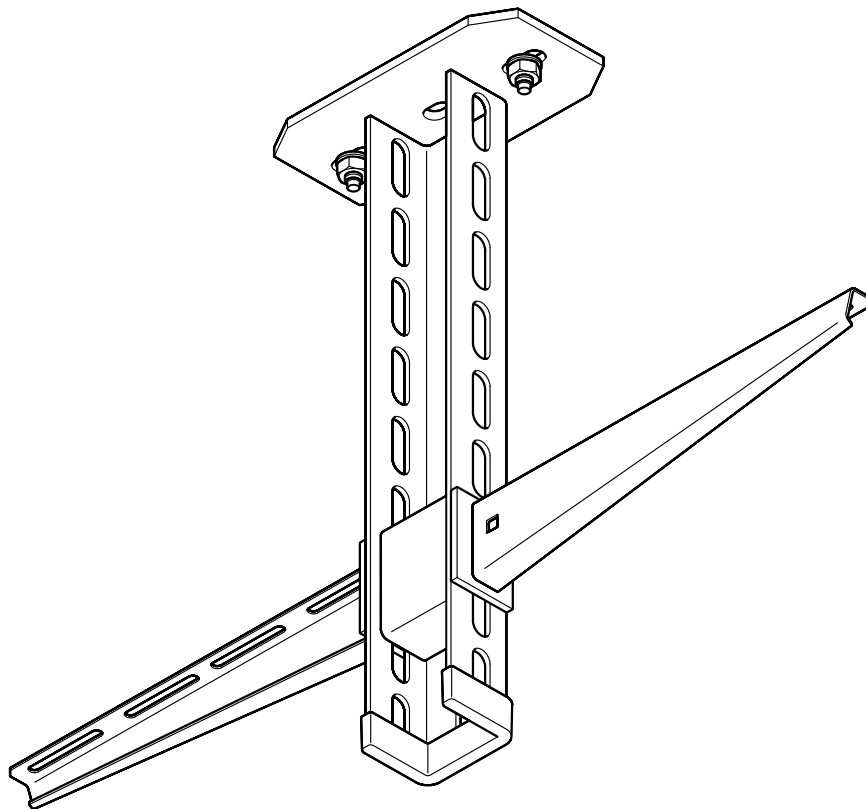


U support systems
Mounting instructions



U support systems

Mounting instructions

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1 About these instructions

1.1 Target group

These mounting instructions are intended for:

- Engineers and architects charged with the planning of U support systems.
- Electrically trained specialists charged with installing U support systems.

1.2 Relevance of these instructions

- These instructions are based on the standards valid at the time of compilation (October 2019).
- Please read the instructions carefully before starting installation. We will not accept any warranty claims for damage caused through non-observance of these instructions.
- Any images are intended merely as examples. Mounting results may look different.

1.3 Types of warning information



Type of risk!

Shows a possibly risky situation. If the situation is not avoided, then death or serious injury may result.

Note!

Indicates important information or assistance!

2 Correct use

The U support system is used for supporting and routing all types of cable trays. Depending on the material and surface design, it can be used indoors and outdoors.

The U support system is suitable for use at ambient temperatures of -20 °C to $+120\text{ °C}$. At temperatures below -20 °C , the material will become brittle and may not be processed further.

The U support system is not designed for any other purpose than the one described here. If the U support system is used for another purpose, any liability, warranty or damage claims shall be rendered null and void.

2.1 Basic standards

The U support system fulfils the requirements of IEC 61537:2006 – Cable management – Cable tray systems and cable ladder systems.

3 Safety

3.1 General safety information

Observe the following general safety information on handling the U support system:

- Follow applicable working, accident and environmental protection regulations.
- The U support system should be included in the protective measures and the equipotential bonding.
- Have the inclusion in the equipotential bonding of the overall system performed by specialist personnel.
- Design the support system according to the loads to be expected.
- Do not exceed the maximum support load of the U support system.
- During mounting, take the structure of the wall and ceiling into account.

3.2 Personal protective equipment

- During all mechanical mounting work, wear personal protective equipment:
 - Gloves
 - Eye protection
 - Head protection

4 System description

U support systems for cable support structures comprise the light-duty US 3 system, the medium-duty US 5 system and the heavy-duty US 7 system. The different systems are designed for light, medium-weight and heavy loads. The U support systems can be used as ceiling suspension, floor stand-off or as construction profiles. The systems comprise U hanging supports, wall and support brackets, head plates, U supports and U support connectors.

Note! *The three variants are mounted in an identical manner. The mounting of the U support system US 7 is shown as an example.*

4.1 System components

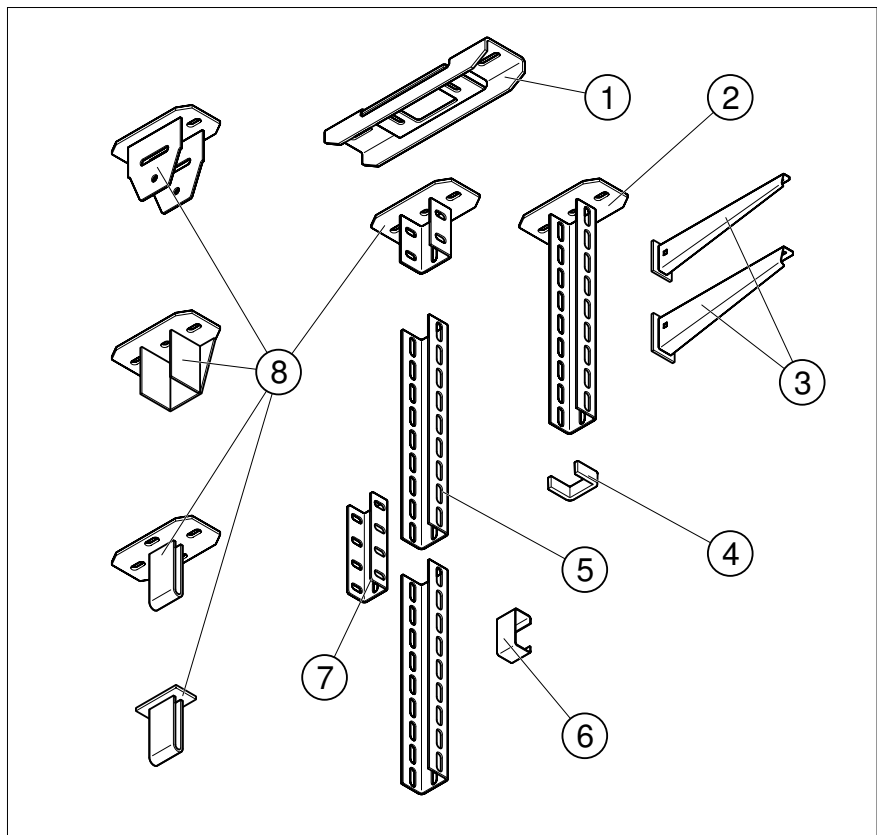


Fig. 1: System components, US 7

	Component	Function
①	Adapter head plate, symmetrical	Increase in the load capacity of the overall system
②	U hanging support	Mounting on horizontal concrete ceiling, acceptance of support brackets
③	Support bracket	Mounting on U support and U hanging support, support for cable tray/cable ladder
④	End cap	End cover of U hanging support and U support
⑤	U support	Extension of U hanging support, construction of traverses
⑥	Spacer	Stabilisation of the profiles

	Component	Function
⑦	U support connector	Connection of U supports
⑧	Head plates	Mounting on with U support horizontal concrete ceiling

Tab. 1: System components

4.2 Accessories

4.2.1 Earthing terminal

Depending on the mounting situation, equipotential bonding with the overall system may be required, see IEC 61537:2006.

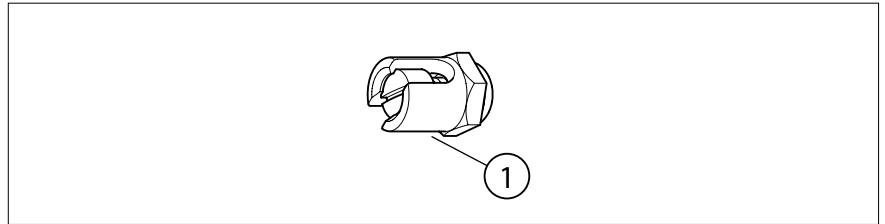


Fig. 2: Earthing terminal

① Earthing terminal

4.2.2 Fastening material

Depending on the structure of the mounting substrate, use suitable fastening materials in the wall or ceiling.

OBO offers the following fastening systems:

Substrate	Fastening material type
Concrete	N, N-K, BZ, BZ-U, BZ-IG, SZ-B, ES, Easy, MMS-plus
Masonry	MMS-plus, HMS-KS, injection tie

The characteristic load values for the fastening anchors can be found in the appropriate tables and the approved load capacity of the individual system components in the appropriate load diagrams in the current catalogue.

<https://obo-bettermann.com/en-wo/support/3804.html>

5 Mounting system components



WARNING

Danger due to high working height!

When installing at height, there is a risk of falling and/or that parts may fall. Falls and/or falling components can cause serious injuries.

- Do not work alone.
 - Use fall protection as required.
 - Secure the area below the installation against access.
 - Wear safety shoes and a helmet.
-

Note!

Tighten bolts and nuts with the torque to be complied with.

Torques and tightness classes of the supplied bolts:

<https://obo-bettermann.com/en-wo/support/3804.html>

5.1 Mounting fastening material

In these mounting instructions, only one system with bolt tie, washer and nut will be shown with regard to wall and ceiling mounting. A combination nut can be used as an alternative to the washer and nut.

Note!

To prevent loosening of bolt connections through vibrations, screw locks can be attached. Possible screw locks are nuts with an internal plastic ring or a screw locking adhesive, e.g. Loctite (item no. 2362940).

1. Drill the anchor hole.
2. Blow out the anchor hole.
3. Knock in the bolt tie.
4. Push the system onto the bolt thread and fix with washers and nuts or combination nuts.

5.2 Mounting the U hanging support

Example: In combination with wall and support brackets and spacer.

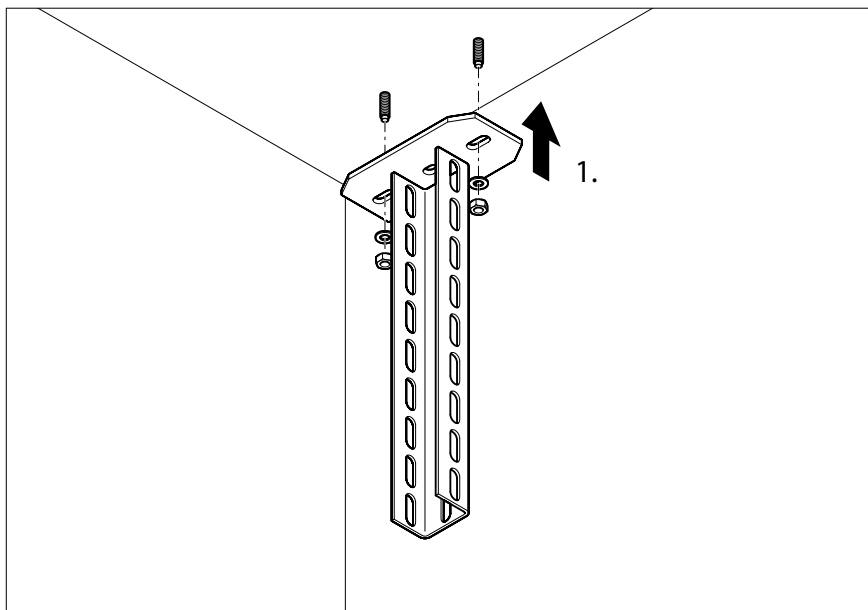


Fig. 3: Mounting the U hanging support

1. Place the U hanging support on the bolt thread and screw together with washers and nuts.

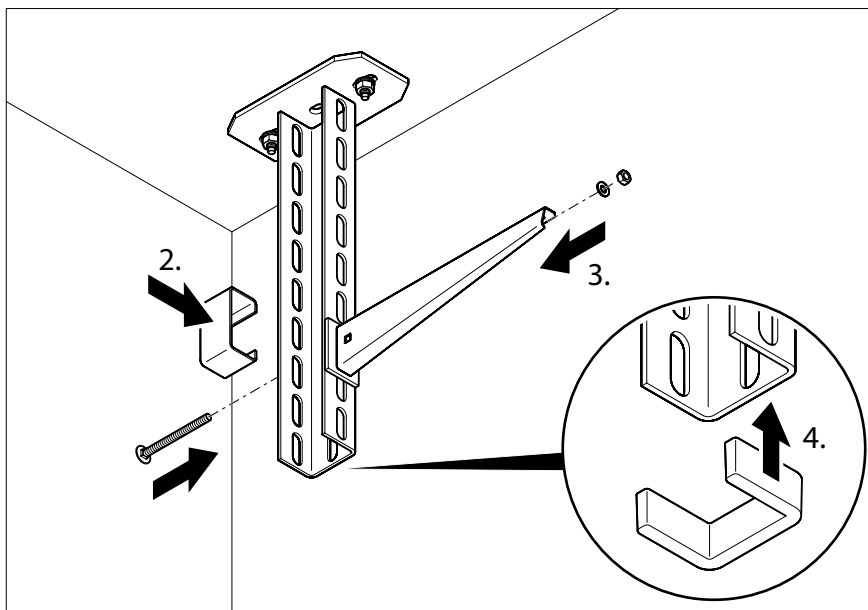


Fig. 4: Mounting the spacer and wall/support brackets

2. Insert the spacer into the U hanging support.
3. Position the wall/support bracket by the U hanging support and screw tight with the hexagonal bolt, washer and nut.
4. Attach the end cap.

5.2.1 Mounting the quick fastening

The quick fastening can be used to fasten cable trays on brackets.

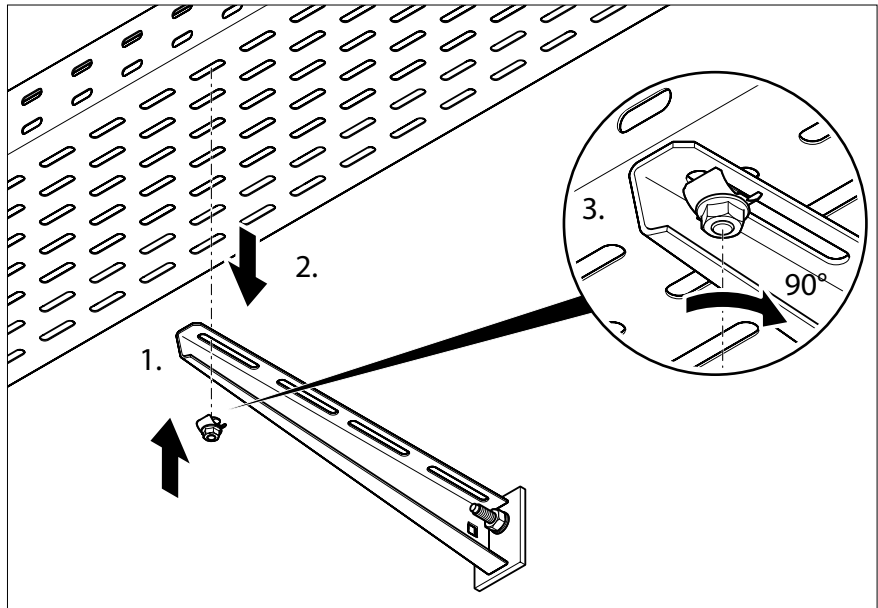


Fig. 5: Mounting the quick fastening

1. Turn the quick fastening into the bracket.
2. Place the cable tray on the quick fastening.
3. Fix the cable tray by turning the quick fastening through 90°.

5.3 Mounting the adapter head plate

Example: In combination with hanging support and two wall and support brackets.

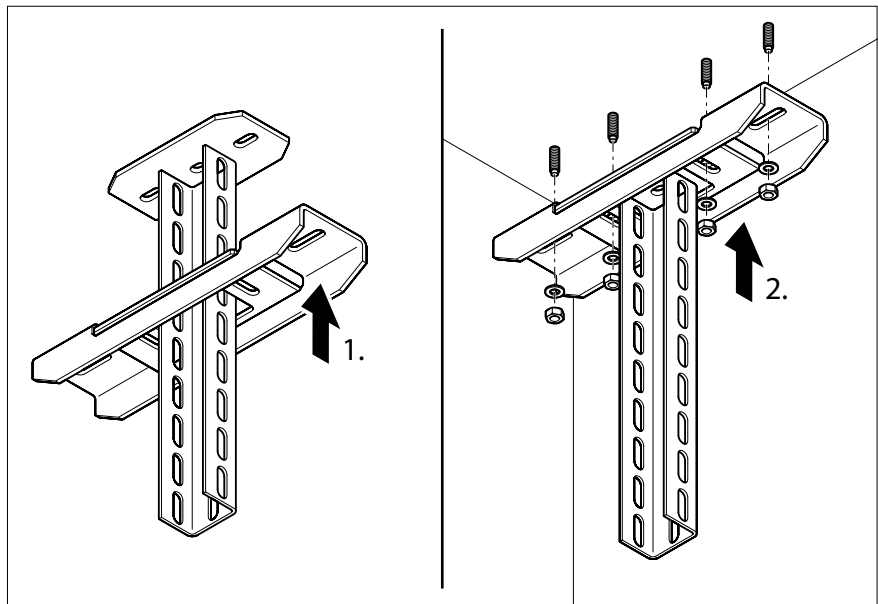


Fig. 6: Mounting the adapter head plate

1. Push the head plate over the U hanging support.
2. Place the mounted unit on the bolt thread and screw together with washers and nuts.

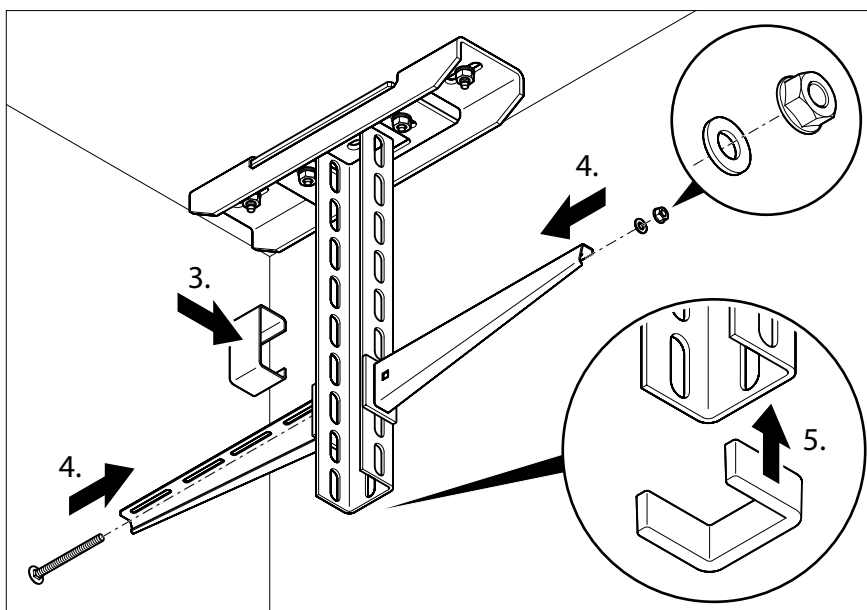


Fig. 7: Mounting the wall/support bracket

3. Insert the spacer into the U hanging support.
4. Screw two wall/support brackets to the U hanging support with a bolt and combination nut.
5. Attach the end cap.

5.4 Mounting the head plate

Example: In combination with U supports, mounted as a traverse.

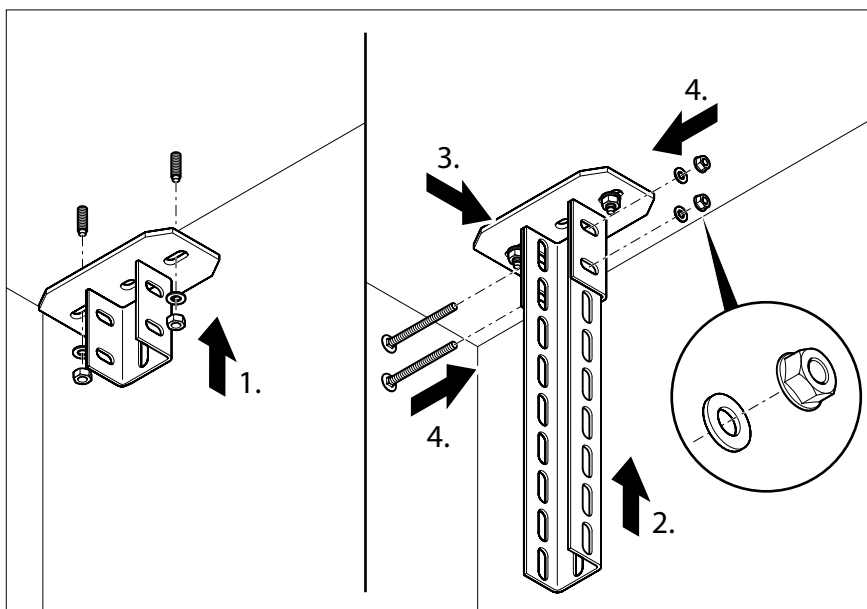


Fig. 8: Mounting the head plate with U support

1. Place the head plate on the bolt thread and screw together with washers and nuts.
2. Insert the U support in the head plate.
3. Insert the spacer in the U support.
4. Screw the U support and spacer together with the head plate with bolts, washers and nuts.

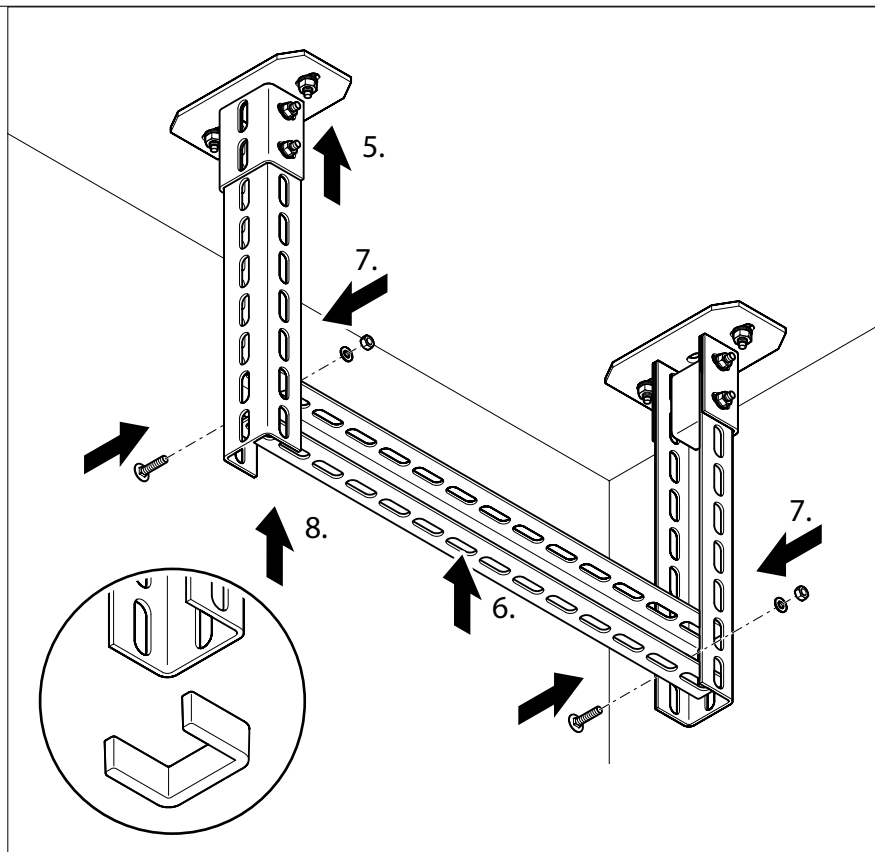


Fig. 9: Mounting the traverse

5. Mount the head plate with U support at a necessary spacing.
6. Shorten the U support as a transverse profile to the necessary length and push the U profile between U supports.
7. Connect the UP supports and U profile with bolts, washers and nuts.
8. Attach the end caps.

5.5 Mounting the variable head plate

Example: In combination with a U support and spacer.

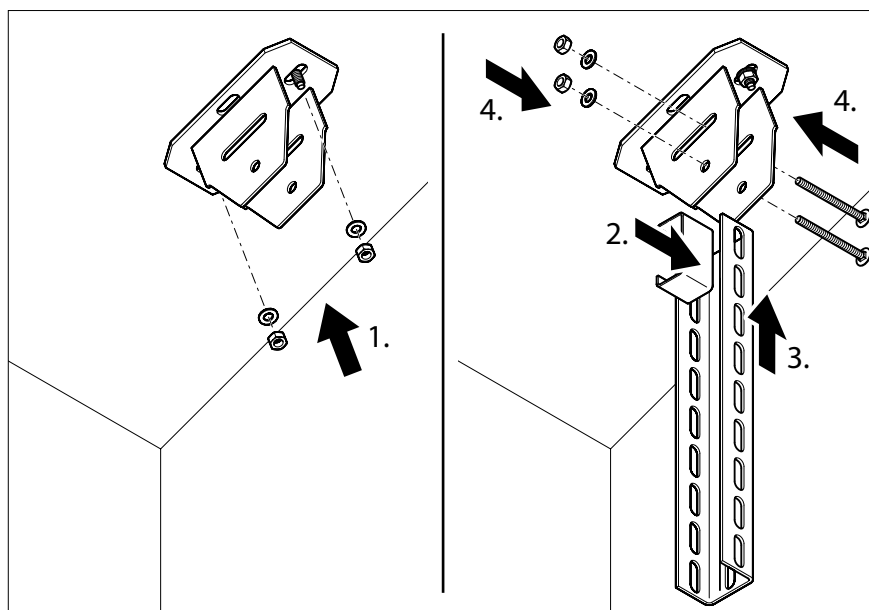


Fig. 10: Mounting the variable head plate with U support

1. Place the variable head plate on the bolt thread and screw together with washers and nuts.
2. Insert the spacer in the U support.
3. Insert the spacer with U support in the variable head plate.
4. Secure the spacer, U support and variable head plate with bolts, washers and nuts.

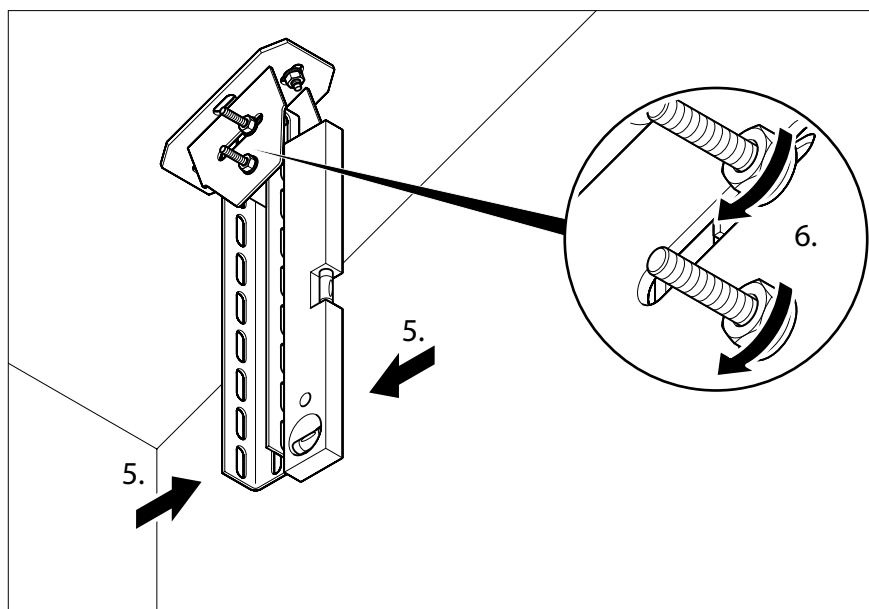


Fig. 11: Aligning the U support vertically

5. Align the U support vertically.
6. Screw the U support tight.

5.6 Mounting the variable wall bracket

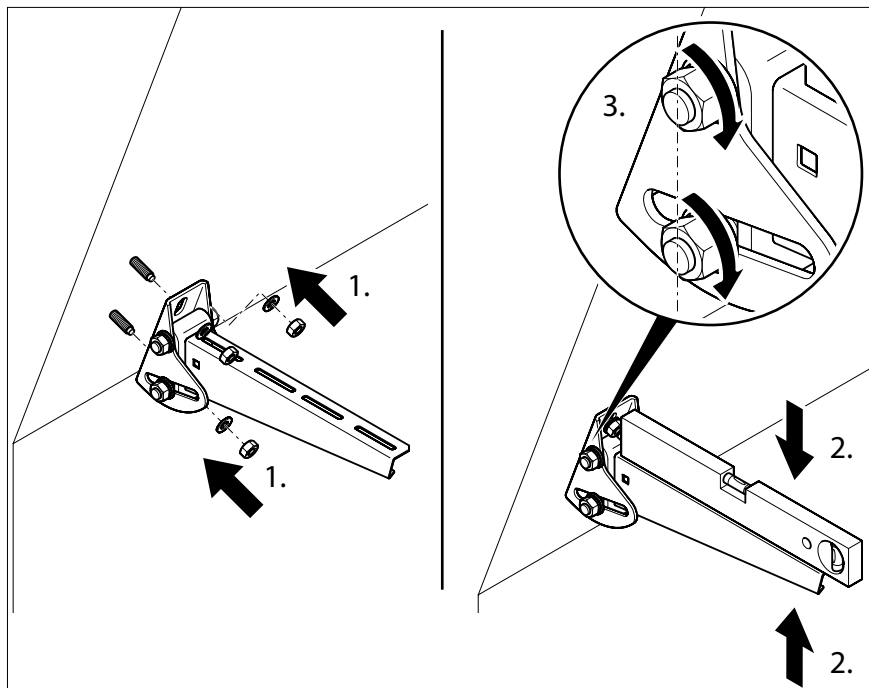


Fig. 12: Mounting the variable wall bracket

1. Place the variable wall bracket on the bolt thread and secure it with washers and nuts.
2. Align the variable wall bracket horizontally over the slot.
3. Screw the variable wall bracket tight.

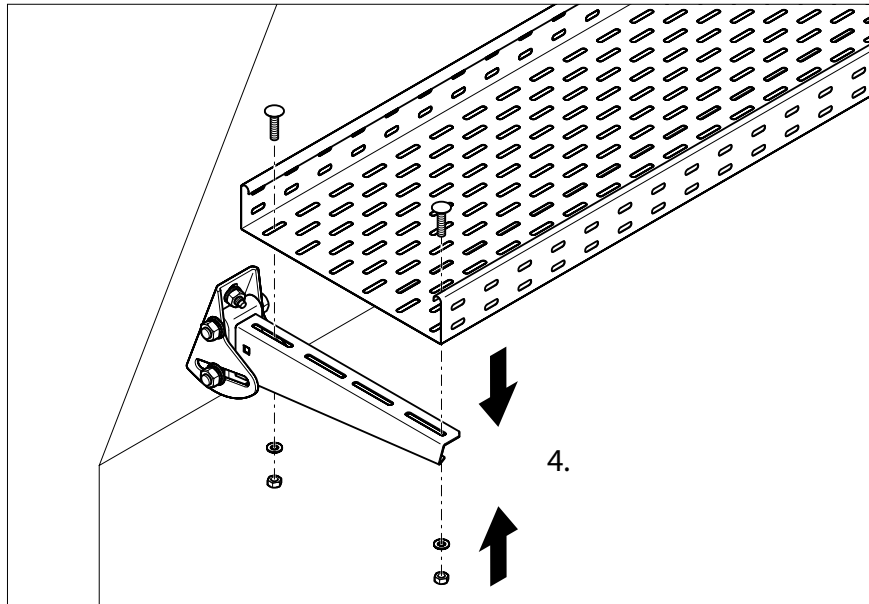


Fig. 13: Mounting the cable tray on the variable wall bracket

4. Attach the cable tray and screw it tight with bolts, washers and nuts.

6 Creating equipotential bonding



A lack of equipotential bonding can, in cases of damage, mean that parts of the U support system may be energised. If contact creates a conductive connection, this can lead to fatal injuries.

- Creating equipotential bonding.

The equipotential bonding is created on the cable tray or cable ladder mounted on the support structure.

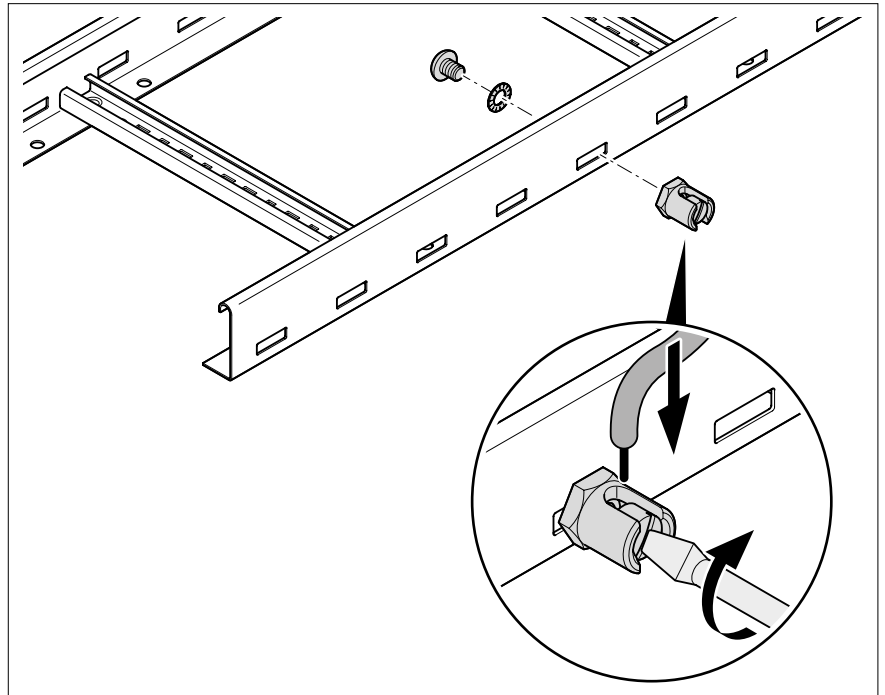


Fig. 14: Mounting the earthing terminal

1. Screw the earthing terminal to the component.
2. Electrically connect the earthing terminal to the overall equipotential bonding.

7 Maintenance of U support systems

The stability and function of the U support systems can be impaired by external influences, such as damage or machine vibrations.

Tighten loose connection elements and, if necessary, apply a screw lock using nuts with an internal plastic ring or a screw locking adhesive. Replace damaged parts. Check regularly to see if the connection to the overall equipotential bonding is still intact.

8 Dismantling U support systems



Danger due to high working height!

When installing at height, there is a risk of falling and/or that parts may fall. Falls and/or falling components can cause serious injuries.

- Do not work alone.
 - Use fall protection as required.
 - Secure the area below the installation against access.
 - Wear safety shoes and a helmet.
-

Dismantling of all the elements of the U support systems takes place in the reverse order to mounting.

9 Disposing of U support systems

- Residual metal: As scrap metal
- Packaging: As household waste

Comply with the local waste disposal regulations.

10 Technical data

Designation	Type	Dimensions, mm	Material	Item no.
US 3 hanging support	US 3 K 20 FT	130 x 200 x 30	FT	6342351
US 3 hanging support	US 3 K 30 FT	130 x 300 x 30	FT	6342353
US 3 hanging support	US 3 K 40 FT	130 x 400 x 30	FT	6342355
US 3 hanging support	US 3 K 50 FT	130 x 500 x 30	FT	6342357
US 3 hanging support	US 3 K 60 FT	130 x 600 x 30	FT	6342359
US 3 hanging support	US 3 K 70 FT	130 x 700 x 30	FT	6342362
US 3 hanging support	US 3 K 80 FT	130 x 800 x 30	FT	6342364
US 3 hanging support	US 3 K 90 FT	130 x 900 x 30	FT	6342366
US 3 hanging support	US 3 K 100 FT	130 x 1,000 x 30	FT	6342368
US 3 hanging support	US 3 K 110 FT	130 x 1,100 x 30	FT	6342370
US 3 hanging support	US 3 K 120 FT	130 x 1,200 x 30	FT	6342372
US 3 hanging support	US 3 K 20 A2	130 x 200 x 30	A2	6342401
US 3 hanging support	US 3 K 30 A2	130 x 300 x 30	A2	6342403
US 3 hanging support	US 3 K 40 A2	130 x 400 x 30	A2	6342405
US 3 hanging support	US 3 K 50 A2	130 x 500 x 30	A2	6342407
US 3 hanging support	US 3 K 60 A2	130 x 600 x 30	A2	6342409
US 3 hanging support	US 3 K 70 A2	130 x 700 x 30	A2	6342411
US 3 hanging support	US 3 K 80 A2	130 x 800 x 30	A2	6342413
US 3 hanging support	US 3 K 90 A2	130 x 900 x 30	A2	6342415
US 3 hanging support	US 3 K 100 A2	130 x 1,000 x 30	A2	6342417
US 3 hanging support	US 3 K 20 A4	130 x 200 x 30	A4	6342375
US 3 hanging support	US 3 K 30 A4	130 x 300 x 30	A4	6342530
US 3 hanging support	US 3 K 40 A4	130 x 400 x 30	A4	6342379
US 3 hanging support	US 3 K 50 A4	130 x 500 x 30	A4	6342381
US 3 hanging support	US 3 K 60 A4	130 x 600 x 30	A4	6342389
US 3 hanging support	US 3 K 70 A4	130 x 700 x 30	A4	6342391
US 3 hanging support	US 3 K 80 A4	130 x 800 x 30	A4	6342393
US 3 hanging support	US 3 K 90 A4	130 x 900 x 30	A4	6342395
US 3 hanging support	US 3 K 100 A4	130 x 1,000 x 30	A4	6342397
US 3 hanging support	US 3 K110 A4	130 x 1,100 x 30	A4	6342396
US 3 hanging support	US 3 K120 A4	130 x 1,200 x 30	A4	6342398
US 3 support	US 3 20 FS	50 x 200 x 30	FS	6342302
US 3 support	US 3 30 FS	50 x 300 x 30	FS	6342304
US 3 support	US 3 40 FS	50 x 400 x 30	FS	6342306
US 3 support	US 3 50 FS	50 x 500 x 30	FS	6342308
US 3 support	US 3 60 FS	50 x 600 x 30	FS	6342310
US 3 support	US 3 70 FS	50 x 700 x 30	FS	6342312
US 3 support	US 3 80 FS	50 x 800 x 30	FS	6342314
US 3 support	US 3 90 FS	50 x 900 x 30	FS	6342316
US 3 support	US 3 100 FS	50 x 1,000 x 30	FS	6342318
US 3 support	US 3 150 FS	50 x 1,500 x 30	FS	6342328
US 3 support	US 3 200 FS	50 x 2,000 x 30	FS	6342338
US 3 support	US 3 300 FS	50 x 3,000 x 30	FS	6342340
US 3 support	US 3 600 FS	50 x 6,000 x 30	FS	6342345
US 3 support	US 3 600 FT	50 x 6,000 x 30	FT	6342450
US 3 support	US 3 30 A2	50 x 300 x 30	A2	6342455
US 3 support	US 3 50 A2	50 x 500 x 30	A2	6342457
US 3 support	US 3 100 A2	50 x 1,000 x 30	A2	6342460
US 3 support	US 3 150 A2	50 x 1,500 x 30	A2	6342463
US 3 support	US 3 200 A2	50 x 2,000 x 30	A2	6342466
US 3 support	US 3 600 A2	50 x 6,000 x 30	A2	6342468
US 3 support	US 3 30 A4	50 x 300 x 30	A4	6342485
US 3 support	US 3 50 A4	50 x 500 x 30	A4	6342488
US 3 support	US 3 100 A4	50 x 1,000 x 30	A4	6342491
US 3 support	US 3 150 A4	50 x 1,500 x 30	A4	6342494
US 3 support	US 3 200 A4	50 x 2,000 x 30	A4	6342497
US 3 support	US 3 600 A4	50 x 6,000 x 30	A4	6342505

Technical data

Designation	Type	Dimensions, mm	Material	Item no.
End cap	US 3 KS OR	55 x 35.5 x 25	PE	6338458
U support connector	VUS 3 FT	45 x 190 x 27.5	FS	6018513
U support connector	VUS 3 A2	45 x 190 x 27.5	A2	6018517
U support connector	VUS 3 A4	45 x 190 x 27.5	A4	6018520
Spacer	DSK 25 FT	22.5 x 40 x 46	FS	6416446
Spacer	DSK 25 A2	22.5 x 40 x 46	A2	6416448
Spacer	DSK 25 A4	22.5 x 40 x 46	A4	6416450
Truss-head bolt	FRS 10x25 F 8.8	M10 x 25	F	6407560
Truss-head bolt	FRS 10x25 A2	M10 x 25	A2	6406718
Truss-head bolt	FRS 10x25 A4	M10 x 25	A4	6407524
Hexagonal bolt	SKS 10x 80 F	M10 x 80	F	6418250
Hexagonal bolt	SKS 10x 90 F	M10 x 90	F	6418252
Hexagonal bolt	SKS 10x90 A2	M10 x 90	A2	6418255
Hexagonal bolt	SKS 10x80 A4	M10 x 80	A4	6418248
Hexagonal bolt	SKS 10x90 A4	M10 x 90	A4	6418256
Head plate	KU 3 FT	130 x 100 x 31.5	FT	6348874
Head plate	KU 3 A4	130 x 100 x 31.5	A4	6348877
Head plate, variable	KU 3 V FS	140 x 120 x 40	FS	6348881
Head plate, variable	KU 3 V FT	140 x 120 x 40	FT	6348883
Head plate, variable	KU 3 V A2	140 x 120 x 40	A2	6348884
Head plate, variable	KU 3 A2	140 x 120 x 40	A2	6348876
US 5 hanging support	US 5 K 20 FT	140 x 200 x 75	FT	6341527
US 5 hanging support	US 5 K 30 FT	140 x 300 x 75	FT	6341535
US 5 hanging support	US 5 K 40 FT	140 x 400 x 75	FT	6341543
US 5 hanging support	US 5 K 50 FT	140 x 500 x 75	FT	6341551
US 5 hanging support	US 5 K 60 FT	140 x 600 x 75	FT	6341578
US 5 hanging support	US 5 K 70 FT	140 x 700 x 75	FT	6341586
US 5 hanging support	US 5 K 80 FT	140 x 800 x 75	FT	6341594
US 5 hanging support	US 5 K 90 FT	140 x 900 x 75	FT	6341608
US 5 hanging support	US 5 K 100 FT	140 x 1,000 x 75	FT	6341616
US 5 hanging support	US 5 K 110 FT	140 x 1,100 x 75	FT	6341624
US 5 hanging support	US 5 K 120 FT	140 x 1,200 x 75	FT	6341632
US 5 hanging support	US 5 K 20 A2	140 x 200 x 75	A2	6341358
US 5 hanging support	US 5 K 30 A2	140 x 300 x 75	A2	6341362
US 5 hanging support	US 5 K 40 A2	140 x 400 x 75	A2	6341366
US 5 hanging support	US 5 K 50 A2	140 x 500 x 75	A2	6341370
US 5 hanging support	US 5 K 60 A2	140 x 600 x 75	A2	6341374
US 5 hanging support	US 5 K 70 A2	140 x 700 x 75	A2	6341378
US 5 hanging support	US 5 K 80 A2	140 x 800 x 75	A2	6341382
US 5 hanging support	US 5 K 90 v	140 x 900 x 75	A2	6341386
US 5 hanging support	US 5 K 100 A2	140 x 1,000 x 75	A2	6341390
US 5 hanging support	US 5 K 110 A2	140 x 1,100 x 75	A2	6341394
US 5 hanging support	US 5 K 120 A2	140 x 1,200 x 75	A2	6341398
US 5 hanging support	US 5 K 20 A4	140 x 200 x 75	A4	6341209
US 5 hanging support	US 5 K 30 A4	140 x 300 x 75	A4	6341213
US 5 hanging support	US 5 K 40 A4	140 x 400 x 75	A4	6341217
US 5 hanging support	US 5 K 50 A4	140 x 500 x 75	A4	6341221
US 5 hanging support	US 5 K 60 A4	140 x 600 x 75	A4	6341225
US 5 hanging support	US 5 K 70 A4	700 x 140	A4	6341228
US 5 hanging support	US 5 K 80 A4	800 x 140	A4	6341233
US 5 hanging support	US 5 K 90 A4	900 x 140	A4	6341237
US 5 hanging support	US 5 K 100 A4	1,000 x 140	A4	6341241
US 5 hanging support	US 5 K 110 A4	1,100 x 140	A4	6341245
US 5 hanging support	US 5 K 120 A4	1,200 x 140	A4	6341249
US 5 support	US 5 20 FT	200 x 50	FT	6340881
US 5 support	US 5 30 FT	300 x 50	FT	6340903
US 5 support	US 5 40 FT	400 x 50	FT	6340911
US 5 support	US 5 50 FT	500 x 50	FT	6340938
US 5 support	US 5 60 FT	600 x 50	FT	6340946

Designation	Type	Dimensions, mm	Material	Item no.
US 5 support	US 5 70 FT	700 x 50	FT	6340950
US 5 support	US 5 80 FT	800 x 50	FT	6340954
US 5 support	US 5 90 FT	900 x 50	FT	6340958
US 5 support	US 5 100 FT	1,000 x 50	FT	6340962
US 5 support	US 5 110 FT	1,100 x 50	FT	6340964
US 5 support	US 5 150 FT	1,500 x 50	FT	6340966
US 5 support	US 5 200 FT	2,000 x 50	FT	6340970
US 5 support	US 5 300 FT	3,000 x 50	FT	6340989
US 5 support	US 5 600 FT	6,000 x 50	FT	6340997
US 5 support	US 5 20 A2	200 x 50	A2	6341101
US 5 support	US 5 30 A2	300 x 50	A2	6341105
US 5 support	US 5 40 A2	400 x 50	A2	6341109
US 5 support	US 5 50 A2	500 x 50	A2	6341113
US 5 support	US 5 70 A2	700 x 50	A2	6341121
US 5 support	US 5 80 A2	800 x 50	A2	6341125
US 5 support	US 5 90 A2	900 x 50	A2	6341129
US 5 support	US 5 100 A2	1,000 x 50	A2	6341133
US 5 support	US 5 110 A2	1,100 x 50	A2	6341137
US 5 support	US 5 120 A2	1,200 x 50	A2	6341141
US 5 support	US 5 300 A2	3,000 x 50	A2	6341152
US 5 support	US 5 30 A4	300 x 50	A4	6341053
US 5 support	US 5 40 A4	400 x 50	A4	6341055
US 5 support	US 5 50 A4	500 x 50	A4	6341057
US 5 support	US 5 60 A4	600 x 50	A4	6341059
US 5 support	US 5 80 A4	800 x 50	A4	6341063
US 5 support	US 5 90 A4	900 x 50	A4	6341065
US 5 support	US 5 300 A4	3,000 x 50	A4	6341073
U support connector	VUS 5 FT	190 x 44	FT	6018505
Spacer	DSK 45 FT	80 x 45	FT	6416500
Spacer	DSK 45 A2	80 x 45	A2	6416489
Spacer	DSK 45 A4	80 x 45	A4	6416462
Head plate US 5	KUS 5 FT	104 x 56	FT	6348904
Head plate, variable	KU 5 V FT	180 x 109 x 55	FT	6348920
Head plate, variable	KU 5 V A2	180 x 109 x 55	A2	6348925
Spacer	DSK 47 FT	80 x 47 x 40	FT	6416504
Spacer	DSK 47 A2	80 x 47 x 40	A2	6416507
Spacer	DSK 47 A4	80 x 47 x 40	A4	6416511
Truss-head bolt	FRS 10x25 F 8.8	10 x 25	F	6407560
Truss-head bolt	FRS 10x25 A2	10 x 25	A2	6406718
Truss-head bolt	FRS 10x25 A4	10 x 25	A4	6407524
Hexagonal bolt	SKS 10x 80 F	10 x 80	F	6418250
Hexagonal bolt	SKS 10x 90 F	10 x 90	F	6418252
Hexagonal bolt	SKS 10x 120 F	10 x 120	F	3160793
Hexagonal bolt	SKS 10x90 A2	10 x 90	A2	6418255
Hexagonal bolt	SKS 10x80 A4	10 x 80	A4	6418248
Hexagonal bolt	SKS 10x90 A4	10 x 90	A4	6418256
US 7 hanging support	US 7 K 20 FT	200 x 200	FT	6339018
US 7 hanging support	US 7 K 30 FT	300 x 200	FT	6339034
US 7 hanging support	US 7 K 40 FT	400 x 200	FT	6339050
US 7 hanging support	US 7 K 50 FT	500 x 200	FT	6339077
US 7 hanging support	US 7 K 60 FT	600 x 200	FT	6339093
US 7 hanging support	US 7 K 70 FT	700 x 200	FT	6339115
US 7 hanging support	US 7 K 80 FT	800 x 200	FT	6339131
US 7 hanging support	US 7 K 90 FT	900 x 200	FT	6339166
US 7 hanging support	US 7 K 100 FT	1,000 x 200	FT	6339182
US 7 hanging support	US 7 K 110 FT	1,100 x 200	FT	6339190
US 7 hanging support	US 7 K 120 FT	1,200 x 200	FT	6339204

Technical data

Designation	Type	Dimensions, mm	Material	Item no.
US 7 hanging support	US 7 K 130 FT	1,300 x 200	FT	6339212
US 7 hanging support	US 7 K 140 FT	1,400 x 200	FT	6339220
US 7 hanging support	US 7 K 150 FT	1,500 x 200	FT	6339239
US 7 hanging support	US 7 K 160 FT	1,600 x 200	FT	6339247
US 7 hanging support	US 7 K 170 FT	1,700 x 200	FT	6339255
US 7 hanging support	US 7 K 180 FT	1,800 x 200	FT	6339263
US 7 hanging support	US 7 K 190 FT	1,900 x 200	FT	6339271
US 7 hanging support	US 7 K 200 FT	2,000 x 200	FT	6339298
US 7 hanging support	US 7 K 20 A2	200 x 200	A2	6338607
US 7 hanging support	US 7 K 30 A2	300 x 200	A2	6338615
US 7 hanging support	US 7 K 40 A2	400 x 200	A2	6338623
US 7 hanging support	US 7 K 50 A2	500 x 200	A2	6338631
US 7 hanging support	US 7 K 60 A2	600 x 200	A2	6338658
US 7 hanging support	US 7 K 70 A2	700 x 200	A2	6338666
US 7 hanging support	US 7 K 80 A2	800 x 200	A2	6338674
US 7 hanging support	US 7 K 90 A2	900 x 200	A2	6338682
US 7 hanging support	US 7 K 100 A2	1,000 x 200	A2	6338690
US 7 hanging support	US 7 K 110 A2	1,100 x 200	A2	6338704
US 7 hanging support	US 7 K 120 A2	1,200 x 200	A2	6338712
US 7 hanging support	US 7 K 140 A2	1,400 x 200	A2	6338739
US 7 hanging support	US 7 K 150 A2	1,500 x 200	A2	6338747
US 7 hanging support	US 7 K 200 A2	2,000 x 200	A2	6338801
US 7 hanging support	US 7 K 100 A4	1,000 x 200	A4	6338872
US 7 hanging support	US 7 K 200 A4	2,000 x 200	A4	6338881
End cap	US 7 KS OR	74.5 x 55 x 25	PE	6338497
US 7 support	US 7 20 FT	200 x 50 x 70	FT	6340016
US 7 support	US 7 30 FT	300 x 50 x 70	FT	6340032
US 7 support	US 7 40 FT	400 x 50 x 70	FT	6340059
US 7 support	US 7 50 FT	500 x 50 x 70	FT	6340075
US 7 support	US 7 60 FT	600 x 50 x 70	FT	6340091
US 7 support	US 7 70 FT	700 x 50 x 70	FT	6340113
US 7 support	US 7 80 FT	800 x 50 x 70	FT	6340148
US 7 support	US 7 90 FT	900 x 50 x 70	FT	6340164
US 7 support	US 7 100 FT	1,000 x 50 x 70	FT	6340180
US 7 support	US 7 110 FT	1,100 x 50 x 70	FT	6340199
US 7 support	US 7 120 FT	1,200 x 50 x 70	FT	6340202
US 7 support	US 7 130 FT	1,300 x 50 x 70	FT	6340210
US 7 support	US 7 140 FT	1,400 x 50 x 70	FT	6340229
US 7 support	US 7 150 FT	1,500 x 50 x 70	FT	6340237
US 7 support	US 7 160 FT	1,600 x 50 x 70	FT	6340245
US 7 support	US 7 170 FT	1,700 x 50 x 70	FT	6340253
US 7 support	US 7 180 FT	1,800 x 50 x 70	FT	6340261
US 7 support	US 7 190 FT	1,900 x 50 x 70	FT	6340288
US 7 support	US 7 200 FT	2,000 x 50 x 70	FT	6340296
US 7 support	US 7 300 FT	3,000 x 50 x 70	FT	6340377
US 7 support	US 7 400 FT	4,000 x 50 x 70	FT	6340393
US 7 support	US 7 600 FT	6,000 x 50 x 70	FT	6340318
US 7 support	US 7 50 A2	500 x 50 x 70	A2	6341764
US 7 support	US 7 100 A2	1,000 x 50 x 70	A2	6341810
US 7 support	US 7 150 A2	1,500 x 50 x 70	A2	6341861
US 7 support	US 7 200 A2	2,000 x 50 x 70	A2	6341950
US 7 support	US 7 300 A2	3,000 x 50 x 70	A2	6341969
US 7 support	US 7 600 A2	6,000 x 50 x 70	A2	6341993
US 7 support	US 7 600 A4	6,000 x 50 x 70	A4	6341995
U support connector	VUS 7 FT	200 x 61 x 45	FT	6018378
U support connector	VUS 7 A2	200 x 61 x 45	A2	6018408
Spacer	DSK 61 FT	80 x 61 x 40	FT	6416519
Spacer	DSK 61 A2	80 x 61 x 40	A2	6416527
Spacer	DSK 61 A4	80 x 61 x 40	A4	6416533

Designation	Type	Dimensions, mm	Material	Item no.
Head plate, light duty	KU 7 FT	115 x 16	FT	6349102
Head plate, heavy duty	KU 7 NOX FT	200 x 120	FT	6349056
Head plate, heavy duty	KUS 7 A2	200 x 98.5	A2	6349277
Head plate, variable	KU 7 VQP FT	200 x 130	FT	6349153
Head plate, variable	KU 7 VQP A2	200 x 130	A2	6349196
Adapter head plate, symmetrical	KA-SY FT	400 x 100 x 50	FT	6346804
Adapter head plate, asymmetrical	KA-ASY FT	400 x 50	FT	6346820
Truss-head bolt	FRS 12x 25 F	12 x 25	F	6406254
Truss-head bolt	FRS 12x25 A2	12 x 25	A2	6406750
Hexagonal bolt	SKS 12x 80 F	12 x 80	F	6418287
Hexagonal bolt	SKS 12x 100 F	12 x 100	F	6418295
Hexagonal bolt	SKS 12x 110 F	12 x 110	F	6418317
Hexagonal bolt	SKS 12x 130 F	12 x 130	F	6408478
Hexagonal bolt	SKS 12x80 A2	12 x 80	A2	6418279
Hexagonal bolt	SKS 12x100 A2	12 x 100	A2	6418368
Hexagonal bolt	SKS 12x110 A2	12 x 110	A2	6418376
Wall and support bracket MWA 12	MWA 12 11S FS	110 x 32.5 x 53	FS	6424716
Wall and support bracket MWA 12	MWA 12 21S FS	210 x 32.5 x 65	FS	6424732
Wall and support bracket MWA 12	MWA 12 31S FS	310 x 38 x 75	FS	6424740
Wall and support bracket MWA 12	MWA 12 41S FS	410 x 38 x 83	FS	6424759
Wall and support bracket MWAM 12	MWAM 12 11 FS	110 x 32.5 x 53	FS	6424550
Wall and support bracket MWAM 12	MWAM 12 21 FS	210 x 32.5 x 65	FS	6424552
Wall and support bracket MWAM 12	MWAM 12 31 FS	310 x 38 x 75	FS	6424554
Wall and support bracket MWAM 12	MWAM 12 41 FS	410 x 38 x 83	FS	6424556
Wall and support bracket AW 15	AW 15 11 FT	110 x 40 x 50	FT	6420656
Wall and support bracket AW 15	AW 15 16 FT	160 x 40 x 55	FT	6420664
Wall and support bracket AW 15	AW 15 21 FT	210 x 40 x 60	FT	6420680
Wall and support bracket AW 15	AW 15 31 FT	310 x 40 x 65	FT	6420710
Wall and support bracket AW 15	AW 15 41 FT	410 x 40 x 70	FT	6420745
Wall and support bracket AW 15	AW 15 51 FT	510 x 40 x 75	FT	6420788
Wall and support bracket AW 15	AW 15 61 FT	610 x 40 x 80	FT	6420826
Wall and support bracket AW 15	AW 15 11 A2	110 x 40 x 50	A2	6421008
Wall and support bracket AW 15	AW 15 21 A2	210 x 40 x 60	A2	6421024
Wall and support bracket AW 15	AW 15 31 A2	310 x 40 x 65	A2	6421032
Wall and support bracket AW 15	AW 15 41 A2	410 x 40 x 70	A2	6421036
Wall and support bracket AW 15	AW 15 51 A2	510 x 40 x 75	A2	6421040
Wall and support bracket AW 15	AW 15 61 A2	610 x 40 x 80	A2	6421044
Wall and support bracket AW 15	AW 15 11 A4	110 x 40 x 50	A4	6392008
Wall and support bracket AW 15	AW 15 21 A4	210 x 40 x 60	A4	6392016
Wall and support bracket AW 15	AW 15 31 A4	310 x 40 x 65	A4	6392024
Wall and support bracket AW 15	AW 15 41 A4	410 x 40 x 70	A4	6392032
Wall and support bracket AW 15	AW 15 51 A4	510 x 40 x 75	A4	6392040
Wall and support bracket AW 15	AW 15 61 A4	610 x 40 x 80	A4	6392059
Wall and support bracket AW 30	AW 30 11 FT	110 x 50 x 60	FT	6419704
Wall and support bracket AW 30	AW 30 16 FT	160 x 50 x 65	FT	6419712
Wall and support bracket AW 30	AW 30 21 FT	210 x 50 x 70	FT	6419720
Wall and support bracket AW 30	AW 30 31 FT	310 x 50 x 80	FT	6419747
Wall and support bracket AW 30	AW 30 41 FT	410 x 50 x 80	FT	6419763
Wall and support bracket AW 30	AW 30 51 FT	510 x 50 x 90	FT	6419798
Wall and support bracket AW 30	AW 30 61 FT	610 x 50 x 100	FT	6419828
Wall and support bracket AW 30	AW 30 71 FT	710 x 50 x 100	FT	6419836
Wall and support bracket AW 30	AW 30 11 A2	110 x 50 x 60	A2	6442803
Wall and support bracket AW 30	AW 30 21 A2	210 x 50 x 70	A2	6442838
Wall and support bracket AW 30	AW 30 31 A2	310 x 50 x 80	A2	6442854
Wall and support bracket AW 30	AW 30 41 A2	410 x 50 x 80	A2	6442870
Wall and support bracket AW 30	AW 30 51 A2	510 x 50 x 90	A2	6442897

Technical data

Designation	Type	Dimensions, mm	Material	Item no.
Wall and support bracket AW 30	AW 30 61 A2	610 x 50 x 100	A2	6442919
Wall and support bracket AW 30	AW 30 11 A4	110 x 50 x 60	A4	6443615
Wall and support bracket AW 30	AW 30 21 A4	210 x 50 x 70	A4	6443311
Wall and support bracket AW 30	AW 30 31 A4	310 x 50 x 80	A4	6443621
Wall and support bracket AW 30	AW 30 41 A4	410 x 50 x 80	A4	6443346
Wall and support bracket AW 30	AW 30 51 A4	510 x 50 x 90	A4	6443625
Wall and support bracket AW 30	AW 30 61 A4	610 x 50 x 100	A4	6443627
Wall and support bracket AW 55	AW 55 21 FT	210 x 50 x 90	FT	6418554
Wall and support bracket AW 55	AW 55 31 FT	310 x 50 x 110	FT	6418570
Wall and support bracket AW 55	AW 55 41 FT	410 x 50 x 130	FT	6418597
Wall and support bracket AW 55	AW 55 51 FT	510 x 60 x 145	FT	6418619
Wall and support bracket AW 55	AW 55 61 FT	610 x 60 x 165	FT	6418635
Wall and support bracket AW 55	AW 55 71 FT	710 x 60 x 195	FT	6418651
Wall and support bracket AW 55	AW 55 81 FT	810 x 60 x 195	FT	6418686
Wall and support bracket AW 55	AW 55 91 FT	910 x 60 x 215	FT	6418708
Wall and support bracket AW 55	AW 55 101 FT	1,010 x 60 x 230	FT	6418724
Wall and support bracket AW 55	AW 55 21 A2	210 x 50 x 90	A2	6443063
Wall and support bracket AW 55	AW 55 31 A2	310 x 50 x 110	A2	6443067
Wall and support bracket AW 55	AW 55 41 A2	410 x 50 x 130	A2	6443071
Wall and support bracket AW 55	AW 55 51 A2	510 x 60 x 145	A2	6443075
Wall and support bracket AW 55	AW 55 61 A2	610 x 60 x 165	A2	6443079
Wall and support bracket AW 55	AW 55 71 A2	710 x 60 x 195	A2	6443083
Wall and support bracket AW 55	AW 55 21 A4	210 x 50 x 90	A4	6418557
Wall and support bracket AW 55	AW 55 31 A4	310 x 50 x 110	A4	6418573
Wall and support bracket AW 55	AW 55 41 A4	410 x 50 x 130	A4	6418601
Wall and support bracket AW 55	AW 55 51 A4	510 x 60 x 145	A4	6418622
Wall and support bracket AW 55	AW 55 61 A4	610 x 60 x 165	A4	6418638
Wall bracket AW 80	AW 80 21 FT	210 x 50 x 110	FT	6417752
Wall bracket AW 80	AW 80 31 FT	310 x 50 x 145	FT	6417779
Wall bracket AW 80	AW 80 41 FT	410 x 50 x 165	FT	6417795
Wall bracket AW 80	AW 80 51 FT	510 x 60 x 195	FT	6417817
Wall bracket AW 80	AW 80 61 FT	610 x 60 x 210	FT	6417833
Wall bracket AW 80	AW 80 71 FT	710 x 60 x 235	FT	6417868
Wall bracket AW 80	AW 80 81 FT	810 x 60 x 260	FT	6417884
Wall bracket, variable	AWV 21 FT	210 x 130 x 60	FT	6419534
Wall bracket, variable	AWV 31 FT	310 x 130 x 60	FT	6419550
Wall bracket, variable	AWV 41 FT	410 x 130 x 60	FT	6419577
Wall bracket, variable	AWV 51 FT	510 x 130 x 60	FT	6419593
Wall bracket, variable	AWV 61 FT	610 x 130 x 60	FT	6419615
Hexagonal bolt	SKS 12x40 G F	12 x 40	F	3164020
Mounting angle BW 60	BW 60 40 FT	60 x 40	FT	6019560
Mounting angle BW 60	BW 60 40 A2	60 x 40	A2	6019587
Mounting angle BW 60	BW 60 40 A4	60 x 40	A4	6019583
Mounting angle BW 70	BW 70 40 FT	40 x 70	FT	6019706
Mounting angle BW 80	BW 80 55 FT	80 x 55	FT	6019528

Legend

G = Electrogalvanised

F = Hot galvanised

FS = Strip galvanised

FT = Hot-dip galvanised

A2 = Stainless steel

A4 = Stainless steel

PE = Polyethylene



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