nVent CADDY CSBRS1 Vertical Rod Stiffener Instruction Manual

CSBRS1 Vertical Rod Stiffener
Instruction Manual

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CSBRS1 Vertical Rod Stiffener

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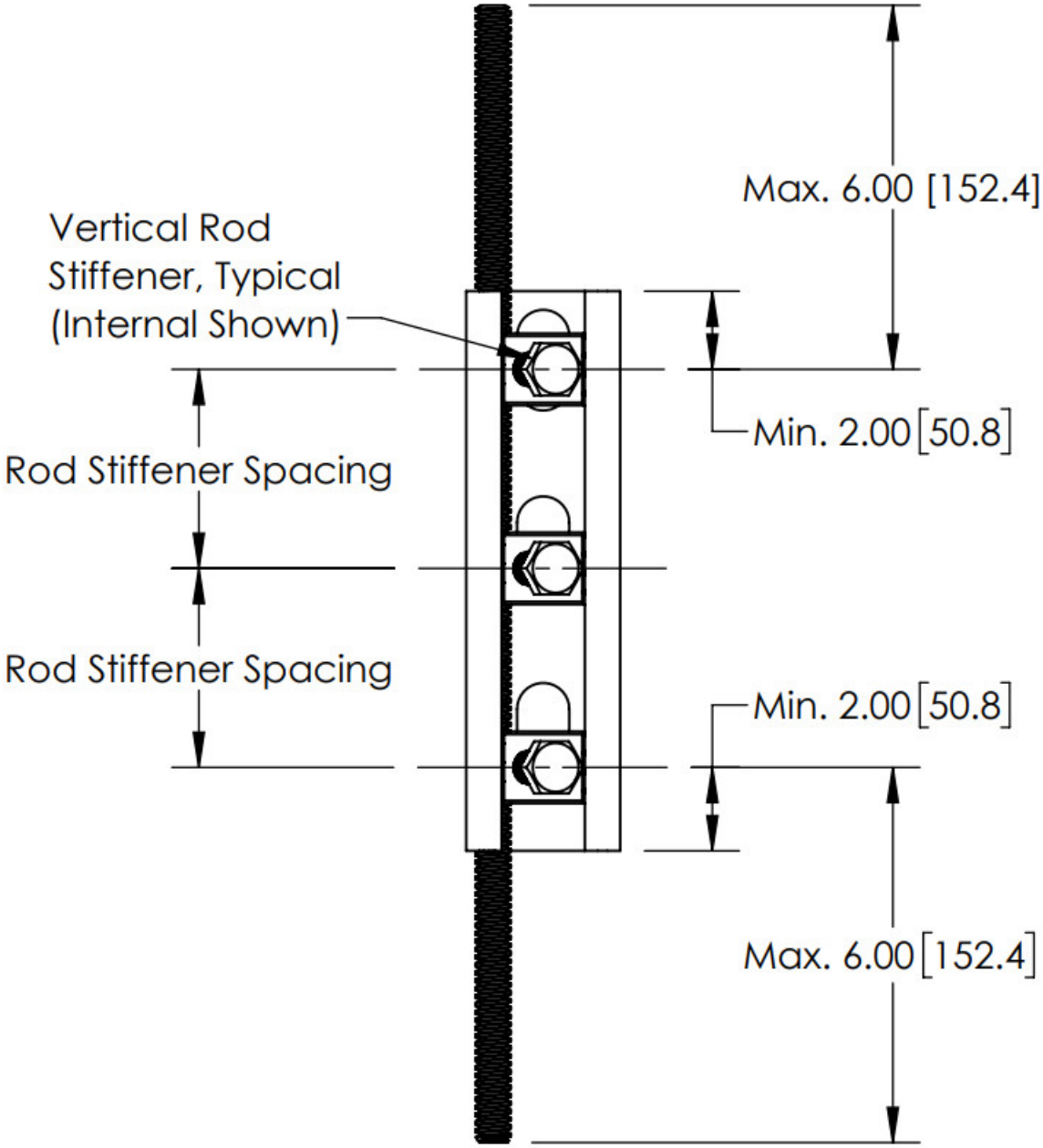
Rod Size	Root Area	Root Diameter	Least Radius of Gyration - r	Yield Stress	Ultimate Stress	Rod Stiffener Spacing (inches)*				Maximum Allowed Threaded Rod Compression Load (lbs)*				Maximum Allowed Tension Load (lbs)**
(in)	(in^2)	(in)	(in)	(ksi)	(ksi)	L/r = 50	L/r = 100	L/r = 150	L/r = 200	L/r = 50	L/r = 100	L/r = 150	L/r = 200	
3/8	0.070	0.299	0.075	36	58	3	7	11	14	1,280	900	460	260	1,330
1/2	0.129	0.405	0.101			5	10	15	20	2,360	1,670	850	480	2,460
5/8	0.207	0.513	0.128			6	12	19	25	3,790	2,680	1,370	770	3,960
3/4	0.309	0.627	0.157			7	15	23	31	5,670	4,010	2,050	1,150	5,910

Rod Stiffener Spacing and Threaded Rod Load Chart - Metric														
Rod Size	Root Area	Root Diameter	Least Radius of Gyration - r	Yield Stress	Ultimate Stress	Rod Stiffener Spacing (mm)*				Maximum Allowed Threaded Rod Compression Load (N)*				Maximum Allowed Tension Load (N)**
Dia - Pitch	(mm^2)	(mm)	(mm)	(N/mm^2)	(N/mm^2)	L/r = 50	L/r = 100	L/r = 150	L/r = 200	L/r = 50	L/r = 100	L/r = 150	L/r = 200	
M10 - 1.50	50.1	8.0	2.0	240	400	99	199	299	399	6,150	4,400	2,290	1,280	6,610
M12 - 1.75	73.2	9.7	2.4			120	241	362	482	8,990	6,430	3,350	1,880	9,660
M16 - 2.00	139.6	13.3	3.3			166	333	499	666	17,140	12,270	6,380	3,590	18,420
M20 - 2.50	218.7	16.7	4.2			208	417	1418	834	26,860	19,220	10,000	5,620	28,870

*When using Stainless Steel Threaded Rod, Calculate the Rod Stiffener Spacing and Allowable Compression Load using the Specified Minimum Yield Strength of the Stainless Steel Material **When using Stainless Steel Threaded Rod, Calculate the Maximum Allowable Tension Load using the Specified Minimum Tensile Strength of

the Stainless Steel Material



WARNING:

1. nVent products shall be installed and used only as indicated in nVent product instruction sheets and training materials. Instruction sheets are available at **www.nVent.com** and from your nVent customer service representative.
2. nVent products must never be used for a purpose other than the purpose for which they were designed or in a manner that exceeds specified load ratings.
3. All instructions must be completely followed to ensure proper and safe installation and performance.
4. Improper installation, misuse, misapplication or other failure to completely follow nVent's instructions and warnings may cause product malfunction, property damage, serious bodily injury and/or death, and void your warranty.
5. Products that are manufactured using spring steel components shall be used only in a non-corrosive indoor environment.
6. All pipe supports, hangers, intermediate components and structural attachments must ONLY be used as

described herein and are NEVER to be used for any other purpose.

NOTE: All load ratings are for static conditions and do not account for dynamic loading such as wind, water or seismic loads, unless otherwise noted.

The customer is responsible for:

a. Conformance to all governing codes.

b. The integrity of structures to which the products are attached, including their capability of safely accepting the loads imposed, as evaluated by a qualified engineer.

c. Using appropriate industry standard hardware as noted above.

SAFETY INSTRUCTIONS:

All governing codes and regulations and those required by the job site must be observed.
Always use appropriate safety equipment such as eye protection, hard hat, and gloves as appropriate to the application.
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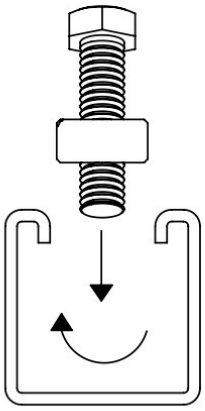
INSTRUCTION SHEET

Section 1
CSBRS37EG
404467

Torque = 8ft-lbs (11Nm)

1)



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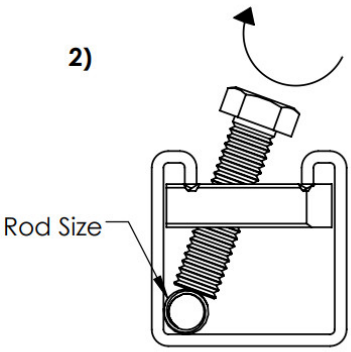
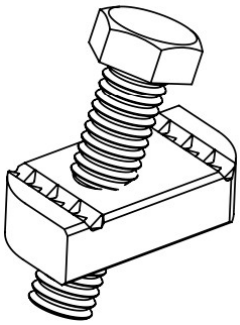
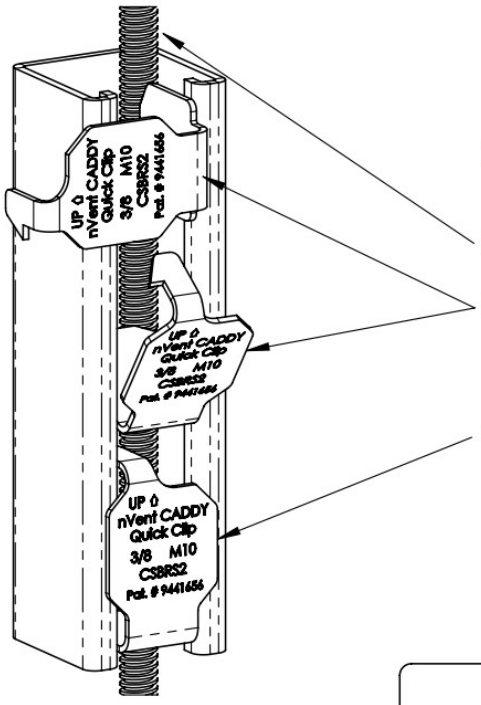
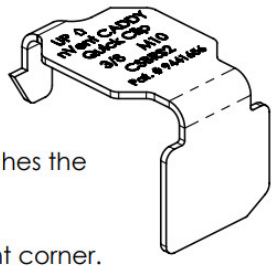




Rod Size	
Imperial	Metric
3/8"	M10-1.50
1/2"	M12-1.75
5/8"	M16-2.00
3/4"	M20-2.50

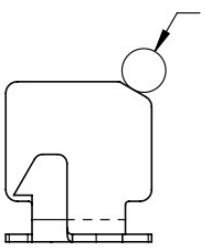


Section 2
Quick Clip



1. Choose the rod stiffener size that matches the correct size of the rod (see Figure 1).
2. Position the strut so the rod is in the right corner.
3. Insert the rod stiffener into the strut as shown and rotate the rod stiffener clockwise 90 degrees, so the arrow points up,
4. Push down rod stiffener to lock in place.

Figure 1 (examples)



Quick Clip

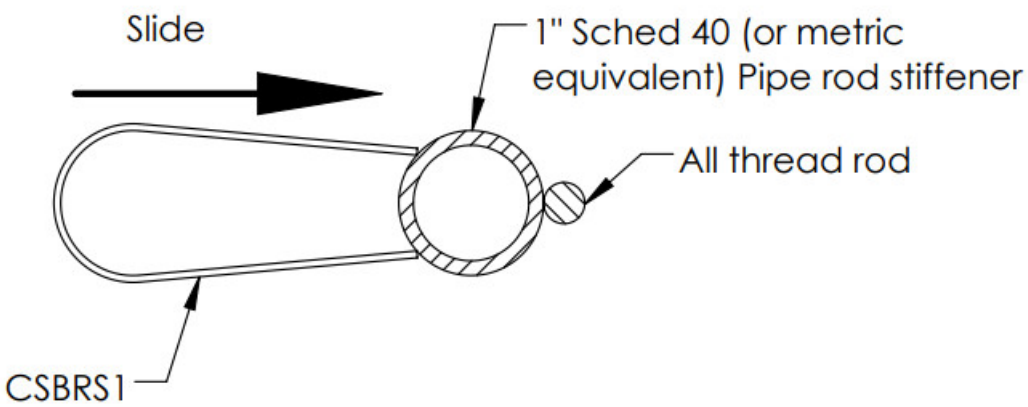
Global Part Number	Article Number	Rod Size	
		Imperial	Metric
CSBRS14	N/A	1/4"	M6-1.00
CSBRS2	404538	3/8"	M10-1.50
CSBRS3	404539	1/2"	M12-1.75
CSBRS4	N/A	5/8"	M16-2.00
CSBRS5	N/A	3/4"	M20-2.50
CSBRS6	N/A	7/8"	N/A

Note: The rod stiffener is intended for use with 1 5/8″ x 1 5/8″ 12-ga strut (undamaged).
If the rod stiffener does not snap into place and firmly hold the rod, remove the rod stiffener, place the threaded rod in the opposite corner of the strut, and reinstall the rod stiffener.

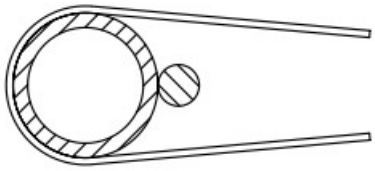
Section 3 CSBRS1 402207

Rod Size	
Imperial	Metric
3/8″	M10-1.25
1/2″	MU-1.75
5/8″	MI 6-2.00

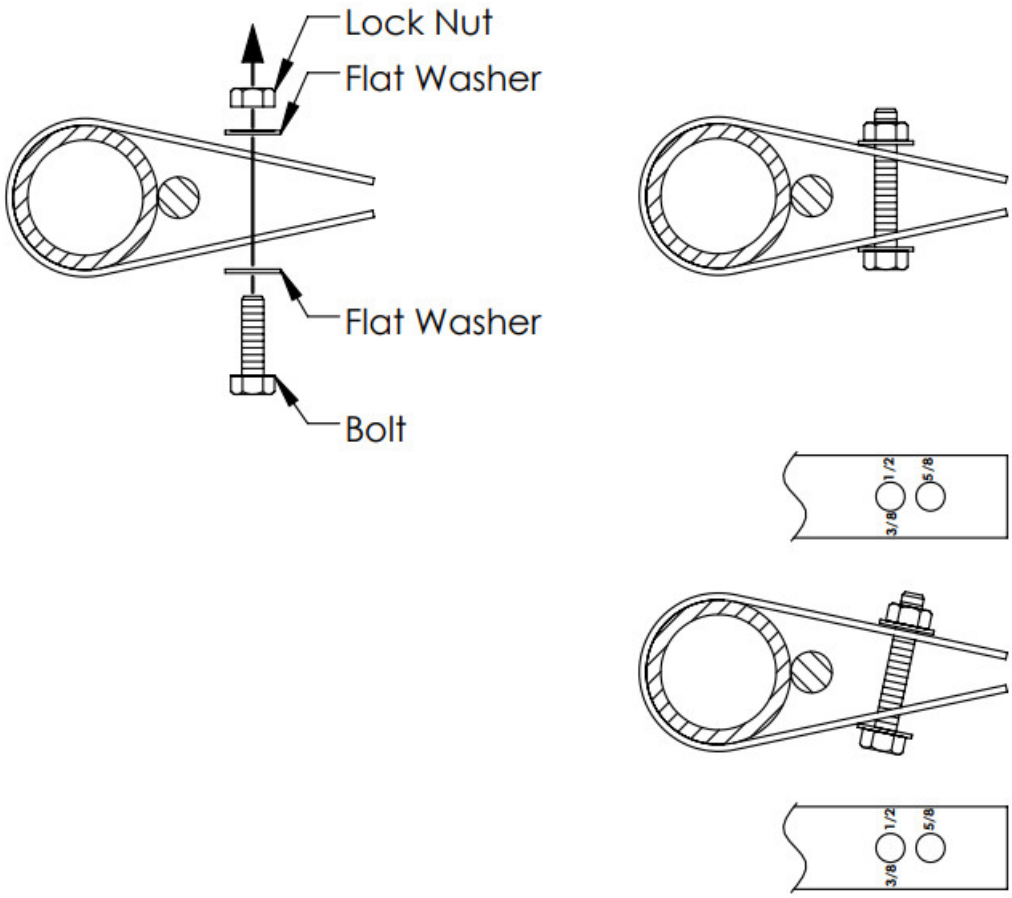
Step 1 – Slide the CSBRS1 onto the 1″ Sch 40 (or metric equivalent) pipe.



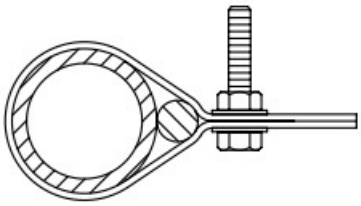
Step 2 – Snap the CSBRS1 over the 1″ pipe rod stiffener.

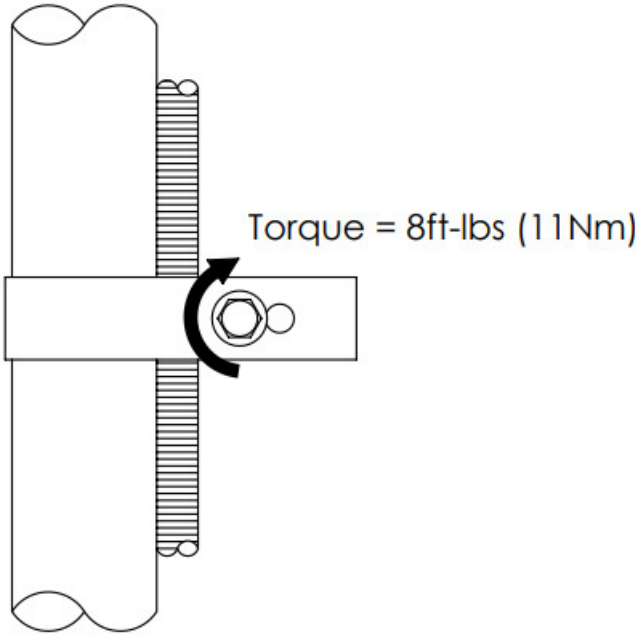


Step 3 – Insert the bolt and washer that is included into the hole that is stamped with the size of threaded rod that the CSBRS1 is being used **with.**



Note: Bolt will be inserted diagonally when 1/2″ all thread rod is used
Step 4 – Tighten the lock nut intel the two ends of the CSBRS1 are closed as shown.





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TECHNICAL SUPPORT:
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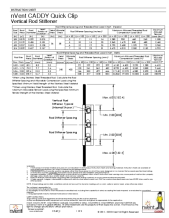
Documents / Resources

	nVent CADDY CSBRS1 Vertical Rod Stiffener [pdf] Instruction Manual CSBRS1 Vertical Rod Stiffener, CSBRS1, Vertical Rod Stiffener, Rod Stiffener, Stiffener

References

- The Future of Connection and Protection | nVent

Manuals+,