

Annex no. 1

Assembly instruction

SST Temporary Spiral Staircase



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Table of amendments

POS.	NAME AND SURNAME	DEPARTMENT	DATE OF AMENDMENT	SCOPE OF AMENDMENT	COMMENTS
1	Miłosz Muzyka	BR	25.03.2022	Exit levels chart/table was add. R8 railing installation update.	
2	Paweł Oleszkowicz	BR	18.10.2022	Fasteners updated in section 6.3	
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1. Mounting instructions

The assembly instructions are appendix to the operation and maintenance manual of the TLC SST Temporary Spiral Staircase

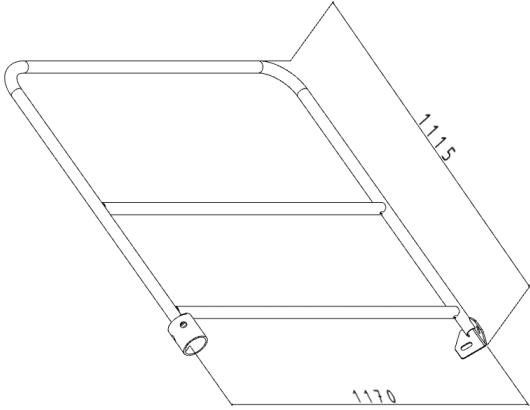
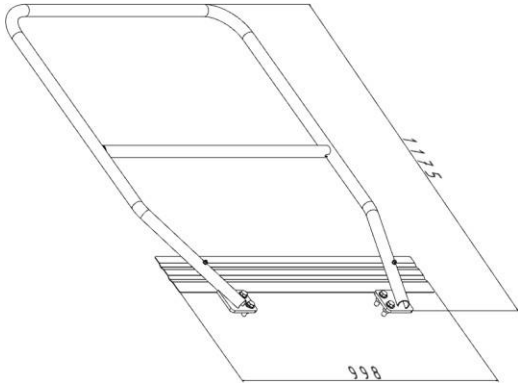
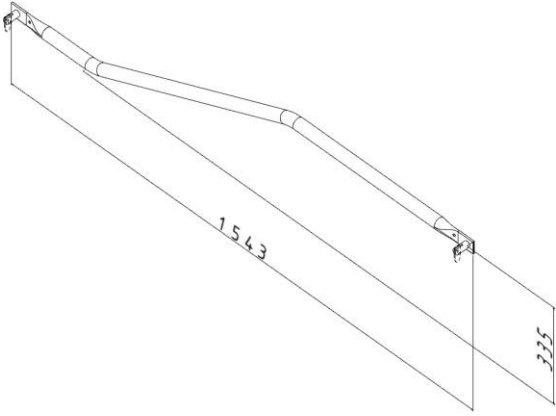
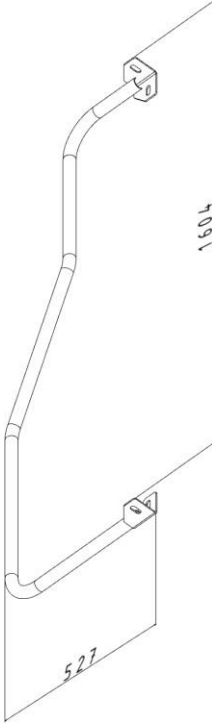
Temporary spiral staircases consist of individual elements according to specifications attached to the delivery. The system includes screwed connections. The system is delivered in the form of separate elements such as platforms, railings, steps, connectors, stairs, poles. The elements are assembled in a specific order.

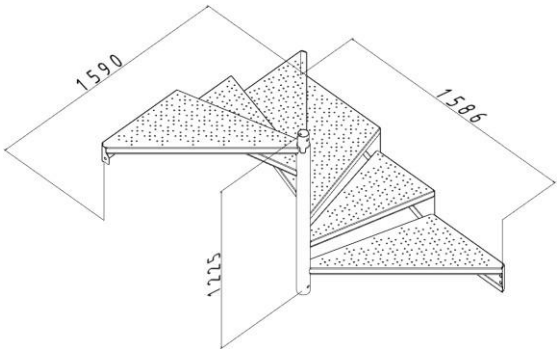
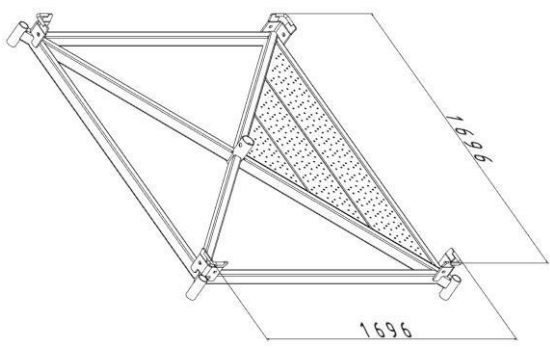
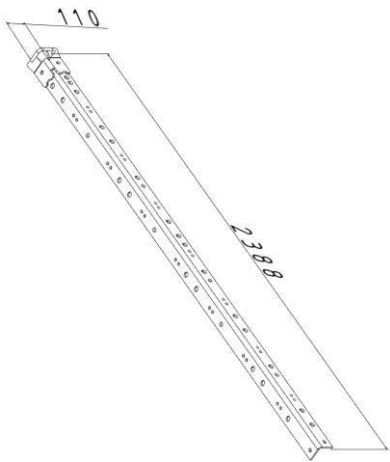
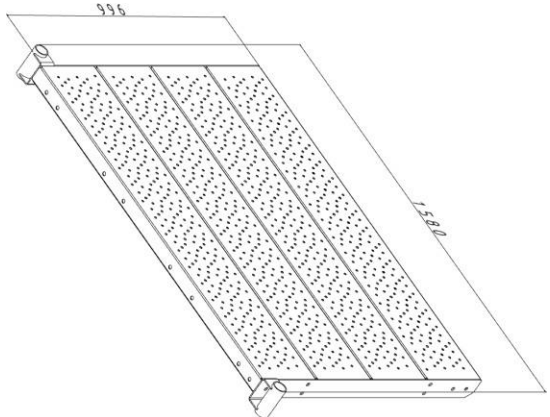
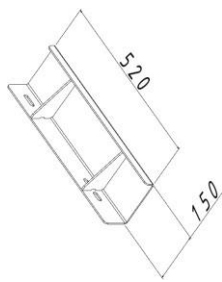
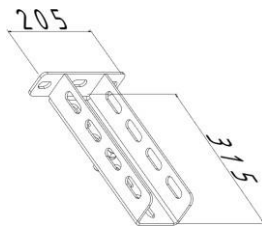
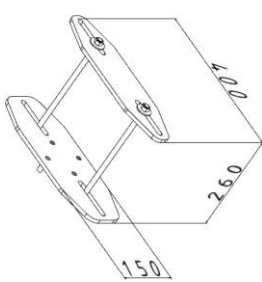
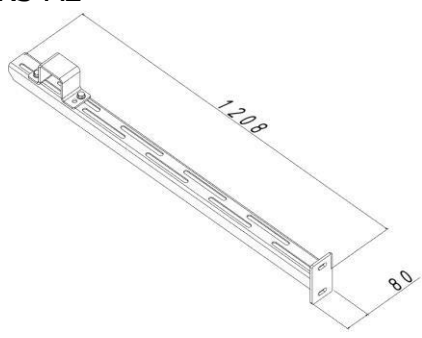
Temporary spiral stairs as a modular construction can be configured according to needs (within the range specified by the manufacturer). Setting of individual configurations should be in accordance with OMM.

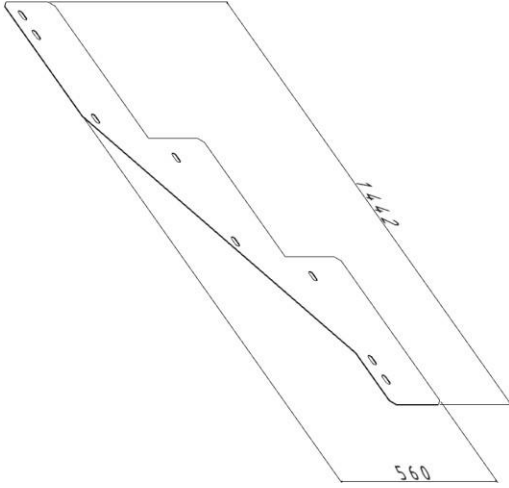
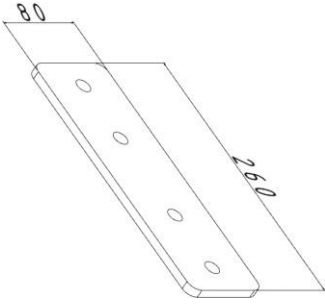
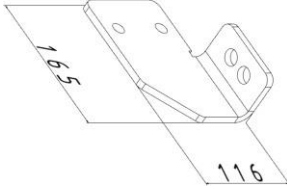
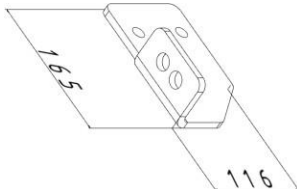
2. SST system components

The list of components included in Table 1 shows the components of the temporary spiral staircase system and their quantities assembled depending on the configuration.

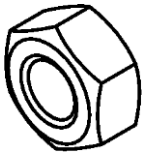
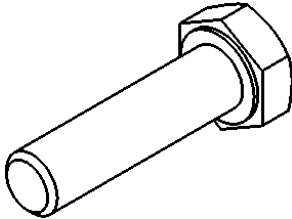
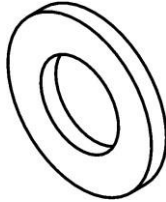
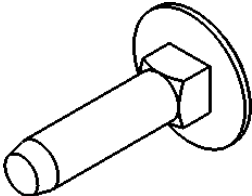

Tab 1. Temporary spiral staircase system components.

<p>SST-R4</p>  <p>Weight: 10.4 kg</p>	<p>SST-R9</p>  <p>Weight: 10.0 kg</p>
<p>SST-PO1</p>  <p>Weight: 2.5 kg</p>	<p>SST-R8</p>  <p>Weight: 4.55 kg</p>

<p>SST-F1</p>  <p>Weight: 59.5 kg</p>	<p>SST-RAP</p>  <p>Weight: 63.7 kg</p>
<p>SST-S1</p>  <p>Weight: 21.5 kg</p>	<p>SST-P2a</p>  <p>Weight: 38.7 kg</p>
<p>SST-P1</p>  <p>Weight: 4.6 kg</p>	<p>SST-L3</p>  <p>Weight: 2.8 kg</p>
<p>EPS-KS-A3</p>  <p>Weight: 7.23 kg</p>	<p>EPS-KS-A2</p>  <p>Weight: 7.32 kg</p>

<p>SST-K1</p>  <p>Weight: 4.8 kg</p>	<p>SST-A3</p>  <p>Weight: 1.3 kg</p>
<p>SST-A1</p>  <p>Weight: 1.23 kg</p>	<p>SST-A2</p>  <p>Weight: 1.23 kg</p>

3. Graphical list of SST system connectors

 <p>M6 M12 M16</p>	 <p>M12x40 M16x40 M16x10 0</p>	 <p>W6 W12 W16</p>
 <p>MZ6x45</p>	 <p>WS12 WS8</p>	

4. List of SST system components

The list of components included in Table 1 shows the components of the temporary spiral staircase system and their quantities assembled depending on the configuration and the type of system ordered by the customer (to be selected from the column designation, description of the component).

Tab 1. List of components

No.	Designation	Description of the element:	quantity in the staircase base SST-POD1	quantity in intermediate module SST-KL1	quantity in the descent platform SST-P2	quantity in the descent step SST-P1
1	SST-A3	Platform connector	0	0	2	0
2	SST-K1	Staircase runner	0	4	0	0
3	SST-L3	Mounting console	0	2	0	0
4	EPS-KS-A2	A2 Console				
5	EPS-KS-A3	A3 Console				
6	SST-R4	Closing barrier	1	0	0	0
7	SST-R8	Closing barrier 02	1	0	0	0
8	SST-R9	Platform barrier	0	0	2	0
9	M-Z-POD-T32	Adjustable foot	4	0	2	0
10	SST-A1	Right-hand platform console	0	0	1	0
11	SST-A2	Left-hand platform console	0	0	1	0
12	SST-P2a	Descent platform frame	0	0	1	0
13	SST-F1	Staircase run	0	2	0	0
14	SST-PO1	Handrail	0	8	0	0
15	SST-S1	Post	0	4	0	0
16	SST-RAP	Base frame	1	0	0	0
17	SST-P1	Descent step	0	0	0	1

Tab 2. Contents of connector sets

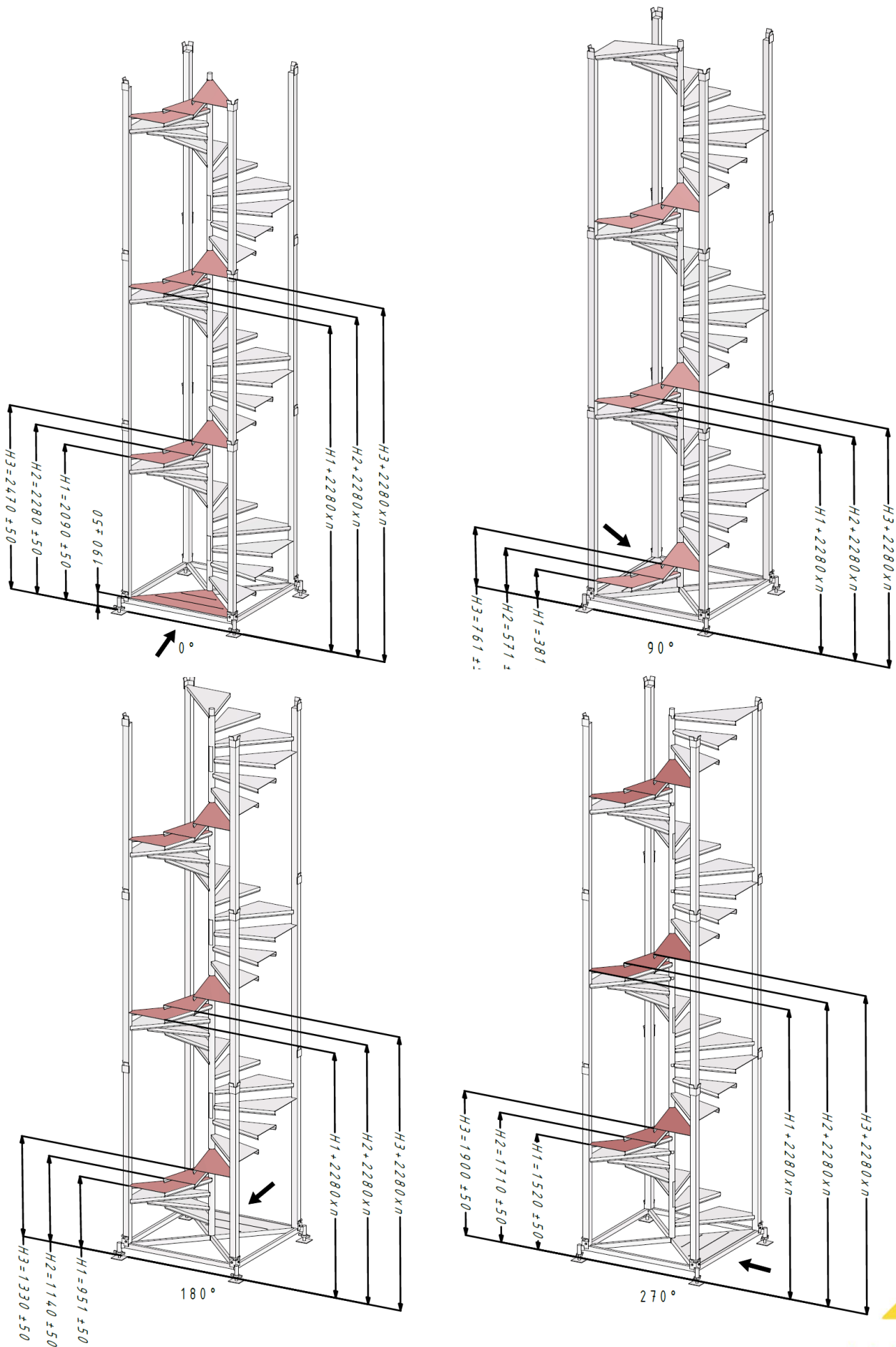
Designation	quantity in the staircase base SST-POD1	quantity in intermediate module SST-KL1	quantity in the descent platform SST-P2	quantity in the descent step SST-P1
M12x40	8	8	14	2
M16x40	0	0	2	0
M16x100	0	2	0	0
M12	16	16	14	2
M16	0	2	2	0
W6	0	0	0	0
W12	32	32	28	4
W16	0	4	4	0

5. Staircase exit levels

Exit level	Module number	Step number	Exit angle [°]
190	1	0	0
380	1	1	90
570	1	2	90
760	1	3	90
950	1	4	180
1140	1	5	180
1330	1	6	180
1520	1	7	270
1710	1	8	270
1900	1	9	270
2090	1	10	0
2280	1	11	0
2470	1	12	0
2660	2	1	90
2850	2	2	90
3040	2	3	90
3230	2	4	180
3420	2	5	180
3610	2	6	180
3800	2	7	270
3990	2	8	270
4180	2	9	270
4370	2	10	0
4560	2	11	0
4750	2	12	0
4940	3	1	90
5130	3	2	90
5320	3	3	90
5510	3	4	180
5700	3	5	180
5890	3	6	180
6080	3	7	270
6270	3	8	270
6460	3	9	270
6650	3	10	0
6840	3	11	0
7030	3	12	0
7220	4	1	90
7410	4	2	90
7600	4	3	90
7790	4	4	180
7980	4	5	180
8170	4	6	180
8360	4	7	270
8550	4	8	270
8740	4	9	270
8930	4	10	0
9120	4	11	0
9310	4	12	0

Exit level	Module number	Step number	Exit angle [°]
9500	5	1	90
9690	5	2	90
9880	5	3	90
10070	5	4	180
10260	5	5	180
10450	5	6	180
10640	5	7	270
10830	5	8	270
11020	5	9	270
11210	5	10	0
11400	5	11	0
11590	5	12	0
11780	6	1	90
11970	6	2	90
12160	6	3	90
12350	6	4	180
12540	6	5	180
12730	6	6	180
12920	6	7	270
13110	6	8	270
13300	6	9	270
13490	6	10	0
13680	6	11	0
13870	6	12	0
14060	7	1	90
14250	7	2	90
14440	7	3	90
14630	7	4	180
14820	7	5	180
15010	7	6	180
15200	7	7	270
15390	7	8	270
15580	7	9	270
15770	7	10	0
15960	7	11	0
16150	7	12	0
16340	8	1	90
16530	8	2	90
16720	8	3	90
16910	8	4	180
17100	8	5	180
17290	8	6	180
17480	8	7	270
17670	8	8	270
17860	8	9	270
18050	8	10	0
18240	8	11	0
18430	8	12	0



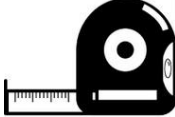

The values in bold represent the height of the last step in the given staircase module.



The arrow shows the direction of entering the starting module.

6. List of tools required for installation of temporary spiral staircases

Tab 3. List of tools

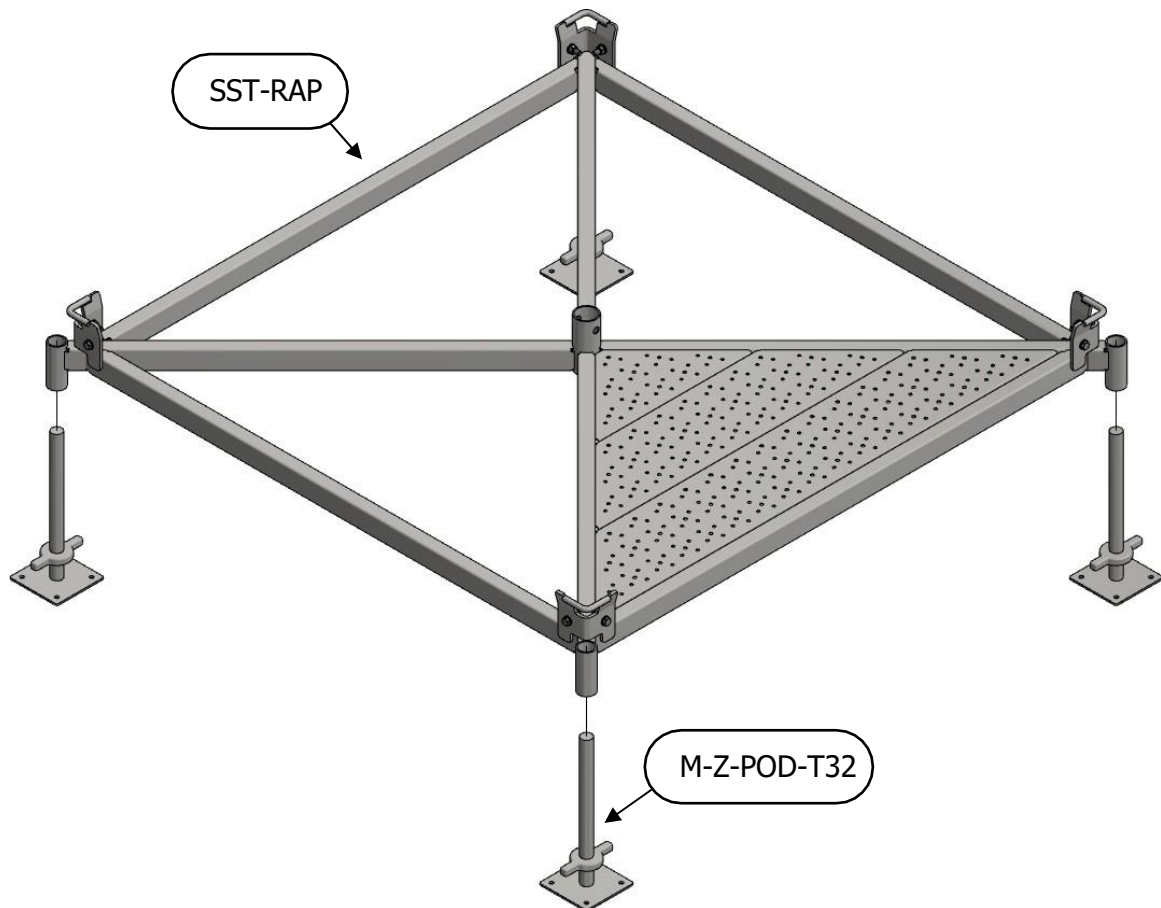
	<p>Keys: 24,19,10</p>
	<p>Spirit level</p>
	<p>Measuring tape</p>
	<p>Lifting device with a load capacity of min. 1 t</p>

7. Assembly operations of individual SST system components

The assembly instructions have been produced to show how to assemble the individual components of the temporary spiral staircase system.

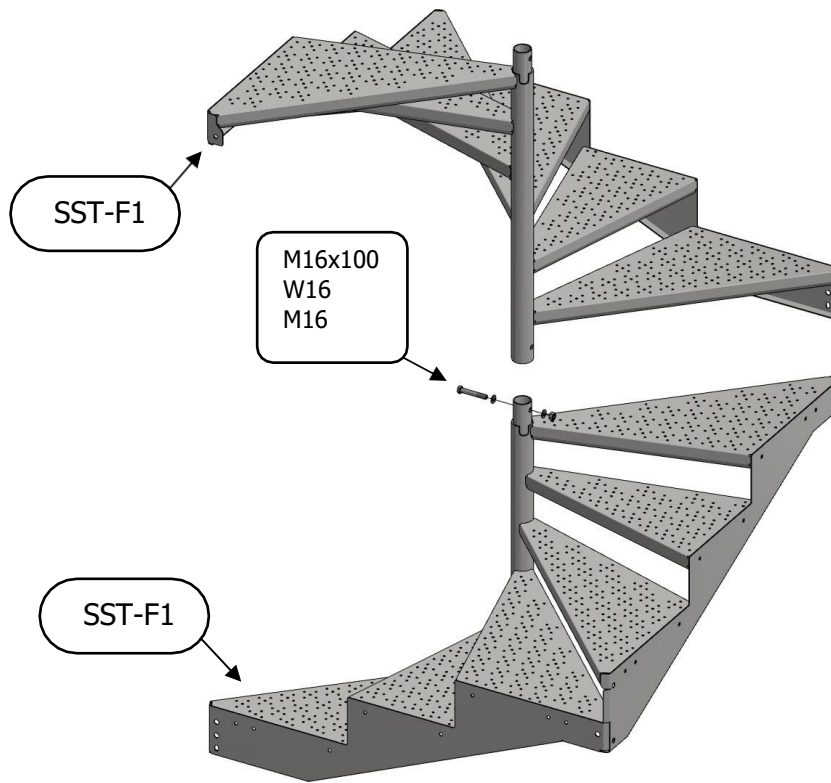
6.1 - Assembly of the base module

Assembly of the base is carried out by placing the platform frame on four feet. The feet may only be placed on a hardened surface with adequate drainage. The next step is to level the base carefully, ensuring that each foot is supported on the ground.

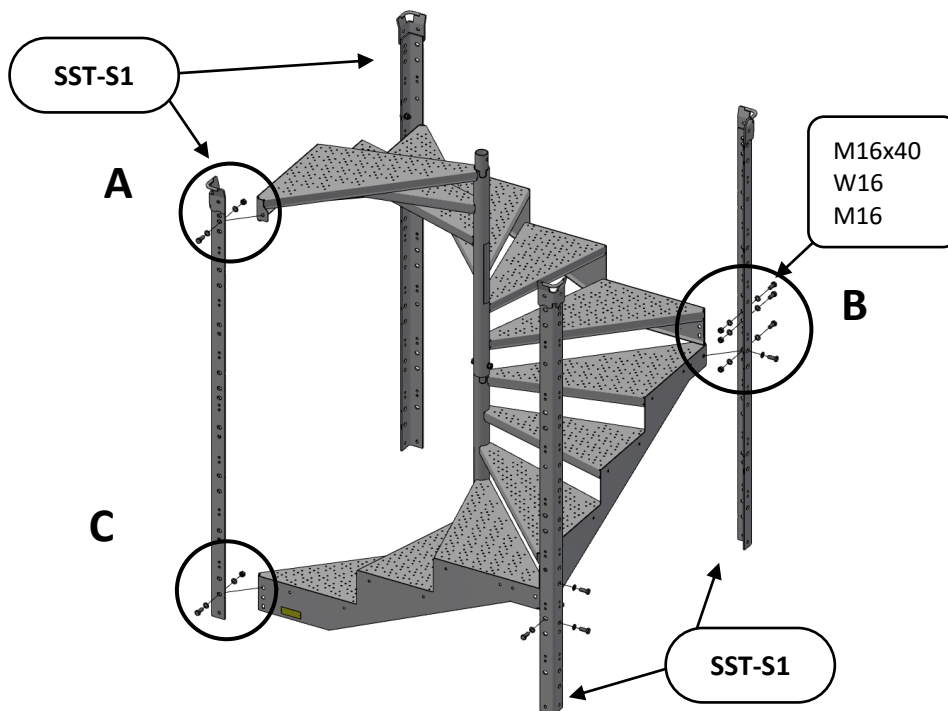


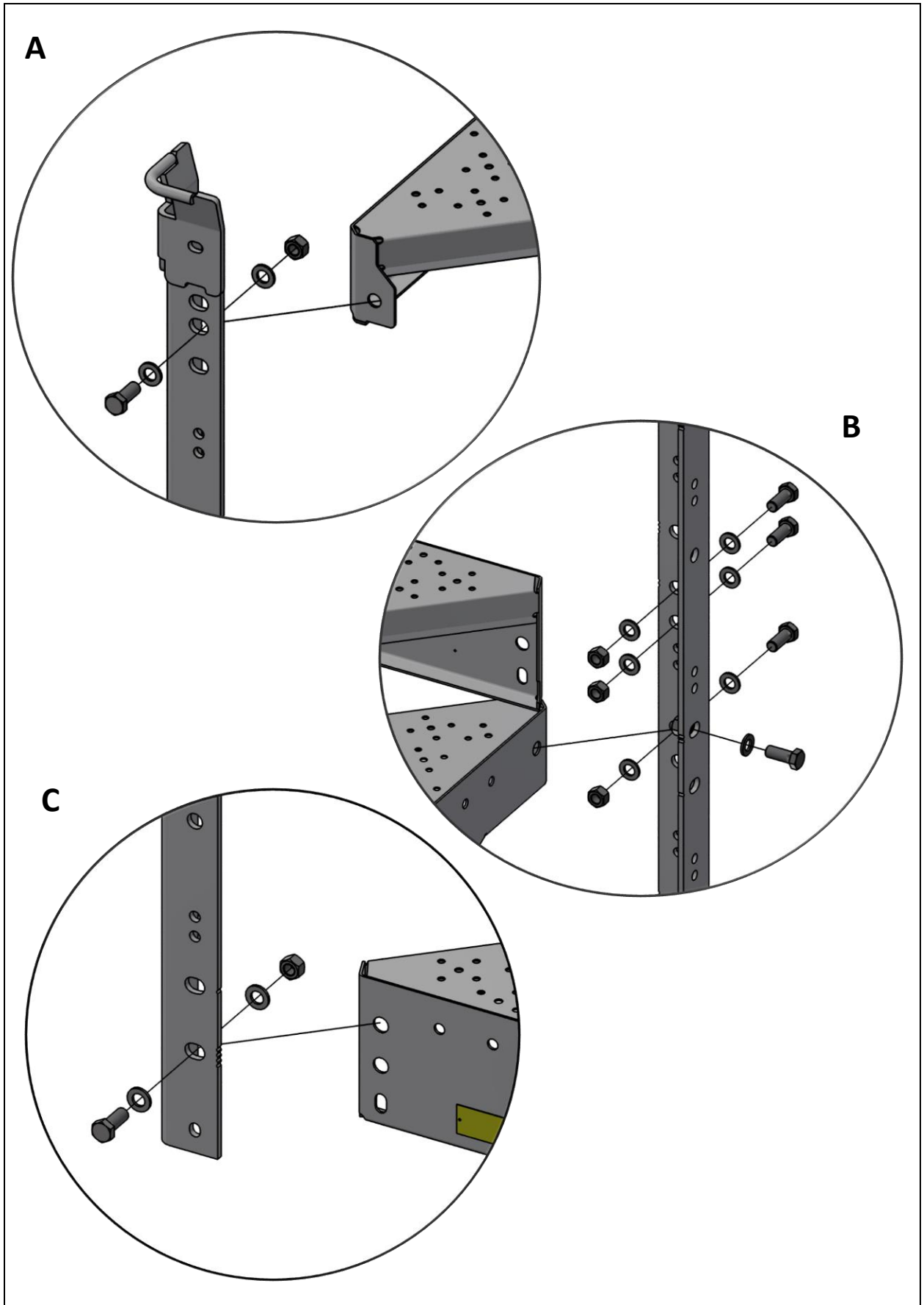
If the staircase is delivered to the construction site in composite form, following points are omitted: 6.2, 6.3, 6.4

6.2 - Start assembling the intermediate module by bolting the central posts together



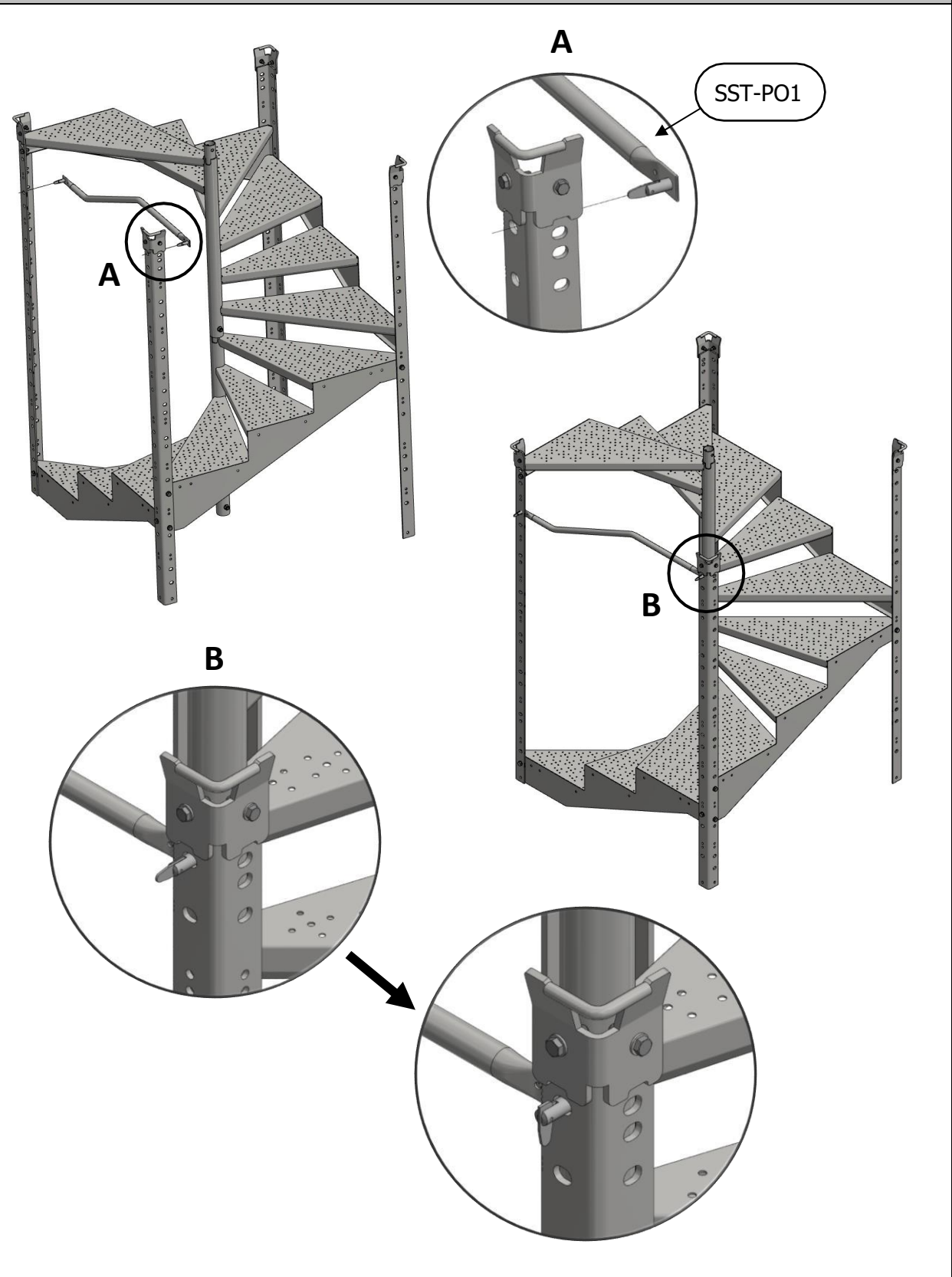
6.3 - The next operation is to tighten the posts at the corners





6.4 - Installing the barriers in the intermediate module

Make sure each pin is secured

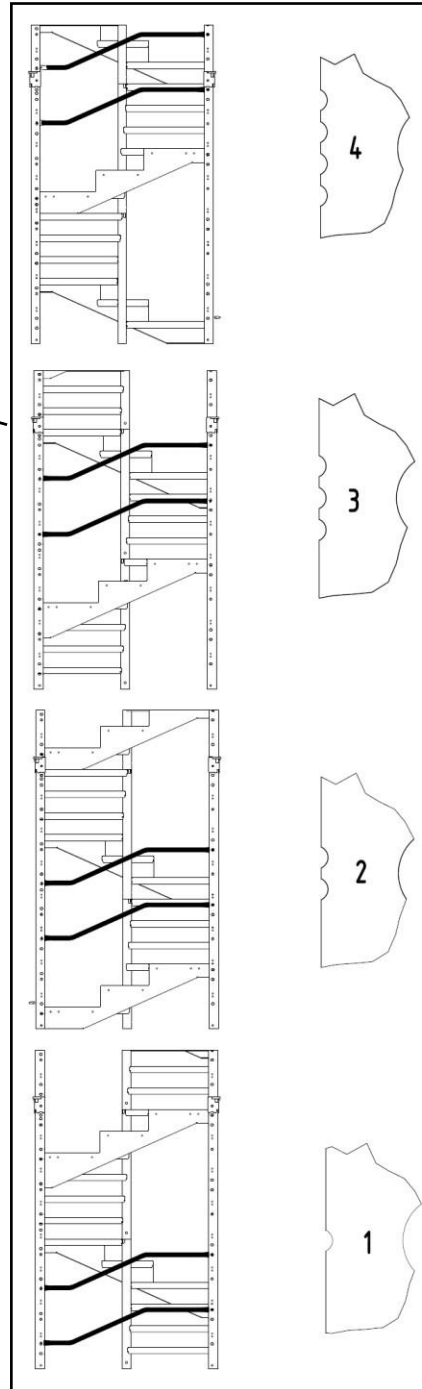
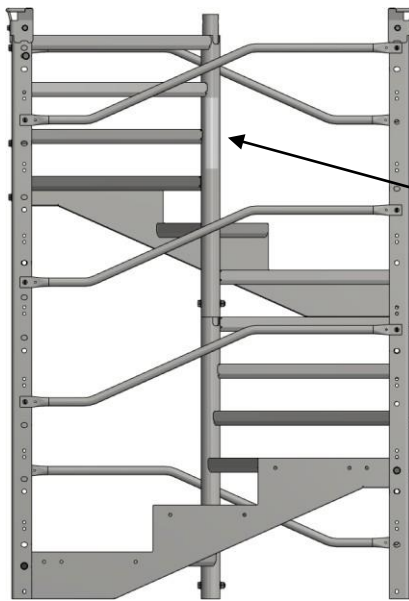


Staircases are supplied with railings in the transport configuration.

Once the staircase has been assembled the railings must be switched to the useable configuration.

To select the correct configuration follow the sticker on the central post. The number of notches on the side posts indicates which holes the barriers should be fitted to.

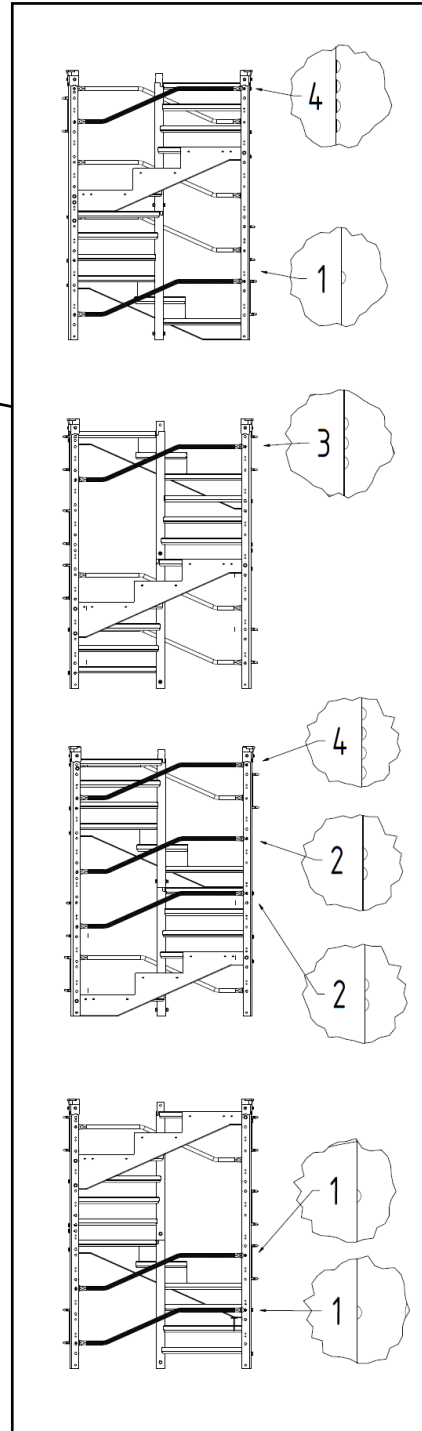
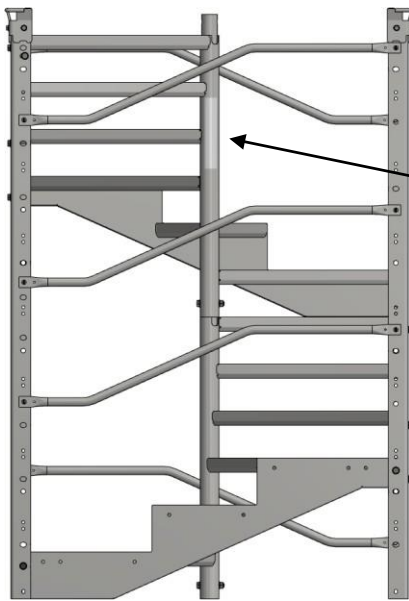
Usable configuration of barriers



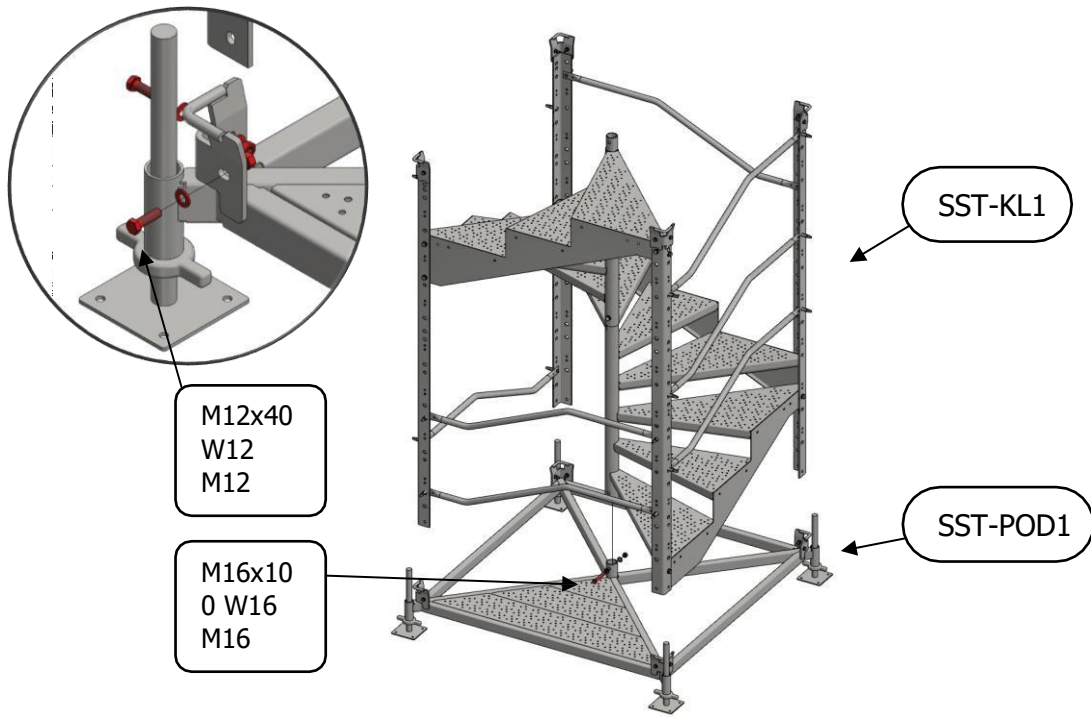
For dismantling and transport, set up the barriers in the transport configuration.

To select the correct configuration follow the sticker on the central post. The number of notches on the side posts indicates on which holes the barriers should be fixed.

Transport configuration of barriers

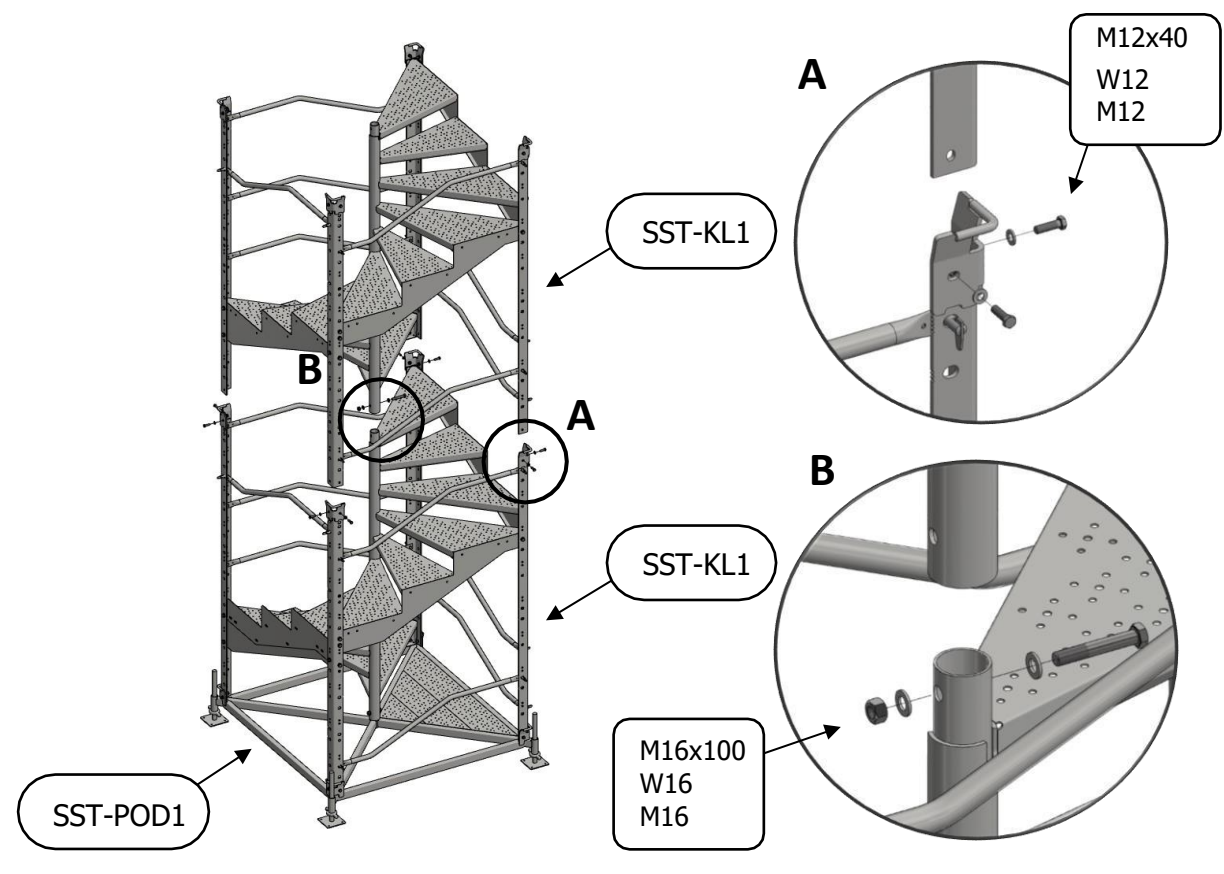


6.5 - Connection of the base to the intermediate module



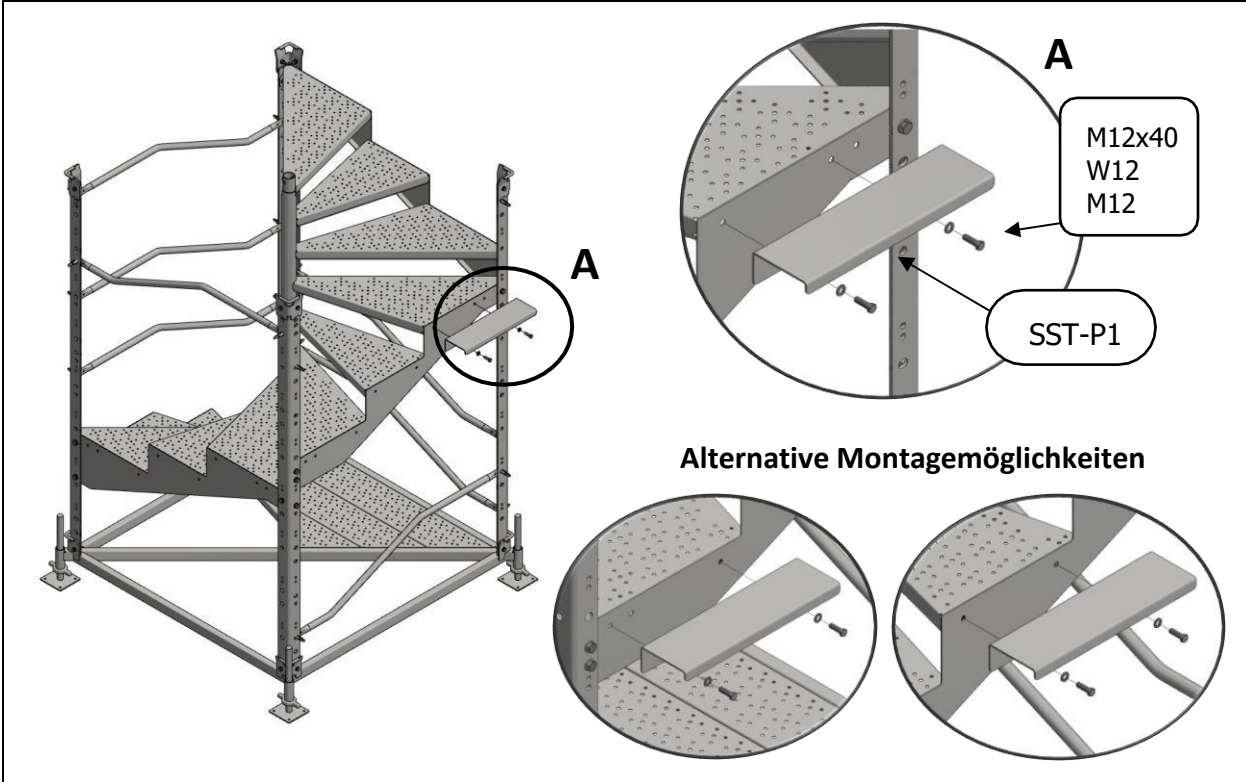
6.6 - Attaching another intermediate module

A maximum of eight modules can be stacked together.



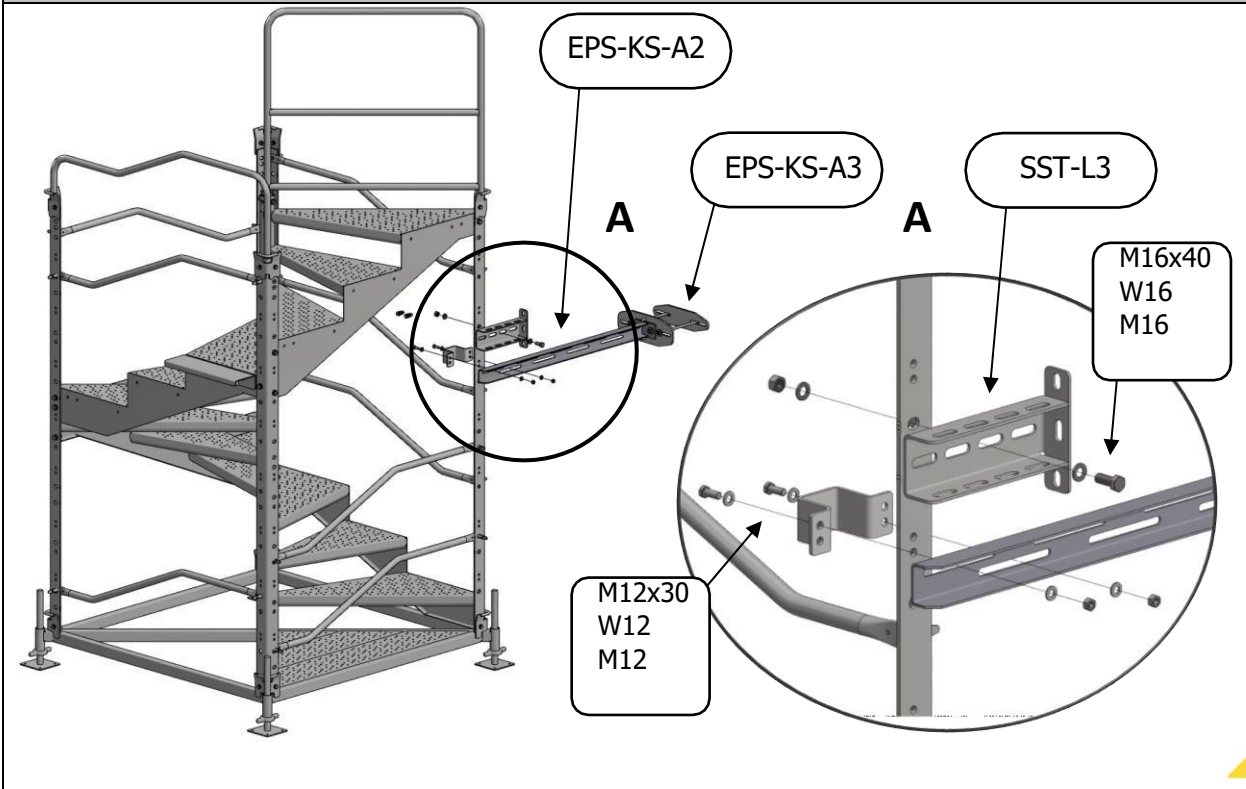
6.7 Assembly of the descent step

The design of the stair run allows the step to be mounted in three positions.



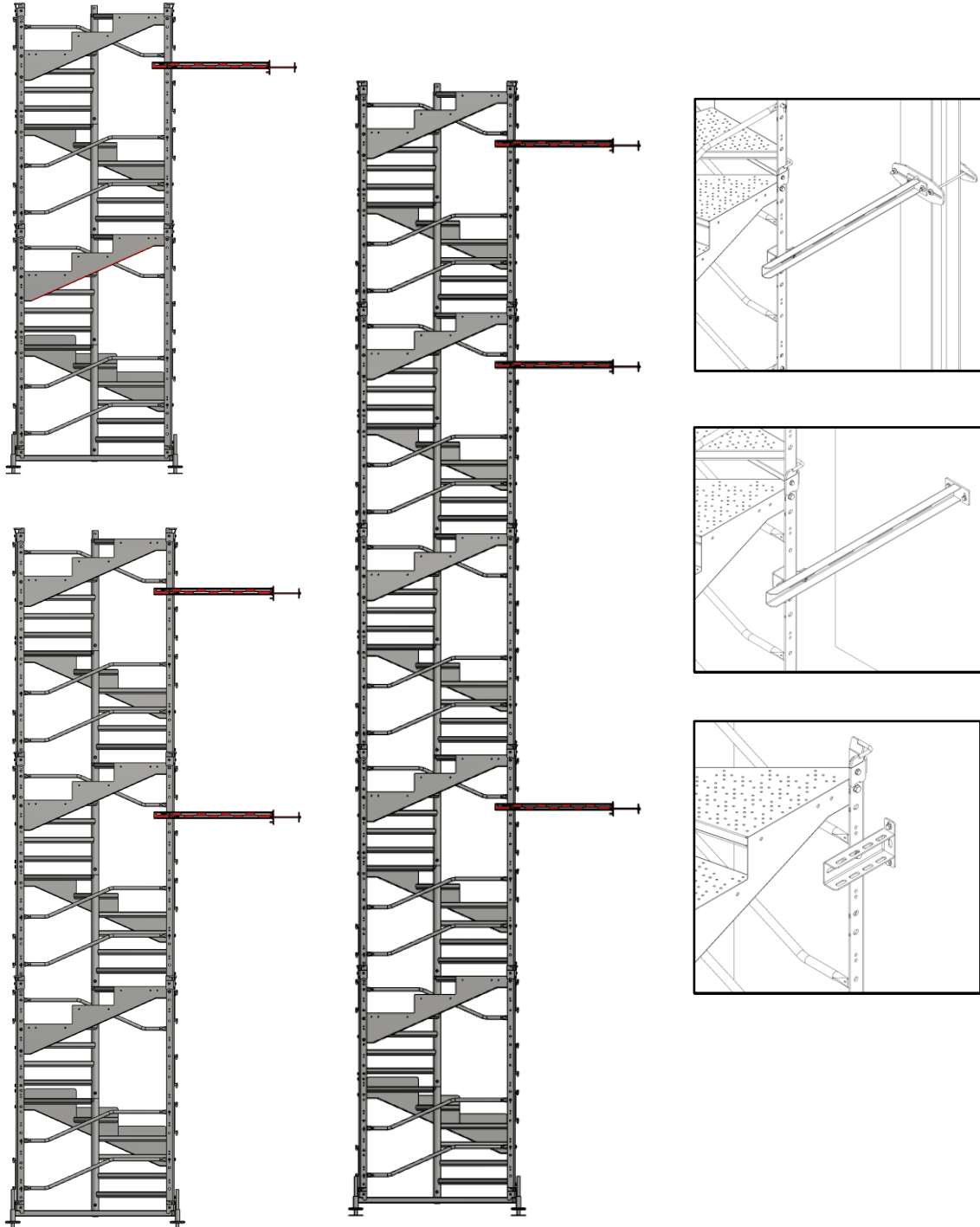
6.8 - Installation of stabilising consoles.

Consoles are necessary at the second and last module. Stabilise the other modules with consoles every second intermediate staircase. Install two consoles per module. SST consoles - L3, EPS-KS-A2 and EPS-KS-A2 are used interchangeably.

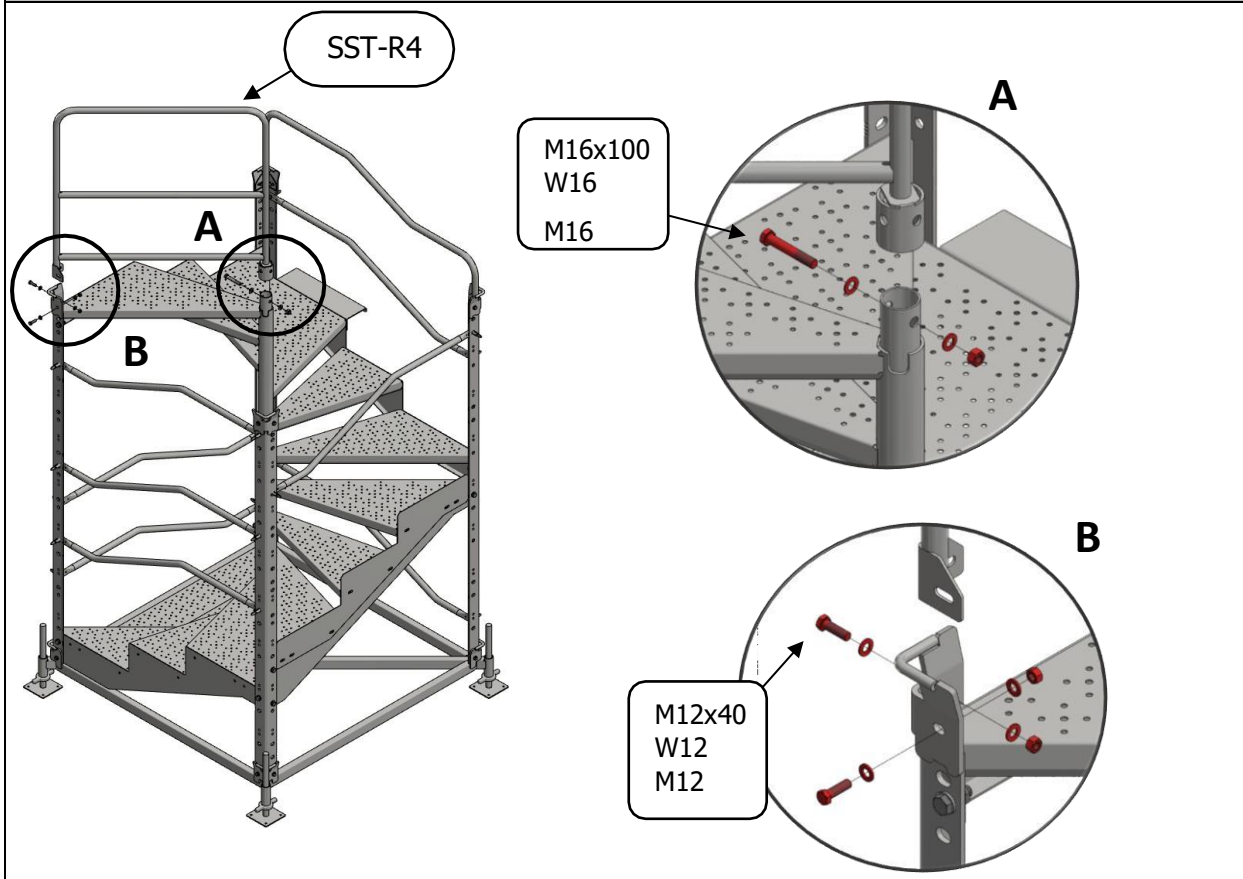


6.9 - Examples of installation of stabilising consoles

The SST-L3 and EPS-KS-A3 consoles should be anchored/screwed to the existing structure. Console EPS-KS-A3 additionally has the possibility to be mounted as a steel post clamp.

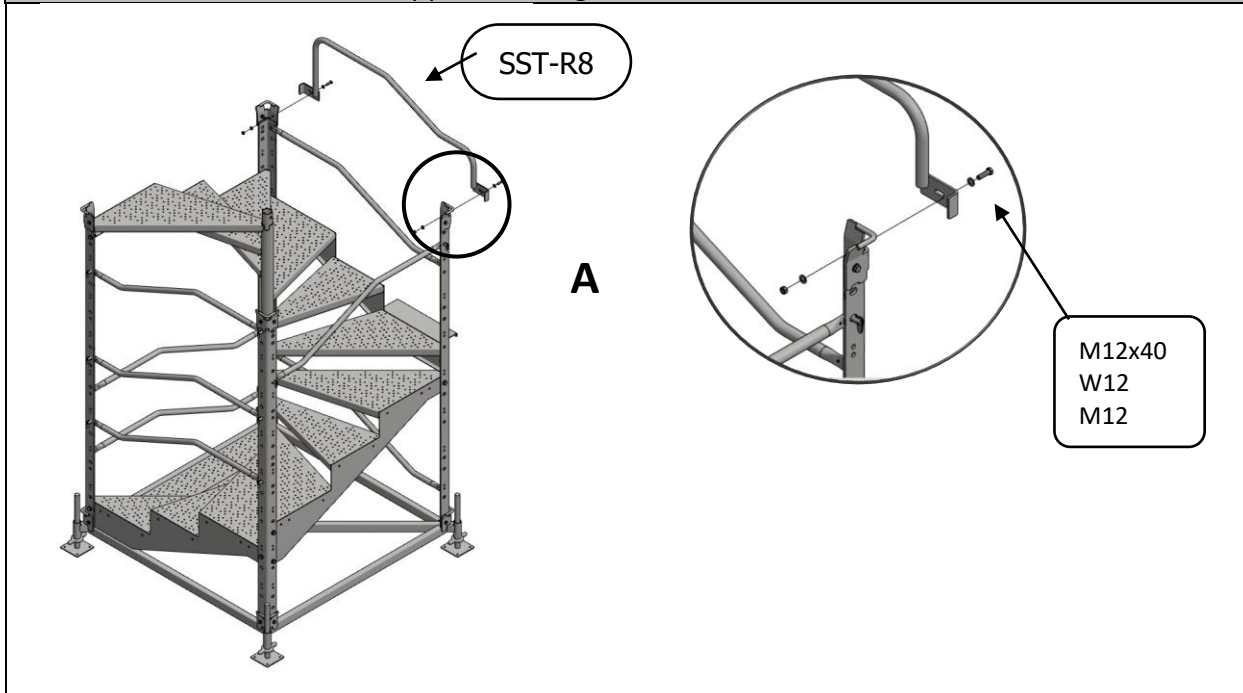


6.10 - Installation of top module barrier

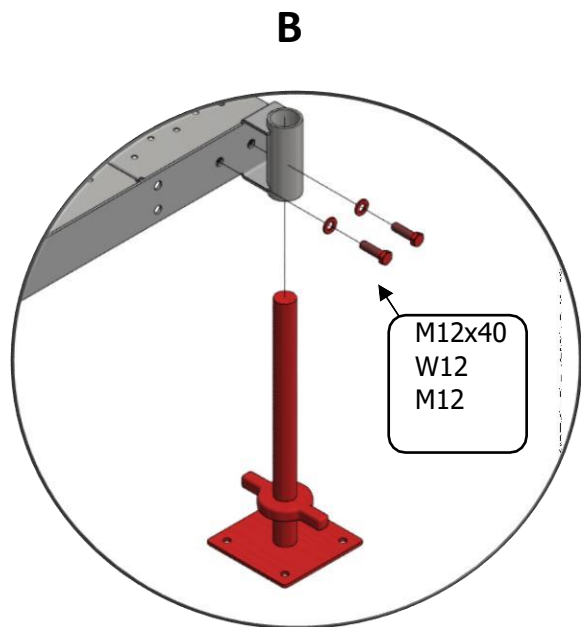
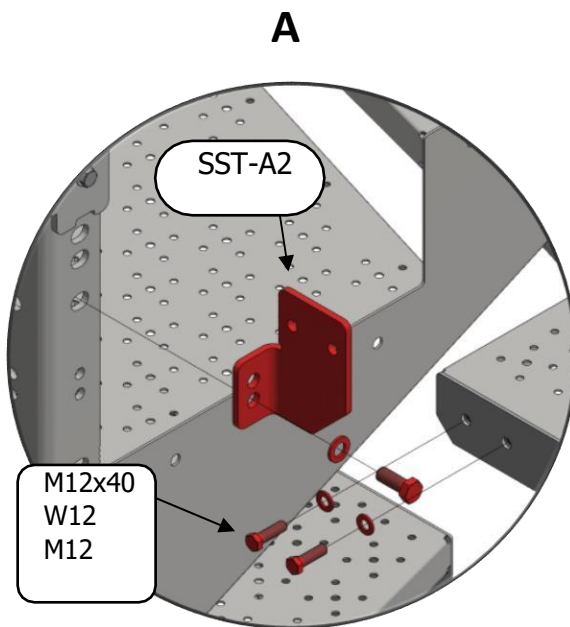
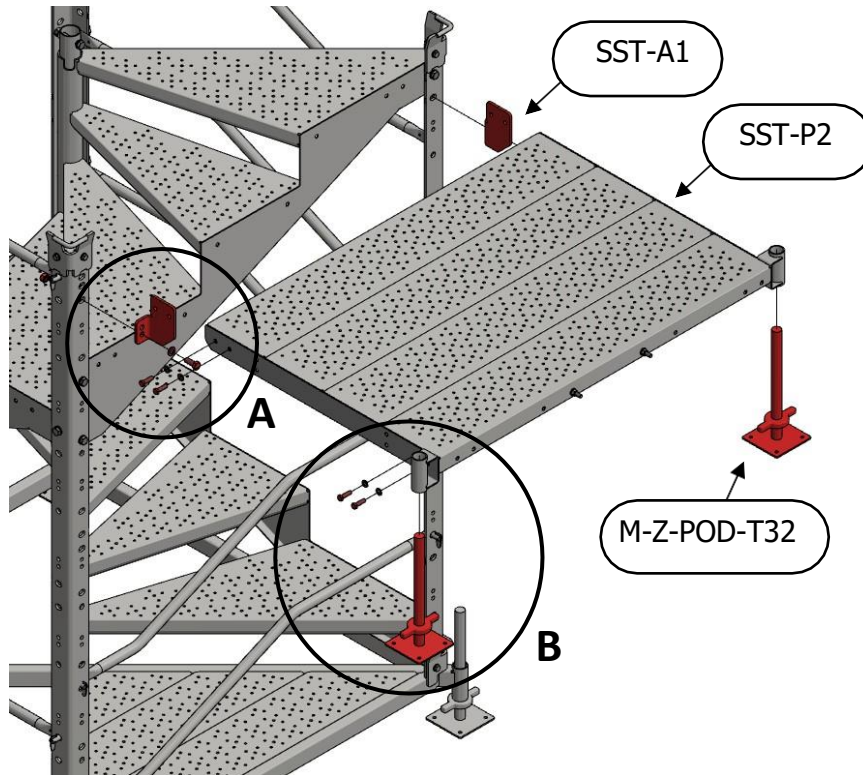


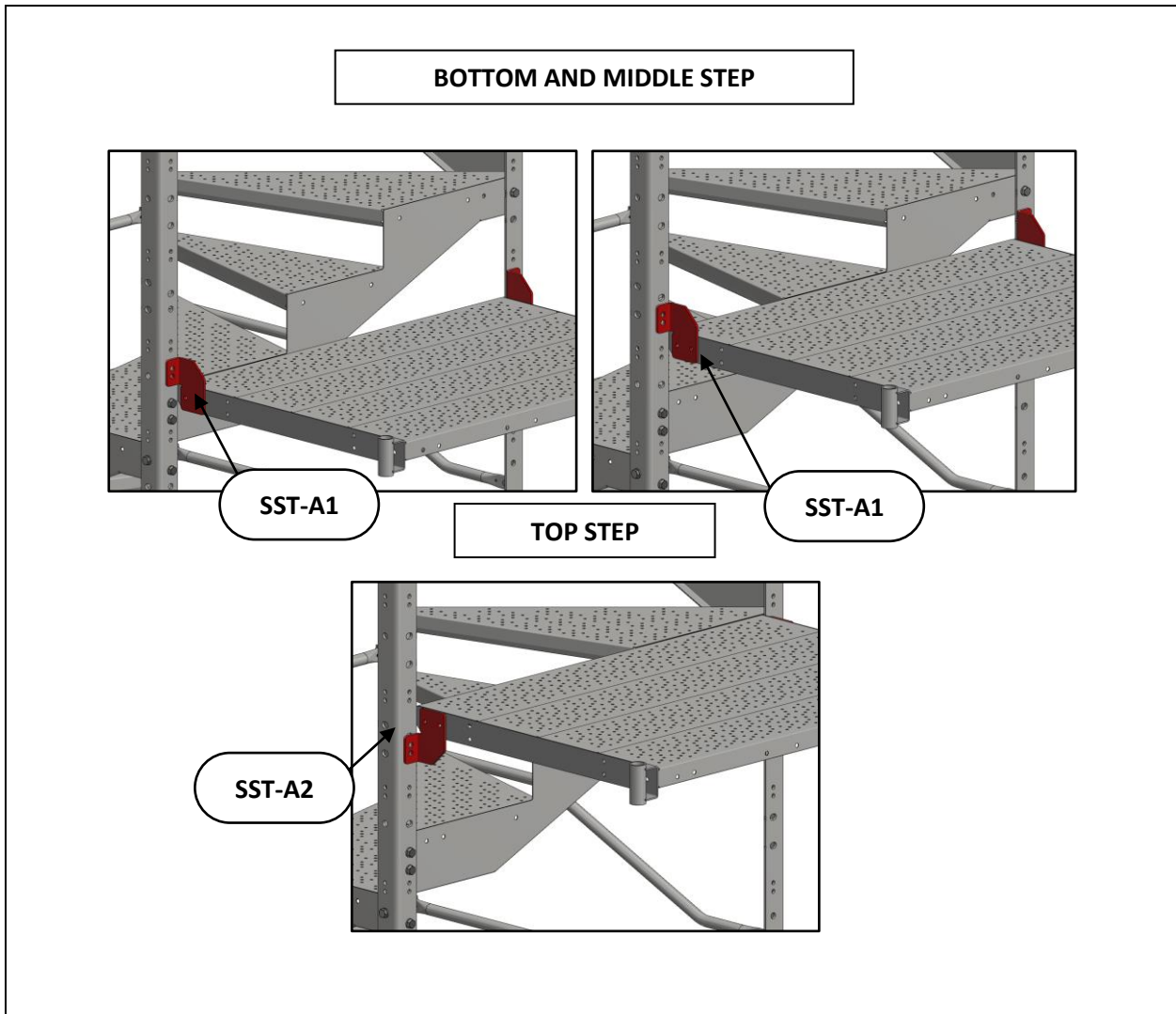
6.11 - Installation of top module barrier

To ensure adequate protection and full use of the cage height, barriers must be installed to secure the descent from the uppermost cage.

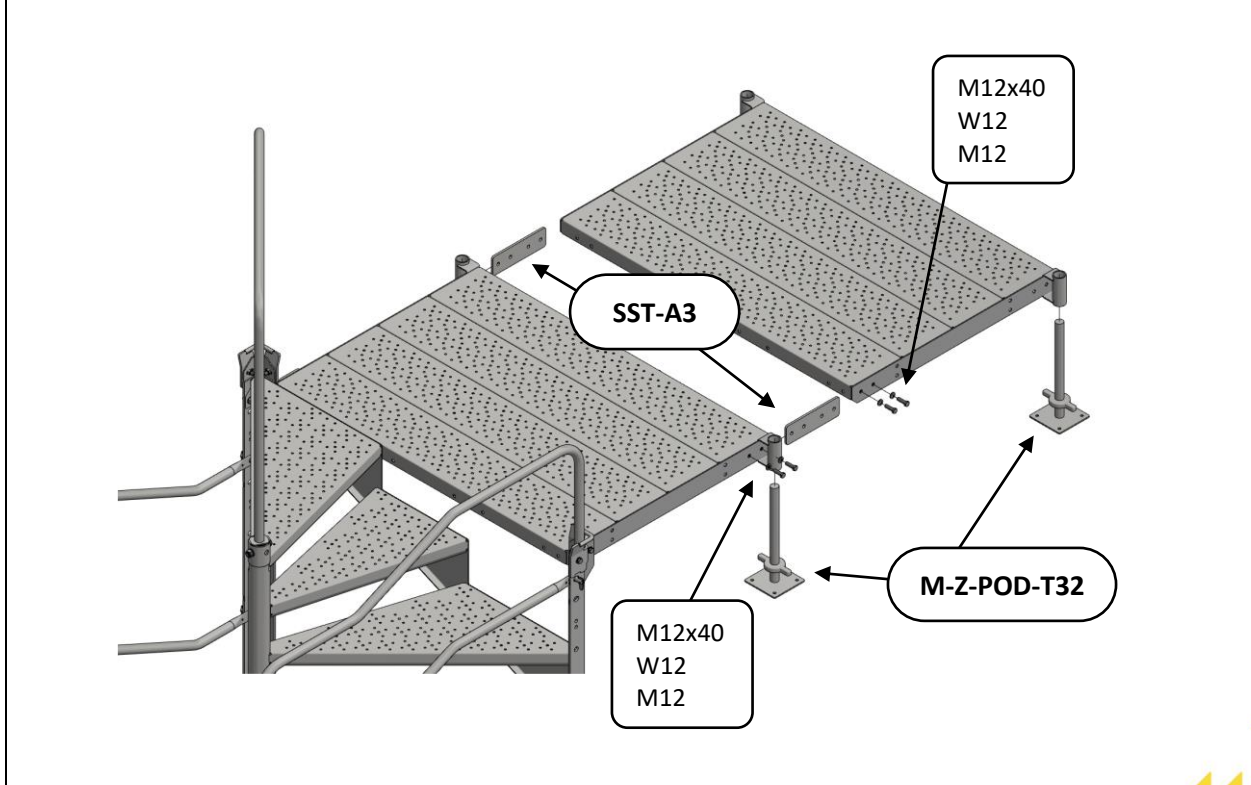


6.12 - Installing the descent platform

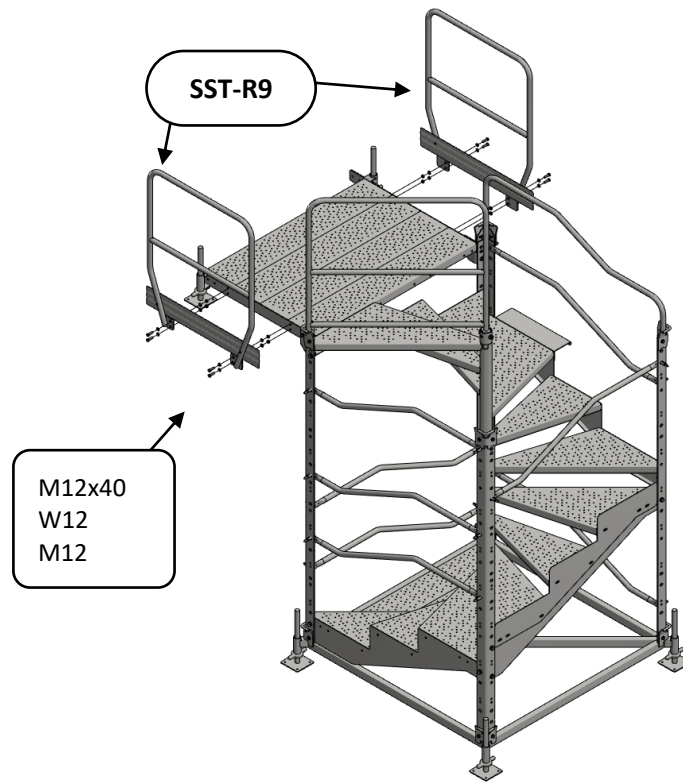




6.13 - Optional assembly of another descent platform



6.14 - Installing the barriers of the descent platform



6.15 - Installation of an optional toeboard on the stairs

