

Application

The Stable Wall RACK is a wall-mounted stand for gas extinguishing agent cylinders such as Sinorix™ CDT, Sinorix™ 1230, and Sinorix™ 227.

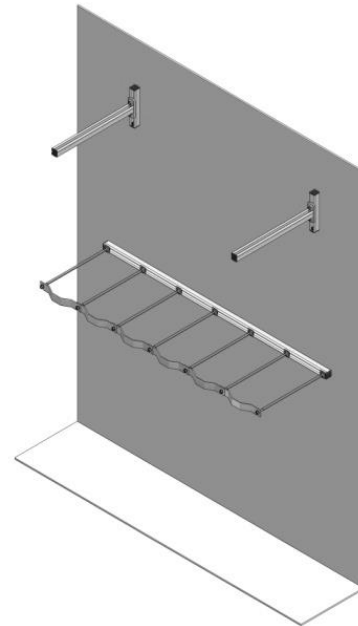
The Stable Wall RACK holds:

- 2 to 30 CDT cylinders in 1 to 2 rows:
 - BOUT80-CDT.
- 2 to 12 chemical agent cylinders in 1 to 2 rows:
 - BOUT67-RED,
 - BOUT80-RED,
 - BOUT120-RED.

Other fastening systems exist for other cylinder arrangements.

This document explains the implementation of the first step in the process of commissioning a Siemens automatic gas extinguishing system.

Sinorix™ CDT
 Sinorix™ 1230
 Sinorix™ 227



▷ 1 Cylinder stand

2 Manifold

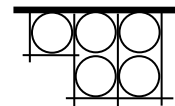
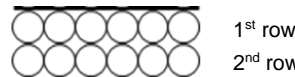
3 Cylinders/Battery

4 Management

Cylinder arrangement

The cylinders are arranged in one or two rows.

For an odd number of cylinders in two rows, the first or last cylinder must be attached with a short threaded rod.



Supplementary documents

Document title	Part number
Handling and safety measures for extinguishing agent cylinders.	A6V10559212



IMPORTANT

■ **Technical data:** The technical characteristics of the products used to assemble the RACK are provided in the product data sheets.

■ **Precautions:** This product is intended for installers specialised and qualified by Siemens, with experience in the design, installation and maintenance of automatic extinguishing systems. Installers must ensure that this product is used under suitable conditions and that any danger to themselves or any other person is avoided, and that Siemens requirements are met (assembly instructions, technical instructions, commissioning, instructions for use). Checks shall also be made to ensure that the product is installed in accordance with the accident prevention regulations and national regulations in force.

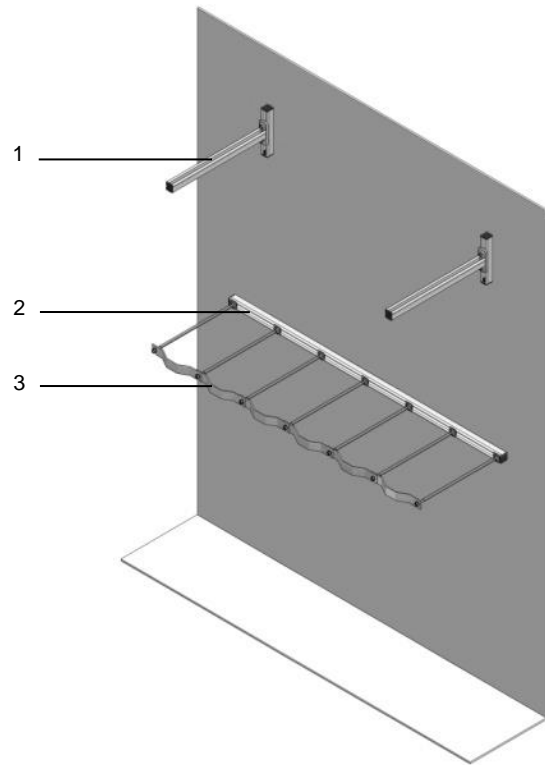
Installers should also ensure that users have read and understood the information concerning this product.

Rack description

The stand is made up of a combination of different sets of equipment.

Item	Part	Part number
1	Manifold support	RACK-MANI-SW-xx
2	Cross member	RAIL-41-xx
3	Cylinder attachment bracket	RACK-FIX-xx

The tables on the previous page show which sets of equipment correspond to which arrangement.



Tooling required

Assembling the RACK

- Torque wrench 20-100 Nm
- Tubular box wrench 16
- Open-end wrench 16
- Tape measure
- Level

Attaching to the wall

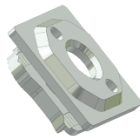
- Drill
- Plugs (metal or chemical) appropriate to the type of wall
- CHC M12 or H M10 screws and washers
- Allen key 10 (if using CHC M12 screws)

RACK assembly parts

Bolt for the rail



Nut plate



Dimensional characteristics

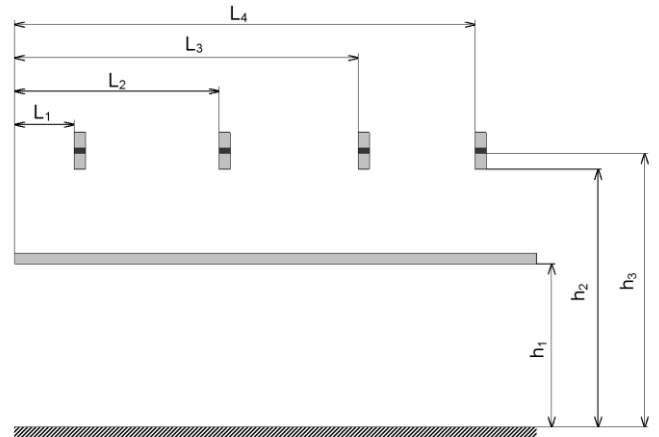
Dimensional characteristics to be observed according to the system's configuration.

h_1 : height of the cross member.

h_2 : height of the rail for the manifold support.

h_3 : height of the manifold support.

L_1, L_2, L_3 and L_4 : distance between the end of the cross member and the position of the rails for the manifold supports.



CDT					
No. of rows	No. of cylinders	L_1 (mm)	L_2 (mm)	L_3 (mm)	L_4 (mm)
1	2	195	455		
1	3	320	740		
1	4	320	1 020		
1	5	320	1 300		
1	6	320	1 580		
1	7	320	1 170	1 860	
1	8	320	1 020	2 150	
1	9	320	1 300	2 430	
1	10	320	1 300	2 710	
1	11	320	1 580	2 990	
1	12	320	1 450	2 580	3 270
1	13	320	1 450	2 430	3 560
1	14	320	1 300	2 430	3 840
1	15	320	1 730	2 710	4 120
2	3/4	146	390		
2	5/6	380	660		
2	7/8	380	940		
2	9/10	380	1 220		
2	11/12	380	1 500		
2	13/14	380	1 220	1 790	
2	15/16	380	1 500	2 070	
2	17/18	380	1 220	2 350	
2	19/20	380	1 500	2 630	
2	21/22	380	1 790	2 910	
2	23/24	380	1 220	2 070	3 200
2	25/26	380	1 220	2 070	3 480
2	27/28	380	1 220	2 350	3 760
2	29/30	380	1 220	2 630	4 040

RED 80L and 67L			
No. of rows	No. of cylinders	L_1 (mm)	L_2 (mm)
1	2	400	680
1	3	400	680
1	4	400	970
1	5	400	1 255
1	6	400	1 540
2	3/4	400	680
2	5/6	400	680
2	7/8	400	970
2	9/10	400	1 255
2	11/12	400	1 540


RED 120L			
No. of rows	No. of cylinders	L_1 (mm)	L_2 (mm)
1	2	440	800
1	3	440	800
1	4	440	1 160
1	5	440	1 520
1	6	440	1 880
2	3/4	440	800
2	5/6	440	800
2	7/8	440	1 160
2	9/10	440	1 520
2	11/12	440	1 880

		CDT	
Manifold	1"1/2	h_1 (mm)	1 300
		h_2 (mm)	2 000
		h_3 (mm)	2 175
	3"	h_1 (mm)	1 300
		h_2 (mm)	1 990
		h_3 (mm)	2 170

		RED 67L	RED 80L	RED 120L	
Manifold	2"	h_1 (mm)	1 300	1 300	1 300
		h_2 (mm)	1 890	2 090	1 890
		h_3 (mm)	2 070	2 270	2 070
	3"	h_1 (mm)	1 300	1 300	1 300
		h_2 (mm)	1 860	2 060	1 860
		h_3 (mm)	2 055	2 255	2 055


Stable Wall RACK assembly

Attaching the cross member

	<p>Attention</p> <p>Ensure the wall is compatible with the load to be supported.</p> <p>Minimum number of attachment points required according to the number of cylinders per row:</p> <ul style="list-style-type: none"> - from 2 to 6 cylinders: 2 attachment points, - from 7 to 11 cylinders: 3 attachment points, - from 12 to 15 cylinders: 4 attachment points. <p>Attachment with CHC M12 or H M10 screws, washers and plugs appropriate to the type of wall.</p>
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1. Fit a protective cap for RAIL-41 (C) to each end of the cross member.
2. Position the cross member (A) on the wall at height "h1", using a level to ensure it is horizontal.
3. Mark the holes and then drill them.
4. Fix the cross member to the wall using the screws, washers and plugs.

Attaching the rails for manifold supports

	<p>Attention</p> <p>Each rail requires two attachment points with CHC M12 or H M10 screws, washers and plugs appropriate to the type of wall.</p>
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1. Fit a protective cap for RAIL-41 (C) to each end of the attachment rails.
2. Position the rails (B), observing the height "h2" and distances L₁ to L₄ (see Dimensional characteristics).
3. Mark the holes and then drill them.
4. Fix the rails to the wall using the screws, washers and plugs.


Manifold support

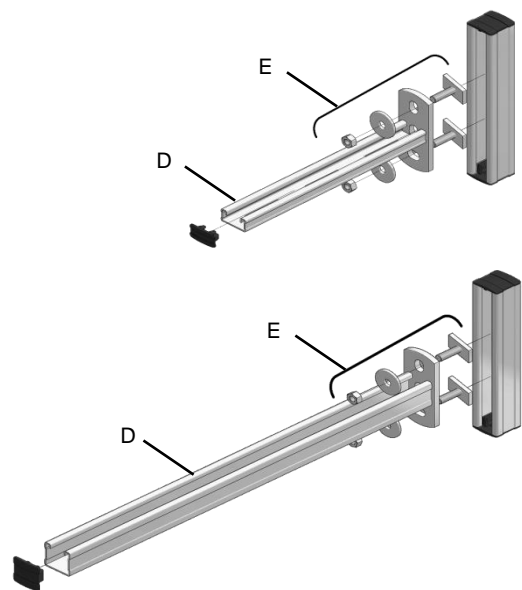
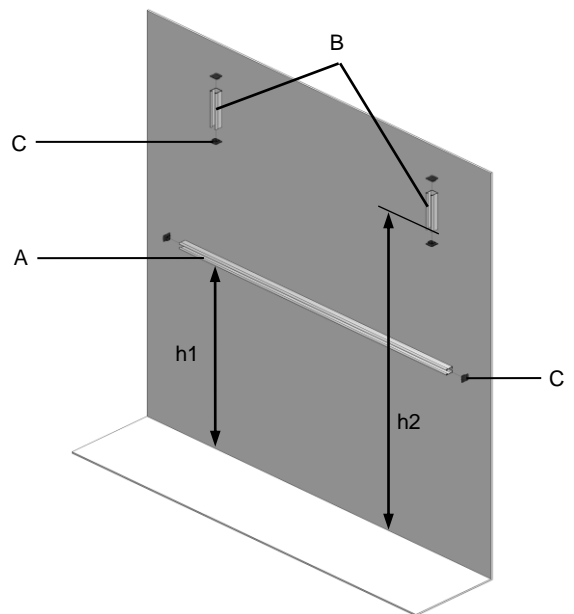
There are two types of manifold support (D), the use of which depends on the type of cylinder and the system's number of rows:

Manifold support type	Number of manifold supports			
	1 row		2 rows	
	Short	Long	Short	Long
BOUT80-CDT	2	-	2	-
BOUT67-RED	2	-	-	2
BOUT80-RED	2	-	-	2
BOUT120-RED	2	-	-	2

Attaching the manifold supports

1. Fit a protective cap to the ends of the manifold supports.
2. Attach the manifold supports (D) to the rails, at height "h3" (see Dimensional characteristics) using two rail bolts (E).
3. Tighten the bolts (E) using an open-end wrench 16.

	<p>The long manifold support corresponds to the equipment assembly called RACK-MANI-SW-LONG.</p>
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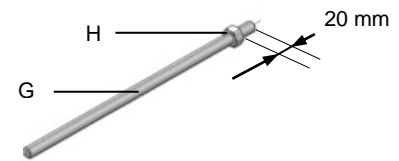
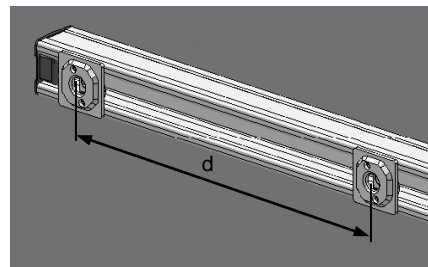
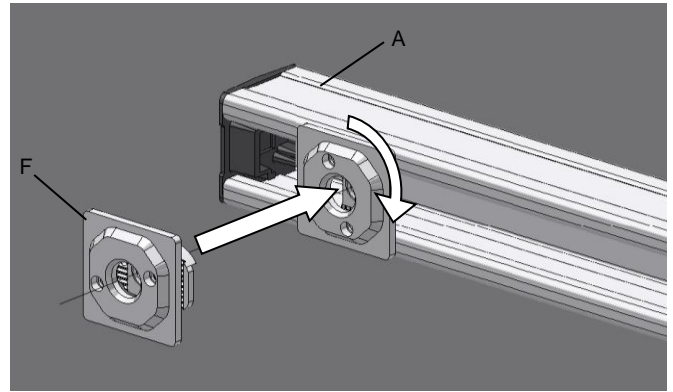


Assembling the cylinder fastening systems

Installing the nut plates

1. Place the first nut plate (F) at the end of the cross member (A).
2. Turn the nut plate one quarter turn.
3. Position all the nut plates on the cross member in the same way, spacing them at a distance "d" according to the diameter of the cylinders:

Type	Cylinder type	Distance "d"
CDT	BOU80-CDT	282 mm
RED	BOU67-RED	282 mm
	BOU80-RED	282 mm
	BOU120-RED	360 mm



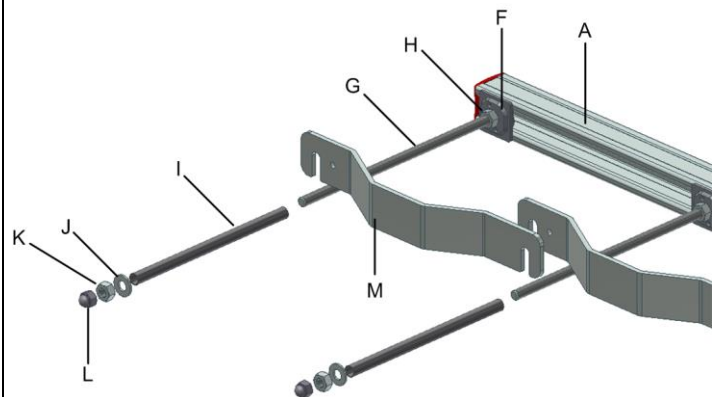
Preparing the threaded rods

Screw the nuts (H) onto the threaded rods (G) leaving approximately 20 mm of thread.

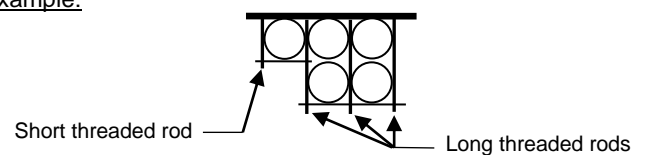
Installing the cylinder fastenings

	<p>Attention</p> <p>Follow the instructions for handling extinguishing agent cylinders and the installation procedures when putting the cylinders into place on the rack.</p>
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1. Screw a threaded rod (G) fitted with a nut (H) into the first nut plate (F).
2. Tighten the nut (H) using a 16 mm open-end wrench.
3. Place a protective tube (I) over the threaded rod (G).
4. Place the cylinder (or both cylinders for an installation in two rows).
5. Screw another threaded rod (G) fitted with a nut (H) into the next nut plate.
6. Tighten the nut (H) using a 16 mm open-end wrench.
7. Place a protective tube (I) over the threaded rod.
8. Place an attachment bracket (M) in front of the cylinder and hold it in place with a washer (J), a nut (K) and a cap nut (L) on each threaded rod.
9. Tighten the nuts (K) using an open-end wrench 16.
10. Repeat the procedure for each cylinder (or group of two cylinders for an installation in two rows), placing the bracket behind the bracket already in place.



For an installation in two rows with an odd number of cylinders, the first (or last) cylinder will be installed with a short threaded rod.
Example:



Maintenance

During the periodic inspections of the systems, check:

- The presence and condition of the plastic protective caps.
- The absence of corrosion.
- The satisfactory tightness of the nuts, assembly buttons and cylinder attachment brackets.
- Anchoring to the floor.

Revision	DESCRIPTION	DATE
E	Sinorix™ H2O Jet removed, and Dimensional characteristics updated for CDT	10/10/2019