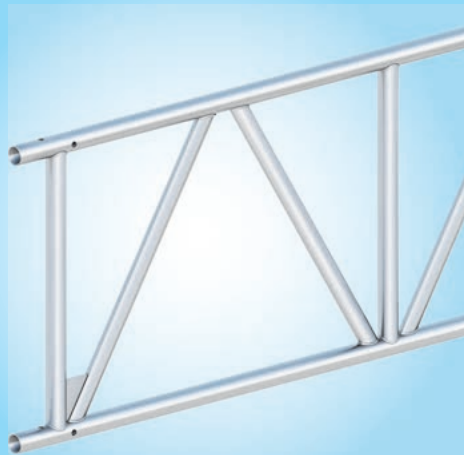
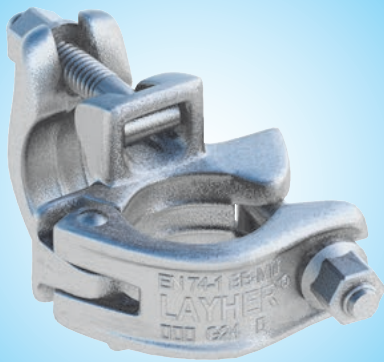


# LAYHER SCAFFOLDING ACCESSORIES CATALOGUE



Edition 04.2013  
Ref. No. 8103.252

Quality management  
certified according  
to ISO 9001:2008  
by German TÜV-CERT



# QUALITY MADE BY LAYHER



// Main plant in Eibensbach



// Plant II in Gueglingen

## // HERE IS THE BEATING HEART OF LAYHER.

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, logistics and management 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 m<sup>2</sup>. This includes more than 142,000 m<sup>2</sup> of production and storage areas. This is where our scaffolding systems are created by highly automated production. Short distances and short reaction times mean we can adapt production to suit our customers' requirements, flexibly and at any time.

## // 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 65 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. With comprehensive services, a permanent range of training courses and an ethos of customer focus, more than 1,500 dedicated Layher employees are creating more possibilities for our customers every single day. In more than 30 countries all over the world.





### // MORE SPEED

We can supply any required quantity of the right products at the right time – to anywhere in the world. Layher has subsidiaries in more than 30 countries in all five continents, with a tight-knit network of national service centers. Speed is also the motto of our logistics concept. Customers have the choice of picking up their material at a Layher service center or having it delivered either to a warehouse or "just in time" directly to the site.



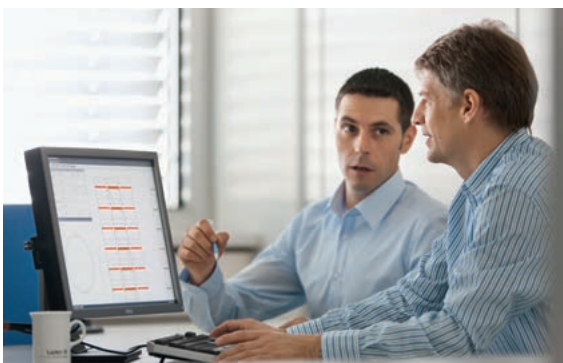
### // MORE EXPERIENCE

Tradition has grown into experience and expertise. Our experts pass on this knowledge – all over the world. Existing customers might want to try a different approach, while new customers might need support when assembling a Layher scaffolding structure. Layher's specialists get to grips with the specific tasks and requirements, devising for our customers persuasive solutions that are both profitable and efficient. Good advice from Layher is guaranteed. We take care of our customers at every level, because cooperation with them on the basis of mutual trust as well as their success are important to us.



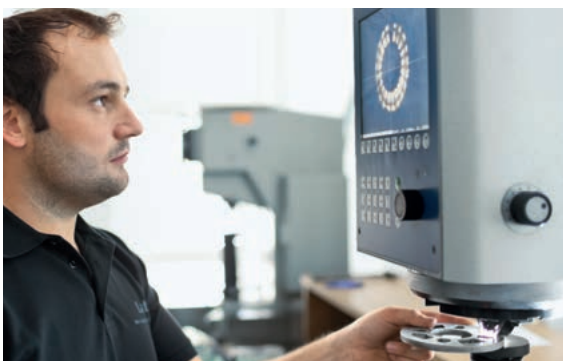
### // MORE KNOWLEDGE

Further training is the key to success. For this reason, Layher organizes regular training seminars that prepare our customers for current and future challenges specifically in scaffolding. This training scheme is backed up by many other options, for example practical product training courses and regular meetings for scaffolding erectors to promote the flow of information between experts and colleagues. And last but not least, Layher offers comprehensive publications on all topics to do with scaffolding construction.



### // MORE CLARITY

Saving time, using material in the best way, improving logistics. All that can be done with Layher's planning software, LayPLAN, or the special Layher tools for AutoCAD®. Layher software means greater reliability when budgeting and planning scaffolding construction projects. Optimization of inventory management and complete cost transparency for the material used in a project. Once the dimensions and the required assembly variant have been entered, the Layher software supplies a scaffolding proposal with matching material list within seconds.



### // MORE QUALITY

People talk a lot about quality. We just produce it. Quality from Layher means state-of-the-art production processes, carefully selected materials, smart automation and a highly qualified workforce. Our products comply with the very latest security standards and possess DIN/ISO certification, German TÜV approval, and many other German and international quality labels. 20,000 kilometers of steel tubing in high-quality workmanship are convincing testimony to Layher's quality standards.

# LAYHER SCAFFOLDING ACCESSORIES



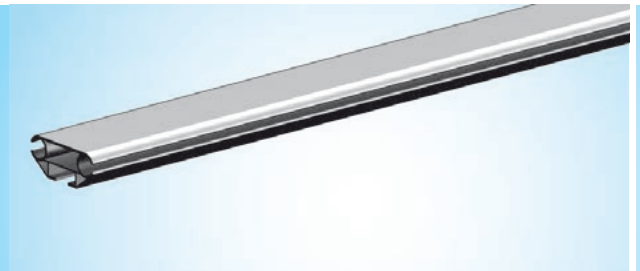
► **Base plates**  
Page 8 – 9



► **Lattice beams**  
Page 8 – 13



► **Castors**  
Page 22 – 23



► **Scaffolding enclosures**  
Page 24 – 27

All dimensions and weights are guideline values. Subject to technical modification.

Steel parts are galvanized according to EN ISO 4042 and EN 12811-2.

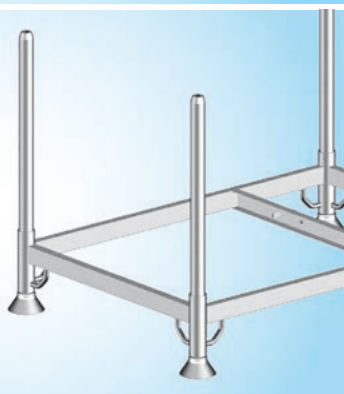
Our deliveries shall be made exclusively in accordance with our currently valid General Terms of Sale. These include the following provisions: The place of performance is Gueglingen-Eibensbach. Title to the delivered goods shall be retained until full payment has been made.

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.

► **Couplers**  
Page 14 – 17



► **Scaffolding pallets**  
Page 28 – 29



## CONTENTS

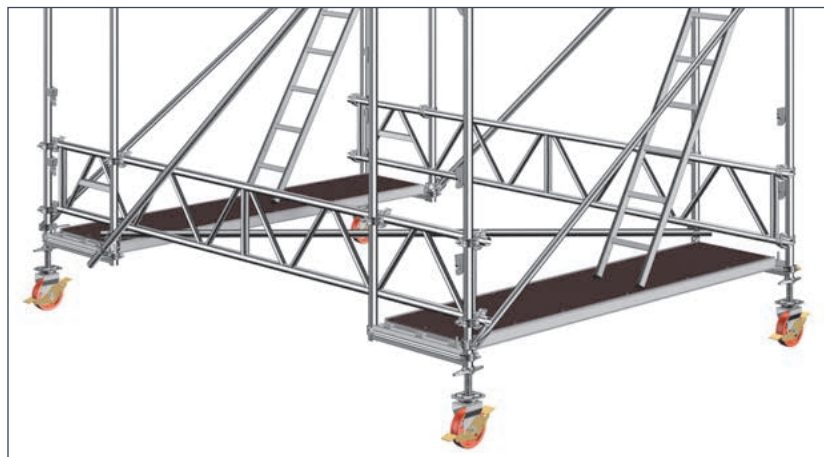
► BASE PLATES AND ACCESSORIES	8
► LATTICE BEAMS, LATTICE BEAMS CONNECTORS, SECTION BEAMS	8
► SCAFFOLDING TUBES, COUPLERS, SPARE PARTS	14
► TOOLS	16
► ANCHORING	18
► TESTING AND MEASURING EQUIPMENT	18
► SCAFFOLDING IDENTIFICATION	18
► SUSPENDED SCAFFOLDING	20
► STANDARD BRICK GUARD AND PROTECTION FOR PEDESTRIANS	20
► PARTS FOR ROLLING TOWERS	22
► SCAFFOLDING ENCLOSURES	24
► LADDER ACCESS	26
► SCAFFOLDING PALLETS	28
► BRIDGING	30
► SCAFFOLDING BOARDS, SOFTWARE FOR SCAFFOLDING CONSTRUCTION	32
► FALL PROTECTION	34
► RAILING CLAMP	34
► VERTICAL TRANSPORT	36
► VARIOUS ACCESSORIES	38

# LAYHER SCAFFOLDING ACCESSORIES

## // THE VERSATILE PROBLEM SOLVERS

Layher is well aware of the fundamental (construction) role of accessories, and offers a comprehensive range complete from a single source:

inexpensive, reliable, system-independent.

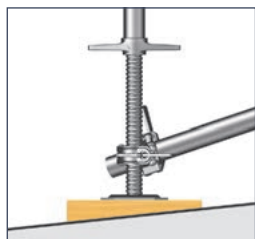


- ▶ **Base plates**
- ▶ **Lattice beams, steel or aluminium**
- ▶ **Couplers and scaffolding tubes**
- ▶ **Parts for rolling towers**

Page 8 – 13

Page 14 – 17

Page 22 – 23



▶ **Base plates**

Page 8 – 9

▶ **Couplers**

Page 14 – 17

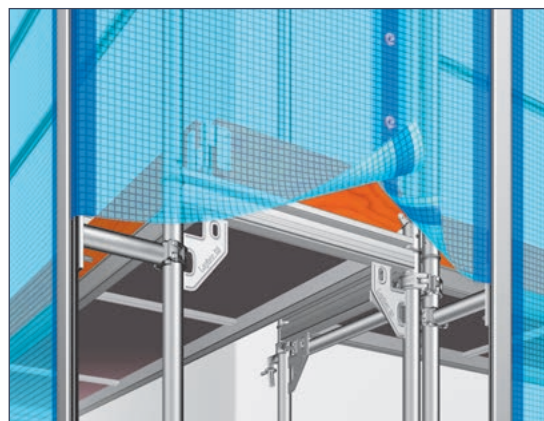


- ▶ **Anchoring**
- ▶ **Ladder access**
- ▶ **Bridging**

Page 18 – 19

Page 26 – 27

Page 30 – 33



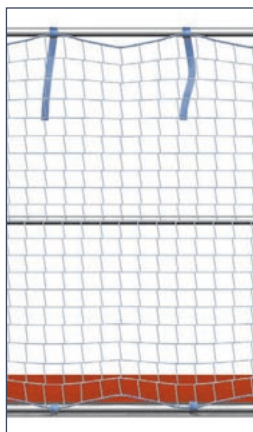
▶ **Scaffolding enclosures**

Page 24 – 27

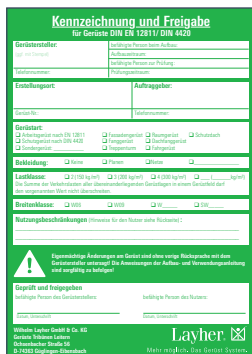




▶ **Suspended scaffolding**  
Page 20 – 21



▶ **Standard brick guard and protection for pedestrians**  
Page 20 – 21



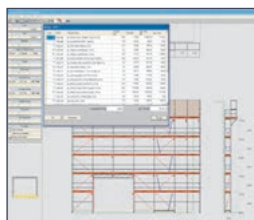
▶ **Scaffolding identification**  
Page 18 – 19



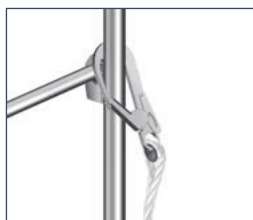
▶ **Vertical transport**  
Page 36 – 39



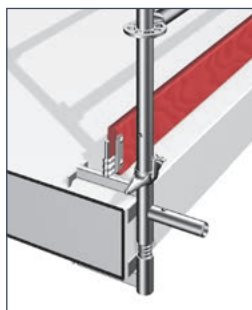
- ▶ **Tools**  
Page 16 – 17
- ▶ **Testing,**  
**measuring equipment**  
Page 18 – 19
- ▶ **Small parts**  
Page 38 – 39



► **Software for scaffolding construction**  
Page 32 – 33



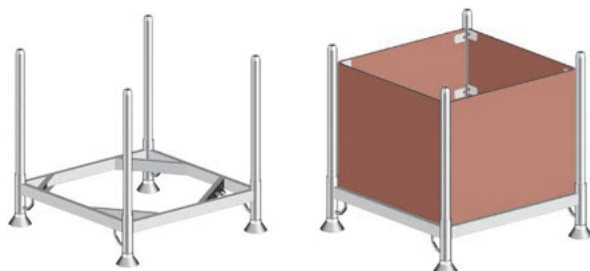
▶ **Fall protection**  
Page 34 – 35



► **Railing clamp**  
Page 34 – 35



► **Scaffolding pallets**



Page 28 – 29

## Base plates and accessories

To adjust to the ground, choose between the non-height-adjustable **base plate** or height-adjustable **base plates** with sturdy and selfcleaning round threads, with colour and notch markings to provide protection against overwinding. Make sure that there are sufficient load-distributing surfaces.

The round threads of all Layher scaffolding spindles have an outside diameter of 38 mm and a pitch of 8.1 mm. The wing external dimension of the spindle nut is 205 mm. The dimensions of the foot plate are 150 x 150 mm.

Base plate (normal)  $\hat{=}$  4.5 mm wall thickness

Base plate (reinforced)  $\hat{=}$  6.3 mm wall thickness

Base plate/head jack solid  $\hat{=}$  solid material

**Load capabilities of spindle cross-section as per DIN EN 12811-1, Annex B**

Spindle type	Npl,d [kN]	Mpl,d [kNcm]	Vpl,d [kN]
normal	97.7	83.0	36.0
reinforced	119.9	94.5	44.1
solid	288.0	157.0	106.0

The **swivelling head jack** can be used to install supports (e.g. wood sections) with an inclination of up to max. 5 % to the horizontal in the longitudinal and transverse directions, thus eliminating the need to level with a wedge. Greater loads can be supported thanks to the articulated mounting of the top plate and the resulting centric introduction of vertical forces into the spindles.

The **cross head jack 45, solid** serves to accommodate wood sections, glued binders or steel beams in falsework and supporting scaffolding. It stabilises the supports against tilting, and it is possible to use one or two formwork supports. Height adjustment is performed using the spindle nut. The cross head jack is suitable for all common formwork supports.

The **protective base for base plates** conserves sensitive floorings from damages made of the base plate.

By using the **adjustment plate**, base plates with steep plate can be used on inclined ground. By turning the top against the bottom part, the inclination from 0 to 16 % can be adjusted. The load increasing static remains completely.

## Lattice beams, lattice beam connectors

Lattice beams of steel and aluminium are used to provide:

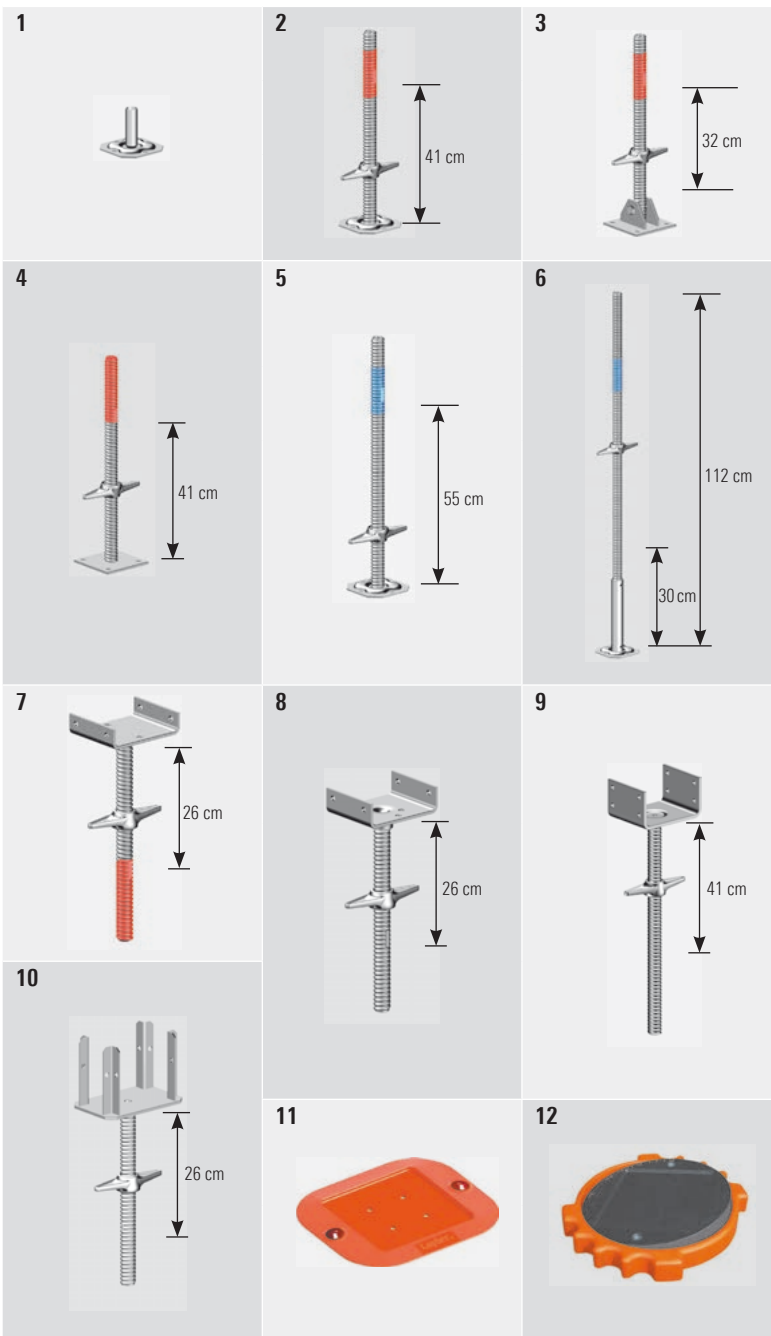
- Bridging
- Projections and strengthening
- Roof structures and enclosures
- Surface scaffolding

The top and bottom chords and the vertical filler bars have an external diameter of 48.3 mm and are suitably designed for the connection of scaffolding couplers.

**Layher** 

More Possibilities. The Scaffolding System.

## Base plates and accessories



## Lattice beams, lattice beam connectors



Type-tested advantages:

- Permissible spans ranging from 3 m to 12 m,
- Different types of support and loads,
- All values in table form, hence no need for structural strength verification for the lattice beam,
- Calculation reliability.

The loading and application tables can be found in our publication "Type testing steel lattice beam 450".





	Pos.	Description	Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	Ref. No.
	1	<b>Base plate</b> without height adjustment	0.11	1.0		4001.000 
	2	<b>Base plate 60</b> (max. spindle travel 41 cm)	0.6	3.6	200	4001.060
	3	<b>Swivelling base plate 60</b> , reinforced (max. spindle travel 32 cm), ensure sufficient structural strength	0.6	6.1	250	4003.000
	4	<b>Base plate 60</b> , solid, without lock (max. spindle travel 41 cm)	0.6	6.7	200	5602.060 
	5	<b>Base plate 80</b> , reinforced (max. spindle travel 55 cm)	0.8	4.9	200	4002.080
	6	<b>Base plate 150</b> , reinforced (max. spindle travel 112 cm), ensure sufficient structural strength	1.5	10.0	25	4002.130
	7	<b>Head jack 45</b> , solid, 16 cm (max. spindle travel 26 cm), width of fork 16 cm, height of fork 5 cm	0.45	6.6	50	5314.045 
	8	<b>Swivelling head jack 45</b> , solid, 16 cm (max. spindle travel 26 cm), effective width of fork 16 cm	0.45	7.3	50	5312.045 
	9	<b>Head jack 60</b> , reinforced, 18 cm (max. spindle travel 41 cm), width of fork 18 cm, height of fork 10 cm	0.6	8.0	100	5316.060 
	10	<b>Cross head jack 45</b> , solid (max. spindle travel 26 cm), opening dimensions 8.5/17 cm	0.45	6.9	50	5315.045 
	11	<b>Protective base for base plate</b> of polypropylene, with 2 reflectors	0.27 x 0.24	0.2	10 	4007.004 
	12	<b>Adjustment plate for base plate</b> of glass-fibre-reinforced polyamide plastic, inclination 0 – 16 %	dia. 0.3	1.3		4000.400 

	Pos.	Description	Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	Ref. No.
	13	<b>Steel lattice beam 450</b> , 45 cm high, 2.0 m long 3.0 m long, with type testing 4.0 m long, with type testing 5.0 m long, with type testing 6.0 m long, with type testing	 2.0 x 0.45 3.0 x 0.45 4.0 x 0.45 5.0 x 0.45 6.0 x 0.45	 20.7 29.6 40.5 49.3 58.2	 40 40 40 40 40	 4912.200 4922.300 4922.400 4922.500 4922.600

## Lattice beams, lattice beam connectors

The lattice beams Ref. Nos. 4912, 4922, 4902 and 4903 are connected to one another using **unit beam spigot T4 dia. 38 mm**, Ref. No. 4922 and **lattice beam hinged pins, dia. 12 mm**, Ref. No. 4905.666 or **special bolt M12 x 60, with nut**, Ref. No. 4905.060.

For lattice beams 4912, 4922, 4902, 4903 and 4906 the following applies: the standard lengths are extended using lattice beam connectors. Loading tables available on request.

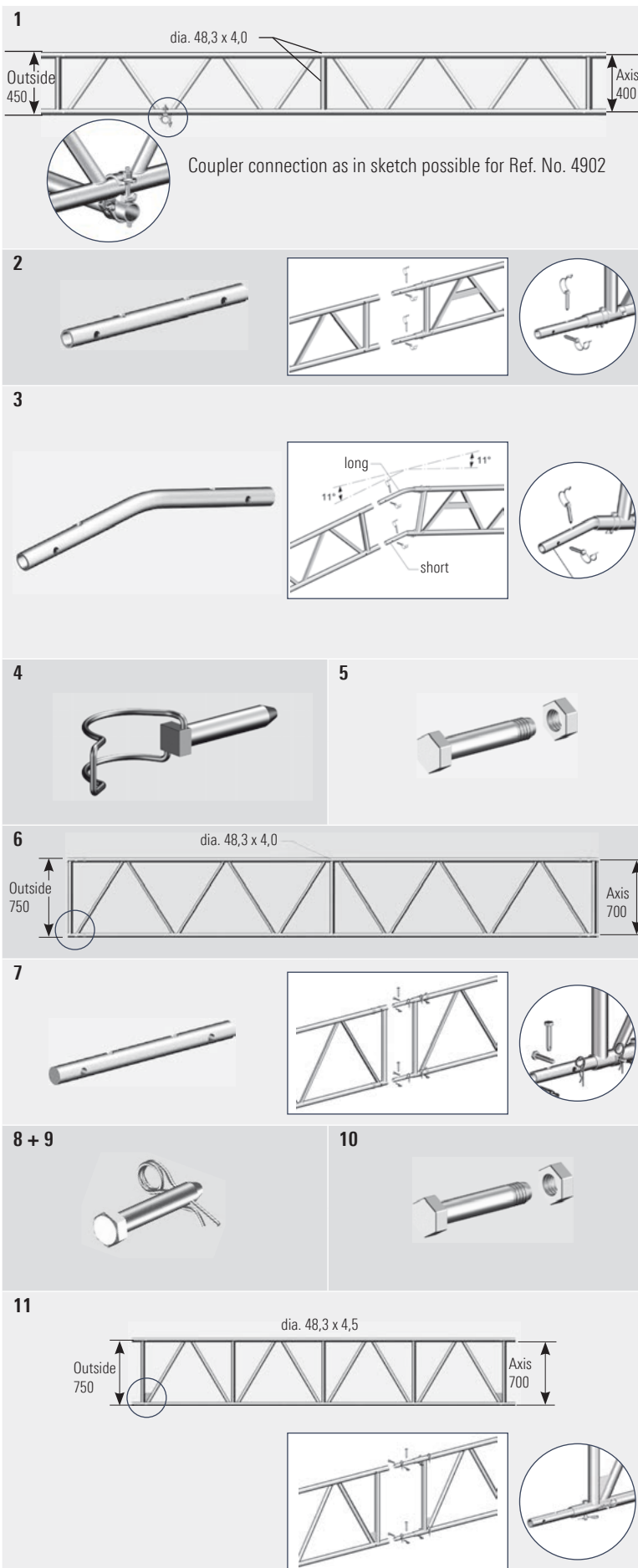
In conjunction with the **unit beam spigots T4 dia. 38 mm, cranked** and standard lattice beams, 45 cm high, made from aluminium or steel, double-pitch roof structures (roof pitch 11°) can be built. See the Catalogue for the Layher Tarpaulin Roof System.






















**Steel lattice beams 750**, 75 cm high, of steel design, are used to support high loads or to bridge wider spans. Loading tables available on request.

The heavy-duty lattice beams Ref. No. 4906 are connected to one another with **unit beam spigots round steel Ref. No. 4916.000** and **lattice beam bolts dia. 14 x 77 mm**, Ref. No. 5906.077, with **safety clip 2.8 mm**, or **special bolts M14 x 65 mm, with nut**, Ref. No. 4908.065.

The **aluminium lattice beam 750** is the lighter alternative for supporting higher loads or for bridging wider spans. Loading tables available on request.

### Lattice beams, lattice beam connectors



	Pos.	Description	Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	Ref. No.
	1	<b>Aluminium lattice beam 450</b> , 45 cm high, aluminium, more than 50 % weight saving compared to steel				
		2.0 m long, with type approval	2.0 x 0.45	8.5	50	<b>4902.200</b>
		3.0 m long, with type approval	3.0 x 0.45	13.5	50	<b>4902.300</b>
		4.0 m long, with type approval	4.0 x 0.45	17.1	50	<b>4902.400</b>
		5.0 m long, with type approval	5.0 x 0.45	21.0	50	<b>4902.500</b>
		6.0 m long, with type approval	6.0 x 0.45	23.6	50	<b>4902.600</b>
		8.0 m long, with type approval	8.0 x 0.45	32.7	50	<b>4902.800</b>
	2	<b>Unit beam spigot T4</b> , dia. 38 mm with type testing, for straight extension of lattice beam Ref. Nos. 4912, 4922, 4902 and 4903	0.44	1.9		<b>4922.000</b>
	3	<b>Unit beam spigot T4</b> , dia. 38 mm, cranked, long for angular extension of lattice beam (45 cm high) at top chord, for double-pitch roof structures, roof pitch 11°	0.62	2.6		<b>4922.001</b> 
		<b>Unit beam spigot T4</b> , dia. 38 mm, cranked, short for angular extension of lattice beam (45 cm high) at top chord, for double-pitch roof structures, roof pitch 11°	0.48	1.9		<b>4922.002</b> 
	4	<b>Lattice beam hinged pin</b> , dia. 12 mm, with pan head	Required: 4 pcs. each	0.1	20 	<b>4905.666</b>
	5	<b>Special bolt M12 x 60</b> , with nut	Required: 4 pcs. each	0.1	50 	<b>4905.060</b>
	6	<b>Steel lattice beam 750</b> , 75 cm high				
		2.0 m long	2.0 x 0.75	35.5	20	<b>4906.200</b> 
		3.0 m long	3.0 x 0.75	48.5	20	<b>4906.300</b> 
		4.0 m long	4.0 x 0.75	61.0	20	<b>4906.400</b> 
		5.0 m long	5.0 x 0.75	78.0	20	<b>4906.500</b> 
		6.0 m long	6.0 x 0.75	90.0	20	<b>4906.600</b> 
		7.0 m long	7.0 x 0.75	102.5	20	<b>4906.700</b> 
	7	<b>Unit beam spigot</b> , round steel, dia. 36 mm for extending lattice beam Ref. No. 4906	0.44	3.4	20	<b>4916.000</b>
	8	<b>Lattice beam pin</b> , dia. 14 x 77 mm	Required: 4 pcs. each	0.1	20 	<b>5906.077</b> 
	9	<b>Safety clip</b> , 2.8 mm	Required: 4 pcs. each	0.01	50 	<b>4905.000</b>
	10	<b>Special bolt</b> , M14 x 65, with nut	Required: 4 pcs. each	0.1	50 	<b>4908.065</b> 
	11	<b>Aluminium lattice beam 750</b> , 75 cm high, aluminium				
		2.25 m long, with type approval	2.25 x 0.75	14.0	25	<b>4903.225</b> 
		3.25 m long, with type approval	3.25 x 0.75	19.5	25	<b>4903.325</b> 
		4.25 m long, with type approval	4.25 x 0.75	26.0	25	<b>4903.425</b> 
		5.25 m long, with type approval	5.25 x 0.75	32.1	25	<b>4903.525</b> 
		6.25 m long, with type approval	6.25 x 0.75	38.1	25	<b>4903.625</b> 
		7.25 m long, with type approval	7.25 x 0.75	44.2	25	<b>4903.725</b> 



## Lattice beams, lattice beam connectors, section beams

The **aluminium tri-lite beam** is a lightweight multi-purpose beam. It is suitable for use as a beam subjected to bending stress, as a vertical support and as a light crosspiece, and is resistant to buckling and tilting without additional stiffening. External dimensions 45 x 45 x 45 cm, coupler connection dia. 48.3 mm possible, extension of beams with lattice beam connectors Ref. No. 4922.000 and special bolts Ref. No. 4905.060 or bolts Ref. No. 4905.065 with safety clips Ref. No. 4905.000. Loading tables available on request.

**Tri-struts LW** are designed for high loadbearing applications, also in temporary hall construction in conjunction with lattice beams Ref. Nos. 4912, 4922, scaffolding tubes and couplers. They therefore serve as supporting structures for mono-pitch and double-pitch roofs and for special solutions. The three scaffolding tubes of the triangular support each have an external diameter of 48.3 mm and a wall thickness of 2.7 mm. The tri-strut has external dimensions of 22 x 22 x 22 cm and is designed for the connection of dia. 48.3 mm scaffolding couplers. Loading tables available on request.

The **three-point base plate** is used to form the base for the tri-strut and to divert the load into the ground.

### Aluminium U-profile with half couplers

For screwing on a lattice beam to carry serial decks; Working surface without any trip hazards. Thanks to the half couplers, the U-profile can be installed on any lattice beam with tubing dia. 48.3 mm.

### Lattice beam mounting 0.4 m

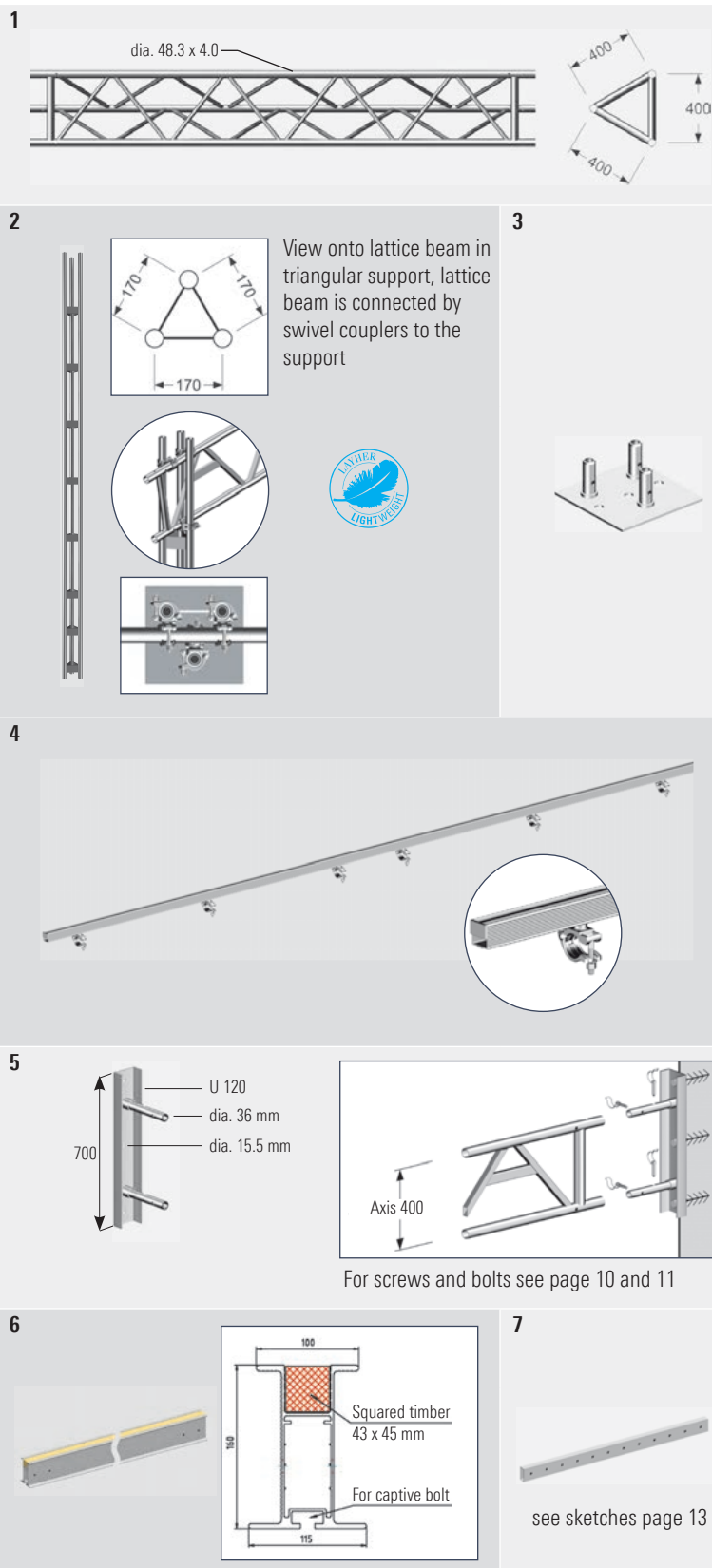
Wall connection for standard lattice beams Ref. Nos 4912, 4922 and 4902 for bridging structures and similar, structural strength calculation required.

The **aluminium section beam with wood** is a lightweight aluminium beam with low overall height for birdcage scaffolding, walkways and bridging. Double-webbed beam of aluminium, 160 mm high. 1 flange 115 mm wide, with T-groove for connections with grooved bolts. 1 flange 100 mm wide, with replaceable wood section insert, for nailed or bolted connections. Loading tables available on request.

### Beam connector, 1.2 m

Holes drilled 10 cm apart. For continuous straight-line extension of aluminium section beams – variable joint. Permits adjustment of the aluminium section beams to the site dimensions. Rectangular tube, 40 x 80 mm cross section, steel, hot-dip galvanized.

## Lattice beams, lattice beam connectors, section beams



For connecting individual **aluminium section beams with wood (6)** Ref. No. 4026 a **beam connector (7)**, 1.2 m Ref. No. 4026.000 and four **beam connector bolts (8) M12 x 70**, with nut Ref. No. 4026.001 are required for each.



## Scaffolding tubes and couplers

### General assembly and extension

Standardised scaffolding tubes in steel (hot-dip galvanized) or aluminium permit, in conjunction with scaffolding couplers, special assembly and extension outside the regular version.

The **33 mm steel tube, 1.5 m** is intended for use with the steel deck T4. Special assemblies differ from the regular version, their stability must be verified.

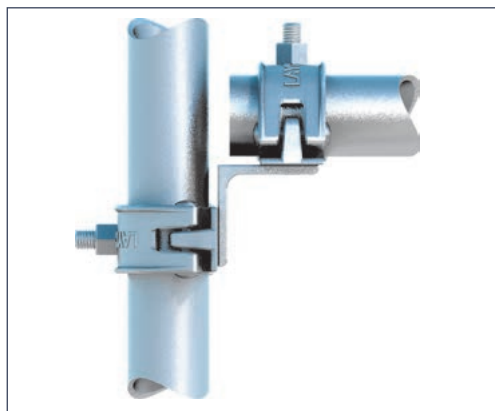
### Scaffolding couplers

connections, in steel, drop-forged; as per DIN EN 74 and general building authority approval from the DIBt (German Civil Engineering Institute). Tightening torque of collar nuts 50 Nm.

The **half-coupler with hook** becomes in conjunction with a steel scaffolding tube a length-adjustable wall tie.

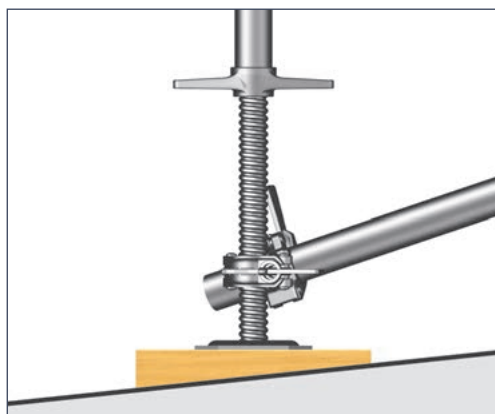
### Lattice beam coupler

Example for use of the lattice beam coupler

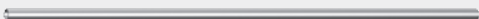


















### Wedge swivel coupler







Example of the use of the Wedge spindle swivel coupler



## Scaffolding tubes and couplers

<b>1</b> 	<b>4</b>  Is used in conjunction with Ref. No. 4600 for anchoring.	
<b>2</b> 		
<b>3</b> 		
<b>5</b>  For right-angled connection of tubes with dia. 48.3 mm	<b>6</b>  For connection at any angle of tubes with dia. 48.3 mm	<b>7</b>  For connection of two tubes with dia. 48.3 mm in one axis. Only in conjunction with EN spigot Ref. No. 4739.000
<b>8</b>  Only in conjunction with sleeve coupler Ref. No. 4703	<b>9</b>  For right-angled connection of tubes with dia. 48.3 mm	<b>10</b>  For connection at any angle of tubes with dia. 48.3 mm
<b>11</b>  For 90° connection on the axis of tubes with dia. 48.3 mm	<b>12</b>  For right-angled connection of a tube dia. 33.7 mm to a tube of dia. 48.3 mm	<b>13</b>  For connection at any angle of a tube dia. 33.7 mm to a tube of dia. 48.3 mm
<b>14</b>  For connection of a tube dia. 48.3 mm to a scaffolding spindle at any angle	<b>15</b>  For right-angled connection of a tube dia. 60.3 mm to a tube of dia. 48.3 mm	<b>16</b>  For connection at any angle of a tube dia. 60.3 mm to a tube of dia. 48.3 mm



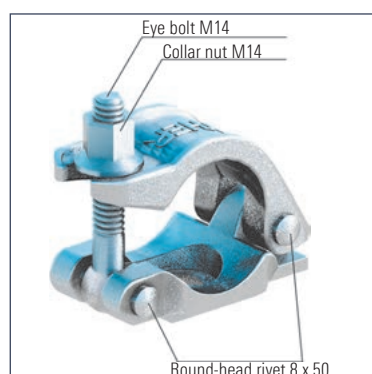
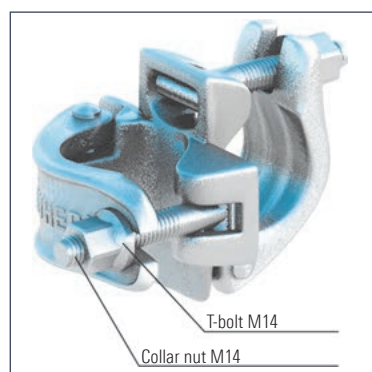
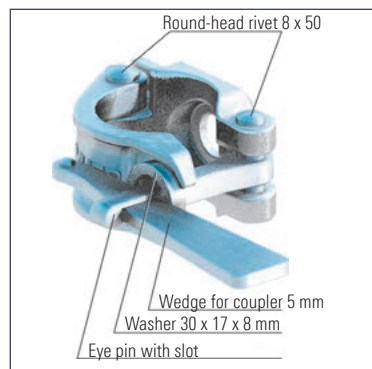
	Pos.	Description	Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	Ref. No.
	1	<b>Scaffolding tube</b> , steel, hot-dip galvanized Scaffolding tubes dia. 48.3 x 4.0 mm, as per DIN EN 29	1.0	4.5	61	4600.100
			2.0	9.0	61	4600.200
			3.0	13.5	61	4600.300
			4.0	16.7	61	4600.400
			5.0	22.7	61	4600.500
			6.0	25.0	61	4600.600
	2	<b>33 mm steel tube</b> , 1.5 m Scaffolding tubes dia. 33.7 x 2.25 mm	1.5	3.0	100	4603.150 
	3	<b>Scaffolding tube</b> , aluminium Scaffolding tubes dia. 48.3 x 4.0 mm	1.0	1.5		4601.100
			2.0	3.0		4601.200
			3.0	4.5		4601.300
			4.0	6.0		4601.400
			5.0	7.5		4601.500
			6.15	8.9		4601.600
			8.0	11.7		4601.800
	4	<b>Half coupler with hook</b>		0.8	25	4749.019
	5	<b>Double coupler</b> Class BB, EN 74-1 RA BB C3 M quality-monitored, for use in class B and BB on steel and aluminium tube	19 WS	1.3	25	4700.019
			22 WS	1.3	25	4700.022
	6	<b>Swivel coupler</b> Class B, EN 74-1 SW B C3 M, quality-monitored, for use in class B on steel and aluminium tube	19 WS	1.5	25	4702.019
			22 WS	1.5	25	4702.022
	7	<b>Sleeve coupler</b> Class B, EN 74-1 SF B C3 M, quality-monitored, for use in class B on steel and aluminium tube	19 WS	1.8	25	4703.019
			22 WS	1.8	25	4703.022
	8	<b>Internal spigot</b> Class B, EN 74-1 SF B C3 M, quality-monitored, for use in class B on steel and aluminum tube	0.2	1.2	25	4739.000
	9	<b>Wedge double coupler</b> Class B, DIN EN 74-B-C, on steel and aluminium tube		1.6	25	4727.000 
	10	<b>Wedge swivel coupler</b> Class A, DIN EN 74-A-C, on steel and aluminium tube		1.8	25	4728.000 
	11	<b>Lattice beam coupler</b> for lattice beam and tubes dia. 48.3 mm	19 WS	1.6	25	4720.019
			22 WS	1.6	25	4720.022
	12	<b>Reduction double coupler</b> , 48.3 x 33.7 mm	19 WS	1.3	25	4737.019
			22 WS	1.3	25	4737.022
	13	<b>Reduction swivel coupler</b> , 48.3 x 33.7 mm	19 WS	1.6	25	4738.019
			22 WS	1.6	25	4738.022
	14	<b>Wedge spindle swivel coupler</b>		1.8	25	4735.000 
	15	<b>Reduction double coupler</b> , 60.3 x 48.3 mm	22 WS	1.9	25	4744.022 
	16	<b>Reduction swivel coupler</b> , 60.3 x 48.3 mm	22 WS	2.3	25	4745.022 

WS = wrench size   PU = packaging unit    = available ex works    = delivery time on request    = only available in this packaging unit

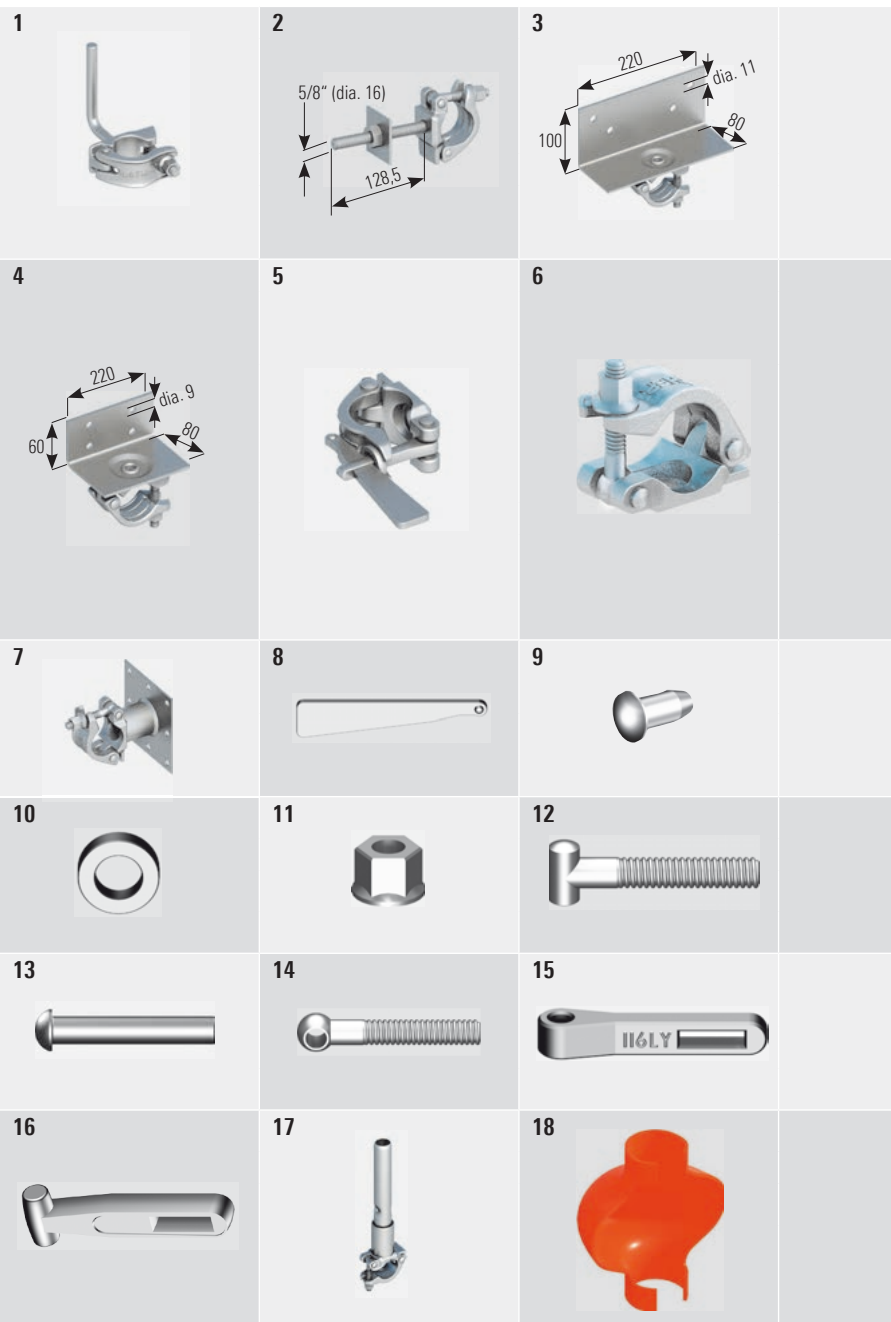
## Scaffolding tubes, couplers, spare parts

### Half-couplers

with screw and wedge connection for use on steel and aluminium tubes in accordance with approval Z-8.331-882.

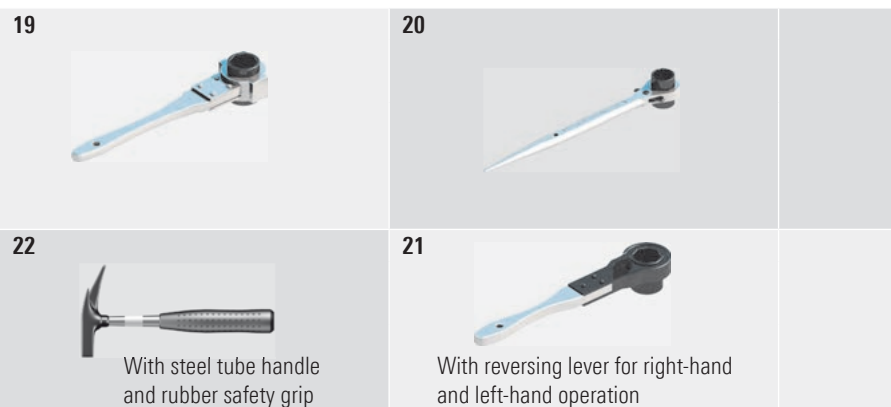


### Scaffolding tubes, couplers, spare parts



### Tools




### Tools



**Layher** 

More Possibilities. The Scaffolding System.

	Pos.	Description		Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	Ref. No.
	1	<b>Half-coupler with toe board pin</b>	19 WS		1.0	25	4708.019
			22 WS		1.0	25	4708.022
	2	<b>Combination coupler</b> connects scaffolding tubes to wooden parts	19 WS		1.1		4711.019 
	3	<b>Squared timber coupler, large</b> with steel bracket for holding wood sections, e.g. 10 x 12 cm	19 WS	0.22	1.9		4717.019
			22 WS		1.9		4717.022 
	4	<b>Squared timber coupler, small</b> with steel bracket for holding wood sections, e.g. 8 x 8 cm	19 WS	0.12	1.4		4718.019
			22 WS		1.4		4718.022
	5	<b>Wedge half-coupler</b> Class A, quality-monitored, with approval Z-8.331-882, for use in class A on steel and aluminium tube			0.9		4729.000 
	6	<b>Half-coupler with eye bolt</b> Class B, quality-monitored, with approval Z-8.331-882, for use in class B on steel and aluminium tube	19 WS		0.8	25	4707.019
			22 WS		0.8	25	4707.022
	7	<b>Half-coupler with plate</b> Connection of wall panels to scaffolding tubes	19 WS	0.12 x 0.12	1.5		4705.019 
	8	<b>Wedge for wedge coupler, 5 mm, complete</b>			2.5	25 	6494.540 
	9	<b>Mushroom head rivet, 5 x 11 mm</b>			1.0	100 	6494.836 
	10	<b>Washer, 30 x 17 x 8 mm</b>			3.0	100 	6494.539 
	11	<b>Collar nut M14</b>	19 WS		3.0	100 	6494.535
			22 WS		3.0	100 	6494.536
	12	<b>T-bolt M14</b>			4.5	50 	6494.537 
	13	<b>Round-head rivet 8 x 50</b> for riveting eye bolts or locking bar			2.0	100 	6491.424 
	14	<b>Eye bolt M14</b>			3.5	50 	6494.538 
	15	<b>Eye bolt with slot</b>			4.5	50 	6494.542 
	16	<b>T-bolt with slot</b>			4.0	50 	6494.541 
	17	<b>Spigot with half coupler</b> for extension on dia. 48.3 mm	19 WS	0.3	1.8		4706.019
			22 WS		1.8		4706.022 
	18	<b>Cover for coupler</b> with integrated reflector polyethylene, fixing with disposable tie 6241.000 (s. p. 26, Pos. 6)			0.1	10 	4007.003 

	Pos.	Description		Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	Ref. No.
	19	<b>Ratchet spanner</b> with reinforced head	19 WS	0.32	0.7		4740.019
			22 WS		0.7		4740.022
	20	<b>Ratchet wrench, WS 19/22</b> for 19 and 22 mm widths across flats, with reversing lever for right-hand and left-hand operation, mandrel for ring bolts		0.32	0.6		4747.000
	21	<b>Scaffolding ratchet</b> with reversing lever for right-hand and left-hand operation	19 WS	0.32	0.7		4726.019 
			22 WS		0.7		4726.022 
	22	<b>Scabbling pick, 600 g, with steel tube handle</b> and rubber safety grip		0.32	0.9		4421.050 

WS = wrench size   PU = packaging unit    = available ex works    = delivery time on request    = only available in this packaging unit



## Anchoring

The scaffolding must be anchored vertically to and parallel with the façade with resistance to both tensile and compressive stress. Layher offers speedy and safe solutions:

**Wall tie, 0.38 m**, connected using one double coupler to an upright tube.

**2 wall ties, 0.38 m**, connected in a V shape with double couplers to the inner standard.

**Wall ties, 0.95 m / 1.45 m / 1.75 m**, connected using two double couplers to both upright tubes.

The optimum combination of the **ring screw** and **plastic wall insert** ensures high holding strengths.

The high-quality welded connection prevents bending open of the eyelet.

The screw-in mark allows the screw-in process to be visually monitored.

High steel strength and zinc coating guarantee long-term use.

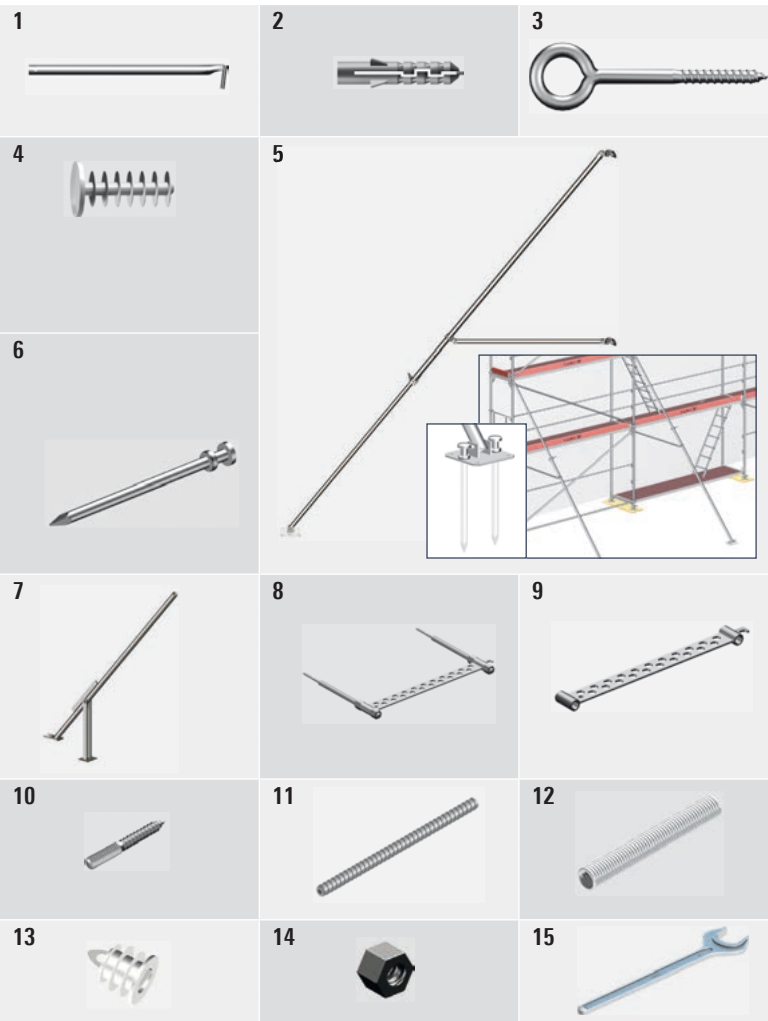
The anchoring forces in accordance with the approval or individual verification of structural strength can vary widely. The loading capacity of the anchoring, in particular of the anchoring foundation, must be carefully checked and verified.

The load-bearing capacity of the plug connection must be checked with the Layher plug tester (see below) in accordance with our instructions for assembly and use. The plug test must be documented. Please comply with the plug manufacturer's installation instructions.

The **ETICS-tie** is constructed for carrying high loads, parallel to the façade, in use together with external thermal insulation compound systems. Assembly information, see instructions for assembly and use.



### Anchoring



## Testing and measuring equipment, scaffolding identification

Our instructions for assembly and use make reference to insert testing. The regulations relating to anchoring must be complied with at all times.

### Insert testing instrument

Hand-operated insert testing instrument with practical equipment case; with 2 measurement ranges (up to 4.5 kN / 9.0 kN). The test loads are read off from the appropriate scale and entered in the test record. Measurement tolerance  $\pm 15\%$ .

Identification and prohibition signs for work scaffolding as per DIN EN 12811-1. Suitable see-through pocket made of transparent plastic for weather protection. The three-piece **scaffolding identification pad** with carbon copy developed to tag work scaffolding. The right part is the inspection record for your files. Your client gets the carbon. On the back side of the carbon, important application notes are listed.

### Testing and measuring equipment, scaffolding identification

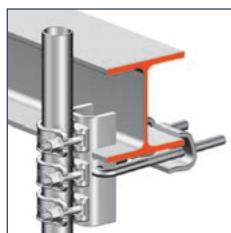


	Pos.	Description	Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	Ref. No.
	1	Wall tie	0.38	1.6	100	1754.038
			0.95	3.7	50	1754.095
			1.45	5.7	50	1754.145
			1.75	5.8	50	1754.175
	2	Plastic wall insert, plastic, drilled hole dia. 14 mm	70 mm	0.01	25	4008.070
			100 mm	0.01	25	4008.100
			135 mm	0.01	25	4008.135
	3	Ring screw, steel, galvanized, dia. 12 mm, for expanding plug	95 mm	0.2	10	4009.095
			120 mm	0.2	10	4009.120
			190 mm	0.3	10	4009.190
			230 mm	0.3	10	4009.230
			300 mm	0.4	10	4009.300
			350 mm	0.5	10	4009.350
	4	Cap, 12 mm, white, for expanding plug Ref. No. 4008	12 mm	0.01	100	4007.000
	5	Telescopic stabilizer, 3.3 – 6.0 m	3.3	28.4	20	4032.600
	6	Peg solid, dia. 24 mm	470 mm	1.8		4032.100
	7	Peg extraction device		8.0		4032.200
	8	ETICS-tie 600 complete, up to approx. 200 mm insulation ETICS-tie 800 complete, up to approx. 300 mm insulation comprising items 9, 10 (2 x), 11 (2 x) and 14 (4 x)	0.68	5.5		4000.600
			0.88	6.9		4000.800
	9	ETICS-tie 600 ETICS-tie 800	0.68	2.5		4000.200
			0.88	3.3		4000.300
	10	ETICS hanger bolt, M12 x 125	125 mm	0.1	25	4000.125
	11	ETICS-tie rod, up to approx. 200 mm insulation ETICS-tie rod, up to approx. 300 mm insulation	0.38	1.0	10	4000.120
			0.48	1.3	10	4000.480
	12	Plastic pipe, 50 m		5.0		4000.050
	13	Cap for plastic pipe		0.01	50	4000.102
	14	Lock nut, WS 36 x 30		0.2	20	2671.130
	15	Open ended wrench, WS 36		0.5		2671.135

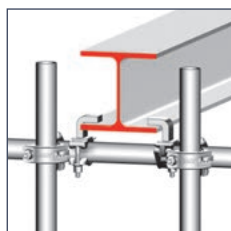
	Pos.	Description	Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	Ref. No.
	16	Insert testing instrument for regulation testing of scaffolding anchoring, in sheet steel equipment case	0.6	9.3		4012.000
	17	Magnetic spirit level	0.4	0.5		4006.000
	18	Scaffolding identification pad Pad with 50 + 50 pieces (Original + Carbon) with centre perforation and foldover as carbon-block	DIN A4	0.5		6344.500
	19	Rolling tower identification pad Pad with 50 pieces with centre perforation	DIN A4	0.5		6344.400
	20	Prohibition sign	0.18 x 0.14	0.01	20	6344.200
	21	See-through pocket for Ref. No. 6344.200/400 and 500	0.24 x 0.16	0.01	10	6344.000

## Suspend scaffolding

Economical solutions for corrosion prevention, refurbishment, ceiling work and much more.



The suspended scaffolding coupler must be secured with two **safety hooks**.



in the vertical or horizontal direction.

The **beam gripper** is attached to the I beam. The connection to the scaffolding is made by means of the continuously adjustable **suspended scaffolding chain** with 2 shorter hooks, which can be connected to every chain link. The suspended structure can be subjected to a load of 20 kN per suspension point in the vertical direction. Expansion work is done with lattice beams and decks.

Dimensions of I beam:

Flange width max. 30 cm

Flange thickness max. 3.6 cm

Web thickness max. 1.9 cm

Corresponds to a wide I beam, series HE B 1000

The **suspended scaffolding coupler** is suspended in existing brackets and T, I or U sections. With the three riveted-on half-couplers (for 48.3 mm scaffolding tubes) they have a permissible load of 15 kN.

The **clamp couplers** for 48.3 mm scaffolding tubes are particularly advantageous for large flange widths. The connection to the flange is always made using two clamping couplers. Permissible load 9 kN per clamping coupler

## Suspend scaffolding



Suspension in upright U or I sections. Maximum flange thickness 18 mm.



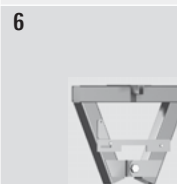
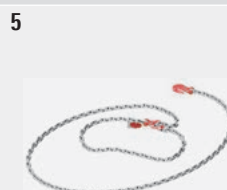
Two **safety hooks for suspended scaffolding coupler** secure the coupler Ref. No. 4713 to the horizontal support flange. Maximum flange width of section 220 mm.



For suspending scaffolding tubes of dia. 48.3 mm on steel structures. Two pieces required.



Use as Clamp coupler



## Standard brick guard and protection for pedestrians

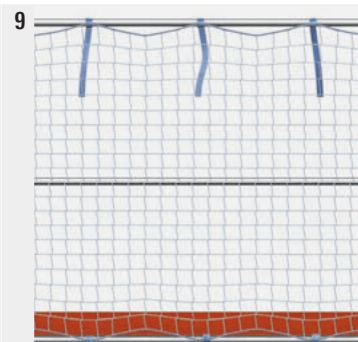
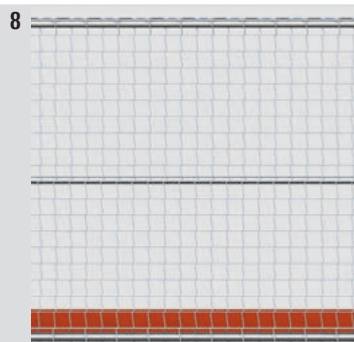
### Protection net

The nets are attached at the bottom (at scaffolding deck height) and at the top (2 m above the scaffolding deck) to a tube. Without a quick strap fastener, the protection net is threaded with each loop of its mesh into the tubes. With quick strap fasteners, the protection net is attached to the tubes at every 750 mm. A toe board and a handrail are required in any event.

Protection net 10.0 x 2.0 m, specification:

Mesh width 100 mm, blue, made of PPM 4.5 mm, knotless, as per DIN EN 1263-1, type U








## Standard brick guard and protection for pedestrians



**Layher** 

More Possibilities. The Scaffolding System.




	Pos.	Description	Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	Ref. No.
	1	<b>Suspended scaffolding coupler</b> Permissible load 15 kN Coupler secured by 2 securing hooks Ref. No. 4714.000	22 WS	3.8		4713.022 
	2	<b>Safety hook</b> for suspended scaffolding coupler	24 WS	0.9		4714.000 
	3	<b>Clamp coupler</b> for I beam Permissible load 9 kN vertical or parallel to the tube axis	19 WS 22 WS	1.1 1.1		4716.019 4716.022
	4	<b>Clamp half coupler</b> for I beam Permissible load 3.6 kN vertical to the tube axis	19 WS 22 WS	1.4 1.4		4750.019  4750.022 
	5	<b>Suspended scaffolding chain</b> , 4.0 m Permissible load 20 kN  Short link round steel chain dia. 8 mm, galvanized, for lifting purposes according to EN 818-2 grade 8 with 2 shorter hooks. About the chain inspection, a inspection certificate 3.1 can be issued according to EN 10204.	4.0	7.1		4015.444 
	6	<b>Beam gripper</b> automatically locking when closed	0.5 x 0.41	11.2		4015.000 
	7	<b>Load hook 450</b> for beam gripper Permissible load 15 kN	0.68 x 0.24	6.9		4016.000 

#### Side protection nets must be checked every year!

Side protection nets may only be used within a year of their being tested. If older protection nets are used, it must be verified in tests that the maximum tensile strength of the net yarn is still at least 2 kN. This testing of your Layher side protection nets is free of charge for you.

To do so, a test mesh must be sent to Layher. In DIN EN 1263-1, Type U "Protection Nets and Protection Net Accessories, Safety Requirements, Testing" details are also given in 4.3 Instructions for Use, on the "time of removal from service".

	Pos.	Description	Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	Ref. No.
	8	<b>Protection net</b> without quick strap fastener	10.0 x 2.0	4.5	100	6232.000
	9	<b>Protection net</b> with quick strap fastener	10.0 x 2.0	5.9	100	6232.002
	10	<b>Quick strap fastener</b>	0.5	0.01	50 	6235.000

## Parts for rolling towers

### Layher castors

The mobile solution for birdcage, bridge or suspended scaffolding is often the best alternative in terms of technical suitability, scheduling and price. In this field too, the choice, the delivery capability and not least the experience of the manufacturer point to Layher. If scaffolding is made mobile using castors, DIN 4420-3 applies. For these rolling towers, verification of structural strength is required.

Robust castors with twin brake (it brakes wheel and slewing ring) for various loads, offer a safer mobility of the scaffolding – without high effort.

The spindels, which are inserted into the scaffolding standards offer an exact adjustment and lead the loads centrally into the wheel. This system offers highest stability and smooth production flows. For special applications, e.g. on sensitive floorings or work in explosive areas, we suggest the use of castors with Vulkollan or polyurethane coatings (see article description). In scaffolding structures with a high proportion of permanent loads (e.g. dead weight), we recommend the use of the castor 1000/1200.

For rolling towers using **mobile beam with bar**, Ref. No. 1338.320, all the provisions of DIN 4420-3 must be met. This applies particularly for sufficient ballasting, safe internal access via hatch-type decks with ladders, and the necessary side protection on every deck level.

The **adjustable spigot** is fastened to the mobile beam with bar, Ref. No. 1338.320, at the required point. For further extensions, the scaffolding elements are attached to the spigots. This permits flexible working on the ceiling or wall (in the middle or at the side).

For heavy rolling towers:

### Double flange castor

For use on rails. Overall height: 313 mm. Steel wheel: External dia. 285 mm, internal dia. 242 mm, external width 95 mm, clear width 75 mm.

The bolted-on half-coupler permits, in conjunction with a scaffolding tube, locking and alignment of all the castors in the direction of travel.

### Flange castor for 48.3 mm tube

For use on 48.3 mm tubes.

Steel wheel: External dia. 230 mm

The welded-on half-coupler permits, in conjunction with a scaffolding tube, locking and alignment of all the castors in the direction of travel.

The scaffolding joints are secured with **locking pins** in special cases against unintentional lifting off, for example when scaffolding units are moved with a crane or in particular wind conditions.

## Parts for rolling towers

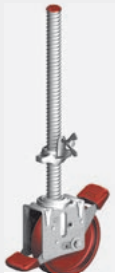
1



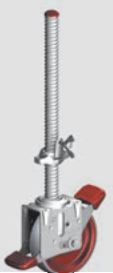
2



3



4

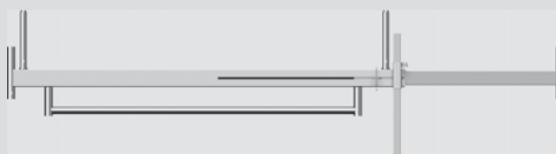


5



The welded-on halfcoupler permits, in conjunction with a scaffolding tube, locking and alignment of all the castors in the direction of travel.

6



The telescopic device: width max. 3.2 m, min. 2.3 m. The mobile beam can be used for all scaffolding systems (rolling towers, frame, modular and other scaffolding, tube-and-coupler) with a tube diameter of 48.3 mm.

7



8



9



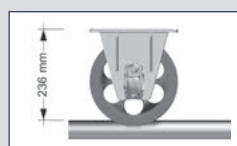
Example for use:  
Trolley with double flange  
castor on rails

10








Example for use:  
Trolley with flange castor  
on 48.3 mm tube

11



**Layher** 

More Possibilities. The Scaffolding System.

	Pos.	Description	Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	Ref. No.
	1	<b>Castor 700</b> Plastic wheel, dia. 200 mm. With base plate, adjustment range 0.3 – 0.6 m, spindle nut with lock, castor with twinbrake lever and load centering when braked. Wheel and slewing ring can be locked. Permissible load capacity: braked 7.0 kN; unbraked 3.5 kN	dia. 0.2	6.8		5218.201
	2	<b>Castor 700</b> , with Vulkollan coating Plastic wheel dia. 200 mm. With base plate, adjustment range 0.3 – 0.5 m, spindle nut lock, castor with twin brake lever and load centering when braked. Wheel and slewing ring can be locked. Permissible load capacity: 7.0 kN	dia. 0.2	7.0		5218.202
	3	<b>Castor 1000</b> Plastic wheel, dia. 200 mm. With base plate, adjustment range 0.3 – 0.6 m, spindle nut with lock, with twin brake lever and load centering when braked. Wheel and slewing ring can be locked. Permissible load 10 kN (braked and unbraked)	dia. 0.2	6.3		5219.201
	4	<b>Castor 1000</b> , with electroconductive polyurethane coating Plastic wheel dia. 200 mm of polyamide with coating of electroconductive polyurethane. With base plate, adjustment range 0.3 – 0.6 m, spindle nut lock, with twin brake lever and load centering when braked. Wheel and slewing ring can be locked. Permissible load capacity 10 kN Special castor for sensitive floorings and thanks to electroconductability also usable in explosive or ESD areas. Bleeder resistance according to DIN EN 12526 < 10 <sup>4</sup> Ω	dia. 0.2	6.8		5219.202 
	5	<b>Castor 1200</b> , with half-coupler Reinforced plastic wheel, dia. 200 mm. With base plate, adjustment range 0.3 – 0.6 m, spindle nut with lock, wheel and slewing ring can be locked. Wheel and slewing ring can be locked. Permissible load 12 kN (braked and unbraked)	dia. 0.2	12.0		5217.200 
	6	<b>Mobile beam with bar</b> , 3.2 m, adjustable Steel rectangular tube, hot-dip galvanized. For base widening in special rolling tower structures.	3.2	42.6	20	1338.320
	7	<b>Castor 750</b> , with Vulkollan coating	dia. 0.25	11.3	150	5207.250 
	8	<b>Spigot</b> , adjustable Steel, hot-dip galvanized. For use with mobile beam Ref. No. 1338.320	0.46	2.1		1337.000
	9	<b>Double flange castor</b> , 75 mm Secured by top plate, hole pattern 170 x 170 mm, dia. 18 mm, external dia. 285 mm, internal dia. 242 mm, without brake. Permissible load 20 kN	dia. 0.285	28.0		5216.075 
	10	<b>Flange castor</b> for 48.3 mm tube Secured by top plate, outer hole pattern 170 x 170 mm, dia. 18 mm, inner hole pattern 126 x 126 x 13 mm (slot hole 13 x 28 mm) without brake. Permissible load 31 kN	dia. 0.23	16.8		5221.048 
	11	<b>Locking pin</b> , red, dia. 11 mm		0.2	200	4000.001

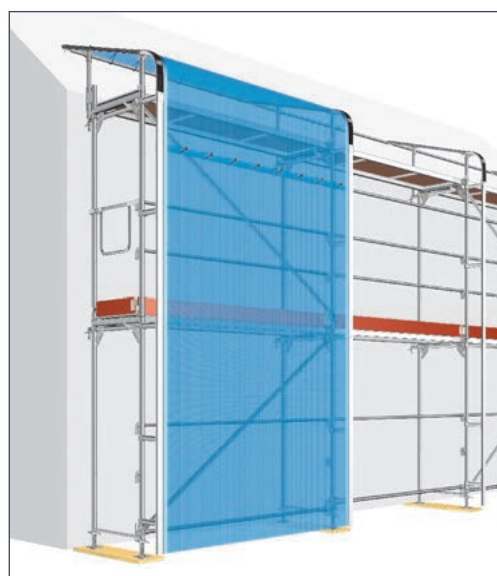
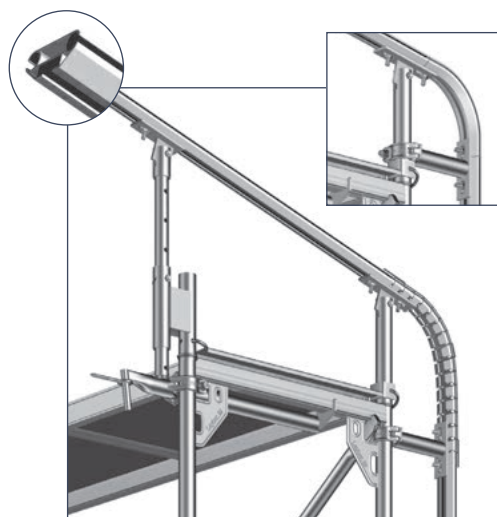
## Scaffolding enclosures

### Keder rail system

The Layher keder rail system is a weather protection system for scaffolding comprising **aluminium keder rails 2000** and ready-made **keder tarpaulins**. It forms a continuous covering of the scaffolding surfaces to a level above the eaves of the building to be enclosed and is thus an almost watertight and dustproof enclosure. The aluminium keder rails are connected with **rail holders** and **capitive bolts**.

The wind loads that the weather protection system for scaffolding has to transmit must be calculated and verified in accordance with DIN EN 12810/12811. The spacing of the rail holders is max. 1 m. Transmission of forces must be structurally verified. Structural strength verifications are available for Layher scaffolding.

The load-bearing capacity of the keder rail system from Layher is designed such that scaffolding bays of up to 3.07 m can be used up to a height of 50 m. Above the 50 m level, the maximum possible scaffolding bay size is 2.57 m. The assembly instructions are available on request.

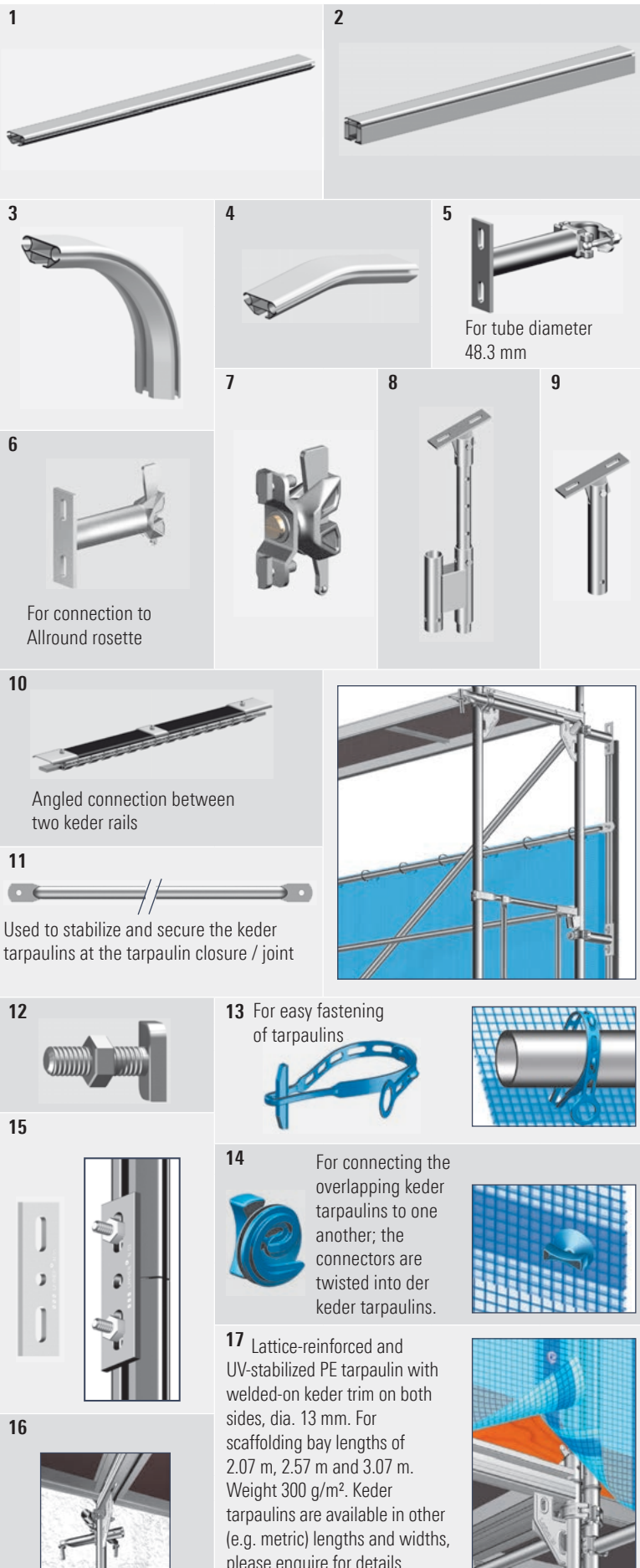


Keder tarpaulins in use on the scaffolding

































**Layher** 

More Possibilities. The Scaffolding System.

### Scaffolding enclosures





	Pos.	Description	Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	Ref. No.
	1	Aluminium keder rail 2000	1.3 2.0 2.25 2.5 3.0 4.0	2.0 3.0 3.3 3.8 4.5 6.0		4201.130  4201.200  4201.220  4201.250  4201.300  4201.400 
	2	Aluminium keder rail 3000	2.0 3.0 4.0 5.0 6.0	6.1 9.2 12.2 15.3 18.3		5574.200  5574.300  5574.400  5574.500  5574.600 
	3	Aluminium keder bow 2000 eaves, 79°	0.35	0.5		4205.001 
	4	Aluminium keder bow 2000 ridge (roof pitch 11°)	0.3	0.5		4205.002 
	5	Rail holder with half-coupler, 19 WS 2 grooved bolts are required	0.2	1.7		4201.000 
	6	Rail holder with wedge head 2 grooved bolts are required	0.2	1.7		4201.001 
	7	Keder rail holder, rotatable		0.9		5573.000 
	8	Height adjuster for weather cap adjustable in 8 cm intervals, 1 grooved bolt is required	0.6	4.5		4203.000 
	9	Hinge fitting for weather cap 2 grooved bolts are required	0.3	1.6		4202.000 
	10	Keder bow 2000 flexible, 0.60 m	0.6	1.0		4205.003 
	11	Tube brace Steel, 2 grooved bolts are required. Metric and other lengths available on request	2.07 2.57 3.07	4.2 5.1 6.0	150 150 150	4204.207  4204.257  4204.307 
	12	Captive bolt for keder rail M12 x 40, with nut		0.1	50 	4206.000 
	13	T-tie, for fastening or connecting the tarpaulins to one another		0.01	100 	6217.000 
	14	Connector, for tarpaulin joint		0.01	100 	6218.000 
	15	Joint strap for aluminium keder rail 2 grooved bolts are required	0.17	0.5		4208.000 
	16	Spring clip, 11 mm pin		0.1	200	1250.000
	17	Keder tarpaulin, 2.07 x 10.0 m Keder tarpaulin, 2.57 x 10.0 m Keder tarpaulin, 3.07 x 10.0 m	10.0 x 2.07 10.0 x 2.57 10.0 x 3.07	5.9 7.3 8.7		6228.207  6228.257  6228.307 

## Scaffolding enclosures

### Scaffolding tarpaulins and nets

To protect passers-by and traffic during spraying work and other site work causing dirt, façade scaffolding is covered with tarpaulins and nets. Layher scaffolding tarpaulins and nets meet the requirements of DIN 4420-1. Compliance with design parameters prevents objects falling from the scaffolding level.

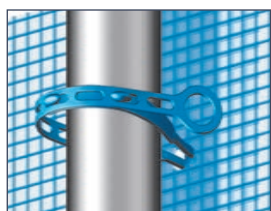
**B1** = Fire protection classification 1  
= high fire resistance acc. to DIN 4102 B1

**Scaffolding tarpaulins:** Lattice-reinforced and UV-stabilized PE tarpaulin with eyelet bands welded on lengthways. For scaffoldings in the standard dimensions of 2.57 m and 3.07 m. Eyelet spacing 10 cm.

**Scaffolding nets:** Highly tear-resistant and UV-stabilized scaffolding protection net with fine fabric structure, gauze fabric of PP bands with three compressed eyelet bands. Eyelet spacing 10 cm. For scaffoldings in the standard dimensions of 2.57 m and 3.07 m.

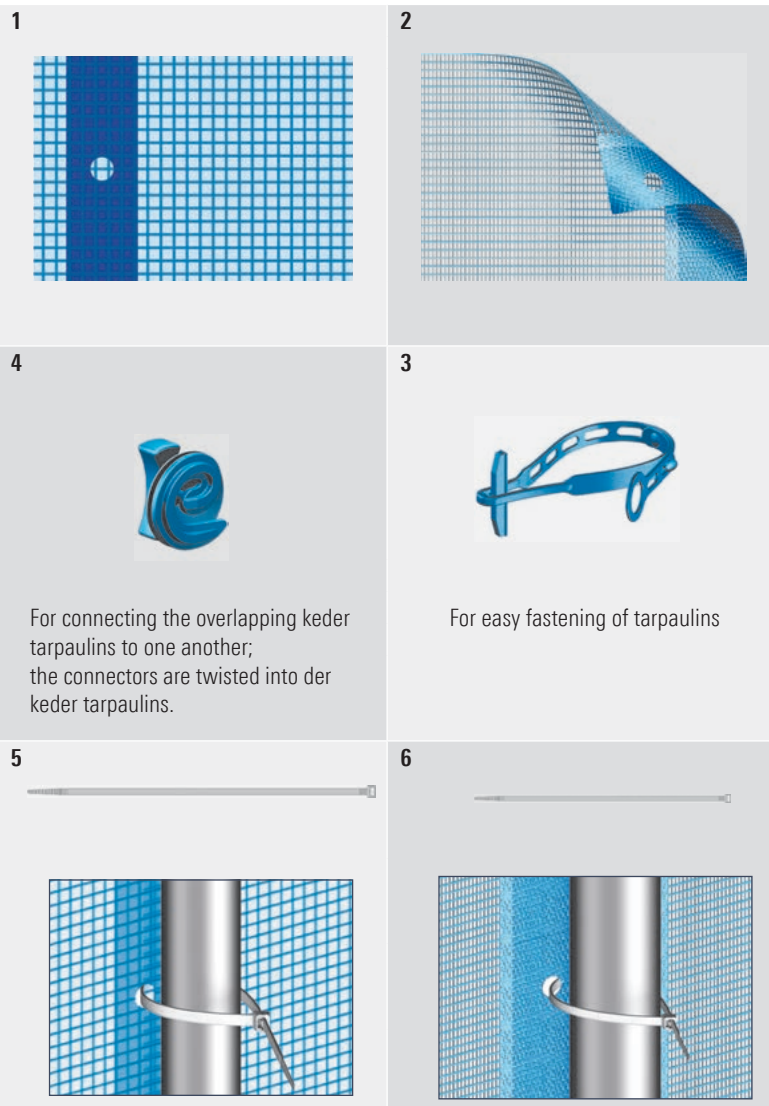
Scaffolding tarpaulins and scaffolding nets are only supplied in rolls of 20 m length.

Scaffolding tarpaulins with printed advertising:  
Delivery time and additional printing costs on request.



**T-tie**  
connecting two  
tarpaulins to the  
scaffolding.

### Scaffolding enclosures



For connecting the overlapping keder tarpaulins to one another; the connectors are twisted into der keder tarpaulins.

For easy fastening of tarpaulins

## Ladder access

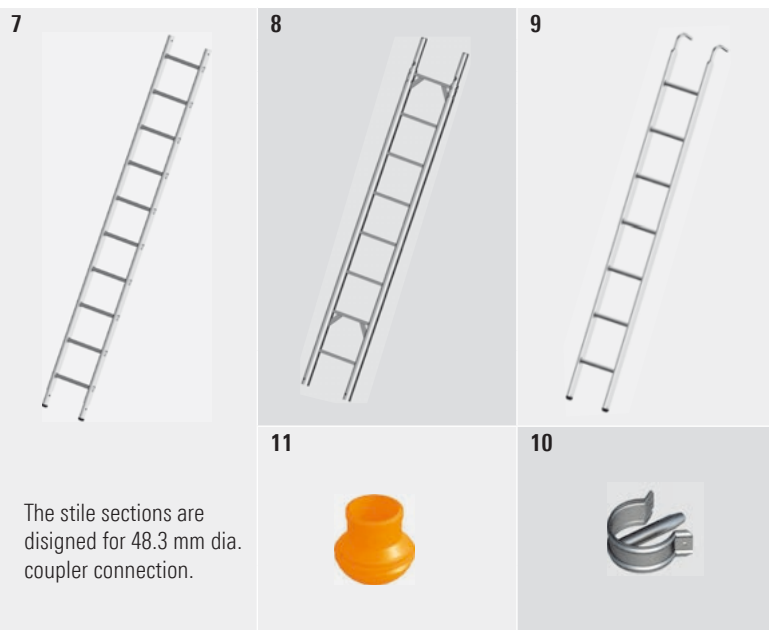


For constructing outward-facing accesses, **simple scaffolding ladders** are the ideal solution.

Layher pole ladders for scaffolding conform to DIN EN 131 individually or when connected to each other. The stile connections must have proper support and be secured with spring clips.

The regulations in BGV C22 must be followed.  
The **storey ladder** is a flexible aid to climbing inside the scaffolding to a storey height of 2 m.







### Ladder access







The stile sections are designed for 48.3 mm dia. coupler connection.

**Layher**

More Possibilities. The Scaffolding System.

	Pos.	Description	Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	Ref. No.
	1	<b>Scaffolding tarpaulin 280</b> , blue 2.70 m wide, working width 2.57 m 3.25 m wide, working width 3.07 m  Lattice reinforced, very tearproof PE tarpaulin, 5 eyelet tapes, tear resistance approx. 500 N / 5 cm, weight approx. 280 g/m², temperature resistance from -40 °C to +80 °C	20.0 x 2.70	15.1		<b>6215.257</b>
			20.0 x 3.25	18.2		<b>6215.307</b>
		<b>Scaffolding tarpaulin 200</b> , white 2.70 m wide, working width 2.57 m 3.25 m wide, working width 3.07 m  Lattice reinforced, very tearproof PE tarpaulin, 5 eyelet tapes, tear resistance approx. 750 N / 5 cm, weight approx. 200 g/m², temperature resistance from -40 °C to +80 °C	20.0 x 2.70	10.8		<b>6217.257</b>
			20.0 x 3.20	13.0		<b>6217.307</b>
	2	<b>Scaffolding net 90</b> , blue Weight 90 g/m², 2.60 m wide, working width 2.57 m 3.20 m wide, working width 3.07 m				
			20.0 x 2.60	4.7		<b>6219.257</b>
			20.0 x 3.20	5.8		<b>6219.307</b>
	3	<b>T-tie</b> for fastening or connecting the tarpaulins to one another		0.01	100 	<b>6217.000</b> 
	4	<b>Connector</b> for tarpaulin joint		0.01	100 	<b>6218.000</b> 
	5	<b>Disposable tie for tarpaulins</b> , 380 x 7.6 mm		0.01	100 	<b>6242.000</b>
	6	<b>Disposable tie for nets</b> , 300 x 5.0 mm		0.01	100 	<b>6241.000</b>

	Pos.	Description	Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	Ref. No.
	7	<b>Aluminium pole ladder</b>	10 rungs	2.9 x 0.46	7.2 50	<b>1004.010</b>
			14 rungs	4.0 x 0.46	10.0 50	<b>1004.014</b>
			17 rungs	4.9 x 0.46	12.0 50	<b>1004.017</b>
			20 rungs	5.7 x 0.46	14.1 50	<b>1004.020</b>
	8	<b>Steel pole ladder</b> hot-dip galvanized	6 rungs	1.5 x 0.43	12.0 50	<b>1002.006</b> 
			8 rungs	2.0 x 0.43	15.0 50	<b>1002.008</b> 
			12 rungs	3.0 x 0.43	21.5 50	<b>1002.012</b> 
			16 rungs	4.0 x 0.43	28.0 50	<b>1002.016</b> 
	9	<b>Access ladder 7 rungs</b> , steel	2.15 x 0.35	7.8	70	<b>4005.007</b>
	10	<b>Spring clip</b> , 11 mm pin, for securing the joint connections of the extended simple steel/aluminium scaffolding ladder Ref. No. 1004/1002		0.1	200	<b>1250.000</b>
	11	<b>Rubber base</b> for tube 48.3 mm		0.1		<b>1020.000</b>

## Scaffolding pallets

### Universal pallet 125

It is possible to transport either  
12 Assembly frames 0.73 m or  
10 Robust decks 0.61 m or  
24 Steel decks 0.32 m wide

The pallet posts only have to be changed round when the stacked material changes. The empty pallets, stored permanently in the base frame using pallet posts, can be transported and stored in a space-saving way.

### Tube pallets

in square shape (85) with or without box insert or in rectangular shape (125). The pallets are open on all sides. Tubes, standards, guardrails, diagonal braces, toe boards and, with the box insert, also couplers and other small parts are transported and stored with this pallet. The empty pallets, stored permanently in the base frame using pallet posts, can be transported and stored in a space-saving way.

### Tube pallet 125

The following can be transported, for example:

13 Frames, 0.73 m or  
70 Standards or  
90 Ledgers or  
11 Robust decks 0.61 m or  
15 Stalu decks 0.61 m or  
24 Steel decks 0.32 m.

### Box insert and mesh box insert for tube pallet 85

To use the box insert, the base plate is placed inside the tube pallet 85, the side panels are folded out and positioned between the pallet posts.

The following can be transported, for example:

about 500 Couplers or  
120 Scaffolding anchors 0.83 m or  
100 Spindles.

### Tube pallet 265

The following can be transported, for example:

about 13 Ridge cassettes or  
20 Roof cassettes or  
15 Brick guards.

The empty pallets, stored permanently in the base frame using pallet posts, can be transported and stored in a space-saving way.

### Modular skeleton box

The skeleton box can be stacked with Euro pallets. Crane eyelets at top; an opening allows stacked material to be removed even if several pallets are stacked one above the other. The integrated timber base plate is 30 mm thick and it's nailed onto 50 x 50 mm square timbers.

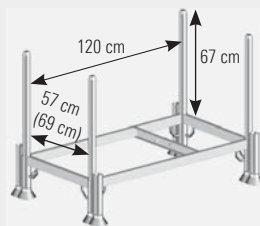
### Assembly frame and deck pallet

It is developed for a complete construction site commission. The pallet is suitable for the horizontal transport of SpeedyScaf parts.

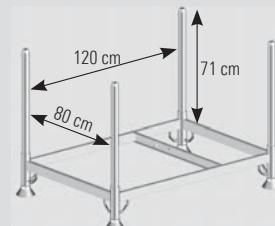
## Scaffolding pallets

Layher pallets save on labour and costs for storage, transport, assembly and inventory control. All pallet types have been developed on the basis of practical experience. The crane or the fork-lifter can be used to move the filled pallets and shorten the loading times. All pallets are suitable for fork-lift or crane transport, full pallets are stackable to save storage and transport space.

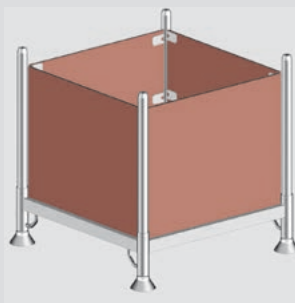
1



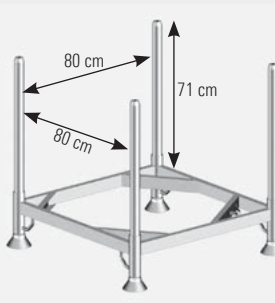
2



4



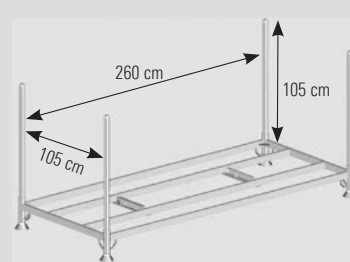
3



5



6















8



7





	Pos.	Description	Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	Ref. No.
	1	<b>Universal pallet 125</b> Steel, hot-dip galvanized, length of pallet posts: 0.86 m, load 1500 kg External dimensions 1.37 x 0.86 m	1.37 x 0.86	45.7	10	5111.125 
	2	<b>Tube pallet 125</b> Steel, hot-dip galvanized, length of pallet posts: 0.86 m, load 1500 kg External dimensions 1.37 x 0.97 m	1.37 x 0.97	35.0	10	5105.125
	3	<b>Tube pallet 85</b> Steel, hot-dip galvanized, length of pallet posts: 0.86 m, load 1500 kg External dimensions 0.97 x 0.97 m	0.97 x 0.97	30.8	10	5105.085
	4	<b>Box insert for tube pallet 85</b> Can be folded flat, load 700 kg, consisting of base plate and side part	0.85 x 0.85	21.6		5104.085 
		<b>Side part for box insert</b>	0.85 x 0.85	16.2		5104.089 
		<b>Base plate for box insert</b>	0.85 x 0.85	5.4		5104.088 
	5	<b>Mesh box insert for tube pallet 85</b> Can be folded flat, load 1000 kg, consisting of base plate and side part	0.85 x 0.85	27.4		5104.087 
		<b>Side part for mesh box insert</b>	0.85 x 0.85	22.0		5104.086 
		<b>Base plate for mesh box insert</b>	0.80 x 0.80	5.4		5104.088 
	6	<b>Tube pallet 265</b> Steel, hot-dip galvanized, length of pallet posts: 1.20 m, load 1300 kg, External dimensions 2.77 x 1.22 m	2.77 x 1.22	50.6	10	5113.265 
	7	<b>Modular skeleton box</b> Steel, hot-dip galvanized, Fill height at front 0.53 m, fill height at rear 0.74 m, load 2000 kg External dimensions 1.26 x 0.86 m	1.26 x 0.86	70.6		5113.000
	8	<b>Assembly frame and deck pallet</b> Steel, hot-dip galvanized, length of the plug-in tubes: 1.15 m Plug-in tubes with crane eyelets, securable with locking pin load 1500 kg; External dimensions 1.37 x 0.97 m consisting of: 1 assembly frame and deck pallet	1.37 x 0.97	39.2		5113.100 
		<b>Assembly frame and deck pallet without plug-in tube</b>		20.0		5113.101 
		<b>Plug-in tube</b>	1.15	4.5		5113.103 
		<b>Locking pin, 12 mm</b>		0.3		5106.002 

## Layher Protect System: the innovative enclosure system.



With the Protect System, Layher offers a cassette enclosure system which satisfies every requirement for environmental protection, for work involving dust, excessive noise or sandblasting, and for bad weather protection, besides other applications; fits in with Layher SpeedyScaf and Layher Allround Scaffolding equipment, the individual cassettes form a protective screen around your construction site. The variable use of wall, roof, light or sound-insulating cassettes permits individualised and uncompromising adaptations. Your company can branch out into new fields of operation; make sure you have the edge over your competitors in a new market – the system pays for itself very quickly thanks to labour-saving assembly, superior product quality and long service life. Contact us for further information material or for a consultation.

## Bridging

The **aluminium stage 600** is a sturdy and versatile work deck of up to 10 m length which can be used quickly and easily as a lightweight aluminium component either individually or in scaffolding structures.

In accordance with DIN EN 12811-1, the Layher **aluminium stage 600** with a width of 0.6 m is permissible for load class 3 (2 kN/m<sup>2</sup>; lengths up to 7.1 m) and also for load class 2 (1.5 kN/m<sup>2</sup>; lengths up to 10.0 m).

It can therefore be used as a deck in work, safety and birdcage scaffolding and also as a bridging element in façade scaffolding. If the height exceeds 2.0, a three-part brick guard is required.

### Double guardrail with toe board

Folds together for transport

### Guardrail fixing

for fastening the double guardrail to the aluminium bridging beam 600

### Guardrail locking clip

for securing the double guardrail on the guardrail fixture

### Guardrail post 1.2 m

for connecting the three-part brick guard made from scaffolding tubes, double couplers and toe boards. The **clamp** can be used to combine several aluminium bridging beams 600 as a platform for common support applications.

### Alu telescopic stage

The automatic locking mechanism ensures that the inner extending element cannot slide out by mistake.

### Toe board

Easy fitting into the toe board pins of the guardrail mounting standard, for complete three-part side protection.

The **steel plank** is a safe bridging element capable of bearing high loads for all scaffolding systems. It is preferred to wooden planks for use in areas with stringent fire protection requirements.

- ▶ Long service life, reusable
- ▶ Lower weight compared with wooden planks
- ▶ Non-slip and non-inflammable
- ▶ Easy to secure in position with locking pins when placed on steel decks

The support length must be at least 10 cm at every support.

The steel planks 0.19 m and 0.32 m are also optionally available with one or with two pins.

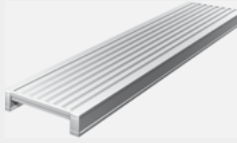
See our Allround catalogue for this.

### Individual toe boards

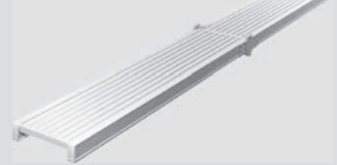
The toe boards can be individually designed in printing and painting.

## Bridging

1



2



Assembly with **guardrail post**, scaffolding tubes and double couplers



Assembly with **guardrail fixing** and **double guardrail with toe board**

6



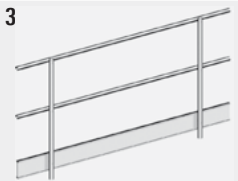
5



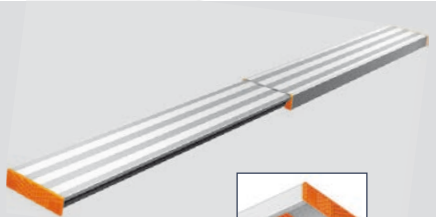
4



3



8



7



10



9



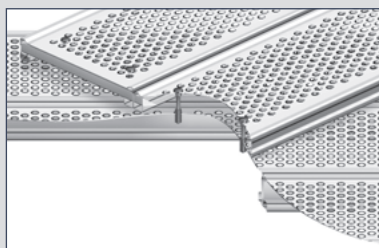
13



11



12



















2 **locking pins** or 1 securing screw for each support secure the steel plank against slipping and lifting off.



**Layher** 

More Possibilities. The Scaffolding System.

	Pos.	Description	Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	Ref. No.	
	1	<div>Alu stage 600</div> <div><div></div><div>Permissible load-bearing capacity 2.0 kN/m2, Height 0.09 m</div><div>Permissible load-bearing capacity 2.0 kN/m2, Height 0.12 m</div><div>Permissible load-bearing capacity 1.5 kN/m2, Height 0.15 m</div></div>	3.18 x 0.60	20.0	20	1348.318	
			4.12 x 0.60	26.0	20	1348.412	
			4.75 x 0.60	29.0	20	1348.475	
			5.20 x 0.60	38.0	16	1348.520	
			6.15 x 0.60	45.0	16	1348.615	
			7.10 x 0.60	52.0	12	1348.710	
			8.00 x 0.60	68.0	12	1348.800	
			9.10 x 0.60	76.0	12	1348.910	
			10.00 x 0.60	85.0	12	1348.100	
				2	<div>Alu stage 600 folding</div> <div>Perm. load-bearing capacity 1.5 kN/m2, Height 0.12 m</div> <div>Perm. load-bearing capacity 1.5 kN/m2, Height 0.12 m</div> <div>Perm. load-bearing capacity 1.5 kN/m2, Height 0.15 m</div>	5.10 x 0.60	47.0
7.30 x 0.60	61.0	8				1349.730 	
9.15 x 0.60	86.0	6				1349.915 	
	3	<div>Double guardrail, 2.0 m with toe board</div> <div>Aluminium</div>	2.0 x 1.1	9.7	30	1332.200	
		<div>Double guardrail, 3.0 m with toe board</div> <div>Aluminium</div>	3.0 x 1.1	12.9	30	1332.300	
	4	<div>Guardrail fixing</div> <div>for Ref. No. 1332, aluminium</div>	0.36	0.9		1330.000	
	5	<div>Guardrail locking clip</div> <div>for Ref. No. 1330.000, steel</div>	0.08	0.1		1333.000	
	6	<div>Guardrail post, 1.2 m</div> <div>Aluminium</div>	1.2	2.4	165	1334.000	
	7	<div>Clamp, steel</div>	0.1	0.4		1331.000	
	8	<div>Alu telescopic stage</div>	1.64 – 2.9 x 0.31	13.0	30	1351.290	
			1.92 – 3.5 x 0.31	16.0	30	1351.350	
2.27 – 4.0 x 0.31			18.0	30	1351.400		
2.49 – 4.4 x 0.31			20.0	30	1351.440		
	9	<div>Toe board, wood</div>	1.57 x 0.15	3.1	140	1757.157	
			2.07 x 0.15	4.7	140	1757.207	
			2.57 x 0.15	5.6	140	1757.257	
			3.07 x 0.15	6.8	140	1757.307	
	10	<div>Locking pin for steel plank, plastic, dia. 11 mm</div>	0.08	0.01	100 	3800.001	
	11	<div>Steel plank, 0.3 m</div>					
			Load class 6	1.0 x 0.30	6.5	60	3880.100 
			Load class 6	1.5 x 0.30	10.3	60	3880.150 
			Load class 5	2.0 x 0.30	12.8	60	3880.200 
		<div>Steel plank, 0.2 m</div>	Load class 3	2.5 x 0.30	15.3	60	3880.250 
			Load class 6	1.0 x 0.20	4.8	100	3878.100 
			Load class 6	1.5 x 0.20	7.2	100	3878.150 
			Load class 5	2.0 x 0.20	9.5	100	3878.200 
			Load class 3	2.5 x 0.20	11.8	100	3878.250 
	12	<div>Steel bolt, self securing</div> <div>for securing of steel planks and gap covers</div>	0.08	0.1	50 	3800.002 	
	13	<div>Securing Screw, WS 19, Steel, galvanized</div>	0.08 x 0.03	0.1	50 	3800.004 	

## Bridging

The **steel-gap cover** can be used between two scaffolding decks on SpeedyScaf and Allround Scaffolding. For use on gap widths up to 13 cm.

### Advantages:

- ▶ fast and easy mounting, independent of the gap width
- ▶ easy position fixing with locking pins (see page 26, pos. 10) for steel decks
- ▶ long life
- ▶ lightweight
- ▶ cost effective
- ▶ flexible use
- ▶ not flameable
- ▶ low height (h = 10 mm), meaning: low tripping hazard

## Scaffolding planks

Our planks conform to sorting category S 10 as per DIN 4074. They can be used as scaffolding planks. They can be protected against splitting at the ends with ▶ **sheet metal fitting for plank 0.60 m**.

### Scaffolding plank

freshly sawn, sorting category S 10

## Layher software for scaffolding construction

### Layher LayPLAN

Planning of façade scaffolding using a computer is now even easier: the new LayPLAN software simply makes proposals for scaffolding, then calculates the expense of assembly and dismantling, and provides printed out plans for more safety at the site.

The completed drawing can be exported to AutoCAD, which can be used to do further editings. Complete scaffolding in just three steps:

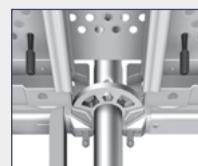
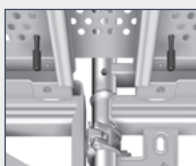
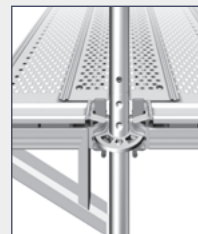
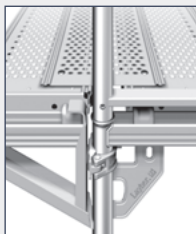
- ▶ Step 1: Plan out the scaffolding with the clearly structured LayPLAN software
- ▶ Step 2: The printed-out plan provides you with the legal safeguard required by BetrSichV and assists you in your logistics.
- ▶ Step 3: Planning saves you time when assembling the scaffolding – all the material needed is at the site.



More Possibilities. The Scaffolding System.

## Bridging

1



2 locking pins / self securing steel bolts or 1 securing screw for each bearing secure the steel plank against slipping and lifting off.

## Scaffolding planks

2

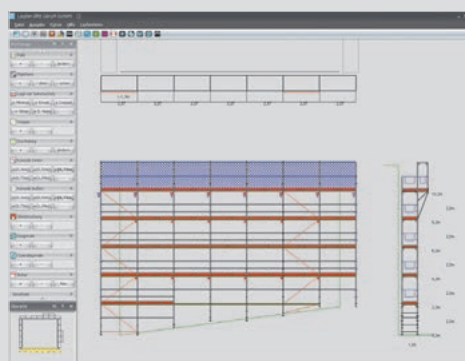


3



## Layher software for scaffolding construction

4 + 5



The clearly structured interface of LayPLAN is self-explanatory. This obviates the need for user courses or the study of thick manuals. A compact set of instructions is provided on the program CD.

**LayPLAN**  
Allround Scaffolding  
MODULAR SCAFFOLDING

**LayPLAN**  
SpeedyScaf  
FAÇADE SCAFFOLDING

**LayPLAN**  
Protective systems  
WEATHER PROTECTION ROOFS



	Pos.	Description	Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	Ref. No.
	1	<b>Steel-gap cover</b> 0.32 m wide	0.73 x 0.32	2.6	150	<b>3881.000</b>
			1.09 x 0.32	3.8	100	<b>3881.001</b>
			1.57 x 0.32	4.2	100	<b>3881.002</b>
			2.07 x 0.32	6.3	100	<b>3881.003</b>
			2.57 x 0.32	8.5	100	<b>3881.004</b>
			3.07 x 0.32	10.7	100	<b>3881.005</b>

	Pos.	Description	Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	Ref. No.
	2	<b>Scaffolding plank</b> 45 mm high, freshly sawn, sorting category S 10	1.00 x 0.24	5.2		<b>3816.100</b>
			1.50 x 0.24	7.8		<b>3816.150</b>
			2.00 x 0.24	10.4		<b>3816.200</b>
			2.50 x 0.24	13.0		<b>3816.250</b>
			3.00 x 0.24	15.6		<b>3816.300</b>
			3.50 x 0.24	18.2		<b>3816.350</b>
			4.00 x 0.24	20.8		<b>3816.400</b>
	3	<b>Sheet metal fitting</b> for plank 0.60 m	0.60	0.1		<b>3817.000</b>

	Pos.	Description		Ref. No.
	4	<b>SINGLE LICENCE</b>		
		<b>LayPLAN Allround Scaffolding</b>		<b>6345.400</b>
		<b>LayPLAN SpeedyScaf</b>		<b>6345.200</b>
		<b>LayPLAN Roof systems</b>		<b>6345.600</b>
		LayPLAN Allround Scaffolding or LayPLAN SpeedyScaf required.		
		<b>LayPLAN package</b>		<b>6345.800</b>
		Allround Scaffolding, SpeedyScaf and Roof systems		
	5	<b>FOLLOW-UP LICENCE</b>		
		<b>LayPLAN Allround Scaffolding</b>		<b>6345.401</b>
		<b>LayPLAN SpeedyScaf</b>		<b>6345.201</b>
		<b>LayPLAN Roof systems</b>		<b>6345.601</b>
		LayPLAN Allround Scaffolding or LayPLAN SpeedyScaf required.		
		<b>LayPLAN package</b>		<b>6345.801</b>
		Allround Scaffolding, SpeedyScaf and Roof systems		

## Fall protection

According to German BGV C22 regulations, equipment to prevent falls by personnel must be provided for work areas and walkways where the height of the fall is more than 2.0 m.

The **PSA-safety harness AX 60 C** has impressive features:

- Comfortable, padded and ergonomic back support
- Convenient tool holders and click-locks for easy fastening
- High operational dependability and absolute freedom from maintenance, plus very simple fastening
- Operating errors are not possible, as the equipment operates in any position
- Excellent running even under gruelling working conditions
- Enormous distribution of forces in the event of a fall

Before use, visual checks must be performed regularly to ensure correct working order. In accordance with German BGR 198 regulations, all personal safety equipment must be inspected at least once a year by an expert. The maximum permissible period of use for the equipment must not be exceeded.

The **advance guardrail post**, the **advance telescopic guardrail 1.57 / 2.07 m**, the **advance telescopic guardrail 2.57 / 3.07 m** and the **End-AGS** are used for temporary protection against falls during assembly of scaffolding parts on the uppermost, unsecured scaffolding level.

### Extension lengths

Article	L min.	L max.
Assembly guardrail 1.57 / 2.07 m	1.57 m	2.90 m
Assembly guardrail 2.57 / 3.07 m	2.20 m	3.70 m

PSA: Personal safety apparatus  
MSG: Advance guardrail system

### Railing clamp





According to German regulations BGV C22 relating to construction work, a fall protection system must be provided for work areas and walkways on roofs and intermediate levels where the height of the fall is more than 2.0 m. The Layher railing clamp meets these requirements for securing of concrete floors and fascias of 16 – 33 cm height and of flat roofs.


The back guard must be made in accordance with applicable regulations from tube/coupler, modular or frame scaffolding. The bay widths can be freely selected, max. 3.07 m long.


**Layher** 


More Possibilities. The Scaffolding System.


## Fall protection

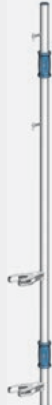



















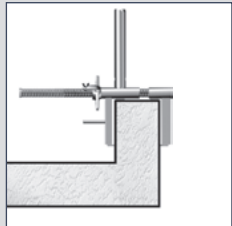
For two advance guardrails (0.5 m and 1 m high)



For one advance guardrail (1 m high)



Advance guardrail for end face of scaffolding

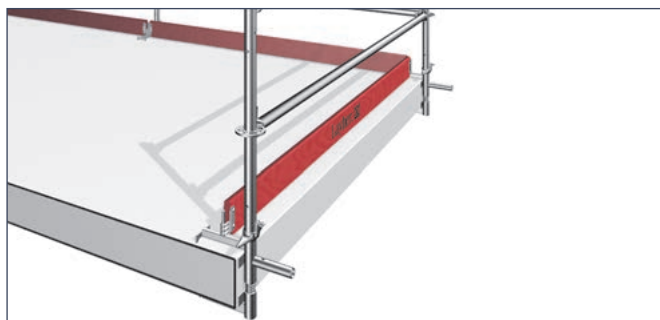




When attached to floors, toe boards must be provided, and the vertical stile must be attached over the spindle.

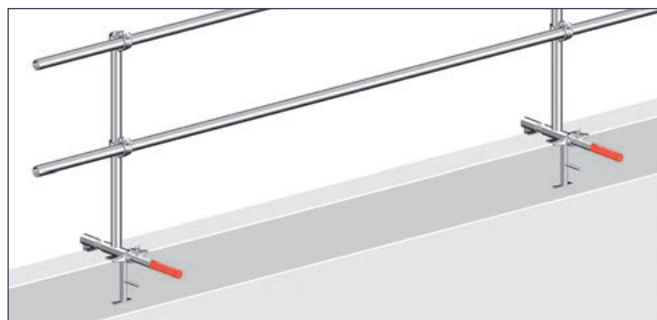
When attached to fascias, no toe boards are required, and the vertical stile must be attached over the spigot.

	Pos.	Description	Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	Ref. No.
	1	<b>PSA-safety harness AX 60 C</b> , with extension 0.5 m conforms EN 361		1.8		5969.160
	2	<b>PSA-backpack</b> , without content		0.6		5969.800
	3	<b>PSA-Flex-safety rope</b> , 2.0 m with fall arrester and snap hook FS 90; as per EN 354/EN 355  self-shortening to reduce tripping hazards	2.0 m	1.1		5969.501
	4	<b>PSA-safety rope</b> , 1.5 m with fall arrester and snap hook FS 90; as per EN 354/EN 355	rope 1.5 m	1.1		5969.400
	5	<b>PSA scaffolding construction set</b> Pos. 1 – 3 Safety harness, safety rope 2.0 m, backpack (Use only in scaffolding construction)		3.5		5969.170
	6	<b>Advance guardrail post</b> Aluminium for one advance guardrail (1 m high); rapid attachment of guardrails with tilting pins		4.2	50	4031.001
	7	<b>Advance guardrail post</b> Aluminium for two advance guardrails (0.5 m and 1 m high); rapid attachment of guardrails with tilting pins		4.3	50	4031.002
	8	<b>Assembly guardrail</b> , 1.57 / 2.07 m <b>Assembly guardrail</b> , 2.57 / 3.07 m Aluminium	1.7	3.2	50	4031.207
			2.3	4.0	50	4031.307
	9	<b>End advance guardrail</b> Aluminium, single-part	2.2 x 0.7	9.8	6	4031.000
	10	<b>Railing clamp</b>	0.58	7.0		4015.100

Example for use of the railing clamp on floor slab:



Example for use of the railing clamp on fascia:



WS = wrench size PU = packaging unit = available ex works = delivery time on request = only available in this packaging unit

## Vertical transport

### Scaffolding construction hoist Mini 60 S

The **Mini 60 S** is suitable for vertical transport of scaffolding material weighing up to 60 kg.

The winch is fastened to the scaffolding at the bottom. For assembly and dismantling of the scaffolding, only the swing arm has to be attached to the topmost scaffolding standard. The maximum working height of the hoist is 40 m, or 76 m if the winch is positioned higher.

The hoist winch is operated with 230 V/50 Hz. It has two hoisting speeds: 23/69 m/min. A slack rope switch shuts down the hoist when there is no longer any rope tension or when the end of the rope is reached. The hoist winch is equipped with an automatic final shutdown feature and a limiter against overloading of the hoist and scaffolding. For scaffolding hoists with a higher loading capacity, please request our special brochure. Loads additionally applied to the scaffolding must be transmitted into the structure or into the ground by special measures, and additional anchoring may be necessary. Please ask for further information about vertical transport.



### Manual vertical transport

**Bracket with hoist wheel** for manual vertical transport of scaffolding material weighing up to 50 kg. Loads additionally applied to the scaffolding must be transmitted into the structure or into the ground by special measures, and additional anchoring may be necessary.



#### Secure pulley

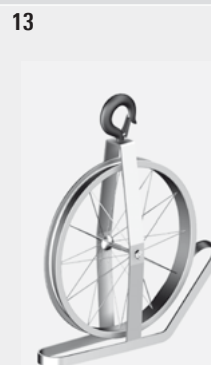
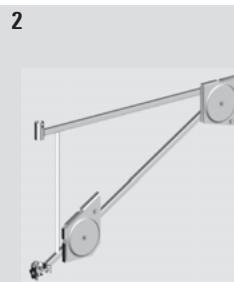
An integrated drop brake prevents the load from dropping when the rope is released and hence speeds up work procedures. The hoisted material is left suspended, thus permitting more flexible working both on the ground and on the scaffolding.

















**Layher**

More Possibilities. The Scaffolding System.

### Vertical transport





	Pos.	Description	Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	Ref. No.
	1	<b>Mini 60 S</b> with 51 m of wire rope, catch and hook, control with emergency stop, 10 m		50.0		4415.060 
		<b>Mini 60 S</b> with 81 m of rope, otherwise as above		55.0		4416.116 
	2	<b>Swing arm</b> for Mini 60 S with deflecting wheel		11.7		4416.015 
	<b>Load-bearing equipment</b>					
	3	<b>Load hook</b> for scaffolding parts		0.5		4416.001 
	4	<b>Hook holder</b> for 5 load hooks		2.3		4416.014 
	5	<b>Rope sling</b> (5 mm dia., 35 cm long) for holding several load hooks		0.1		4416.002 
	6	<b>Bucket holder</b> for 2 buckets		4.4		4416.005 
	7	<b>Lifting sling</b> , 1.5 m for transport of scaffolding decks		0.5		4416.013 
		<b>Accessories</b>				
	8	<b>Control unit</b> , 30 m with emergency stop <b>Control unit</b> , 50 m with emergency stop		7.0 13.0		4416.021  4416.055 
	9	<b>Security lock</b>		1.1		4416.010 
	10	<b>Swing arm holder</b> (fitted in any scaffolding level)		8.0		4416.003 
	11	<b>Wire rope</b> , 51 m, 4.5 mm <b>Wire rope</b> , 81 m, 4.5 mm		4.5 6.3		4416.011  4416.036 
	12	<b>Bracket</b> , 0.73 m with eyelet for hoist wheel	19 WS 0.73 22 WS 0.73	6.8 6.8	100 100	4417.719 4417.722
	13	<b>Hoist wheel</b> up to max. 50 kg load, dia. 350 mm, with CE-mark	0.5 x 0.4	2.7	80	4419.000
	14	<b>Connecting clip</b> Connection of bracket with hoist wheel		0.2		4418.000
	15	<b>Secure pulley</b> up to max. 50 kg load, with CE-mark	0.4 x 0.4	5.0		4419.001
	16	<b>Bracket adapter</b> for hoist wheel Ref. No. 4419.001	0.26	1.2		4419.002
	17	<b>Rope for hoist wheel</b> , without drop brake Plastic rope, dia. 20 mm, for hoist wheel Ref. No. 4419.000; load capacity 50 kg; manufactured as per DIN EN 1261 Shape A; with spliced loops as per DIN 83 319; fitted at one end with 1 shackle clip as per DIN 82 101, colour blue	20 m 40 m	6.4 12.4		4420.200 4420.400
	18	<b>Rope for hoist wheel</b> , with drop brake Plastic rope, dia. 18 mm, for hoist wheel Ref. No. 4419.001, colour orange, otherwise as rope for hoist wheel without drop brake	20 m 40 m	6.4 12.4		4419.020 4419.040

## Vertical transport

### Scaffolding construction hoist Layher 200

The **Layher 200** is suitable for vertical transport of scaffolding material weighing up to 200 kg and transport height of 35 m.

The base unit includes chassis, cable bin, trailing cable and control unit.

The mast with toothed rack can be fixed to the scaffolding using only one tube.

The anchoring distances are 4 m.

The entire unit only requires an area of 1.5 x 1.5 m on the ground, which makes it possible to load the hoist parallel to the building without any problems.

Unloading at the landing levels can be easily done by turning the platform.

The lightweight platform (only 51 kg) can be turned by 90° to the right.

The Layher 200 is easily serviced and maintained, i.e. easy access to handy components.

### Vertical transport



Please ask for further information about vertical transport.

## Various accessories

### Wood lacquer, red-brown

Painting or rolling: unthinned onto clean surface

Spraying: with 5 % synthetic resin thinner onto cleaned surface

Dust-dry: about 45 mins.

Dry to touch: about 4 – 5 hrs.

Thoroughly dry: about 24 hrs.

The **tube end cap** is the visual closure for the tube and keeps out dirt, water and the like. It can be fitted over or into the tube.

For the use with aluminium tubes the spigots of the **tube end caps 20** and **21** must be cut longitudinally.



### Various accessories



**Layher** 

More Possibilities. The Scaffolding System.

	Pos.	Description	Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	Ref. No.
	1	<b>Base unit Layher 200</b> 1.7 kW / 230 VAC / 50 Hz, load capacity 200 kg, hoisting speed 25 m/min, max. hoisting height 35 m (Not allowed for passenger transportation) Scope of delivery: base part 2.0 m, electrical driven carriage, gripping device, control unit 5 m, cable bin, chassis		142.0		4416.883
	2	<b>Swivelling frame</b> right, 90° swivelling		18.0		4416.822
	3	<b>Loading platform</b> interior dimensions 1.20 x 0.75 x 1.80 m		51.0		4416.884
	4	<b>Holding rack</b> for scaffolding parts (decks, toe boards or similar)		3.6		4416.885
	5	<b>Support for scaffolding tubes</b> swivelling, 2-parts (with screwed on base bracket)		6.2		4416.886
	6	<b>Load secure bar</b> with snap-on claws		2.4		4416.887
	7	<b>Ladder piece</b> with toothed rack	2.0 1.0	24.0 14.0		4416.825 4416.826
	8	<b>Ladder support</b> holder spacings 4.0 m		9.4		4416.888
	9	<b>Position switch bracket</b>		2.6		4416.827
	10	<b>Advanced loading side guardrail</b> for use with advance guardrail post (see page 34, Pos. 6)		9.3		4416.889
		<b>Accessories</b>				
	11	<b>Current distributor</b>		8.0		4416.064
	12	<b>Cable bin, 33 m,</b> 3 x 2.5 mm², minimum cable diameter		8.0		4416.039
	13	<b>Cable extension, 20 m, for control unit, 5-pins</b>		5.0		4416.331

	Pos.	Description	Dimensions L/H x W [m]	Weight approx. [kg]	PU [pcs.]	Ref. No.
	14	<b>Wood lacquer, red-brown, 10 kg can</b>		10.2		4020.000
	15	<b>Allround rosette cover with connected ledger</b> Polyethylene, fixing with disposable tie 6241.000 (s. p. 26, Pos. 6)		0.1	10	4007.001
	16	<b>Allround rosette cover</b> without connected ledger Polyethylene, fixing with disposable tie 6241.000 (s. p. 26, Pos. 6)		0.1	10	4007.002
	17	<b>Lashing strap</b> with 0.5 t ratchet	4.0	0.2		6306.004
	18	<b>Poly cord, blue-white</b> with fused ends, with spliced eyelet on one side, 3-strand, rope dia. 8 mm	2.5	0.1	10	4017.001
	19	<b>Tube end cap, dia. 48.3 mm, flat, external attachment</b> Plastic		0.5	50	6494.532
	20	<b>Tube end cap, dia. 48.3 mm, flat, internal attachment</b> Plastic		0.5	50	6494.534
	21	<b>Tube end cap, dia. 48.3 mm, round, internal attachment</b> Plastic		1.0	50	6494.533

WS = wrench size PU = packaging unit = available ex works = delivery time on request = only available in this packaging unit

	SpeedyScaf
	Allround Scaffolding
	Accessories
	Protective Systems
	Shoring
	Event Systems
	Rolling Towers
	Ladders



// Proximity to the customer is a central factor behind Layher's success – geographically speaking too. Wherever our customers need us, we will be there – with our advice, assistance and solutions.



// Headquarters in Eibensbach



// Plant II in Gueglingen

// Layher is your dependable partner with more than 60 years of experience. "Made by Layher" always means "Made in Germany" too – and that goes for the entire product range. Superb quality – and all from one source.

# Layher®

More Possibilities. The Scaffolding System.

**Wilhelm Layher GmbH & Co. KG**  
Scaffolding Grandstands Ladders

Ochsenbacher Strasse 56  
D-74363 Gueglingen-Eibensbach  
Germany

Post Box 40  
D-74361 Gueglingen-Eibensbach  
Germany  
Telephone +49 (0) 71 35 70-0  
Telefax +49 (0) 71 35 70-2 65  
E-Mail: [export@layher.com](mailto:export@layher.com)  
[www.layher.com](http://www.layher.com)