

# TAS - temporary access stairs and staircases





We are Swedish-Polish group specialising in the design and production of solutions for the industrial and construction sectors.

We are able to predict the challenges in the next stages of construction and industrial project.

Keep calm due to our experience.

**20 000+** m<sup>2</sup> of production space in three automated facilities

**2005** the year we started

**15** branches throughout Europe

**50+** countries where our projects are located

Manufacturer, TLC Sp. z o.o., holds Enviromental Product Declaration in acc. with ISO 14025:2006 and EN 15804:2012+A2:2019/AC:2021 for industrial communication systems including stairs, railings and fencings.



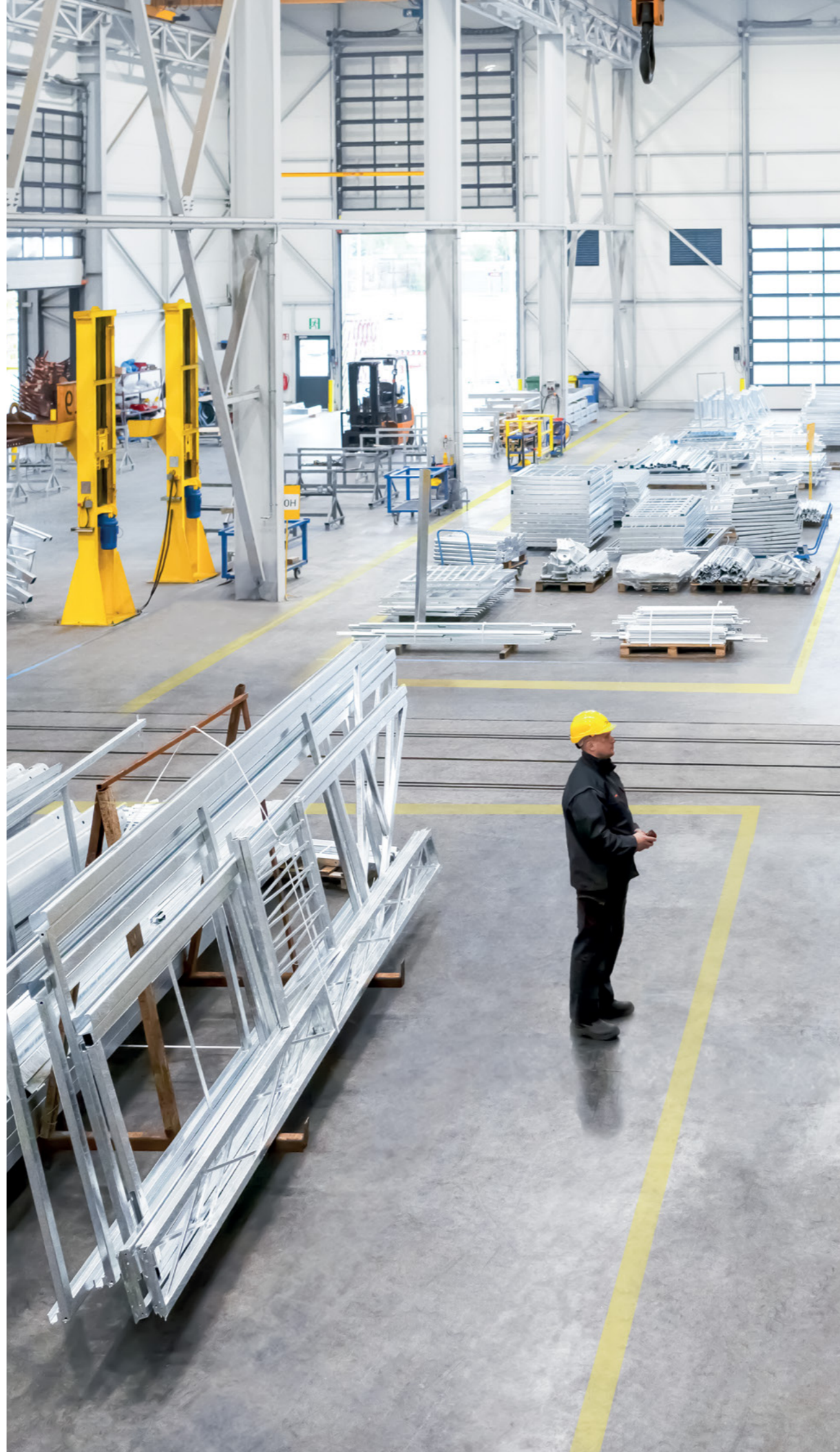
TLC's production plant has implemented Factory Production Control according to EN 1090-1 and welding quality system according to PN-EN ISO 3834-2, both certified by TUV SUD Polska.

TLC's production plant has been certified with the Integrated Management System of Quality, Environment and OHS (ISO 9001/ ISO 14001/ ISO 45001) issued by Bureau Veritas Certification.



The information contained in this advertising material is provided for informational purposes only.

The product specification should be checked aganist the technical documentation provided by the manufacturer.



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TAS system

# General information

A safe solution that makes a great alternative to usually used, makeshift wooden structures. Modularity and universal purpose allows to use the system wherever there is a need of safe overcoming small and significant level differences. Their main advantage is the possibility of safe, repeated assembly without losing its performance properties. The stairs are available in steel and aluminum version. Additionally, they have smooth angle regulation for better adjustment to required conditions. In order to increase visibility at the construction site, handrails are painted in yellow.

TAS system applications:

- As temporary stairs to overcome small and significant level differences of various pitches (excavations banks, building tiers)
- As temporary gangways (excavations at road and construction works, trenches)
- As staircases to overcome significant level differences (buildings, deep foundation excavations e.g. underground parking lots)
- As a step-over platform to overcome small obstacles like walls or pipelines
- As scaffolding stairs - TAS stairs equipped with special chucks make it possible to assemble the stairs on scaffold systems.



STEEL

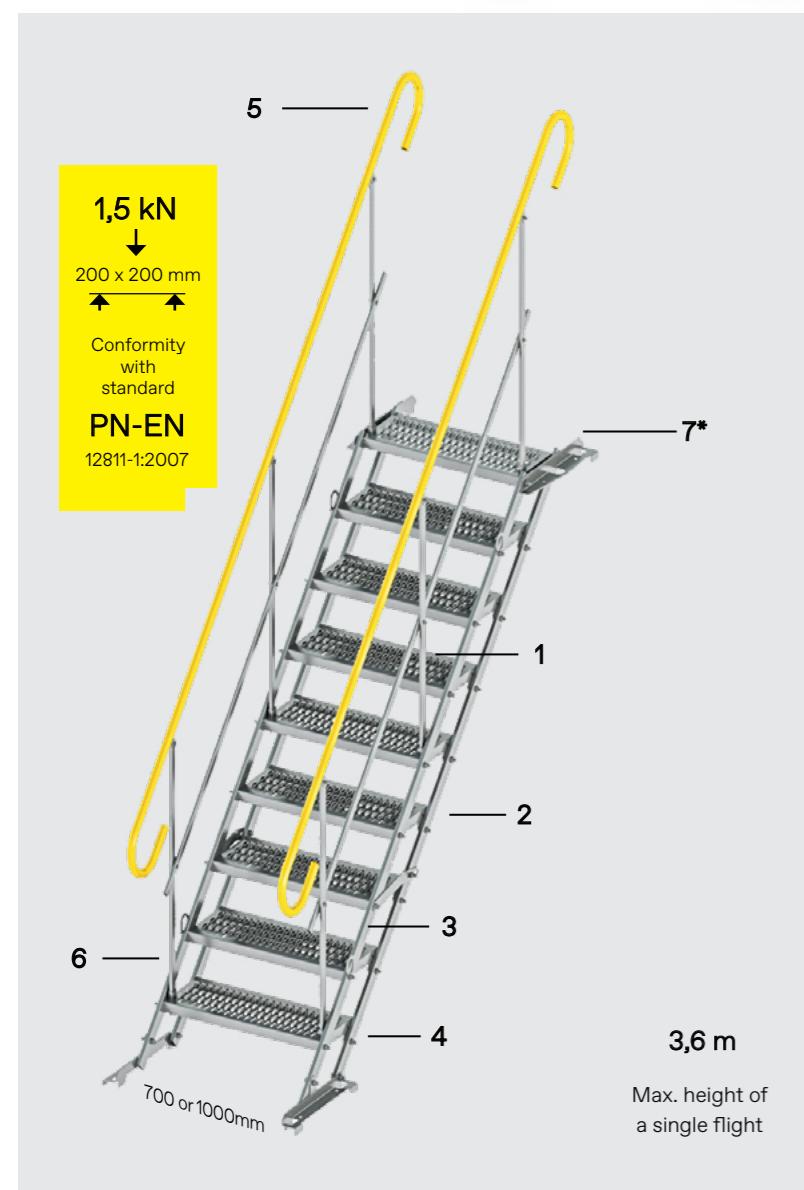
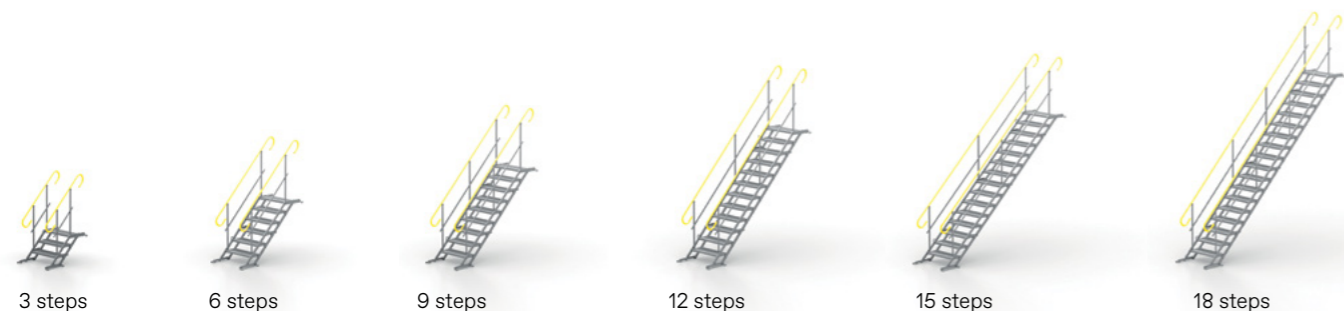


ALUMINUM

usable width 700 or 1000 mm	usable width 700 mm
temporary stairs	temporary stairs
gangways (up to 8 metres)	gangways (up to 2,8 metres)
scaffolding stairs	scaffolding stairs
step-over platform	step-over platform
staircases	

# Key features of the system

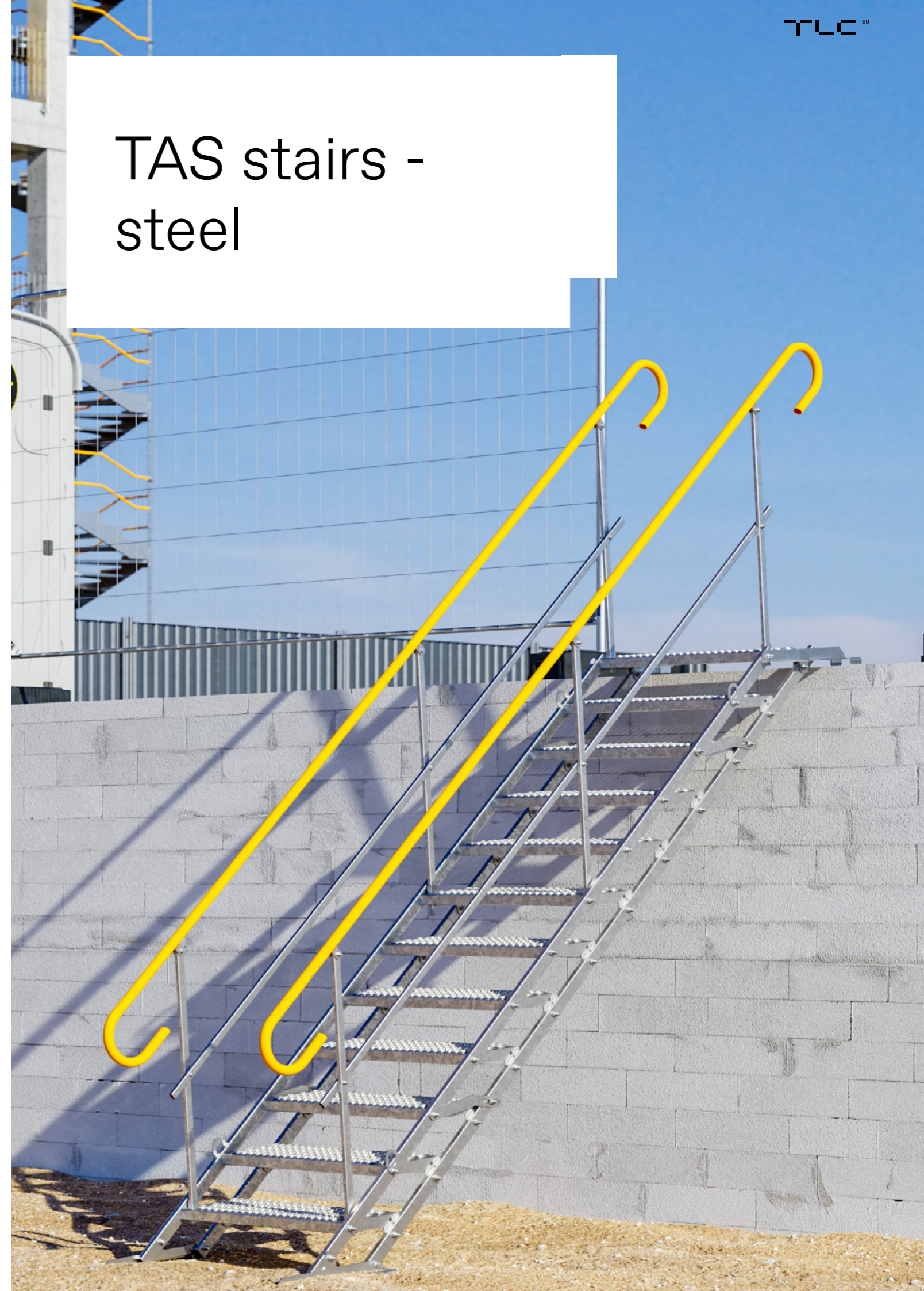
- Wide angle of inclination: from 0° to 50°
- Modularity - available in single flight modules with 3, 6, 9, 12, 15, 18 steps
- Possibility to connect flights (e.g. 18+18, 15+12 steps) when using connectors and supports
- Possibility to mount railings on one or both sides
- Automatic steps leveling
- Possibility to change a place of use at any time
- Possibility to use a handle lowering last step



- 1 Anti-skid and self-cleaning steps
- 2 Safety locks preventing from folding
- 3 Practical transport grips
- 4 Anti-skid grips at bottom and top of the stairs
- 5 Single or double railing
- 6 Socket for fast railing instalation
- 7\* Possibility to use a handle lowering last step

The stairs meet the requirements of the PN-EN 12811-1:2007 requirements regarding the class 1 carrying capacity (1 kN on 200×200mm surface) and are adapted for self-assembly with the use of a crane.

# TAS stairs - steel



# Lenght selection and stairs setup

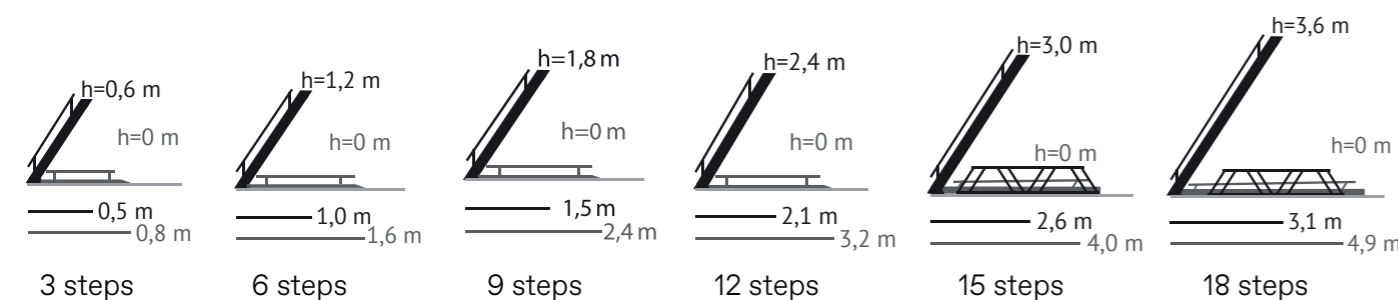
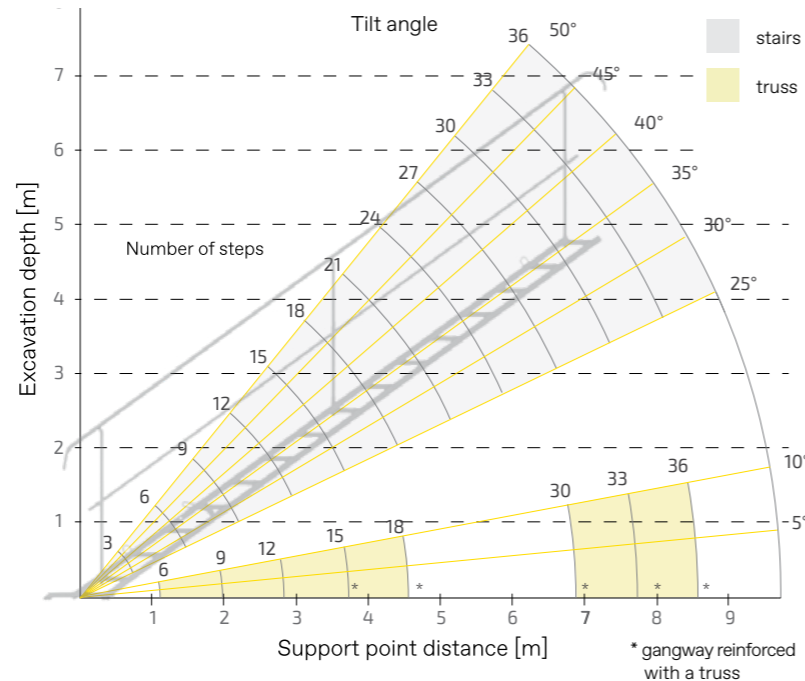
Temporary stairs system can consists of 6 basic modules of 3, 6, 9, 12, 15, 18 steps. Angle regulation is possible from 0° to 50° for modules from 3 to 12 steps, and from 25° do 50° for 15- and 18-steps modules. The stairs are to be assembled on a previously prepared surface attaching the lower and the upper part. The table below shows basic parameters of the available modules.

Number of steps	3		6		9		12		15		18	
Width [m]	700	1000	700	1000	700	1000	700	1000	700	1000	700	1000
Height [m]	0 - 0,6		0 - 1,2		0 - 1,8		0 - 2,4		1,6 - 3,0		2,1 - 3,6	
Weight [kg]*	47	56	74	93	105	134	133	171	162	208	192	248
Flight length [m]	0,8		1,61		2,24		3,23		4,05		4,86	
Length of stairs with guardrails [m]	1,4		2,2		3		3,8		4,6		5,4	
Max. number of users on the stairs	1		1		2		2		2		3	
Possibility to use as a gangway	no		yes		yes		yes		yes (when used with a truss)		yes (when used with a truss)	
Trench width [m]	-		1,17		1,98		2,78		4,60		4,40	

The table above shows the basic parameters of the available modules  
\* weight includes stairs and two guardrails

Stairs location, i.e. their angle and distance between the lower upper end are determined on the diagram shown to the right as follows:

- Determine the excavation depth and mark the value on a vertical axis
- Taking into account the number o steps in the set, determine the angle of stairs - lead a horizontal line to the point of intersection with a curve.
- Determine the distance of the point of setting of the lower part of the stairs - vertical line to the intersection with horizontal axis.



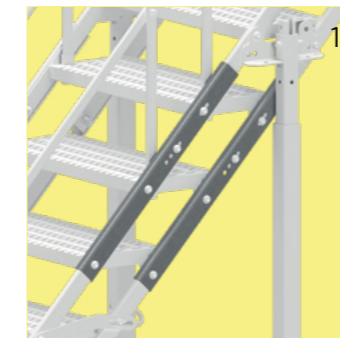
# Additional elements

## Stairs fasteners

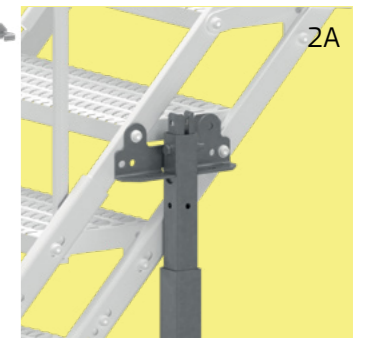
The structure of stairs allow to connect stair flights with each other using special fasteners.

## Support poles

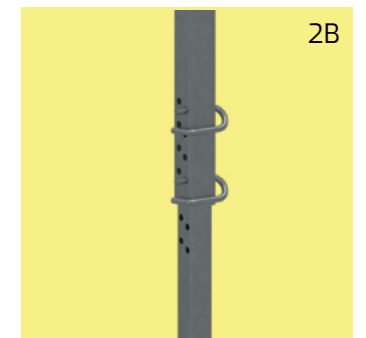
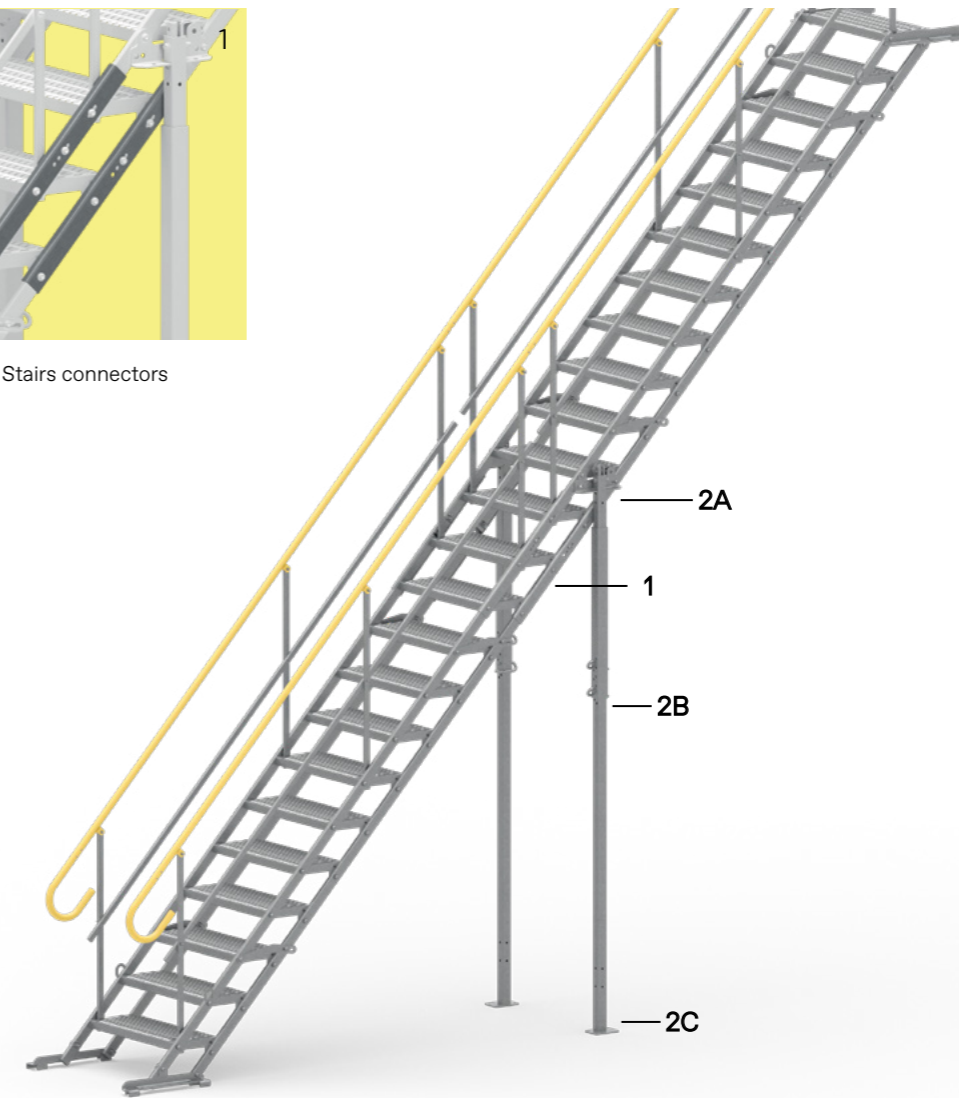
When stair flights are connected, there is a need to use special support poles assembled to the stairs.



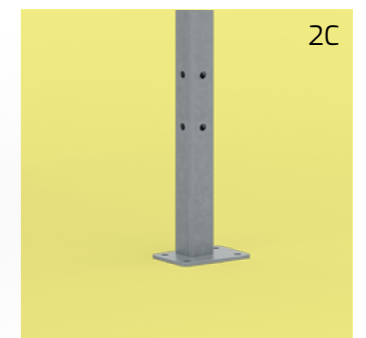
Stairs connectors



Fixing of the post to the stairs



Stepwise regulation



Anchored foot

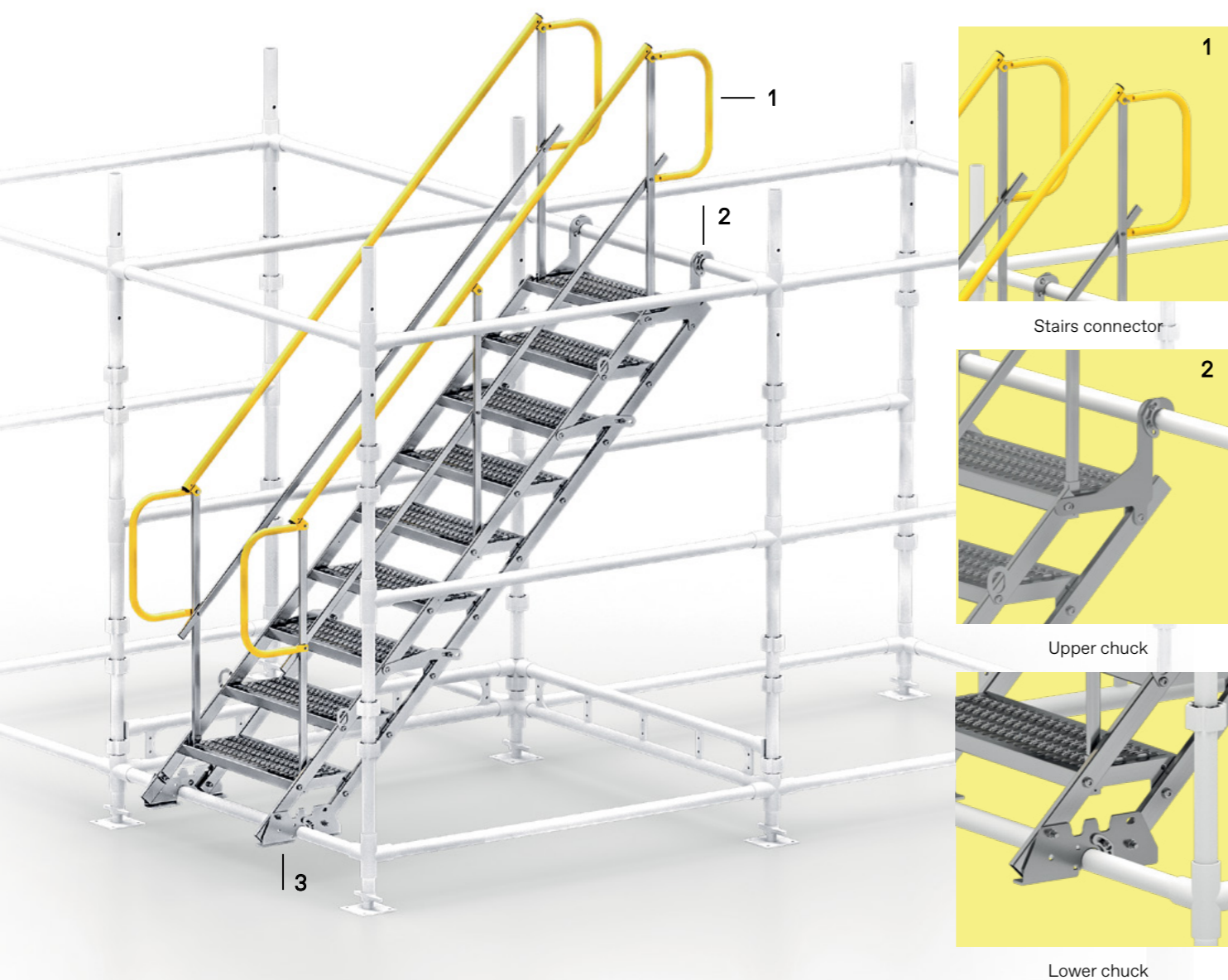
When assembling and connecting flights on a bank, support poles are not required.

Regardless of the flight angle, the steps are automatically set horizontally (parallel to the grips - upper and lower).

# Scaffolding chuck

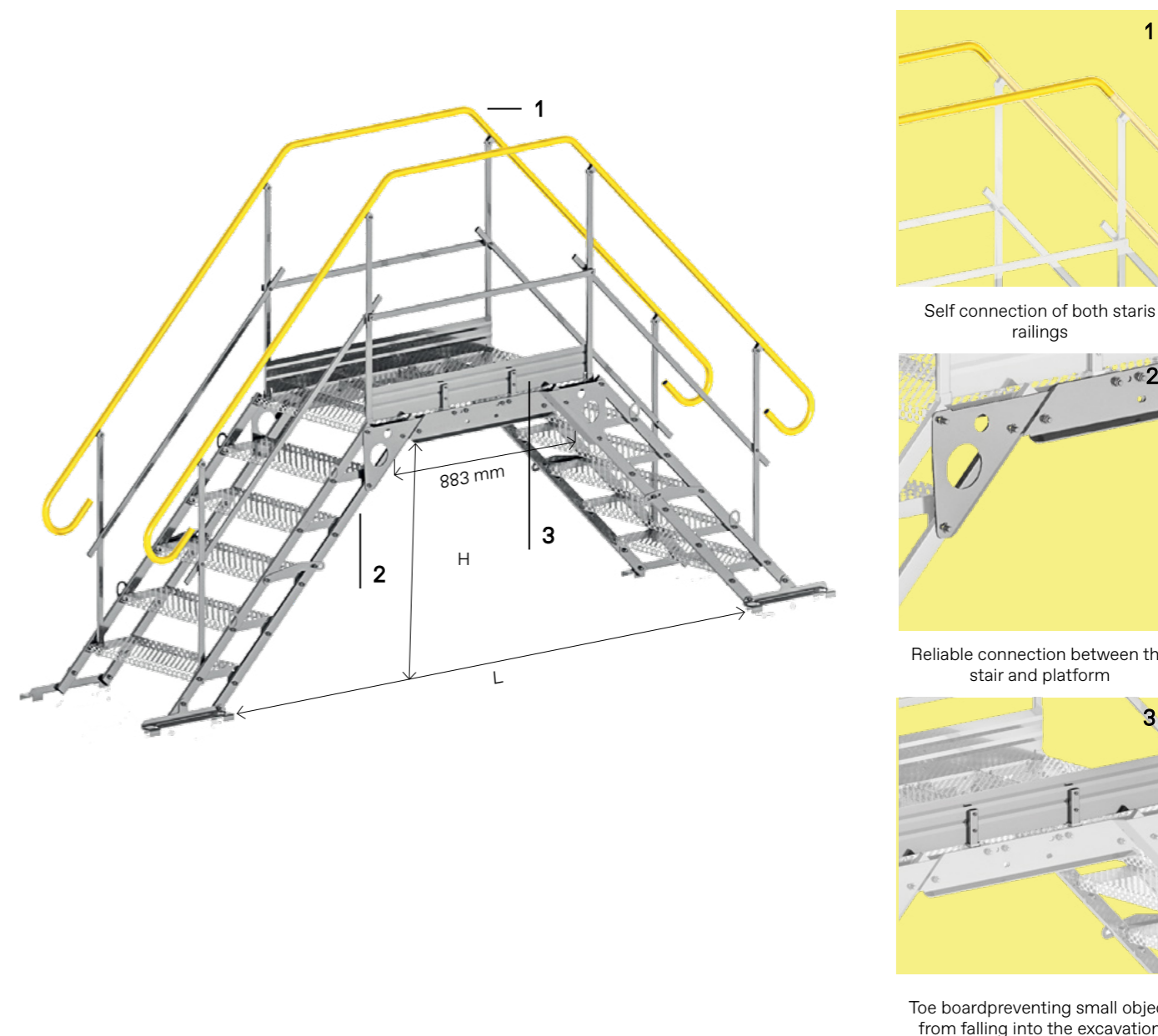
In order to optimise and adapt the product to the needs of the construction site, we have extended the TAS offer with scaffolding chucks. The assembly process is fast and troublefree, as it only requires exchanging standard feet with dedicated chucks.

The assembly is conducted by hanging the upper stairs flight on horizontal traverse.



# Step-over platform

TAS step-over platform is a modular and easy to assemble solution which consists of a platform and two TAS flights of stairs. The step-over stairs can be used to overcome such obstacles as pipelines, walls, or as a cross-over platform over excavations, trench boxes and small technical openings. Thanks to the possibility to use 3- or 6-step flights, the height of the platform can adjusted according to current needs.



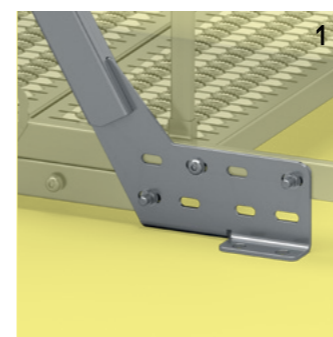
Number of steps	Stair width [mm]	Weight [kg]	Height [m]	Lenght [m]
3	700	93	0,46	1,8
3	1000	107	0,46	1,8
6	700	120	1,00	3,0
6	1000	244	1,00	3,0

# Gangway and truss

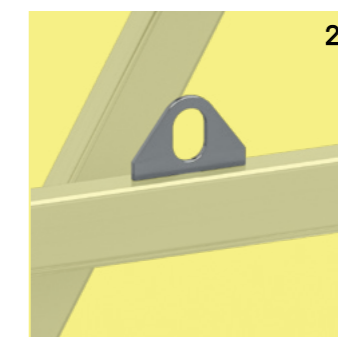
In a basic version of TAS gangway, angle regulation from 0 to 50 degrees applies only for modules from 3 to 12 steps. When it comes to 15 and 18 steps long stairs, the basic regulation is from 25 to 50 degrees. In order to enable using the longest variants as gangways, we have extended the product offer with a truss.

All the possible TAS gangway connections with a truss are presented below.

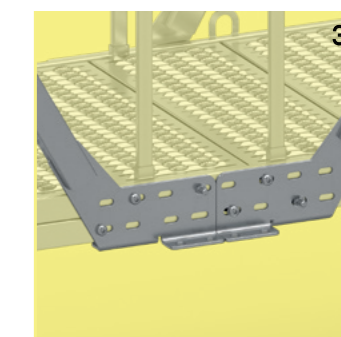
No.	Configuration	Assembly	Trench Width [mm]
1	TRUSS-15	15 steps gangway	4597
2	TRUSS-18	18 steps gangway	4407
3	TRUSS-2×15	Two 15 steps gangways	6812
4	TRUSS-15+18	15 and 18 steps gangways	7646
5	TRUSS-2×18	Two 18 steps gangways	8456



The initial connector between a truss and a gangway

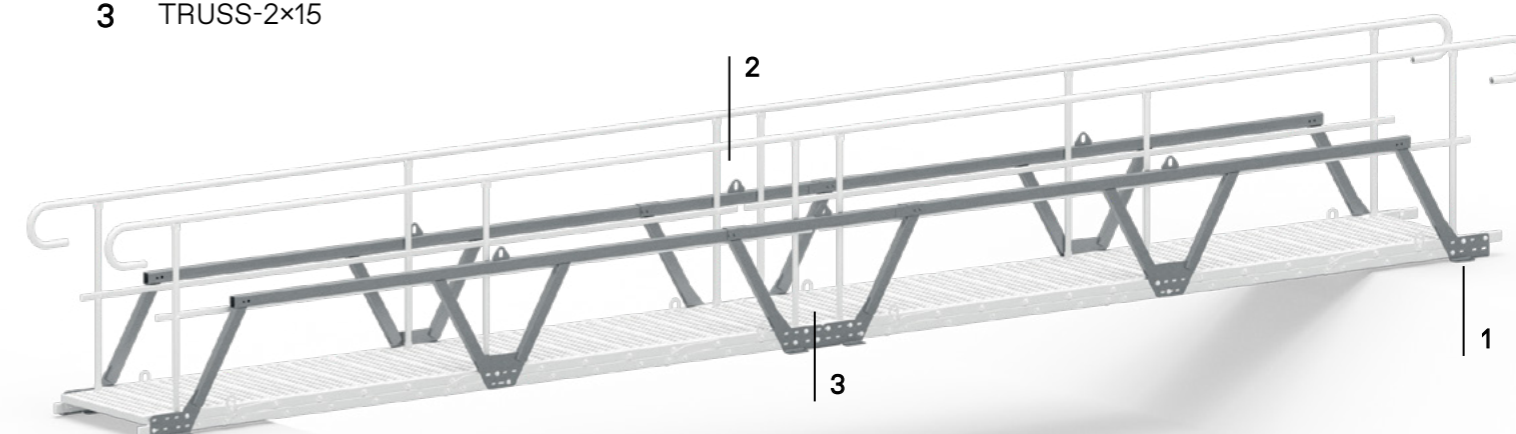


Handle for better truss relocation

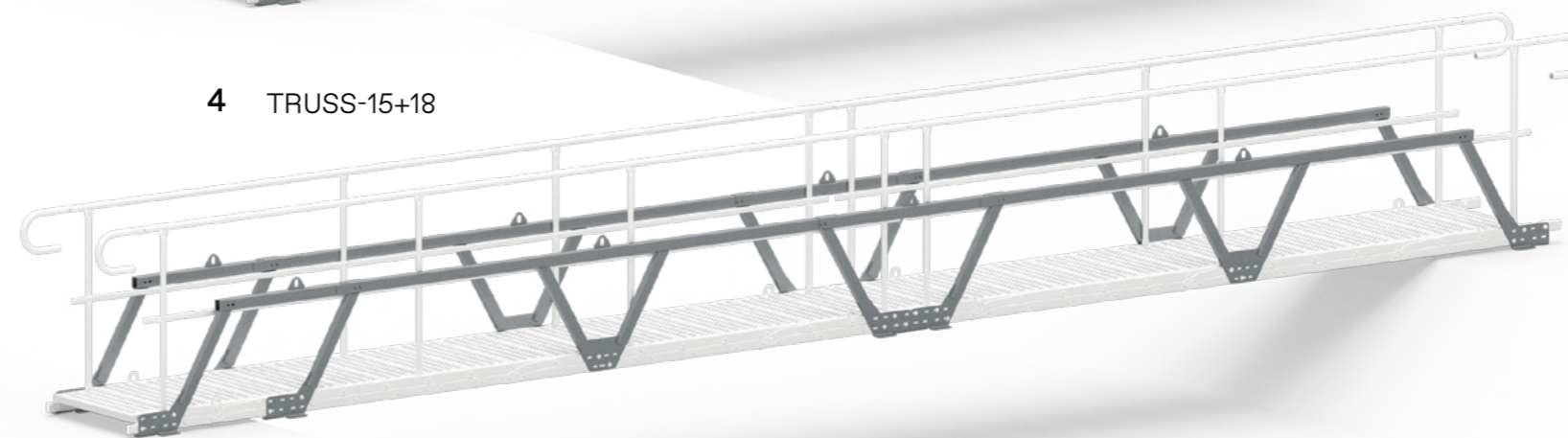


Gangways connection point

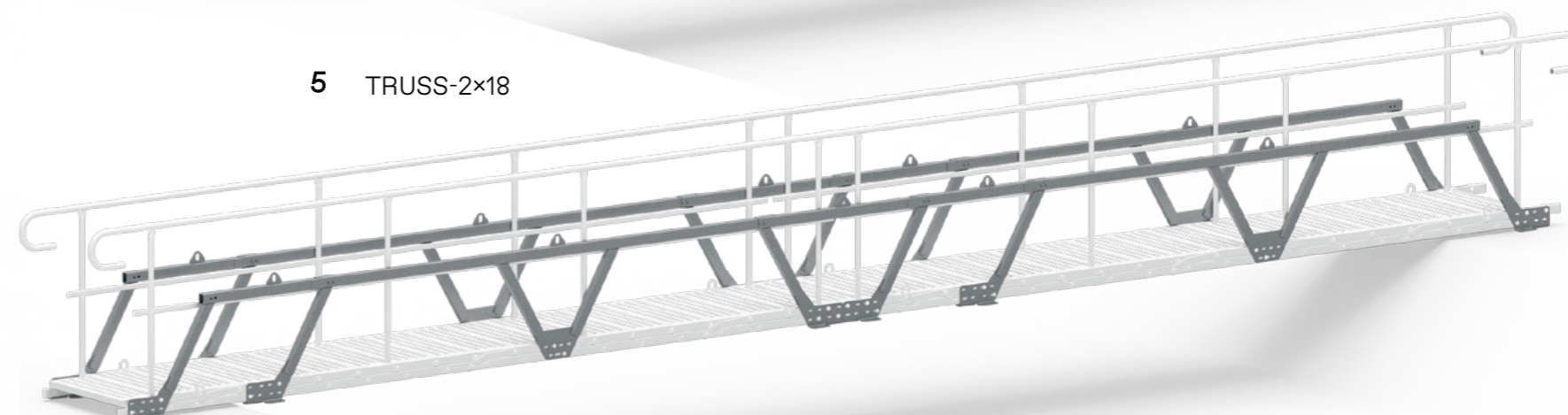
3 TRUSS-2×15



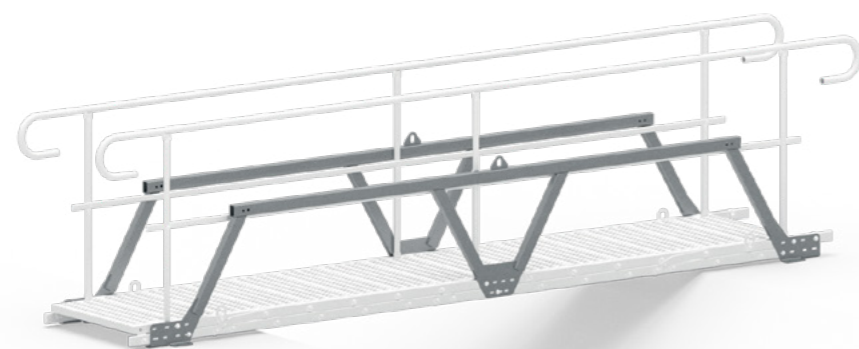
4 TRUSS-15+18



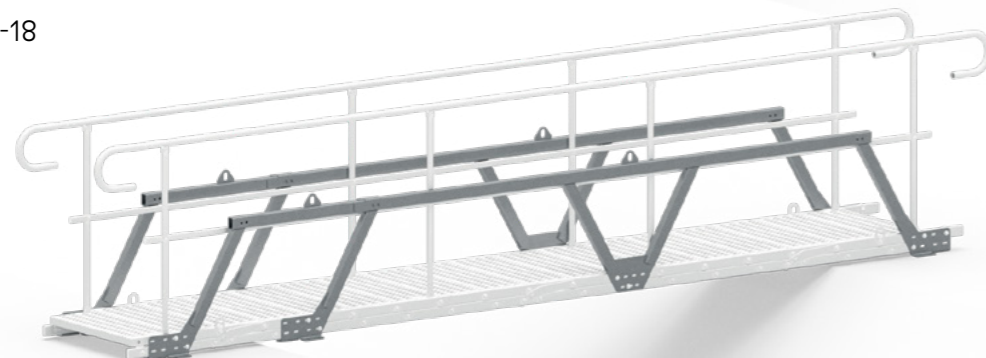
5 TRUSS-2×18



1 TRUSS-15

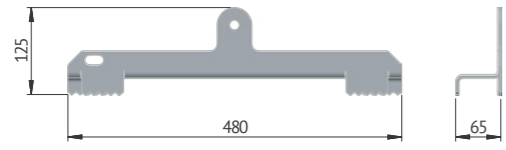


2 TRUSS-18



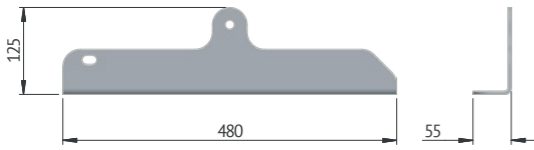
# Accessories

## Standard lower foot



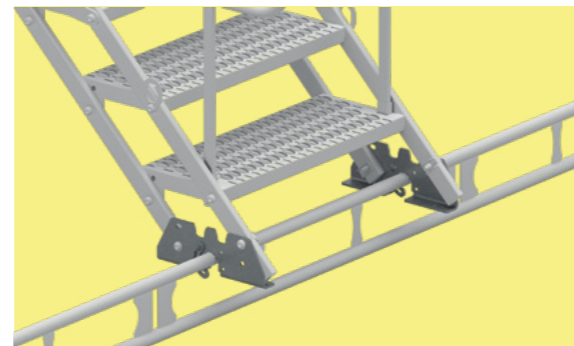
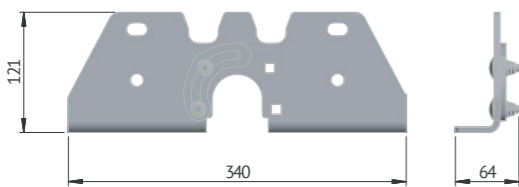
Destination	Weight	Article no.
Assembly of the lower part of the stairs on stabilized ground	1,8 kg	TAS-SDL2, TAS-SDP2

## Lower flat foot



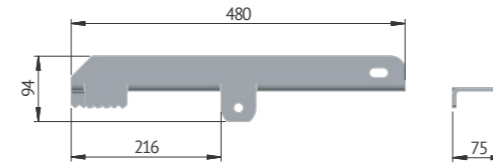
Destination	Weight	Article no.
Assembly of the lower stairs flight on a surface that allows anchoring, e.g. concrete, wood, steel structures etc.	2,2 kg	TAS-SDLH, TAS-SDPH

## Lower flat foot



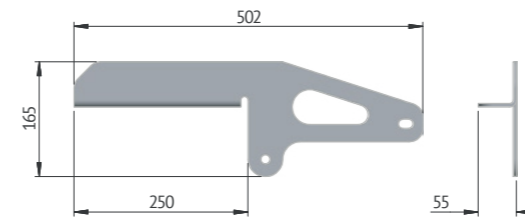
Destination	Weight	Article no.
Assembly of the lower part of the stairs on a scaffolding	2 kg	TAS-L16, TAS-L17

## Upper standard foot



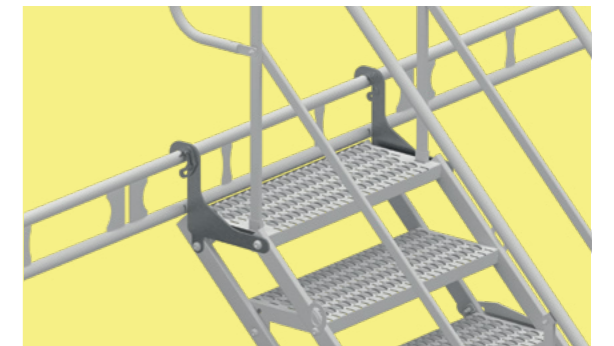
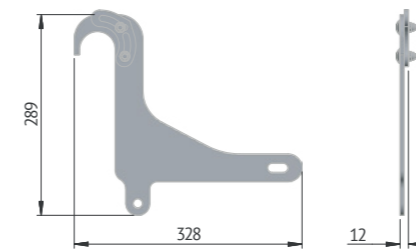
Destination	Weight	Article no.
Assembly of the upper stairs part on stabilized ground	2 kg	TAS-SGL2, TAS-SGP2

## Upper foot levelling the final step



Destination	Weight	Article no.
Assembly of the upper stair flight on a surface that allows anchoring, e.g. concrete, wood, steel structures, etc.	1,9 kg	TAS-SGLH, TAS-SGPH

## Upper scaffolding chuck



Destination	Weight	Article no.
Assembly of the upper part of the stairs on a scaffolding	1,3 kg	TAS-L14, TAS-L15



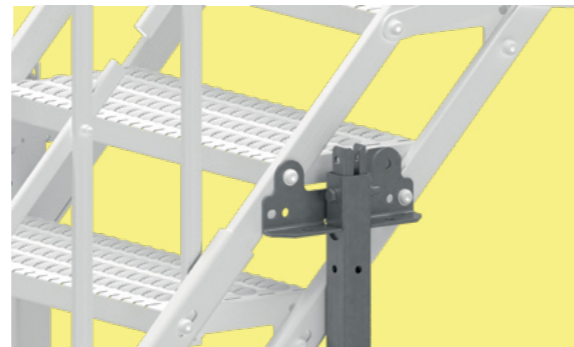
# Accessories

Upper foot that lowers final step.



Destination	Weight	Article no.
Upper foot that lowers final step	2,1 kg	TAS-L26

Stairs support / pole



Destination	Weight	Article no.
Stairs support	25,5 kg	TAS-PR5

TAS-L12 for 700mm and TAS-L6 for 1000mm stair fasteners



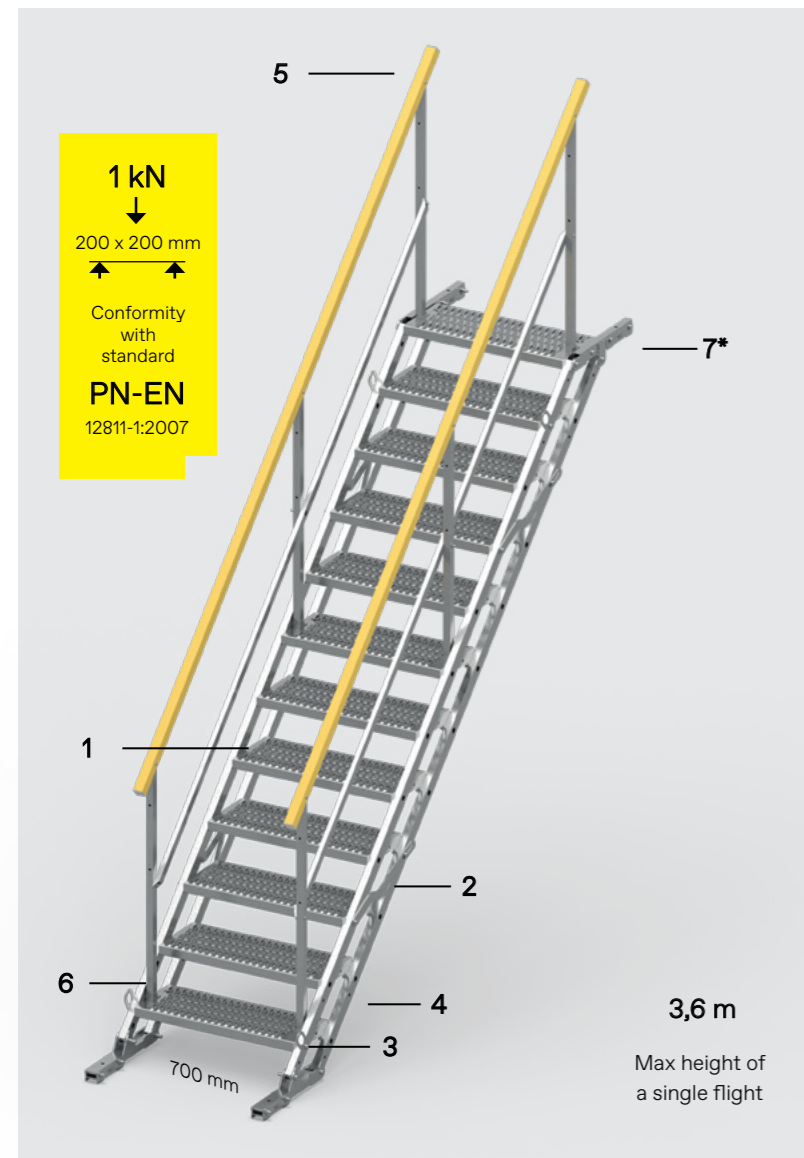
Destination	Weight	Article no.
Stairs fastener L6 dedicated for 1000mm wide stairs, and L12 for 700mm wide stairs	TAS-L6 3,1 kg, TAS-L12 2,8 kg	TAS-L6, TAS-L12



# Key features of the system

The product offer has been expanded with TAS stairs made of aluminum, which significantly reduces stairs weight while maintaining its functionality.

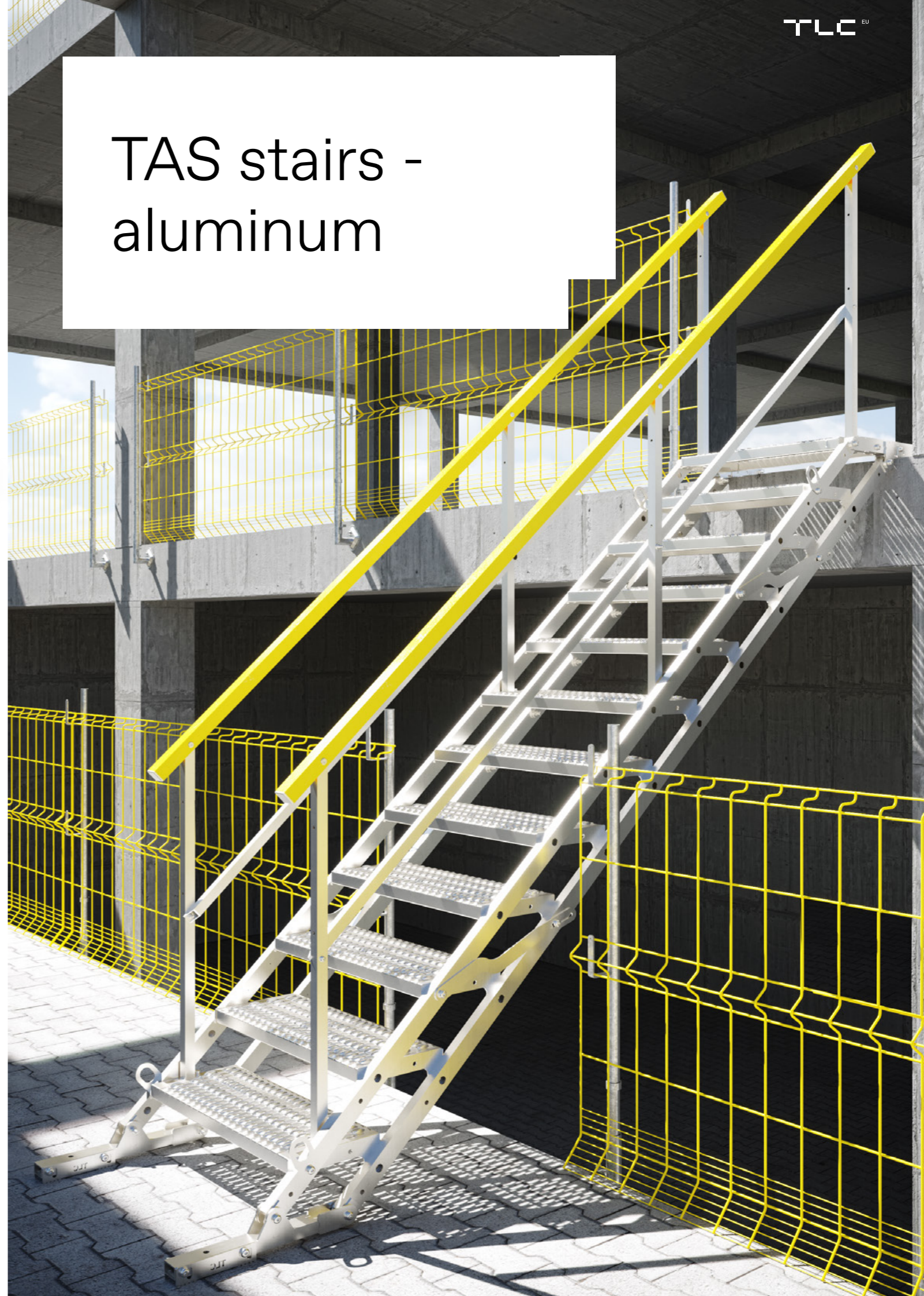
- Low weight - easy transport, assembly and disassembly
- Wide range of possible angles: 0 to 50 degrees
- Modularity - available in modules from 3 to 18 steps in a single flight
- Possibility to assemble railing on one or both sides
- Possibility to use a holder that lowers the last step (additional option)
- Automatic steps levelling



- 1 Anti-skid and self-cleaning steps
- 2 Safety locks preventing from folding
- 3 Practical transport grips
- 4 Anti-skid grips at bottom and top of the stairs
- 5 Single or double railing
- 6 Socket for fast railing installation
- 7\* Possibility to use a handle lowering last step

The stairs meet the requirements of the PN-EN 12811-1:2007 requirements regarding the class 1 carrying capacity (1 kN on 200×200mm surface) and are adapted for self-assembly with the use of a crane.

# TAS stairs - aluminum



# Lenght selection and stairs setup

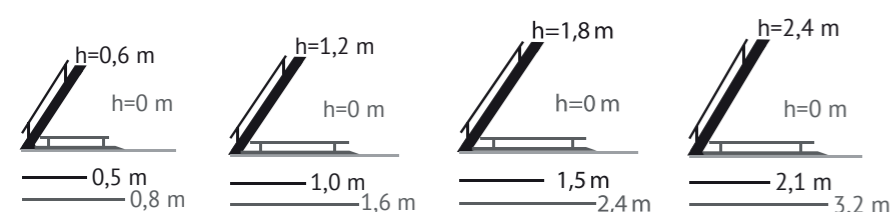
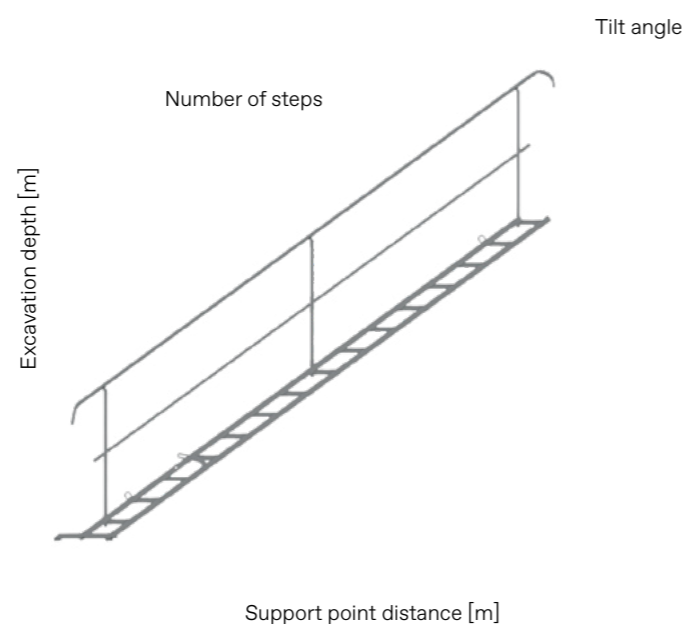
Temporary aluminum stairs system can consists of 6 basic modules of 3, 6, 9, 12, 15, 18 steps. Angle regulation is possible from 0° to 50° for modules from 3 to 12 steps, and from 25° do 50° for 15- and 18-steps modules. The stairs, similar to their steel counterpart, are to be assembled on a previous prepared surface attaching the lower and the upper part. The table below shows basic parameters of the available modules.

Number of steps	3	6	9	12	15	18
Width [mm]	700	700	700	700	700	700
Height [m]	0-0,6	0-1,2	0-1,8	0-2,4	1,6-3,0	2,1-3,6
Weight [kg]*	26,2	42	61	73	90	106
Flight length [m]	0,8	1,61	2,42	3,23	4,05	4,86
Length of stairs with guardrails [m]	1,4	2,2	3	3,8	4,6	5,4
Max. number of users on the stairs	1	1	2	2	2	3
Possibility to use as a gangway	no	yes	yes	yes	no	no
Trench width [m]	-	1,17	1,98	2,78	4,60	4,40

\* weight includes stairs and two guardrails

Stairs location, i.e. their angle and distance between the lower upper end are determined on the diagram shown to the right as follows:

- Determine the excavation depth and mark the value on a vertical axis
- Taking into account the number of steps in the set, determine the angle of stairs - lead a horizontal line to the point of intersection with a curve.
- Determine the distance of the point of setting of the lower part of the stairs - vertical line to the intersection with horizontal axis.

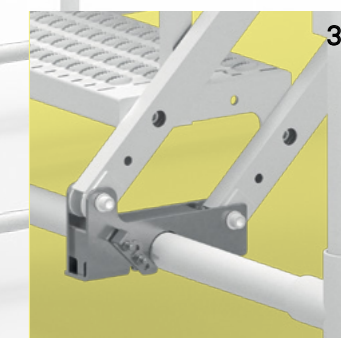
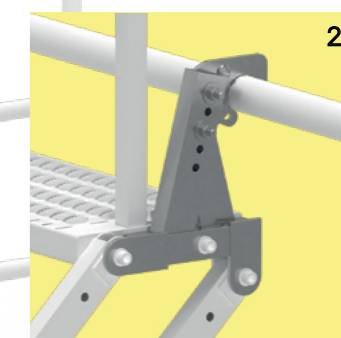
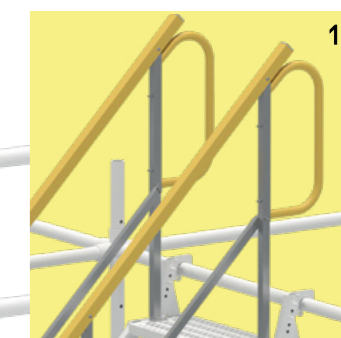
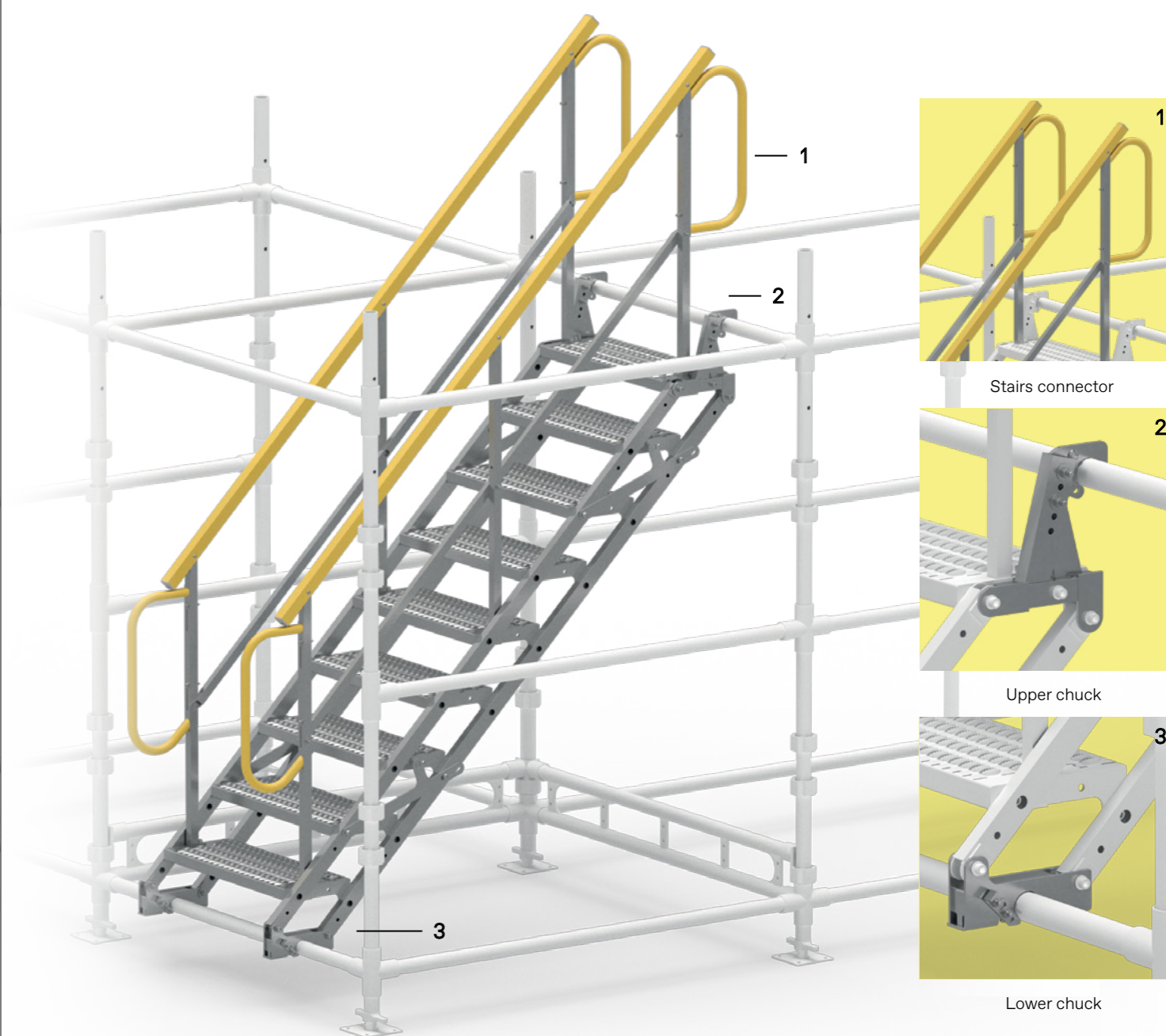


3 steps      6 steps      9 steps      12 steps      15 steps      18 steps

# Scaffolding chuck

In order to optimise and adapt the product to the needs of the construction site, we have extended the TAS offer with scaffolding chucks. The assembly process is fast and troublefree, as it only requires exchanging standard feet with dedicated chucks.

The assembly is conducted by hanging the upper stairs flight on horizontal traverse.



Lower chuck

Stairs connector

Upper chuck

# Accessoires

## Standard lower foot



Destination	Weight	Article no.
Assembly of the lower part of the stairs on stabilized ground	1,45 kg	TAS-SDAL

## Lower flat foot



Destination	Weight	Article no.
Assembly of the lower stairs flight on a surface that allows anchoring, e.g. concrete, wood, steel structures etc.	0,85 kg	TAS-SDAL1

## Lower scuffolding chuck



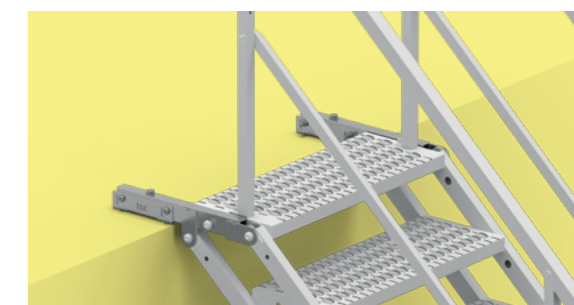
Destination	Weight	Article no.
Assembly of the lower part of the stairs on a scaffolding	0,7 kg	TAS-L21

## Upper scurrolding chuck



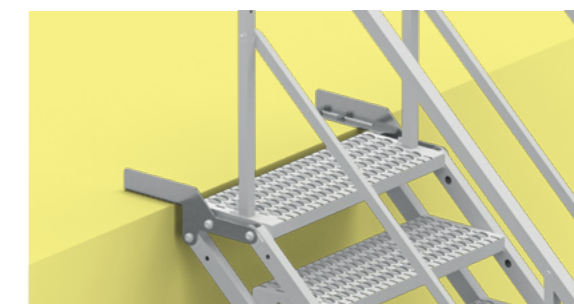
Destination	Weight	Article no.
Assembly of the upper part of the stairs on a scaffolding	1,7 kg	TAS-SGLH4, TAS-SGPH4

## Upper standard foot



Destination	Weight	Article no.
Assembly of the upper stairs part on stabilized ground	1,2 kg	TAS-SGLAL, TAS-SGPAL

## Upper foot levelling the final step



Destination	Weight	Article no.
Assembly of the upper stair flight on a surface that allows anchoring, e.g. concrete, wood, steel structures, etc.	1,5 kg	TAS-SGLH3, TAS-SGPH3

## Upper foot that lowers final step



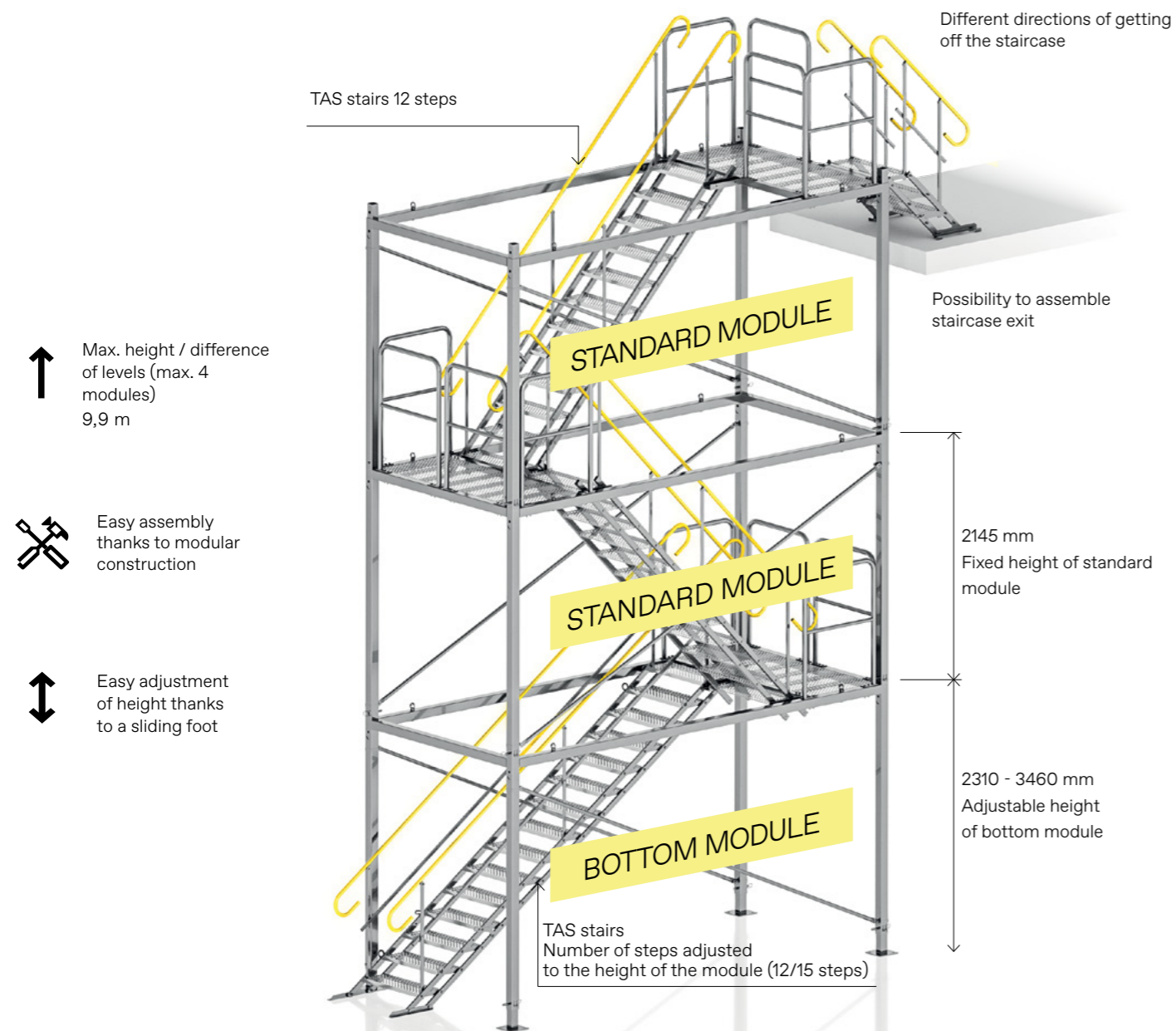
Destination	Weight	Article no.
Assembly of the upper stair flight on a surface that allows anchoring, e.g. concrete, wood, steel structures, etc.	3,1 kg	TAS-SGLH5, TAS-SGPH5

# Key featured of system

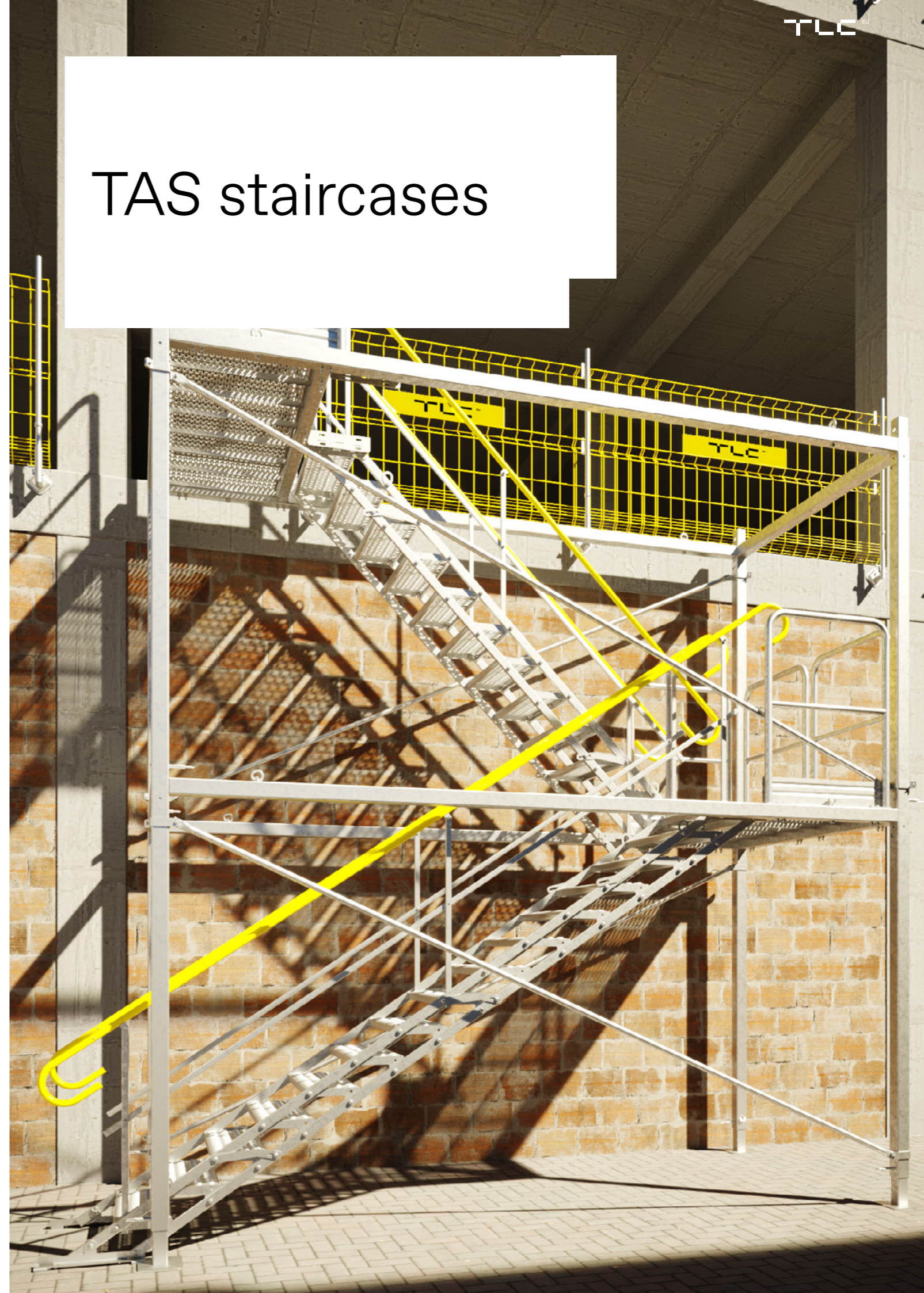
TAS Staircases have modular construction which allows for a great number of available heights and directories of getting off the staircase. The system consists of two modules: BOTTOM and STANDARD, as well as TAS temporary stairs. The standard module always includes 12-step stairs, and the bottom one's number of steps depends on the module's height.

Innovative solutions implemented in our staircases allow for safe communication even in the most demanding conditions.

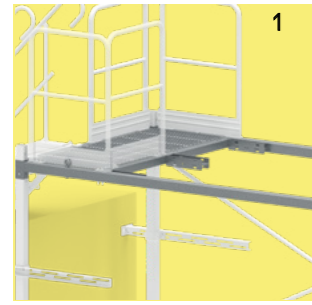
TAS staircase exit adapter was designed to eliminate level and distance differences between the staircase and the level you wishes to get to. The staircase has a 7-step regulation (every 195mm). By using the adapter, you receive smooth regulation.



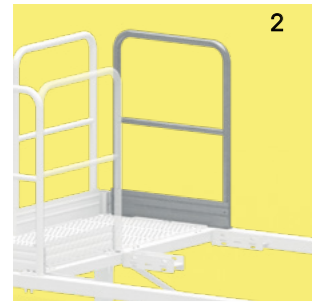
# TAS staircases



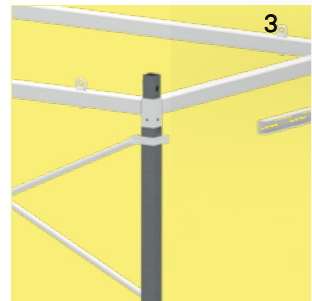
# Module elements



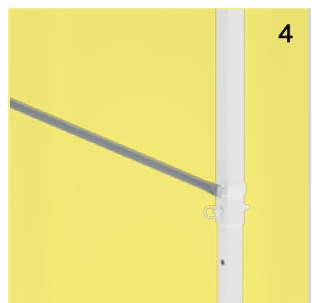
1  
Frame with non-slip platform



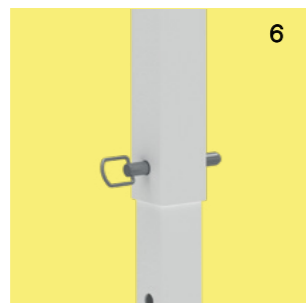
2  
Railing



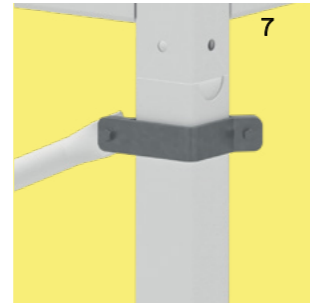
3  
Post



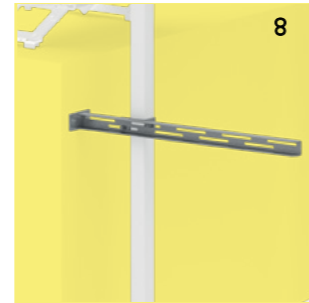
4  
Bracing



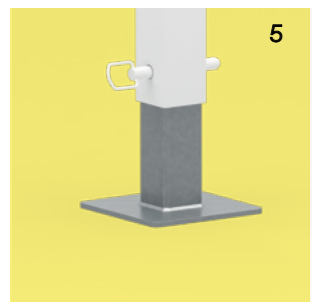
6  
Kingpin



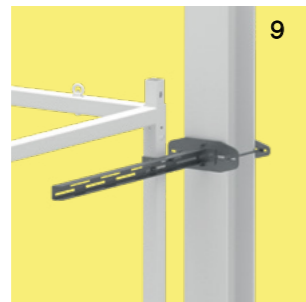
7  
Clamping rings



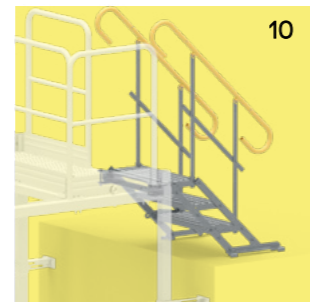
8  
Adapter - staircase exit



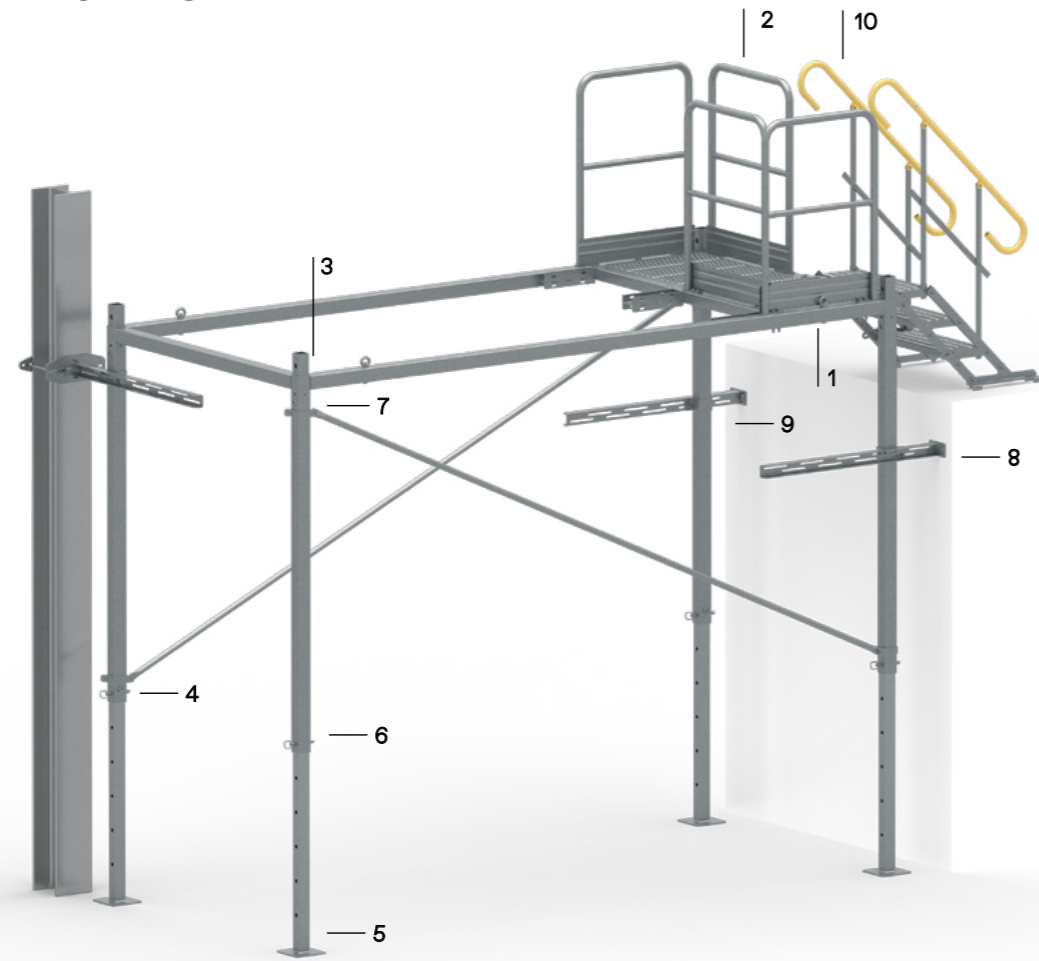
5  
Adjustable foot



9  
Element anchoring to the steel structures



10  
Component anchoring to the wall



The table below presents the list of main units for different types of modules.

No.	Index	Name	Quantity [pcs]		Weight of element (kg) *
			Bottom module	Standard module	
1	RA	Frame with platform	1	1	124
2	R-01	Railing	4	4	12
3	S-01	Post	4	4	21
4	X-01	Bracing	2	2	8
5	A-01	Foot	4	0	13
6	-	Kingpin	8	4	0,4
7	-	Clamping ring	4	4	0,15

TAS staircases manufactured by TLC comply with the requirements concerning load capacity in class 1 (1 kN of the surface of 200×200 mm). Staircases are adapted to self-assembly with the use of a crane.

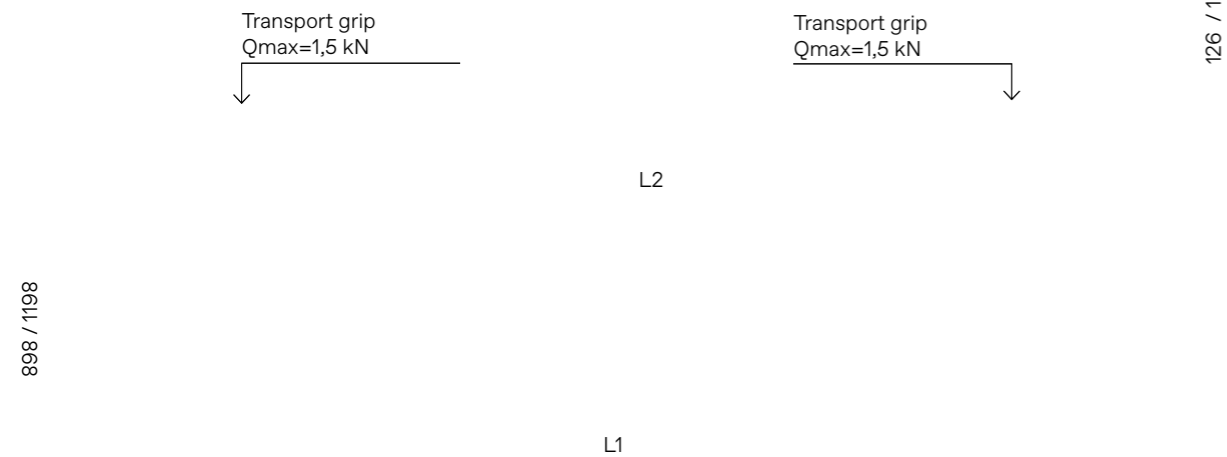
# Transport and storage of TAS stairs/gangways

TAS stairs should be transported and stored with disassembled railings and folded to a minimum to reduce the space necessary for transport and storage. Use transport grips to lift the stairs. Stairs weight and dimension depend on a chosen variant.

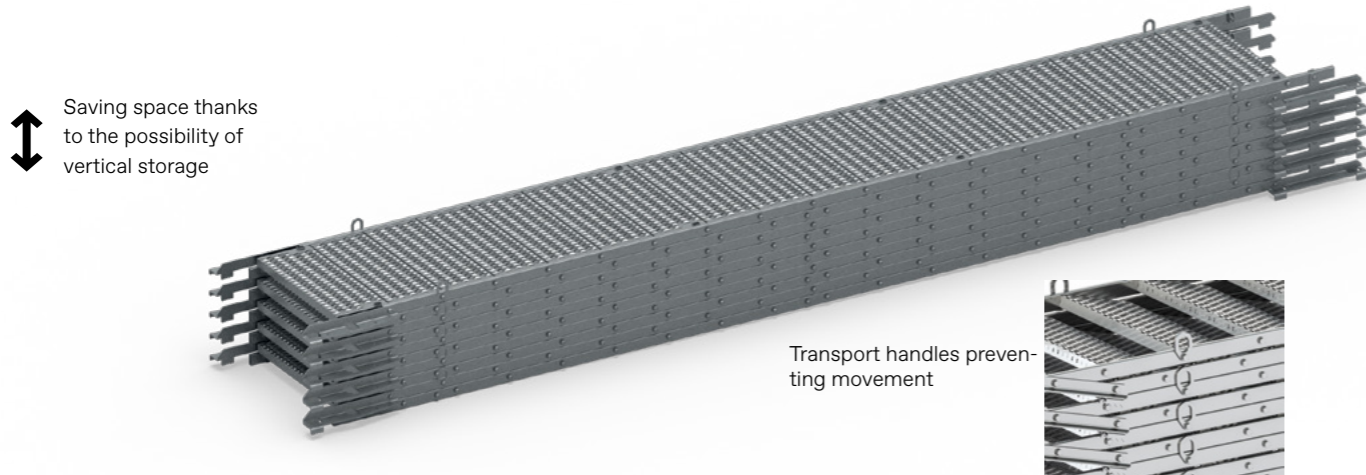
Note: Applies to standard version. Does not apply to scaffolding chucks.

Number of steps	Stairs width [mm] and material	3	6	9	12	15	18
Weight [kg] *	Steel 700	46,7	75,2	106,6	134	162,2	192,6
	Steel 1000	57	93,8	134,6	171,2	209	248,5
	Aluminium 700	26	42	61	73	90	106
Lenght when folded I [m]	L1	1,3	2,1	2,9	3,7	4,5	5,4
	L2	1,5	2,3	3,1	3,9	4,7	5,6

\*weight includes stairs and two guardrails



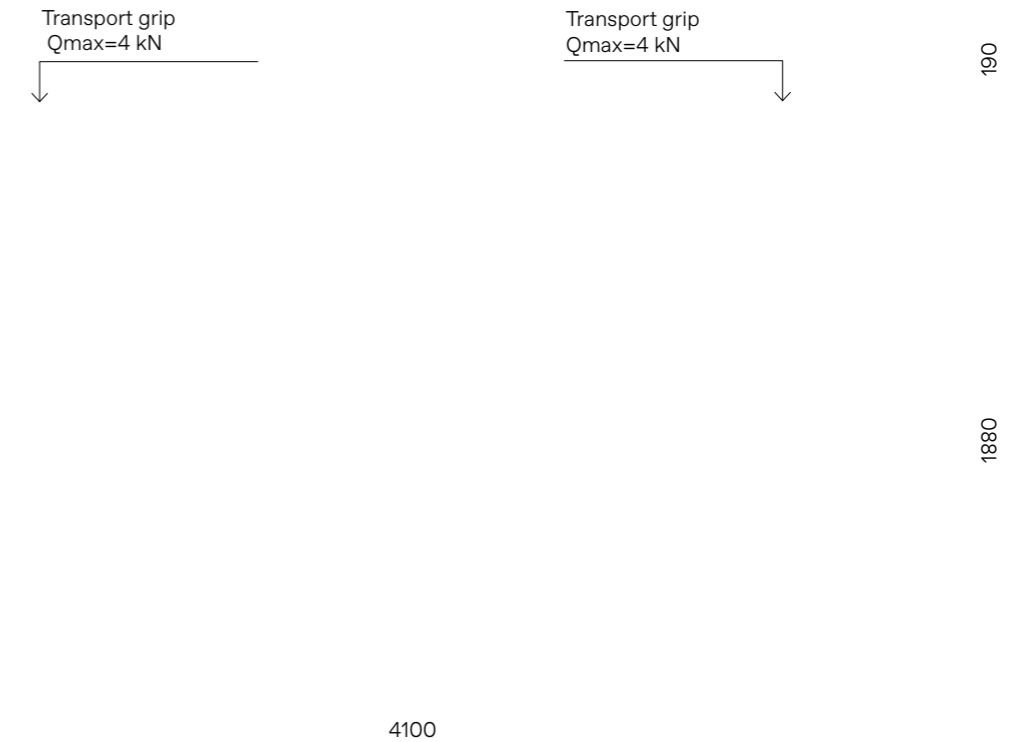
TAS stairs can be stored one on the top of the other. In order to secure the set from moving to the side, you can use transport grips - they should be set and locked with a mounting screw. See the picture below.



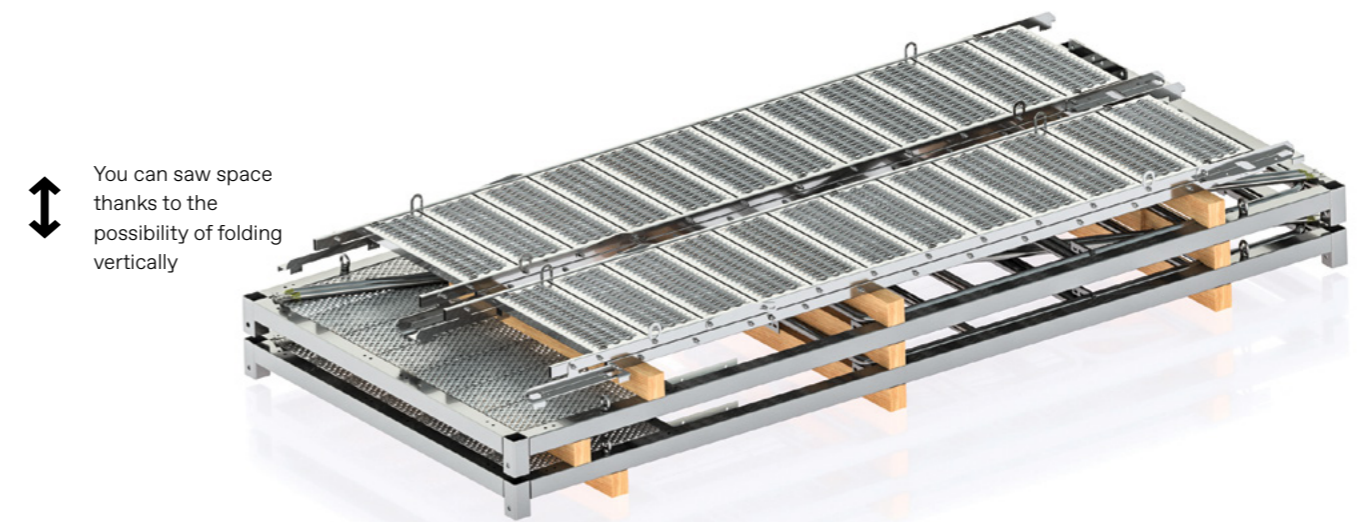
Maximum acceptable number of stored sets is 5.

# Transport and storage of TAS staircases

TAS staircases should be transported and stored disassembled with individual elements arranged as in the figure below. It reduces the space required to transport and store the product. The weight of individual modules, without flights, are as follows: 326 kg (bottom module) and 275 kg (standard module).



Disassembled TAS staircases can be stored one on the top of the other and transported together with TAS flights. In this case, the elements should be secured with wooden dividers (rectangle blocks). Individual elements should be fastened with transport belts.



Maximum acceptable number of stored sets is 3.

# Chosen realisation





