

Operator manual

March 2024 / Version 1.0

Congratulations

on purchasing your twall®.

Please read the entire operator manual carefully before beginning assembly.

Make sure all modules and components are present and complete by checking them against the delivery note.

The following packages should be present:

- Package of support frame with separate advertising panel
- Package of supports
- Package(s) of module(s)
- Package of universal base frame with weights (optional)

If everything is there, you can get started. When assembling the individual components, it is essential that you proceed in the order specified in the following document.



The current version of this user manual can be found at twall.de/downloads

1. Table of contents

1	Table of contents.....	3
2	Product description.....	4
3	Intended use.....	4
4	Hazard warnings.....	5
5	Safety notice regarding epilepsy.....	5
6	Assembling the universal base frame.....	6
7	Assembling the twall® A16 support frame.....	20
8	Assembling the twall® A16 support frame + universal base frame.....	26
9	Final assembly of the twall® A16.....	28
10	Assembling the twall® A32 support frame.....	34
11	Assembling the twall® A32 support frame + universal base frame.....	40
12	Final assembly of the twall® A32.....	42
13	Assembling the twall® A64 support frame.....	48
14	Assembling the twall® A64 support frame + universal base frame.....	54
15	Final assembly of the twall® A64.....	56
16	Installing the supports.....	64
17	Installing the cabling.....	70
18	Stationary installation.....	76
19	Installing the advertising panel.....	80
20	Installing the control box (stationary installation).....	86
21	Stationary wall-mounted installation.....	90
22	Direct stationary wall-mounted installation of the twall® A16.....	94
23	Decommissioning & disposal.....	98
24	Contact/service.....	98
25	Technical specifications.....	99

2. Product description

The **twall®** is an interactive exercise device that uses light pulses to prompt specific movement sequences. It indicates the required movements by illuminating light pads, which the user must then touch to switch off again. Depending on the program, this enables training for condition, mobility, responsiveness and, if necessary, even specific strength endurance. The different pads respond in either a pre-programmed or random order, position and speed, but the task is always the same: switch off the lights by quickly touching them.

Software-controlled program sequences enable individual training as well as group training (depending on version). Thanks to the individual control of each pad, the **twall®** training area can be calibrated to the trainee's body size, response radius, range of visual perception and tactile situation. It is even possible to include cognitive exercises based on colour stimulation.

3. Intended use

The **twall®** is only intended to generate light effects and to prompt people to move. The operator is responsible for determining the suitability of training programs for users. Free space of at least 1 metre must be maintained in front of the training device at all times! For free-standing installation, the **twall®** must be placed on a stable, level surface.

It is neither intended nor suitable for use as general lighting in homes or businesses.

The **twall®** must be powered using the supplied power adapter only. When installing and operating the **twall®**, make sure that the power supply cable cannot be damaged by sharp objects or edges. If damaged, any defective parts must be replaced immediately! If the power supply cable for this device is damaged, it must be replaced with a special cable that can be obtained from the manufacturer or from its customer service or service partners.

Permanent operation of all light pads at maximum brightness is not permitted, as it can lead to overheating of the LED modules.

Exercise programs that force individual light pads or all light pads to illuminate for longer than two minutes are not permitted and will void the warranty.

The **twall®** may only be used in dry areas after a sufficient period of temperature equalisation – all system components should be at room temperature before switching on the device.

The use of LAN cables longer than 30 metres is not permitted.

The **twall®** is not waterproof!

Ensure that the **twall®** does not become contaminated with oil, grease or similar substances.

4. Hazard warnings

1. General hazard warnings:

Only operate a **twall®** when fully assembled.

To avoid injuries, always carry out assembly in the specified order! You will find a detailed description of this in the operator manual.

To avoid injuries (e.g. cuts or lacerations caused by machined surfaces), make sure to install the cover caps.

Check the stability of your **twall®** daily by checking that the installation elements are firmly seated.

To avoid electric shocks, check the power supply cable for damage before each use.

The mobile **twall®** may only be used with its original counterweights and supports.

The **twall®** can be used by children from 8 years of age and by people with reduced physical, sensory or mental abilities or lack of experience and knowledge, if supervised or instructed in the safe use of the device and if the hazards are understood. Keep unsupervised children away!

The **twall®** is not a climbing toy! Hanging or climbing on the frame is prohibited!

Standing behind the mobile **twall®** is only permitted for installation purposes.

The action area in front of the **twall®** must be free of obstacles and uneven surfaces to reduce the risk of falling.

In all cases, the operator is responsible for ensuring the stability of the device! Not intended for use in homes!

Make sure that the pre-assembly of the profile connectors is carried out precisely, to ensure the necessary strength and safety.

2. Hazard warnings for assembly of the modules/commissioning of the complete device

Assembly of the modules requires two people.

There is an increased risk of crushing when inserting the counterweights. So be careful of your hands and feet when inserting the weights.

There is an increased risk of falling when working behind the mobile **twall®**.

The specified cable routing must be followed exactly.

The installation must be checked for functional and safety compliance before the device can be released for use.

5. Safety notice regarding epilepsy

Flashing lights and patterns that occur during **twall®** exercises may trigger epileptic seizures in predisposed people. Even for players who have not previously experienced epileptic symptoms in response to light stimuli, there is a possibility of having a previously undiscovered predisposition to epilepsy.

If you have epilepsy, consult a doctor before using the **twall®**.

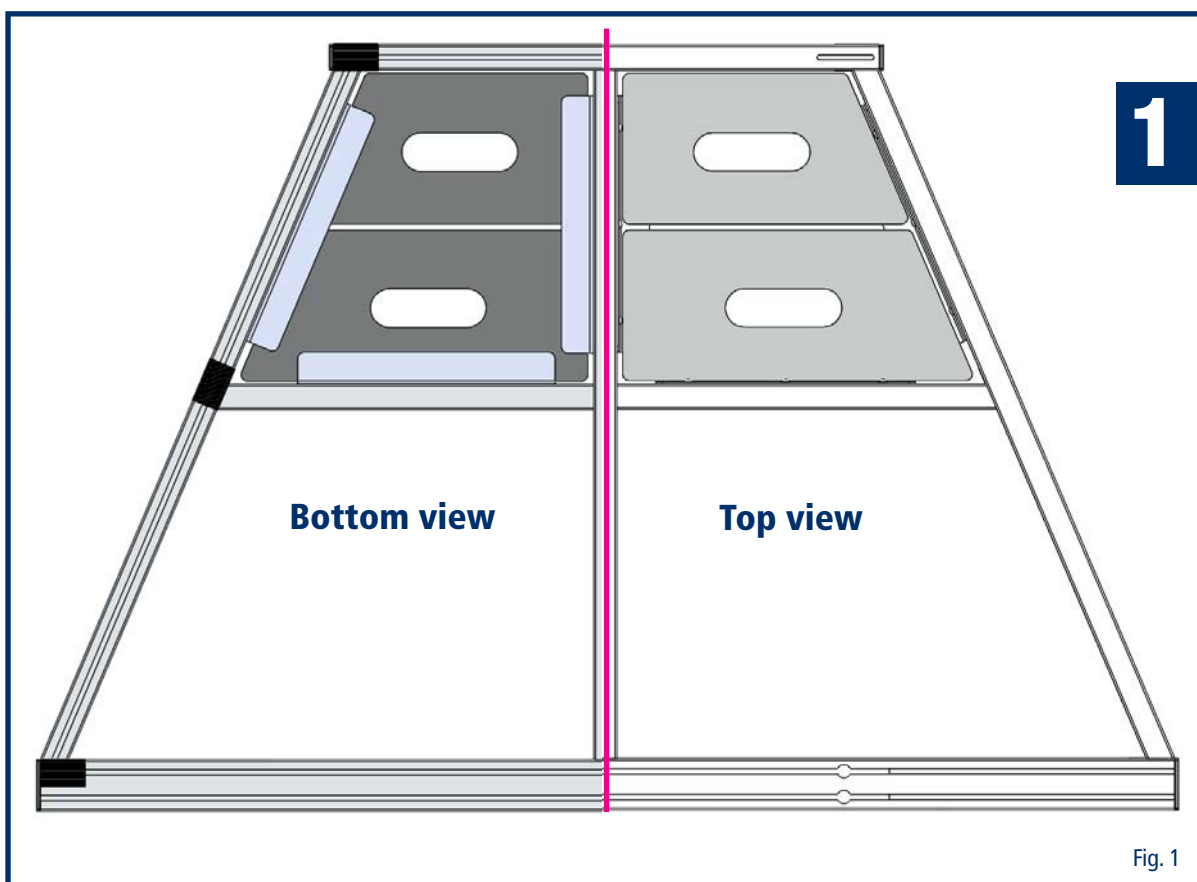
Parents should watch their children when the children are using the **twall®**. Interrupt the exercise if your child experiences one or more of the following symptoms:

- Convulsions
- Eye or muscle spasms
- Loss of awareness of surroundings
- Altered vision
- Involuntary movements
- Disorientation

To minimise the risk of an epileptic seizure, please observe the following instructions:

- Do not exercise when exhausted or in need of sleep.
- Always exercise in a well-lit room.
- Take a 10-to-15 minute break every hour.

6. Assembling the universal base frame

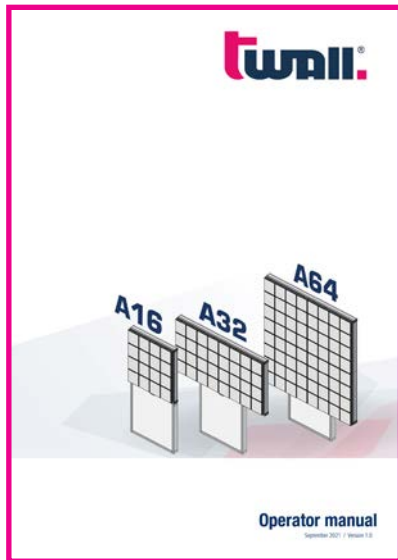


Dear valued customer,

The following section explains how to assemble the universal base frame of the **twall®**, step by step.

The end result with frame structure, universal base frame and angle brackets is shown in **Fig. 1** above.

A



2

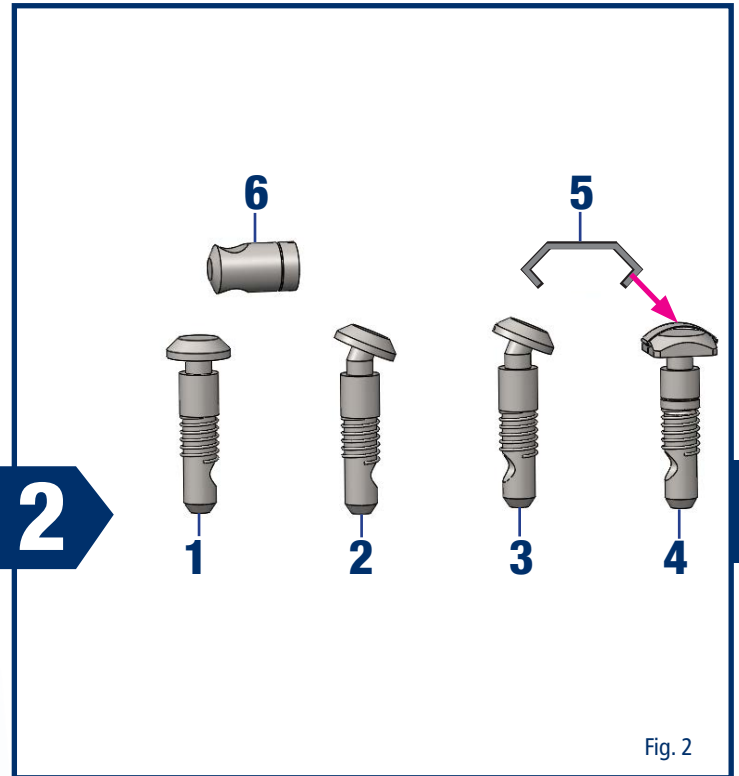


Fig. 2

B

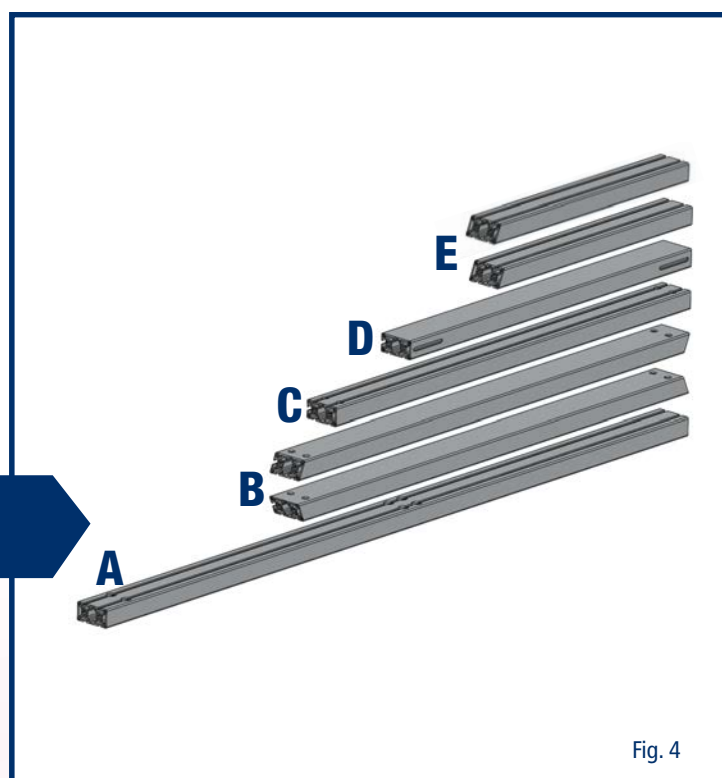
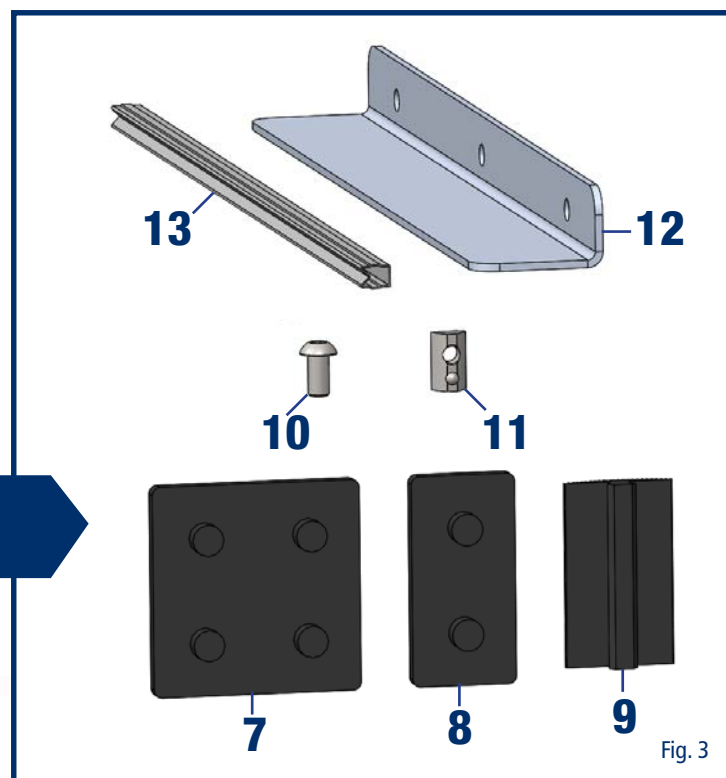
Check that all parts are present and complete!

!

Unpack the various components and check to ensure that the correct quantities are present.

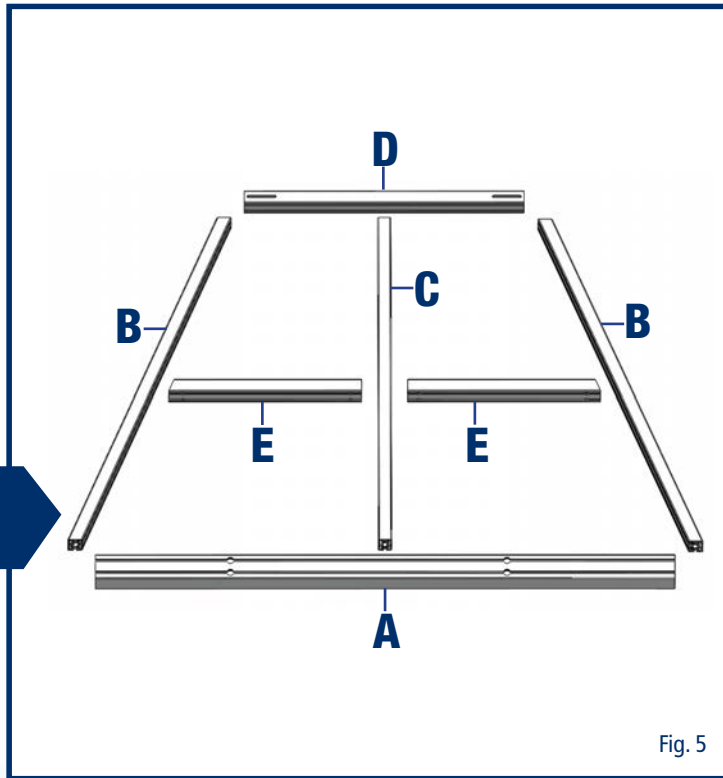
Unpack all the supplied components and check the quantities as follows:

- 6x anchors, straight (1)
- 4x bent anchors, angled -23° (2)
- 8x bent anchors, angled 23° (3)
- 2x anchors, square head incl. spring (4)
- 2x leaf springs for square head (5)
- 20x cross-pieces with set screw (6)



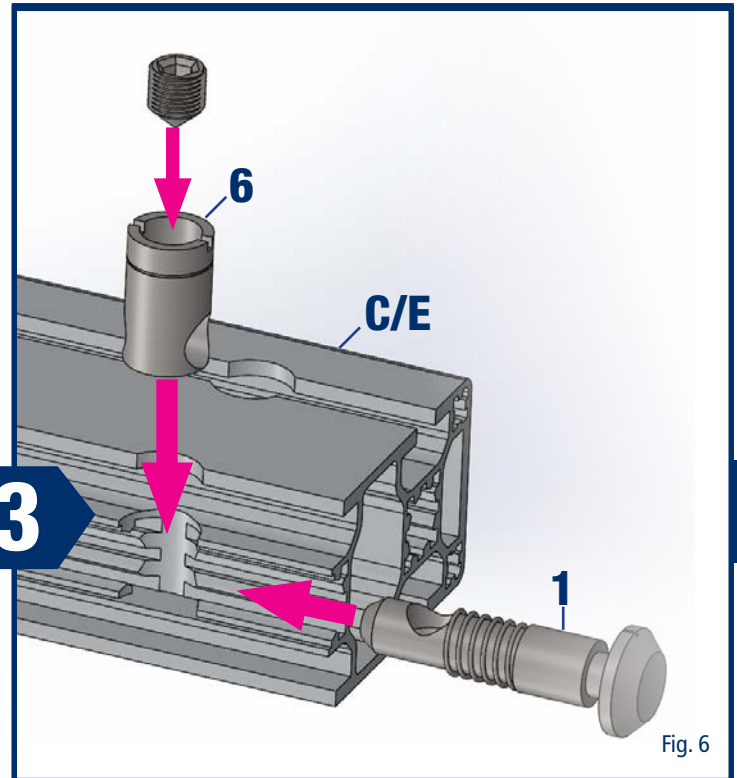
2x cover caps (black, 80x80) (7)
 2x cover caps (black, 40x80) (8)
 9x rubber cover profiles (black) (9)
 18x button head flange screws M8x16 (10)
 18x T-nuts M8 with ball (11)
 6x support brackets (12)
 4x combination profiles, 440 mm (13)

1x profile (80x80x1760) (A)
 2x profiles (40x80x1182) with special angle, left: 23°, right: 23° (B)
 1x profile (40x80x1072), straight (C)
 1x profile (40x80x586), straight with slot (D)
 2x profiles (40x80x586) with special angle, left: 23°, right: straight (E)



Arrangement of the individual profiles:

Make sure that the smooth surfaces of profiles B, C and E face upwards. Profiles A and D have mounting holes that are required for further assembly. These sides must always face upwards (refer to Fig. 5).



Pre-assembly of the straight anchors

Attach the straight anchors (Fig. 2, item 1) to the straight ends of the following profiles:

- 2x at one end of the profile 40x80x1072 mm (Fig. 4, item C)
- 2x on the profiles with angle, left 23° 40x80x586 mm (Fig. 4, item E)

10 Assembly instructions for the universal base frame

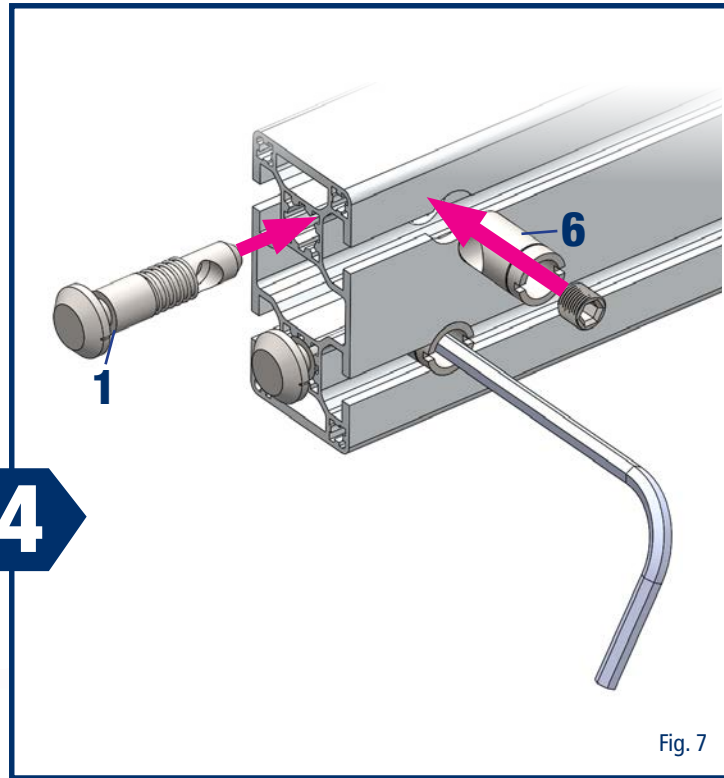


Fig. 7

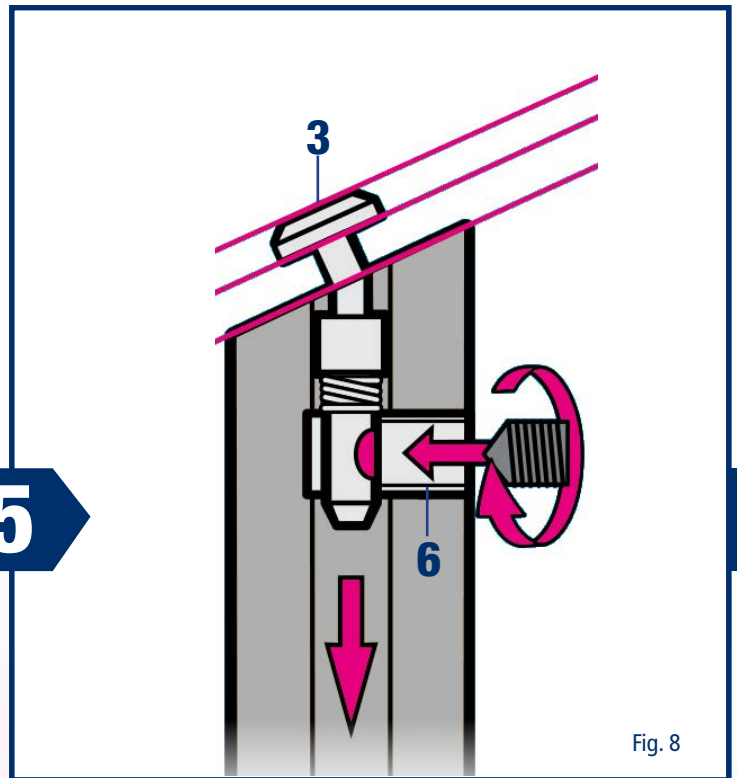


Fig. 8

Pre-assembly of the straight anchors

The distance between profile and anchor head should be approx. 5 mm.
Make sure that the anchors are centred, using the marking for reference.

Pre-assembly of the bent anchors

Attach the bent anchors, 23°/-23° (Fig. 2) at the angled ends of the following profiles:

- 2x at the ends of the profiles with angle, left 23°/right 23° 40x80x1182 mm (Fig. 4, item B)
- 2x at the ends of the profiles with angle, left 23° 40x80x586 mm (Fig. 4, item E).

Insert the straight anchors and the bent anchors in the centre of the head ends of the profile pieces.

The tip of the cross-piece set screws is screwed into a recess of the anchor.
The cross-pieces are inserted laterally into the holes on the profile pieces.
Fix the anchors using the cross-piece set screws.



Caution: Do not fully tighten yet!

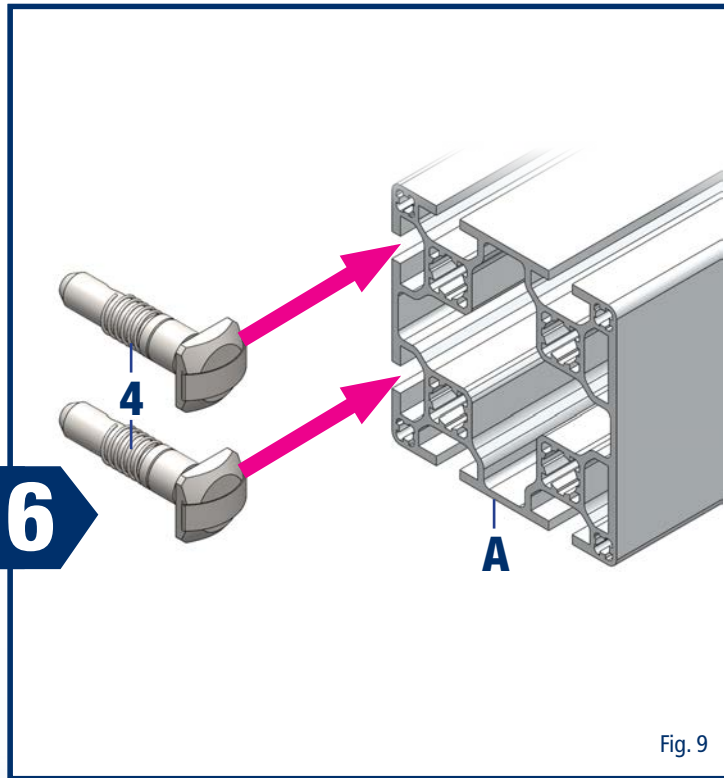


Fig. 9

The square head anchors are inserted in T-shaped grooves on the corresponding profiles (Fig. 4, item A).

Before assembling the angled side profiles (Fig. 4, item B), insert two square head anchors (Fig. 2, item 4), to which you have attached the leaf springs (Fig. 2, item 5) in the direction of insertion, into the T-grooves of the profile Fig. 4, item A) to aid in the later assembly of the centre profile (Fig. 4, item C).

Make sure that the anchors are centred, using the marking for reference.

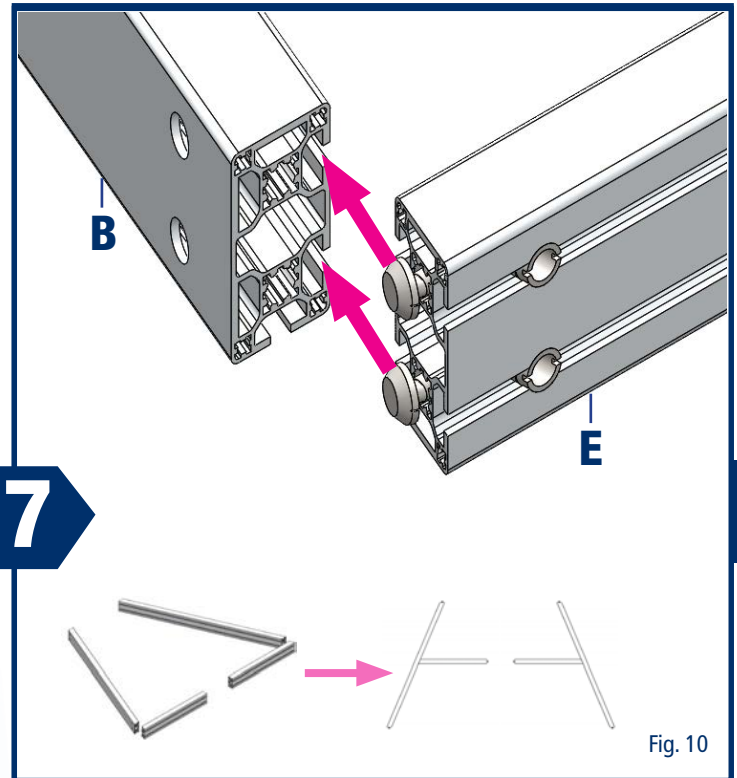


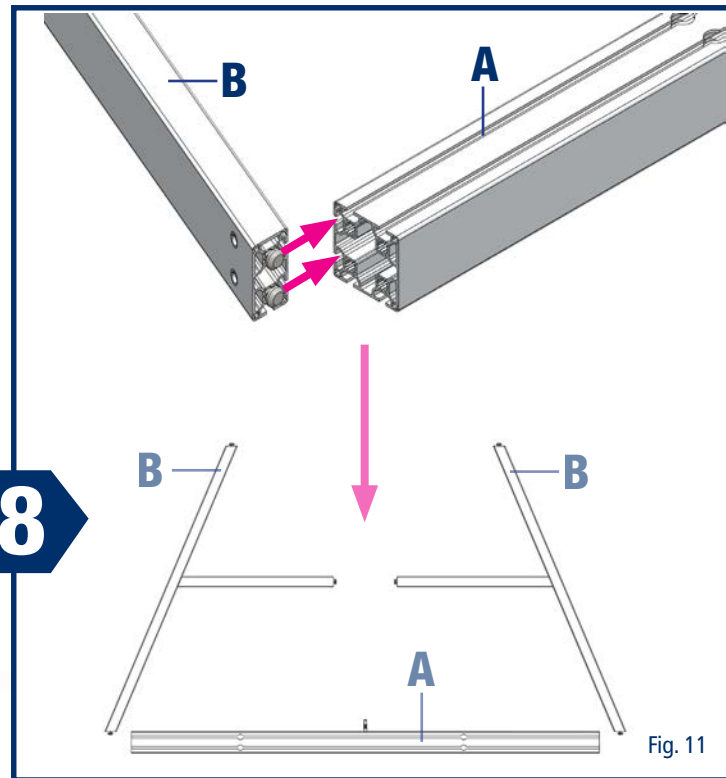
Fig. 10

Then insert the profiles (Fig. 4, item E) into the side profiles (Fig. 4, item B).

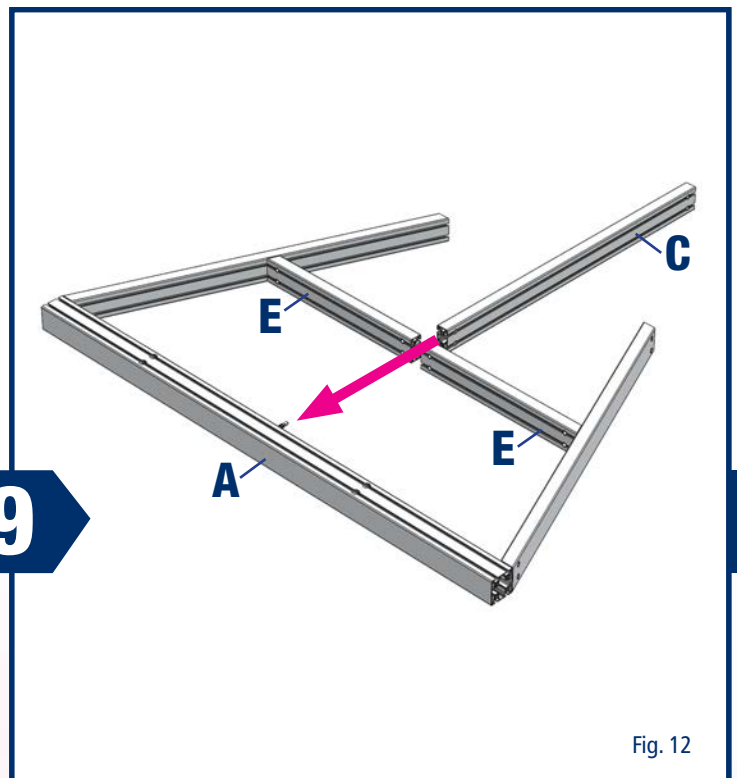


Caution: Do not fully tighten the threaded components yet! Before the universal base frame can be assembled, the rubber cover profiles must be installed on profiles B and D (Fig. 1 and Fig. 24).

12 Assembly instructions for the universal base frame



Next, insert the side profiles (Fig. 4, item B) into the profile (Fig. 4, item A) (see Fig. 11).



Then assemble the centre profile (Fig. 4, item C) (see Fig. 12).



Caution: Use the same grooves for this as for the square head anchor screws!

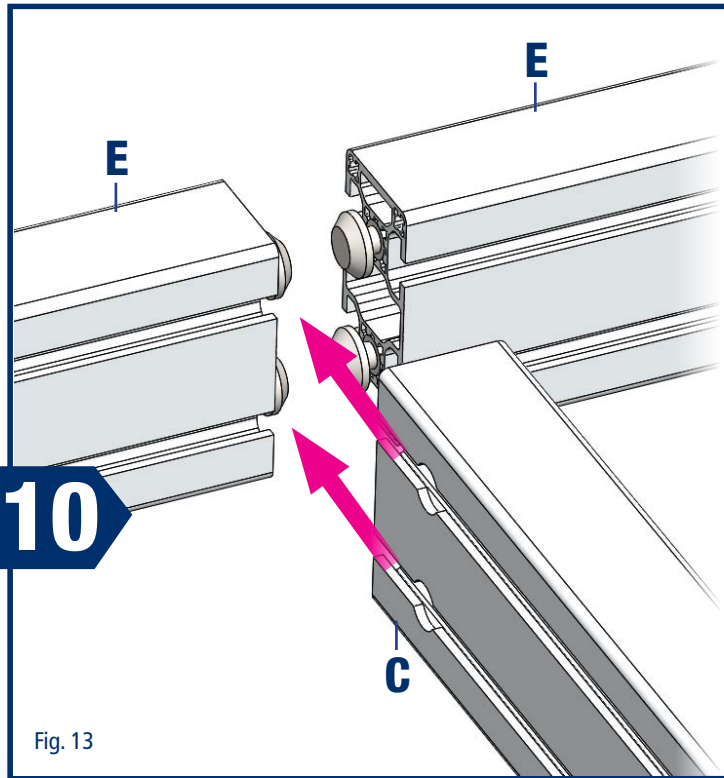


Fig. 13

Insert the pre-assembled anchors of the profiles (Fig. 4, item E) into the grooves of the centre profile (Fig. 4, item C).

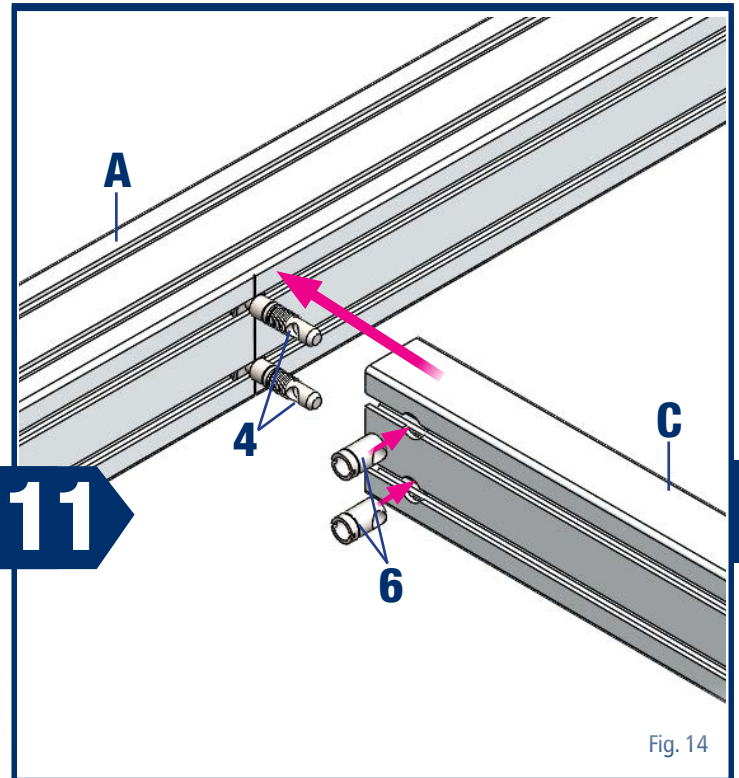
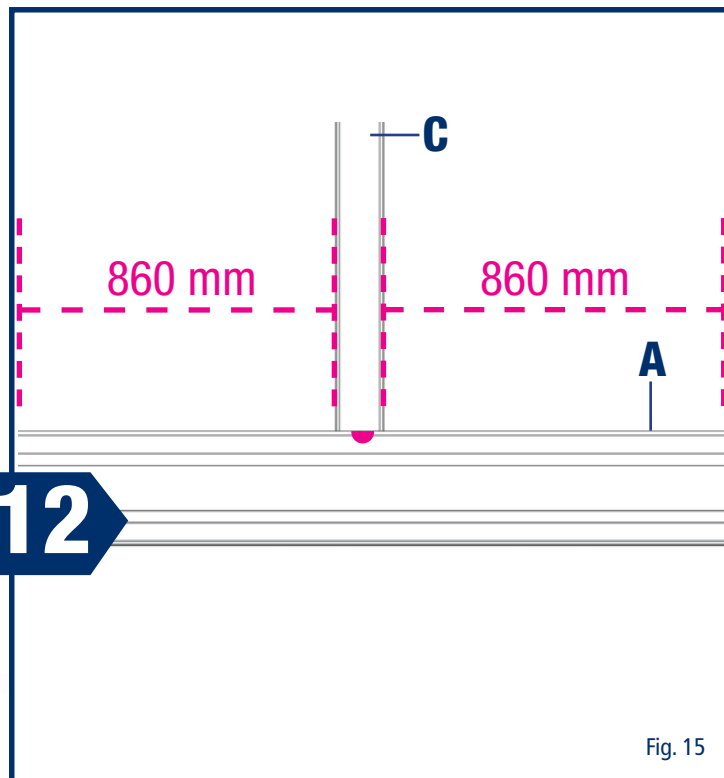


Fig. 14

Then attach the centre profile (Fig. 4, item C), using the pre-assembled square anchors (Fig. 2, item 4). Before doing so, however, insert two cross-pieces (Fig. 2, item 6) laterally into the holes of the centre profile.

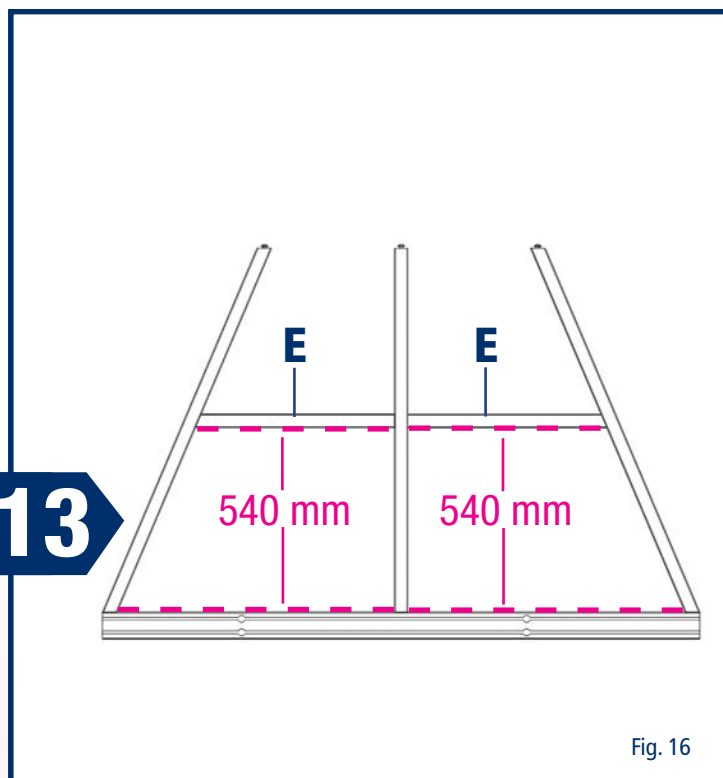
14 Assembly instructions for the universal base frame

12

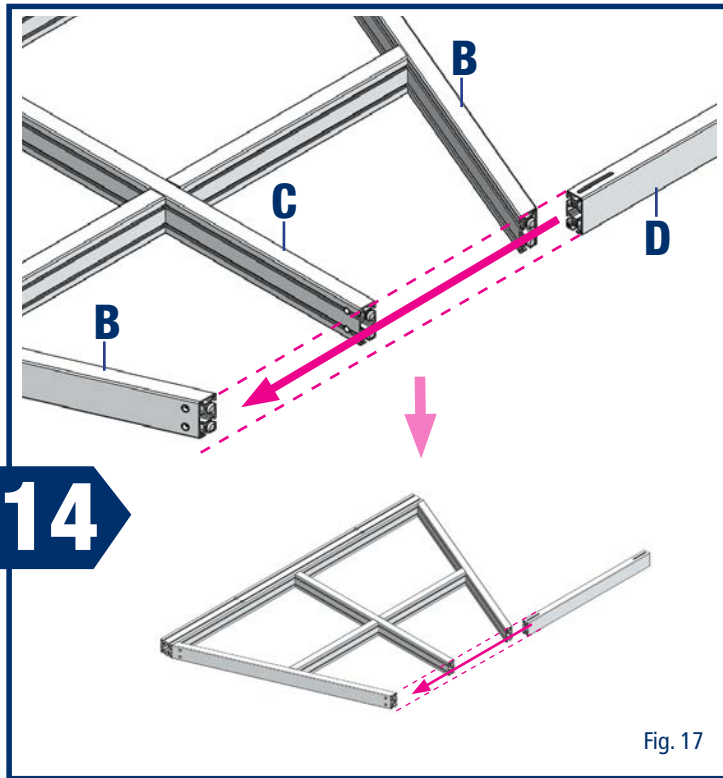


When assembling the profile (Fig. 4, item C), make sure that it is centred properly. Use the marking on the profile (Fig. 4, item A) for this.

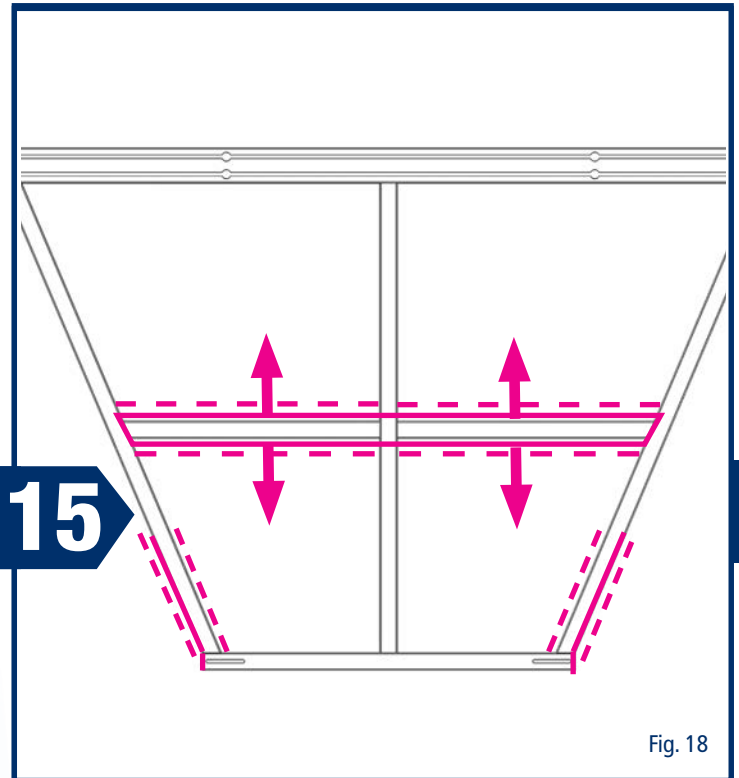
13



Align the profiles (Fig. 4, item E) so that they are the same height.



Finish the assembly by sliding the profile with slot (Fig. 4, item D) with its grooves over the pre-assembled anchors of the profiles (Fig. 4, item B/C).
Make sure that the slots are facing upwards.

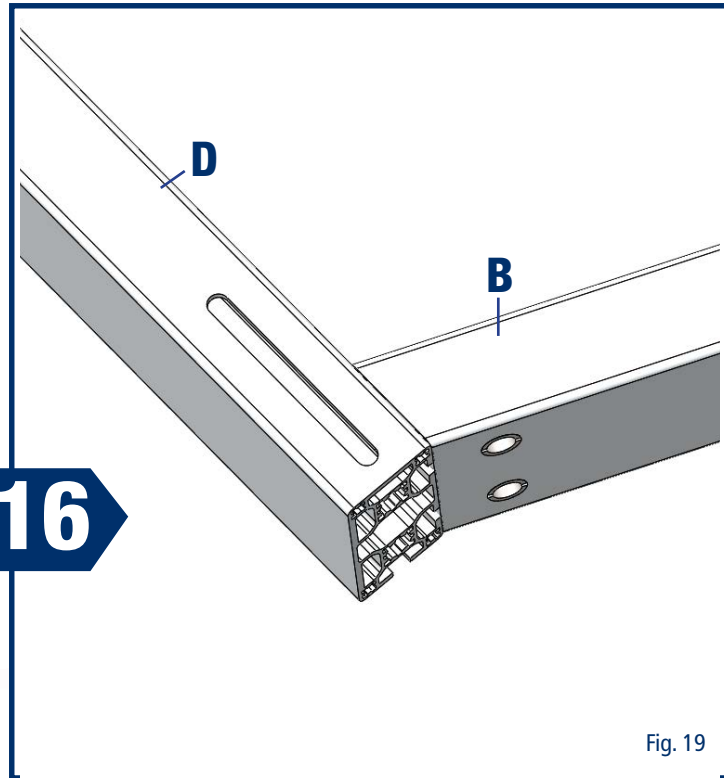


If the components are not flush, correct the position of the two centre profiles by raising or lowering them.

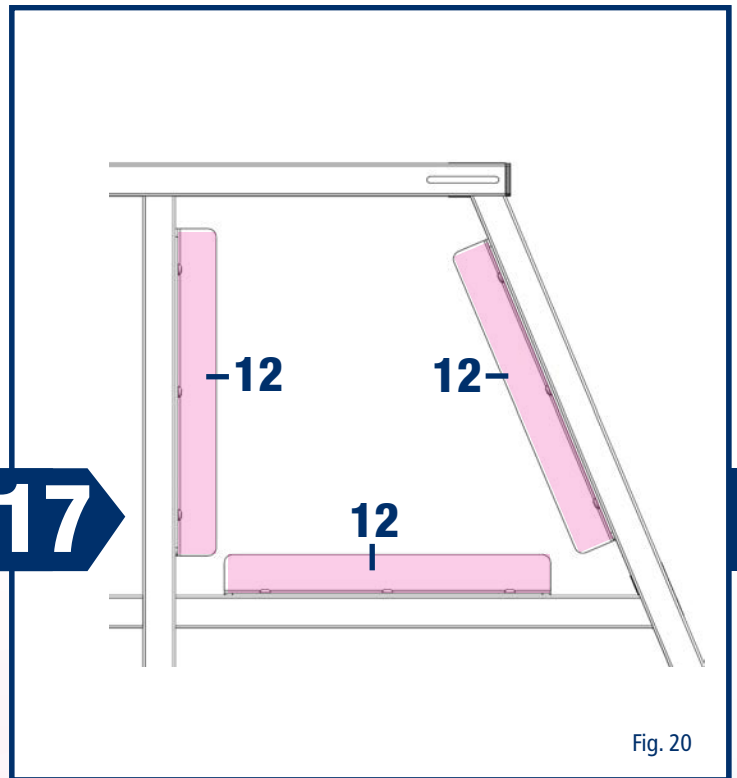


Caution: Make sure that all components are flush.

16 Assembly instructions for the universal base frame



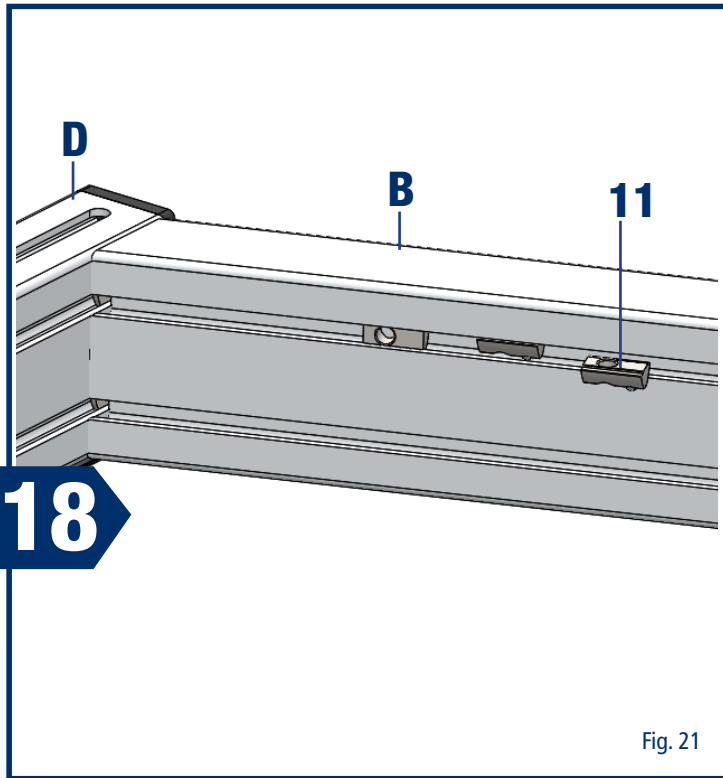
When all components are correctly aligned, fully tighten all the cross-piece set screws.



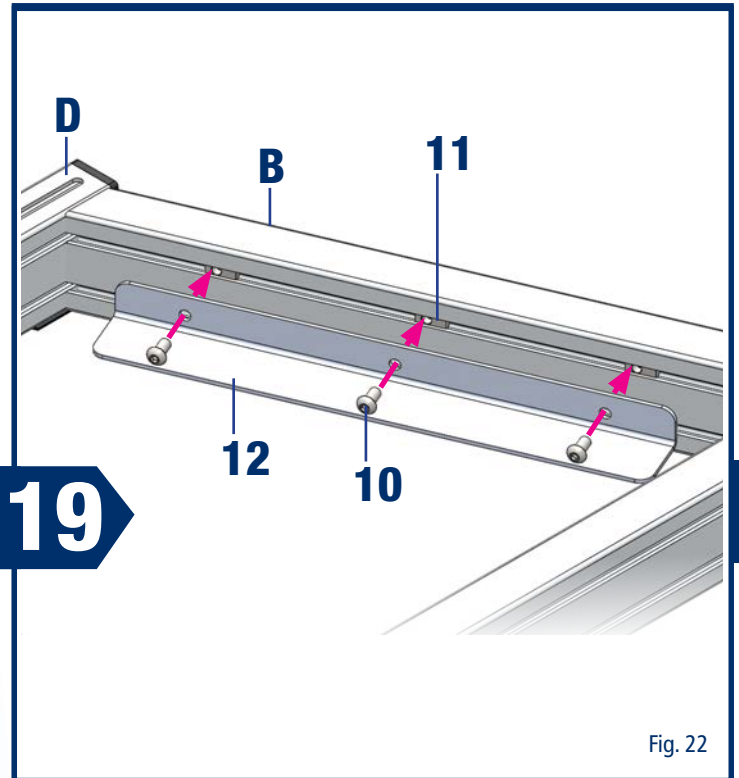
The following section explains how to assemble the support brackets (Fig. 3, item 12) for the counterweights.



Caution: When assembling the support brackets (Fig. 3, item 12) for the counterweights, make sure that the T-nuts (Fig. 3, item 11) are inserted into the appropriate grooves.

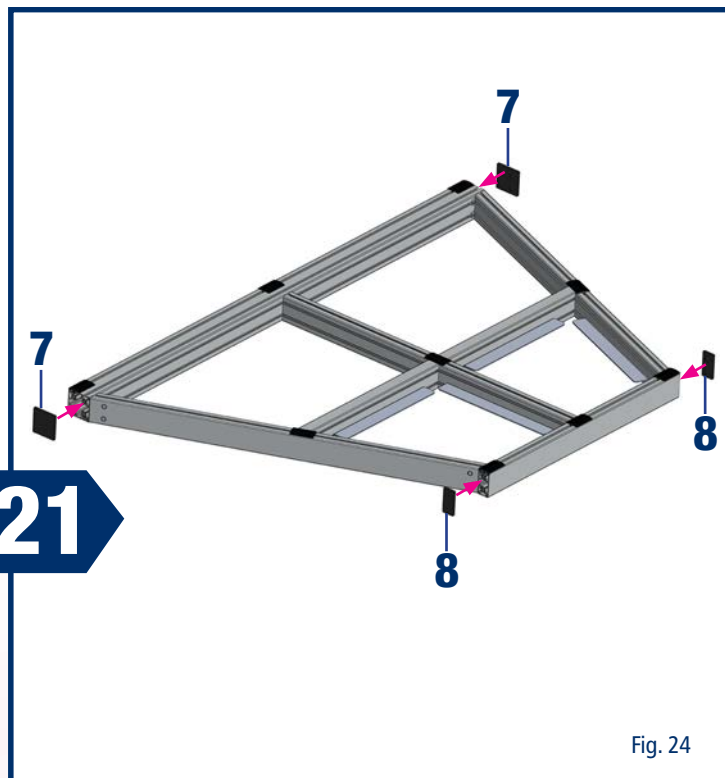
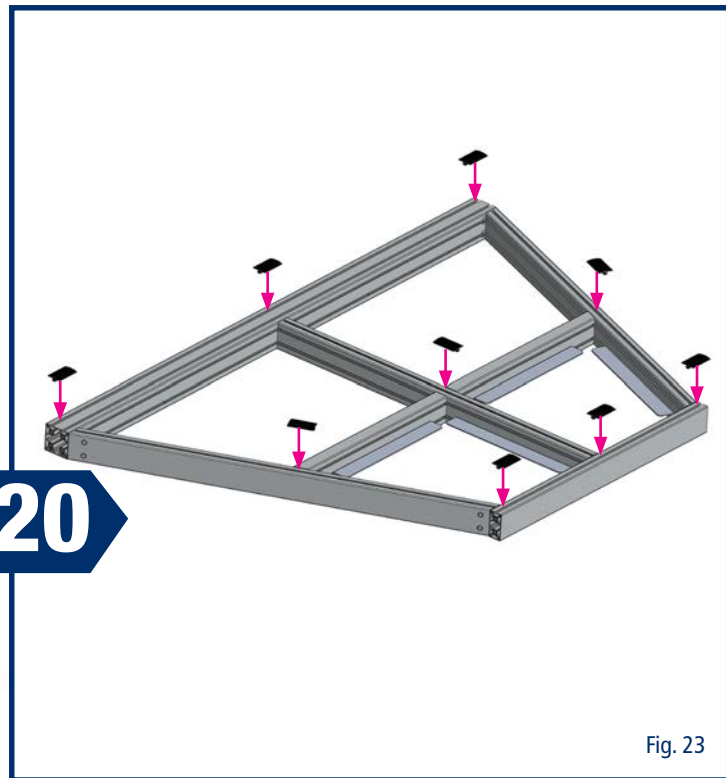


Insert 3 T-nuts (Fig. 3, item 11) into the upper grooves of each of the profiles B, C and D – as shown in Fig. 21.



Then fasten 3 support brackets (Fig. 3, item 12) to the upper grooves of each of the profiles B, C and D, using the button head flange screws M8x14 (Fig. 3, item 10).

18 Assembly instructions for the universal base frame

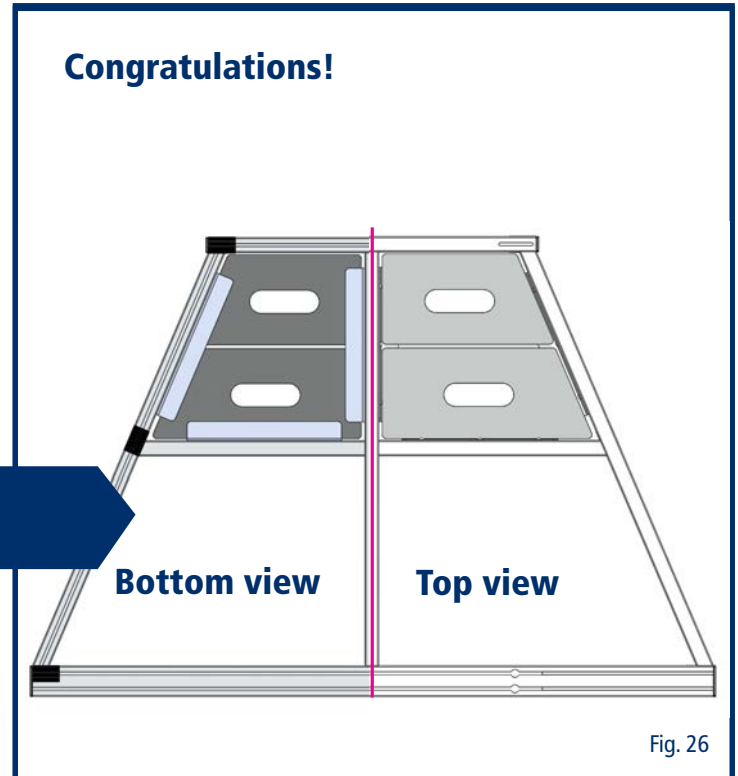


Next, turn the universal base frame on its back to install the rubber cover profiles (Fig. 3, item 9). This is done by pressing the rubber cover profiles into the open grooves on the bottom. See Fig. 23 for the correct positioning of the rubber cover profiles.

Then attach the cover caps (Fig. 3, item 7/8) to the open ends of the profiles.



Caution: The rubber cover profiles are installed on the bottom.



Next, turn the universal base frame over onto the rubber feet.

Finally, insert the counterweights.

You have completed assembly of the universal base frame of the twall®.

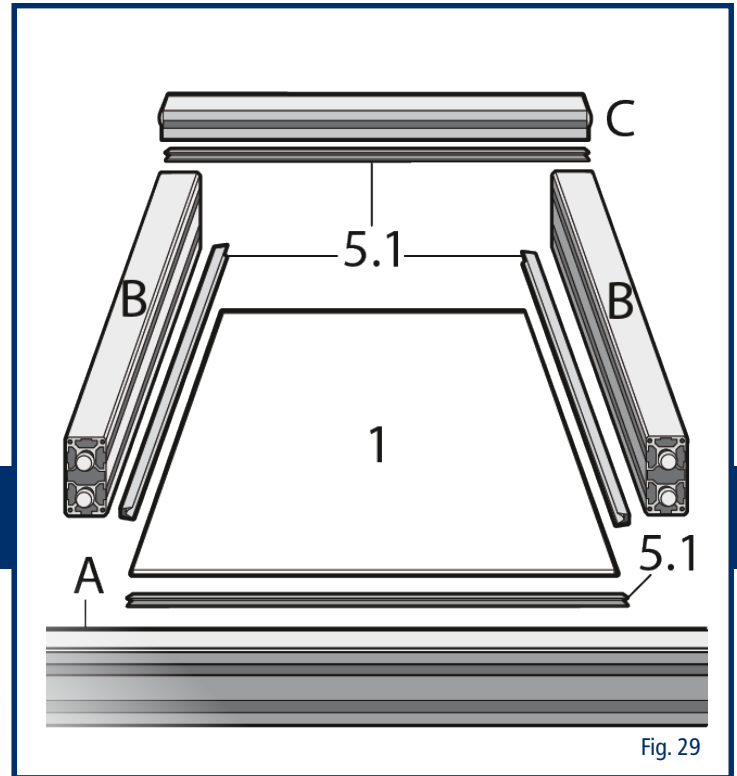
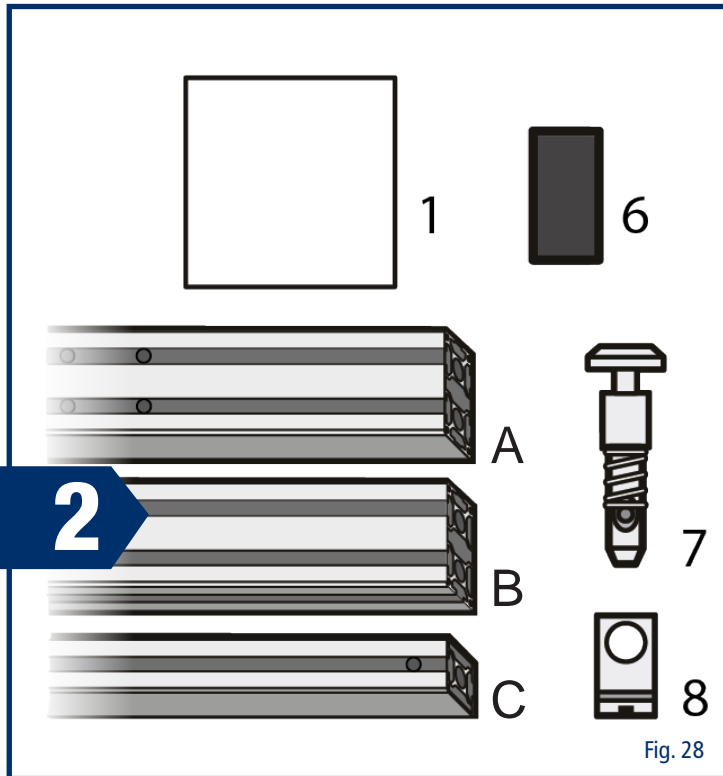


Caution: Crush hazard!

7. twall® A16 support frame



The following section explains how to assemble the support frame for the twall® A16.



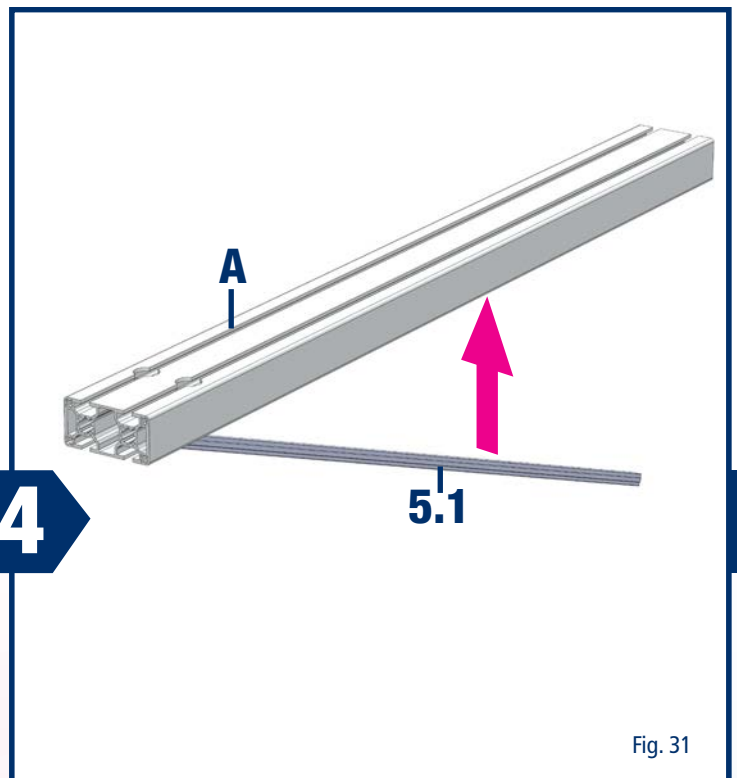
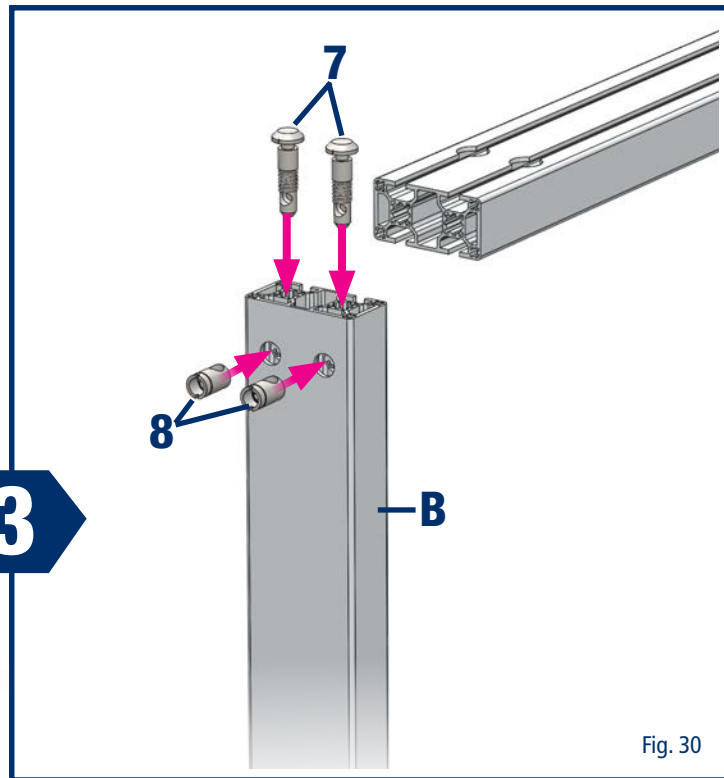
Unpack all the supplied components and check the quantities as follows:

- 1x advertising panel 5 mm, 820x820 mm (1), packaged individually
- 2x profiles, straight 80x40x880 mm (A)
- 2x profiles, straight 40x80x840 mm (B)
- 1x profile, straight 40x40x800 mm (C)
- 4x cover caps 40x80 mm, black (6)
- 10x anchors, straight (7)
- 10x cross-pieces with threaded insert (8)

Additional required components:

- 4x combination profiles, grey 800 mm long (5.1)

22 Assembling the twall® A16 support frame

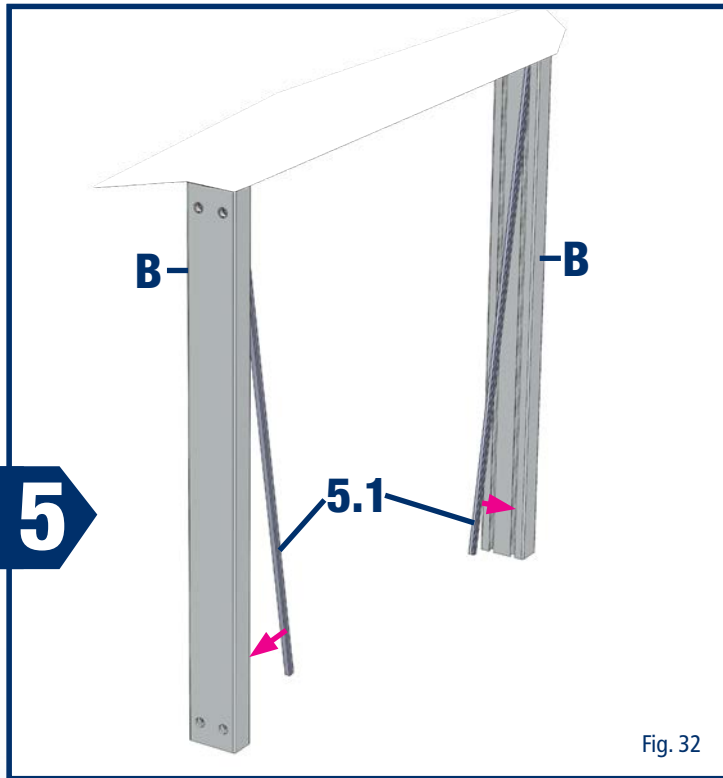


Pre-assembly of straight anchors

Attach the straight anchors (Fig. 28, item 7) to the straight ends of the following profiles:

- 2x at one end of each profile 40x80x840 mm (Fig. 28, item B)
- 2x on the profile 40x40x800 mm (Fig. 28, item C)

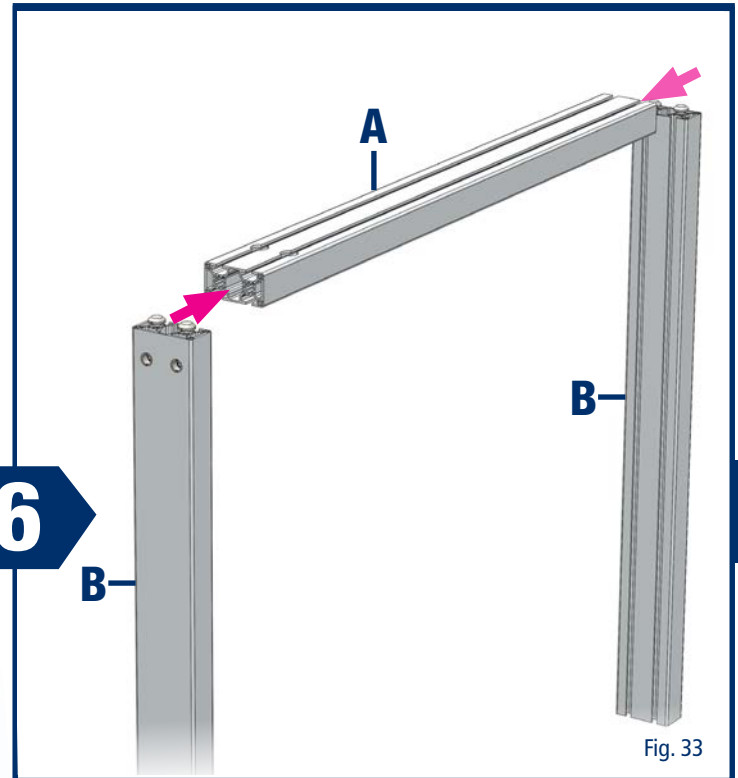
Insert a combination profile (800 mm, Fig. 29, item 5.1) into a T-groove of profile A. Repeat the procedure for profile C.



Insert a combination profile (800 mm, Fig. 29, item 5.1) into a T-groove of each of the profiles (40x80x840 mm, Fig. 29, item B).

Note: The combination profiles serve as mounts for the advertising panel (refer to Fig. 36).

Position the combination profiles so that the advertising panel can be inserted in the front grooves.



Next, slide the profiles (40x80x840 mm, Fig. 29, item B) with the pre-assembled anchors into the T-grooves of the profile (40x80x880 mm, Fig. 29, item A).

Make sure that the holes of profile A, which are used for mounting the modules, are facing upwards.



Caution: Make sure that you use the same grooves on each profile piece.

24 Assembling the twall® A16 support frame

7

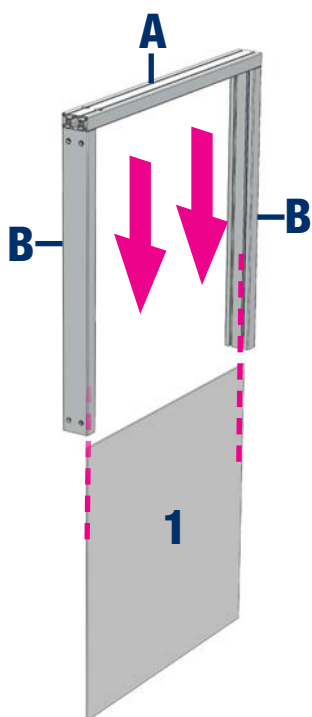


Fig. 34

8

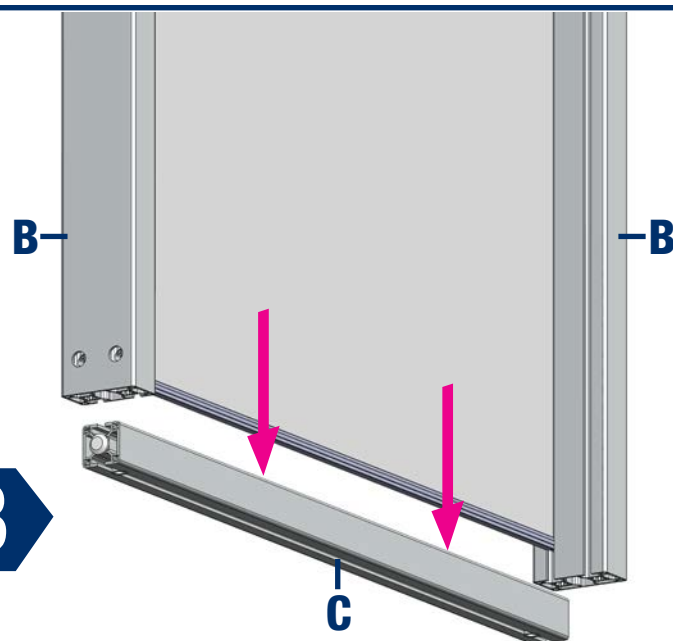
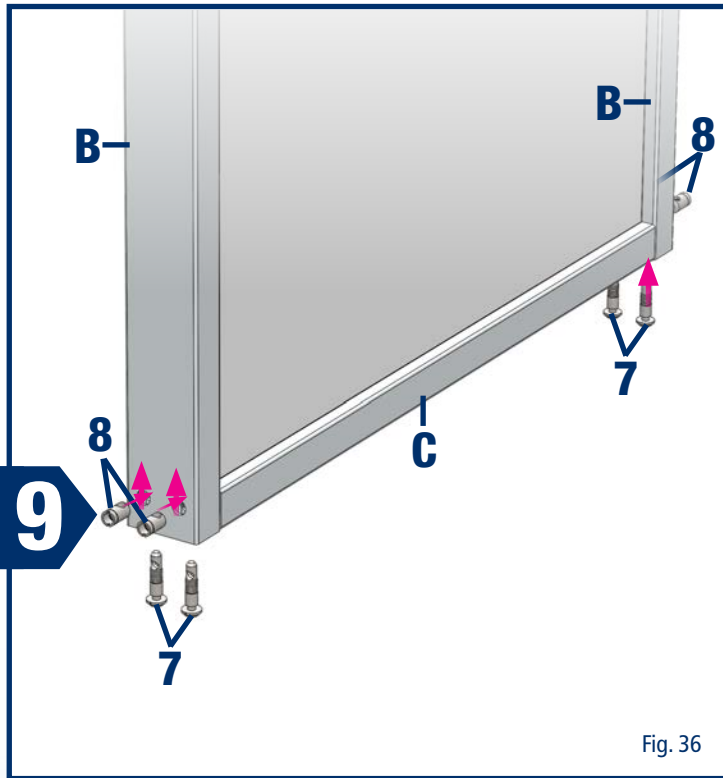


Fig. 35

Install the advertising panel by inserting it into the front T-grooves of the profiles (40x80x840 mm, Fig. 29, item B) and of the profile (40x80x800 mm, Fig. 29, item A), which are fitted with combination profiles.

Then insert profile C into the groove of the profiles (40x80x840 mm, Fig. 29, item B).



Check whether the straight anchors (Fig. 28, item 7) and the cross-pieces (Fig. 28, item 8) are installed on the bottom end of the profiles 40x80x840 (Fig. 36, item B). If not, please install them.

You have completed assembly of the twall® A16 support frame.

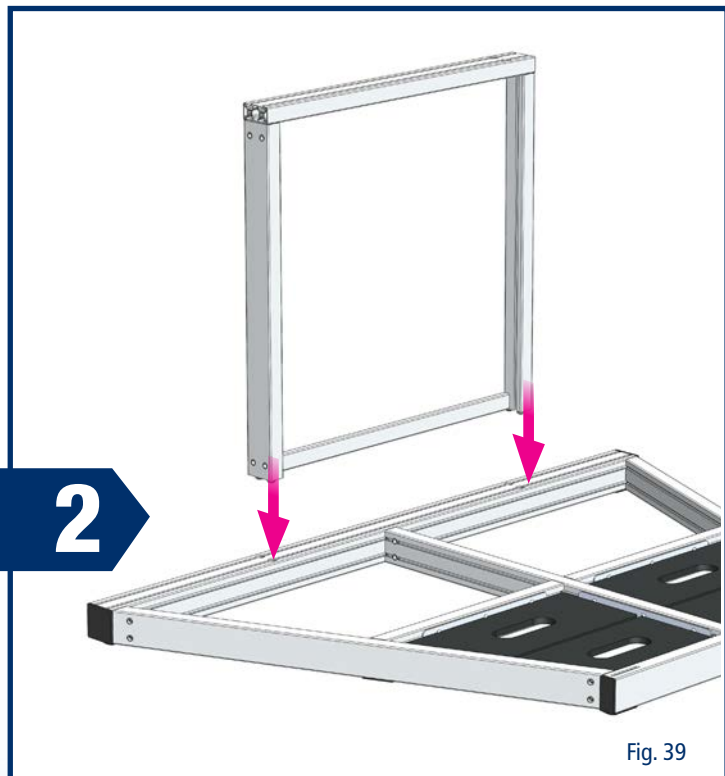
8. Assembling the support frame + universal base frame

1



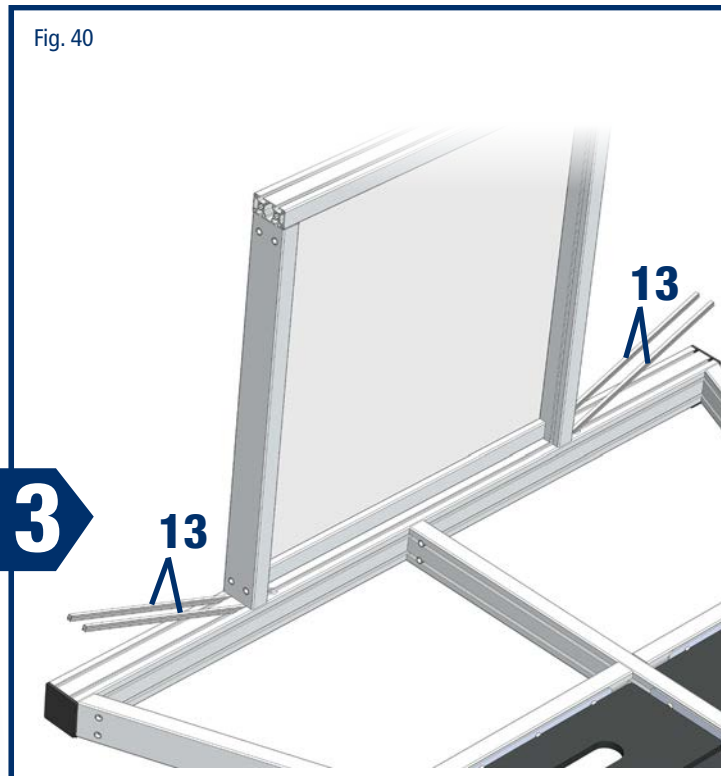
Fig. 38

The following section explains how to assemble the support frame on the universal base frame for the twall® A16.



Using the pre-assembled anchors, place the support frame onto the universal base frame via the mounting holes of the profile (80x80x1760 mm, Fig. 4, item A).

Attach the support frame so that the distance between the outer edge of the profile of the universal base frame (80x80x1760 mm, Fig. 4, item A) and the outer edge of the profile of the support frame (40x80x840mm, Fig. 29, item 3) is 440 mm.



Seal the open grooves in the profile (80x80x1760 mm, Fig. 4, item A) of the universal base frame with 4 combination profiles (Fig. 3, item 13).

Finally, install the side cover caps.

Congratulations!

You have completed the connection of the twall® A16 support frame with the universal base frame.

9. Final assembly of the twall® A16



The following section explains how to install the twall® A16 on the support frame and universal base frame.

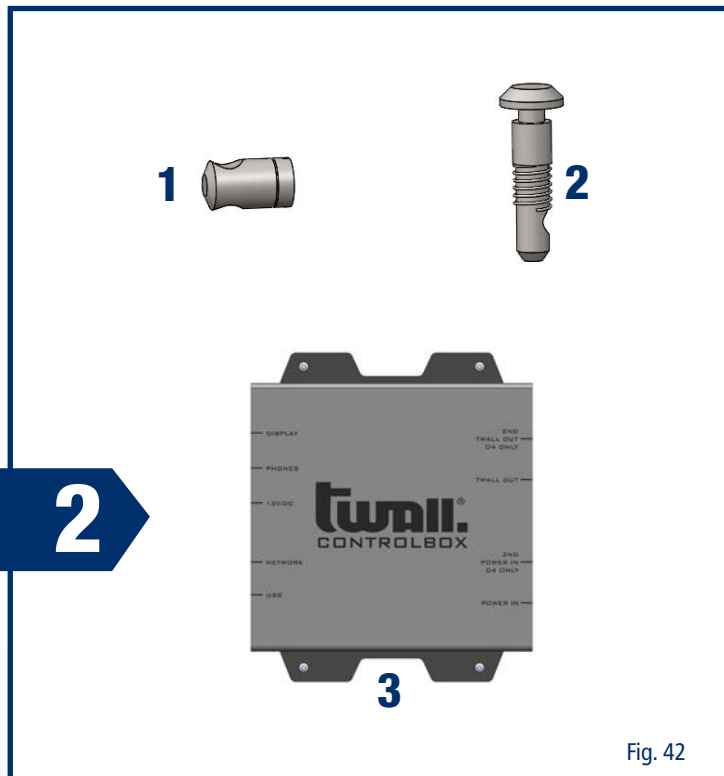


Fig. 42



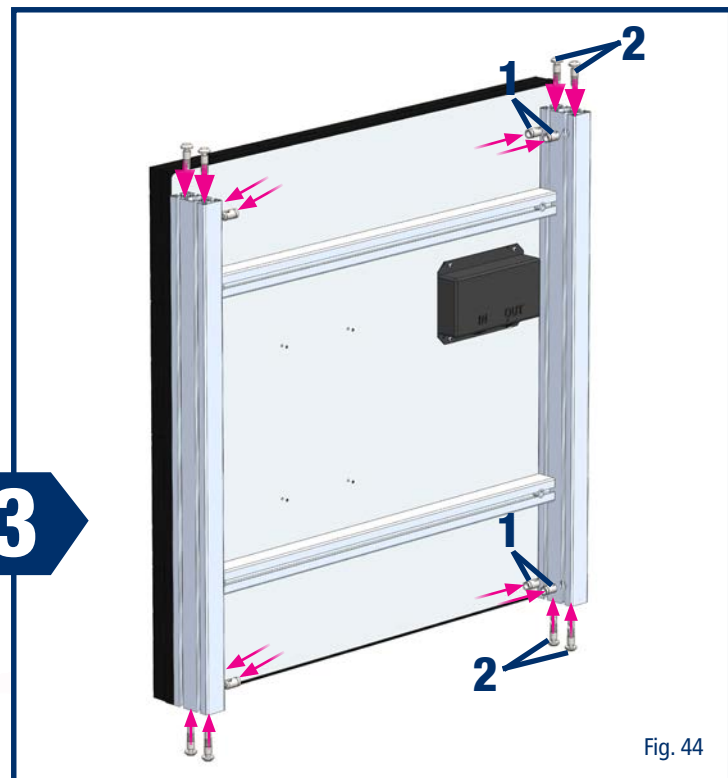
Fig. 43

Unpack all the supplied components and check the quantities as follows:

- 8x cross-pieces (1)
- 8x anchors, straight (2)
- 1x control box including screws (3)

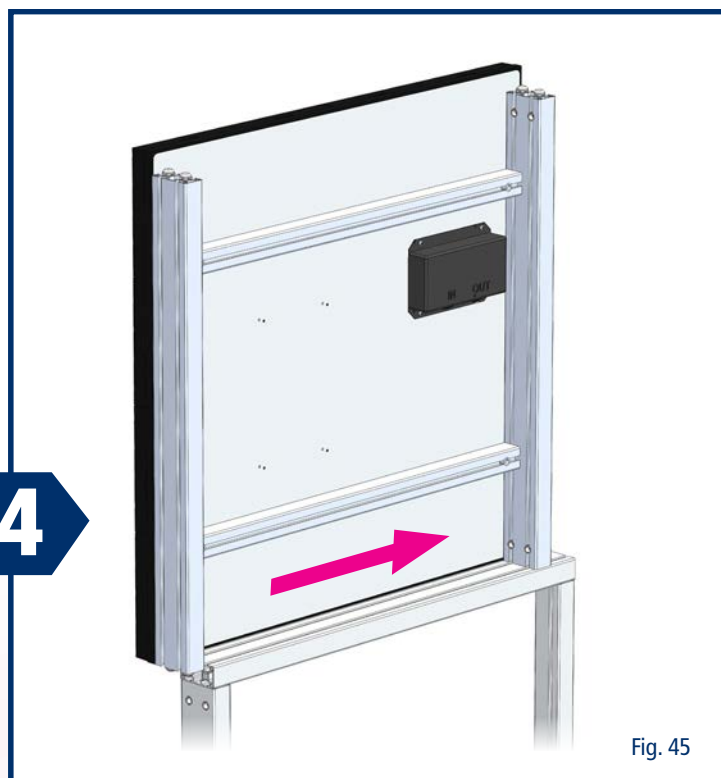
1x twall® module (pre-assembled)

30 Final assembly of the twall® A16



Pre-assembly of straight anchors

Pre-assembly of the straight anchors (2) and cross-pieces (1) on the ends of the profiles of the twall® module.



Place the twall® module on the profile 80x40x880 mm of the support frame so that the lower anchors fit into the corresponding mounting holes.

Slide the module to the left so that it rests flush on the support frame on both sides.

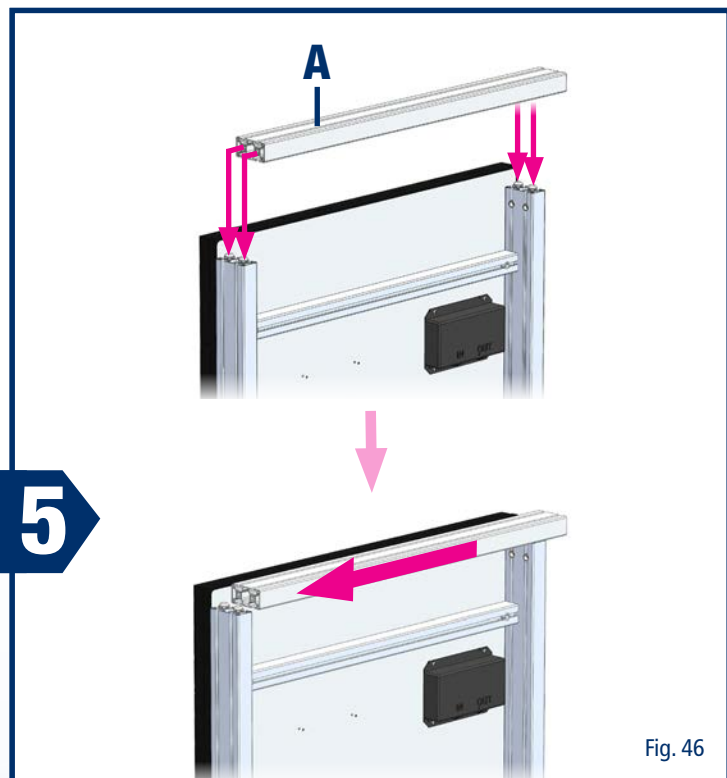


Caution: Do not fully tighten the threaded components yet!



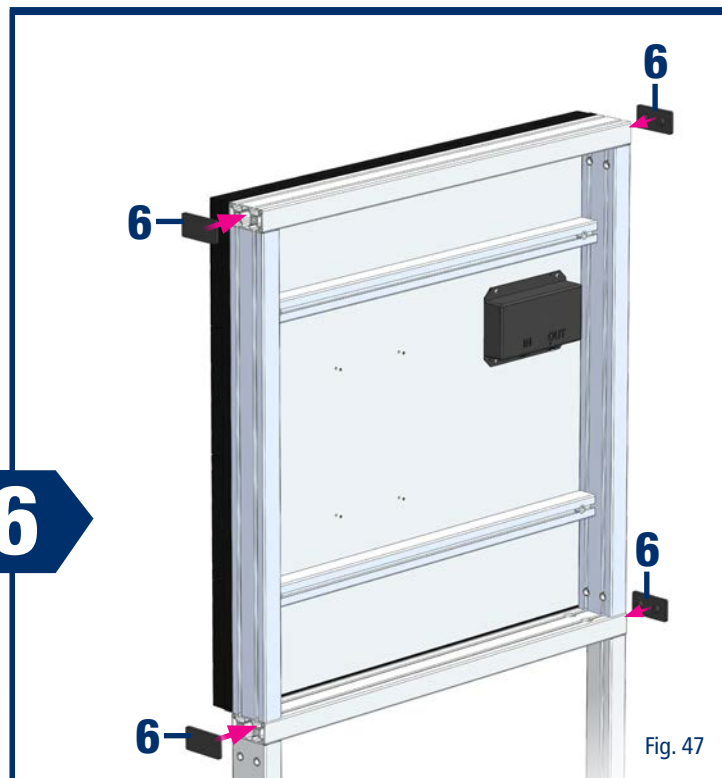
Caution: The lower threaded components are fully tightened. The upper threaded components are not yet tightened!

Fall hazard when working behind the twall®!



Place the profile (40x80x880 mm, Fig. 28, item A) on the twall® module (see Fig. 46).

Make sure that the upper anchors of the module fit into the corresponding mounting holes of the profile, and then slide it to the left so that it rests flush on the twall® module on both sides.



Finally, attach the cover caps to the open fronts of the support frame profiles, as well as the cover caps (Fig. 28, item 6) for the upper profile (80x40x880 mm).

32 Final assembly of the twall® A16



Next, install the control box on the rear of the twall® A16 module, using the supplied screws. Install the screws in the provided holes.

Congratulations!



You have completed the installation of the twall® A16 on the support frame.

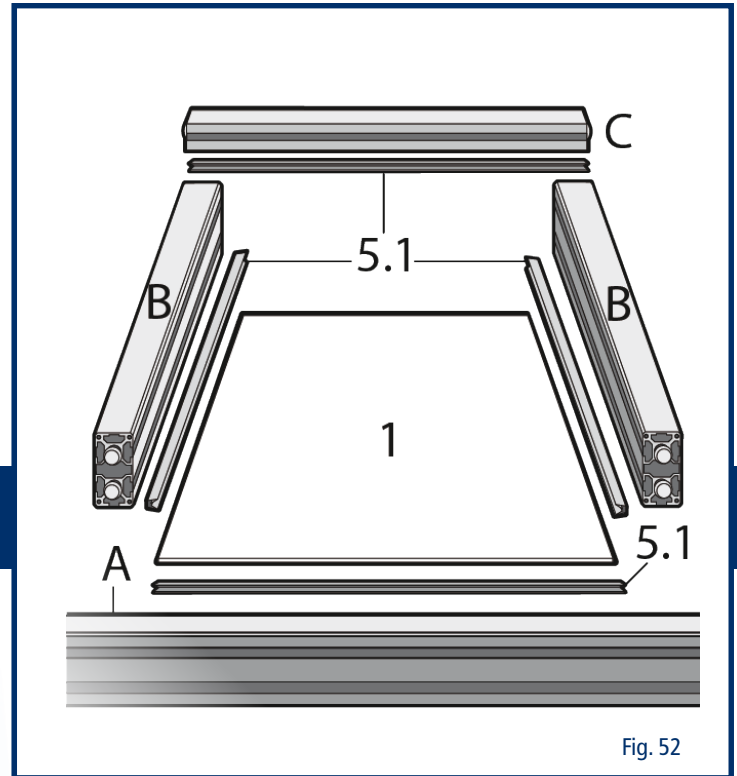
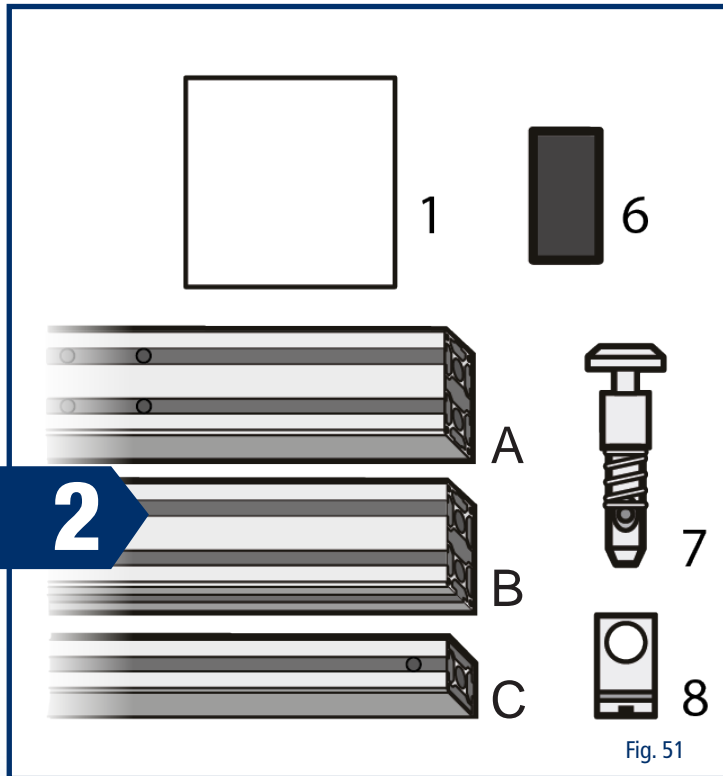
Next, continue with the assembly of the supports (see page 64).



10. twall® A32 support frame



The following section explains how to assemble the support frame for the twall® A32.



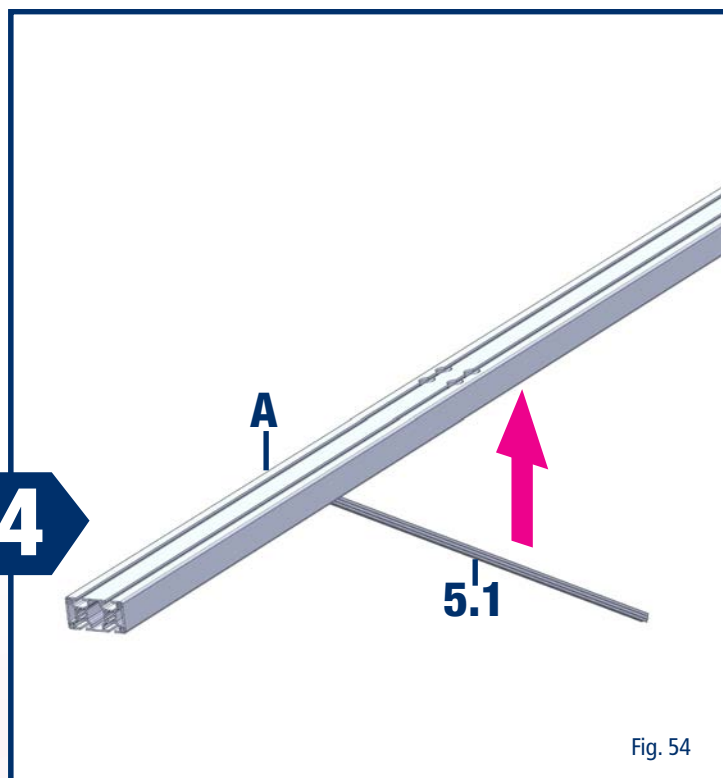
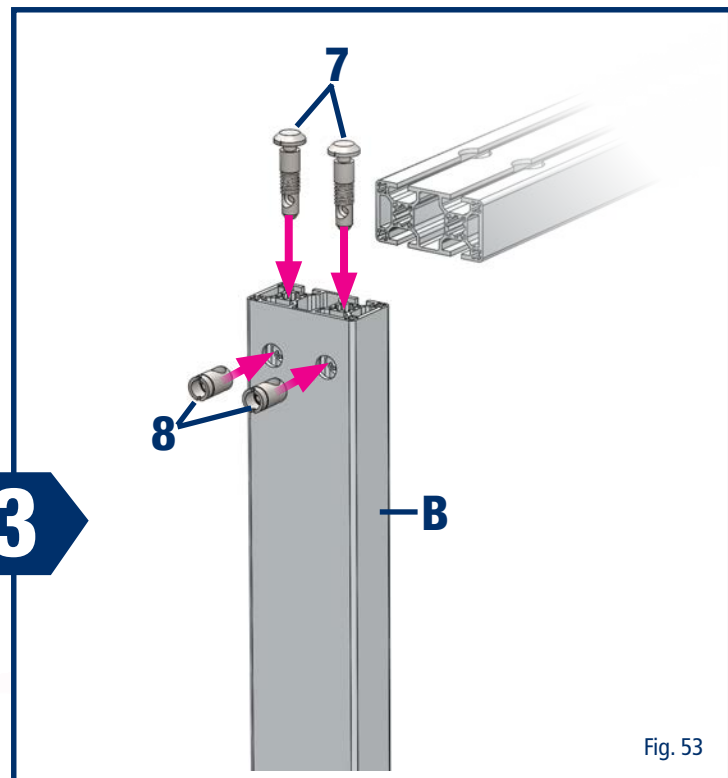
Unpack all the supplied components and check the quantities as follows:

- 1x advertising panel 5 mm, 820x820 mm (1), packaged individually
- 2x profiles, straight 80x40x1760 mm (A)
- 2x profiles, straight 40x80x840 mm (B)
- 1x profile, straight 40x40x800 mm (C)
- 4x cover caps 40x80 mm, black (6)
- 10x anchors, straight (7)
- 10x cross-pieces with threaded insert (8)

Additional required components:

- 4x combination profiles, grey 800 mm long (5.1)

36 Assembling the twall® A32 support frame

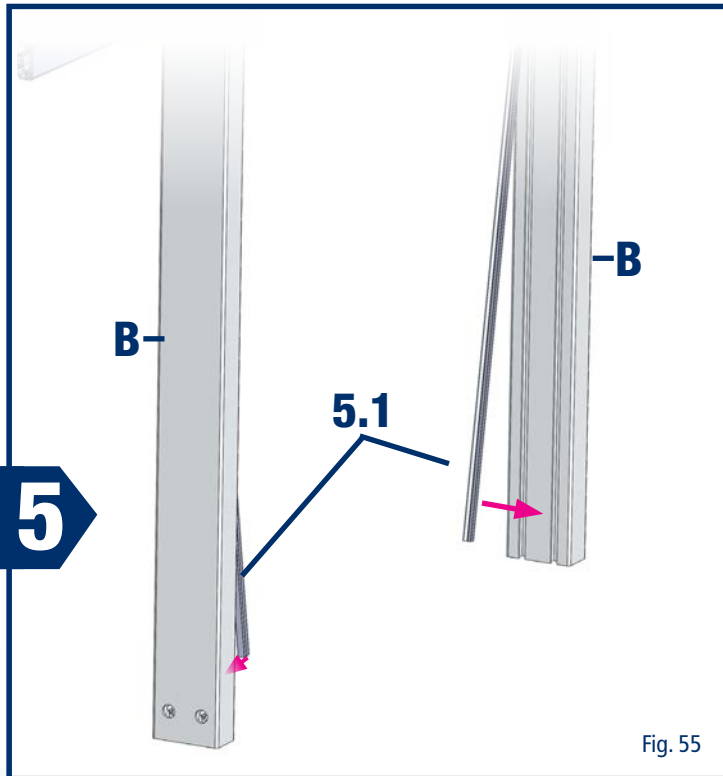


Pre-assembly of the straight anchors

Attach the straight anchors (Fig. 51, item 7) to the straight ends of the following profiles:

- 2 times at one end of each profile 40x80x840 mm (Fig. 52, item B)
- 2 times on the profile 40x40x800 mm (Fig. 52, item C)

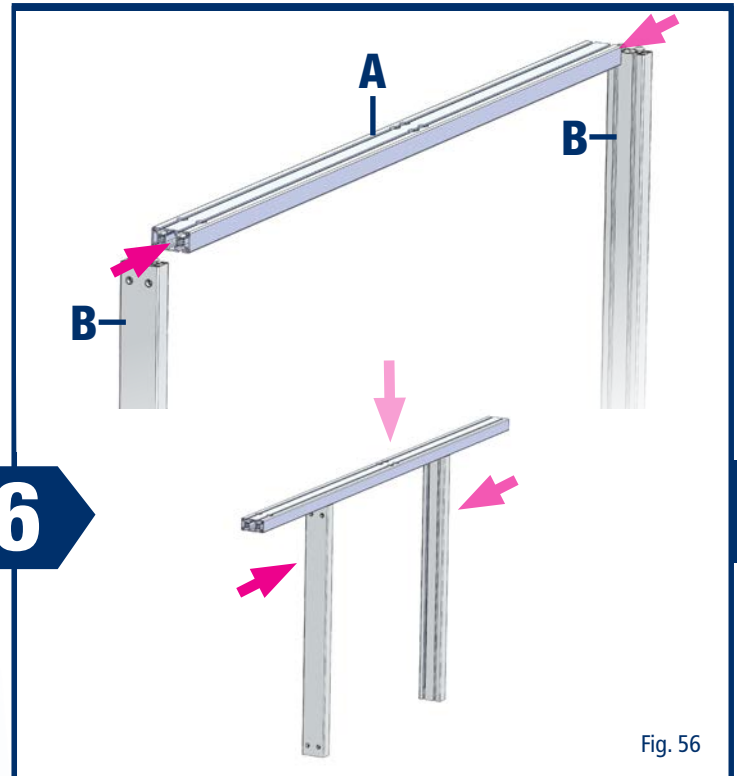
Insert a combination profile (800 mm, Fig. 52, item 5.1) into a T-groove of the profile (Fig. 52, item A). Repeat the procedure for profile C.



Insert a combination profile (800 mm, Fig. 52, item 5.1) into a T-groove of each of the profiles (40x80x840 mm, Fig. 52, item B).

Note: The combination profiles serve as mounts for the advertising panel (refer to Fig. 37).

Position the combination profiles so that the advertising panel can be inserted in the front grooves.



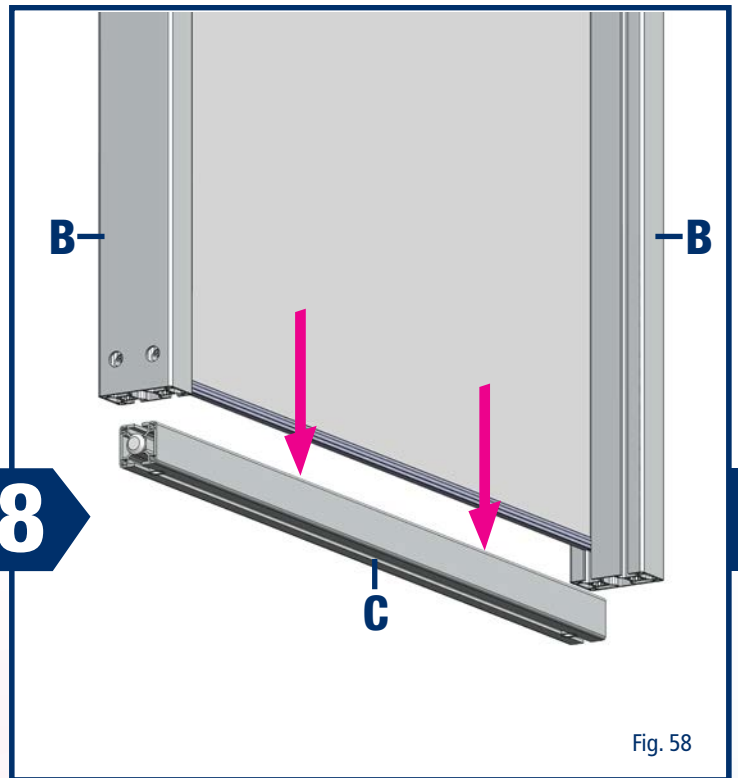
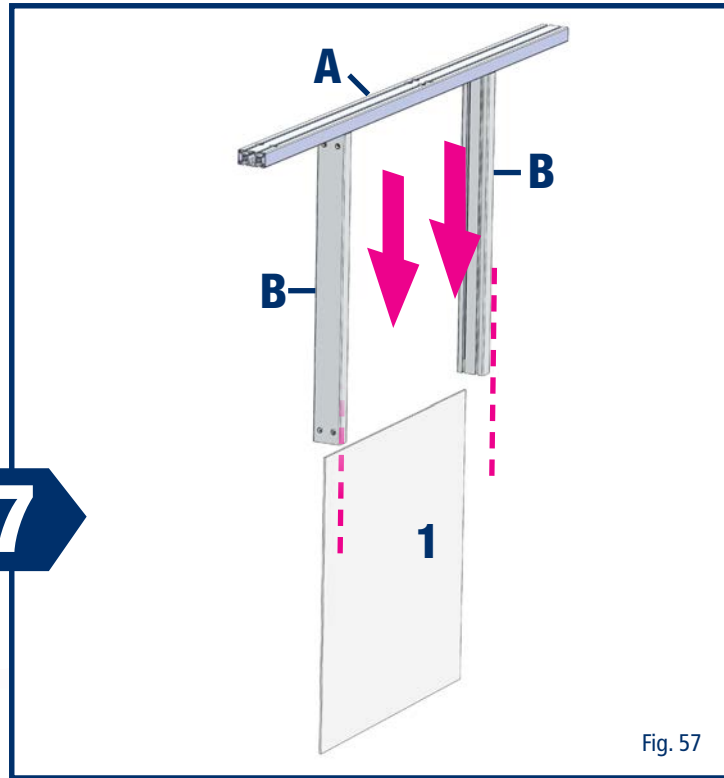
Next, slide the profiles (40x80x840 mm, Fig. 52, item B) with the pre-assembled anchors into the T-grooves of the profile (40x80x1760 mm, Fig. 52, item A).

Make sure that the holes used for mounting the modules are facing upwards.



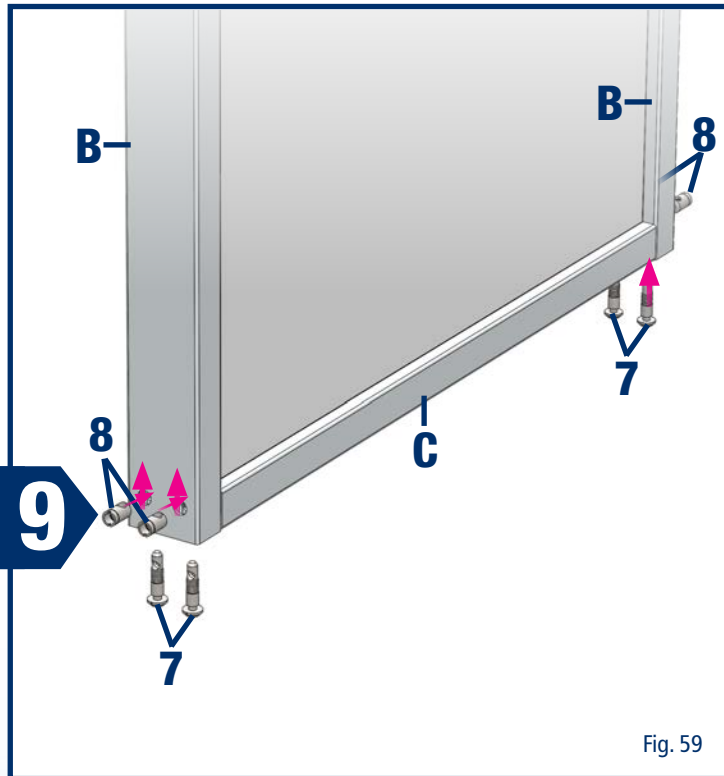
Caution: Make sure that you use the same grooves on each profile piece.

38 Assembling the twall® A32 support frame



Install the advertising panel by inserting it into the front T-grooves of the profiles (40x80x840 mm, Fig. 52, item B) and of the profile (80x40x1760 mm, Fig. 52, item A), which are fitted with combination profiles.

Then insert the heads of the universal connector of the profile (Fig. 52, item C) into the groove of the profiles (40x80x840 mm, Fig. 52, item B).



Check whether the straight anchors (Fig. 51, item 7) and the cross-pieces (Fig. 51, item 8) are installed on the bottom end of the profiles 40x80x840 (Fig. 59, item B). If not, please install them.

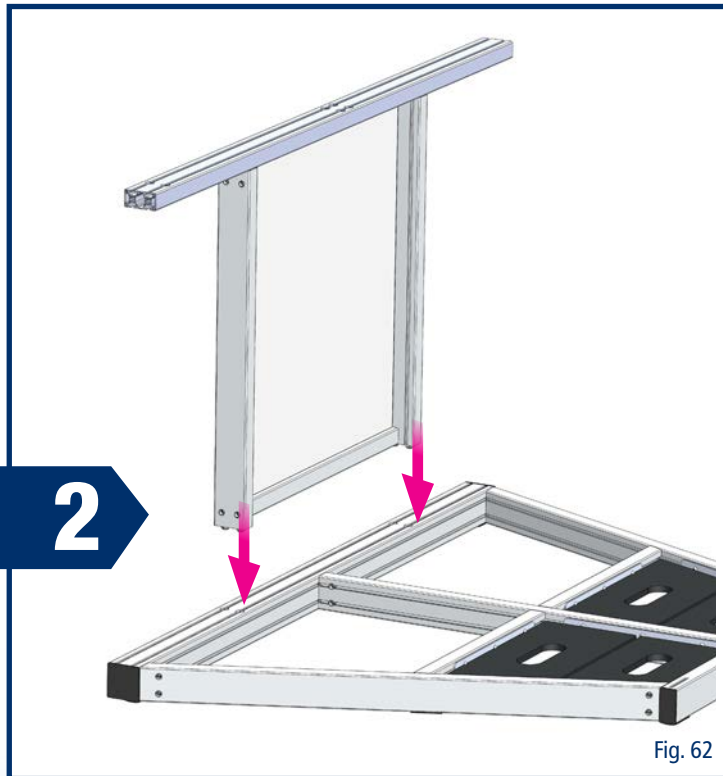


You have completed assembly of the twall® A32 support frame.

11. Assembling the support frame + universal base frame

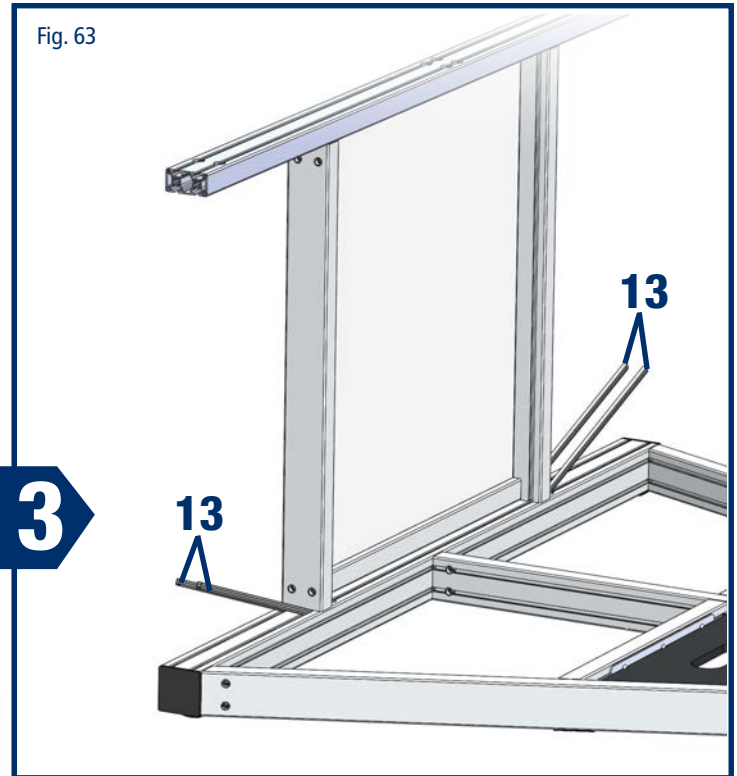


The following section explains how to assemble the support frame on the universal base frame for the twall® A32.



Using the pre-assembled anchors, place the support frame onto the universal base frame via the mounting holes of the profile (80x80x1760 mm, Fig. 4, item A).

Attach the support frame so that the distance between the outer edge of the profile of the universal base frame (80x80x1760 mm, Fig. 4, item A) and the outer edge of the profile of the support frame (40x80x840 mm, Fig. 51, item B) is 440 mm.



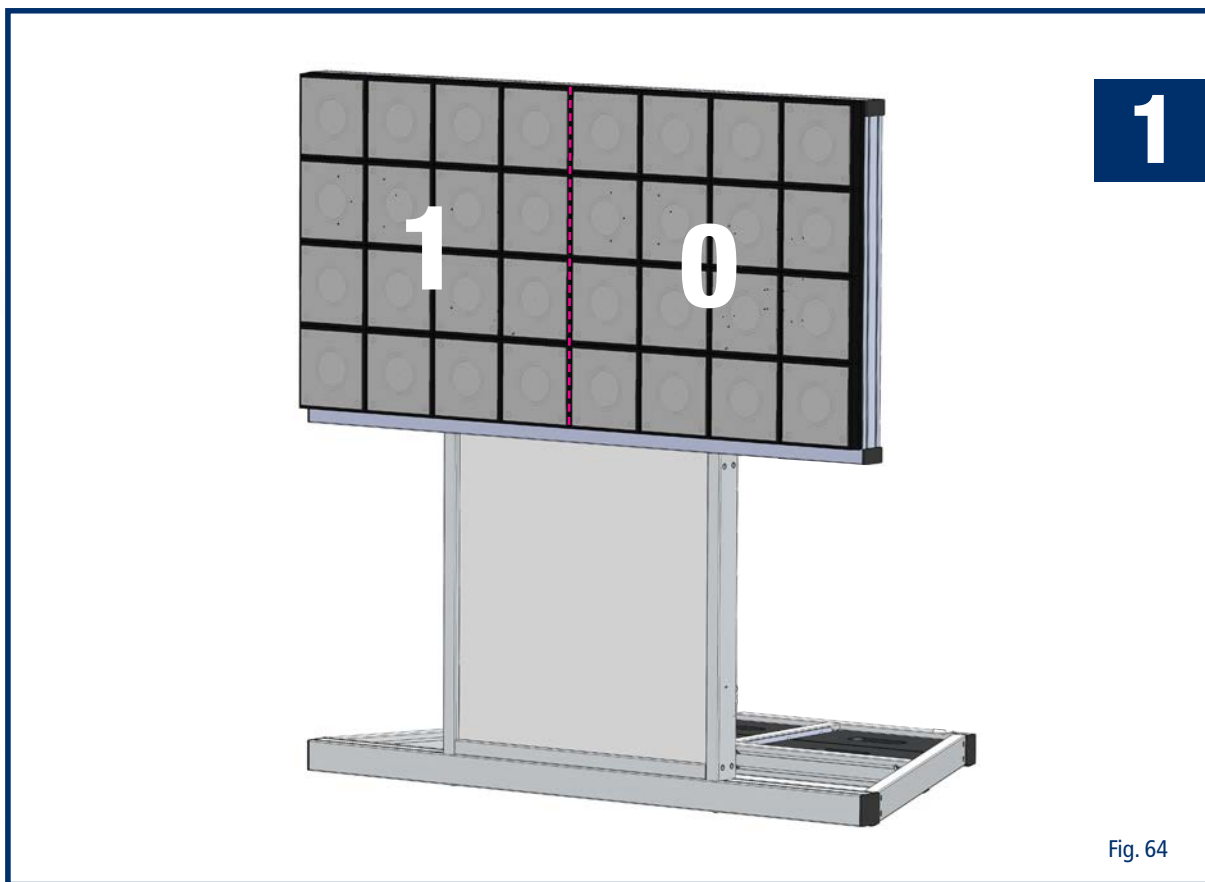
Seal the open grooves in the profile (80x80x1760 mm, Fig. 4, item A) of the universal base frame with 4 combination profiles (Fig. 3, item 13).

Finally, install the side cover caps.

Congratulations!

You have completed the connection of the twall® A32 support frame with the universal base frame.

12. Final assembly of the twall® A32



The following section explains how to install the twall® A32 on the support frame and universal base frame.

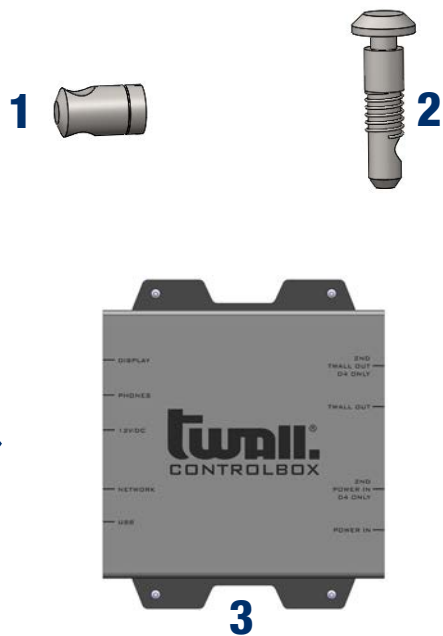


Fig. 65



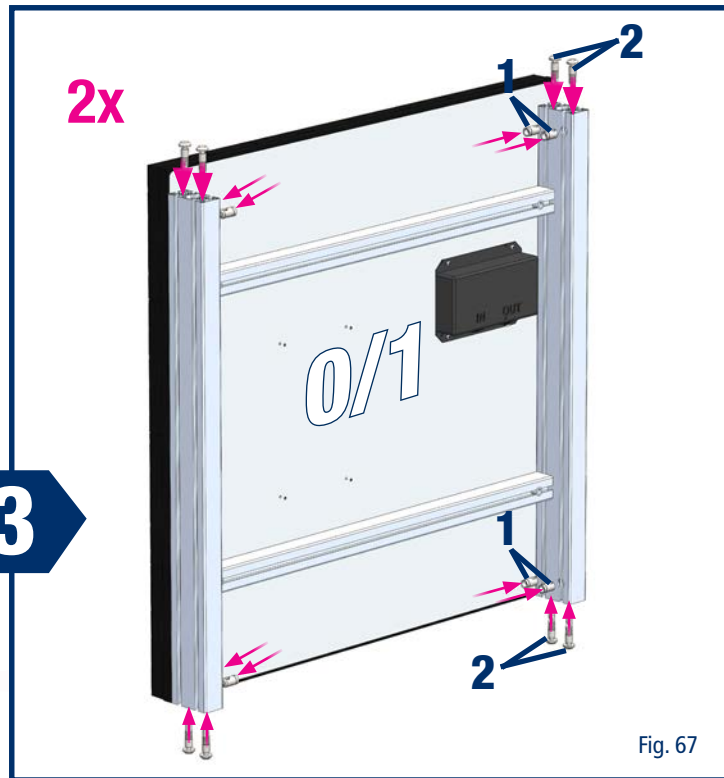
Fig. 66

Unpack all the supplied components and check the quantities as follows:

- 16x cross-pieces (1)
- 16x anchors, straight (2)
- 1x control box including screws (3)

2x twall® module (pre-assembled)

44 Final assembly of the twall® A32



Pre-assembly of the straight anchors (2x)

If it hasn't been done already, you can now carry out the pre-assembly of the straight anchors and cross-pieces on the ends of the profiles of the two twall® modules.



Insert a twall® module into the marked mounting holes of the profile 80x40x1760 mm of the support frame.
Slide it to the left so that it locks in place and is flush.

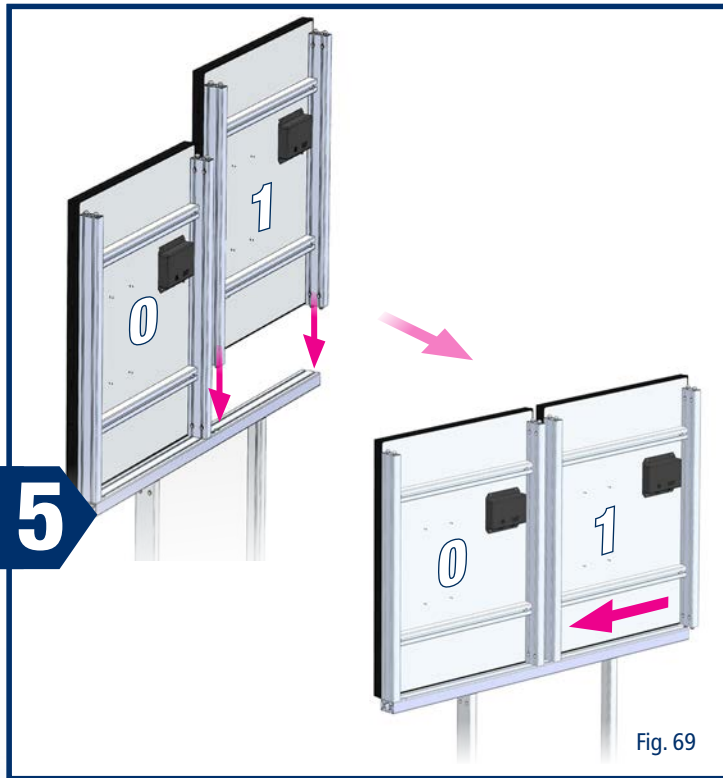


Caution: Do not fully tighten the threaded components yet!



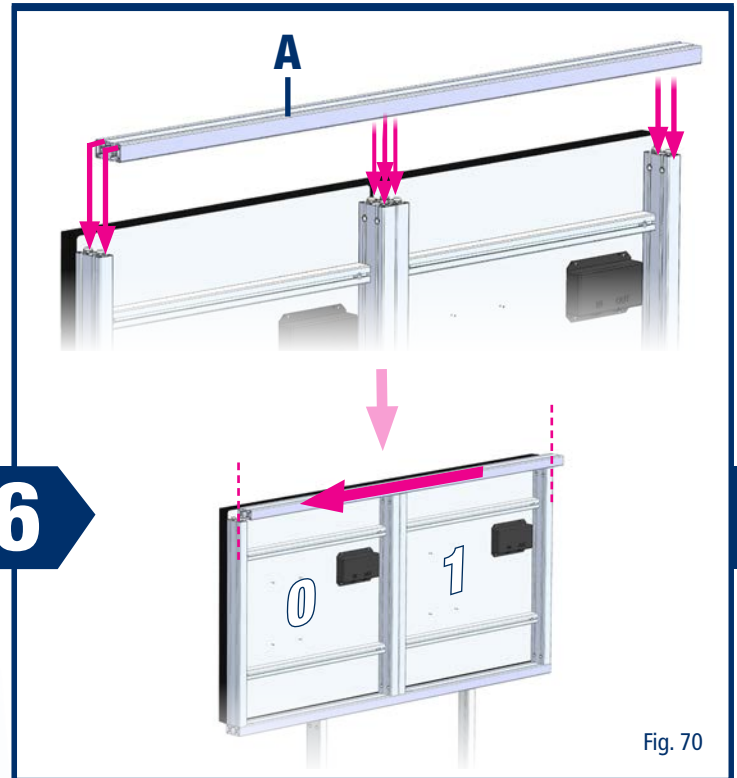
**Caution: Do not fully tighten the upper threaded components yet!
Fully tighten the lower threaded components!**

Fall hazard when working behind the twall®!



Insert the second twall® module into the marked mounting holes of the profile 80x40x1760 mm of the support frame.
Slide it to the left so that it locks in place and is flush.

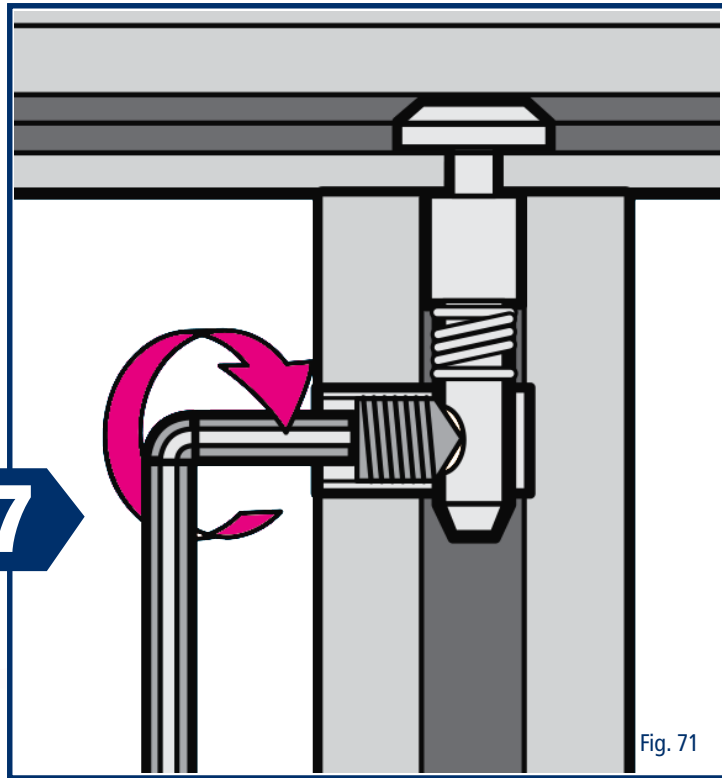
Make sure that both modules are positioned correctly and that they are locked in place, flush with the ends of the profile 80x40x1760.



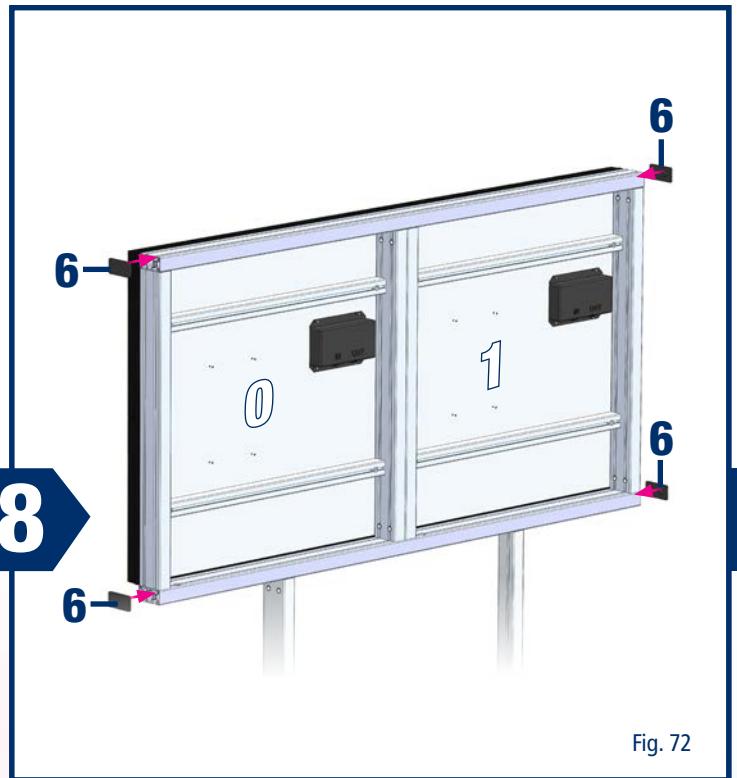
Place the profile (40x80x1760 mm, Fig. 52, item A) with the marked mounting holes onto the pre-assembled anchors of the twall® modules from above. Slide the profile to the left and thread in the remaining anchors.

Make sure that the profile locks into place and is flush on both sides.

46 Final assembly of the twall® A32



Next, fully tighten all cross-piece set screws.
Once again, make sure that the modules and all profiles are seated properly.



Finally, attach the cover caps (Fig. 51, item 6) to the profiles (Fig. 52, item A) of the support frame.



Next, install the control box on the rear of the left twall® module item 0, using the supplied screws. Install the screws in the provided holes.

Congratulations!

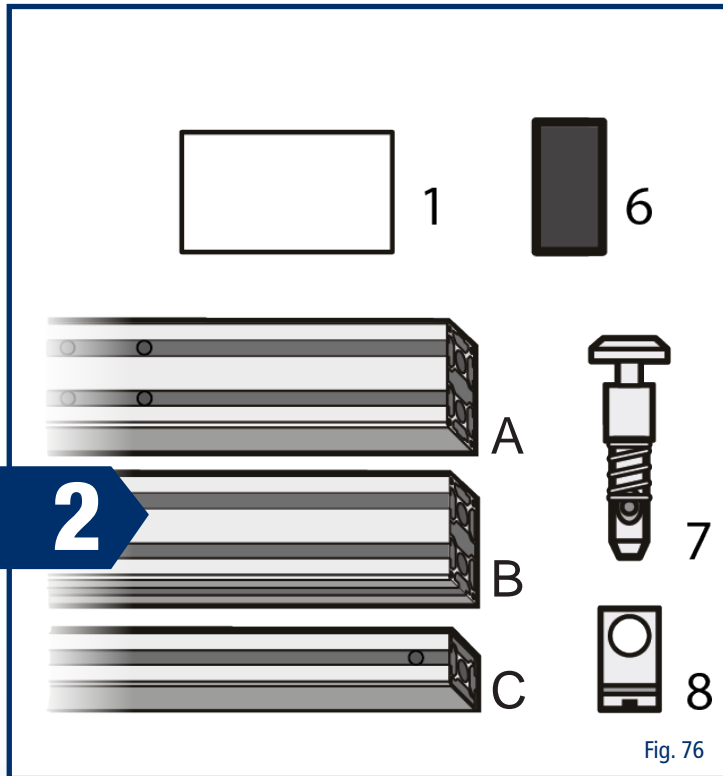


You have completed the installation of the twall® A32 on the support frame.
Next, continue with the assembly of the supports (see page 64).

13. twall® A64 support frame

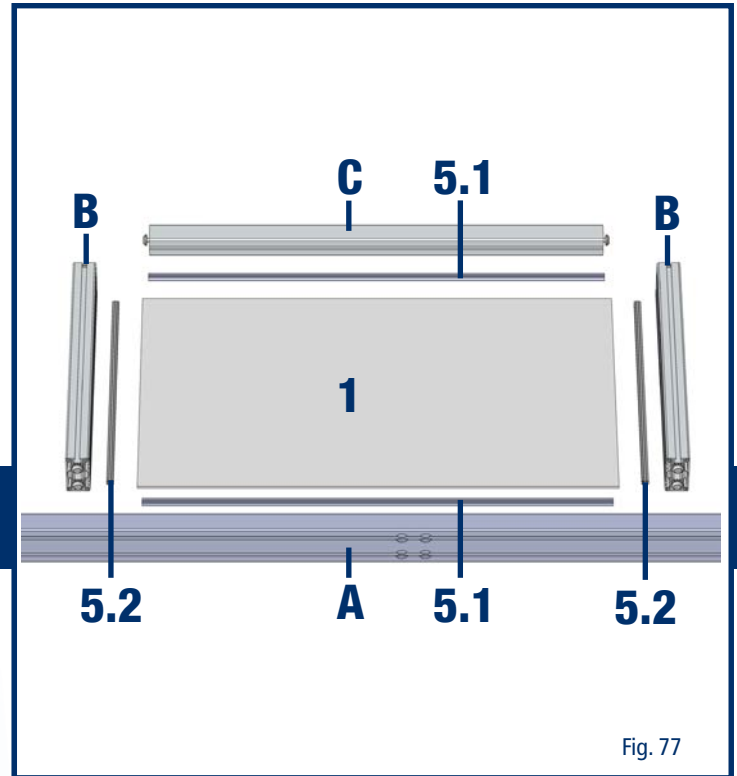


The following section explains how to assemble the support frame for the twall® A64.



Unpack all the supplied components and check the quantities as follows:

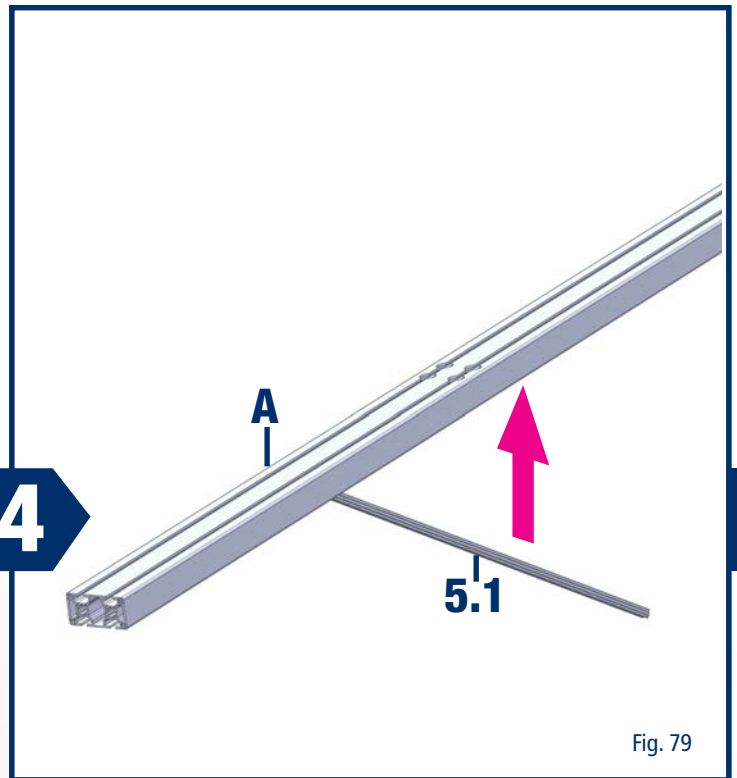
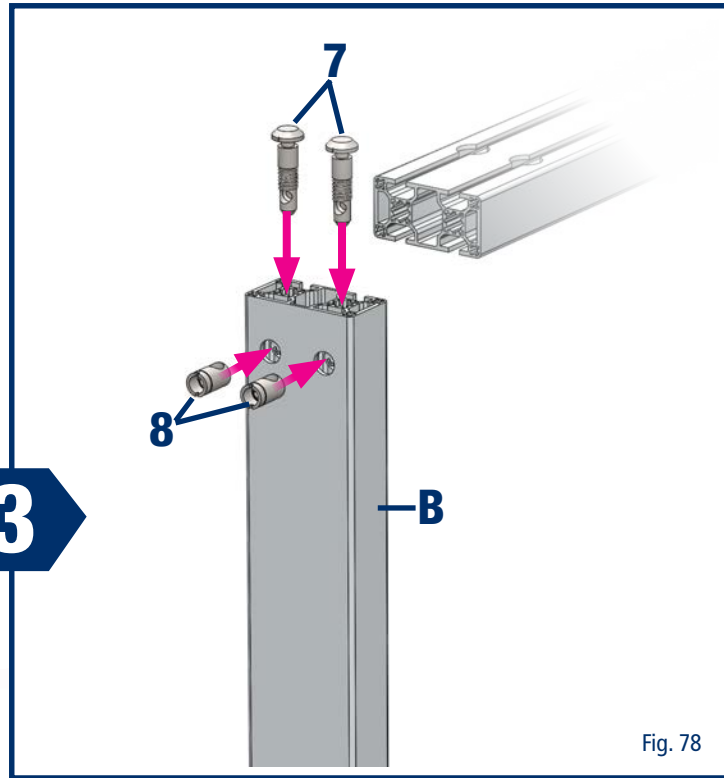
- 1x advertising panel 5 mm, 820x400 mm (1), packaged individually
- 2x profiles, straight 80x40x1760 mm (A)
- 2x profiles, straight 40x80x480 mm (B)
- 1x profile, straight 40x40x800 mm (C)
- 4x cover caps 40x80 mm, black (6)
- 10x anchors, straight (7)
- 10x cross-pieces with threaded insert (8)



Additional required components:

- 2x combination profiles, grey 800 mm long (5.1),
- 2x combination profiles, grey 440 mm long (5.2)

50 Assembling the twall® A64 support frame

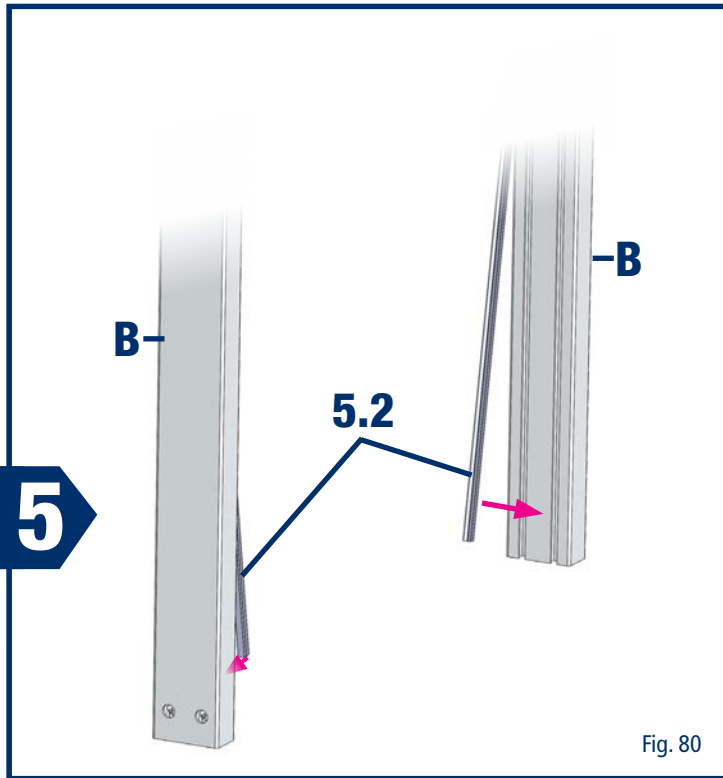


Pre-assembly of the straight anchors

Attach the straight anchors (Fig. 76, item 7) to the straight ends of the following profiles:

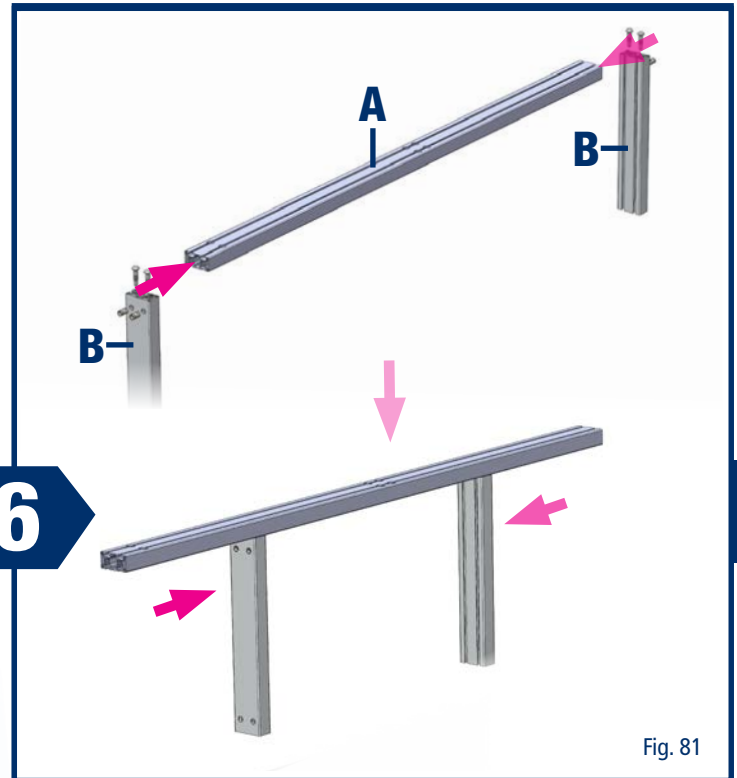
- 2x at one end of each profile 40x80x480 mm (Fig. 73, item B)
- 2x on the profile 40x40x800 mm (Fig. 76, item C)

Insert a combination profile (800 mm, Fig. 52, item 5.1) into a T-groove of the profile (Fig. 76, item A). Repeat the procedure for the profile (Fig. 76, item C).



Insert a combination profile (400 mm, Fig. 77, item 5.2) into a T-groove of each of the profiles (40x80x480 mm, Fig. 77, item B).

Position the combination profiles so that the advertising panel can be inserted in the front grooves.



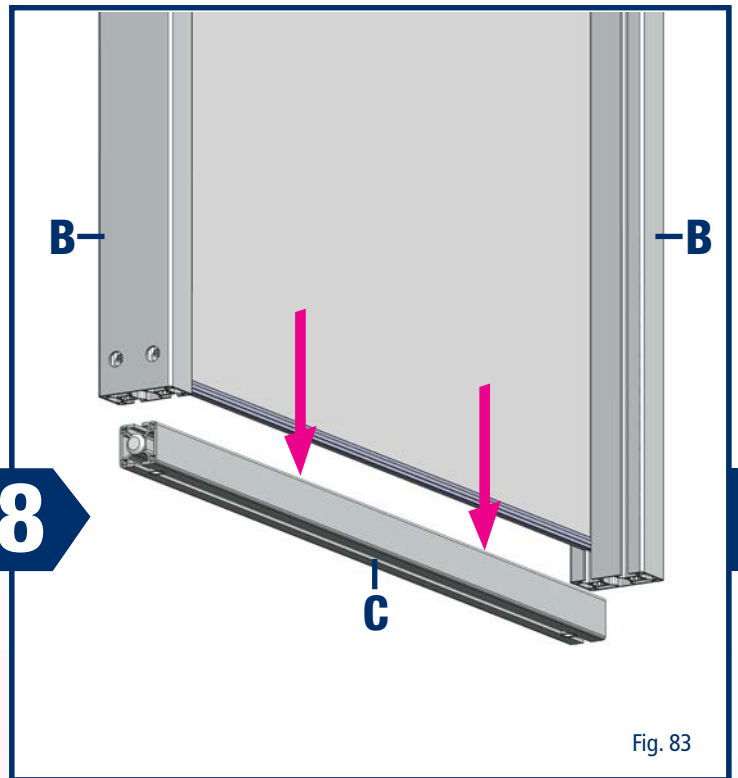
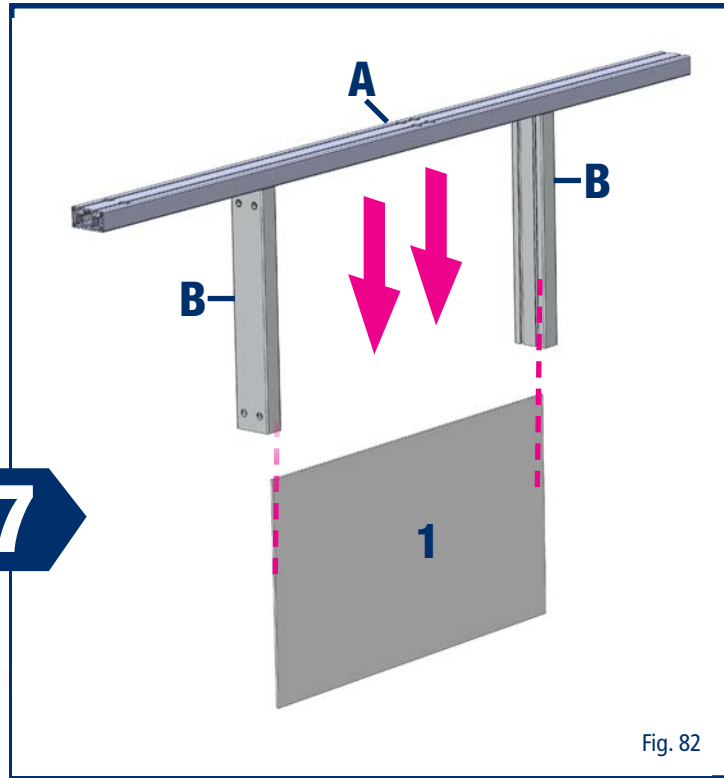
Next, slide the profiles (40x80x480 mm, Fig. 77, item B) with the pre-assembled anchors into the T-grooves of the profile (40x80x1760 mm, Fig. 77, item A).

Make sure that the holes used for mounting the modules are facing upwards.



Caution: Make sure that you use the same grooves on each profile piece.

52 Assembling the twall® A64 support frame



Install the advertising panel by inserting it into the front T-grooves of the profiles (40x80x480 mm, Fig. 77, item B) and of the profile (40x80x1760 mm, Fig. 77, item A), which are fitted with combination profiles.

Then insert the profile (Fig. 77, item C) into the groove of the profiles (40x80x480 mm, Fig. 77, item B).

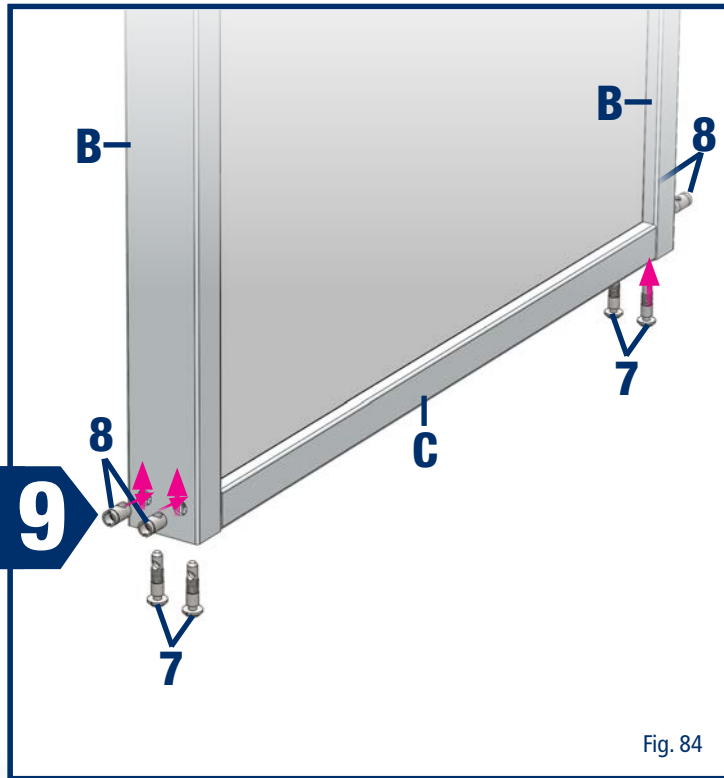


Fig. 84

Check whether the straight anchors (Fig. 76, item 7) and the cross-pieces (Fig. 76, item 8) are installed on the bottom end of the profiles 40x80x480 (Fig. 84, item B). If not, please install them.



Fig. 85

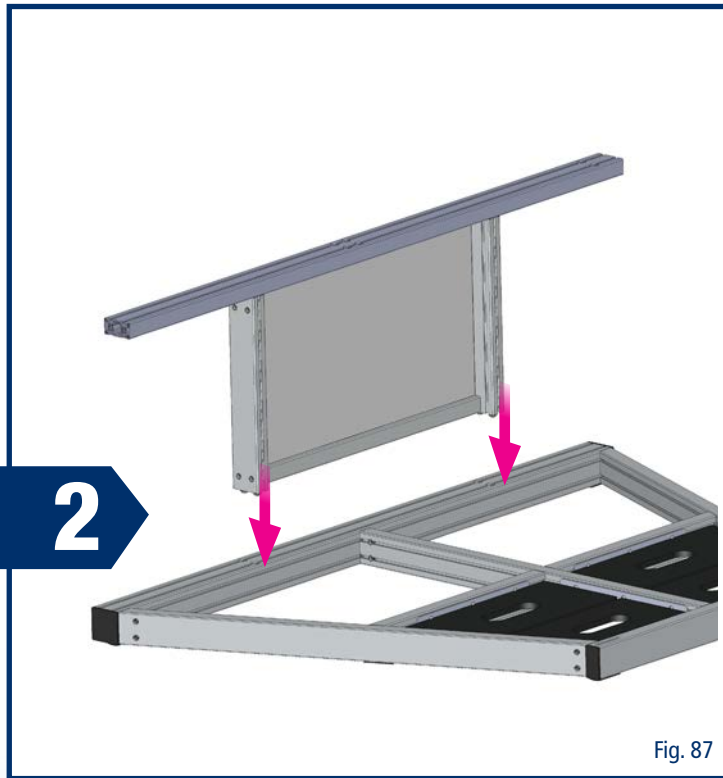
You have completed assembly of the twall® A64 support frame.

14. Assembling the support frame + universal base frame



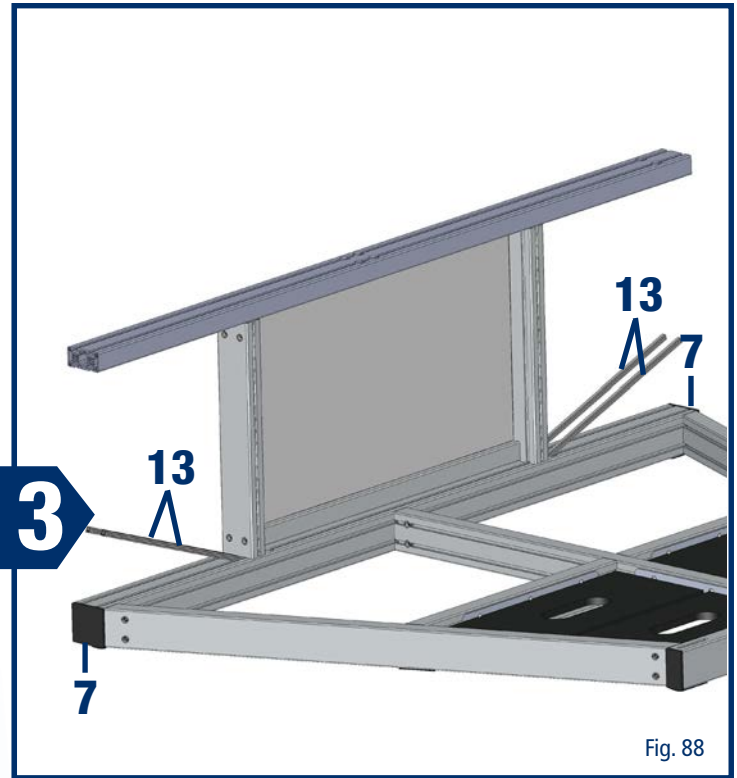
Fig. 86

The following section explains how to assemble the support frame on the universal base frame for the twall® A64.



Using the pre-assembled anchors, place the support frame onto the universal base frame via the mounting holes of the profile (80x80x1760 mm, Fig. 4, item A).

Attach the support frame so that the distance between the outer edge of the profile on the universal base frame (80x80x1760 mm, Fig. 4, item A) and the outer edge of the profile on the support frame (40x80x480 mm, Fig. 77, item B) is 440 mm.



Seal the open grooves in the profile (80x80x1760 mm, Fig. 4, item A) of the universal base frame with 4 combination profiles (Fig. 3, item 13).

Finally, install the side cover caps (Fig. 3, item 7).

Congratulations!

You have completed the connection of the twall® A64 support frame with the universal base frame.

15. Final assembly of the twall® A64

1

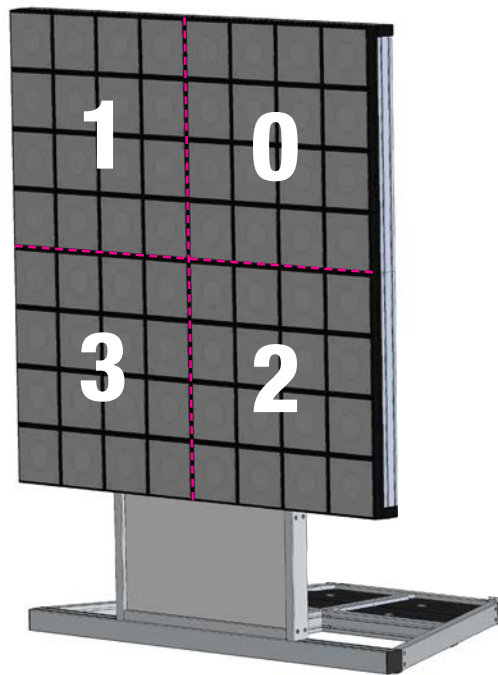
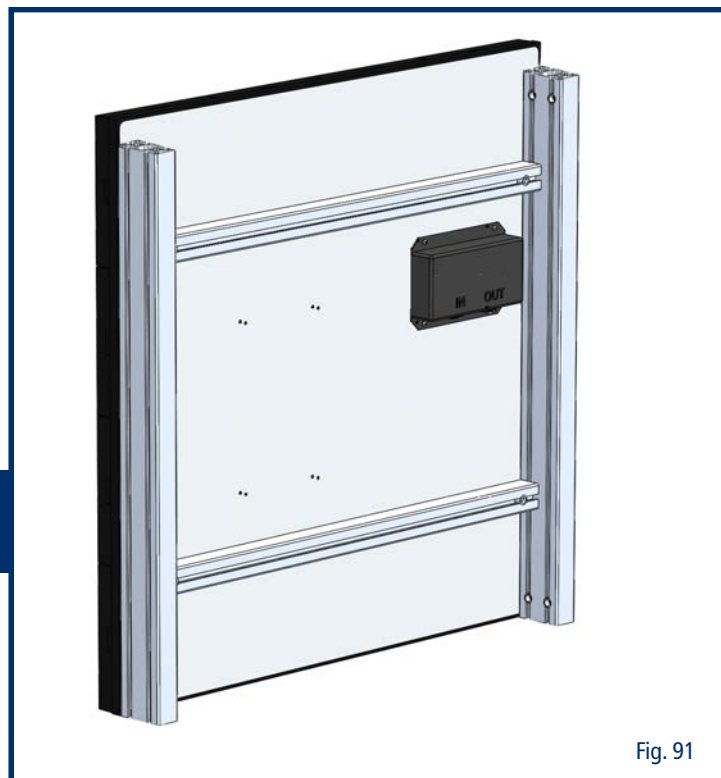
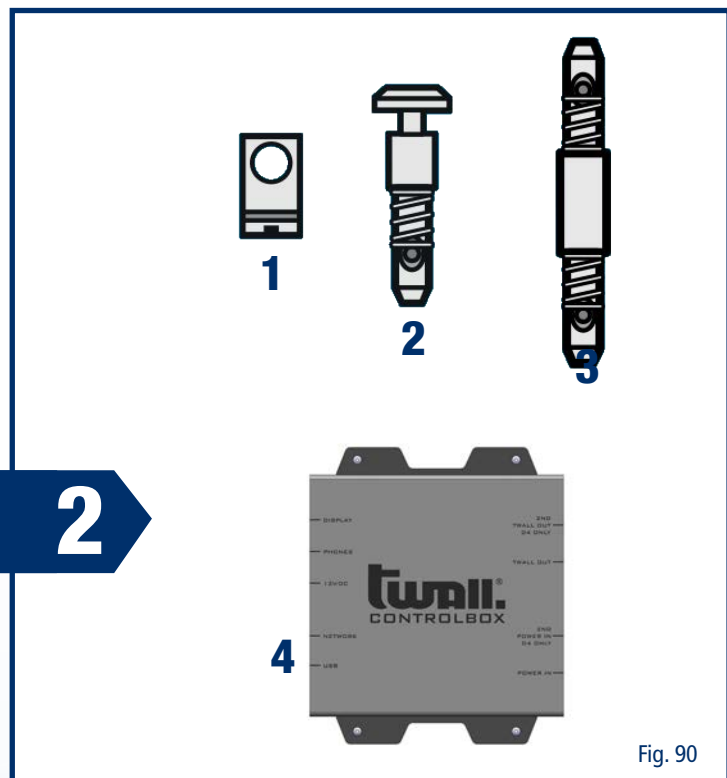


Fig. 89

The following section explains how to install the twall® A64 on the support frame and universal base frame.



Unpack all the supplied components and check the quantities as follows:

- 32x cross-pieces (1)
- 16x anchors, straight (2)
- 8x connectors for profile extension (3)
- 1x control box including screws (4)

4x twall® modules (pre-assembled)



Pre-assembly of the anchors/cross-pieces on one side on the ends of the profiles of two twall® modules.

Note: The anchors and cross-pieces (Fig. 92, item 1/2) are pre-assembled on the profile ends with overhanging panel (panel and profile are not fitted flush).

Pre-assembly of connectors for profile extension

Caution: For module item 2 and item 3, "top" refers to the location where the profile and panel are at the same final height!

Insert 4 extension connectors (Fig. 92, item 3) and cross-pieces on the top profile ends of each of the modules item 2/3.

Fully tighten the set screws in the cross-pieces of the extension connectors (Fig. 90, item 3 and item 1).

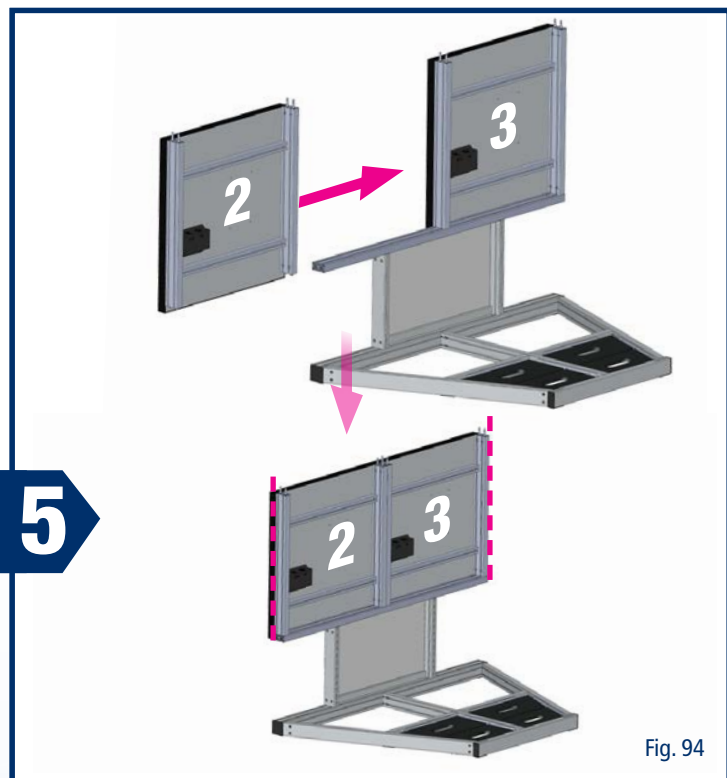
Insert the **twall®** module item 3, with the anchors attached at the bottom, into the marked mounting holes of the profile 80x40x1760 of the support frame. Slide it to the right so that it locks in place and is flush.

Make sure that the twall® is positioned correctly and is flush with the profile 80x40x1760 mm.

Caution: The cross-pieces of the extension connectors may already be fully tightened!

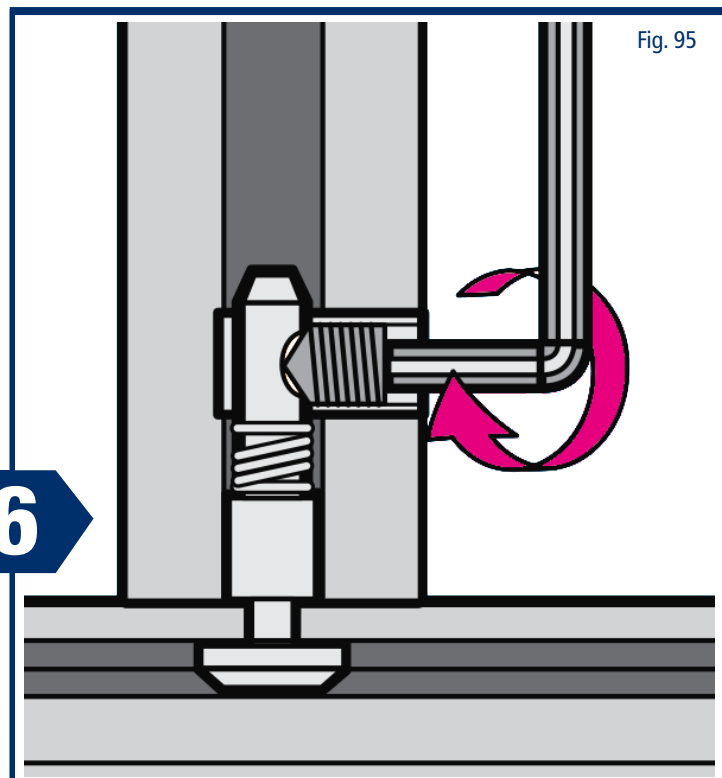
Caution: Do not fully tighten the threaded components yet!

Fall hazard when working behind the twall®!

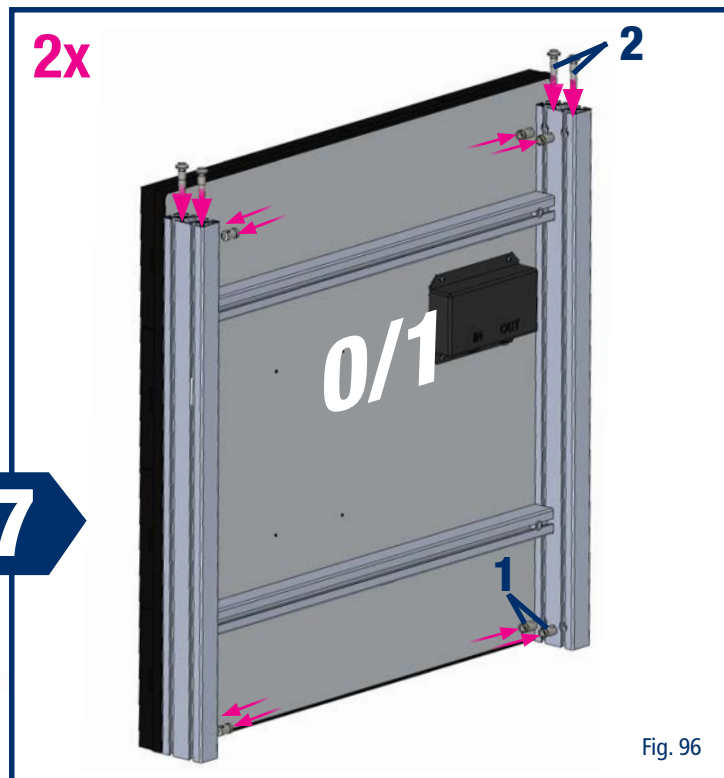


Insert the twall® module item 2 from the left into the two marked mounting holes of the profile 40x80x1760 so that the lower anchors remain free on the left side of the module. Then slide the module carefully to the right and thread in the free anchors.

Make sure that the outer edge of the module is flush with the profile!

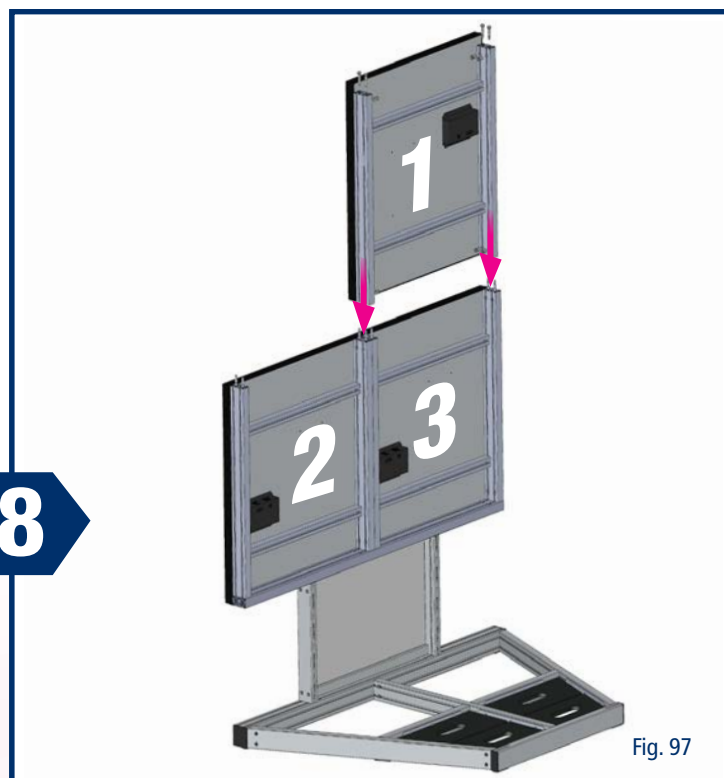


Caution: Fully tighten the set screws in the cross-pieces.



Pre-assembly of the anchors/cross-pieces (Fig. 96, item 1/2) on one side at the top ends of the profiles of two twall® modules (item 0 & item 1).

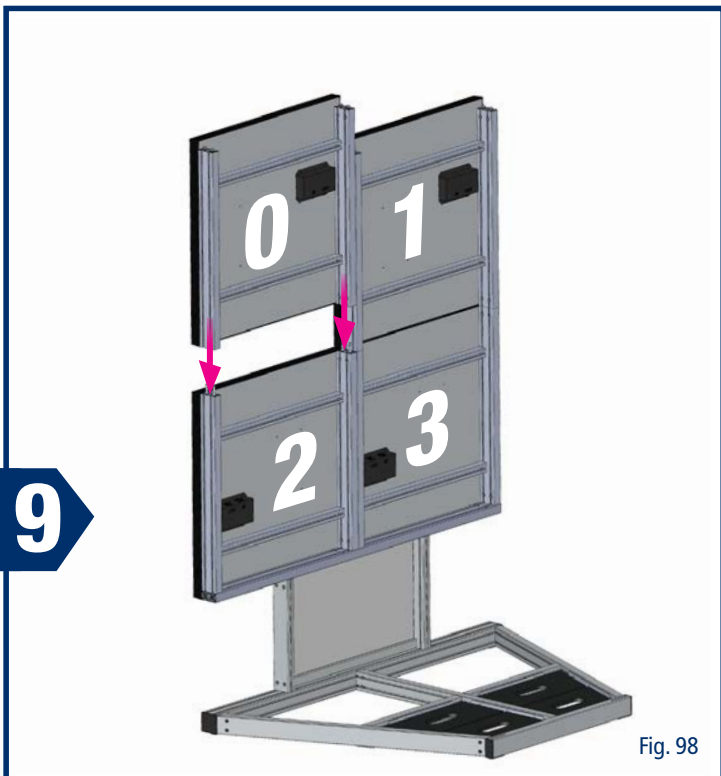
The remaining four cross-pieces are inserted into the open profile ends down into the corresponding mounting holes of the grooves. Make sure that the marking of the cross-pieces runs vertically.



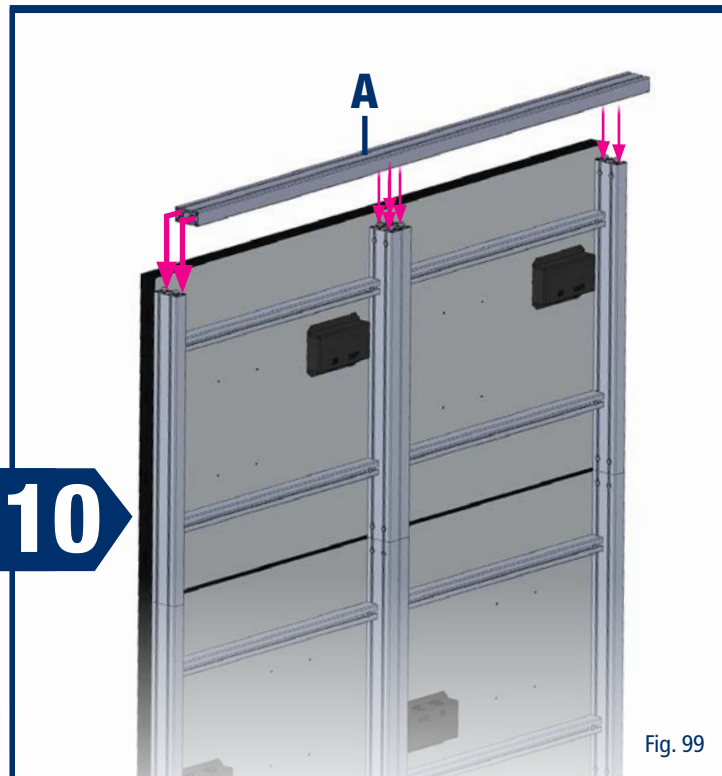
Place the twall® module item 1 onto the module item 3 from above. Fully tighten the set screws of the cross-pieces at the extension connectors!



Caution: Fully tighten the threaded inserts of the extension connectors!

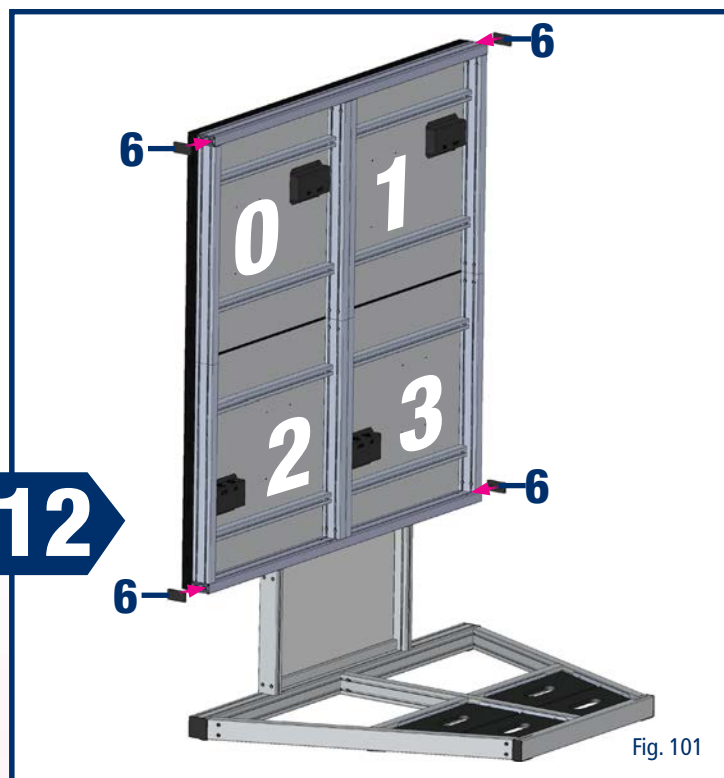
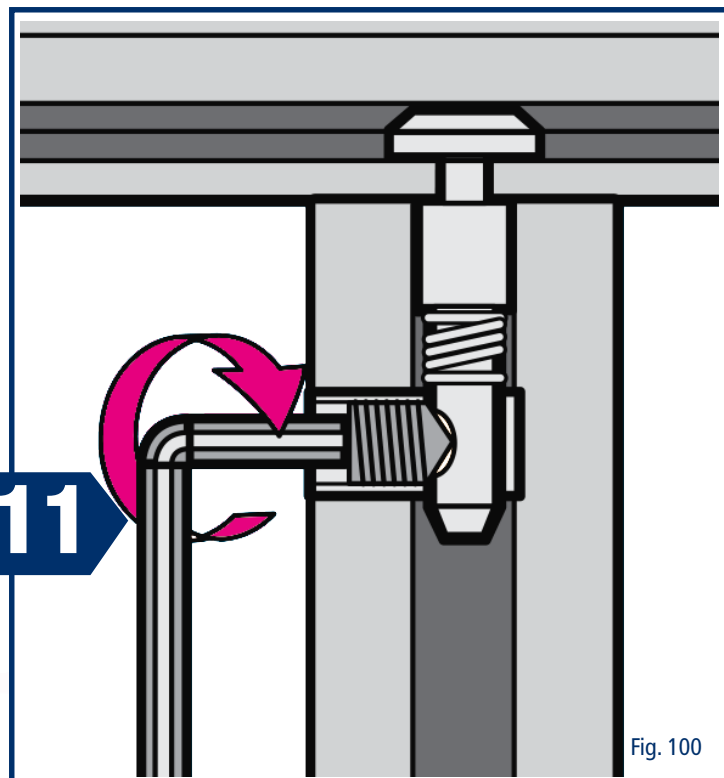


Next, place module item 0 onto module item 2 from above. Fully tighten the set screws of the cross-pieces into the extension connectors!



Place the profile 40x80x1760 mm (Fig. 76, item A) with the marked mounting holes onto the pre-assembled anchors of the twall® modules item 0/item 1 from above. Slide the profile to the left and thread in the remaining anchors.

Make sure that the profile locks into place and is flush on both sides.



Next, fully tighten all cross-piece set screws.
Once again, make sure that the modules and all profiles are seated and positioned properly.

Finally, attach the cover caps (Fig. 76, item 6) to the profiles (80x40x1760) of the support frame.



Caution: Fully tighten the threaded inserts for connectors and profile connectors!



Next, install the control box on the rear of the twall® module item 0, using the supplied screws. Install the screws in the provided holes.

Congratulations!

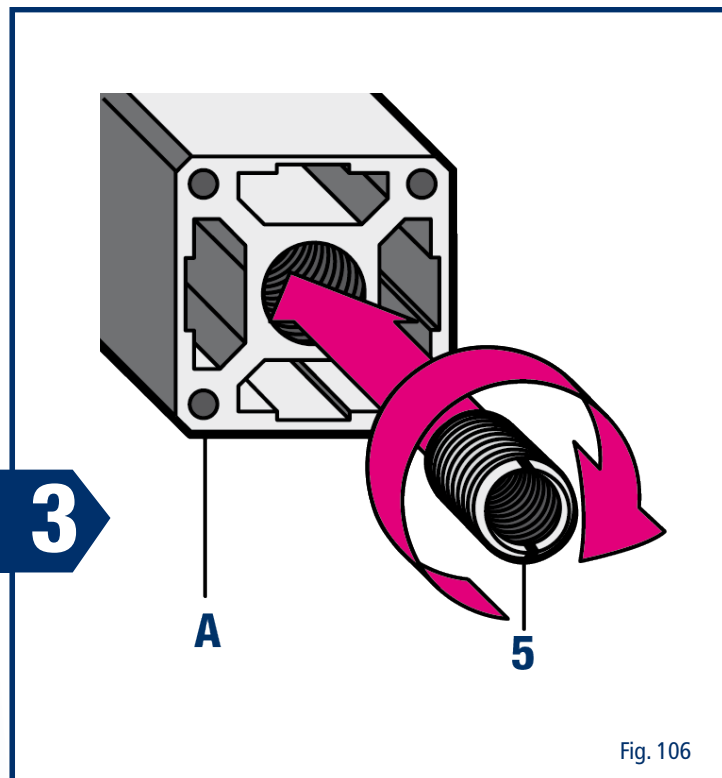
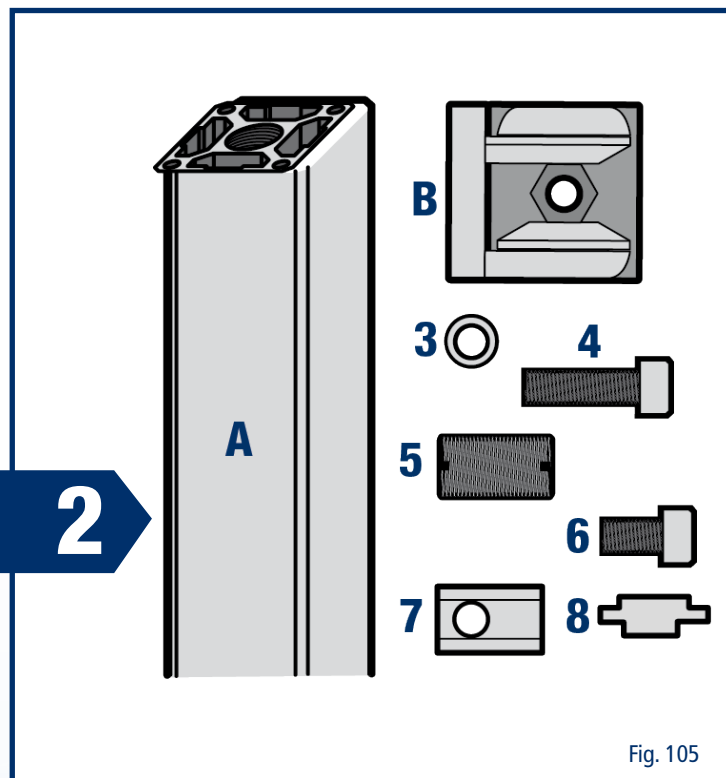


You have completed the installation of the twall® A64 on the support frame. Please turn to page 64, Installing the supports.

16. Installing the supports



The following section explains how to install the supports for your **twall®**, step by step.
The supports are used to stabilise your **twall®**. The end result is shown in Fig. 104 above (example based on A32).



Unpack all the supplied components and check the quantities as follows:

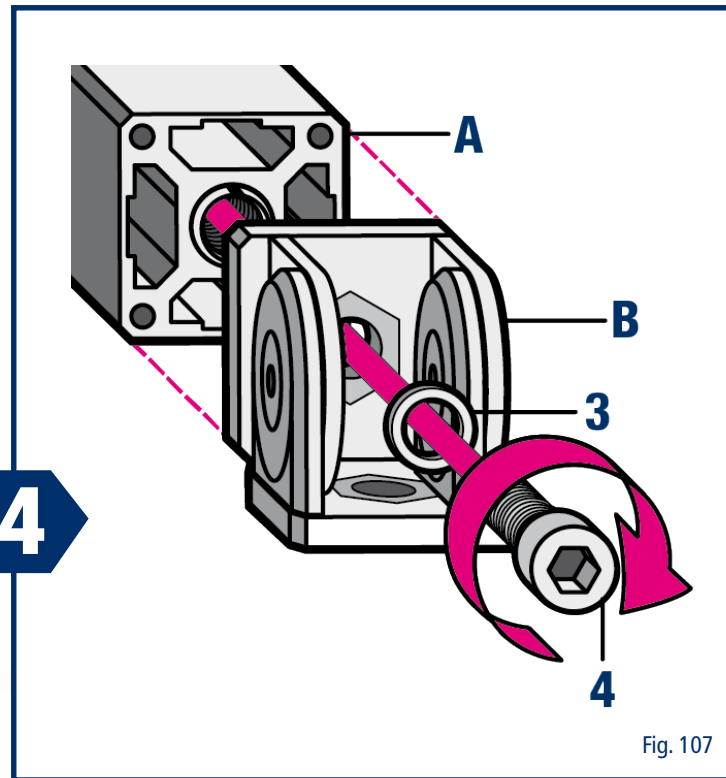
- 2x profiles 40x40x1455 mm (A) (A16 or A32)
- 2x profiles 40x40x1518 mm (A) (A64)
- 4x joints ZN 40x40 mm (B)
- 8x Schnorr lock washers S8 (3)
- 4x cheese head screws M8x30 (4)
- 4x threaded inserts M14/M8, L30 (5)
- 4x cheese head screws M8x16 (6)
- 4x T-nuts with ball, M8 (7)
- 4x locking components (8)

On each end of the two profiles (40x40x1473 mm A16, A32/1838 mm A64, Fig. 105, item A), install a threaded insert (Fig. 105, item 5) so that it is screwed in flush.



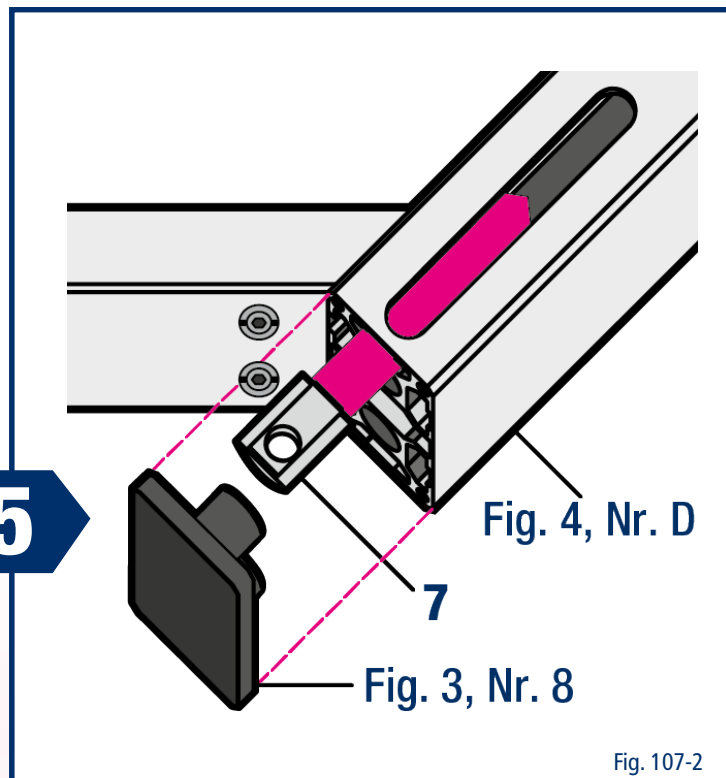
Check that all parts are present and complete!

Unpack all the supplied components and check the contents.



Two locking components (Fig. 105, item 8) must be inserted, with their 10 mm long side first, into the side of each joint being installed on the head end of the profile (Fig. 105, item A).

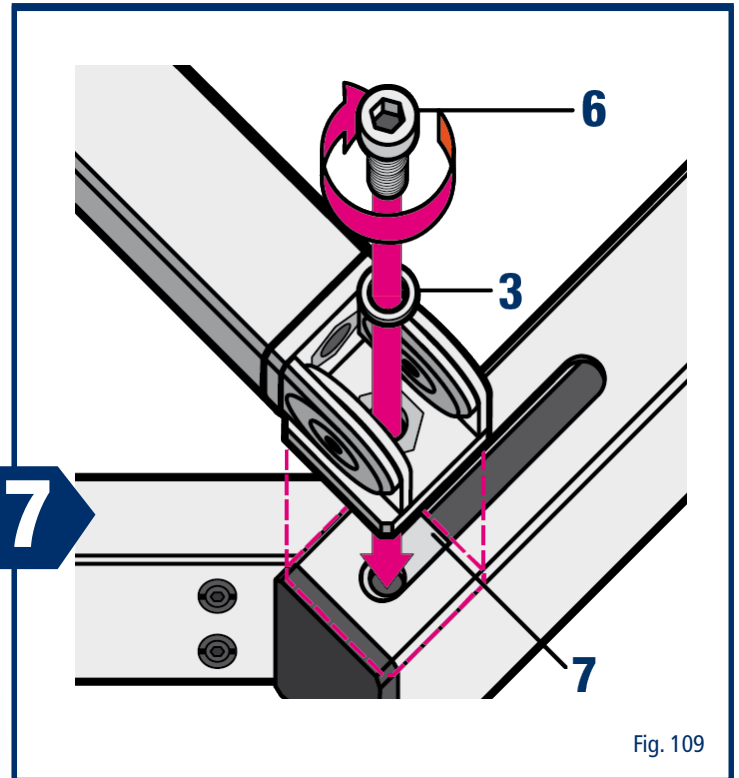
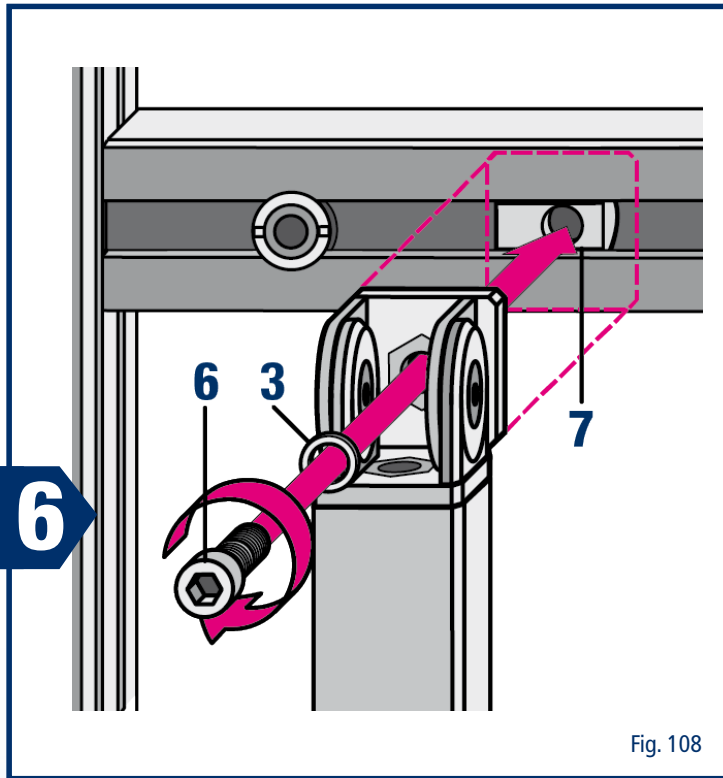
On each end of the two profiles (40x40x1473 mm A16, A32/1838 mm A64, Fig. 105, item A) attach a joint (Fig. 105, item B). Use a cheese head screw (M8x30, Fig. 105, item 4) and a lock washer (S8, Fig. 105, item 3) for this.



The pre-assembled profiles incl. the joints are attached to the rear profile (Fig. 4, item D) in the slots of the universal base frame.

This is done using a T-nut (Fig. 105, item 7), which was previously inserted in the slots.

This may require removal and re-installation of the cover caps (Fig. 3, item 8) on the profile (Fig. 4, item D).



The supports are attached to the **twall®** modules

- on the lower, horizontal profiles for the A16/A32 versions.
- on the upper, horizontal profiles of the lower module tier for the A64 version.

For the installation of each support, you will need two T-nuts M8 (Fig. 105, item 7), two cheese head screws M8x16 (Fig. 105, item 6) and two lock washers S8 (Fig. 105, item 3).

Tip:

Angling the joint (see Fig. 109) will avoid trouble when installing the cheese head screw.

8

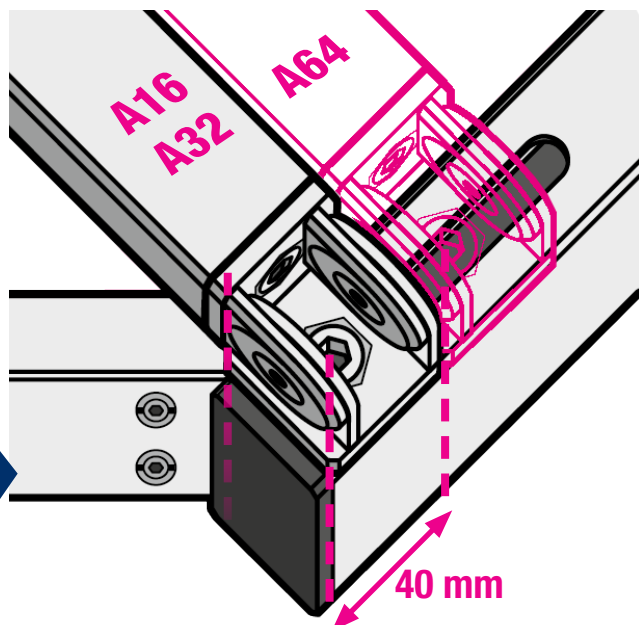


Fig. 110



Fig. 111

Note:

For versions A16 and A32, the supports are installed flush with the outer edge of the universal base frame (Fig. 110).

For version A64, the support 40 mm is installed with an inset (Fig. 110).

Congratulations!

You have completed the installation of the support profiles, ensuring the safety and stability of your twall®.



Fig. 112



Fig. 113

17. Installing the cabling

17.1 Installing the cabling for the twall® A16 – mobile version

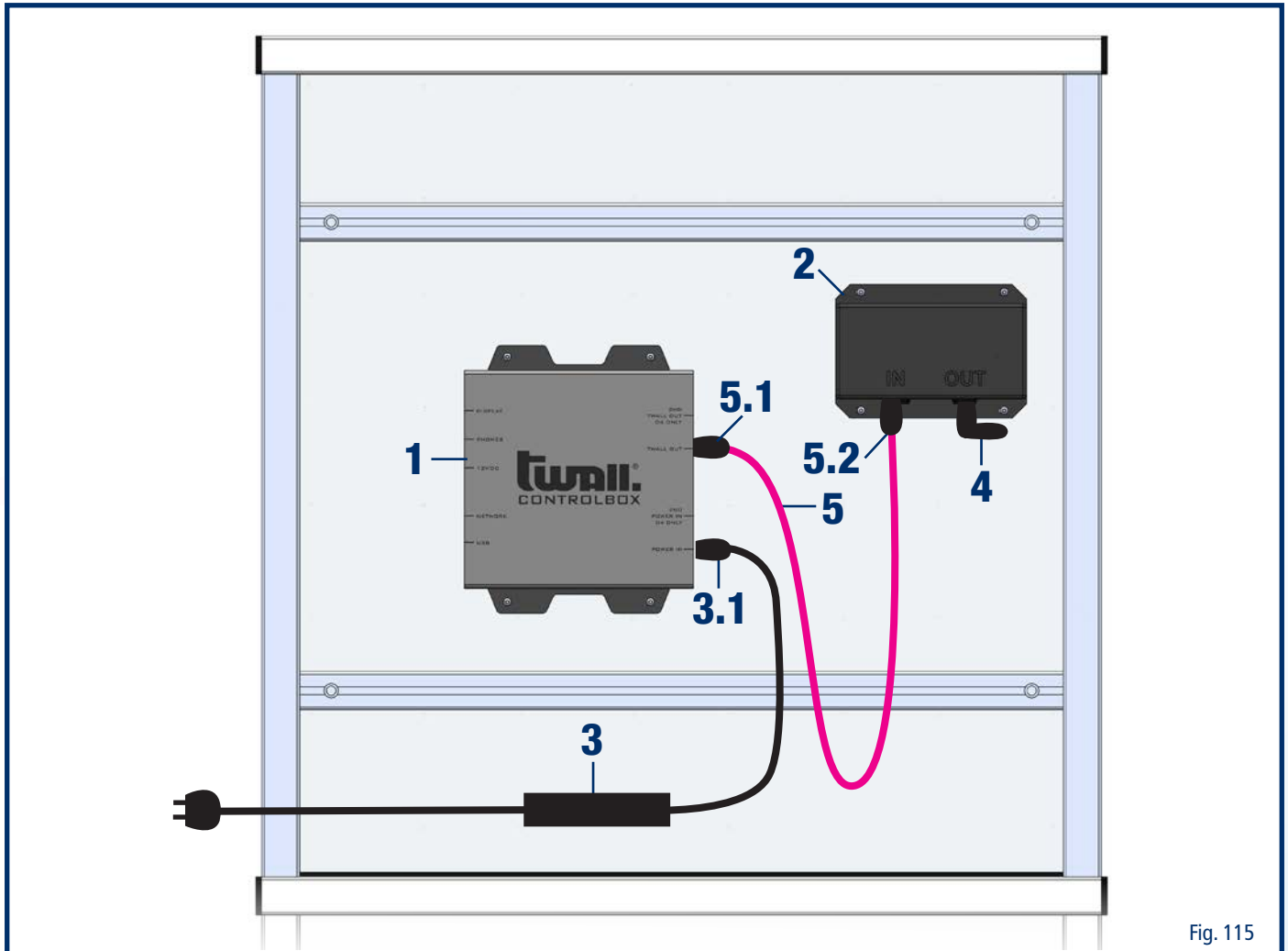


Fig. 115

The following section explains how to route the power cables for the twall® A16 (mobile version). See Fig. 115.

- 1x control box (1)
- 1x CAN module (2)
- 1x power adapter (3) with XLR socket, 3-pin (3.1)
Connect the 3-pin socket (3.1) to the control box (1), **POWER IN** input.
- 1x terminator (4)
- 1x power CAN cable (5) with XLR plug, 4-pin (5.1) and XLR socket, 4-pin (5.2)
Connect the plug (5.1) to the control box (1), **TWALL OUT** output.
Connect the socket (5.2) to the **IN** input of the CAN module (2).



Caution: The power CAN cable (5) is 0.30m long for the mobile version!

17.2 Installing the cabling for the twall® A16 – stationary version

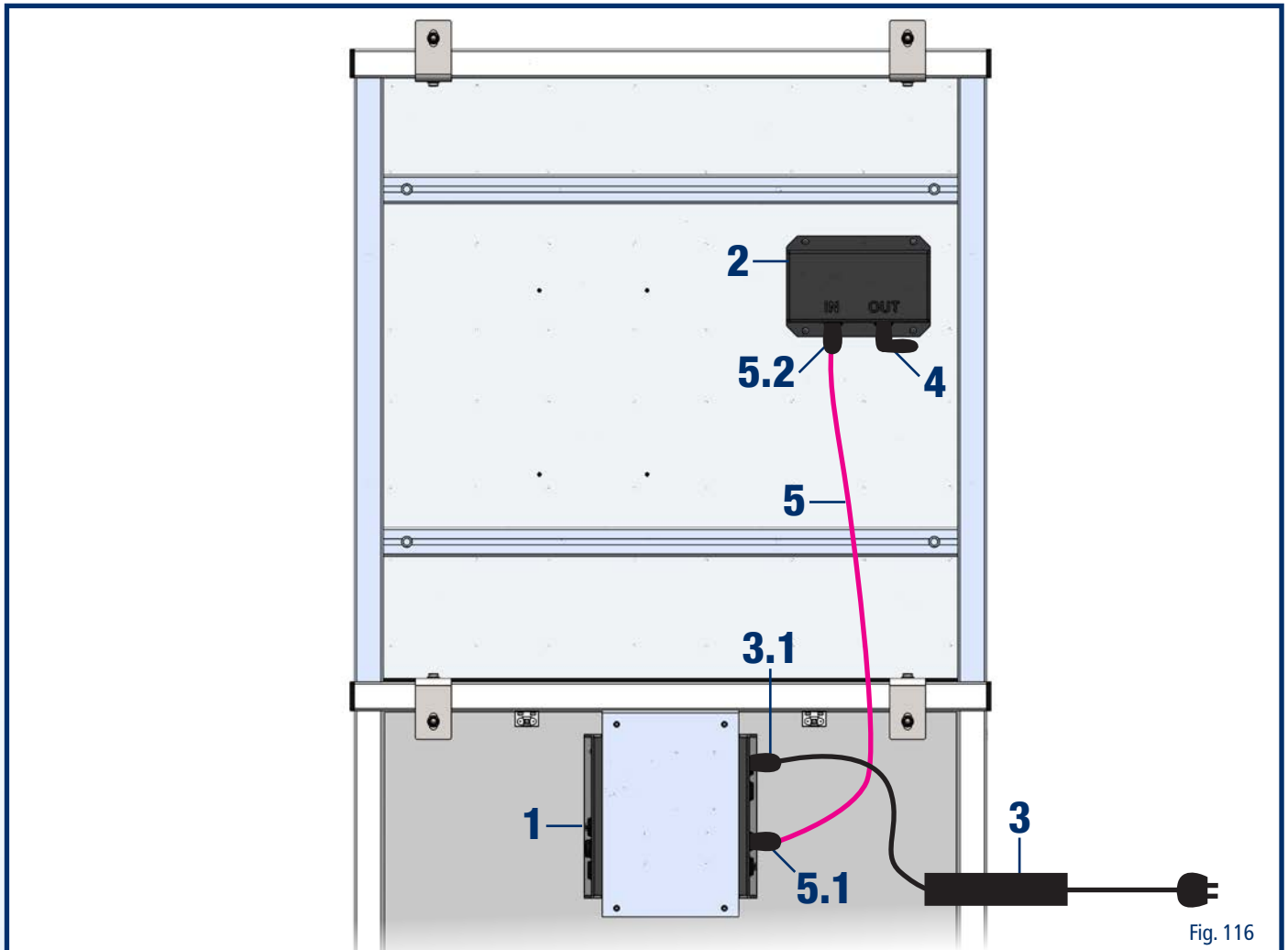


Fig. 116

The following section explains how to route the power cables for the twall® A16 (stationary version). See Fig. 116.

- 1x control box (1)
- 1x CAN module (2)
- 1x power adapter (3) with XLR socket, 3-pin (3.1)
 - Connect the 3-pin socket (3.1) to the control box (1), **POWER IN** input.
- 1x terminator (4)
- 1x power CAN cable (5) with XLR plug, 4-pin (5.1) and XLR socket, 4-pin (5.2)
 - Connect the plug (5.1) to the control box (1), **TWALL OUT** output.
 - Connect the socket (5.2) to the **IN** input of the CAN module (2).



Caution: The power CAN cable (5) is 1.20m long for the stationary version!

17.3 Installing the cabling for the twall® A32 – mobile version

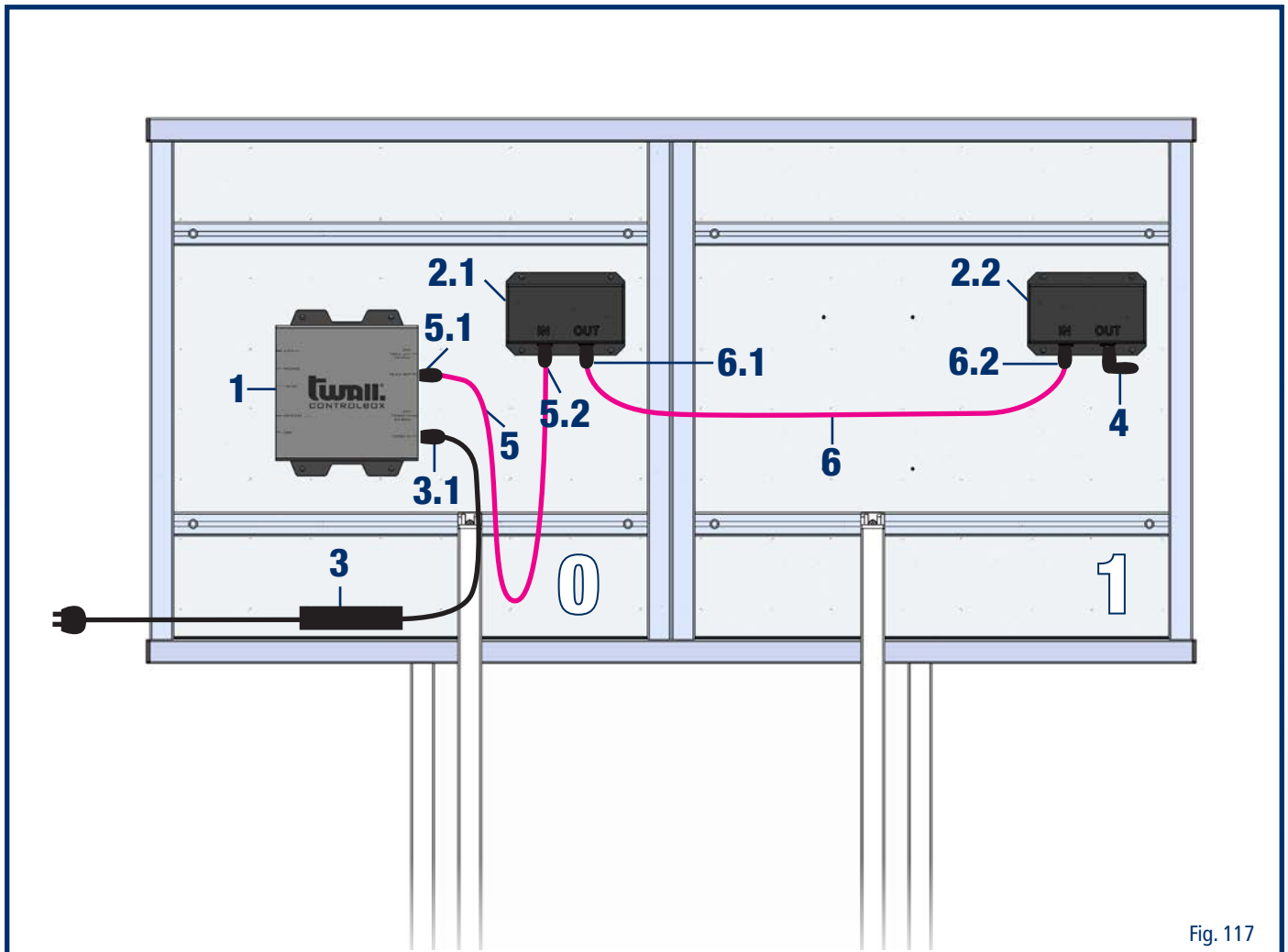


Fig. 117

When routing the power cables for the twall® A32 (mobile version), connect them as described in Fig. 117 (rear view):

- 1x control box (1)
- 2x CAN modules (2.1 & 2.2)
- 1x power adapter (3) with XLR socket, 3-pin (3.1)
Connect the 3-pin socket (3.1) to the control box (1), **POWER IN** input.
- 1x terminator (4)
- 1x power CAN cable (5) with XLR plug, 4-pin (5.1) and XLR socket, 4-pin (5.2)
Connect the plug (5.1) to the control box (1), **TWALL OUT** output.
Connect the socket (5.2) to the **IN** input of the CAN module (2.1).
- 1x power CAN cable (6) with XLR plug, 4-pin (6.1) and XLR socket, 4-pin (6.2)
Connect the plug (6.1) to the **OUT** output of the CAN module (2.1).
Connect the socket (6.2) to the **IN** input of the CAN module (2.2).



Caution: The power CAN cable (5) is 0.30m long in the mobile version!

17.4 Installing the cabling for the twall® A32 – stationary version

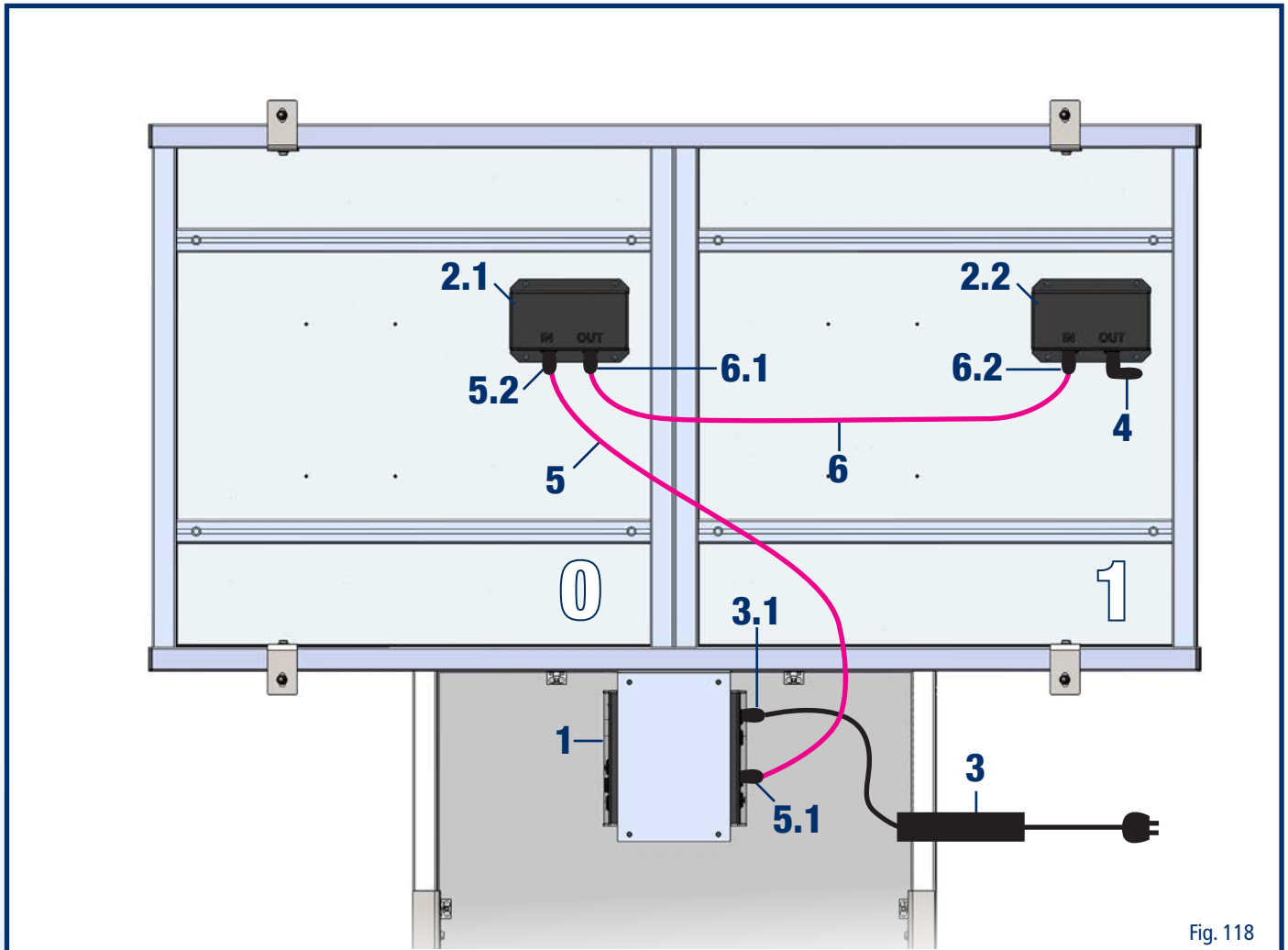


Fig. 118

The following section explains how to route the power cables for the twall® A32 (stationary version). See Fig. 118.

- 1x control box (1)
- 2x CAN modules (2.1 & 2.2)
- 1x power adapter (3) with XLR socket, 3-pin (3.1)
Connect the 3-pin socket (3.1) to the control box (1), **POWER IN** input.
- 1x terminator (4)
- 1x power CAN cable (5) with XLR plug, 4-pin (5.1) and XLR socket, 4-pin (5.2)
Connect the plug (5.1) to the control box (1), **TWALL OUT** output.
Connect the socket (5.2) to the **IN** input of the CAN module (2.1).
- 1x power CAN cable (6) with XLR plug, 4-pin (6.1) and XLR socket, 4-pin (6.2)
Connect the plug (6.1) to the **OUT** output of the CAN module (2.1).
Connect the socket (6.2) to the **IN** input of the CAN module (2.2).



Caution: The power CAN cable (5) is 1.20m long for the stationary version!

17.5 Installing the cabling for the twall® A64 – mobile version

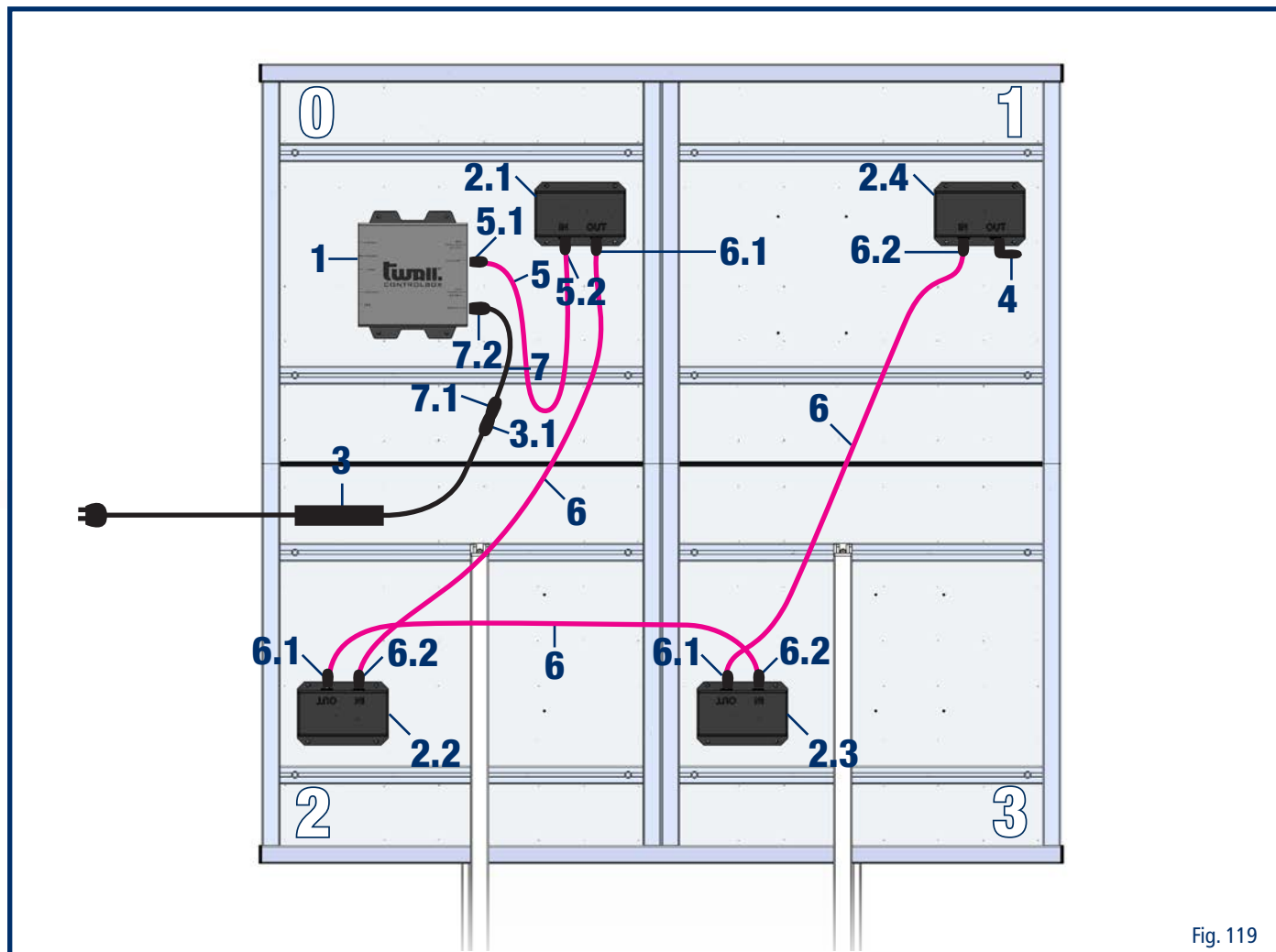


Fig. 119

The following section explains how to route the power cables for the twall® A64 (mobile version). See Fig. 119.

- 1x control box (1)
 - 4x CAN modules (2.1/2.2/2.3/2.4)
 - 1x power adapter (3) with XLR socket, 3-pin (3.1)
 - Connect the 3-pin socket (3.1) to the 3-pin plug (7.1) of the extension cable (7).
 - 1x extension cable, power adapter (7) with 3-pin XLR plug (7.1) and 3-pin XLR socket (7.2)
 - Connect the 3-pin socket (7.2) to the **POWER IN** input of the control box (1).
 - 1x terminator (4)
 - 1x power CAN cable (5) with XLR plug, 4-pin (5.1) and XLR socket, 4-pin (5.2)
 - Connect the plug (5.1) to the control box (1), **TWALL OUT** output.
 - Connect the socket (5.2) to the **IN** input of the CAN module (2.1).
 - 3x power CAN cable (6) with XLR plug, 4-pin (6.1) and XLR socket, 4-pin (6.2)
 - Connect the plug (6.1) to the **OUT** output of the CAN module (2.x, x=1...3).
 - Connect the socket (6.2) to the **IN** input of the CAN module (2.x+1).
- See Fig. 119 for the recommended power CAN cable sequence.



Caution: The power CAN cable (5) is 0.30m long in the mobile version!

17.6 Installing the cabling for the twall® A64 – stationary version

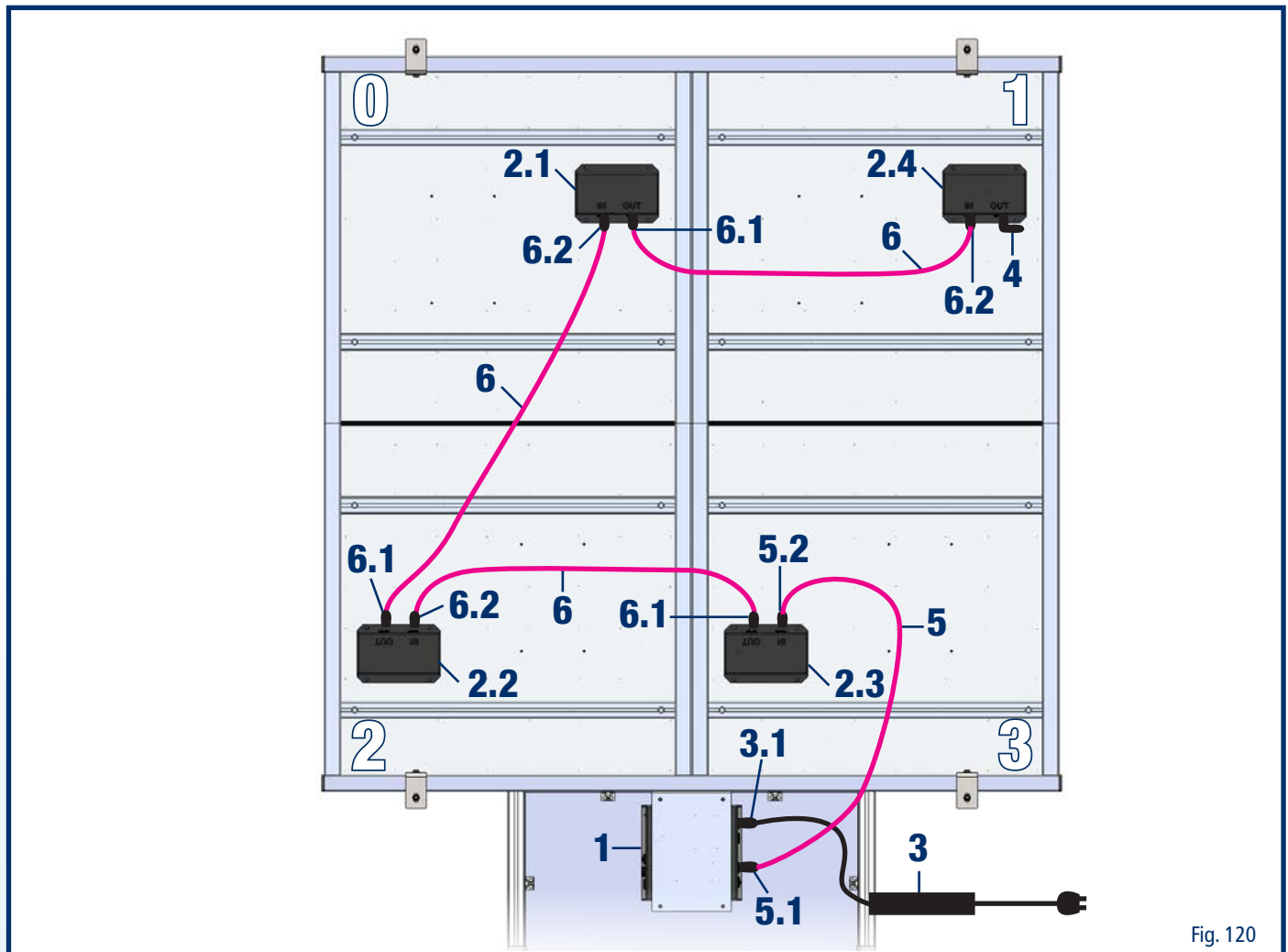


Fig. 120

The following section explains how to route the power cables for the twall® A64 (stationary version). See Fig. 120.

- 1x control box (1)
 - 4x CAN modules (2.1/2.2/2.3/2.4)
 - 1x power adapter (3) with XLR socket, 3-pin (3.1)
 - Connect the 3-pin socket (3.1) to the **POWER IN** input of the control box.
 - 1x terminator (4)
 - 1x power CAN cable (5) with XLR plug, 4-pin (5.1) and XLR socket, 4-pin (5.2)
 - Connect the plug (5.1) to the control box (1), **TWALL OUT** output.
 - Connect the socket (5.2) to the **IN** input of the CAN module (2.1).
 - 3x power CAN cable (6) with XLR plug, 4-pin (6.1) and XLR socket, 4-pin (6.2)
 - Connect the plug (6.1) to the **OUT** output of the CAN module (2.x, x=1...3).
 - Connect the socket (6.2) to the **IN** input of the CAN module (2.x+1).
- See Fig. 120 for the recommended power CAN cable sequence.



Caution: The power CAN cable (5) is 1.20m long for the stationary version!

18. Stationary installation

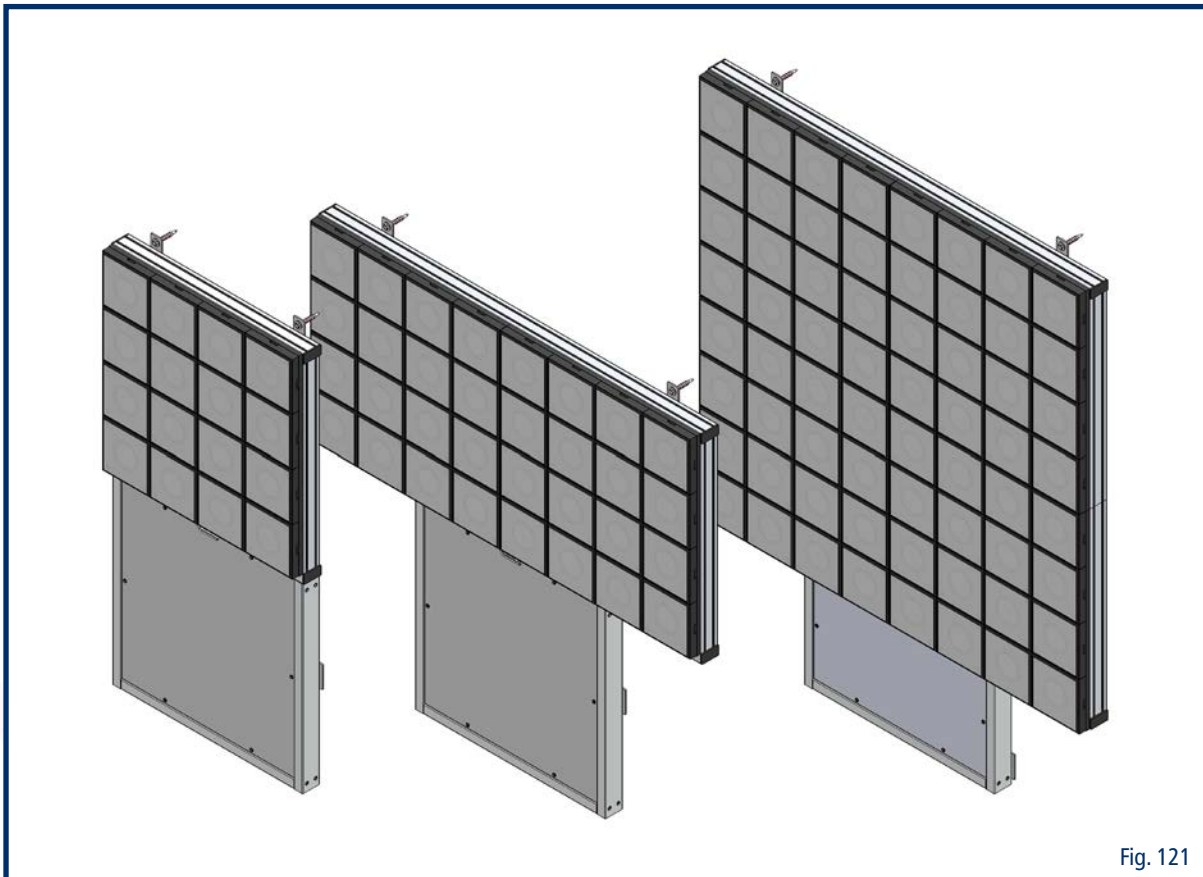


Fig. 121

The following section explains the stationary installation of the twall®.

The following installation steps must be completed for stationary installation of your twall®:

Assembling the support frame:

- 7. twall® A16
- 10. twall® A32
- 13. twall® A64

Final assembly:

- 9. twall® A16
- 12. twall® A32
- 15. twall® A64

Installing the cabling:

- 17.2 twall® A16
- 17.4 twall® A32
- 17.6 twall® A64



The individual components should be assembled on the floor. Place the components face-down on the floor for this. Protect against scratches!



The described installation of the twall® applies when using the support frame. This type of installation can be used in drywall with the appropriate screws and anchors. Get the advice of an expert!

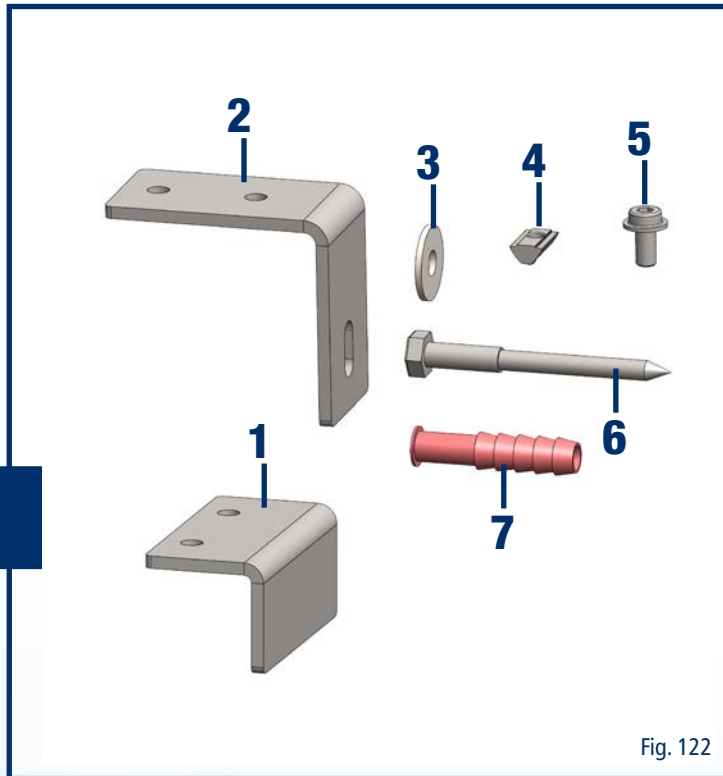


Fig. 122

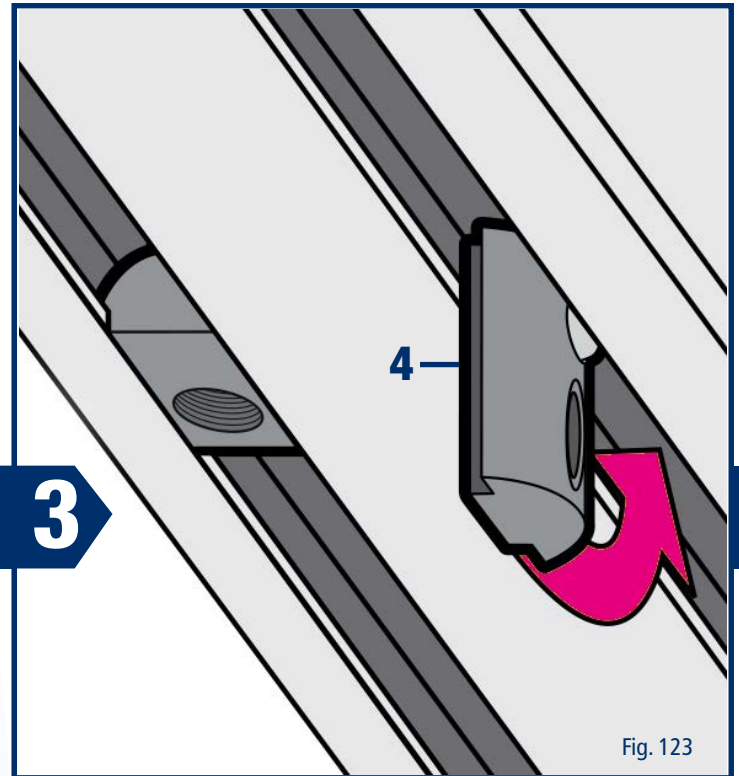


Fig. 123

Unpack all the supplied components of the "twall® stationary kit" mounting kit and check the quantities as follows:

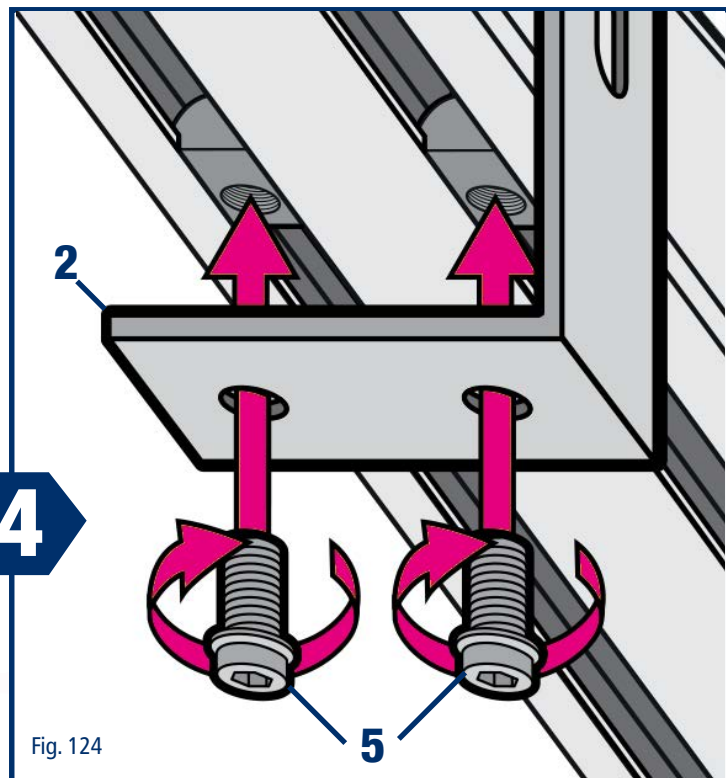
- 2x spacer brackets (1)
- 4x mounting brackets (3)
- 4x washers (3)
- 12x T-nuts with ball (4)
- 12x hexagon socket shoulder screws (5)
- 4x wood screws (6)
- 4x nylon anchors (7)

Insert the required T-nuts (Fig. 122, item 4) into the grooves of the aluminium profiles, as shown in Fig. 123.

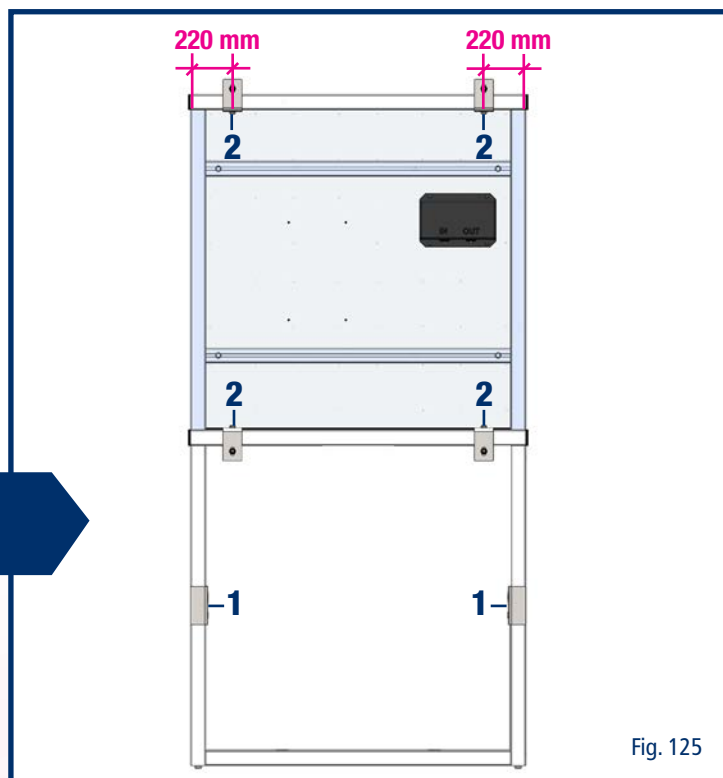


Check that all parts are present and complete!

Unpack all the supplied components and check the contents.

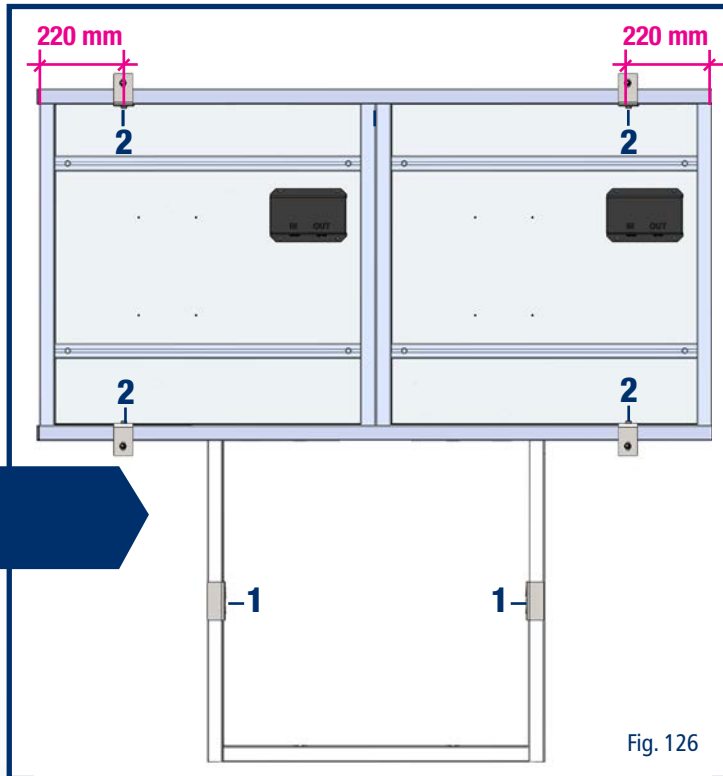


Next, you can install the mounting bracket (3) for wall mounting, using the cheese head screws (2).
The bracket is screwed on at a distance of approx. 220 mm from the outer contour.
For final positioning, screw on the bracket loosely and slide it as needed using the T-nuts.



Rear view of the installed twall® A16

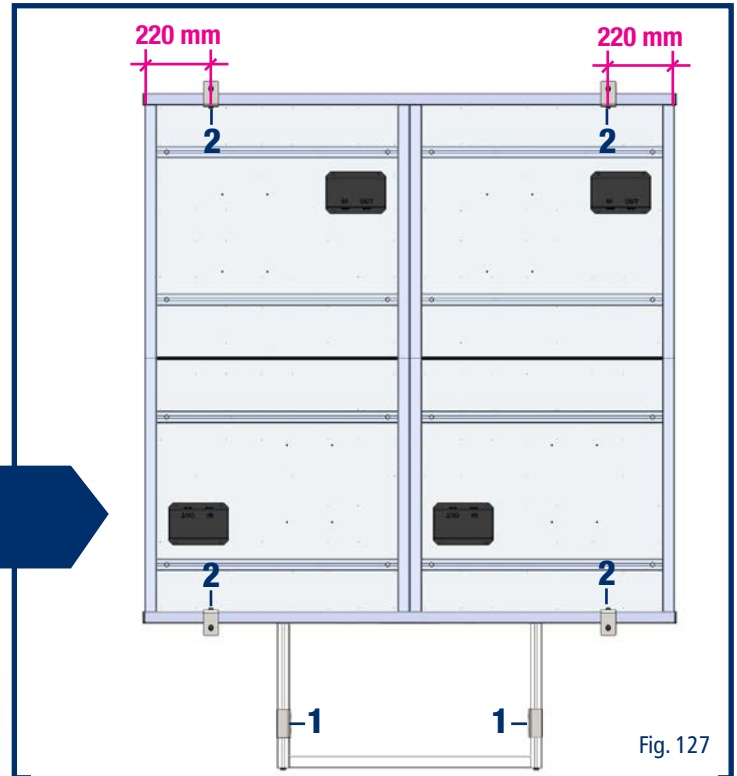
The mounting brackets (2) should each be located approx. 220 mm from the outer edge.
The spacer brackets (1) should each be installed on the centre of the profile.



Rear view of the installed twall® A32

The mounting brackets (2) should each be located approx. 220 mm from the outer edge.

The spacer brackets (1) should each be installed on the centre of the profile.

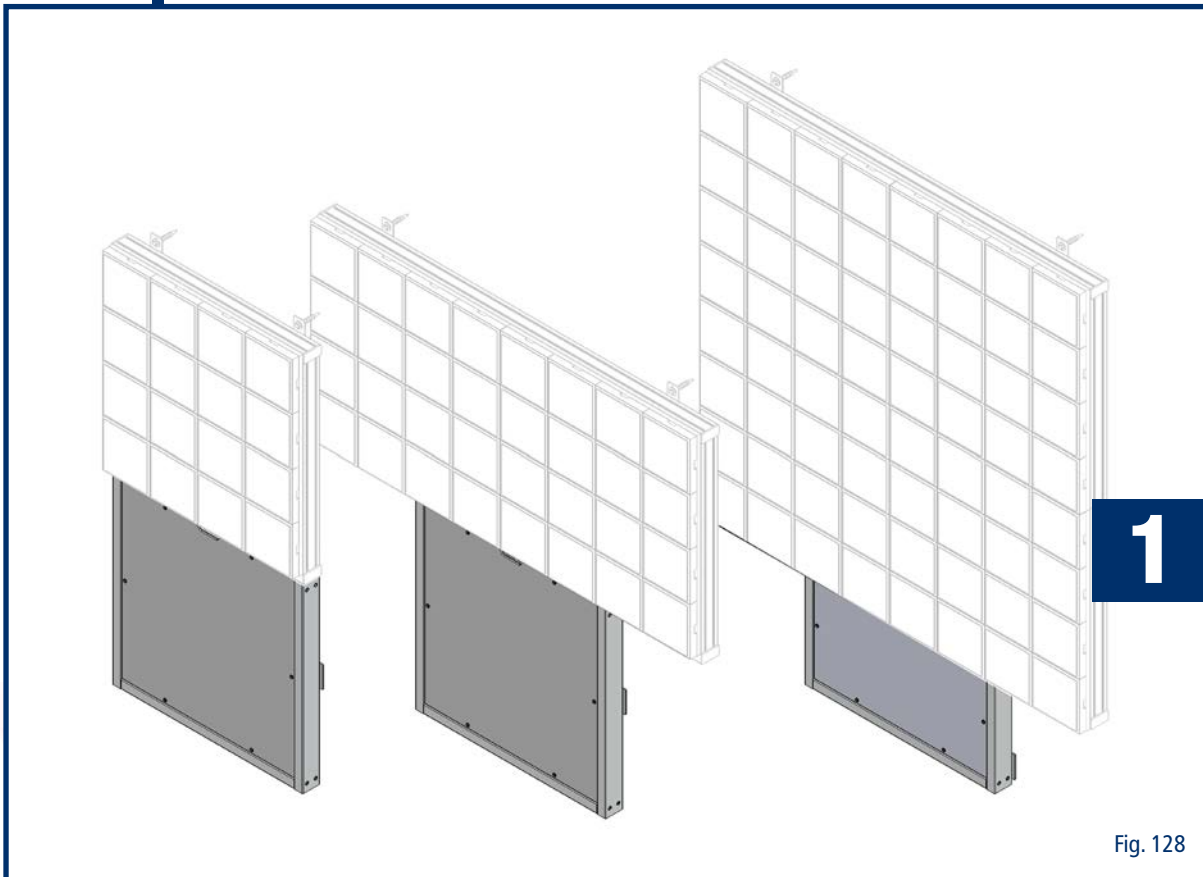


Rear view of the installed twall® A64

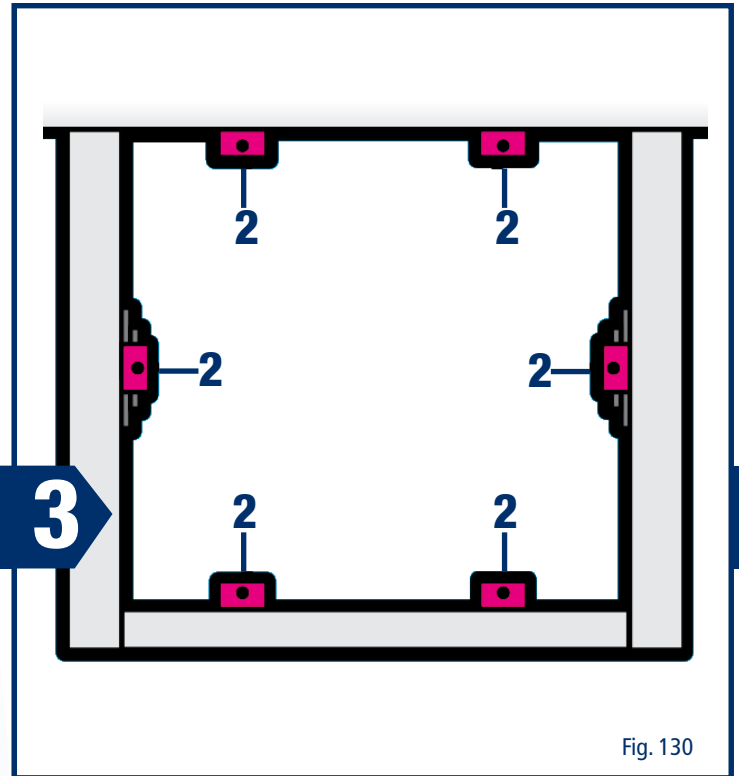
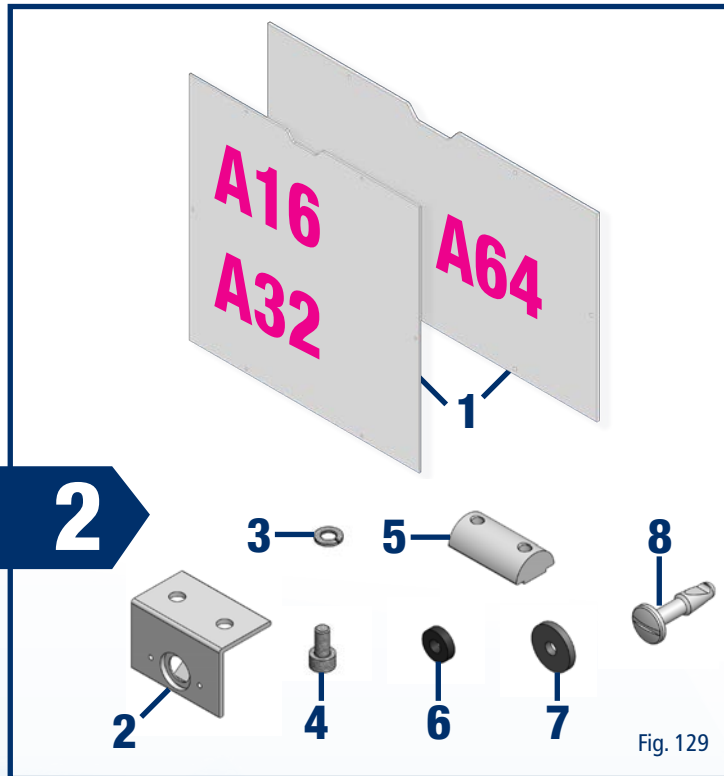
The mounting brackets (2) should each be located approx. 220 mm from the outer edge.

The spacer brackets (1) should each be installed in the upper OR lower half of the profile.

19. Installing the advertising



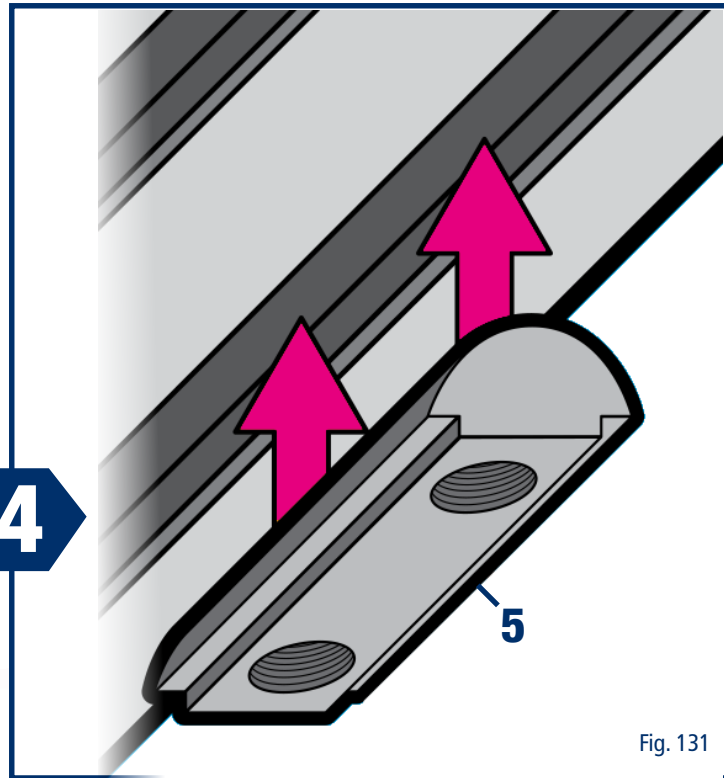
The following section explains how to install the advertising panel for the stationary **twall®**.



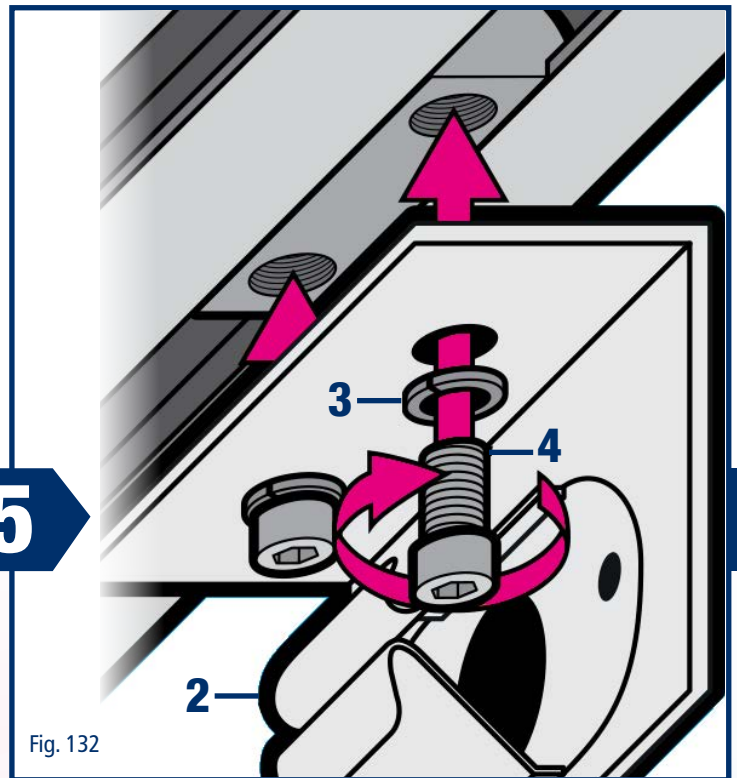
Unpack all the supplied components and check the quantities as follows:

- 1x advertising panel, removable (1)
- 6x mounting brackets (2)
- 12x spring washers B4 (3)
- 12x cheese head screws M4x8 (4)
- 6x T-nuts 2xM4, swivelling (5)
- 6x sealing rings, small (6)
- 6x sealing rings, large (7)
- 6x anchor bolts (8)

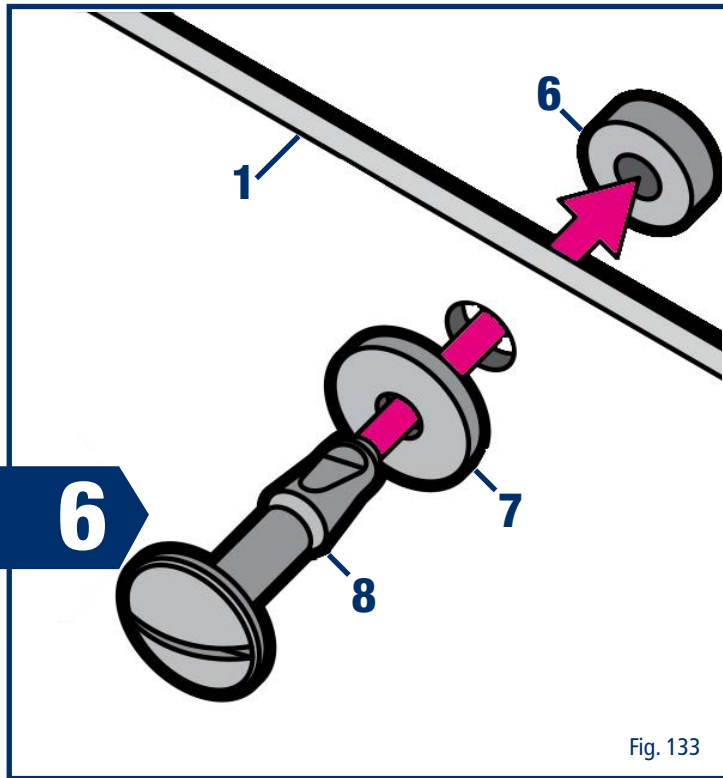
Position the mounts of the advertising panel to line up with the mounting holes in the panel on the inside of the support frame.



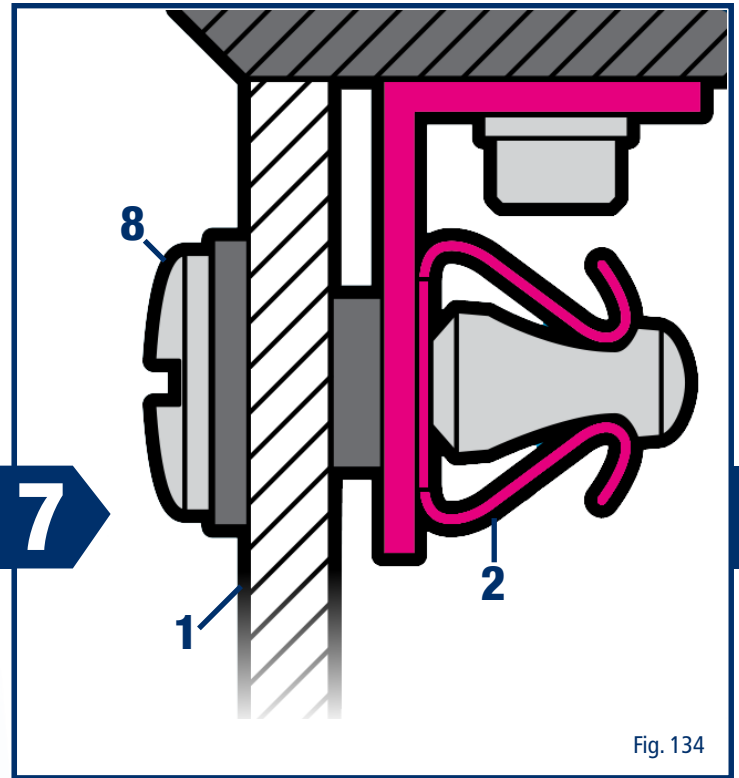
Place the T-nuts 2xM4 (5) in the front groove of the aluminium profiles, as shown in Fig. 131.



Next, install the mounting bracket (Fig. 129, item 2). For final positioning, screw on the bracket loosely and slide the T-nuts (5) as needed. Position the mounting brackets so that they line up with the holes in the panel (Fig. 132).

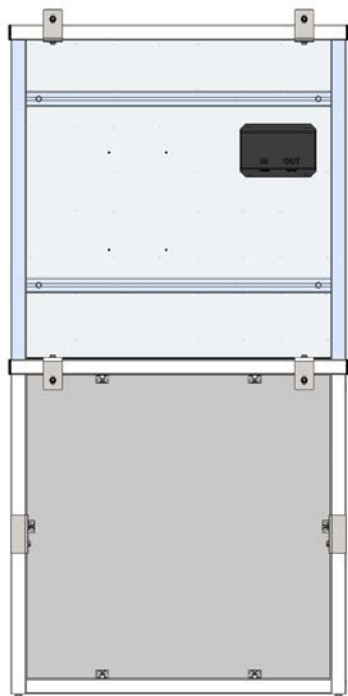


Install the anchor bolts (8) in the holes of the advertising panel (1). Place the sealing rings, small (6) and large (7), as shown in Fig. 133.



Next, attach the advertising panel (1) by snapping the anchor bolts (8) into place in the mounting bracket (Fig. 134). The advertising panel (1) can be removed if necessary by lightly turning the anchor bolts (8).

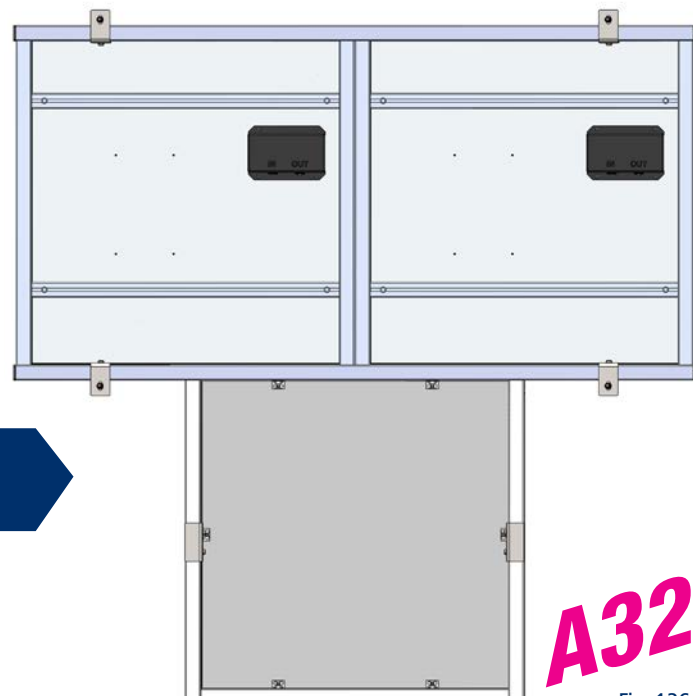
84 Installing the advertising panel



A16

Fig. 135

Rear view of the twall® A16



A32

Fig. 136

Rear view of the twall® A32

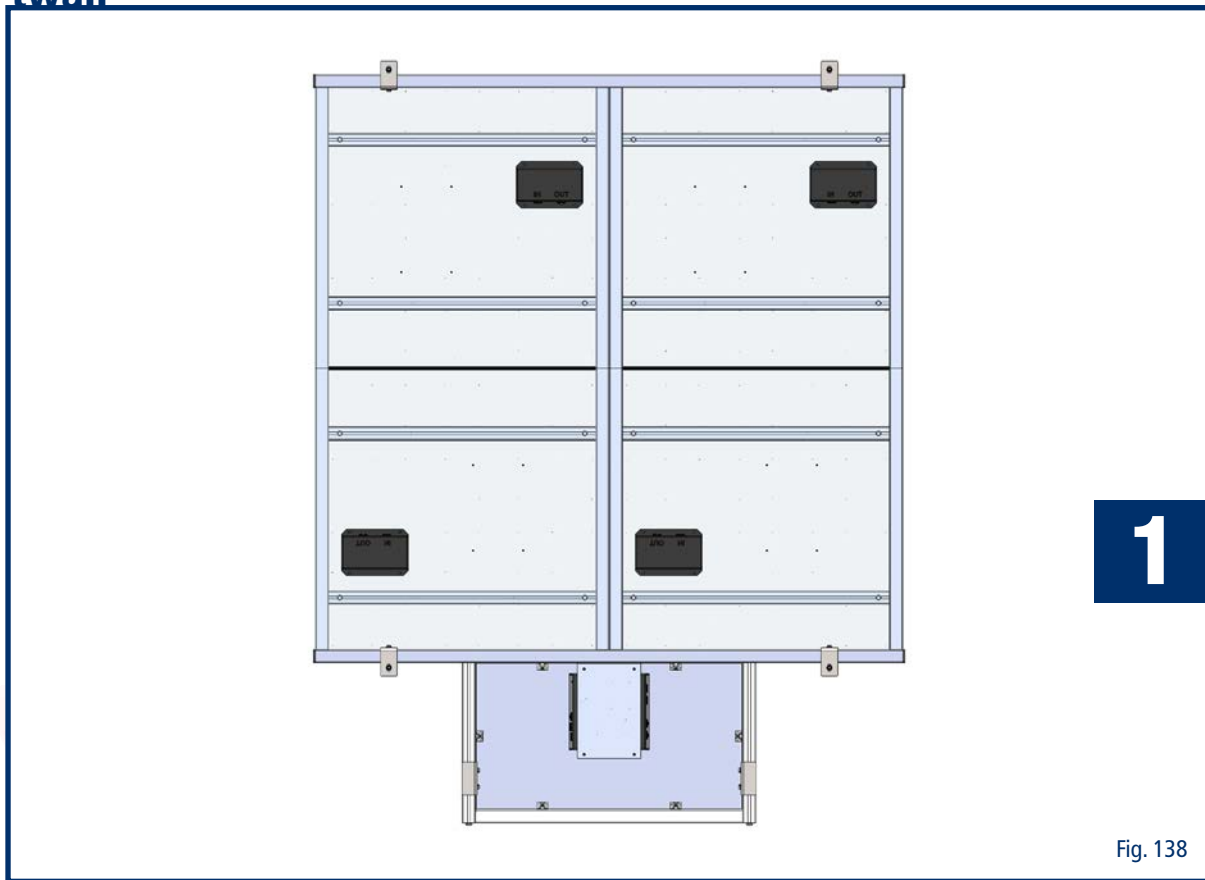
Congratulations!

You have completed the installation of the advertising panel on the support frame.



Rear view of the twall® A64

20. Installing the control box for stationary installation of the twall®



The following section explains how to install the control box for the stationary twall® (A16/A32/A64).

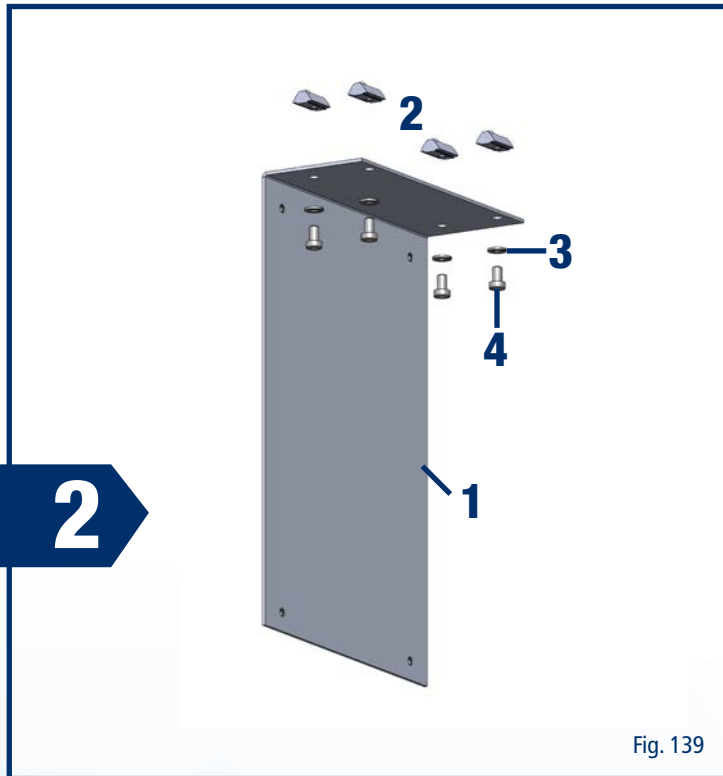


Fig. 139

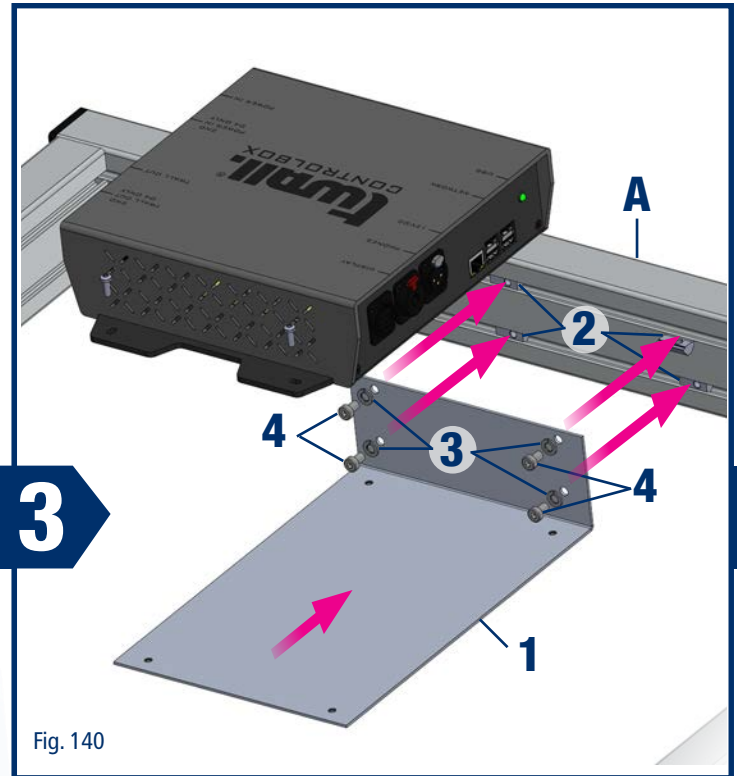


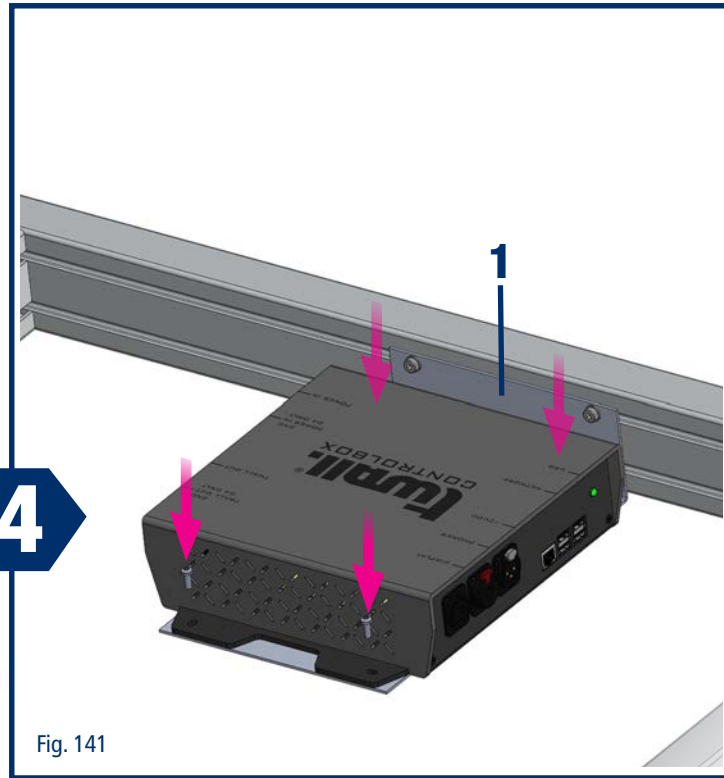
Fig. 140

Unpack all the supplied components and check the quantities as follows:

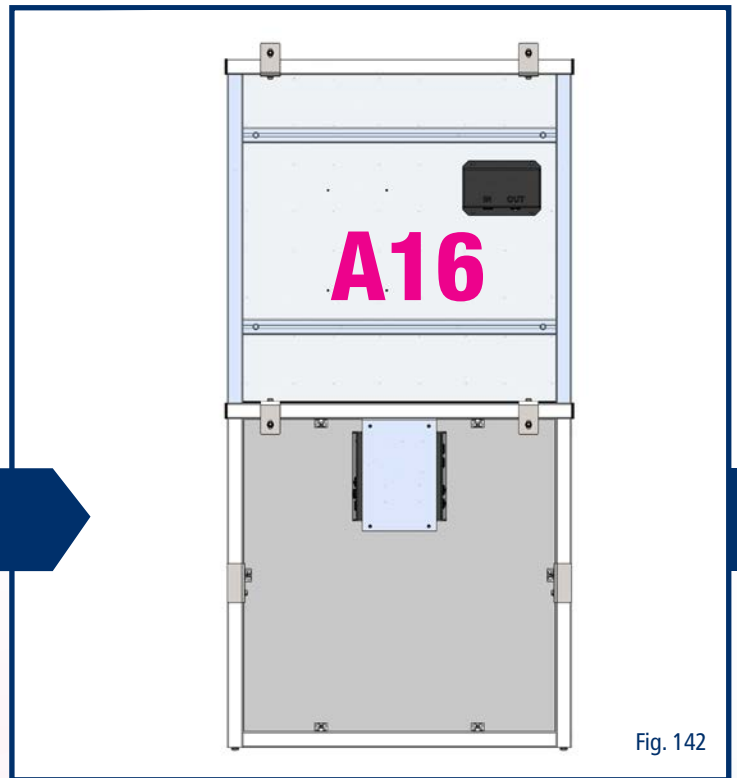
- 1x retaining bracket (1)
- 4x T-nuts (2)
- 4x spring washers (3)
- 4x cheese head screws M4 (4)

The retaining bracket (Fig. 139, item 1) for the control box should be installed in the centre of the bottom edge of the profile (80x40x880, Fig. 140, item A). This requires inserting the T-nuts (Fig. 139, item 2) into the profile grooves as shown in Fig. 140.

The cheese head screws (Fig. 139, item 4) with spring washer (Fig. 139, item 3) are used to install the retaining bracket (Fig. 139, item 1) on the profile 80x40x880 (Fig. 140, item A).



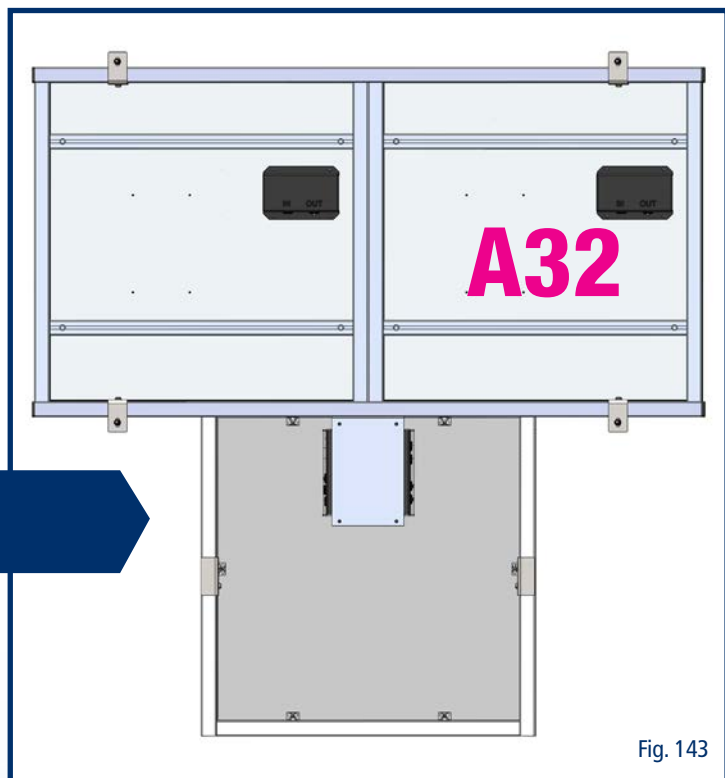
Finally, the control box is installed on the retaining bracket (1) with the corresponding screws.



Rear view of the twall® A16

Congratulations!

You have completed the installation of the control box on the support frame.

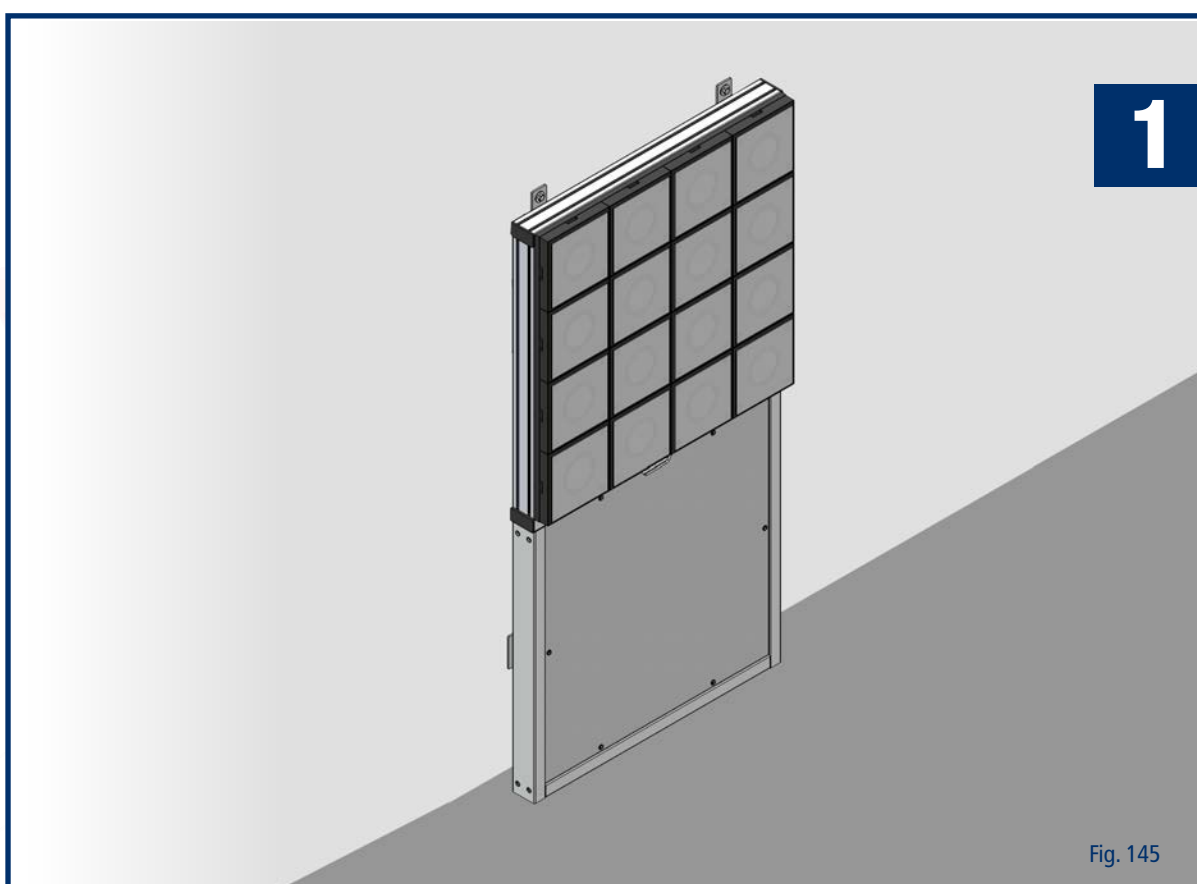


Rear view of the twall® A32



Rear view of the twall® A64

21. Stationary wall-mounted installation



The following section explains how to carry out the stationary wall-mounted installation of the **t-wall®**, step by step.

This installation section applies to all **t-wall®** A models with support frame (A16/A32/A64)

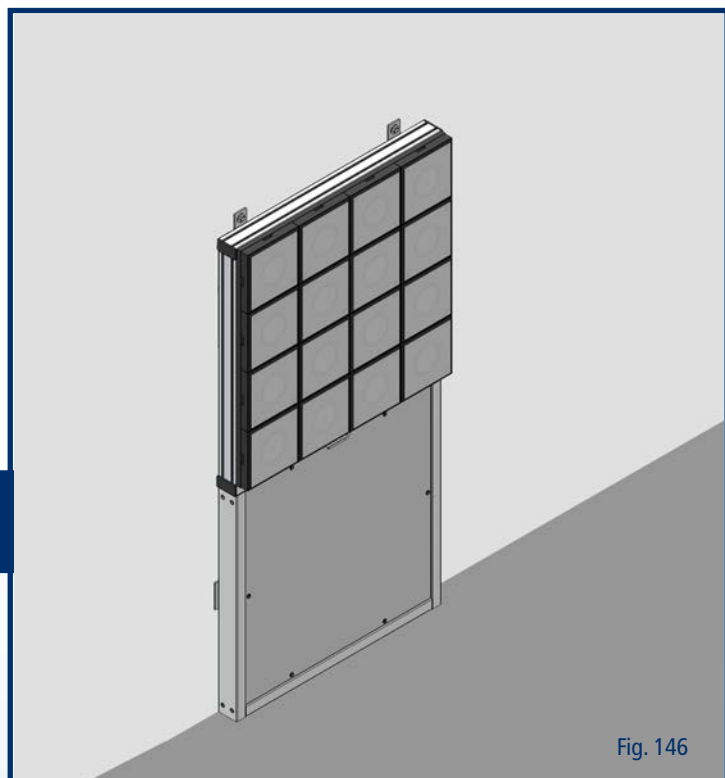


Fig. 146

Standing and positioning the assembled twall® to mark the drill holes.

Fig. 146 shows the twall® A16 to represent the described procedure.

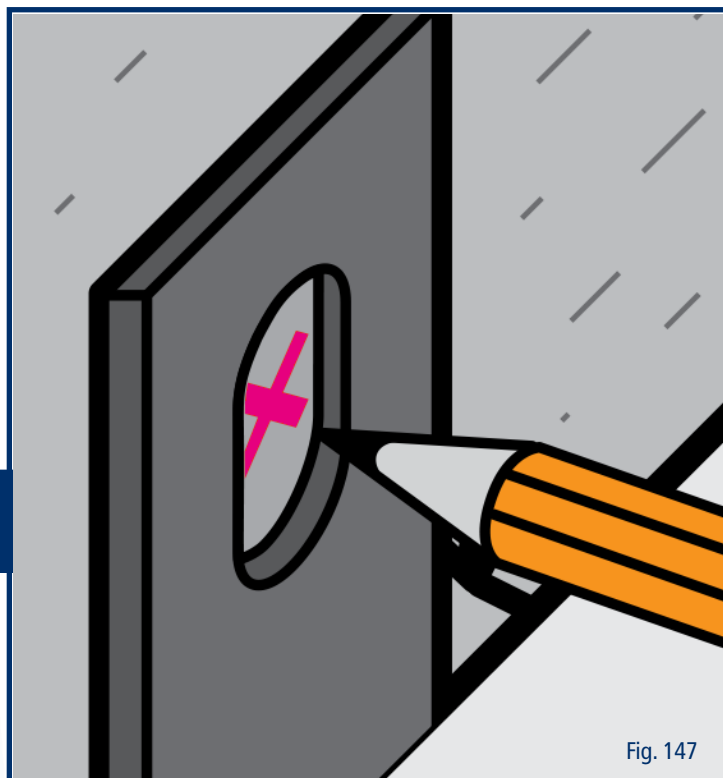


Fig. 147

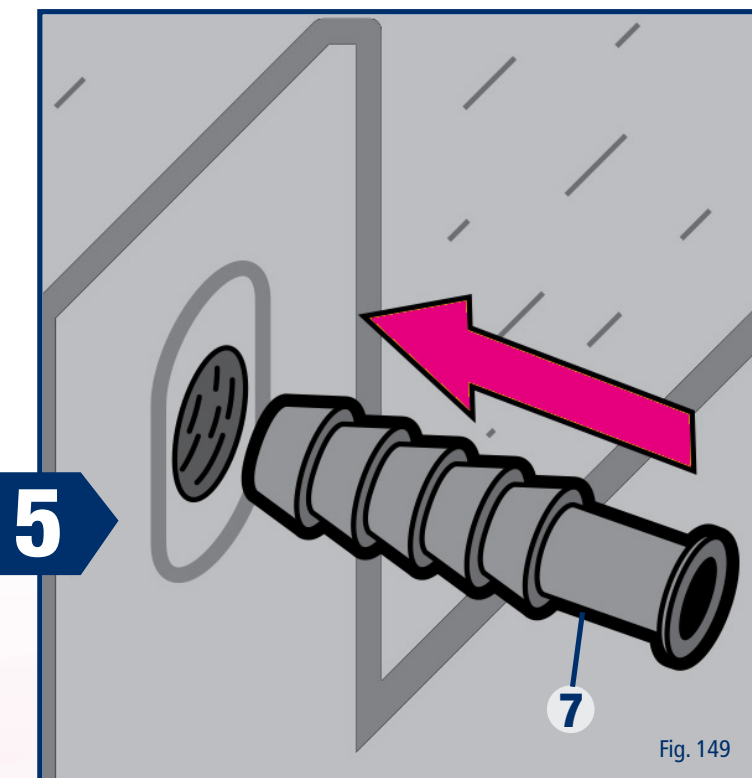
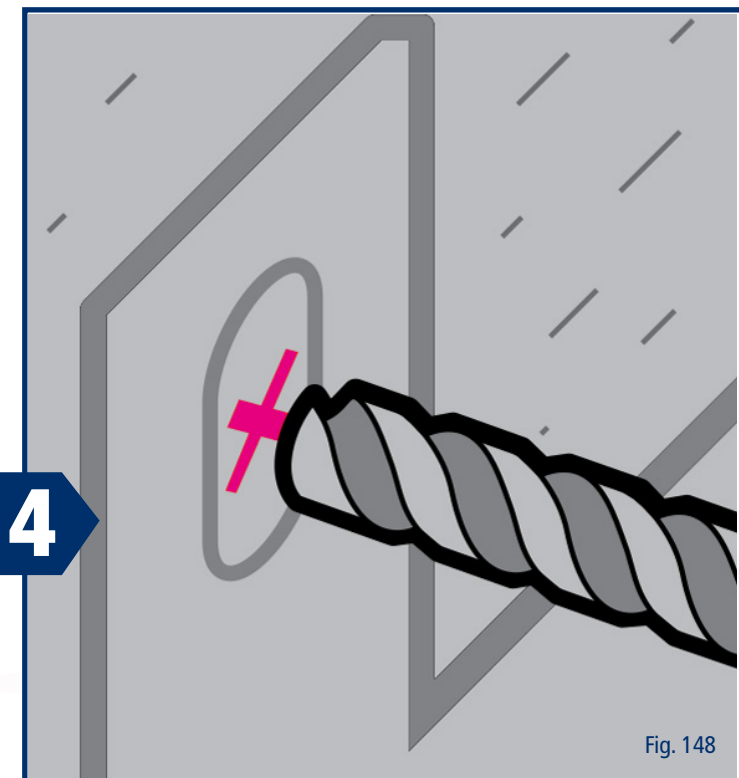
Is your twall® positioned correctly?

If so, mark the locations of the drill holes. Set the twall® safely aside.



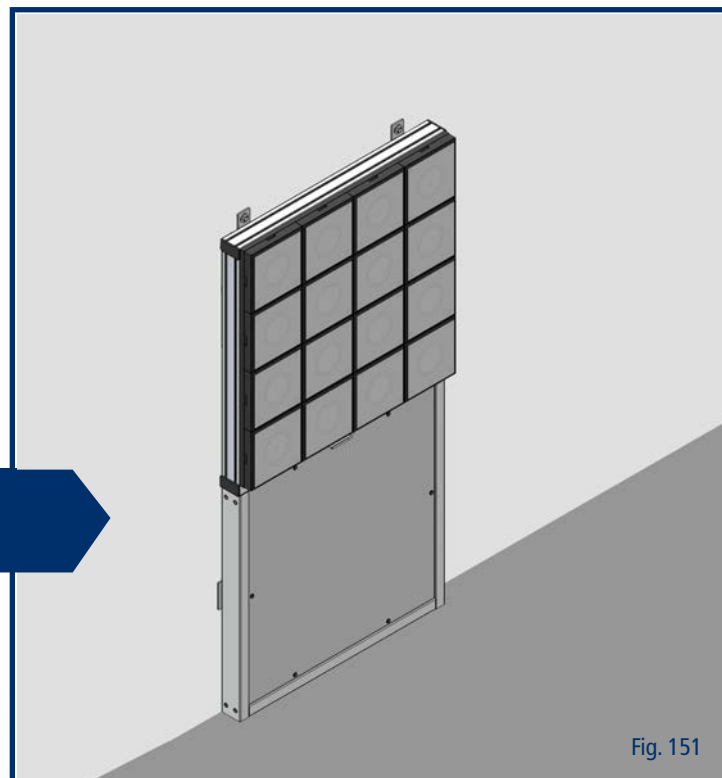
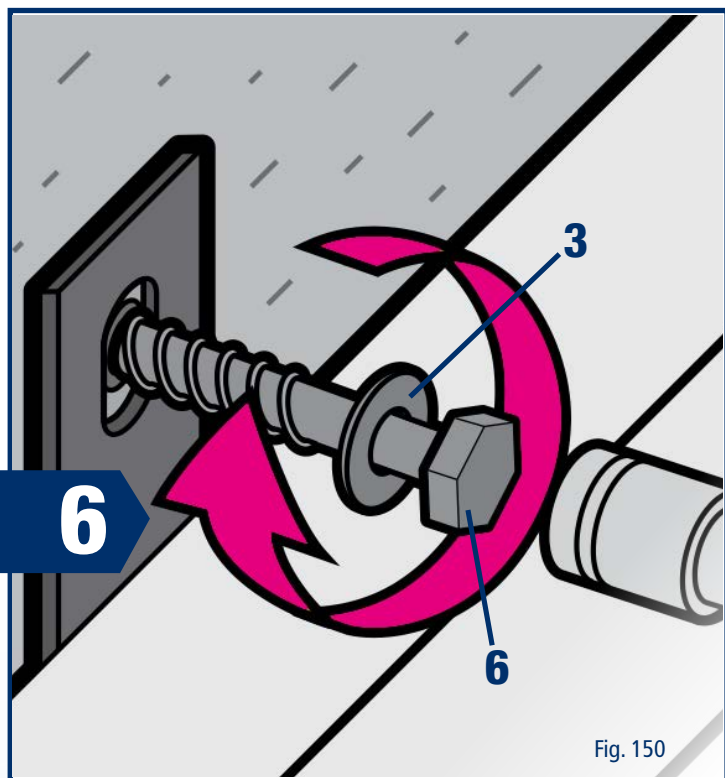
Check that all parts are present and complete!

Unpack all the supplied components and check the contents.



Use a drill bit with a diameter of 12 mm to drill the required holes.

Then insert the nylon anchors (Fig. 122, item 7) into the holes.



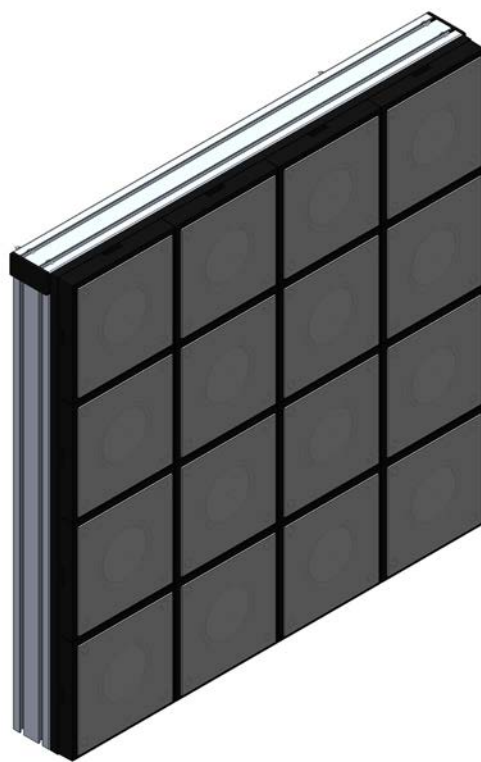
Put your twall® into position again and screw it to the wall using the four wood screws (Fig. 122, item 6).

Don't forget the washers (Fig. 122, item 3), see Fig. 150.

Congratulations!

You have completed the installation of your twall®.

22. Direct stationary wall-mounted installation of the twall® A16



1

Fig. 152

The following section explains how to carry out the stationary wall-mounted installation of the twall®, step by step.

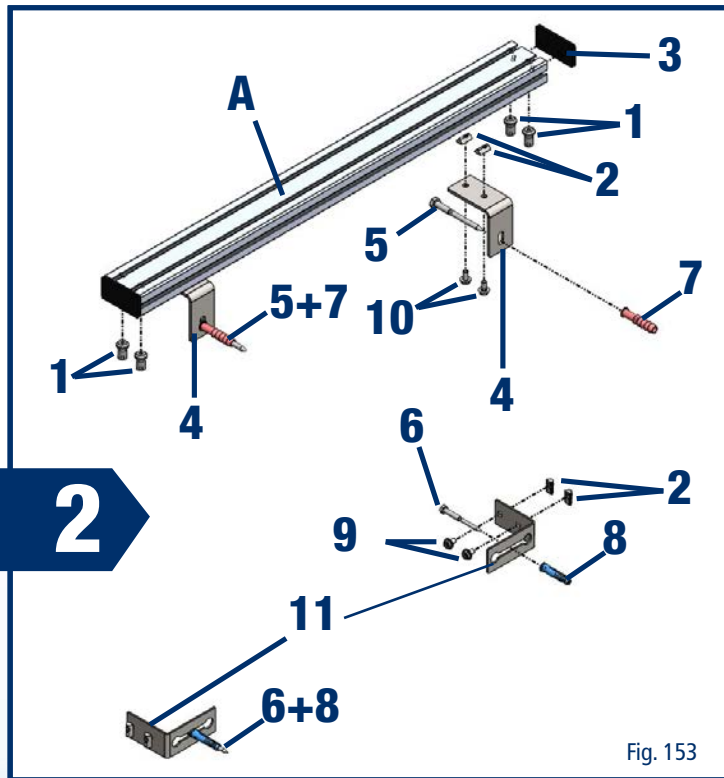


Fig. 153

Installation kit component overview

Unpack all the supplied components and check the quantities as follows:

- 1x profile 40x80x880 mm (A)
- 4x connector screws, self-tapping (1)
- 8x T-nuts, swivelling (2)
- 2x cover caps 40x80, black (3)
- 2x mounting brackets, top (4)
- 2x wood screws 10x100 (5)
- 2x wood screws 8x80 (6)
- 2x nylon anchors (7)
- 2x all-purpose plastic anchors (8)
- 4x hexagon socket shoulder screws M8x12 (9)
- 4x hexagon socket shoulder screws M8x16 (10)
- 2x mounting brackets, bottom (11)
- 1x drilling template (12)

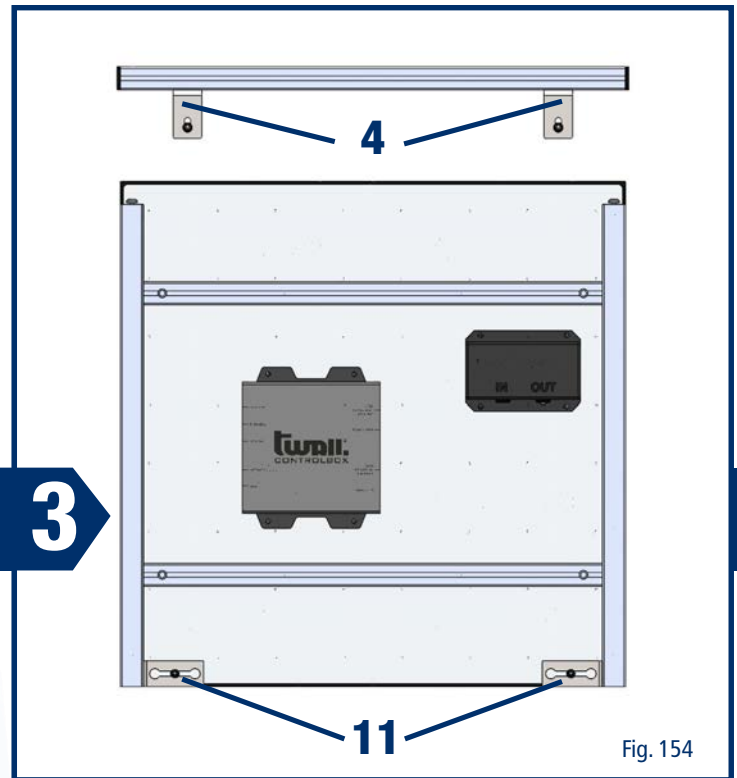


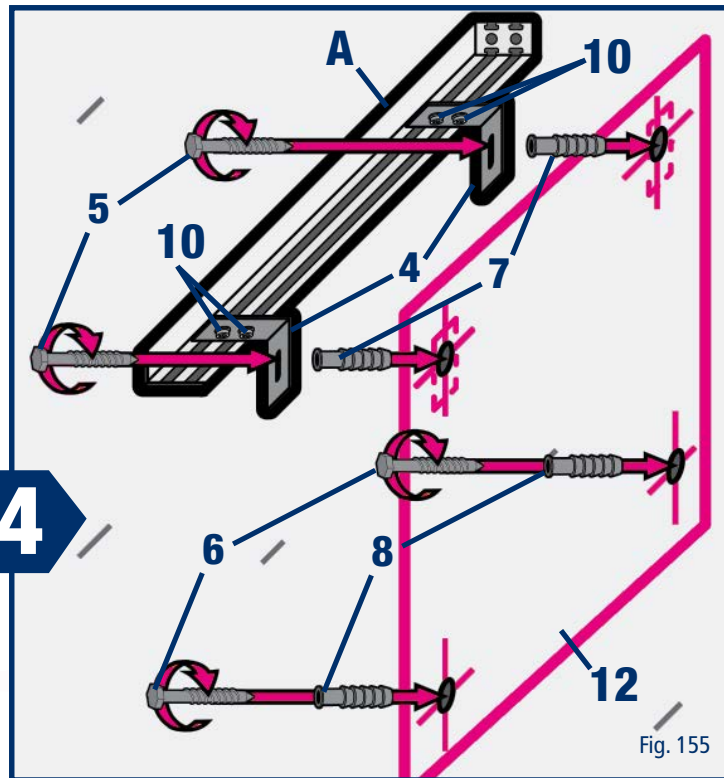
Fig. 154

Attach the retaining brackets on the top edges of the twall® module. Attach the two brackets for wall-mounted installation directly on the profile. The distance between the holes is 646 mm, or you can use the drilling template for the alignment. Attach the profile so that the auxiliary holes of the profile are facing upwards.

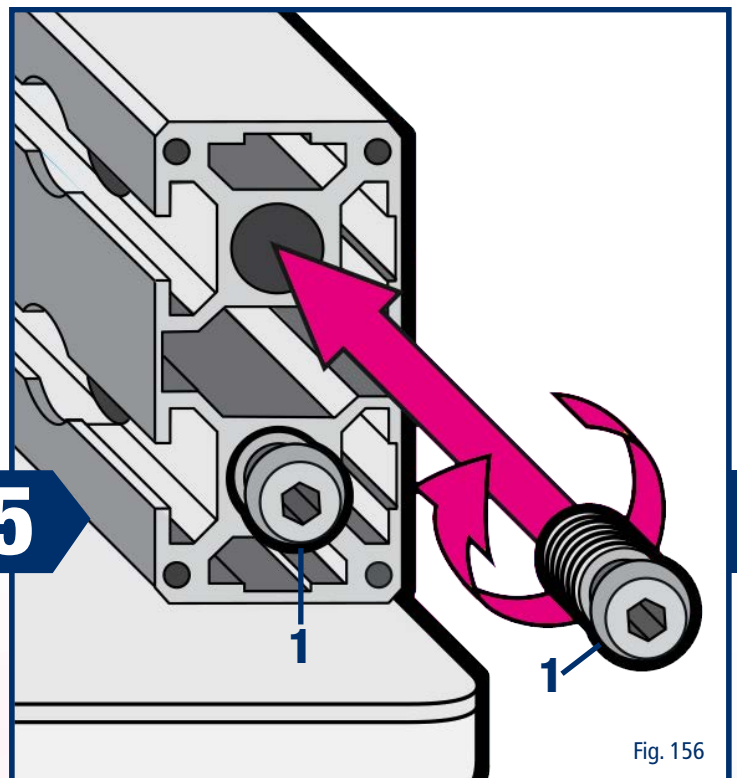


Check that all parts are present and complete!

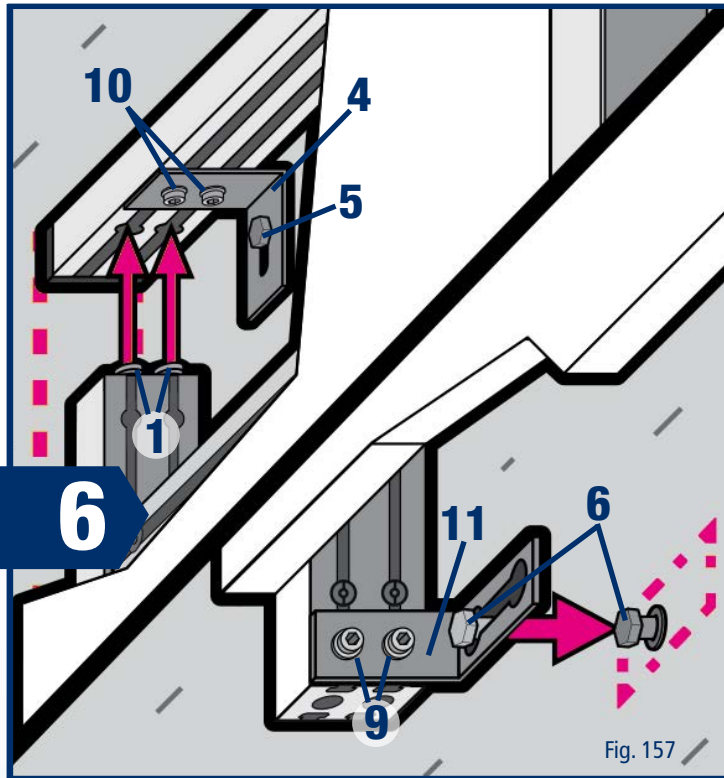
Unpack all the supplied components and check the contents.



Use the drilling template to mark the required drill holes.
Align the drilling template at your chosen location and mark the drill holes.
Drill the holes and insert the anchors. Next, insert the screws into the upper holes.
Screw the prepared profile on the bottom.



Then, screw two self-tapping screws into each of the tapped holes of the module profiles on the lower front edge.



Next, you can install the twall® A16 module on the assembled profile and thread the lower screws into the bracket at the same time.

Slide the module until the entire structure is aligned so that the upper profile and the twall® A16 module are in alignment.

After tightening all the screws, you can seal the sides of the profiles with the caps.

Congratulations!

You have completed the installation of your twall®.

23. Decommissioning & disposal

This section contains all information regarding temporary and permanent decommissioning as well as environmentally responsible disposal.

If you would like to dispose of the **twall®** or parts thereof, please get in touch with us at IMM electronics GmbH. We are happy to help you dispose of the machines in compliance with the law.

The components of machines and systems are reusable materials. In accordance with the WEEE Directive 2012/19/EU (Waste Electrical and Electronic Equipment Directive), they must be returned to the reusable materials cycle.

Electric shock hazard!

Only disconnect the power supply with the control box switched off and disconnected from the energy supply as well as protected against being switched back on.

First de-energise the control box, then after switching it off, wait for a discharge time of 2 minutes before touching the terminals of the power supply.

24. Manufacturer information & service



IMM electronics GmbH
Leipziger Straße 32
09648 Mittweida, Germany

tel +49 3727 6205-80
service@twall.de

To open a service call, you will need to provide the following information:

- Customer number, telephone number, email address
- Information regarding the **twall®** model
 - > Version: A16, A32, A64
 - > **twall®** serial number
 - > Information regarding mobile or stationary installation

The dissemination and duplication of this documentation, and the exploitation of its content as well as the product-related software, are only allowed with the written permission of IMM electronics GmbH.

All information in this documentation has been carefully checked. However, minor differences may arise due to technical improvements.

You can find the current version at: www.twall.de

Subsequent deliveries of **twall®** modules may exhibit minor variations in the surface colour. This is a result of the production process and does not constitute a reason for complaint.

25. Technical specifications

99

	Unit/dimension	twall® A16	twall® A32	twall® A64
Dimensions (assembled/stationary)	W x H x D	892 x 1800 x 150 mm	1772 x 1800 x 150mm	1772 x 2280 x 150mm
Dimensions (assembled/mobile)	W x H x D	1772 x 1845 x 1244 mm	1772 x 1845 x 1244 mm	1772 x 2325 x 1244 mm
twall® module	Quantity	1	2	4
Material	MDF & PVC			
Surface	PVC translucent white & PVC			
Weight	kg	29.0		
Active play surface	W x H	880 x 880 mm	1760 x 880 mm	1760 x 1760 mm
Resolution	Pads	4 x 4	8 x 4	8 x 8
Touch detection by means of		Buttons		
Number of possible colours		Over 15 million		
Power consumption with white light	Watts	60	95	165
Power supply	Volts	24		
Control		CAN bus		
LED module (I _{LED} = 20 mA)				
Peak wavelength (blue)	nm	465		
Peak wavelength (green)	nm	515		
Peak wavelength (red)	nm	635		
Dominant wavelength (blue)	nm	470		
Dominant wavelength (green)	nm	520		
Dominant wavelength (red)	nm	625		
Peak luminous flux (blue)	lm	8		
Peak luminous flux (green)	lm	36		
Peak luminous flux (red)	lm	15		
Control box (connected load)				
Power supply		24 VDC; 21 W		
Dimensions	W x H x D	280 x 68 x 240 mm		
Weight	kg	1.3		
Power adapter				
- Primary		90-264 VAC; 47-63 Hz; IP22; protection class I; energy efficiency V		
- Secondary		24 VDC; 180 W		
included in delivery				
USB cable (A/B)		•		
Power CAN bus cable		1	2	4
CAN bus terminator	Quantity	1	1	1
Support frame				
Dimensions	W x H x D	892 x 1845 x 80 mm	1772 x 1845 x 80 mm	1772 x 2325 x 80 mm
Weight	kg	16.8	17.2	17.6
Universal base frame for mobile version		•	•	•
Dimensions	W x H x D	1772 x 85 x 1200 mm		
Weight	kg	29.0		
Supports	Quantity	2	2	2
Supports	Length	1455 mm	1455 mm	1518 mm
Weight of supports	kg	9	9	9
Counterweights	kg	2 x 9.6 / 2 x 12.3		



twall.de

Contact:
IMM electronics GmbH
Leipziger Straße 32
09648 Mittweida, Germany

tel +49 3727 6205-80
info@twall.de