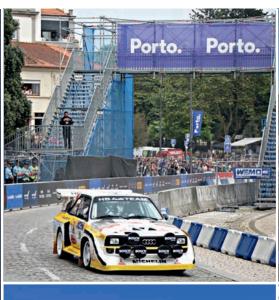


# LAYHER EVENT SYSTEMS CATALOGUE 2023/2024





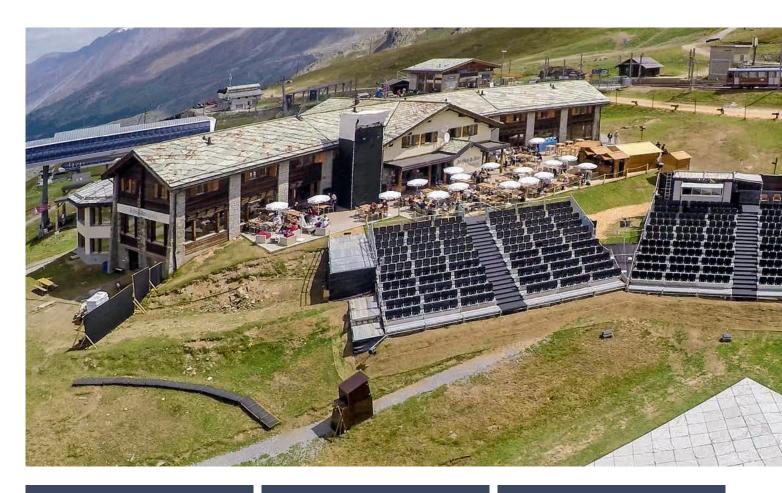






Edition 04.2023 Ref No. 8111.235

Quality management certified according to DIN EN ISO 9001



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# MIXED REALITY



In this catalogue, you can find images highlighted with the symbol for mixed reality.

By using the Layher App, you bring these scaffolding structures to life. Learn more and download the app:

app-en.layher.com

# PRODUCT PORTFOLIO



The Layher Product Range – all catalogues at a glance

SpeedyScaf
Allround Scaffolding
System-free Accessories
Protective Systems
Event Systems
Access Technology

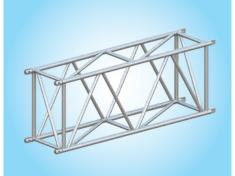
Ref. No. 8102.264 Ref. No. 8116.260 Ref. No. 8103.281 Ref. No. 8121.262 Ref. No. 8111.235 Ref. No. 8118.235

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Steel Truss System 40

# **NOTICE**

Subject to technical modification. Component weights are subject to fluctuations due to tolerances and may therefore diverge from what is specified.

Steel components are hot-dip galvanized according to EN ISO 1461 and DASt guideline 022. Connection parts or other small pieces can be galvanized according to EN ISO 4042.

Our deliveries shall be made exclusively in accordance with our at the conclusion of contract valid General Terms of Sale. These include the following provisions: The place of performance is Gueglingen-Eibensbach. Title to the delivered goods shall be retained until full payment has been made. The fully GTC you can find here: gtc.layher.com

Please request the specific instructions for assembly and use when ordering. Protected by copyright. Not to be reproduced, either in whole or in part. Misprints and errors excepted.

# **QUALITY MADE BY LAYHER**



## QUALITY MADE IN GERMANY.

Quality made by Layher comes from Gueglingen-Eibensbach. Our company has set down deep local roots since it was established. Right up until today, development, production and management, sales and export department are all in one place, where the conditions are best for achieving quality made by Layher: in Gueglingen-Eibensbach. The two locations together cover a surface area of 318,000 m². This includes more than 148,000 m² of covered production and storage areas.

# MORE POSSIBILITIES. THE SCAFFOLDING SYSTEM.

This brand promise made by Layher is the expression of a brand philosophy that we've been living by for over 75 years. More speed, more safety, more proximity, more simplicity and more future: values with which we strengthen our customers' competitiveness in the long term. With our innovative systems and solutions, we're working all the time on making scaffolding construction even simpler, even more economical and, above all, even safer.

#### SUSTAINABILITY AT LAYHER.

We've long been acting with a clear focus, with a view to both economic and ecological sustainability in all our process steps. Social responsibility towards employees, clients and society as a whole are at the very centre of this. We're a dependable employer, active in protecting our resources. The sparing use of work materials as a feature of our sustainable approach is fundamental to how we see ourselves: we already take care to ensure sustainable building methods when planning a new production facility, for example by greening the roofs or using photovoltaic systems. We also value locations that are close by, avoiding unnecessary  $\mathrm{CO}_2$  emissions due to long traffic routes. The topic of sustainability is firmly embedded in Layher's organisational structure thanks to its energy management team. Their work has paid off in particular in the form of DIN EN ISO 50001 certification.







# **MORE SPEED**

High level of material availability, effective delivery service and quick assembly and dismantling of the scaffolding systems thanks to 100% fitting accuracy.



# **MORE SAFETY**

Outstanding quality and precision coupled with a long service life — confirmed internationally through independent certifications, inspections and approvals. Continuity and long-term partnership.



# **MORE PROXIMITY**

Comprehensive personal consultation and close-knit delivery network. Global presence through our own subsidiaries. Family-owned company that works closely with its customers.



# **MORE SIMPLICITY**

Economical scaffolding systems that have been proven in practice, available with an extensive product range. Cross-system combinations for versatile use. Rapid decision making thanks to efficient structures and processes.



# **MORE FUTURE**

Thanks to permanent product innovations and the improvement of existing parts. By opening up new areas of business. With an integrated system to ensure high profitability and retention of investment value. Through an extensive range of training opportunities and seminars to ensure that customers are always right up-to-date with the latest technical and commercial developments.

Layher Lightweight: Through the use of high-tensile steel, a new production process, and an improved design, we have succeeded in minimising the weight of the core components of our systems — while maintaining or raising load-bearing capacity.

# Layher LayPLAN

Time and material are crucial factors in scaffolding construction. To make the most efficient use of both, the Layher range includes the practical LayPLAN scaffolding planning software.

## LayPLAN CAD

For more complex structures, LayPLAN CAD is available. This is a plug-in for Autodesk AutoCAD. It enables 3-dimensional planning of scaffolding structures of all types.

A visual collision check is possible with the aid of volume rendering. By using a convenient search function with preview image, scaffolding planners will find not only an extensive library of individual Layher parts, but also assemblies already prefabricated for even faster design work. The detailed drawings can then be printed out. A transfer to visualisation or animation software is also possible without any problem. This allows projects not only to be planned economically and at the same time adapted precisely to actual requirements, but also to be presented professionally to customers.

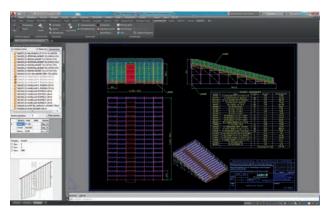
After finalisation of the scaffolding proposal, the LayPLAN Material Manager provides you with complete lists of required parts to ensure you always have precisely the material you need at the site.

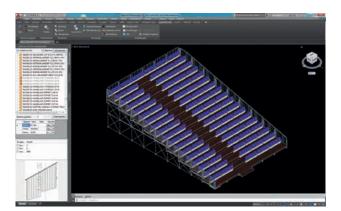
## How can I buy LayPLAN?

Registration and all the ordering processes can be conveniently accessed at the Layher website: http://software.layher.com

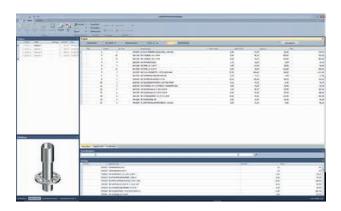
A contact form gives you the data to access our software portal, where you can download a 30-day test version and also find the order form for the full version.





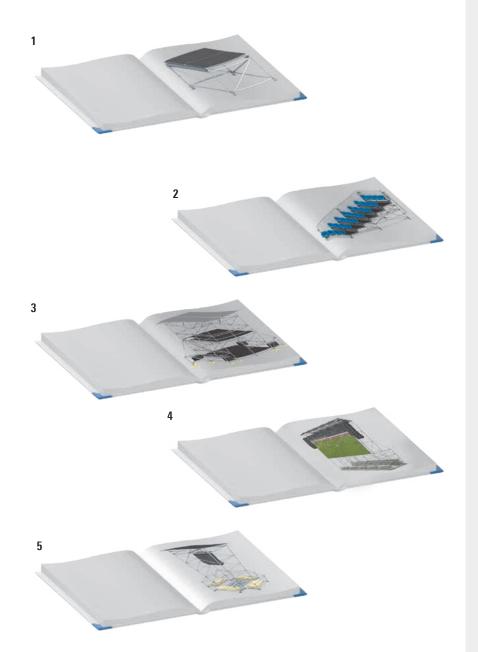


Planning of a grandstand in LayPLAN CAD



**Component images LayPLAN Material Manager** Part of LayPLAN CLASSIC and LayPLAN CAD

Pos	Description	Weight approx. [kg]	Ref. No.
1	LayPLAN CAD Single licence — plug-in for AutoCAD, for designing complex scaffolding in 3D and for developing scaffolding proposals from LayPLAN CLASSIC		6345.103



Events held outdoors frequently require the building of structures (structural systems) such as stages, stands, FOH Towers, video wall systems or PA Towers.

If these structural systems are both suitable and intended for repeated assembly and dismantling at different locations, they are deemed to be Temporary Structures.

Temporary Structures require Model Approval before they are erected and put into service for the first time.

Model Approval is granted for a defined period that should not exceed five years. It can be extended a further five years on written request. Model Approval and its extension is entered in an **inspection book**.

The inspection book contains:

- ▶ Detailed plans of the entire structure
- Detailed part drawings
- ▶ Appropriate excerpts from approvals, where these are referred to in the structural strength analysis
- ➤ Complete and verifiable structural strength analysis according to valid laws, provisions and standards
- Certificates
- ▶ Test Report

Our customers can obtain from Layher inspection books for modular and standardised structures. Accordingly, the assembly variants can be clearly defined, and the typical variants can be verified in structural strength calculations.

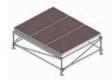
Pos.	Description	Weight approx. [kg]	PU [pcs.]	Ref. No.	
1	Inspection book for Event Podium				
	for EV 86	1.00		5400.002	<b>(</b>
	for EV 100	1.50		5400.004	<b>(</b>
	for EV 104	1.50		5400.005	<b>(</b>
2	Inspection book for Event Stand				
	for EV 86	2.50		5400.007	<b>(</b>
	for EV 86Q	1.00		5400.003	(1)
	for EV 100	2.00		5400.101	<b>(</b>
	for EV 104	2.50		5400.006	<b>(</b>
3	Inspection book for FOH Tower for EV 100 and EV 104	3.20		5400.150	<b>(</b>
4	Inspection book for video wall system for EV 100 and EV 104	3.00		5400.160	<b>(</b>
5	Inspection book for PA Tower PLUS for EV 100 and EV 104	1.00		5400.170	<b>(</b>

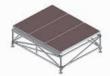
# LAYHER PODIUMS AND STAND SYSTEMS

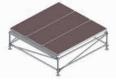
# **DECISION-MAKING AIDS**

# LAYHER PODIUMS

Layher podiums are just as suitable for use inside halls and marquees as use outdoors. The components make up a construction kit allowing the building of a small podium for fashion shows, for a music performance or for a giant concert stage. The parts are weatherproof, thanks to the use of aluminium, hot-dip galvanized steel and coated plywood panels. On uneven surfaces, fast and easy adaptability of the Allround podiums to the lie of the land is a particular advantage. The permissible loading capacity of the podium surface is up to  $7.5 \, \text{kN/m}^2$ . The height can, depending on the structural strength, be up to 10 m. Meeting of the guidelines for temporary structures with the design loads as per EN 13814 is verified by inspection books issued by the competent authority.











Module	EV 86	EV 86+	EV 86Q	EV 100 Metric*	EV 104
Bay	2.07 x 2.57 m	2.07 x 2.57 m	2.57 x 2.57 m	2.00 x 2.00 m	2.07 x 2.07 m
Deck type	Event deck				
Deck size	0.86 x 2.07 m	0.86 x 2.07 m	0.86 x 2.57 m	1.00 x 2.00 m	1.04 x 2.07 m
Decks per bay	3	3	3	2	2
Support element	Event transom				
Support element length	2.57 m	2.57 m	2.57 m	2.00 m	2.07 m
Crosspiece support	-	required	_	-	-
Perm. load capacity	5.0 kN/m <sup>2</sup>	7.5 kN/m <sup>2</sup>	5.0 kN/m <sup>2</sup>	7.5 kN/m <sup>2</sup>	7.5 kN/m <sup>2</sup>

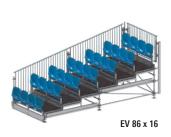


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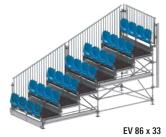
# LAYHER STANDS

The most important characteristics of Layher seating stands are: sturdy material, sound workmanship, long service life, rapid assembly at changing locations, and low transport volume. The individual parts are easy to assemble and lightweight, so that they can be installed manually. Please refer to our

tables in this connection. Thanks to the modular design, it is possible to adapt the stand to the local conditions and to plan it in accordance with local regulations.









Seating stand	EV 86 x 16	EV 86 x 25	EV 86 x 33	EV 100 x 25 Metric*	EV 104 x 25
Step width	0.857 m	0.857 m	0.857 m	1.00 m	1.036 m
Step height	0.166 m	0.25 m	0.333 m	0.25 m	0.25 m
Riser angle	11.1°	16.3°	21.2°	14.0°	13.6°
Riser angle	19.4 %	29.2 %	38.9 %	25.0 %	24.1 %
Standard dimension	2.57 x 2.07 m	2.57 x 2.07 m	2.57 x 2.07 m	2.00 x 2.00 m	2.07 x 2.07 m
Loose seating	possible	possible	possible	recommended	recommended
Permanently fitted benches	recommended	recommended	recommended	possible	possible

More variants upon request.

# LAYHER EVENT STAGES AND PODIUMS

LAYHER STAGES AND PODIUMS - EASIER, QUICKER AND SAFER BY USING THE MODULAR LAYHER SYSTEM



No compromising on site, fulfils requirements in terms of dimension and equipment: Layher Event Stages and Podiums.

Layher podiums and stages provide a safe play performance area that's exactly what's needed. Series manufacture and high delivery readiness are our way to help you cut costs and achieve economic success; and tailor-made special solutions whenever necessary are our strengths.

# THE BENEFITS FOR YOU:

## ▶ Basic unit

Can be expanded with a choice of layouts, standard dimensions and performing levels.

# Expandable

Caters for requirements with a variety of roof and support systems.

## ▶ Allround base

High load-bearing capacity, rapid assembly and dismantling.

# ▶ Practically-minded design

Strong connector technology, ergonomic handling, low-wear aluminium parts, corrosion-proof thanks to hot-dip galvanisation, space-saving storage.



Parts from the Layher Allround Scaffolding construction kit are used as the substructure for podiums.

The diagonal braces LW 1-4 with rotatable wedge heads further brace the basic system consisting of standards and ledgers, providing convincingly high connection values.

The **O-ledgers LW horizontal-diagonal 5** can be used as an assembly aid to ensure rectangularity in the ground plan. Many structures exploit the bracing effect of the horizontal-diagonal braces.

The O-ledgers horizontal-diagonal have:

- straight-welded wedge heads for a square ground plan
- by obliquely welded wedge heads for a rectangular ground plan

The O-ledgers LW 6 with welded wedge heads connect the standards to one another.

The standards LW 10 are made from hot-dip-galvanized steel tube d=48.3 mm. The rosettes spaced 0.50 m apart permit the connection of ledgers 6 and diagonal braces 1-4.

To connect the individual standards, **spigots 7** are used. The latter are fastened in the lower standard using special bolts M12 x 60 with nut 9. The upper standard is pinned using hinged pins 8. Alternatively, also using special bolts 9.

The standard LW 0.67 m 10 and the standard LW 1.16 m can be used alternatively for stages with heights of 0.90 m and 1.40 m respectively, enabling the base collar to be omitted. Assembly proceeds faster, and ballast can be placed at the bottom scaffolding level. The standard 1.16 m can be extended using spigots 7.

The **standard lock 0.50 m 11** can create a pull-resistant connection between the base collar and the standard. It is needed if the ballast has to be placed at the lowest scaffolding level.





height is about 0.35 m, for plates 60 solid 14, base which base plates 20 13 collars 12b and standards and base collars short 12a without spigots 10, in the are used.

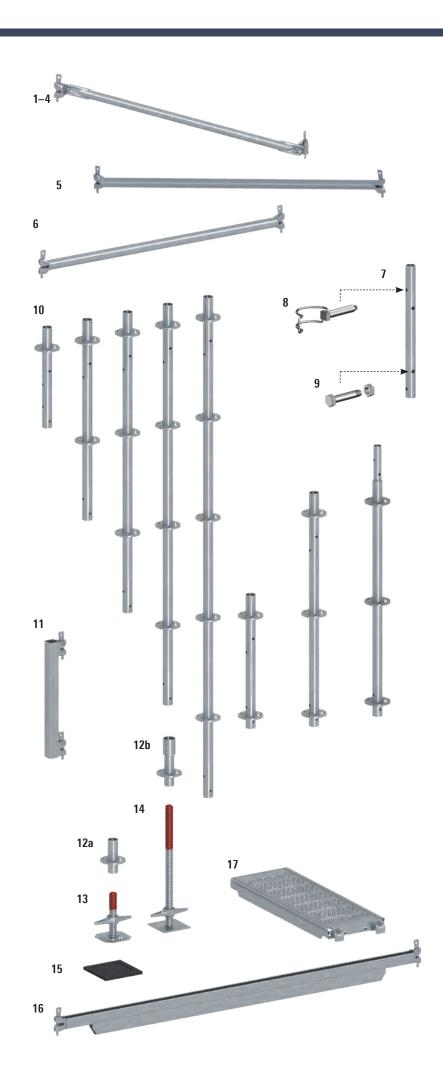
The lowest possible podium For greater heights, base appropriate length are used.

The rubber pad 15 minimises slippage of the structure and helps to protect sensitive indoor floors. Inserted between the load-distributing support and the base plate, it can help in many cases to reduce the amount of ballast.









Pos.	Description	Use up to load class		Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	Ref. No.	
1	Diagonal brace LW, steel, 2.00 m bay height							
	1.00 m bay length			2.22	7.30	50	2683.100	
	1.04 m bay length			2.23	7.60	50	2683.104	
	2.00 m bay length			2.76	9.10	50	2683.200	
	2.07 m bay length			2.81	9.20	50	2683.207	
	2.57 m bay length			3.18	10.00	50	2683.257	
2	Diagonal brace LW, steel, 1.50 m bay height							
	1.00 m bay length			1.77	6.20	50	2682.100	1000
	1.04 m bay length			1.79	6.20	50	2682.104	<u>==</u>
	2.00 m bay length			2.42	8.00	50	2682.200	1000
	2.07 m bay length			2.48	8.20	50	2682.207	2000
	2.57 m bay length			2.89	9.50	50	2682.257	2000
3	Diagonal brace LW, steel, 1.00 m bay height							
	1.00 m bay length			1.36	5.00	50	2681.100	1225
	1.04 m bay length			1.39	5.10	50	2681.104	1000
	2.00 m bay length			2.14	7.20	50	2681.200	222
	2.07 m bay length			2.20	7.40	50	2681.207	
	2.57 m bay length			2.66	8.60	50	2681.257	
4	Diagonal brace LW, steel, 0.50 m bay height							
	1.00 m bay length			1.03	4.30	50	2680.100	<u>::::</u>
	1.04 m bay length			1.08	4.20	50	2680.104	
	2.00 m bay length			1.96	6.70	50	2680.200	
	2.07 m bay length			2.03	6.90	50	2680.207	
	2.57 m bay length			2.51	8.20	50	2680.257	
5	O-ledger LW, horizontal-diagonal, steel			2.01	0.20	30	2000.237	-
J	for 2.00 m bay length, 1.00 m bay width, left			2.23	7.83	50	2678.201	1224
	for 2.00 m bay length, 2.00 m bay width			2.23	9.60	50	2678.201	
	, , ,							
	for 2.07 m bay length, 1.04 m bay width, left			2.32	8.08	50	2678.206	
	for 2.07 m bay length, 2.07 m bay width			2.93	10.00	50	2678.207	
	for 2.57 m bay length, 2.07 m bay width, right			3.30	11.20	50	2678.255	
•	for 2.57 m bay length, 2.57 m bay width			3.64	12.20	50	2678.257	===
6	O-ledger LW			0.00	0.00			
	steel, with AutoLock function			0.86	3.30	50	2601.086	
				1.04	3.80	50	2601.103	
				1.72	5.90	50	2601.172	
				2.07	7.00	50	2601.207	
				2.57	8.50	50	2601.257	
	steel, metric with AutoLock function			1.00	3.70	50	2601.100	
				2.00	6.80	50	2601.200	1000
7	Spigot, steel			0.52	1.60	350	2605.000	1222
	for standards Ref. No. 2619.xxx and 2604.xxx							
8	<b>Spigot,</b> d=12 mm with pan-head				1.60			
9	Special bolt M12 x 60, with nut		19		4.00	50 ⊞	4905.062	
10	Standard LW							
	steel, without spigot, for scaffolding layer			0.50	2.20	300	2619.050	
				1.00	4.40	28	2619.100	-
				1.50	6.60	28	2619.150	
				2.00	8.80	28	2619.200	
				2.50	11.00	28	2619.250	
				3.00	13.20	28	2619.300	
	steel, 0.67 m, with 2 rosettes, without spigot, with integrated			0.67	3.27	200	2619.066	
	base collar			0.07	0.27			
	steel, 1.16 m, with 3 rosettes, without spigot, with integrated			1.16	5.47	28	2619.116	200
	base collar							
	steel, with integrally shaped spigot, with cross-drilling, for use as			1.16	5.75	28	2617.116	200
	standard and suspended scaffolding standard							
11	Standard lock, 0.50 m			0.58	4.00	100	2603.000	<u>==</u>
12	Base collar							
	a) short			0.17	1.05	250	5601.000	
	b) normal			0.24	1.41	500	2602.000	
13	Base plate 20			0.20	2.30	200	5602.020	<u>==1</u>
	without lock (max. spindle travel 10 cm)							
14	Base plate 60			0.58	6.70	200	5602.060	1222
45	solid, without lock (max. spindle travel 41 cm)			0.00	2.1-	40	4000	y.0
15	Rubber pad for base plate			0.20 x 0.20	0.43	10	4000.500	***
16	for slip-reduction and to protect sensitive deckings from damages							
16	U-ledger reinforced LW T14			0.00	10.50	FO	2040.000	po/l
	steel, metric			2.00	12.50	50	2618.200	
	steel			2.07	12.70	50	2618.207	
17	U-steel deck LW, 0.32 m wide	IND 6		1.00 x 0.32	7.20	60	3883.100	
	steel, hot-dip galvanized, perforated, non-slip working surface	IND 6		1.04 x 0.32	7.40	60	3883.104	
		IND 6		2.00 x 0.32	12.90	60	3883.200	(B)
		0		2.07 x 0.32	12.30	00	3883.207	

# Podiums – Basic components

The plywood board of the **Event decks T16 1** is riveted onto an aluminium frame and is also supported by cross rungs. All four sides of the Event decks can be fitted into the Event crosspiece. The removable plastic corners allow the vertical tubes to be passed through.

The **X-Event decks T16 2** have plywood boards with rectangular corners. The detachable plastic corners are not removable. Guardrails can be mounted by using posts Ref. No. 5406.000 to the podium.

The Event decks with lengths of up to 2.07 m are rated for a load of 7.5 kN /  $m^2$ . The Event deck 2.57 m can withstand 5.0 kN /  $m^2$ .

The 18 cm high **Event transom 3** made of aluminium section with wedge head connection of galvanized steel is used as a support for the Event decks.

The loading capacity of the  $2.57\,m$  long Event crosspiece can be increased from  $5.0\,kN/m^2$  to  $7.5\,kN/m^2$  by fitting the **transom support 4**.

The **Tension clasp 5** of spring steel connects the Event deck to the Event transom and acts as a lock against lift-off.

A fully closed podium surface is assured by a shift preventer at the edge of the podium assembled using square half coupler 6.

Optionally, the Event decks can be connected to one another using the **clamp 7/8** made of plastic.

The Event decks are supplied with plastic corners fitted. The matching **plastic corners 9** are available in packaging units of 50 as spare parts.

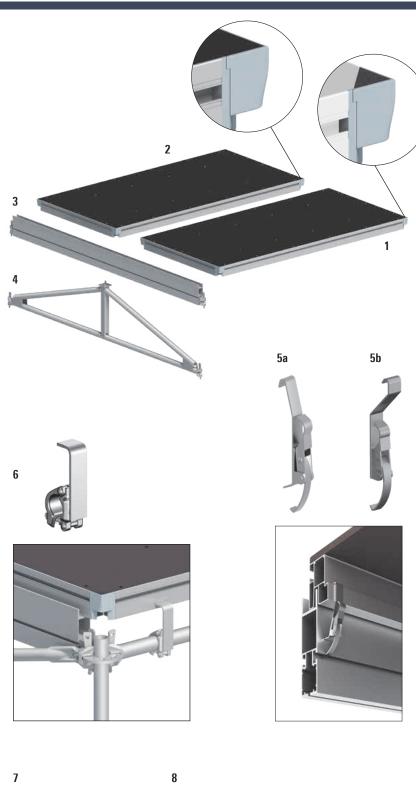
The design variant of the existing Event decks should be taken into account when ordering toggle latches, clamps and plastic corners.

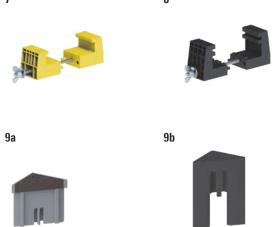
Year built after 2016: Event deck T16
Year built 2007 – 2016: Event deck T10 and T7
Year built 2004 – 2007: Event deck T4

Year built 2001 – 2004: Event deck T1



For the basic variants of the podiums, an inspection book can be ordered. See page 7.





Pos.	Description	Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	Ref. No.	
1	Event deck T16					
	aluminium frame, coated plywood, detachable plastic corners, for EV 86	0.86 x 1.04	16.86	10	5402.201	(I)
	didifficially, course prywood, doublinds placed comolo, for Ev oo	0.86 x 1.57	23.47	10		<u></u>
		0.86 x 2.07	30.21	10	5402.202	
	aluminium frame, coated plywood, detachable plastic corners, for EV 86Q	0.86 x 2.57	36.68	10	5402.202	
	didinimal name, coated prywood, actachable placed comors, for EV oog	0.00 X 2.07	00.00	10	3102.201	
	aluminium frame, coated plywood, detachable plastic corners, for EV 100	1.00 x 1.00	18.30	10	5402.205	<b>(</b>
		1.00 x 2.00	32.52	10	5402.206	100
	aluminium frame, coated plywood, detachable plastic corners, for EV 104	1.04 x 1.04	19.25	10	5402.208	<b>(</b>
		1.04 x 2.07	34.27	10	5402.209	1200
2	X-Event deck T16					
	aluminium frame, coated plywood, not detachable plastic corners, for EV 86	0.86 x 1.04	16.86	10	5402.211	<b>(</b>
		0.86 x 2.07	30.21	10	5402.212	<b>(</b>
	aluminium frame, coated plywood, not detachable plastic corners, for EV 86Q	0.86 x 2.57	36.68	10	5402.214	<b>(</b>
		4.00 4.00	40.00	40	E400.04E	<b>(T)</b>
	aluminium frame, coated plywood, not detachable plastic corners, for EV 100	1.00 x 1.00	18.30	10		( <u>+</u> )
		1.00 x 2.00	32.52	10	5402.216	
	aluminium frame, coated plywood, not detachable plastic corners, for EV 104	1.04 x 1.04	19.25	10	5402.218	
		1.04 x 2.07	34.27	10	5402.219	<b>(</b>
3	Event transom					
	for EV 86	0.86	6.10	60	5400.072	
		1.71	10.00	60		
	for EV 100	1.00	6.40	60	5400.010	
		2.00	11.40	60	5400.040	
	for EV 104	1.04	6.60	60	5400.020	1000/
		2.07	12.00	60		200/
	for EV 86 and EV 86Q	2.57	14.60	60	5400.070	1000
4	<b>Transom support</b> increases permissible load on the EV 86+ system	2.57 x 0.50	21.20	40	5400.100	
5	Tension clasp					
	a) for Event deck T16	0.16				***
	b) for Event deck T10, T7, T4 and T1	0.16	2.60	50 ₺	5403.515	1200
6	Square half-coupler		1.40	25	5403.510	
7	Clamp yellow for Event decks T16		0.30	50	5403.518	1220
3	Clamp black for Event decks T10, T7		0.35	40	5403.506	7000
9	Plastic corner					
	a) 2-coloured, grey-brown spare part for Event deck T16		3.50	50 ₺	5403.523	100/
	b) brown spare part for Event deck T10, T7, T4		3.40	50 ⊞	6494.103	****

Side protection of the stage is provided by **handrails T13**2 or **guardrails with child safety features T12 3**.

The handrail has a height of 1 m above the deck, and the guardrails are 1.10 m high. To absorb the horizontal forces as specified for areas used by the public, **guardrail posts 1** are used.

Alternatively, standards going all the way through can be installed in conjunction with additional parts for strengthening.

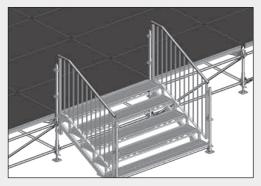
#### Variant A:

Round tube with four welded top pieces (Ref. No. 5405.075), see page 22.

#### Variant B:

Standard 2 m (Ref. No. 2619.200) fastened with four twin wedge head couplers, (Ref. No. 2629.000).





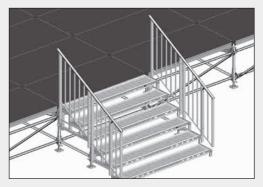
The 5-step **U-stairway stringer 750 5** forms a stair for a podium height of 0.85 m. The top step is flush with the podium surface.

- ▶ Riser s = 16 cm
- ▶ Tread a = 31.8 cm
- ▶ Undercut u = 0.2 cm

Depending on the podium height, the stair can be extended using different stair stringers.

**N.B.:** When different stair stringers are combined, the tread dimensions are not uniform.

Four steel decks  $0.32\,\text{m}$  and one steel deck  $0.19\,\text{m}$  are needed as steps. U-cover ledger (Ref. No. 2675.xxx) is also installed as the lower step edge.

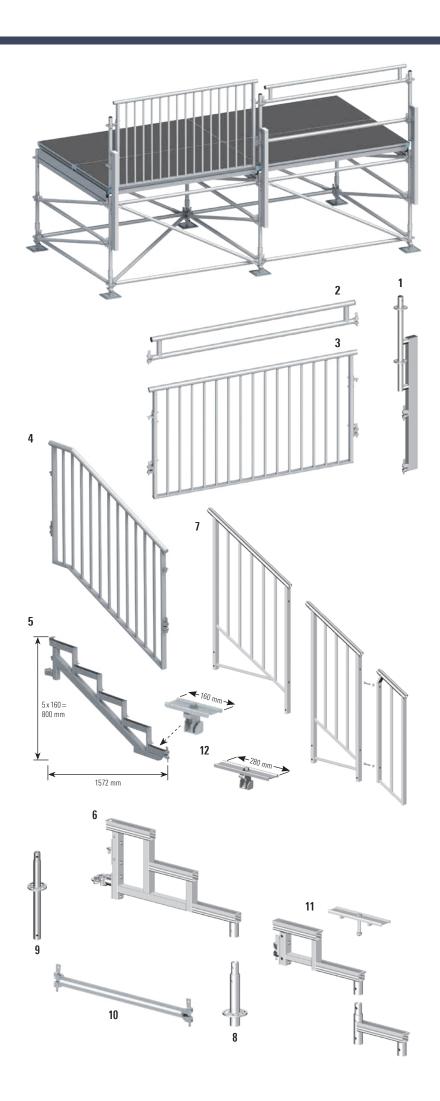


The artist entry to the stage is via the modular stairway. The construction kit comprises: **stringer for modular stairway,** 1, 2 and 3 steps **6, base collar 0.26 m 8** and **0-ledger LW** 0.90 m **10**.

The bolts for guardrail assembly are included with every **stair guardrail 7.** The steps installed are five robust decks 0.32 m or five steel decks 0.32 m in the selected length. The steps are fastened using **lift-off preventers 11.** 







Pos.	Description	WS [mrr	Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	Ref. No.	
1	Guardrail post for podium		1.64	13.80	20	5406.000	2
2	Handrail T13						
	handrail height 1.00 m for EV 100		1.00	7.90	20	5417.100	0
			2.00		40	5417.200	
	handrail height 1.00 m for EV 104		1.04	8.10	40	5417.104	(
	handrail height 1.00 m for EV 86 and EV 104		2.07	14.45	40	5417.207	ı
	handrail height 1.00 m for EV 86 and EV 86Q		2.57	18.70	40	5417.257	
3	Guardrail with child safety feature T12						
	guardrail height 1.10 m, connection elements height adjustable for use		0.86	18.50	25	5409.086	(
	with Event or scaffolding decks, for EV 86 and EV 86Q		1.57	25.80	25	5409.157	
			2.57	35.80	25	5409.257	
	guardrail height 1.10 m, connection elements height adjustable for use		1.00	19.80	25	5409.100	
	with Event or scaffolding decks, for EV 100		2.00	30.50	25	5409.200	
	guardrail height 1.10 m, connection elements height adjustable for use with Event or scaffolding decks, for EV 104		1.04	20.00	25	5409.104	
	guardrail height 1.10 m, connection elements height adjustable for use with Event or scaffolding decks, for EV 86 and EV 104		2.07	30.80	25	5409.207	ě
4	Stairway guardrail 750 with child safety feature for stairway stringer 2639.003		1.57 x 1.10	22.00	25	2616.106	
5	U-Stairway stringer 750 with half-coupler with 5 steps		1.57 x 1.00	18.50	20	2639.003	
6	Stringer for modular stairway						
	1-step		0.30	2.40	50	5407.001	ı
	2-step		0.60	5.50	50	5407.002	1
	3-step		0.90	8.00	20	5407.003	
,	Guardrail for modular stairway						
	1-step		0.30 x 1.10	6.50	40	5407.011	
	2-step		0.60 x 1.10	14.00	25	5407.012	Į,
	3-step		0.90 x 1.10	16.00	25	5407.013	
8	Base collar 0.26 m for modular stairway, with spigot		0.26	2.00	450	5407.021	
9	Standard for modular stairway 0.59 m, with spigot		0.59	3.10	250	5407.022	
10	O-ledger LW steel, with AutoLock function		0.90	3.40	50	2601.090	
1	Lift-off preventer with bolt		0.29	0.40	500	5407.030	
12	Universal III Life of Comment		0.40	0.70	050	2005.000	
12	Universal U-Lift-off preventer		9 0.16			2635.002	
12	Universal U-Lift-off preventer	<b>S</b> 2	9 0.16 2 0.16 9 0.28	0.70	250	2635.002 2635.003 2635.000	1

The Universal Base connects your roof structure efficiently to a Layher podium. The position of the roof supports can be set infinitely inside the Universal Base.

# The advantages are:

- ▶ The dead weight of the podium can be taken account of in the structural calculation, meaning that less ballast is needed.
- ▶ Forces arising from the rope hoist (wind braces) are absorbed by the podium, meaning that less ballast
- Greater headroom at the level of the wind braces due to attachment points being provided at the deck level.
- ▶ Rapid assembly of the podium thanks to the assembly advantages of Layher Allround Scaffolding.

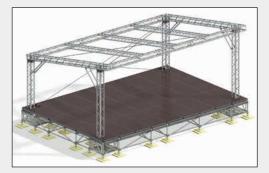
The use of serrated rails in conjunction with serrated bolts permits defined transmission of the horizontal forces. The base plate 4/5 always rests on two truss-transoms 3. The orientation of the transoms has effects to the position of the Event transoms and the outer position of the roof support.





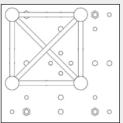
Example A: four rosettes, thanks to use use of the base beam 2. of the base beam 1.

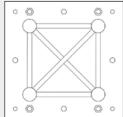
Example B: Base plate 4 in the middle Base plate 4 in the corner, of the bay, even distri- distribution of the load onto bution of the load onto eight rosettes, thanks to



# Typical use:

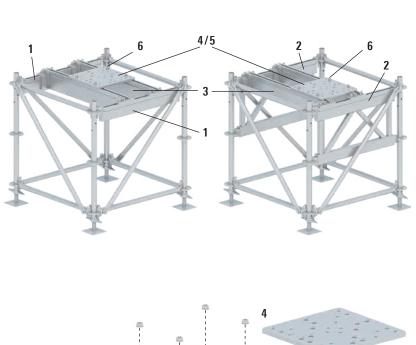
Universal bases in the podium corners are used to receive the roof supports.

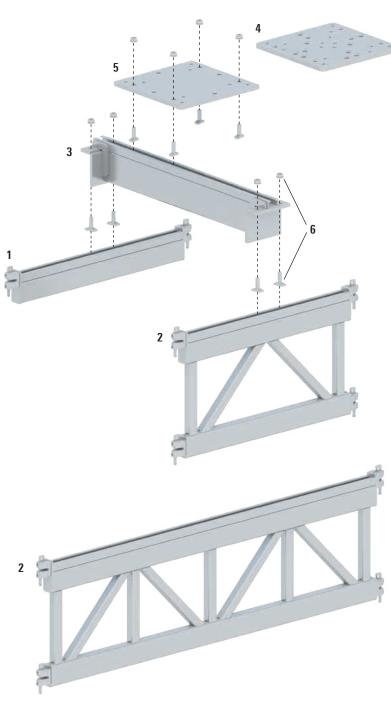




#### Base plate type 1 Base plate type 2

The plate type 1 with additional drillings allows the assymmetrical positioning of the towers. Additionally there are drillings in the plate centre for an optional support.

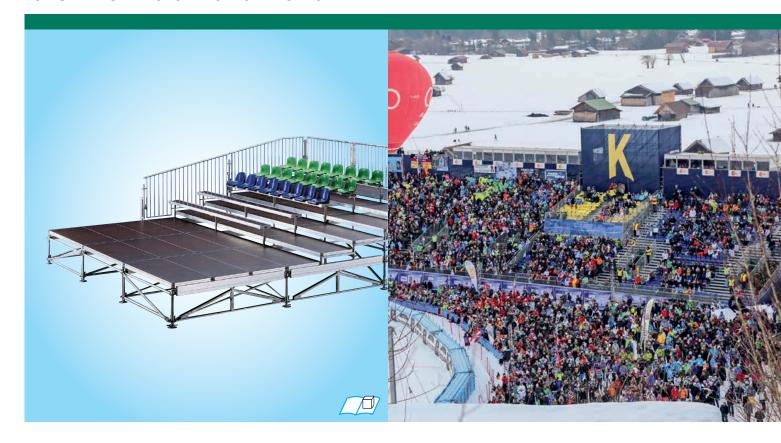




Pos.	Description	WS [mm]	Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	Ref. No.	
1	Base beam						
	steel, hot-dip galvanized, for EV 86		0.86	13.00	10	5431.086	<b>(L</b> )
	steel, hot-dip galvanized, for EV 100		1.00	15.50	10	5431.100	<b>(</b>
			2.00	32.50	10	5431.200	<b>(</b>
	steel, hot-dip galvanized, for EV 104		1.04	16.10	10	5431.104	
	steel, hot-dip galvanized, for EV 86 and EV 104		2.07	33.70	10	5431.207	
2	Base beam						
	steel, hot-dip galvanized, for EV 86		0.86 x 0.50	38.20	10	5432.086	<b>(</b>
	steel, hot-dip galvanized, for EV 100		1.00 x 0.50	38.50	10	5432.100	
			2.00 x 0.50	76.00	10	5432.200	
	steel, hot-dip galvanized, for EV 104		1.04 x 0.50	39.10	10	5432.104	
	steel, hot-dip galvanized, for EV 86 and EV 104		2.07 x 0.50	76.70	10	5432.207	
	Steet, Hot-dip galvanized, for Ev ob and Ev 104		2.07 X 0.00	70.70	10	3432.207	Ī
3	Truss-Transom						
	steel, hot-dip galvanized, for EV 86		0.86	27.80	10	5433.086	
	steel, hot-dip galvanized, for EV 100		1.00	28.90	10	5433.100	<b>(</b>
			2.00	47.30	10	5433.200	<b>(</b>
	steel, hot-dip galvanized, for EV 104		1.04	29.00	10	5433.104	1000
	steel, hot-dip galvanized, for EV 86 and EV 104		2.07	48.60	10	5433.207	
4	Base plate type 1 steel, hot-dip galvanized, for H30V and H40V support, with 31 drillings		0.41 x 0.41	25.00	10	5434.003	<b>(b)</b>
5	Base plate type 2 steel, hot-dip galvanized, for H30V and H40V support, with 16 drillings		0.41 x 0.41	25.00	10	5434.002	<b>(</b>
6	Special bolt with nut, HZS 53 x 34	24	M16 x 60	2.00	12	5434.013	

# LAYHER EVENT STANDS

# FOR GETTING THE CROWD'S MONEY'S WORTH



No restrictions on comfort, no limits on dimensions and equipment, no concessions to the location: Layher stands are always an excellent "observation point", just as required.

The Layher Event system: Stands for sitting, all over the world and meeting client requirements. Series manufacture and high delivery readiness are our way to help you cut costs and achieve economic success; and tailor-made special solutions whenever necessary are our strengths.

The whole Layher Event system bases on the proven Allround Scaffolding System. Thus makes investions even more economical, because the material can be used for lots of different kinds of use.

# THE BENEFITS FOR YOU:

## Standard solutions

Series material, economical complete solutions from one source, rapid availability, proven safety.

# **▶** Substructure Allround

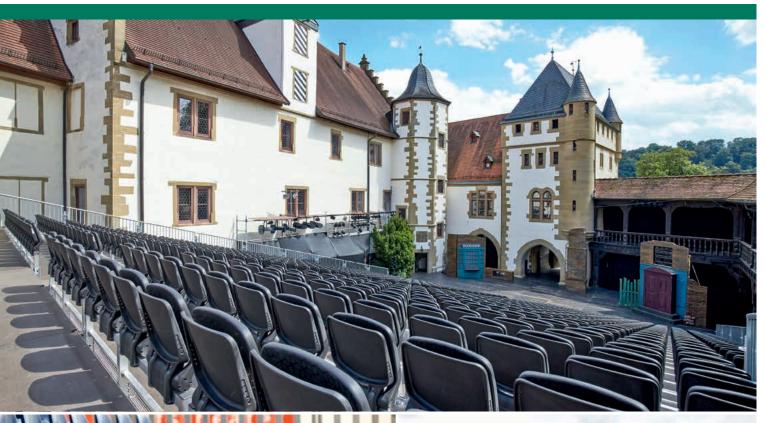
High load-bearing capacity, rapid and flexible erection and dismantling, choice of accessories.

# Handy components

Easy to transport and store, palletizable.

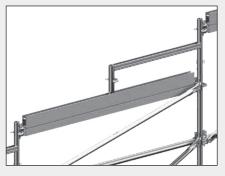
# ▶ Special design

For individualized problem solutions.

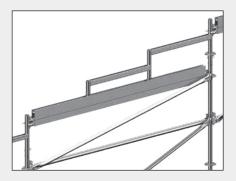








The **stand element, 1-step 1** with a standard rise of 0.25 m is used for the Event systems EV 100 and EV 104.



For the Event System EV 86, the **stand elements, 2-step 1** with risers of 0.16 m, 0.25 m or 0.33 m are used.

When Event decks are used, the **steel lift-off preventer 2** is required to prevent the Event decks from lifting off and tilting.

Alternatively, conventional steel decks can also be used, which is to be recommended especially for outdoor events. Here the **steel lift-off preventer 3/4** and the **steel deck support 6** are used.

The steel lift-off preventer is fastened using the **bolt M10 x 70 5**. The bolts must be ordered separately.

The **guardrail standard** 0.96 m **7** with spigot fitted at the bottom is used to continue the Allround standards from the substructure. When side guardrails are used, this standard has to be additionally strengthened.

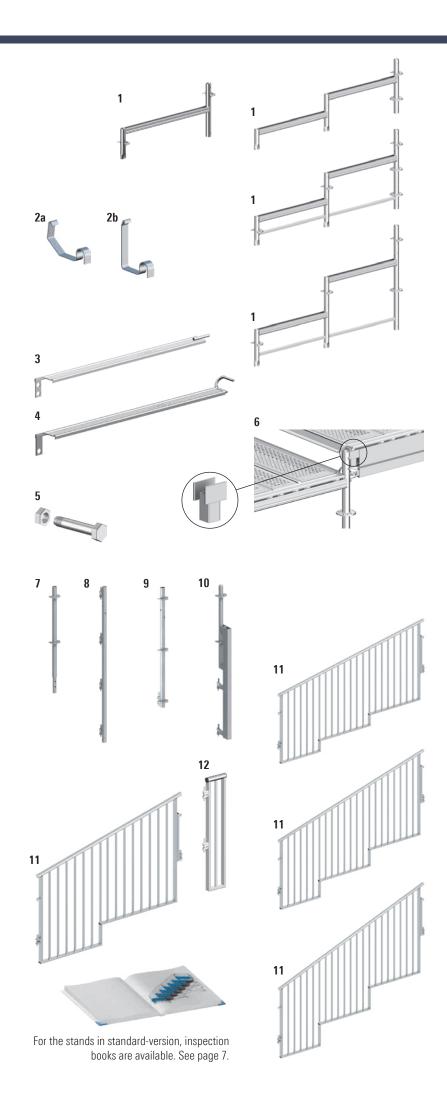


Variant for seating: Side guardrail in the system axis



Variant for bench seat: Side guardrail next to the system axis

The components shown here are showcase. For the different stand variants, showing in table on page 9, further stand components are available. These are stand elements, intermediate steps, guardrails and guardrail posts for each type of stand.



Pos.	Description	Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	Ref. No.	
1	Stand element					
	1-step, inclination 0.25 m, for EV 100	1.00 x 0.25	6.60	40	5401.010	P***
	1-step, inclination 0.25 m, for EV 104	1.04 x 0.25	6.70	40	5401.020	<b>=</b>
	2-step, inclination 0.16 m, for EV 86 and EV 86Q	0.86 x 0.16	10.60	30	5401.216	<b>=</b>
	2-step, inclination 0.25 m, for EV 86 and EV 86Q	0.86 x 0.25	16.60	20	5401.225	<b>(</b>
	2-step, inclination 0.33 m, for EV 86 and EV 860	0.86 x 0.33	18.00	20	5401.233	( (b)
2	Lock for stand element					
	a) for Event deck T16		2.00	50	<b>Ⅲ</b> 5403.522	<u></u>
	b) for Event deck T10, T7, T4, T1	0.10	2.00	50		
3	Steel lift-off preventer T19 for stand elements from 2019, for EV 86 and EV 86Q	0.86	1.49	300	5403.010	<u> </u>
4	Steel lift-off preventer for stand elements from 2019, for EV 86 and EV 86Q	0.86	1.60	268	5403.007	· •
5	<b>Bolt M10 x 70</b> with nut, for steel lift-off preventer, for EV 86 and EV 86Q		3.50	50	5403.011	
6	Steel deck support for EV 86 and EV 86Q	0.10	0.40	500	5403.006	<b>==</b>
7	<b>Guardrail standard</b> 0.96 m, with bottom mounted spigot and 2 cutaway rosettes	0.96	5.50	28	5405.045	<b>=</b>
8	Tube with 4 wedge heads	1.70	8.61	50	5405.075	<u> </u>
9	Guardrail post 🕮	1.16	5.51	50	5405.041	<b>(</b>
10	Guardrail post for stand	1.60	14.00	20	5405.050	9
11	Side guardrail T12 📨					
	2-step, inclination 0.25 m	2.00 x 1.10	32.09	25	5410.208	<b>(</b>
		2.07 x 1.10	32.50	25	5410.209	<b>(</b>
	3-step, inclination 0.16 m	2.57 x 1.10	38.62	25	5410.304	<u> </u>
	3-step, inclination 0.25 m	2.57 x 1.10	39.59	25	5410.305	<b>(</b>
	3-step, inclination 0.33 m	2.57 x 1.10	40.73	25	5410.306	•
12	Corner guardrail T12	0.28 x 1.10	11.20	40	5410.303	<u></u>

You can choose the seating to suit the application, but also to suit your specific conditions. There is a choice of benches, bucket seats and tip-up seats.

## Variant for bench seat:

The bench seat mounting is achieved with the bench adapters 10. The length of the vertical tubes is matched to the respective riser.

For the bottom row of seats, seat supports with integrated rosette 11 are used.

The **bench 1** is 0.30 m wide and comprises anodised aluminium stiles and smooth-coated plywood.

Bench seats are secured using wedges 9. At the posts for side guardrails, short wedges 9 are needed. At the ends of each row of seats, bench ends 2 are fitted.

Novanta bucket seats 3 can be fastened to the benches. We recommend benches with predrilled holes here. The standard Novanta bucket seats are dark blue, UV-protected and flame-retardant.

## The assembly material comprises per seat:

- 2 bolts with square neck
- ▶ 2 washers
- ▶ 2 nuts
- ▶ 1 plug, left
- ▶ 1 plug, right
- Number plate without lettering, white

## Variant for folding seats:

Tip-up seats 12 are clamped to the aluminium frames 13 at one point. This creates handy seat elements for rapid assembly and low transport volumes.

Aluminium frames 13 are inserted from above into the adapters 14. To fasten side guardrails, standards 0.92 m with adapter 16 are used.

For the bottom row of seats, adapters with rosette 15 are used, and on the side guardrail the standard 1.18 m with adapter 17.

The aluminium frames, the adapters and standards for tip-up seats 13-17 match all three risers: 0.16 m, 0.25 m and 0.33 m.

# Tip-up seats in the following colours on request:













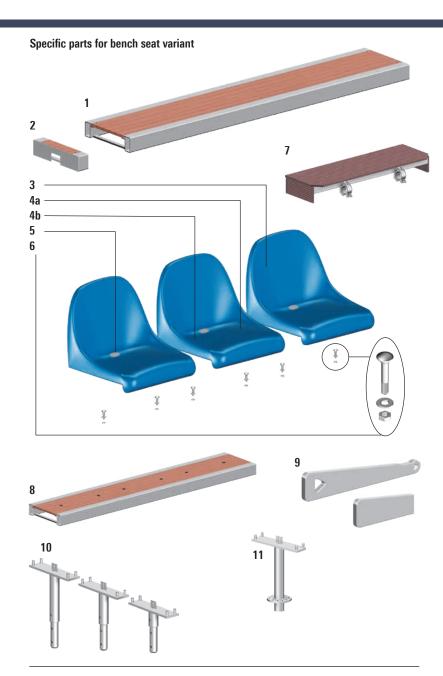


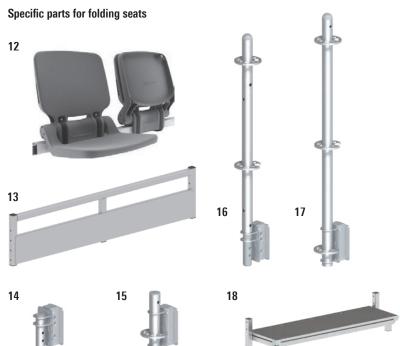




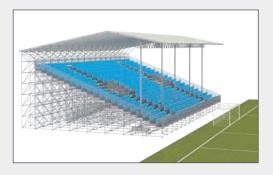
# Variant for seating:

Alternatively, already available chairs can be placed on the Event stand. The specified clear passage width inside the row of seats must be taken into account here.

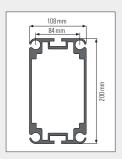




Pos.	Description	Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	Ref. No.	
1	Bench					
	anodised aluminium, coated plywood, for EV 86 and EV 86Q	1.57 x 0.30	7.20	60	5623.157	Œ
	anodised aluminium, coated plywood, for EV 100	2.00 x 0.30	9.40	60	5623.200	Œ
	anodised aluminium, coated plywood, for EV 86 and EV 104	2.07 x 0.30	9.50	60	5623.207	Œ
	anodised aluminium, coated plywood, for EV 86Q	2.57 x 0.30	11.70	60	5623.257	Œ
2	Bench end anodised aluminium, coated plywood	0.06 x 0.30	0.50	400	5624.000	-
3	Novanta bucket seat blue, UV-protected and flame-retardant	0.40 x 0.43	1.65	120	5408.021	-
4	Plug					
	a) left, blue		0.20	20	<b>5408.029</b>	<u> </u>
	b) right, blue		0.20	20	<b>5408.030</b>	-
5	Number plate without lettering, white		0.20	20	<b>5408.028</b>	<u> </u>
6	Assembly-Set for 20 bucket seats existing of 40 bolts M8 x 40, 40 nuts and 40 washers		1.20	40	5408.008	-
7	Intermediate step	L = 1.00	8.40	12	5402.110	
_	0.30 x 0.12 x L, with 2 half couplers, for EV 100 and EV 104	L = 1.25	10.50	24	5402.130	G
3	Bench, with holes for Novanta bucket seats, for EV 86 and EV 86Ω	1.57 x 0.30	7.20	60	5408.157	(
	for Novanta bucket seats, for EV 86 and EV 104	2.07 x 0.30	9.50	60	5408.207	
	for Novanta bucket seats, for EV 860	2.57 x 0.30	11.70	60	5408.257	
	Allround wedge	2.37 x 0.30	11.70	00	3400.237	1
	for securing bench		12.00	100	₩ 6494.901	1
	short, 90 mm, without holes, at edge of stand	0.09	0.98		£ 6495.041	
0	Bench adapter	0.00	0.00	10		i
	inclination 0.16 m, for EV 86 and EV 86Q	0.42	3.70	100	5406.010	
	inclination 0.25 m, for EV 100 and EV 104	0.34	3.40	100	5406.015	
	inclination 0.33 m, for EV 100 and EV 104	0.26	3.05	100	5406.020	
1	Seat support with rosette for bottom rows	0.34	4.00	300	5619.000	
2	<b>Tip-up seat, black</b> UV-protected and flame-retardant	0.48 x 0.42	3.20	60	5515.001	ě
3	Aluminium frame for tip-up seats					
	suitable for all inclinations, for EV 100	1.50 x 0.43	7.40	50	5517.150	
		2.00 x 0.43	9.40	50	5517.200	(
	suitable for all inclinations, for EV 86, EV 86Q and EV 104	1.57 x 0.43	7.60	50	5517.157	(
	suitable for all inclinations, for EV 86 and EV 104	2.07 x 0.43	9.70	50	5517.207	i
	suitable for all inclinations, for EV $86\Omega$	2.50 x 0.43 2.57 x 0.43	11.60 11.80	50 50	5517.250 5517.257	
4	Adapter with spigot	0.17	2.76	150	5521.001	
5	Adapter with rosette for lowest stand row	0.26	3.51	150	5521.002	(
6	Standard 0.92 m with adapter for guardrail mounting	0.92	7.80	50	5521.003	(
17	Standard 1.18 m with adapter for guardrail mounting at the lowest stand row	1.18	7.90	50	5521.004	(
8	Intermediate step for stands with tip-up seats 🚥	1.57 x 0.12	13.24	10	5402.132	(
	step width 0.43 m	1.57 x 0.16	13.74	10	5402.134	(
		2.07 x 0.12	16.83	10	5402.136	(
		2.07 x 0.16	17.33	10	5402.138	(



**The Layher stand roof** protects the audience from sun and rain.

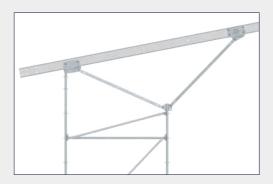


The basis for the roof trusses is the **Keder Rail 9000 1** with additional holes. The spacing of the keder grooves is 3 cm wider than with other Layher keder rails, which must be taken into account when ordering the roof tarpaulins.

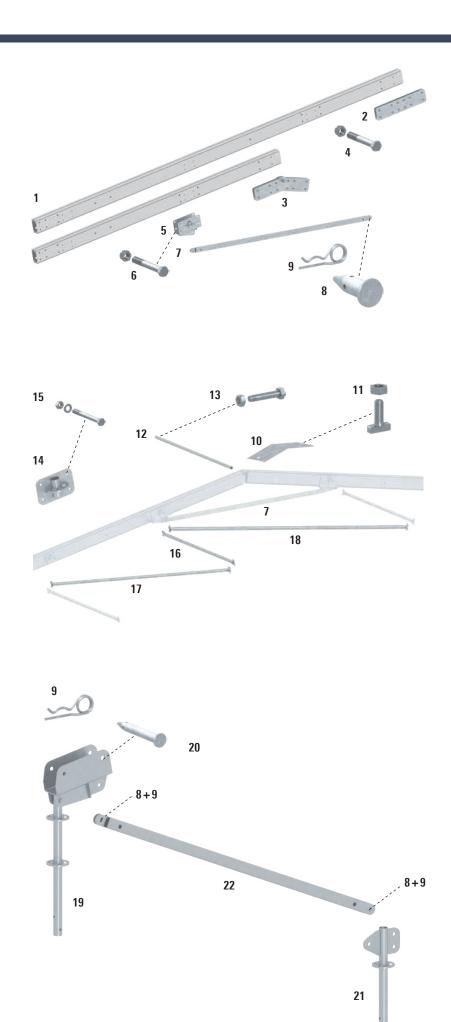
The keder rails are extended with the **keder rail connector 2**, and the **ridge connector 3** is used to form the roof ridge with 2 x 11°. For the assemblies mounted on the ground, the elements are fastened with **hexagonal bolts 4** and **6**. The pre-assembled sections are connected at height with **bolts 20**.



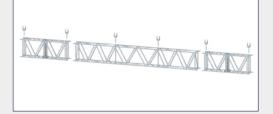
The stiffening of the roof trusses is carried out with corresponding **0-bolts 16** and **horizontal diagonal braces 17** and **18**. The connections are realised with the **rosette adapter 14** and the **bolt 15**. The truss spacing is 2.07 m.



With the help of the **support and bracing elements 19** to **22**, the stand roof can be placed on a pre-assembled stand back wall (2.07 m wide) in a bending-stiff way.



Pos.	Description	WS [mm]	Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	Ref. No.	
1	Keder rail 9000		4.00 6.00 8.00	45.84 65.80 87.68	50 50 50	5411.004 5411.006 5411.008	<b>(</b>
2	Keder rail connector		0.80	19.62	20	5411.010	
3	Ridge connector		0.90	21.00	20	5411.011	<b>(</b>
4	Hexagonal bolt M20 x 140 with securing nut			11.50	25 ፟	5411.093	<b>(</b>
5	Bearing with FW system connector		0.25	11.05	12	5411.022	
6	Hexagonal bolt M20 x 150 with securing nut			12.07	25 ≣		
7	Ridge strut		2.85	20.94	20	5411.012	
8	Bolt 20 x 66			1.61	10		
9	Safety clip d=4 mm		0.250.405	1.50	50 🖩		
10	Ridge cover sheet		0.25 x 0.105	0.16 5.00	500 50 <b>I</b>	5411.013 4206.003	
11	Captive bolt for keder rail M12 x 40, with nut  Ridge tube		2.00		50 ±	5411.046	
12	for 2.07 truss spacing  Special bolt M12 x 60	19	2.00	6.83 4.00	50		
14	with nut  Rosette adapter	13	0.20	1.98	150	5411.026	(F)
15	Hexagonal bolt M12 x 140		0.20	8.15	50		
16	with nut and washer  O-ledger LW		1.95	6.84	50	5411.042	
17	O-ledger LW horizontal diagonal		2.80	9.52	50	5411.043	
18	Ridge horizontal diagonal brace		3.56	15.18	50	5411.044	
19	for 2.07 m truss spacing  Bearing with standard		0.90	14.56	10	5411.020	
20	Bolt 20 x 167			2.70	6 ⊞		
21	Stand roof standard with FW system connector		0.60	5.32	28	5411.024	<b>(</b>
22	FW System chord		2.07	13.90	20	2646.207	<u></u>



At the front of the grandstand, the roof trusses are supported by a 4-point beam made of **steel truss components 2.** The roof trusses are connected every 2.07 m. The 4-point beam transfers the roof loads to the **roof supports 5.** In the standard version, the roof props are positioned at a distance of 8.28 m.



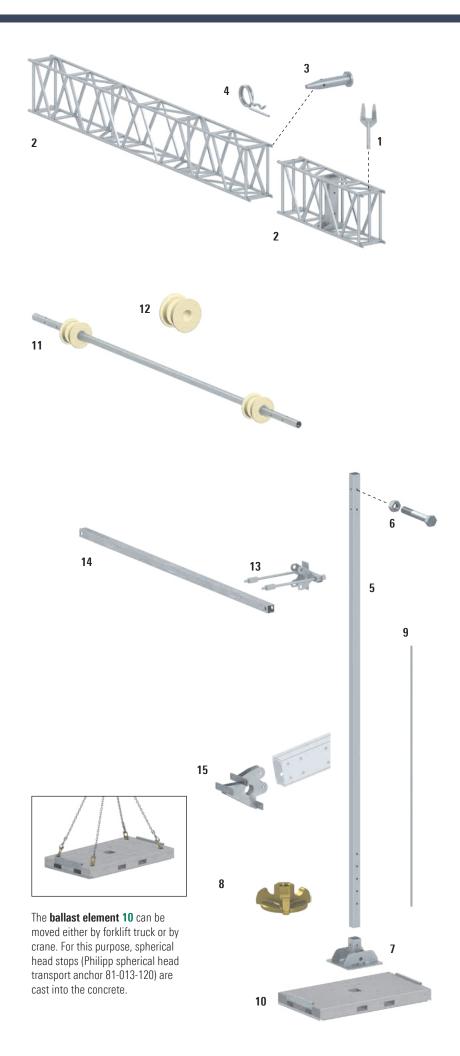
The **roof supports 5** are supported on specially designed **ballast elements 10.** These system ballast elements can be placed directly on the Allround scaffolding to ensure positioning and alignment. For the tension-resistant connection of the prop to the ballast, **bridging system diagonal rods 9** are provided, which are cut to size on site. The **plate nuts 8** (4 pieces at the top and 4 pieces at the bottom) are used for bracing.



The **K9000 tarpaulin tensioners 13** are fitted to the rear ends of the roof girders. The threaded rods put the **tensioning tube 14** into the optimal position. The loose end of the roof tarpaulin can be fixed to the keder rails with a tube stiffener (Ref. No. 4204.207).



The rain gutter is mounted on the front roof girder ends. The **gutter bracket K9000 15** enables the connection of a slotted ridge tube, to which the roof tarpaulin is attached, and 2 keder rails 2000 (Ref. No. 4201.xxx) between which the matching tarpaulin strip is suspended as a gutter. The narrow keder tarpaulin is manufactured on a project-specific basis to match the desired position of the downpipes.



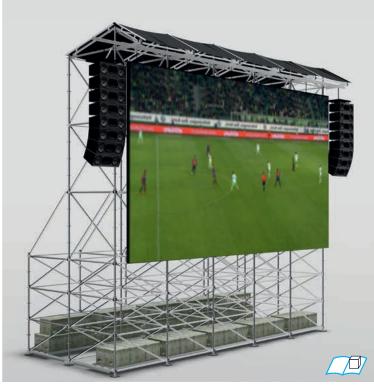
Pos.	Description	Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	Ref. No.	
1	Fork with tube connector	0.49	4.26	20	5411.028	<b>(</b>
2	Steel truss 0.40 x 0.80 m	2.23 6.00	170.33 285.83	2 2	5411.060 5411.066	
3	Bolt 15.8 x 80	0.00	0.70	4		
4	Safety pin d=2.8 mm		0.50	50 ⊞	4905.002	
5	Roof support 0.14 x 0.14 m drilled	7.50	257.00	5	5411.087	<b>(</b>
6	Hexagonal bolt M30 x 200 with nut		7.60	5 🎹	5411.096	<b>(</b>
7	Grandstand roof holder for roof support	0.68	111.00	2	5411.080	<b>(</b>
8	Plate nut	0.13	1.53	250	5411.099	<b>(</b>
9	Bridging system diagonal rod for 2.07 m bay length	3.05	7.90	75	2671.030	<b>=</b>
10	Concrete ballast element	2.13 x 1.20 x 0.20	1250.00	1	5411.100	<b>(</b>
11	Set for tarpaulin insertion K9000	3.00	6.00	50	5411.110	<b>(</b>
12	Castor for tarpaulin pulling K9000 d=175 mm		0.40	1	5411.111	<b>(</b>
13	Tarpaulin tensioner K9000	0.44 x 0.23	4.32	50	5411.130	<b>(</b>
14	<b>Tensioning tube</b> for 2.07 m panel	1.93	3.73	50	5411.135	<b>(</b>
15	Gutter bracket K9000	0.32 x 0.28	5.10	50	5411.120	(1)

# FOH TOWER

# VIDEO WALL

# TOWERS FOR EVERY EVENT IN MODULAR DESIGN





The Layher FOH Tower kit system provides you with the right solution for your Front-Of-House applications. To meet the most frequently encountered requirements, a total of 12 FOH Tower complete KITs are available.

## ONE SYSTEM - MANY VARIANTS

The kit system and Layher's flexible Allround equipment offers an impressive variability.

Whether it's a 2 or 3 bay width, with or without a projecting roof and entrance, with 1, 2 or 3 storeys. The Layher FOH Tower kit system means more possibilities. Typical for Layher!

# THE BENEFITS FOR YOU:

- Duick and easy assembly thanks to optimum use of material.
- Neat and practically-minded design down to the last detail.
- Each of the maximum of three levels is without a hindering central support.
- Complete enclosure using keder tarpaulins.
- Very few special parts.
- Two inspection books available: 4.14 m x 4.14 m (4 x 4) and 6.21 m x 4.14 m (6 x 4).

To give all of the audience a closer look at the performers at major open-air concerts, and also because the broadcasting of major sporting events like the FIFA World Cup is increasingly evolving into a spectacle for the entire public, LED video screens have now become essential.

But since not every concert and not every fan community makes the same demands of a video screen, and the LED displays made up of several panels can be flexibly adjusted in size to suit actual needs, Layher has designed its video wall system for easy adaptation to requirements on the spot.

# THE BENEFITS FOR YOU:

- High degree of planning certainty and simplicity, by covering many application scenarios with one system and by rapid material availability.
- High degree of legal security, thanks to the inspection book provided in accordance with DIN EN 13814 and covering all system variants. Stability is verified for up to wind zone 4. The video screen does not have to be removed in strong winds (display panel manufacturer's specifications must be complied with).
- Quick and easy assembly without a crane, thanks to bolt-free pin and wedge connection technology.

# PA TOWER PLUS

# SIDE STAGES





Compared with one-off solutions devised for specific projects, the PA Tower PLUS is not only quick to deliver due to the use of Allround standard components, and efficient to assemble.

Depending on requirements, more than 300 pre-configured variants in various heights and widths are possible with the Allround construction kit. An extensive structural report is available for all these variants.

The applications range from classic loudspeaker towers and camera  $\prime$  directing towers to towers for lighting or advertising.

Structural strength calculations and inspection books for smaller open-air stages and mobile stages usually ignore a technical area positioned at the side or behind the stage floor. This technical area is needed for preparing and storing technical equipment and instruments. Unlike expensive one-off solutions, side attachments for stages using Allround Scaffolding are considerably faster to build, making them more economical too.

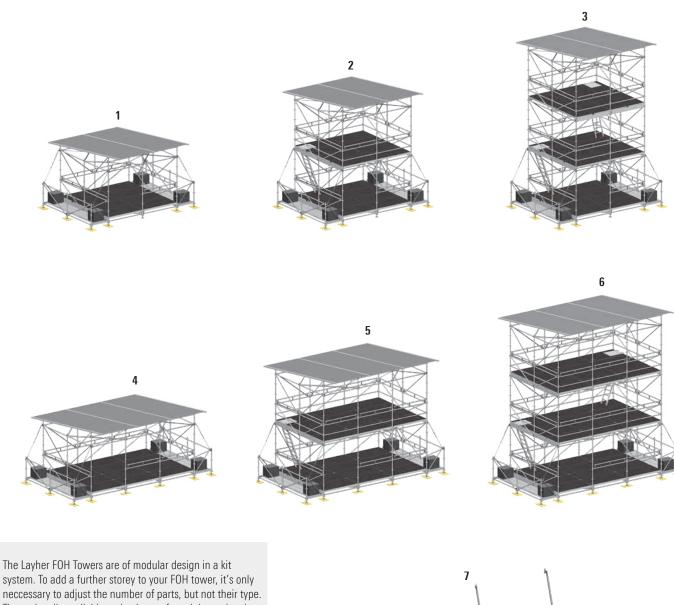
To assist its clients even during the planning phase, Layher has verified the stability for a range of different configurations.

# THE BENEFITS FOR YOU:

- Modular design, based on the Allround construction kit.
- Economical to assemble thanks to bolt-free wedge and pin connections.
- Minor logistic effort thanks to small packing dimensions.
- Planning and scheduling certainty thanks to availability of a structural report with more than 300 different variants.
- Investments are protected by new application possibilities for existing material without major additional investments.

# THE BENEFITS FOR YOU:

- ▶ No need to invest in individual structural analyses for Side Stages.
- > Safety under the law from available verification of stability.
- Added value of existing material new application options without additional investment.
- Well thought-out system solution using rapidly available standard Allround Scaffolding parts.
- Quick and easy building manually. No crane is needed.



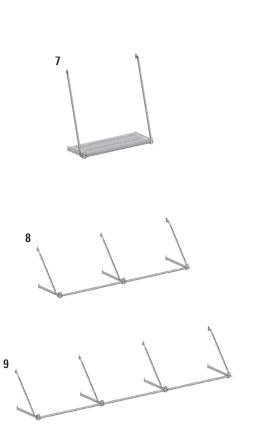
system. To add a further storey to your FOH tower, it's only neccessary to adjust the number of parts, but not their type. The optionally available projecting roofs and the optional entrance steps can be easily mounted if required.



For all the shown variants of the FOH tower, an inspection book is available. See page 7.

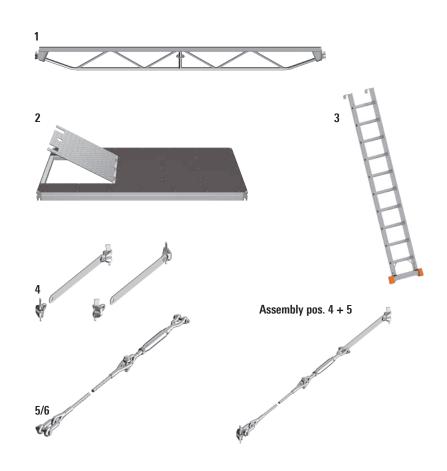
The construction complies with DIN EN 13814, which reflects the current state of the art. The Layher FOH Tower is available in the well-known Layher grid dimensions and in metric dimensions.

The wall coverings (rear wall and side walls) are available as a separate kit for all FOH towers variants. These consist of: keder rail holders, keder rails 2000, keder tarpaulins and gable tarpaulins.



Pos.	Description	Dimensions L/H x W [m]
1a	FOH Tower with 1 storey including roof tarpaulins	4.00 x 4.00
	Wall covering for F0H tower 1a	
1b	FOH Tower with 1 storey including roof tarpaulins	4.14 x 4.14
	Wall covering for FOH tower 1b	
2a	FOH Tower with 2 storeys including roof tarpaulins	4.00 x 4.00
	Wall covering for FOH tower 2a	
2b	FOH Tower with 2 storeys including roof tarpaulins	4.14 x 4.14
	Wall covering for FOH tower 2b	
3a	FOH Tower with 3 storeys including roof tarpaulins Wall covering for FOH tower 3a	4.00 x 4.00
3b	FOH Tower with 3 storeys including roof tarpaulins	4.14 x 4.14
	Wall covering for FOH tower 3b	
4a	FOH Tower with 1 storey including roof tarpaulins	6.00 x 4.00
AL.	Wall covering for FOH tower 4a	C 21 A 1A
4b	FOH Tower with 1 storey including roof tarpaulins	6.21 x 4.14
-	Wall covering for FOH tower 4b	0.00 4.00
5a	FOH Tower with 2 storeys including roof tarpaulins	6.00 x 4.00
5b	Wall covering for FOH tower 5a  FOH Tower	6.21 x 4.14
ວນ	with 2 storeys including roof tarpaulins	0.Z1 X 4.14
6a	Wall covering for FOH tower 5b  FOH Tower	6.00 x 4.00
Od	with 3 storeys including roof tarpaulins	0.00 X 4.00
	Wall covering for FOH tower 6a	
6b	FOH Tower with 3 storeys including roof tarpaulins	6.21 x 4.14
	Wall covering for FOH tower 6b	
7	FOH entrance	2.00 2.07
8	FOH projecting roof	4.00
	for 2 bays including tarpaulin	4.14
9	FOH projecting roof	6.00
Ū	for 3 bays including tarpaulin	0.00
		6.21





# Roof and wall cladding

The proven **keder rail 2000 7**. Known for its low weight. Ideal for lightweight applications, particularly for wall coverings and scaffolding covers.

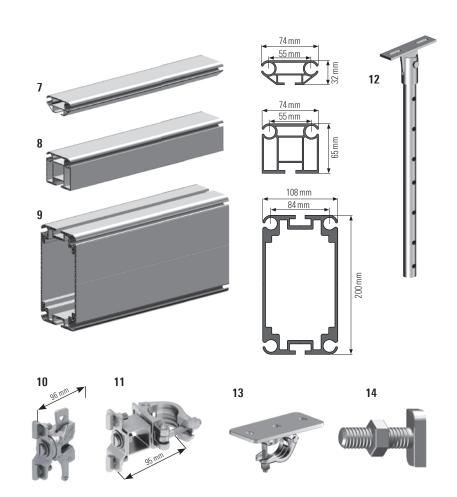
The **keder rail 3000** 8 – very strong yet light. It is perfectly suited for medium spans, as found for example in FOH and directing towers or in technical equipment and storage areas. The keder rail 3000 can also be used as a wall keder rail over large spans.

The **keder rail 9000 9** is suitable as a heavy-duty marquee section for large and very large spans. Roofs and side coverings for large open-air stages can be constructed with this section, in addition to massive roofs for stands.

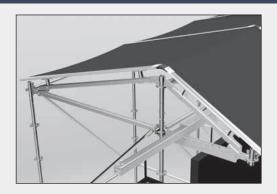
The **keder rails 7**, **8** and **9** are suitable for keder tarpaulins with a keder of 13 mm.

When using the **keder rails 7** and **8**, standard tarpaulins from the protective system range can be used. When using the **keder rail 8**, the tarpaulins must 29 mm narrower. We offer suitable material upon request.





Pos.	Description	WS [mm]	Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	Ref. No.	
1	FOH beam						
	for EV 100		4.00	38.10	20	5573.010	[***/
	for EV 104		4.14	38.60	20	5573.011	<b>==</b>
2	Event access deck T16						
	with aluminium hatch, for EV 86		0.86 x 2.07	33.90	10	5402.221	(1)
	with aluminium hatch, for EV 100		1.00 x 2.00	36.30	10	5402.222	(1)
	with aluminium hatch, for EV 104		1.04 x 2.07	38.00	10	5402.223	(1)
3	Single step ladder with hook, 10-steps, for storey height 2.50 m, for EV 100 and EV 104		2.70 x 0.45	7.70	10	5573.021	
4	<b>FOH rope holder set</b> 4 parts, for connection of the ballast bays, for EV 100 and EV 104			2.70	100	5573.002	
5	Rope fastener for ballast bays, for EV 100 and EV 104		1.22	1.30	10	5573.005	<b>(</b>
6	Rope fastener, for roof stiffening						
	as HD 4.00 x 4.00 m, for EV 100 and EV 104		5.57	7.50	10	5573.003	(1)
	as HD 4.14 x 4.14 m, for EV 100 and EV 104		5.77	7.60	10	5573.004	<b>(4)</b>
7	Aluminium keder rail 2000		1.30	1.95	50	4201.130	
			2.00	3.00	50	4201.200	1000
			2.25	3.30	50	4201.220	***
			2.50	3.80	50	4201.250	***
			3.00	4.50	50	4201.300	<b>==</b>
			4.00	6.00	50	4201.400	<b>***</b>
			6.00		50	4201.600	(1)
8	Aluminium keder rail 3000		2.00		20	5574.200	
			3.00		20	5574.300	
			4.00		50	5574.400	
			5.00		20	5574.500	
			6.00		50	5574.600	
9	Aluminium keder rail 9000		5.00		10	5577.500	
			6.00		20	5577.600	
10	Keder rail holder with wedge head		9.00 0.10		10 25	5577.900 5573.000	
11	rotatable, incl. 2 captive bolts  Keder rail holder with half-coupler	19	0.16	1.00	25	5573.006	<u></u>
12	rotatable, incl. 2 captive bolts  Hinged attachment for Event roof		0.70	3.40	100	5573.001	<u></u>
13	Half-coupler with plate	19	0.20 x 0.10	2.10	100	5573.030	<b>(</b>
14	Captive bolt for keder rail						
	M12 x 40, with nut			5.00	50	4206.003	<b>==</b>
	M12 x 25, with nut			4.30	50		



## Product advantages:

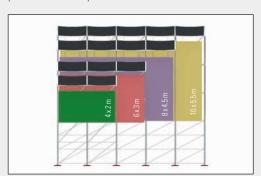
- Modular design based on Layher Allround Scaffolding
- Manual assembly
- Economical to assemble thanks to wedge and pin connections
- ▶ Low transport volume
- Expandable with additional functions
- ▶ Roofing
- ▶ Enclosure
- ▶ Table / podium
- ▶ Projecting arm for PA

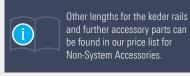
The load bracket consists of five parts connected to one another with pins 12. The standard 0.50 m 1 has two different receiving plates for fastening the diagonal braces 3 and 5. At the top level of the scaffolding wall, one ledger 4 is used. The projecting U-ledger 2 can receive the load beams 6 from both sides.

At the ends of the video screen, **projecting arms 8** can be laterally inserted to support the loads of up to  $5\,\text{kN}$ . The necessary M12 x 130 bolts are supplied together with the projecting arm.

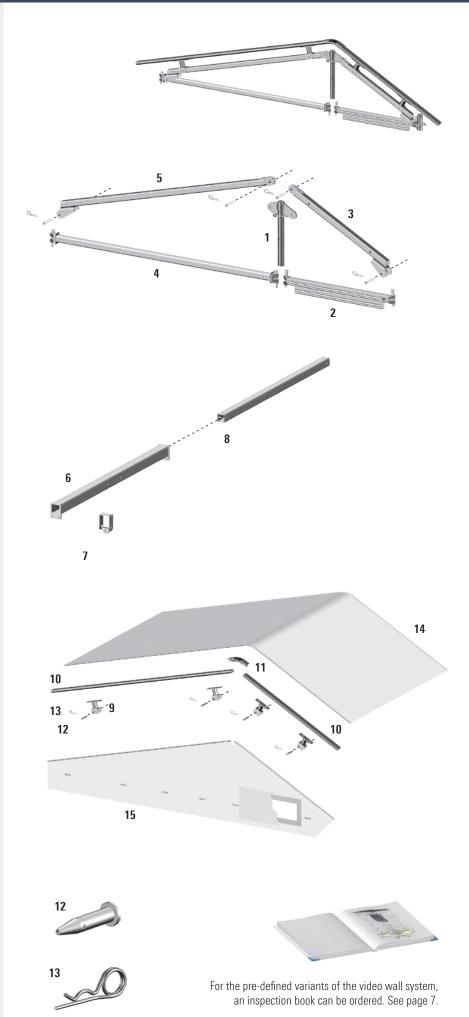
A roof can be constructed optionally. To do so, the **keder holders 9** are fastened by means of **pins 12** into the holes provided for them in the **diagonal braces 3** and **5**.

To fix the keder rails, **groove bolts for keder rail** (Ref. No. 4206.003) are needed.









Pos.	Description	Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	Ref. No.	
1	Video wall standard, 0.50 m	0.50	4.46	100	5435.050	
2	Video wall U-ledger	1.00 1.04	6.20 6.32	50 50	5435.100 5435.104	
3	<b>Video wall diagonal brace, square tube, short</b> for video wall U-ledger 1.00 and 1.04 m	1.01	7.07	100	5435.030	<b></b>
4	Video wall ledger, square tube	2.00		50	5435.201	
		2.07	12.84	50	5435.208	<b></b>
5	<b>Video wall diagonal brace, square tube, long</b> for video wall ledger 2.00 and 2.07 m	1.93	12.35	50	5435.035	<b></b>
6	Load beam	1.00		10	5435.010	
		1.04		10	5435.014	
		2.00		10	5435.020	
		2.07		10	5435.027	· · · · · ·
7	Suspension point	0.10 x 0.10	2.14	200	5435.210	<u> </u>
8	Video wall PA projecting arm	2.00	23.76	20	5435.055	<b>=</b>
9	Video Wall keder holder	0.08 x 0.17	1.30	100	5435.215	<b>==</b>
10	Aluminium keder rail 2000	1.30	1.95	50	4201.130	<b></b>
		2.25	3.30	50	4201.220	<u>===</u>
11	Aluminium keder bend flexible, short	0.16	0.50	20	4205.004	
12	<b>Video wall pin</b> 16 x 121 mm		0.19	250	5435.310	<b>===</b>
13	Safety clip d=4 mm		1.50	50	<b>Ⅲ</b> 5905.002	<b>=</b>
14	Video wall roof tarpaulin					
	black	2.00 x 3.68	6.90	10	5435.320	
		2.07 x 3.68	7.20	10	5435.327	
	white	2.00 x 3.68	6.90	10	5435.321	
		2.07 x 3.68	7.20	10	5435.328	(1)
15	Video wall gable tarpaulin					
	black	3.45 x 0.90	2.70	10	5435.330	
	white	3.45 x 0.90	2.70	10	5435.331	(1)

Towers for loudspeakers, camera equipment or lighting are essential at every sporting and cultural event.

Depending on requirements, more than 300 preconfigured variants in various heights and widths are possible.



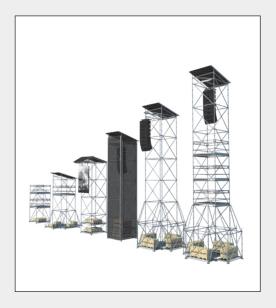
An extensive structural report is available for all these variants.

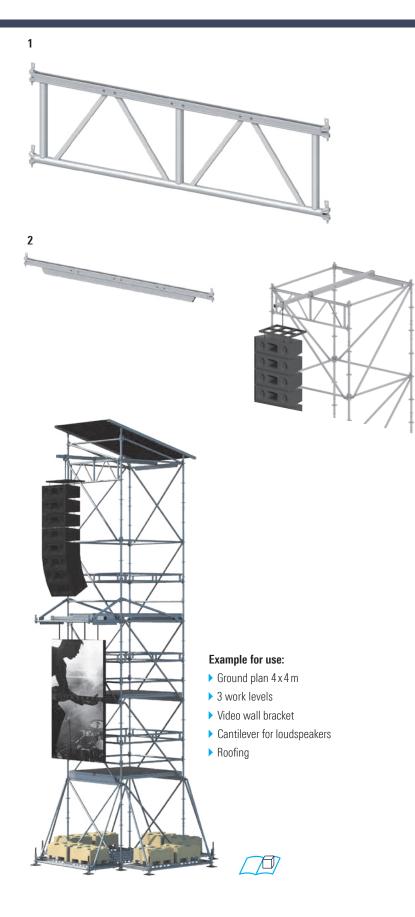
Zwo surface areas are available  $-2.07 \times 2.07$  m and  $4.14 \times 4.14$  m or  $2.00 \times 2.00$  m and  $4.00 \times 4.00$  m - plus heights from 4.7 to 14.7 metres.

Roofs and enclosures using tarpaulins or the Protect System that quickly fits onto Allround Scaffolding cater to every requirement.

The stability of the PA-Tower PLUS was structurally verified in accordance with the current standard DIN EN 13814: with and without a wind strength limit up to Wind Zone 4 — both with and without covering.

This means that time-consuming and cost-intensive structural analyses for individual towers are no longer needed, considerably reducing the project handling workload.





Pos.	Description	Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	Ref. No.	
1	PA Tower PLUS U-lattice beam	2.00 2.07	20.90 21.40	40 40	0100.200	( <del>L</del> )
2	PA Tower PLUS U-ledger	2.00	12.50	50	5435.200	<b>(</b>
		2.07	12.70	50	5435.207	<b>(</b>

# LAYHER STEEL TRUSS SYSTEMS

ENORMOUSLY BEARING, HUGE SPANS, FOR DIFFERENT SCOPES OF APPLICATION







Constructions, which are made to carry high loads and however must be easy and fast to assemble, need well-thought and strong components. Layher offers with the new steel truss the right tools for that challenge.

# THE BENEFITS FOR YOU:

- ▶ Attractive outer dimensions.
- ▶ High load-bearing capacity.
- Large spans.
- Quick assembly thanks to well-known fork-connectors.
- Low bending.

Constructions, which are made to carry high loads and however must be easy and fast to assembly, need well-thought and strong components. Layher offers with the new steel truss the right tools for that challenge.

If needed, order the free available system statics for the truss systems. These contain load tables and all relevant data for your planning office.

#### **Tower Truss**

The Layher Tower truss is suitable for use as a vertical support for structures with horizontal Maxi-Truss beams. **Examples of use:** 

Ground support, advertising panel and cable bridge.

#### **Maxi Truss**

The Maxi Truss is a very strong transom type, which is especially usable for roofings as main transom, as ground support, for advertisment signs or cable bridges.

#### **Nova Truss**

The Layher Nova truss is suitable for use as a vertical support for structures with horizontal Super-Truss beams.

#### Examples of use:

Ground support, advertising panel and cable bridge.

## **Super Truss**

The Super Truss is a very strong transom type, which is usable for roofings as main transom, as ground support, for advertisment signs or cable bridges.

The steel truss elements are connected to one another using bolts 2 / 3 and safety clips 2 / 3. The bolts intended for this purpose must be ordered separately.

The steel truss elements will be produced individually according to your requirements. Do not hesitate to ask us! We are pleased to help you.



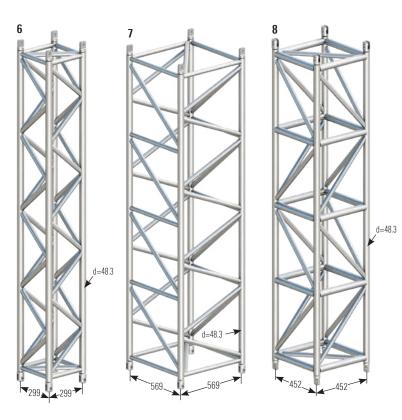
Corner elements and sleeve blocks on request.













# MORE INFORMATION

Further information about load-bearing capacity can be found in the Layher Info Steel Truss

Pos.	Description	Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	]	Ref. No.	
1	Super Truss 🕮	2.40	149.60	2		5650.240	<b>(</b>
	steel, hot-dip galvanized, axial dimensions 550 x 854 mm, Usable for roofings as main transom, as ground support, for advertisment signs or cable bridges, use with bolt 20 x 100	3.00	186.18	2		5650.300	<b>(</b>
		4.00	237.38	2		5650.400	<b>(</b>
		5.00	289.80	2		5650.500	<b>(</b>
		5.50	323.13	2		5650.550	<b>(</b>
2	Bolt 15.8 x 80		0.70	4	<b>=</b>	5550.003	
3	Bolt 20 x 100		1.30	4	<b>=</b>	5550.004	
4	Safety clip d=2.8 mm		0.50	50	<b>=</b>	4905.002	
5	Safety clip d=4 mm		1.50	50		5905.002	

# **ON REQUEST**

Pos.	Description	Dimensions L/H x W [m]	Weight approx. [kg]	Weight per metre approx. [kg]	Ref. No.
6	<b>Tower Truss,</b> steel, hot-dip galvanized, axial dimensions 299 x 299 mm	0.50	23.00	46.00	
	Usable for roofings as vertical support for constructions of Maxi Truss, as ground support, advertisment signs or cable bridges, use with bolt 15.8 x 80	1.00	37.00	37.00	
		1.50	50.30	33.50	
		2.00	67.30	33.70	
		2.40	81.00	33.80	
		3.00	98.00	32.70	
		4.00	127.70	31.90	
		5.00	152.60	30.50	
7	<b>Maxi Truss,</b> steel, hot-dip galvanized, axial dimensions 569 x 569 mm Usable for roofings as main transom, as ground support, for advertisment signs or cable bridges, use with bolt 15.8 x 80	0.25	21.60	86.40	
		0.50	33.00	66.00	
		1.00	53.40	53.40	
		2.07	91.00	44.00	
		2.40	99.20	41.30	
		3.00	120.00	40.00	
		4.00	156.90	39.20	
		5.00	191.00	38.20	
3	<b>Nova Truss,</b> steel, hot-dip galvanized, axial dimensions 452 x 452 mm Usable for roofings as vertical support for constructions of Super Truss, as ground support,	1.50	78.00	52.00	
	for advertisment signs or cable bridges, use with bolt 15.8 x 80	2.40	109.30	45.50	
		3.00	142.50	47.50	
		4.00	184.90	46.20	
		5.00	227.40	45.50	
		6.00	270.00	45.00	

# Index

A		F		0	
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Adapter with spigot	25	FOH entrance	33	horizontal diagonal	27
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