	20	19	18	18	17	17	16	16	15
	12 in 12	45.00			32		31	28	26	24	23	22	21	20	19	18	18	17	16	16	15
120	1 in 12	4.50			32																
	2 in 12	9.50			32														31	31	30
	3 in 12	14.00			32														26	25	24
	4 in 12	18.50			32			31	30	28	27	26	25	24	23	22	21	21	21	21	21
	5 in 12	22.50			32			30	28	27	26	25	24	23	22	21	21	20	19	19	19
	6 in 12	26.50			32			30	28	26	25	24	23	22	21	20	20	19	18	18	17
	7 in 12	30.50			32			30	28	26	25	23	22	21	20	20	19	18	18	17	16
	8 in 12	33.75			32			29	27	25	23	22	21	20	19	19	18	18	17	16	16
	9 in 12	37.00			32			30	28	26	24	23	21	20	19	19	18	17	16	16	15
	10 in 12	40.00			32			29	27	25	23	22	21	20	19	18	17	17	16	16	15
	11 in 12	42.50			32			29	26	24	23	21	20	19	18	18	17	16	16	15	15
	12 in 12	45.00			32			31	28	26	24	22	21	20	19	18	17	17	16	15	14
130	1 in 12	4.50			32																
	2 in 12	9.50			32														31	31	30
	3 in 12	14.00			32														26	25	24
	4 in 12	18.50			32			31	30	28	27	26	25	24	23	22	22	21	20	19	18
	5 in 12	22.50			32			30	28	27	26	25	24	23	22	21	20	20	19	19	18
	6 in 12	26.50			32			31	29	27	25	24	23	22	21	20	19	19	18	18	17
	7 in 12	30.50			32			29	27	25	24	22	21	20	20	19	18	18	17	16	16
	8 in 12	33.75			32			30	28	26	24	23	21	20	19	19	18	17	17	16	15
	9 in 12	37.00			32			29	27	25	23	22	20	20	19	18	17	17	16	15	14
	10 in 12	40.00			32			28	26	24	22	21	20	19	18	17	17	16	16	15	14
	11 in 12	42.50			32			31	28	25	23	22	20	19	18	18	17	16	15	15	14
	12 in 12	45.00			32			30	27	24	23	21	20	19	18	17	16	15	15	14	13
140	1 in 12	4.50			32																
	2 in 12	9.50			32														31	30	29
	3 in 12	14.00			32														26	25	24
	4 in 12	18.50			32			31	29	27	26	25	24	23	22	22	21	20	20	19	19
	5 in 12	22.50			32			30	28	26	25	24	23	22	21	20	20	19	18	18	17
	6 in 12	26.50			32			31	28	26	24	23	22	21	20	19	19	18	18	17	16
	7 in 12	30.50			32			29	27	25	24	22	21	20	20	19	18	17	17	16	15
	8 in 12	33.75			32			30	28	26	24	23	21	20	19	19	18	17	16	15	14
	9 in 12	37.00			32			31	28	26	24	22	21	20	19	18	17	17	16	15	14
	10 in 12	40.00			32			30	27	25	23	21	20	19	18	17	17	16	15	15	14
	11 in 12	42.50			32			30	26	24	22	21	20	19	18	17	16	15	15	14	13
	12 in 12	45.00			32			29	26	24	22	20	19	18	17	16	15	15	14	13	13

For SI: 1-inch=25.4 mm; 1psf=0.0479 kPa

<sup>1</sup> Values in this table shall be used in the system capacity and general performance as defined in Sections 2.4 and Section 3 of this report.



## EVALUATION REPORT

**Number: 805**

**Originally Issued: 10/10/2023**

Revised: 10/28/2024

**Valid Through: 10/31/2025**

**TABLE 7 - ColorGard® Snow Rail (punched) Double Span Maximum Span (inches) Between Clamps<sup>1</sup>**



# EVALUATION REPORT

Number: 805

Originally Issued: 10/10/2023

Revised: 10/28/2024

Valid Through: 10/31/2025

TABLE 7			Horizontal Roof Retention Length (ft)																		
Roof Snow Load (psf)	Roof		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	Pitch	Slope	ColorGard® Snow Rail (punched) Double Span Maximum Span (inches) Between Clamps																		
	8 in 12	33.75	32	30	29	28	27	26	25	24	23	23	22								
65	9 in 12	37.00	32	30	29	28	27	26	25	24	23	23	22	21							
	10 in 12	40.00	32	31	29	28	27	26	25	24	23	22	21	21	20						
	11 in 12	42.50	32	30	29	27	26	25	24	23	23	22	22	21	21	20	20				
	12 in 12	45.00	32	31	30	28	27	26	24	24	23	22	21	21	20	20	19	19	19	20	
	1 in 12 to 3 in 12	4.5 to 14	32																		
	4 in 12	18.50	32															31	30	29	28
	5 in 12	22.50	32															31	30	29	28
	6 in 12	26.50	32															27	26	26	25
	7 in 12	30.50	32															24	23	23	22
	8 in 12	33.75	32															21	22	22	21
70	9 in 12	37.00	32															20	20	20	19
	10 in 12	40.00	32															19	20	20	19
	11 in 12	42.50	32															20	20	20	19
	12 in 12	45.00	32															19	19	19	19
	1 in 12 to 2 in 12	4.5 to 9.5	32																		
	3 in 12	14.00	32															31			
	4 in 12	18.50	32															27	26	26	25
	5 in 12	22.50	32															24	23	23	22
	6 in 12	26.50	32															23	23	23	22
	7 in 12	30.50	32															21	21	21	21
75	8 in 12	33.75	32															20	20	20	19
	9 in 12	37.00	32															19	19	19	18
	10 in 12	40.00	32															18	19	19	18
	11 in 12	42.50	32															18	19	19	18
	12 in 12	45.00	32															18	18	18	18
	1 in 12 to 2 in 12	4.5 to 9.5	32																		
	3 in 12	14.00	32															30			
	4 in 12	18.50	32															26	26	26	25
	5 in 12	22.50	32															23	23	23	22
	6 in 12	26.50	32															21	21	21	20
80	7 in 12	30.50	32															20	20	20	19
	8 in 12	33.75	32															19	19	19	18
	9 in 12	37.00	32															18	19	19	18
	10 in 12	40.00	32															17	18	19	18
	11 in 12	42.50	32															18	18	18	17
	12 in 12	45.00	32															17	17	17	17
	1 in 12 to 2 in 12	4.5 to 9.5	32																		
	3 in 12	14.00	32															30			
	4 in 12	18.50	32															26	26	26	25
	5 in 12	22.50	32															23	23	23	22
85	6 in 12	26.50	32															21	21	21	20
	7 in 12	30.50	32															20	20	20	19
	8 in 12	33.75	32															19	19	19	18
	9 in 12	37.00	32															18	19	19	18
	10 in 12	40.00	32															17	18	19	18
	11 in 12	42.50	32															17	17	17	17
	12 in 12	45.00	32															16	17	17	16



# EVALUATION REPORT

**Number: 805**

**Originally Issued: 10/10/2023**

Revised: 10/28/2024

**Valid Through: 10/31/2025**



# EVALUATION REPORT

Number: 805

Originally Issued: 10/10/2023

Revised: 10/28/2024

Valid Through: 10/31/2025

TABLE 7			Horizontal Roof Retention Length (ft)																		
Roof Snow Load (psf)	Roof		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	Pitch	Slope	ColorGard® Snow Rail (punched) Double Span Maximum Span (inches) Between Clamps																		
	3 in 12	14.00	32								31	30	29	27	27	26	25	24	24	23	
120	4 in 12	18.50	32	30	28	27	26	25	24	23	22	21	20	20	19	19	19	18	18	17	17
	5 in 12	22.50	32	31	29	27	25	24	23	22	21	20	19	19	19	18	18	17	17	16	16
	6 in 12	26.50	32	31	29	27	25	24	23	22	21	20	19	19	19	18	18	17	17	16	16
	7 in 12	30.50	32	29	27	25	24	22	21	20	19	19	18	18	17	17	16	16	15	15	15
	8 in 12	33.75	32	30	28	26	24	23	21	20	19	19	19	18	17	17	16	16	15	15	15
	9 in 12	37.00	32	29	27	25	23	22	20	19	19	18	18	17	17	16	16	15	15	15	14
	10 in 12	40.00	32	28	26	24	22	21	20	19	19	18	18	17	17	16	16	15	15	14	14
	11 in 12	42.50	32	31	28	25	23	22	20	19	18	18	17	17	16	16	15	15	14	14	14
	12 in 12	45.00	32	30	27	24	23	21	20	19	18	17	17	16	16	15	15	14	14	14	13
	1 in 12	4.50	32																		
	2 in 12	9.50	32	31	30	29	27	26	25	24	23	22	21	20	19	18	18	17	17	16	16
	3 in 12	14.00	32	31	30	29	27	26	25	24	23	22	21	20	19	18	18	17	17	16	16
	4 in 12	18.50	32	31	29	27	26	25	24	23	22	21	20	19	19	18	18	17	17	16	16
	5 in 12	22.50	32	30	28	26	25	24	23	22	21	20	19	19	18	18	17	17	16	16	16
	6 in 12	26.50	32	30	28	26	24	23	22	21	20	19	19	18	18	17	17	16	16	15	15
	7 in 12	30.50	32	31	28	26	24	23	22	20	20	19	18	17	17	16	16	15	15	15	15
	8 in 12	33.75	32	33	29	27	25	23	22	21	20	19	18	17	17	16	16	15	15	15	14
	9 in 12	37.00	32	31	28	26	24	22	21	20	19	18	17	17	16	15	15	15	14	14	13
	10 in 12	40.00	32	30	27	25	23	21	20	19	18	17	17	16	15	15	15	14	14	13	13
	11 in 12	42.50	32	30	26	24	22	21	20	19	18	17	17	16	15	15	15	14	14	13	13
	12 in 12	45.00	32	29	26	24	22	20	19	18	17	17	16	15	15	14	14	13	13	13	13

For SI: 1-inch=25.4 mm; 1psf=0.0479 kPa

<sup>1</sup> Values in this table shall be used in the system capacity and general performance as defined in Sections 2.4 and Section 3 of this report.

**TABLE 8 - ColorGard® Snow Rail (punched) Double Span Maximum Span (inches) Between Clamps<sup>1</sup>**

TABLE 8			Horizontal Roof Retention Length (ft)																		
Roof Snow Load (psf)	Roof		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	Pitch	Slope	Table 6 - ColorGard® Snow Rail (punched) Triple Span Maximum Span (inches) Between Clamps																		
25 and below	1 in 12	4.5 to 45	32																		
30	1 in 12 to 11 in 12	4.5 to 42.5	32																		
	12 in 12	45.00	32																		31
35	1 in 12 to 8 in 12	4.5 to 33.75	32																		
	9 in 12	37.00	32																		
	10 in 12	40.00	32																		
	11 in 12	42.50	32																		
	12 in 12	45.00	32																		
40	1 in 12 to 7 in 12	4.5 to 30.5	32																		
	8 in 12	33.75	32																		
	9 in 12	37.00	32																		
	10 in 12	40.00	32																		
	11 in 12	42.50	32																		
	12 in 12	45.00	32																		
45	1 in 12 to 6 in 12	4.5 to 26.5	32																		
	7 in 12	30.50	32																		
	8 in 12	33.75	32																		
	9 in 12	37.00	32																		
	10 in 12	40.00	32																		
	11 in 12	42.50	32																		
	12 in 12	45.00	32																		
50	1 in 12 to 5 in 12	4.5 to 22.5	32																		
	6 in 12	26.50	32																		
	7 in 12	30.50	32																		
	8 in 12	33.75	32																		
	9 in 12	37.00	32																		
	10 in 12	40.00	32																		



# EVALUATION REPORT

Number: 805

Originally Issued: 10/10/2023

Revised: 10/28/2024

Valid Through: 10/31/2025

TABLE 8			Horizontal Roof Retention Length (ft)																			
Roof Snow Load (psf)	Roof		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
	Pitch	Slope	Table 6 - ColorGard® Snow Rail (punched) Triple Span Maximum Span (inches) Between Clamps																			
	11 in 12	42.50							32				31	30	29	28	27	26	25	25	25	
	12 in 12	45.00							32				31	30	29	28	27	26	26	25	24	24
55	1 in 12 to 4 in 12	4.5 to 18.5								32												
	5 in 12	22.50								32												31
	6 in 12	26.50								32												29
	7 in 12	30.50								32												27
	8 in 12	33.75								32				31	30	29	28	27	26	25	24	23
	9 in 12	37.00								32				31	30	29	28	27	26	25	24	23
	10 in 12	40.00								32				31	30	29	28	27	26	25	24	23
	11 in 12	42.50								32				31	29	28	27	26	25	24	23	22
	12 in 12	45.00								32				31	30	29	28	27	26	25	24	23
60	1 in 12 to 4 in 12	4.5 to 18.5								32												
	5 in 12	22.50								32												31
	6 in 12	26.50								32												30
	7 in 12	30.50								32				31	30	29	28	27	26	25	24	23
	8 in 12	33.75								32				31	30	29	28	27	26	25	24	23
	9 in 12	37.00								32				31	30	29	28	27	26	25	24	23
	10 in 12	40.00								32				31	30	29	28	27	26	25	24	23
	11 in 12	42.50								32				31	29	28	27	26	25	24	23	23
	12 in 12	45.00								32				31	30	29	28	27	26	25	24	23
65	1 in 12 to 4 in 12	4.5 to 18.5								32												
	5 in 12	22.50								32												29
	6 in 12	26.50								32												27
	7 in 12	30.50								32				31	30	29	28	27	26	25	24	23
	8 in 12	33.75								32				31	30	29	28	27	26	25	24	23
	9 in 12	37.00								32				31	30	29	28	27	26	25	24	23
	10 in 12	40.00								32				30	29	28	27	26	25	24	23	22
	11 in 12	42.50								32				31	29	28	27	26	25	24	23	22
	12 in 12	45.00								32				30	29	27	26	25	24	23	22	21
70	1 in 12 to 3 in 12	4.5 to 14								32												
	4 in 12	18.50								32												31
	5 in 12	22.50								32												28
	6 in 12	26.50								32				31	30	29	28	27	26	25	24	23
	7 in 12	30.50								32				31	30	29	28	27	26	25	24	23
	8 in 12	33.75								32				31	30	29	28	27	26	25	24	23
	9 in 12	37.00								32				31	30	29	28	27	26	25	24	23
	10 in 12	40.00								32				30	29	28	27	26	25	24	23	22
	11 in 12	42.50								32				31	29	28	27	26	25	24	23	22
75	1 in 12 to 3 in 12	4.5 to 14								32												
	4 in 12	18.50								32												
	5 in 12	22.50								32												
	6 in 12	26.50								32				31	30	29	28	27	26	25	24	23
	7 in 12	30.50								32				30	29	28	27	26	25	24	23	22
	8 in 12	33.75								32				31	30	29	28	27	26	25	24	23
	9 in 12	37.00								32				31	30	29	28	27	26	25	24	23
	10 in 12	40.00								32				30	29	28	27	26	25	24	23	22
	11 in 12	42.50								32				31	29	28	27	26	25	24	23	22
80	1 in 12 to 3 in 12	4.5 to 14								32												
	4 in 12	18.50								32												
	5 in 12	22.50								32												
	6 in 12	26.50								32				31	30	29	28	27	26	25	24	23
	7 in 12	30.50								32				31	29	28	27	26	25	24	23	22
	8 in 12	33.75								32				30	29	28	27	26	25	24	23	22
	9 in 12	37.00								32				31	29	28	27	26	25	24	23	22
	10 in 12	40.00								32				30	28	27	26	25	24	23	22	21
	11 in 12	42.50								32				30	29	27	26	25	24	23	22	21
85	1 in 12 to 3 in 12	4.5 to 14								32												
	4 in 12	18.50								32												
	5 in 12	22.50								32												
	6 in 12	26.50								32												



# EVALUATION REPORT

Number: 805

Originally Issued: 10/10/2023

Revised: 10/28/2024

Valid Through: 10/31/2025

TABLE 8			Horizontal Roof Retention Length (ft)																		
Roof Snow Load (psf)	Roof		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	Pitch	Slope	Table 6 - ColorGard® Snow Rail (punched) Triple Span Maximum Span (inches) Between Clamps																		
90	7 in 12	30.50	32						31	30	28	27	26	25	24	24	23	22	21	22	
	8 in 12	33.75	32						31	30	28	27	26	25	24	23	23	22	21	21	
	9 in 12	37.00	32						30	29	27	26	25	24	23	22	22	21	21	20	
	10 in 12	40.00	32						31	29	28	26	25	24	23	22	22	21	20	19	
	11 in 12	42.50	32						30	28	27	26	24	23	22	21	21	20	19	19	
	12 in 12	45.00	32						31	29	28	26	25	24	23	22	21	21	20	19	
	1 in 12 to 2 in 12	4.5 to 9.5	32																		
	3 in 12	14.00	32																		31
	4 in 12	18.50	32																		27
	5 in 12	22.50	32																		25
95	6 in 12	26.50	32																		23
	7 in 12	30.50	32																		21
	8 in 12	33.75	32																		20
	9 in 12	37.00	32																		19
	10 in 12	40.00	32																		19
	11 in 12	42.50	32																		18
	12 in 12	45.00	32																		18
	1 in 12 to 2 in 12	4.5 to 9.5	32																		17
	3 in 12	14.00	32																		30
	4 in 12	18.50	32																		26
100	5 in 12	22.50	32																		24
	6 in 12	26.50	32																		23
	7 in 12	30.50	32																		21
	8 in 12	33.75	32																		20
	9 in 12	37.00	32																		19
	10 in 12	40.00	32																		18
	11 in 12	42.50	32																		18
	12 in 12	45.00	32																		17
	1 in 12 to 2 in 12	4.5 to 9.5	32																		17
	3 in 12	14.00	32																		29
110	4 in 12	18.50	32																		26
	5 in 12	22.50	32																		23
	6 in 12	26.50	32																		21
	7 in 12	30.50	32																		20
	8 in 12	33.75	32																		19
	9 in 12	37.00	32																		18
	10 in 12	40.00	32																		18
	11 in 12	42.50	32																		17
	12 in 12	45.00	32																		17
	1 in 12 to 2 in 12	4.5 to 9.5	32																		16
120	3 in 12	14.00	32																		28
	4 in 12	18.50	32																		24
	5 in 12	22.50	32																		22
	6 in 12	26.50	32																		20
	7 in 12	30.50	32																		19
	8 in 12	33.75	32																		18
	9 in 12	37.00	32																		18
	10 in 12	40.00	32																		17
	11 in 12	42.50	32																		17
	12 in 12	45.00	32																		16
130	1 in 12	4.50	32																		27
	2 in 12	9.50	32																		31



# EVALUATION REPORT

Number: 805

Originally Issued: 10/10/2023

Revised: 10/28/2024

Valid Through: 10/31/2025

Roof Snow Load (psf)	Roof		Horizontal Roof Retention Length (ft)																	
			2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
140	Pitch	Slope	Table 6 - ColorGard® Snow Rail (punched) Triple Span Maximum Span (inches) Between Clamps																	
	3 in 12	14.00	32																	
	4 in 12	18.50	32																	
	5 in 12	22.50	32																	
	6 in 12	26.50	32																	
	7 in 12	30.50	32																	
	8 in 12	33.75	32																	
	9 in 12	37.00	32																	
	10 in 12	40.00	32																	
	11 in 12	42.50	32																	
	12 in 12	45.00	32																	

For SI: 1-inch=25.4 mm; 1psf=0.0479 kPa

<sup>1</sup> Values in this table shall be used in the system capacity and general performance as defined in Sections 2.4 and Section 3 of this report.



# EVALUATION REPORT

Number: 805

Originally Issued: 10/10/2023

Revised: 10/28/2024

Valid Through: 10/31/2025

## FLORIDA SUPPLEMENT

**S-5! METAL ROOF INNOVATIONS, LTD.**  
**12730 Black Forest Rd**  
**Colorado Springs, CO 80908**  
**(888)-825-3432**  
**www.S-5.com**

**COLORGARD® METAL ROOF SNOW  
GUARD AND S-5! STANDING SEAM  
CLAMPS**

**CSI Division and Section:**  
**05 00 00 METALS**  
**05 05 23 Metal Fastenings**

### 1.0 RECOGNITION

The S-5! ColorGard® system and S-5! Standing Seam Clamps evaluated in IAPMO UES ER-805 are a satisfactory alternative to the following codes and regulations including locations in the High-velocity Hurricane Zone:

- 2023 Florida Building Code, Building (FBC, Building)
- 2023 Florida Building Code, Residential (FBC, Residential)

### 2.0 LIMITATIONS

The S-5! ColorGard® system and S-5! Standing Seam Clamps described in this report supplement are subject to the following limitations:

**2.1** Use of the S-5! ColorGard® system and S-5! Standing Seam Clamps shall comply with the provisions of the applicable codes, the manufacturer's published installation instructions, and this report. Where conflicts occur in these provisions, the most restrictive shall govern.

**2.2** For products falling under Section 5(d) of Florida Rule 61G20-3.008, it has been verified that the report holder's quality assurance program is audited by a quality assurance entity, approved by the Florida Building Commission, to provide oversight and determine that the products are being manufactured as described in this evaluation report to establish continual product performance.

**2.3** This supplement expires concurrently with ER-805.

For additional information about this evaluation report please visit  
[www.uniform-es.org](http://www.uniform-es.org) or email us at [info@uniform-es.org](mailto:info@uniform-es.org)