



ALBLITZ 100 S

[Seal: Deutsches Institut für Bautechnik]

National technical approval / General construction technique permit

An institution under public law jointly funded by the German Federation and the federal states (Länder)

Approval Body for Construction Products & Techniques

Date: Reference number: 03 January 2022 | 37.1-1.8.1-82/21

Approval number: **Z-8.1-943**

Period of validity: from: 4 January 2022 to: 4 January 2027

Applicant: **Alfix GmbH**Langhennersdorfer Straße 15

09603 Großschirma (Germany)

Subject of approval:

Scaffolding components of the "ALBLITZ 100 S" scaffolding system

The subject mentioned above is hereby granted national technical approval.

This decision comprises 22 pages as well as Annex A (pages 1 to 183), Annex B (pages 1 to 16) and Annex C (pages 1 to 38).

The subject was first granted national technical approval on 12 December 2013.

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I GENERAL PROVISIONS

- 1 This decision confirms the usability and / or applicability of the subject matter as defined by the Building Codes of the federal states.
- 2 This decision does not replace statutory approvals, authorisations and certifications specified for carrying out construction works.
- This decision is granted without prejudice to the rights of third parties, especially private property rights.
- The user of the subject matter must, without prejudice to further regulations laid out under "Special Provisions", make copies of this decision available to the persons using or applying the subject matter. The person using or applying the subject matter shall also be informed that the decision must be present at the place of use. Upon request, copies must be provided to the relevant authorities.
- This decision may only be reproduced in its entirety. Publication of the decision in excerpts requires the prior consent of the Deutsches Institut für Bautechnik (DIBt). Text and drawings of promotional material must be consistent with this decision. Translations must include the following note: "Translation of the original German version not reviewed by Deutsches Institut für Bautechnik".
- This decision is issued in a revocable manner. The provisions of this decision may be amended or modified at a later time, particularly if new technical knowledge requires this.
- This decision relates to the information on the subject matter of the permit made available by the applicant during the approval process and the documents submitted. Any change made to these decision bases is not covered by this decision and must be disclosed to the Deutsches Institut für Bautechnik without delay.

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II SPECIAL PROVISIONS

1 Subject matter and scope of use and application

1.1 Subject matter of the approval and scope of application

Subject matter of the approval are prefabricated scaffolding components in accordance with table 1 for use in the "ALBLITZ 100 S" scaffolding system.

1.2 Subject matter of the permit and scope of application

Subject matter of the approval is the planning, dimensioning and execution of the "ALBLITZ 100 S" scaffolding system, consisting of scaffolding components

- according to table 1,
- according to table 3 and
- MVV TB (Model Administrative Provisions Technical Building Rules), section C 2.16 in accordance with the respective scope of application.

The main load-bearing structure consists of steel vertical frames b = 1.088 m,

decks $\ell \le 3.07$ m and vertical diagonal braces in the outer vertical plane.

The scaffolding system has been verified for use as a working and service scaffold according to the DIN EN 12811-1:2004-03 in connection with the "Application Guideline for working scaffolds in accordance with DIN EN 12811-1" and DIN 4420-1:2004-03.

2 Provisions for the scaffold components

2.1 Properties

2.1.1 General provisions

The scaffolding components according to table 1 must comply with the provisions of annex A, the provisions in the documents filed at the Deutsches Institut für Bautechnik (DIBt) as well as the regulations of the sections below.

Table 1: Scaffolding components of the "ALBLITZ 100 S" scaffolding system

Designation	Annex A, page	Detailed view / components in accordance with Annex A, page
Vertical frame AF 2.00/1.50x1.09 m	178	180
Vertical frame AF 1.00/0.66x1.09 m	179	180

2.1.2 Materials

2.1.2.1 Metals

Metal materials must comply with the technical rules according to table 2. Their properties must be confirmed by means of a material test certificate in accordance with table 2.

Components for which the material specifications are stored at the Deutsches Institut für Bautechnik, the properties shall be confirmed by means of the following material test certificates:

 For structural steel without increased yield strengths and with a defined minimum yield strength of ≤ 275 N/mm², a test report 2.2 issued by the factory is sufficient.

For all other metal materials, an inspection report 3.1 is mandatory.

2.1.3 Corrosion protection

The technical building regulations shall apply.

See DIBt-Mitteilungen (notifications of the DIBt), issue 2/2006, p. 61 et seq

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<u>Table 2:</u> Technical rules and material test certificates for the metal materials of the scaffolding components

Material	Material number / 5-digit code	Designation	Technical regulation	Material test certificate according to DIN EN 10204: 2005-01
	1.0038	S235JR*)	DIN EN 10025-2:	2.2 *)
	1.0045	S355JR	2019-10	3.1
Structural	1.0039	S235JRH*)	DIN EN 10219-1: 2006-07	2.2 *)
steel	1.0579	S355J2C+C	DIN EN 10277: 2018-09	0.4
	1.0335	DD13	DIN EN 10111: 2008-06	3.1

For some scaffolding components, an increased yield strength $R_{eH} \ge 320 \text{ N/mm}^2$ is mandatory. These components have been marked accordingly in the drawings in annex A. The proportional strain at fracture A may not be lower than 15 %. For a wall thickness of < 3 mm, the proportional strain at fracture of A_{80mm} shall be determined. The conversion of A_{80mm} to A shall be done in accordance with DIN EN ISO 2566-1.

The values of the yield strength, the strain at fracture and the tensile strength shall be confirmed by means of an inspection report 3.1 in accordance with DIN EN 10204:2005-01. The purchase requisition regarding the increased yield strength shall be indicated in the inspection report 3.1 as a desired value.

2.2 Manufacturing and marking

2.2.1 Manufacturing

Companies that manufacture welded scaffolding components in accordance with the present decision shall demonstrate that they are qualified for this task.

For steel components, this proof shall be considered to be furnished, if welding procedures and welding personnel are qualified in accordance with DIN EN 1090-2:2018-09 and the company holds a welding certificate of at least execution class 2 (EXC 2) in accordance with DIN EN 1090-1:2012-02.

2.2.2 Marking

The delivery notes for scaffolding components according to table 1 shall be marked in accordance with the regulations for the mark of conformity of the federal states (Länder).

In addition, scaffolding components shall be permanently and easily recognisably marked with:

- the uppercase letter "Ü",
- at least the abbreviated approval number "943",
- the identifying mark (logo) of the manufacturer, and
- the last two digits of the year of manufacture.

These identifying marks may only be applied if the requirements under section 2.3 are fulfilled.

2.3 Attestation of conformity

2.3.1 General provisions

Attestation of conformity of the scaffolding components according to section 2.1 with the provisions of the National Technical Approval covered by this decision must be provided for each manufacturer's work by a declaration of conformity on the basis of factory production controls and a certificate of conformity issued by a recognised certification body as well as regular external supervision, including a product test of scaffolding components and their components in accordance with the provisions below by a recognised inspection body.

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The manufacturer of the scaffolding components must involve a recognised certification body as well as a recognised inspection body to obtain a certificate of conformity and to carry out the external supervision, including the product tests.

The declaration that a certificate of conformity has been issued must be indicated by the manufacturer by marking the scaffolding components with the mark of conformity (Ü mark) with reference to the intended use.

The certification body shall provide DIBt with a copy of the initial test report upon request of the same.

DIBt shall be given a copy of the initial test report upon request of the same.

2.3.2 Factory production control

A factory production control system must be set up and operated at each production site. Factory production control is to be understood as a continuous monitoring of production to be carried out by the manufacturer, by means of which the manufacturer ensures that the scaffolding components manufactured by them are in compliance with the rules of this National Technical Approval.

Factory production control must include at least the following measures:

Scaffolding components in accordance with table 1:

- In the case of template or automatic production of scaffolding components, the respective templates and / or machine settings shall be checked and documented before commissioning.
- Checks and inspections on the starting material:
 - It shall be checked whether inspection certificates as per section 2.1.2 are available for the materials and that the attested inspection results meet the requirements.
 - At least 1‰ of the components shall be checked for conformity with dimensions and tolerances as specified in the design drawings.
- Checks and inspections on scaffolding components:
 - At least 1‰ of the scaffolding components shall be checked for conformity with dimensions and tolerances and, if necessary, welding seams and corrosion protection, as specified in the design drawings.
 - On at least 0.1‰ of the pressed-in tube connectors of the standards according to Annex A, pages 178 and 179, a tensile test on non-galvanized members is to be conducted. The breaking load F_{Break} must not be lower than 13.75 kN.

The results of the factory production control shall be recorded and evaluated.

The records must contain at least the following information:

- Designation of the scaffolding components
- Type of inspection
- Date of manufacturing and inspection of the scaffolding components
- Result of the production controls and inspections and comparison with requirements
- Signature of the person responsible for the factory production controls.

The records shall be kept for at least five years and shall be made available to the external supervisory body in charge of the external supervision. Upon request, these records must be presented to DIBt and to the competent superior building inspection authority.

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If inspection results are unsatisfactory, the manufacturer must immediately take corrective actions. Scaffolding components or components that do not meet the requirements must be handled in such a way that they cannot become confused with conforming parts. After the corrective actions, the inspection/test concerned must be repeated immediately, provided this is technically possible and necessary to prove that the defect has been rectified.

2.3.3 External supervision

In each manufacturer's work, factory production controls shall be supervised by an external supervision body on a regular basis, at least every 5 years for scaffolding components in accordance with table 1.

External supervision includes an inspection of the factory and the factory production control system, including a product inspection. Sampling and inspections/tests shall be the responsibility of the recognised body.

At least the following inspections/tests are to be carried out:

- Inspection of the requirements in terms of personnel and equipment for proper manufacturing of the scaffolding components
- Inspection of the factory production control system
- Checks on random samples for conformity of scaffolding components with the provisions of the approval in terms of
- Construction type, form and dimensions
- Corrosion protection
- Marking
- Inspection of the required certificates of suitability (welding)
- For the pressed tube connectors according to annex A, pages 178 and 179, at least 5 pressed-in tube connector tests are to be carried out in accordance with the provisions of Section 2.3.2 per inspection.

The scaffolding components shall be taken from current production.

The results of the certification and external supervision shall be kept for at least five years. Upon request, they must be presented to DIBt and to the competent superior building inspection authority by the certification body and/or supervisory body.

3 Provisions for planning, dimensioning and execution

3.1 Planning

3.1.1 General provisions

The Technical Building Regulations, in particular the regulations of the DIN EN 12811-1:2004-03 in connection with the "Application guideline for working scaffolds according to DIN EN 12811-1" as well as the "Approval Principles for working and service scaffolds, requirements, calculation conditions, tests and proof of conformity", DIN 4420-1:2004-03 as well as the rules stated below shall apply for the planning of working and service scaffolds using components of the "ALBLITZ 100 S" scaffolding system.

The scaffolds shall be planned in accordance with engineering standards. Verifiable calculations shall be made in accordance with the technical regulations and the construction drawings.

The "ALBLITZ 100S" scaffolding system consists of scaffolding components in accordance with section 1.

To be obtained from the Deutsches Institut für Bautechnik.

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Table 3: Additional scaffolding components for use in the "ALBLITZ 100 S scaffolding system"

Designation	Annex A, page	Detailed view / components in accordance with Annex A, page	Regulations for manufacturing, marking and certificate of conformity	
Foot plate	2			
Base jack 60	3			
Base jack 80, reinforced	4			
Base jack 60 with swivel base, reinforced	5			
Base jack 150, reinforced	6		according to Z-8.1-16.2	
Base jack 40	7		2-0.1-10.2	
Wedged swivel coupler with spindle	8			
Locking pin red Ø11 mm	9			
Locking pin Ø9 mm	10			
Lightweight assembly frame 2.00 x 1.09 m, steel	11	21, 22, 25		
Lightweight assembly frame 1.50 - 1.00 – 0.66 x 1.09 m, steel	12	21, 22, 25		
Assembly frame 2.00 x 1.09 m, steel	13	21, 24, 25	according to	
Assembly frame 1.50 - 1.00 - 0.66 x 1.09 m, steel	14	21, 24, 25	according to Z-8.1-840	
Assembly frame 2.00 x 1.09 m, steel (discontinued design)	15	21, 24, 25	2 0.1 040	
Assembly frame 1.50 – 1.00 – 0.66 x 1.09 m, steel (discontinued design)	16	21, 24, 25		
Lightweight assembly frame 2.00 x 0.73 m, steel	17	21, 22, 23, 25		
Lightweight assembly frame 1.50 - 1.00 - 0.66 x 0.73 m, steel	18	21, 22, 23, 25		
Assembly frame 2.00 x 0.73 m, steel (discontinued design)	19	21, 23, 25		
Assembly frame 1.50 – 1.00 – 0.66 x 0.73 m (discontinued design)	20	21, 23, 25		
Lightweight passage frame 2.20 x 1.50 m	26	21, 22, 25		
Passage frame 2.20 x 1.50 m	27	21, 24, 25		
Locking guardrail wedge housing	28	25		
Gusset plate coupler	29		according to	
Guardrail coupler with wedge housing	30	58	Z-8.1-16.2	
Horizontal strut 1.57 – 3.07 m	31			
I-guardrail with turning bolt 1.57 – 3.07 m	32			
I-guardrail 1.57 – 3.07 m	33			
Guardrail 0.73 – 3.07 m	34			
Double guardrail 1.57 – 3.07 m, steel	35			
Double guardrail 2.07 - 2.57 m, steel (discontinued design)	36			
Single and double guardrail (discontinued design)	37			
Aluminium double guardrail 1.57 – 3.07 m	38			
End guardrail 1.09 m	39		according to Z-8.1-840	

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<u>Table 3:</u> (continued)

Designation	Annex A, page	Detailed view / components in accordance with Annex A, page	Regulations for manufacturing, marking and certificate of conformity
End guardrail 0.73 m	40		according to Z-8.1-16.2
Double end guardrail 1.09 m	41		according to
Double end guardrail 1.09 m (discontinued design)	42		Z-8.1-840
Double end guardrail 0.73 m	43		according to
Double end guardrail 0.73 m (discontinued design)	44		Z-8.1-16.2
End guardrails 1.09 m, single and double	45		according to Z-8.1-840
Diagonal brace 2.80; 3.20; 3.60 m	46		
Diagonal brace for 2.07; 2.57 and 3.07 m (discontinued design)	47		
Quick release anchor 0.69 m	48		
Scaffold tie 0.38 – 1.75 m	49		
Anchor coupler	50		
Quick release anchor 0.65 m (discontinued design)	51		
Scaffold tie 0.30 – 2.00 m (discontinued design)	52		
VARIO lightweight anchor rod	53		
VARIO lightweight anchor ledger 1.57 – 3.07 m	54		
Telescopic scaffold stabilizer 3.30 - 6.00 m, steel	55		
Bracket 0.36 m	56	22, 23	according to Z-8.1-16.2
Bracket 0.36 m (discontinued design)	57	23	2 0.1 10.2
Bracket 0.73 m	58	21, 22, 24	
Bracket 0.73 m – reinforced	59	21, 22, 24	
Bracket 0.22 m without tube connector	60	22, 23	
Bracket 0.36 m without tube connector	61	22, 23	
Kombi bracket 0.36 m	62	22	
Bracket 0.50 m	63	21, 22, 23	
Plug-in bracket 0.22 m; 0.36 m	64	22	
Bracket 0.36 m with swivel base	65	22	
Bracket 0.73 m with swivel base	66	21, 22	
Bracket 1.09 m	67	21, 22, 23	
Deck lift-off prevention 0.36 – 0.73 m	68		
Deck lift-off prevention 1.09 m	69		according to Z-8.1-840
Universal U-deck lift-off preventer	70		according to Z-8.22-939
Diagonal cross brace 1.95 m	71		according to Z-8.1-840
Diagonal cross brace 1.77 m	72		according to Z-8.1-16.2
Lightweight guardrail post 1.09 m	73	21, 25	according to
Lightweight end guardrail post 1.09 m	74	21, 25	Z-8.1-840

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<u>Table 3:</u> (continued)

Table 61 (Serial acca)			
Designation	Annex A, page	Detailed view / components in accordance with Annex A, page	Regulations for manufacturing, marking and certificate of conformity
Lightweight guardrail post 0.73 m	75	21, 25	
Lightweight end guardrail post 0.73 m	76	21, 25	
Guardrail post, single	77	21, 25	according to
Protective roof bracket 1.30 m	78	22, 23	Z-8.1-16.2
Protective roof support 2.10 m	79	22, 23	
Safety meshguard post 1.09 m	80	25	according to
Safety meshguard post 1.09 m (discontinued design)	81	25	according to Z-8.1-840
2-pin coupler	82		
Safety meshguard post 0.36; 0.50; 0.73 m T15	83	25	according to Z-8.1-16.2
			according to
Adapter for safety meshguard post	84	83, 85	Z-8.1-840
Safety meshguard post 0.36; 0.50; 0.73 m	85	25	
Safety meshguard post 0.73 m (discontinued design)	86	25	
Side safety meshguard 1.57 – 3.07 m	87		according to
Safety meshguard 1.57 – 3.07 m (discontinued design)	88		Z-8.1-16.2
Toeboard 0.73 – 3.07 m	89		
End toeboard 1.09 m	90		according to Z-8.1-840
End toeboard 0.36 – 0.73 m	91		according to
Halfcoupler with toeboard pin	92		Z-8.1-16.2
Storey ladder 7 rungs T19 / T15	93		according to Z-8.22-939
Storey ladder 7 rungs	94		
Aluminium single ladder for scaffolds with 10; 14, 17; 20 rungs	95		
Tube connector 0.19 m	96		
Lightweight lattice girder 4.14 m with tube connector	97		according to
Lightweight lattice girder 5.14 m; 6.14 m with tube connector	98		Z-8.1-16.2
Lattice girder 4.14 m with tube connector	99		
Lattice girder 5.14 m; 6.14 m with tube connector	100		
Lattice girder coupler	101		
U-lattice girder ledger 1.09 m	102	22, 23	
Lightweight U-transom 1.09 m	103	22	according to
U-transom 1.09 m	104	24	Z-8.1-840
U-transom 0.73 m	105	22, 23	according to Z-8.1-16.2
Lightweight U-starter transom 1.09 m	106	22	according to Z-8.1-840
U-starter transom 0.73 m	107	22, 23	according to Z-8.1-16.2
		1 -	a a a a maltin or 4 a
Plug-in U-starter profile 1.09 m	108	22	according to Z-8.1-840
Plug-in U-starter profile 1.09 m Plug-in U-starter profile 0.73 m	108 109	22 22	

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Table 3: (continued)

Designation	Annex A, page	Detailed view / components in accordance with Annex A, page	Regulations for manufacturing, marking and certificate of conformity
Stairway post 1.10 m	111	25	
Corner adapter 74 (115)	112		
U-distance coupler	113	22	according to
Aluminium U-platform stairway 2.57; 3.07 x 2.00 x 0.64 m	114	115	Z-8.1-16.2
Aluminium U-platform stairway 2.57; 3.07 m (discontinued design)	116		
U-Komfort stairway 2.57; 3.07 x 2.00 x 0.64 m	117		according to Z-8.22-939
Stair guardrail 2.57; 3.07 m	118		
Inner guardrail for stairway	119		
Inner guardrail for stairway (discontinued design)	120		
Stairway guardrail 1.0 x 0.5 m	121		
Keder rail 2000, aluminium	122		
Keder rail, aluminium (discontinued design)	123		
Rail holder with halfcoupler	124		
Keder slotted screw with nut	125		
Keder tube brace 2.07 – 3.07 m	126		
Lightweight system lattice girder 450, 2.25 – 6.32 m, steel	127		
Lattice girder 450 2.00 - 6.00m, steel	128		
System-integrated lattice girder 450, 2.25 – 6.32 m, aluminium	129		according to
Aluminium lattice girder 450 2.00 - 8.00 m	130		Z-8.1-16.2
Aluminium lattice girder 750 2.25 – 7.25 m	131		
Aluminium assembly guardrail T19 1.57 / 2.07 m, 2.07 / 3.07 m	132		
Assembly post T19	133		
Aluminium assembly guardrail 1.57 / 2.07 m; 2.57 / 3.07 m	134		
Assembly post T5	135		
Aluminium end assembly guardrail	136		
Lightweight U-deck 0.73 – 3.07 x 0.32 m, steel; design: spot-welded / hand welded	137		
U-deck T4 0.73 – 3.07 x 0.32 m, steel; design: spot-welded / hand welded	138		
U-deck 0.73 – 3.07 x 0.32 m, steel; design: spot-welded / hand welded	139		

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Table 3: (continued)

Designation	Annex A, page	Detailed view / components in accordance with Annex A, page	Regulations for manufacturing, marking and certificate of conformity	
U-deck 0.73 – 3.07 x 0.19 m, steel	140			
U-trapdoor deck 2.07 x 0.64 m, steel	141			
U-trapdoor deck 2.57 x 0.64 m, steel	142			
U-robust trapdoor deck 2.07 – 3.07 x 0.61 m	143			
U-robust trapdoor deck with ladder 2.57 – 3.07 x 0.61 m	144			
Aluminium U-trapdoor deck 1.57 – 3.07 x 0.61 m	145			
Aluminium U-trapdoor deck with ladder, 2.57 – 3.07 x 0.61 m	146		according to Z-8.1-16.2	
U-XTRA-N-trapdoor deck 2.07 – 3.07 x 0.61 m	147			
U-XTRA-N-trapdoor deck with ladder, 2.57 – 3.07 x 0.61 m	148			
Aluminium U-trapdoor deck 2.07 x 0.61 m, trapdoor offset	149			
Aluminium U-trapdoor deck 2.57 - 3.07 x 0.61 m with ladder, trapdoor offset	150			
Gap cover 0.73 – 3.07 x 0.32 m, steel	151		according to Z-8.22-939	
U-gap cover 0.73 – 3.07 m, steel	152		a a a a malina muta	
U-Aluminium gap cover 1.09 – 3.07 m	153		according to Z-8.1-16.2	
U-Aluminium gap cover 0.35; 0.60 m	154			
U-gap deck 0.73 – 3.07 m, telescopic	155		according to Z-8.22-939	
U-deck for compensation bay 0.19; 0.32; 0.61 x 0.50 m	156		according to Z-8.1-16.2	
U-corner deck, rigid with toeboard, steel	157		according to Z-8.1-840	
U-deck 0.73 – 3.07 x 0.19 m, steel (discontinued design)	158		according to	
U-trapdoor deck 2.07 – 2.57 x 0.64 m, steel (trapdoor opens sideways)	159		Z-8.1-16.2	
U-trapdoor deck 2.57 – 3.07 x 0.64 m, steel	160		according to Z-8.1-840	
U-trapdoor stackable combi-deck 2.07 - 3.07 x 0.61 m	161		according to	
U-trapdoor stackable combi-deck 2.57 - 3.07 x 0.61 m, with ladder	162		Z-8.1-16.2	
U-frame deck 1.57 – 2.57 x 0.50 m, solid wood	163			
U-frame deck 2.57 x 0.52 m, solid wood	164		according to	
Deck frame 1.57 – 3.07 x 1.09 m	165	7 0 1 040		
Wooden plank 1.57 – 3.07 x 0.44 m	166			

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Table 3: (continued)

Designation	Annex A, page	Detailed view / components in accordance with Annex A, page	Regulations for manufacturing, marking and certificate of conformity	
Locking plate	167			
Horizontal frame 1.57 – 3.07 x 1.00 m	168			
Lightweight EXP-assembly frame 2.00 x 1.09 m, steel	169	21, 22	according to	
EXP-assembly frame 2.00 x 1.09 m, steel	170	21, 24	Z-8.1-840	
EXP-assembly frame 2.00 x 1.09 m (discontinued design)	171	21, 24		
EXP-diagonal brace 2.80; 3.20; 3.60 m	172		according to	
EXP guardrail 1.57 – 3.07 m	173		Z-8.1-16.2	
EXP-double end guardrail 1.09 m	174		according to	
EXP-guardrail post 1.09 m	175	21	Z-8.1-840	
EXP-guardrail post, single	176		according to Z-8.1-16.2	
EXP-end toeboard 1.09 m	177		according to Z-8.1-840	
TRBS guardrail (compliant with technical regulations for occupational safety) 2.07 m; 2.57 m; 3.07 m, foldable	181			
TRBS guardrail (compliant with technical regulations for occupational safety) 0.73 m; 1.09 m; 1.57 m, rigid	182		according to Z-8.1-862	
TRBS end guardrail (compliant with technical regulations for occupational safety) 0.73 m; 1.09 m	183			

3.1.2 Standard system configuration

The use of the scaffold components in facade scaffolding is described in the provisions of a standard system configuration. Proof of structural stability for said fully erected scaffolds in their standard system configuration has been furnished. Assembly configurations of facade scaffolds are considered to be standard system variations when they comply with the provisions of annex B and C. Any assembly configurations that deviate from the standard system configuration shall be assessable and verified in each individual case.

The standard system configuration applies to facade scaffolds with a structural height that does not exceed 24 m, not including the spindle extension length above the ground. In its standard system configuration, the scaffolding system may be used with system width b = 1.09 m and in accordance with the bay length with the following load classes in accordance with DIN EN 12811-1:2004-03, and as a protection scaffold and roof edge protection scaffold with a maximum falling height of class 1 (FL1) and as protection scaffold and roof edge protection scaffold with protective walls of class SWD 1 in accordance with DIN 4420-1:2004-03:

- for bay length $\ell \le 3.07 m$ for working scaffolds of load classes ≤ 4 ,
- for bay length $\ell \le 2.57 m$ for working scaffolds of load classes ≤ 5 or
- for bay length $\ell \le 2.07 \, m$ for working scaffolds of load classes ≤ 6 .

3.1.3 Deviations from the standard system configurations

If assembly configurations deviate from the standard system configurations in accordance with annex B or annex C, proof of structural stability of the scaffoldings shall be provided for each individual configuration or by means of a structural design calculation in accordance with the Technical Building Rules [Technische Baubestimmungen] and the provisions of this decision.

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The characteristic values to be used for the stability verification are specified in this decision. Other anchorage patterns are possible and other nettings may be used as scaffold cladding. Any increased stresses / loads (e.g. from higher dead weights and wind loads or from increased live loads) must be tracked in a scaffold up to the anchors and to the ground level. The impact of building hoists or other lifting equipment must also be taken into account if they are not operated independently of the scaffold.

For any assembly configurations of the standard system configuration in accordance with annex B and C, the use of lightweight scaffolding spindles according to DIN 4425:2017-04 or base jacks according to Annex B of DIN EN 12811-1:2004-03 is considered a major deviation for which individual proof of stability must be provided.

3.2 Dimensioning

3.2.1 General provisions

Unless otherwise specified in this decision, particular attention in relation to the design and calculation of scaffolds erected using the scaffold system shall be paid to the Technical Building Regulations, in particular for working and service scaffolds of DIN EN 12811-1:2004-03 in conjunction with the "Application guideline for working scaffolds according to DIN EN 12811-1" ¹, DIN 4420-1:2004-03, and the "Approval principles for working and service scaffolds, requirements, calculation, tests and proof of conformity".³ ⁴

In the event that other configurations are used and it is not clear which component shall be used, any proof of structural stability shall assume the least favourable variant.

3.2.2 Vertical frames

3.2.2.1 U-profiles

3.2.2.1.1 U-profile 60 without holes according to annex A, pages 24 and 180

U-profile 60 without holes according, e.g. as upper transom of the vertical frames according to annex A, pages 178 and 179 shall be verified assuming the characteristic values in accordance with figure 1.

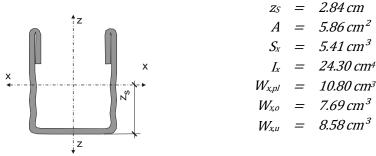


Figure 1: Characteristic values of U-profile 60 without holes

3.2.2.1.2 U-profile 60 with holes according to annex A, pages 24 and 180

U-profile 60 with holes \square 20 x 40 mm, e.g. as upper transom of the vertical frames according to annex A, pages 178 and 179 shall be verified assuming the characteristic values in accordance with figure 2.

To be obtained from the Deutsches Institut für Bautechnik

Please also take into consideration the advisory results of the "Scaffold Expert Committee", the so-called "SVA Gerüste", available on the DIBt homepage.

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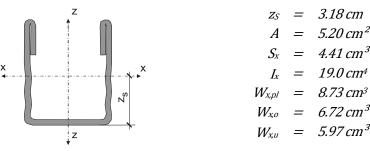


Figure 2: Characteristic values of U-profile 60 with holes = 20 x 40 mm

3.2.2.1.3 U-profile 53 without holes according to annex A, pages 22 and 23

U-profile 53 without holes according, e.g. as upper transom of the lightweight vertical frames shall be verified assuming the characteristic values in accordance with figure 3.

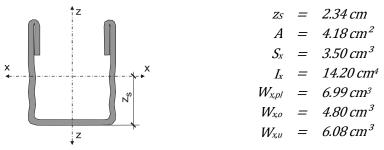


Figure 3: Characteristic values of U-profile 53 without holes

3.2.2.1.4 U-profile 53 with holes according to annex A, pages 22 and 23

U-profile 53 without holes \square 20 x 40, e.g. as upper transom of the lightweight vertical frames shall be verified assuming the characteristic values in accordance with figure 4.

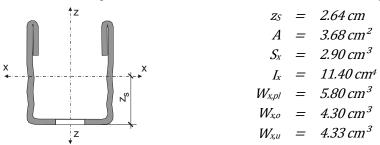


Figure 4: Characteristic values of U-profile 53 with holes

3.2.2.2 Welded connection of the post of the upper transom and vertical frame

For the welded connections of the upper transom with cross section U53 T10 in accordance with annex A, page 22 to the vertical frame post, the load-bearing capacities according to table 4 may be assumed for the frames of Annexes 11, 12 and 169. When verifying the load-bearing capacity of the welded connection, proof of interaction may be carried out in accordance with (equation 1).

For the welded connection of the upper transom with cross section U53 U53 T10 in accordance with annex A, page 25 or U53 in accordance with Annex A, page 26 to the vertical frame post, the load-bearing capacities according to Z-8.1-16.2 may be assumed for the frames of Annex A, pages 17 to 20.

For the welded connection of the upper transom with cross section U60 in accordance with annex A, page 24 for the frames of annex A, pages 13 to 16, 27, 170 and 171 as well as for the welded connection of the U-profile in accordance with annex A, page 180 for the vertical frame AF according to annex A, page 178 and 179, the load-bearing capacities in accordance with table 4 may be assumed. When verifying the load-bearing capacity of the welded connection, proof of interaction may be carried out in accordance with (equation 1).

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$$\frac{\left| \frac{M_{Ed}}{M_{Rd}} + 1.12 \cdot \left(\frac{N_{Ed}}{N_{Rd}} \right)^2 - k \cdot \left(\frac{N_{Ed}}{N_{Rd}} \right) \le 1.0 }{ \text{with }} \quad \begin{array}{c} k = + \ 0.12 \\ k = - \ 0.12 \end{array} \quad \text{for positive moments}$$

within the following scope:

$$-0.50 \le \frac{N_{Ed}}{N_{Rd}} \le 0.50$$
 ar

and

$$-\frac{1}{3} \le \frac{V_{z,Ed}}{V_{z,Rd}} \le \frac{1}{3}$$

Table 4: Load-bearing capacities of the connections of the U-ledgers to the vertical frame posts

Provisions for execution	Annex A, page	N _{Rd} [kN]	M _{y,Rd} [kNcm]	V _{z,Rd} [kN]
U-profile 53 T10	22	109	165	106
U-profile 60	24 or 180	86.2	146	62.2

3.2.2.3 Corner plate transom - vertical frame post

Proof of structural stability of the scaffold system may be provided assuming that the "gusset plate, lightweight" at the connection of the transom and the vertical frame post of the vertical frames is an equivalent linear member with a nominally pinned connection on both sides with the reduced cross section area (A*) according to figure 5.

For the corner plate according to annex A, page 180 of the vertical frame AF in accordance with Annex A, page 178 and 179, and for the "gusset plate 170" of the assembly frames (A*) may be assumed in relation to $A^* = 0.49 \text{ cm}^2$.

If it is not possible to ensure that only vertical frames with a gusset plate shall be used in a scaffold or that their effect on the structural stability is taken into account by means of detailed calculation and design documents, the smaller reduced cross sectional area (A) of the lightweight gusset plate in accordance with figure 5 shall be used for the proof of structural stability of this scaffold.

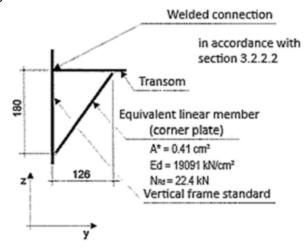


Figure 5: Characteristic values for the connection of the transom and the vertical frame post to the lightweight gusset plate

3.2.2.4 Connection of the lower transom to the upright tube

Proof of structural stability of the scaffold system may be furnished taking into account the connection of the lower transom to the upright tube of the vertical frames with a rotational restraint and a load-bearing capacity according to table 5. Please note that the connection is related to the outer face of the upright tubes.

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<u>Table 5:</u> Characteristic values of the connection lower transom / upright tube

Component	Load-bearing capacity $M_{y,Rd}$ [kNcm]	Rotation ϕ_d [rad]
Assembly frame, steel in accordance with annex A, pages 11 to 20		My,Ed
EXP-assembly frame, steel in accordance with annex A, pages 169 to 171	47.0	9250 - 131 · My,Ed
Vertical frame AF in accordance with annex A, pages 178 and 179		M _{y,Ed} in [kNcm]

3.2.2.5 Standard joints

Unless not otherwise specified below, the joints of the standards in the ALBLITZ 100 S frame scaffold are always to be constructed and proof of structural stability is to be provided in accordance with the current Technical Building Rules. Please also refer to the "Calculation of standard connections with one-sided, centrally fixed pins for working and service scaffolds, and for falsework made of steel"⁵.

If it is not certain which type of tube connectors are used, the verification of structural stability shall be based upon the least favourable assumptions.

A tension stress resistance of $N_{\rm Z,Rd}=10.0~kN$ may be assumed for the pressed tube connectors of the standards according to annex A, pages 178 and 179 and the indented tube connectors according to annex A, page 21.

The compressed tube connectors according to annex A, page 21 may be used in accordance with Z-8.1-16.2.

If required, the verification of a pin-like connector for tension coupling must be provided separately. When using a pin of at least Ø12-8.8, a separate verification in case of pressed / indented tube connectors is not mandatory.

3.2.3 Vertical diagonal braces

For the proof of structural stability of the scaffolding system, the vertical diagonal braces according to annex A, pages 46, 47 and 172 in connection with the joint stiffness values given in table 8 shall be taken into consideration. The stiffness values given therein only include the contributions from the upper push-in joints and the lower coupler connection, the stiffness of the diagonal brace tube must additionally be considered. When connecting EXP vertical diagonal braces according to annex A, page 172 at the tilting pin, a clearance of \pm 1.8 mm must additionally be considered.

The joint eccentricities between the connection of the vertical diagonal braces and the centroidal axis of the decks are to be considered with the following values:

- Plug connection (top): $e_{connection} = 80 \text{ mm}$

- Swivel coupler connection (bottom): $e_{connection} = 160 \text{ mm}$

For the vertical diagonal braces, proof shall be provided that the loads shall not exceed the load-bearing capacities. For the diagonal braces according to annex A, these load-bearing capacities are listed in Table 6. The load-bearing capacities apply to the vertical diagonal braces including the plug connection and the coupler connection. For the EXP-diagonal braces according to annex A, page 172, the design value for the load-bearing capacity of the tilting pin for a connection of one or plural diagonal braces is $F_{KS,Rd} = 5.45 \, kN$.

See DIBt Newsletter 4/2017.

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Table 6: Load-bearing capacity and stiffness of the vertical diagonal braces

Scaffold bay length	Load	Stiffness CD,d	Load-bearing capacity $F_{//,Rd}$
0.07	Tension	11.55 kN/cm	7.73 kN
ℓ = 3.07 m	Compression	14.73 kN/cm	5.76 kN
. 0.57	Tension	16.73 kN/cm	7.73 kN
ℓ = 2.57 m	Compression	32.0 kN/cm	7.09 kN
0.07	Tension	21.09 kN/cm	7.73 kN
ℓ = 2.07 m	Compression	37.0 kN/cm	7.73 kN

3.2.4 Vertical load-bearing capacity of decks

The decks of the "ALBLITZ 100 S" scaffolding system are verified in accordance with table 7 for live loads of the scaffold load classes / service classes according to EN 12811-1:2004-03, Table 3 and for use in protection scaffold and roof edge protection scaffolds with fall heights of up to 2 m (top fall arresting layer of class FL 1) according to DIN 4420-1:2004-03 (class D according to DIN EN 12810-1:2004-03) in accordance with Table 7.

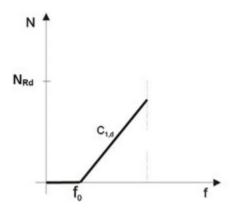
Table 7: Assignment of decks to load classes (service classes)

Designation	Annex A, page	Bay length ℓ [m]	Use in load classes (service classes)	Use in protection scaffold and roof edge protection scaffold	
Lightweight U-deck 0.32 m,	137	≤ 2.07	≤ 6		
U-deck T4 0.32 m, steel	138	2.57	≤ 5	-	
U-deck 0.32 m, steel	139	3.07	≤ 4	1	
	4.40	≤ 2.07	≤ 6		
U-deck 0.19 m, steel	140, 158	2.57	≤ 5	1	
	130	3.07	≤ 4		
U-trapdoor deck 0.64 m, steel	141	2.07	< 4		
O-traputor deck 0.04 m, steel	142	2.57	≥ 4]	
U-robust trapdoor deck 0.61 m	143, 144			allowed	
Aluminium U-trapdoor deck 0.61 m	145, 146, 149, 150	≤ 3.07	≤ 3		
U-XTRA-N-trapdoor deck 0.61 m	147, 148				
		≤ 2.07	≤ 6		
U-gap deck, telescopic	155	155	2.57	≤ 5	
		3.07	≤ 4		
U-trapdoor deck 0.64 m, steel	159	≤ 2.57	≤ 4		
U-trapdoor deck 0.64 m, steel	160	≤ 3.07	≤ 4	not allowed	
U-trapdoor stackable combi-deck 0.61 m	161, 162	≤ 3.07	≤ 3	allowed	
U frame deck, solid wood	163, 164	≤ 2.57	≤ 4	not allowed	
		1.57	≤ 6		
Deck frame 1.09 m	165	2.07; 2.57	≤ 5	1	
		3.07	= 3 ≤ 4	allowed	
Horizontal frame	168	≤ 3.07	<u>≤ 4</u>		

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3.2.5 Elastic support of the vertical frame sections

Non-anchored nodes of vertical frame sections on the frame level (in case of facade scaffolding perpendicular to the facade) may be assumed to be elastically supported by the horizontal level (decking), provided that the neighbouring horizontal nodes are anchored. Said elastic support may be considered by assuming a bilinear or trilinear travel spring according to figures 6 and 7 with the characteristic values of table 8 for the load classes according to table 7.



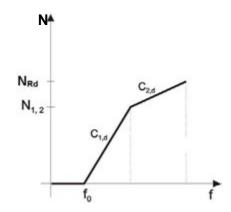


Figure 6: Bilinear spring characteristics

Figure 7: Trilinear spring characteristics

<u>Table 8:</u> Design values of the horizontal travel springs

Deck	հ, page	Bay width [m]	Clearance $f_{L,o}$ [cm]	Stiffness [kN/cm]		<i>N_{L,1,2}</i> [kN]	Load-bearing capacity of the spring load $N_{\perp,Rd}$ [kN]
	Annex A,			<i>C</i> 1⊥,d	C 2⊥,d	$N_{\perp,1}$	Load-b capacit spring load
	137, 138, 139	ℓ ≤ 2.07	3.4	1.90			
U-deck 0.32 m, steel		ℓ = 2.57	4.2	1.50			4.45
		ℓ = 3.07	5.0	1.20			
	140, 158	ℓ ≤ 2.07	3.9	2.56			
U-deck 0.19 m, steel		ℓ = 2.57	4.8	1.66			5.55
		ℓ = 3.07	5.8	1.16	0.32	4.82	
U-trapdoor deck 0.64 m,	141, 142, 159	ℓ = 2.07	2.8	2.79			4.00
steel		ℓ = 2.57	3.1	1.81			
	165 ℓ = 2.	ℓ ≤ 2.07	1.0	0.90	0.21	2.64	3.73
Deck frame 1.09 m		ℓ = 2.57	1.0	0.56	0.29	3.09	4.45
		<i>ℓ</i> = 3.07	1.1	0.38	0.20	2.55	3.64

3.2.6 Elastic coupling of the vertical levels

The inner and outer vertical level of a scaffolding may be assumed to be elastically coupled to each other by the decking in the direction of these levels (in the case of facade scaffolding parallel to the facade). Said elastic coupling may be considered by assuming bilinear or trilinear coupling springs according to figures 6 and 7 with the characteristic values of table 9 for the load classes according to table 7. The values given in table 9 apply to bay lengths of up to $\ell=3.07\,m$.

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Table 9: Design values of the horizontal coupling springs per scaffold bay

		Clearance $f_{ ,o}$ [cm]	Stiffness [kN/cm]			ing the $N_{//,Rd}$	
Deck	Annex A, page		C1//,d	C2 ,d	<i>N_{II,1.2}</i> [kN]	Load-bear capacity of spring load [kN]	
U-deck 0.32 m, steel	142, 143, 144	1.6	1.70	1.2	5.10	6.50	
U-deck 0.19 m, steel 145, 163		2.0	2.07			5.91	
Deck frame 1.09 m	170	0.3	1.20	0.48	4.64	6.09	

3.2.7 Material parameters

For components made of S235JRH steel with an increased yield point $(R_{eH} \ge 320 \ N/mm^2)$ - any such components are marked accordingly in the drawings of Annex A - the design value of the yield point $f_{v,d} = 291 \ N/mm^2$ may be used for the calculation.

3.2.8 Tubes Ø48.3 mm made from \$460MH

Scaffold tubes $\emptyset 48.3 \times 2.9 \text{ }mm$ and $\emptyset 48.3 \times 2.7 \text{ }mm$ made from steel material S460MH in accordance with Z-8.1-16.2 or Z-8.1-840 may be assigned to buckling curve "a".

For the proof of structural stability, the plastic shape coefficient shall be limited to $\alpha_{\rm pl}=1.25$. If for the tubes $\emptyset 48.3~mm$ made from S460MH steel material a calculation according to the second order theory of elasticity is carried out, the following value may be assumed as the design value of the initial curvature:

$$v_0 = \frac{\ell}{300}$$
 (Eq. 2)

The cosine interaction may be used to provide proof of interaction pressure with bending.

3.2.9 Scaffolding spindles / base jacks

The substitute section properties for the base jacks for the stress and / or interaction analyses and calculations of deformation according to DIN 4425:2017-04 (Annex B of DIN EN 12811-1:2004-03) shall be assumed as follows:

 Scaffolding spindles (base jacks) according to annex A, pages 3 and 7 (base jack 0.60 m and 0.40 m):

$$A = A_S$$
 = 3.84 cm²
 I = 3.74 cm⁴
 W_{el} = 2.61 cm³
 W_{pl} = 1.25 · 2.61 = 3.26 cm³

- Scaffolding spindles (base jacks) according to annex A, pages 4, 5 and 6 (reinforced base jack 0.80 m, reinforced swivel base jack 0.60 m and base jack 1.50 m):

$$A = A_S$$
 = 4.71 cm²
 I = 4.29 cm⁴
 W_{el} = 2.97 cm³
 W_{pl} = 1.25 · 2.97 = 3.71 cm³

The cosine interaction in accordance with DIN 4425:2017-04, section 7.1 may be used to provide proof of stability of the load-bearing capacity of the scaffolding spindles / base jacks.

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3.2.10 Couplers

For the proof of stability of the halfcouplers attached to different components, the load-bearing capacities and stiffness values for halfcouplers shall be applied in accordance National Technical Approval Z-8.331-882.

Notwithstanding these provisions, the values of the class A swivel couplers with wedge-lock in accordance with DIN EN 74-1:2005-12 may be used for wedged swivel couplers with spindle.

For the riveted halfcouplers of the components in accordance with annex A, pages 42, 44 to 47, 71 to 72, 78, and 79 the following isotropic load-bearing capacities of the riveted joints may be assumed when the couplers are connected to steel or aluminium tubes:

Coupler with screw top: $F_{Rd} = 13.6 \text{ kN}$ Coupler with wedge-lock: $F_{Rd} = 9.1 \text{ kN}$

3.3 Provisions for execution

3.3.1 General provisions

The Technical Building Regulations, in particular the regulations of the DIN EN 12811-1:2004-03 in connection with the "Application guideline for working scaffolds according to DIN EN 12811-1" as well as the "Approval Principles for working and service scaffolds, requirements, calculation conditions, tests and proof of conformity" DIN 4420-1:2004-03 as well as the rules stated below shall apply for the erection of scaffolds using components of the "ALBLITZ 100 S" scaffolding system1.

Assembly, alteration and dismantling of the scaffold must be carried out in compliance with the "Instructions for Assembly and Use" which are not subject of this decision.

3.3.2 Condition of components

All components shall be inspected for proper condition prior to assembly. Damaged components may not be used.

Tilting pins of EXP-components at the connections of the diagonal braces and guardrails shall lock automatically.

3.3.3 Structural design

3.3.3.1 General provisions

Deviating from section 1, components that are marked according to the provisions of previous approval decisions may also be used.

3.3.3.2 Base area

The lower vertical frames must be placed on base plates according to annex A, page 2 or base jacks and aligned in such a way that the working areas are horizontal. It must be ensured that the base plates according to annex A, page 2 or the end base plates of the base jacks are horizontal and supported over the entire area to absorb and transmit the forces resulting from the scaffold in the supporting surface.

3.3.3.3 Height equalisation

For height equalisation, the vertical frames / assembly frames 1.50 m, 1.00 m and 0.66 m can be used as equalisation frames. Do not work on scaffolding levels directly below these frames.

3.3.3.4 Scaffold decks

Scaffold decks must be secured to prevent them from accidental lift-off.

The Instructions for Assembly and Use must comply with the requirements of the "Application guideline for working scaffolds according to DIN EN 12811-1", see DIBt-Mitteilungen (notifications of the DIBt) issue 2/2006.

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3.3.3.5 Side protection

The provisions of DIN EN 12811-1:2004-03 apply to the side protection. Primarily use components intended for this use and only exceptionally use components such as steel tubes and couplers according to DIN EN 12811-1:2004-03 as well as scaffold decks and planks according to DIN 4420-1:2004-03.

When connecting different guardrail configurations, the wedges of the guardrail housings must be connected to the standards by driving the wedge into its housing to the end-stop with a 0.5 kg hammer (or heavier).

When using these guardrails consistently install I-guardrails in accordance with Z-8.1-16.2 or TRBS-guardrails in accordance with Z-8.1-862 according to the working level.

During assembly, secure the last TRBS-guardrail on the left (looking at the scaffold) on the topmost working level against uplifting forces by means of an additional scaffold coupler. Keep the additional security in place until the security of the TRBS-guardrail in this respectively leftmost scaffold bay has been secured against uplifting by means of an assembly frame that is installed in the level above ⁷.

3.3.3.6 Bracing

Scaffolds must be braced.

For facade scaffolding, the outer vertical level is to be braced in parallel to the facade by means of diagonal braces fitted one above another or spaced along the scaffolding. The number of diagonal braces depends on the structural analysis. However, do not allocate more than 5 scaffolding bays to one diagonal brace. Longitudinal ledgers shall be fitted at least in the bays to which a diagonal brace is connected at the height of the base jacks.

Horizontal levels (working levels) shall be braced using decks according to section 3.2.5 or 3.2.6 or by means of tubes and couplers.

3.3.3.7 Anchoring

Please refer to the structural analysis for anchor forces and the anchorage pattern.

The anchorage of scaffold ties to the facade or to other parts of the building is not covered by this approval. The user shall ensure that the respective forces can be securely absorbed and dispersed from scaffold ties. Vertical forces must not be transferred in this process.

3.3.3.8 Couplers

Couplers with screwed connectors must be tightened with a torque of 50 Nm when connecting to the standards; tolerances of ±10 % are permitted. According to the manufacturer's instructions for use, pins/screws must be easy to reposition.

When connecting wedge-lock couplers to the standards, they must be connected by driving the wedge to the end-stop with a 0.5 kg hammer (or heavier).

3.3.3.9 Lift-off preventer against uplifting forces

To secure against uplifting forces in accordance with the structural analysis, the standard joints shall be fitted in accordance with the Instructions for Assembly and Use or in accordance with a structural analysis.

Lift-off preventers in accordance with annex A, pages 68 and 69, guardrail posts in accordance with annex A, pages 73 to 77, 175 and 176, the protective net posts in accordance with annex A, pages 80, 81, 83, 85 and 86, the adapter for protective net posts in accordance with annex A, page 84, the tube connector 0.19 m, and the gap cover in accordance with annex A, page 151 must be secured in accordance with the provisions of annex A.

⁷ Please also refer to the Instructions for Assembly and Use of the manufacturer.

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3.3.4 Attestation of conformity

The building contractor shall submit a declaration of conformity in accordance with §§ 16 a (5) in conjunction with 21 (2) Model Building Regulation (MBO) in order to confirm the conformity of the erected working and service scaffold with the General Construction Technique Permit (aBG) covered by this decision.

4 Provisions for use, maintenance and inspection

4.1 General provisions

The use of the scaffold is not covered by this decision.

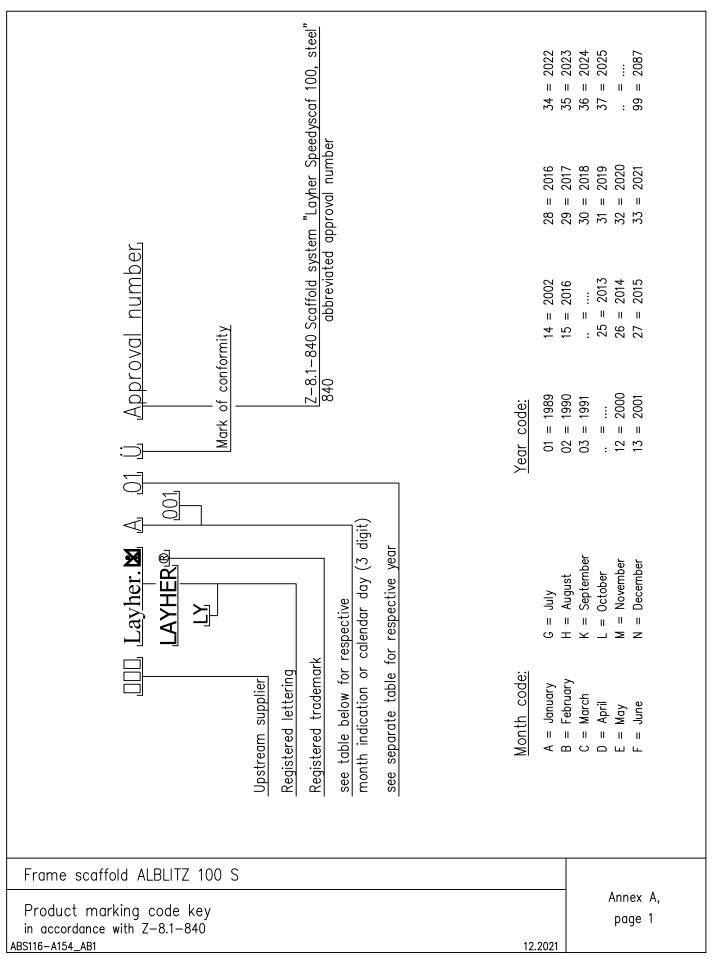
Undamaged components may be reused. All components shall be inspected optically for proper condition prior to assembly. Damage may be caused by mechanical action or through corrosion

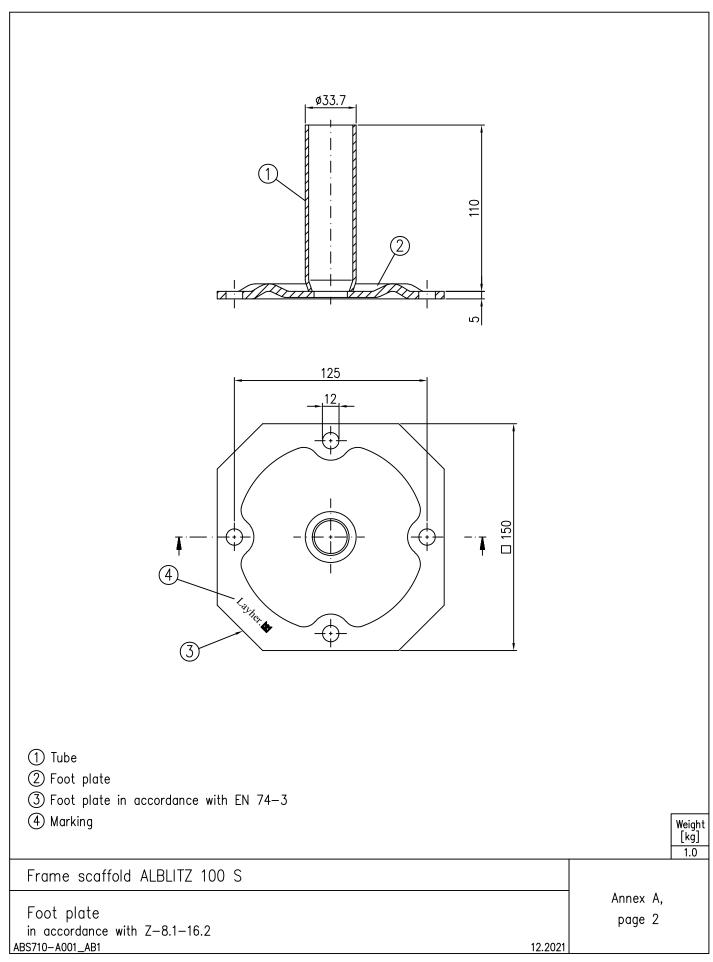
Maintain and check all components as prescribed in the product manual of the manufacturer.

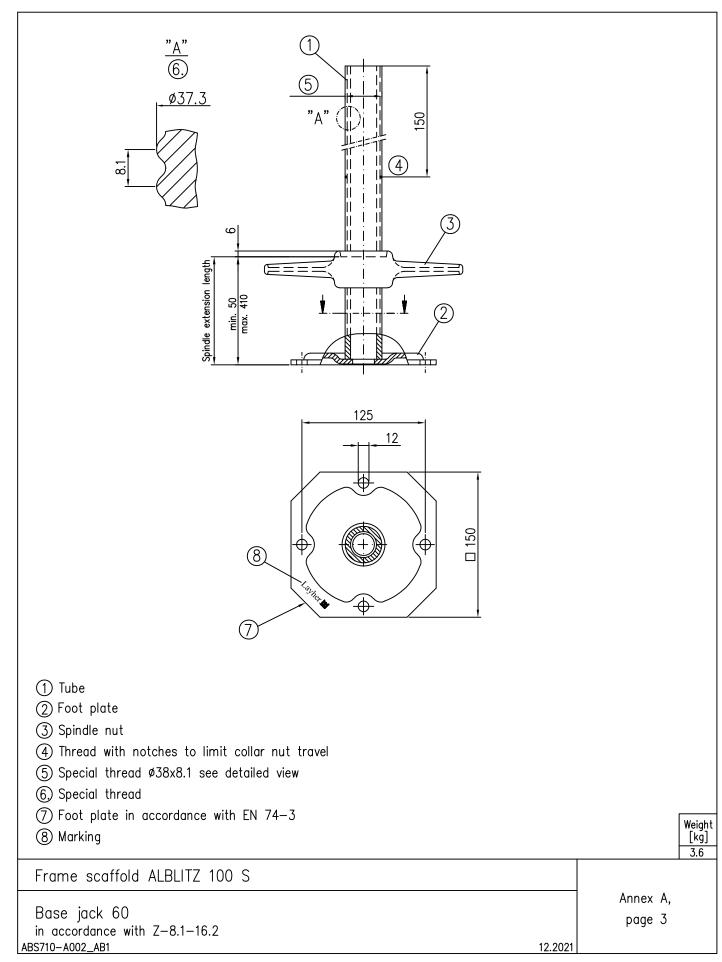
4.2 Wooden scaffolding components

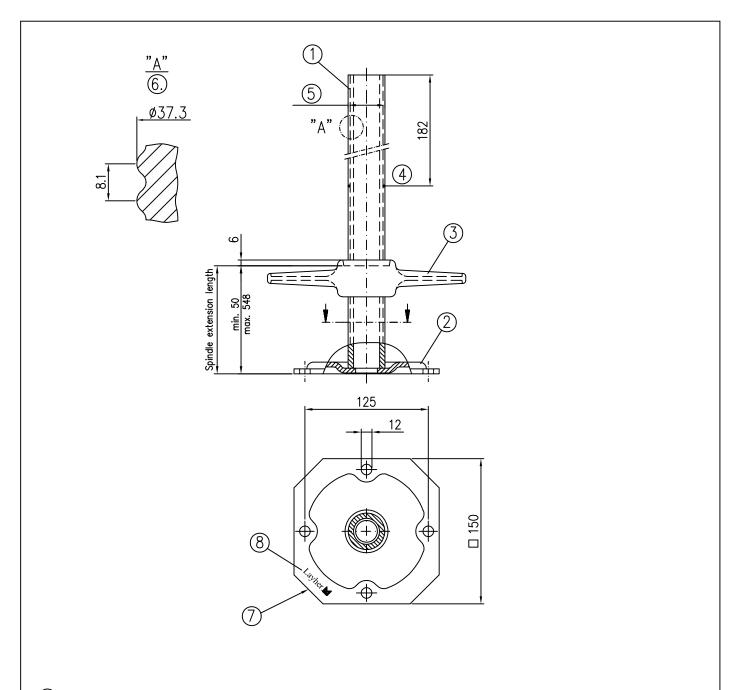
In order to prevent damage caused by moisture to wooden scaffolding components, they must be stored in a dry place, off the ground, and providing adequate ventilation.

Head of Division Attested





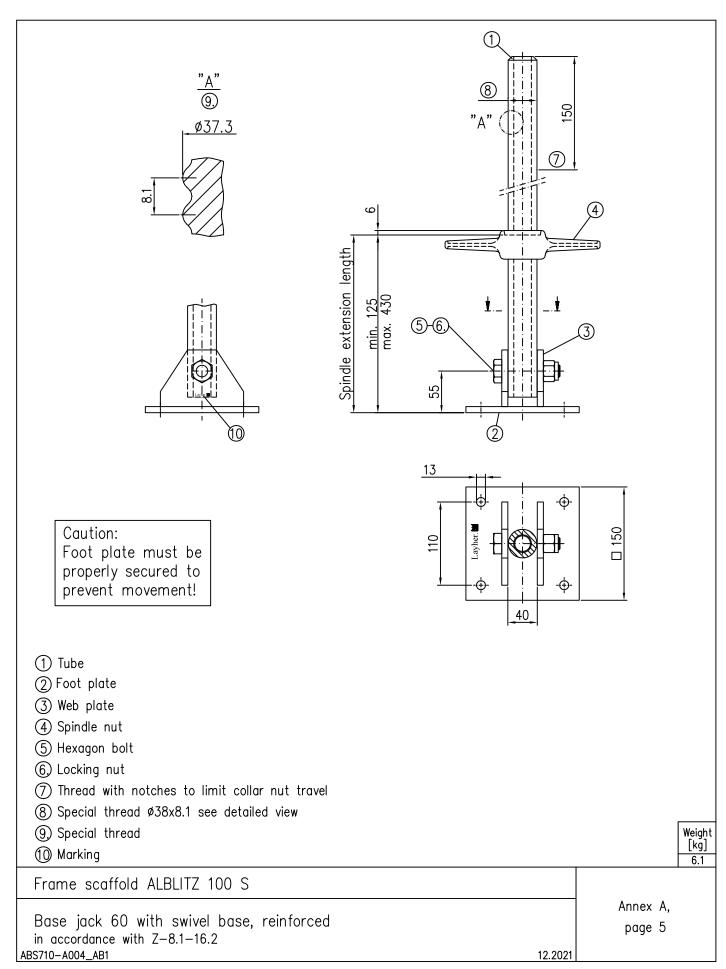


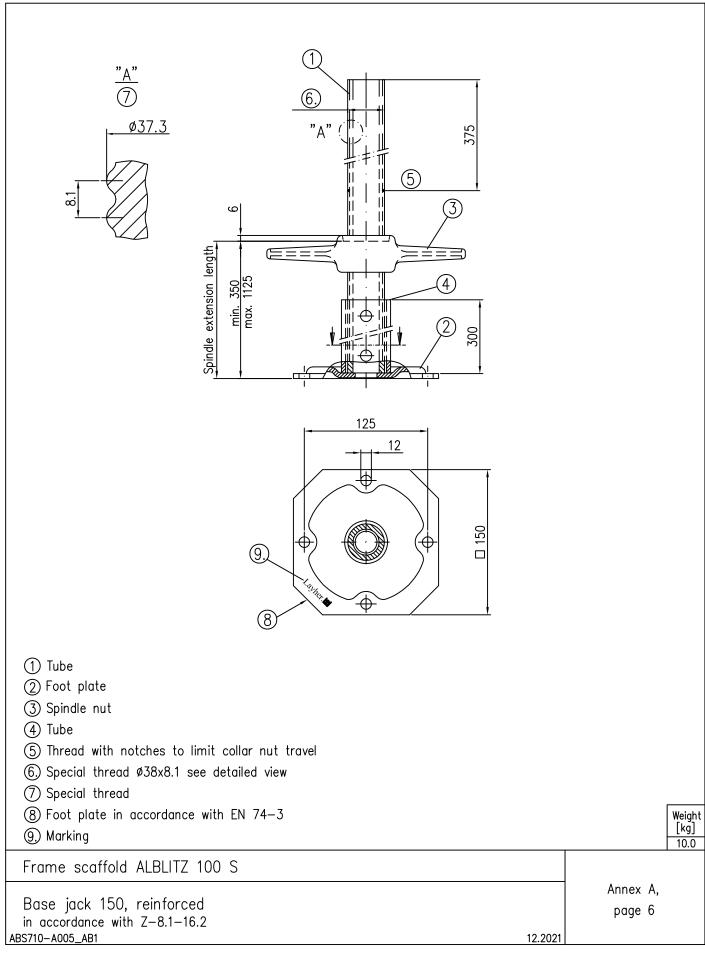


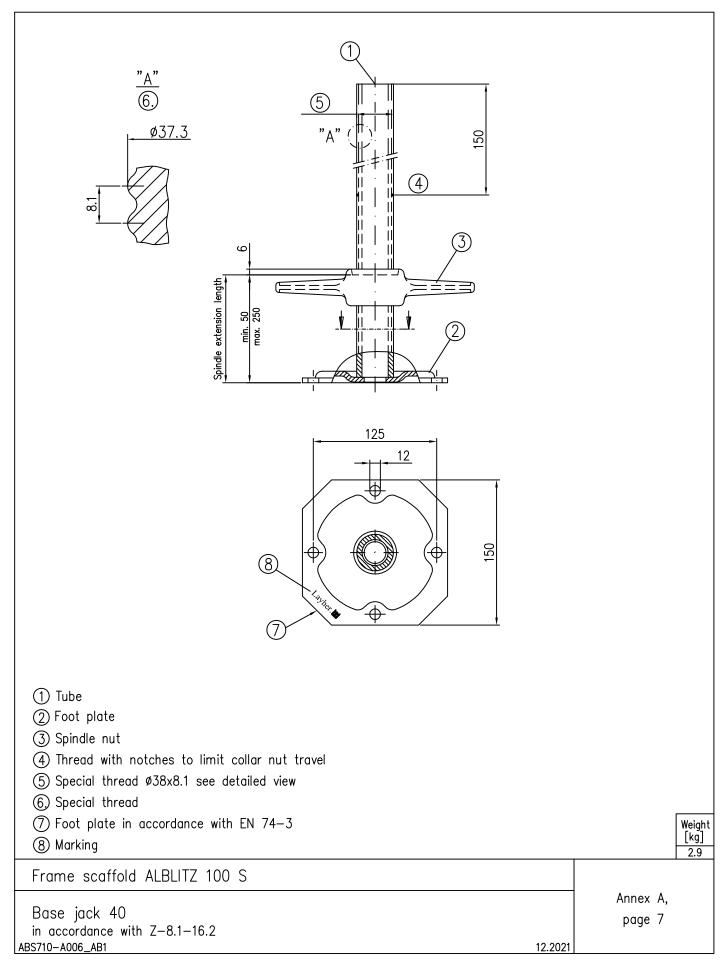
- 1) Tube
- (2) Foot plate
- 3 Spindle nut
- 4) Thread with notches to limit collar nut travel
- (5) Special thread Ø38x8.1 see detailed view
- (6.) Special thread
- 7) Foot plate in accordance with EN 74-3
- 8 Marking

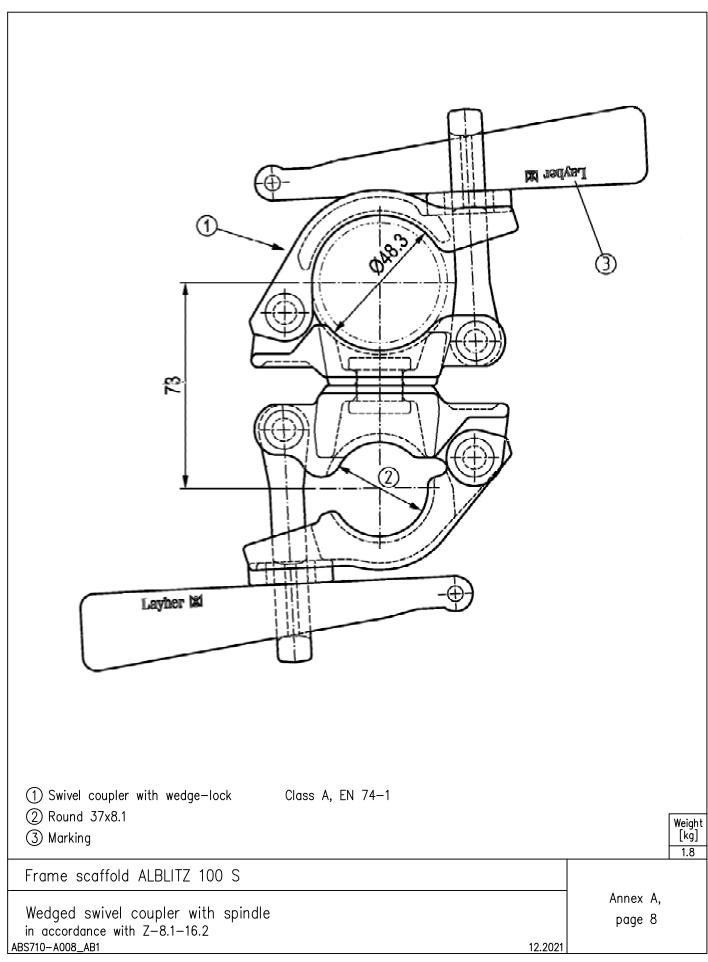
Weight [kg]	
4.9	

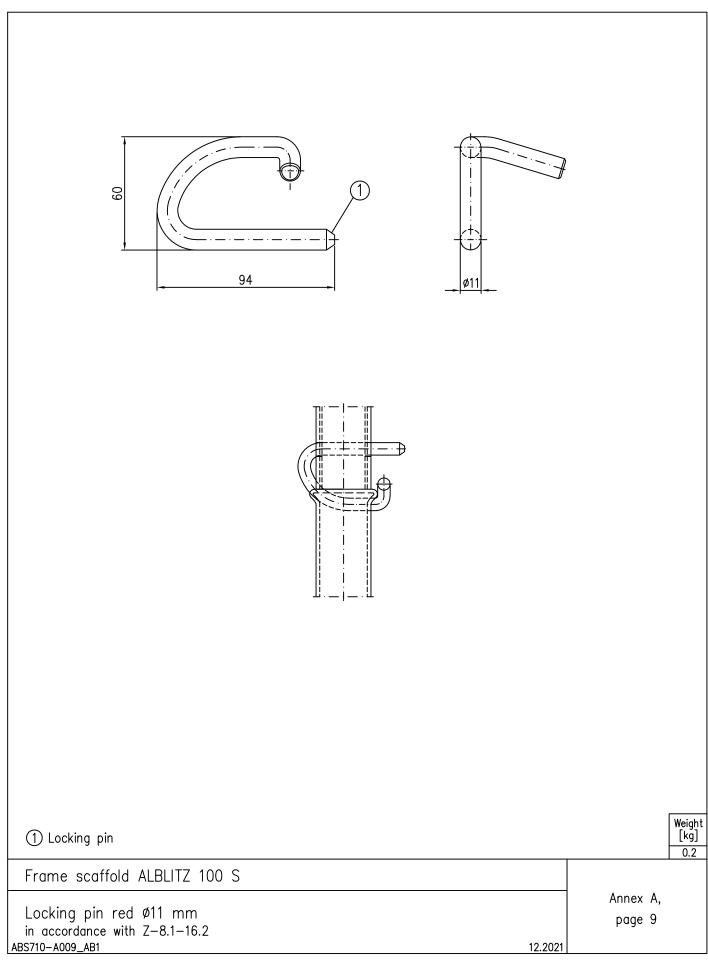
Frame scaffold ALBLITZ 100 S	
	Annex A,
Base jack 80, reinforced in accordance with Z-8.1-16.2	page 4
in accordance with Z=6.1=16.2	
ABS710-A003_AB1 12.2021	

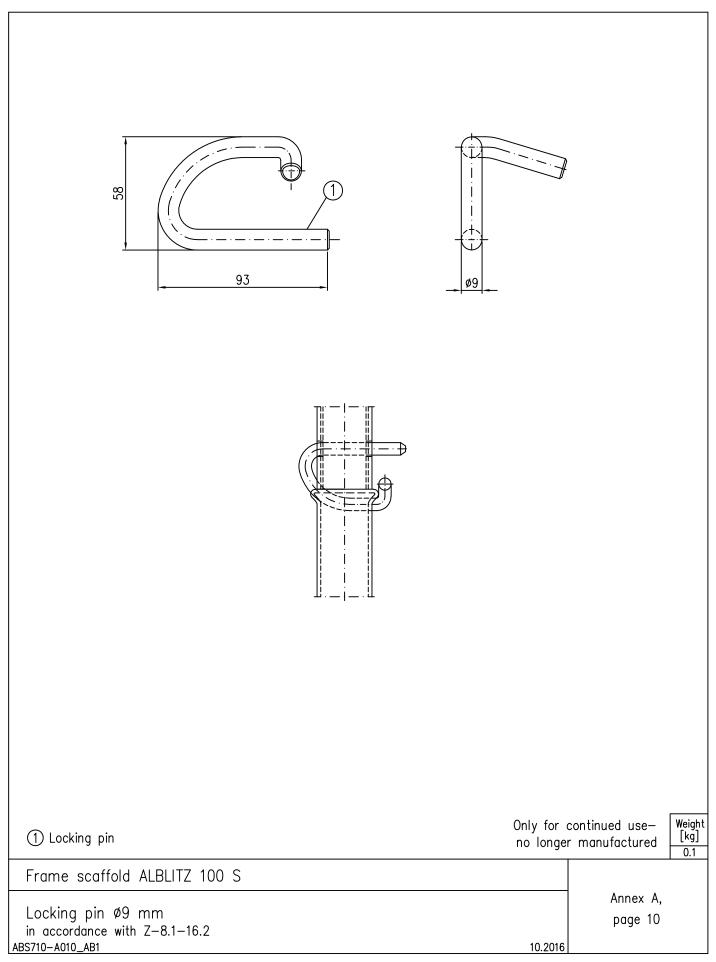


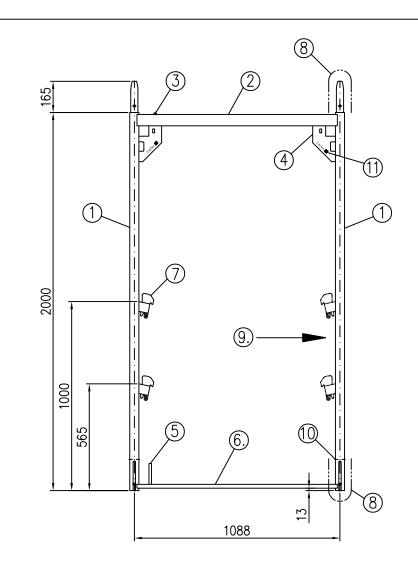












(1) Tube Ø48.3x2.7 EN 10219-1 - S460MH

② U-profile 49x53x2.5 EN 10149-2 - S460MC (see Annex A, page 22)

③ Pin Steel④ Lightweight gusset plate Steel

(5) Toeboard pin(6) Rectangular tube(7) Steel(8) 40x20x2(9) Steel

7 Guardrail wedge housing (see Annex A, page 25)

8 see Annex A, page 21

(9) 2 slotted holes for connecting the locking guardrail wedge housings alternatively: 2 welded—on guardrail wedge housings

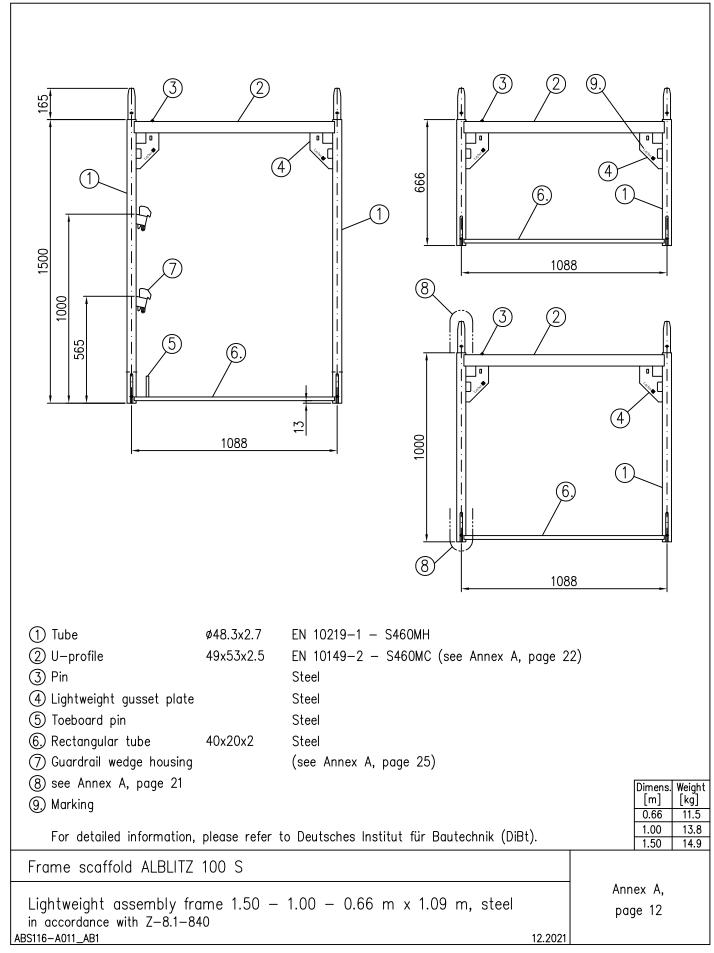
10 Marking of the diagonal braces

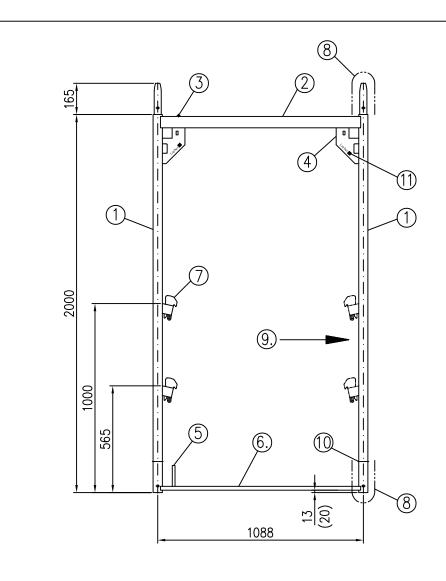
(11) Marking

For detailed information, please refer to Deutsches Institut für Bautechnik (DiBt).

Weight [kg]

Frame scaffold ALBLITZ 100 S	
Lightweight assembly frame 2.00 x 1.09 m, steel in accordance with Z-8.1-840	Annex A, page 11
ABS116-A012_AB1 12.2021	





① Tube Ø48.3x3.2 EN 10219-1 - S235JRH R_{eH}≥320 N/mm²

② U-profile 49x60x3 (see Annex A, page 24)

③ Pin Steel④ Lightweight gusset plate Steel⑤ Toehoard pin Steel

(5) Toeboard pin(6) Rectangular tube40x20x2Steel

7 Guardrail wedge housing (see Annex A, page 25)

8 see Annex A, page 21

② 2 slotted holes for connecting the locking guardrail wedge housings alternatively: 2 welded—on guardrail wedge housings

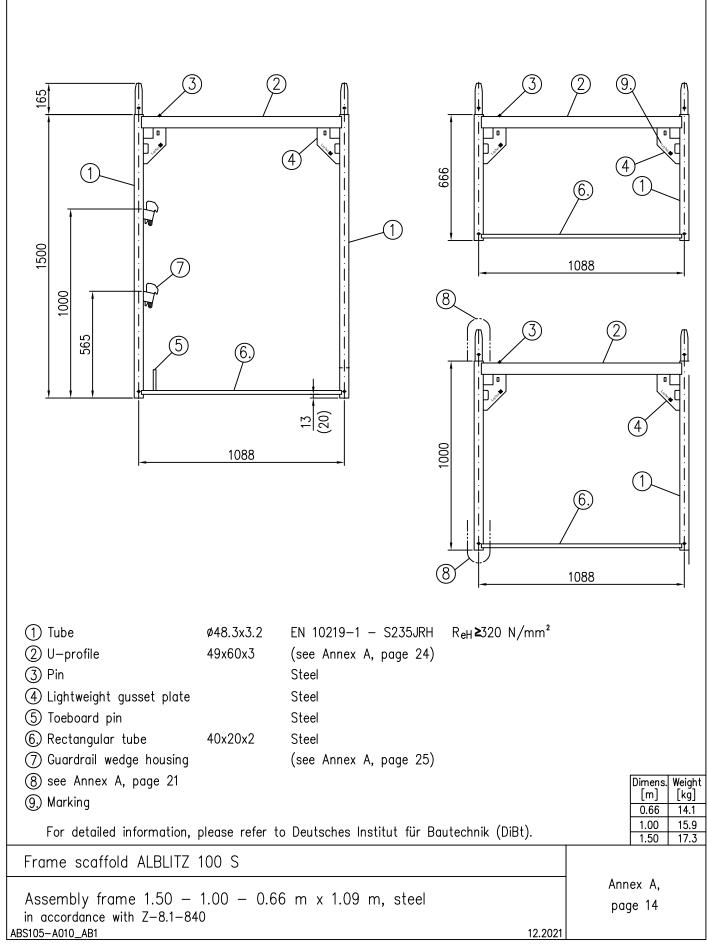
10 Marking of the diagonal braces

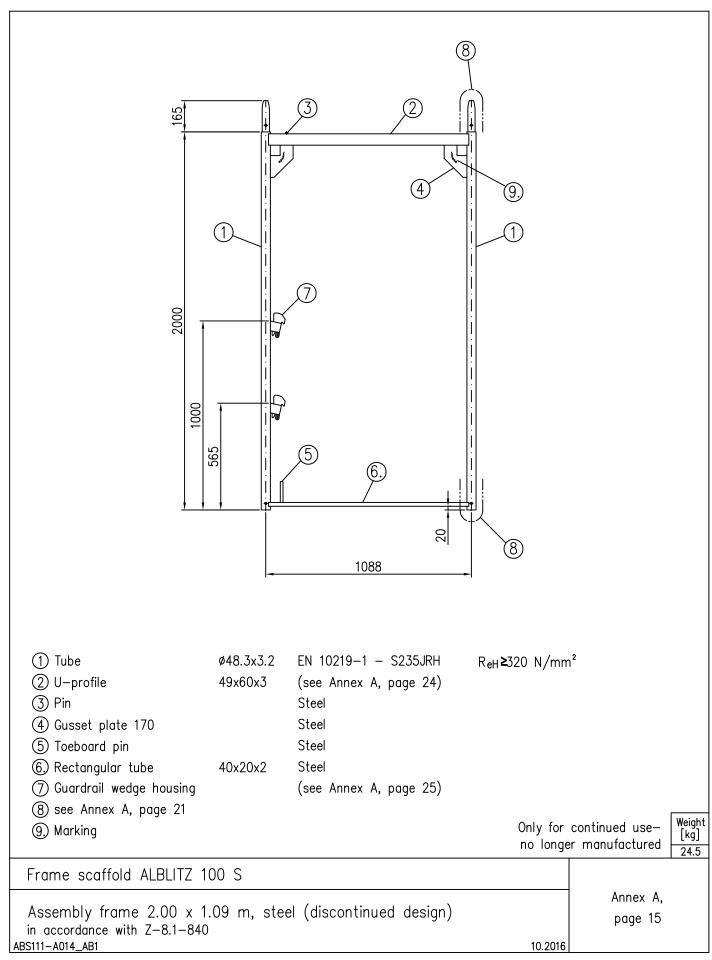
(11) Marking

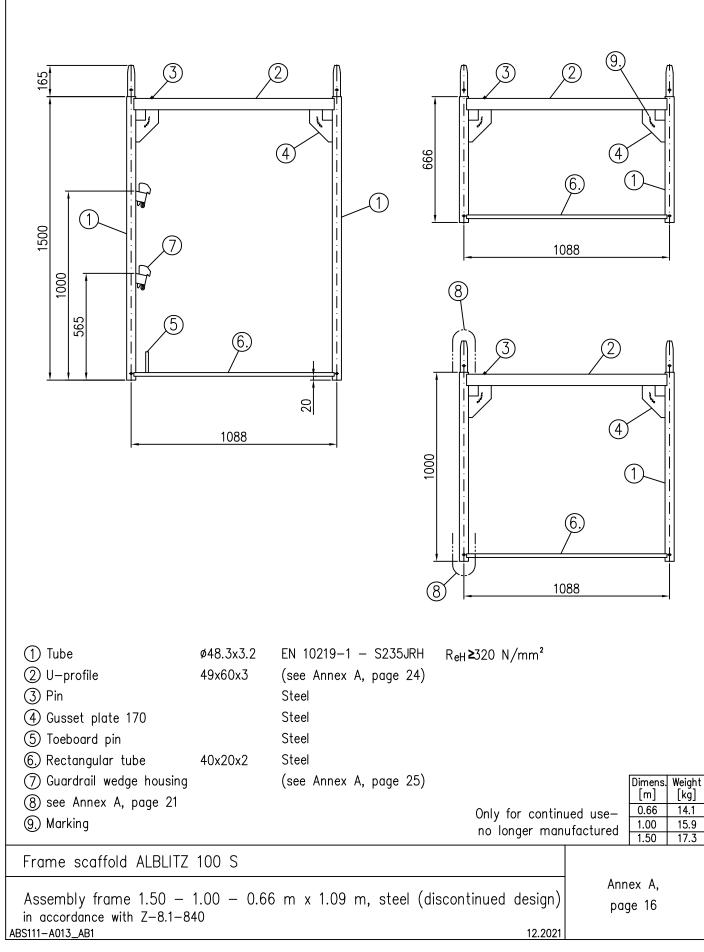
For detailed information, please refer to Deutsches Institut für Bautechnik (DiBt).

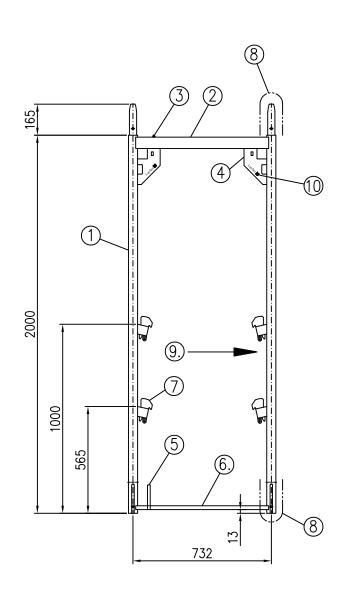
Weight [kg] 24.5

Frame scaffold ALBLITZ 100 S		
Assembly frame 2.00 m x 1.09 m, steel in accordance with Z-8.1-840		Annex A, page 13
ARS105-A011 AR1	12 2021	









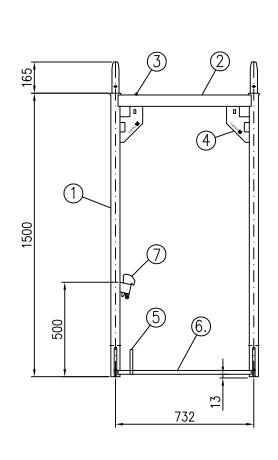
- 1) Tube
- 2 U-profile

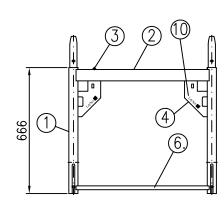
(see Annex A, pages 22, 23)

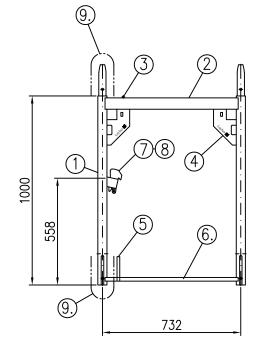
- ③ Pin
- 4 Lightweight gusset plate
- (5) Toeboard pin
- 6. Rectangular tube
- (See Annex A, page 25)
- 8 see Annex A, page 21
- (9) 2 slotted holes for connecting the locking guardrail wedge housings alternatively: 2 welded—on guardrail wedge housings
- 10 Marking

Weight [kg] 18.8

Frame scaffold ALBLITZ 100 S	
Lightweight assembly frame 2.00 x 0.73 m, steel in accordance with Z-8.1-16.2	Annex A, page 17
ARS721_A001_AR1 12 2021	







- (1) Tube
- ② U-profile

(see Annex A, pages 22, 23)

- 3 Pin
- 4 Lightweight gusset plate
- (5) Toeboard pin
- 6. Rectangular tube
- (7) Guardrail wedge housing (see Annex A, page 25)
- (8) alternatively: without Guardrail wedge housing
- (9) see Annex A, page 21
- (10) Marking

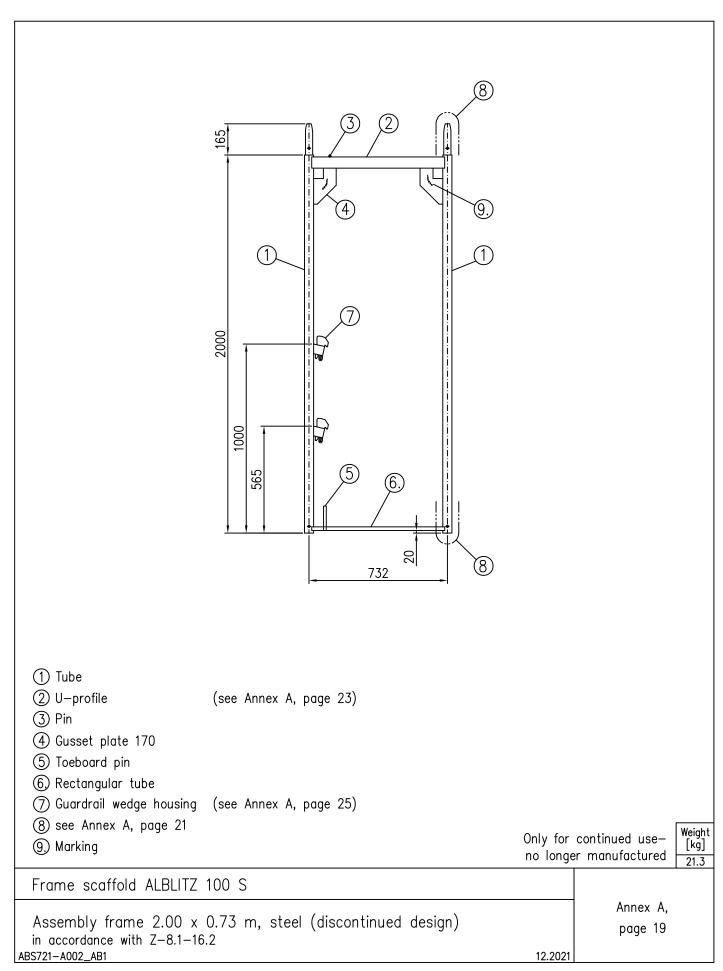
Dimens.	
[m]	[kg]
0.66	9.3
1.00	11.9
1.50	15.8

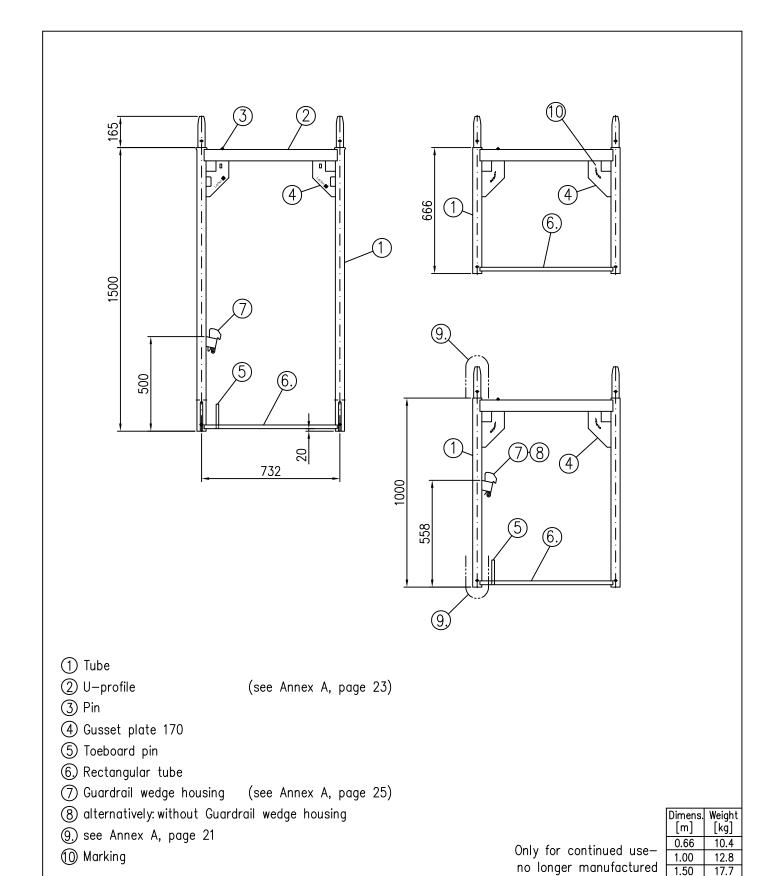
	77 1		~ı ı.	т-7 .	$1 \cap \cap$	\sim
Frama	scaffold	~I ∧ I ⊁	∢ । ו	1/	100	_
110111	SCULION	J 71 I) I I	1/	11111	.)

Lightweight assembly frame 1.50 - 1.00 - 0.66 x 0.73 m, steel in accordance with Z-8.1-16.2 ABS711-A011_AB1

Annex A, page 18

12.2021

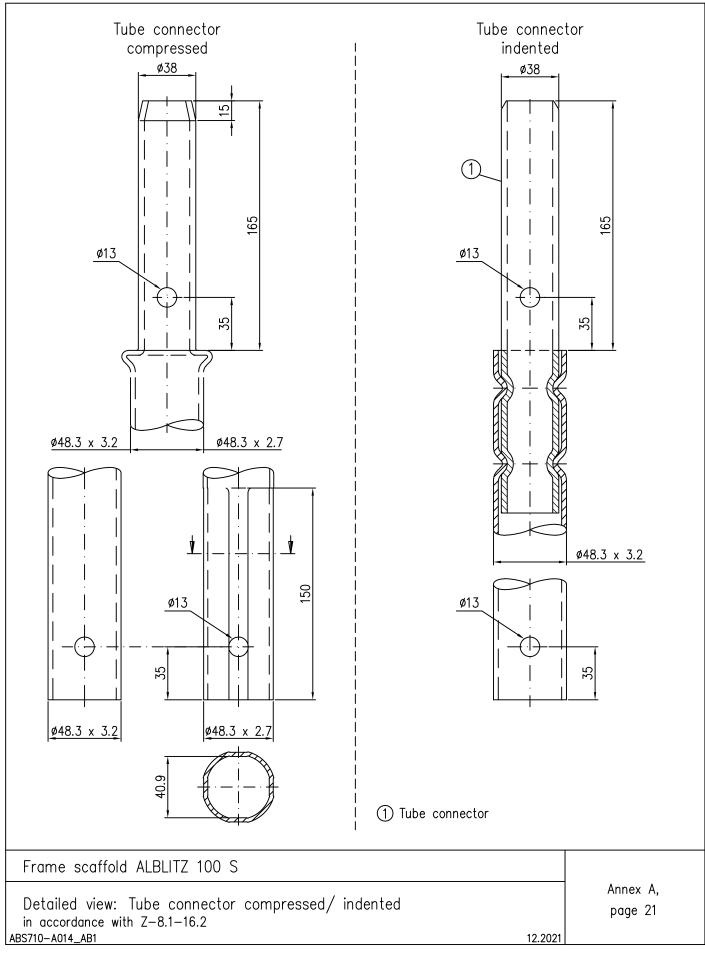


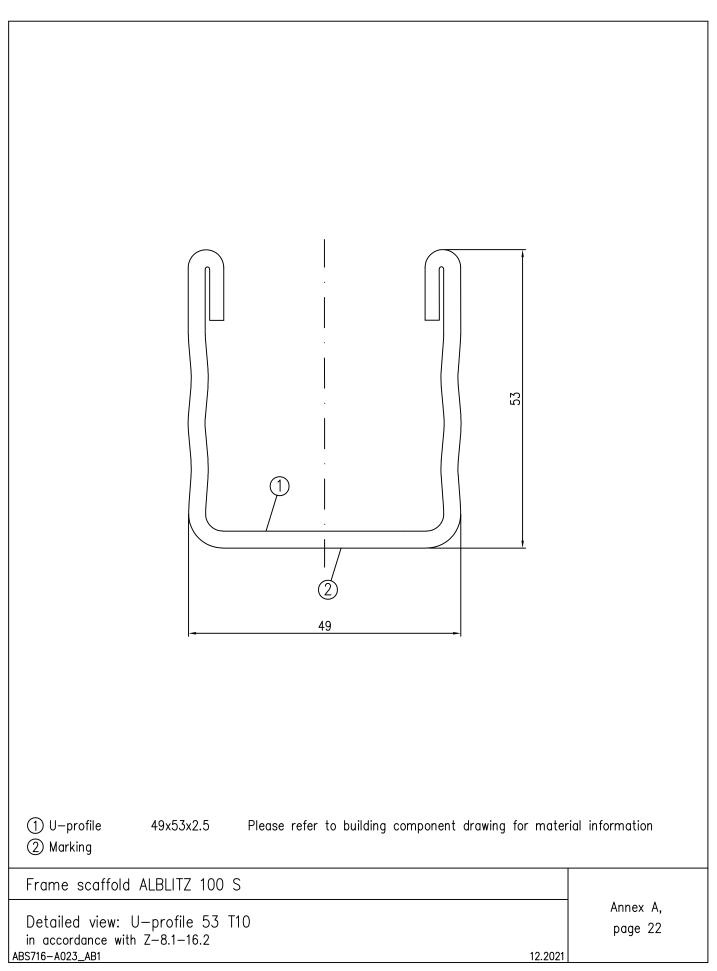


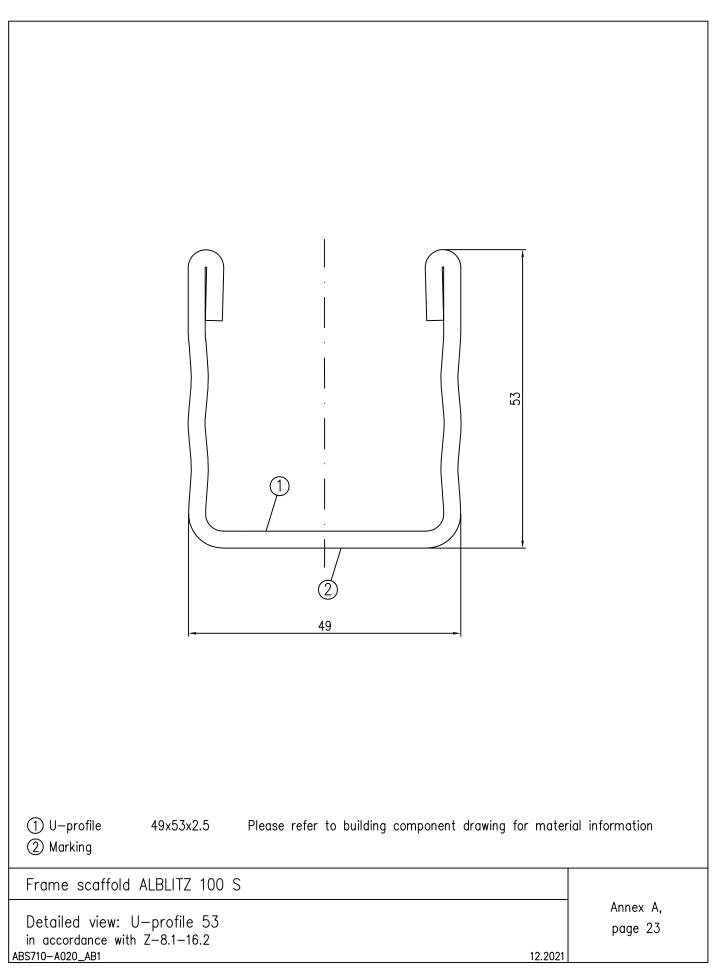
Frame	scaffold	ALBLITZ	100 S

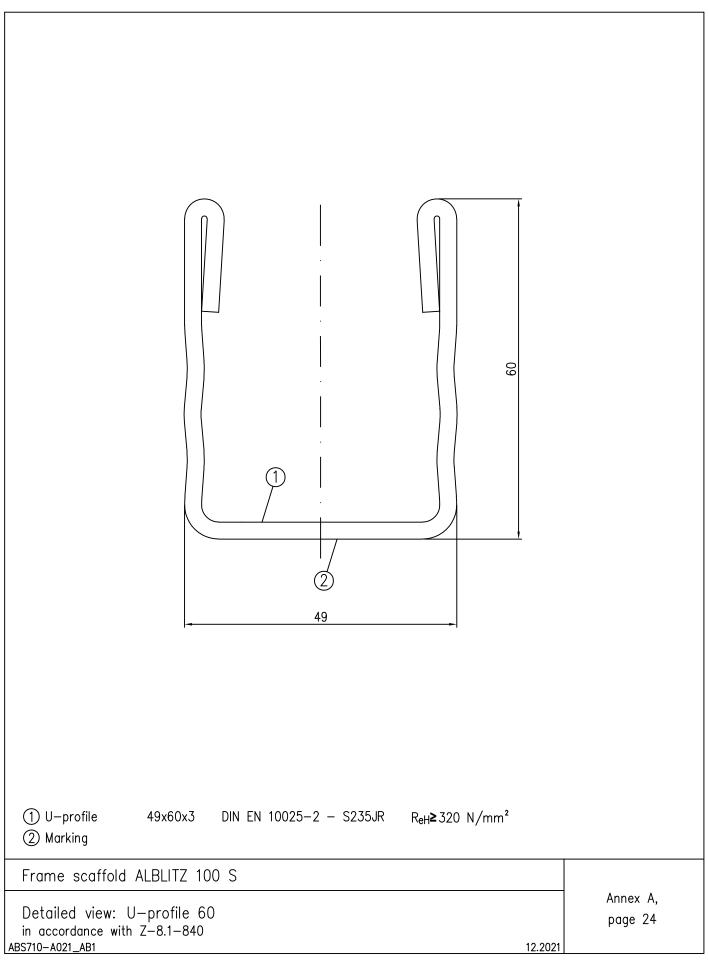
Assembly frame $1.50-1.00-0.66 \times 0.73$ m, steel (discontinued design) in accordance with Z-8.1-16.2 ABS711-A012_AB1

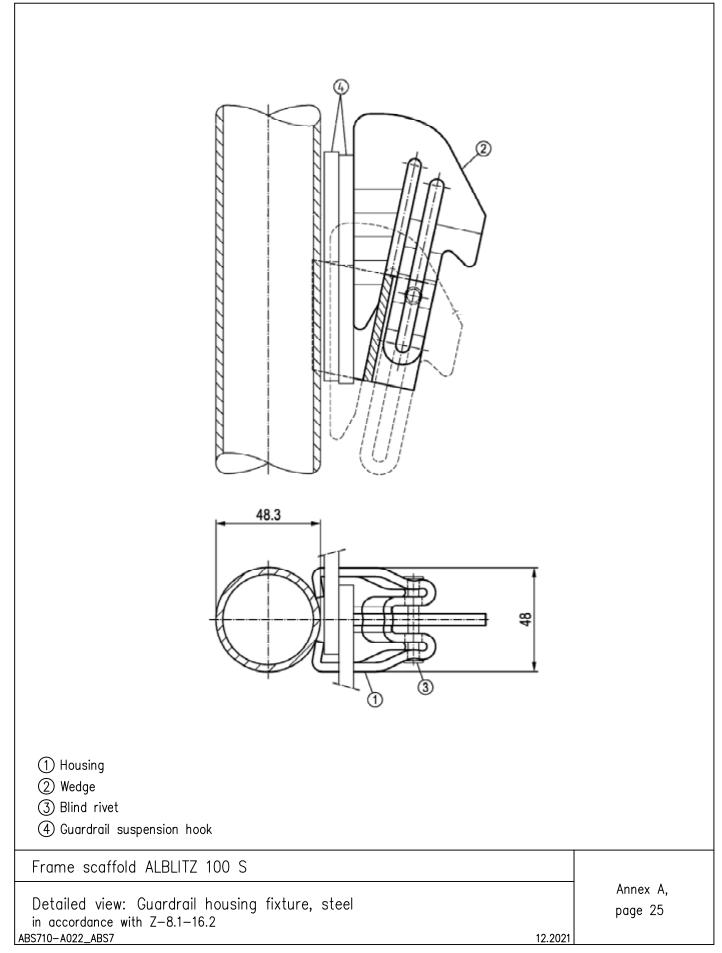
Annex A, page 20

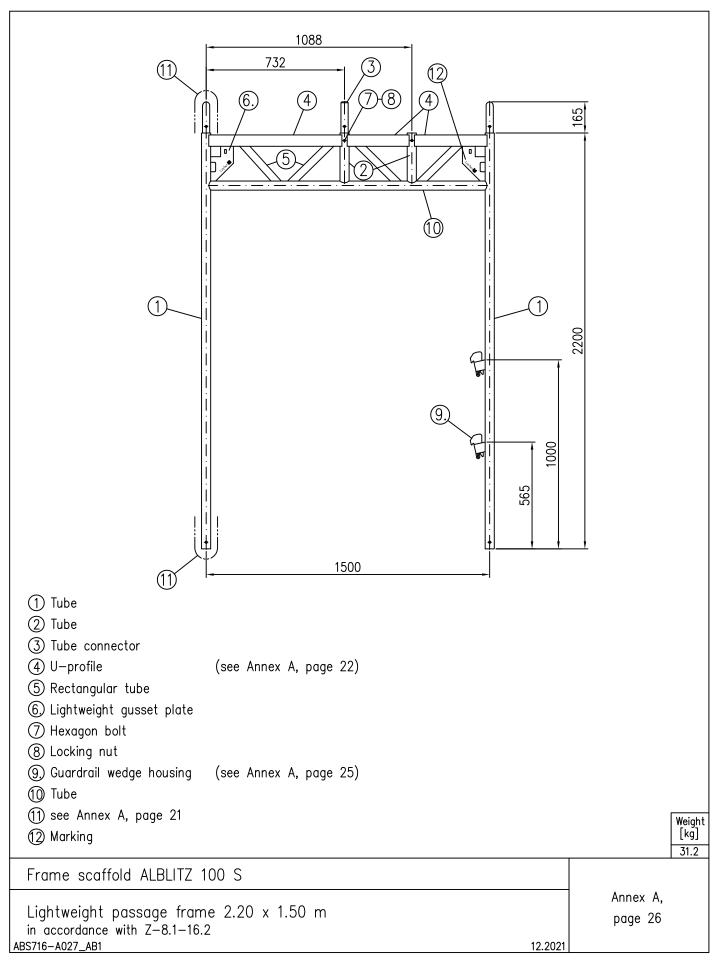


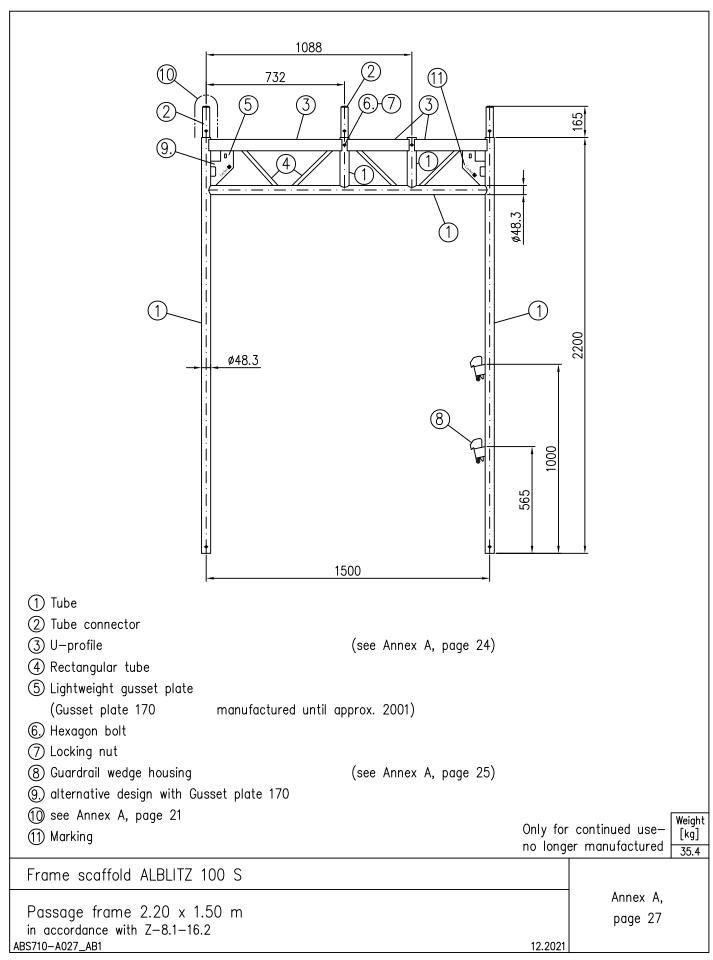


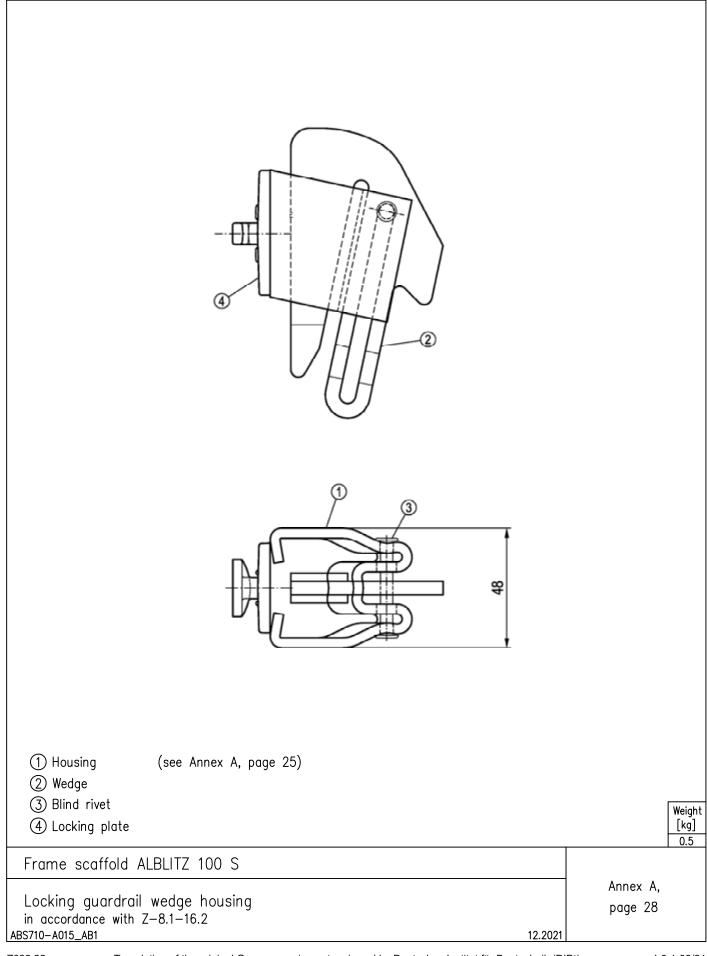


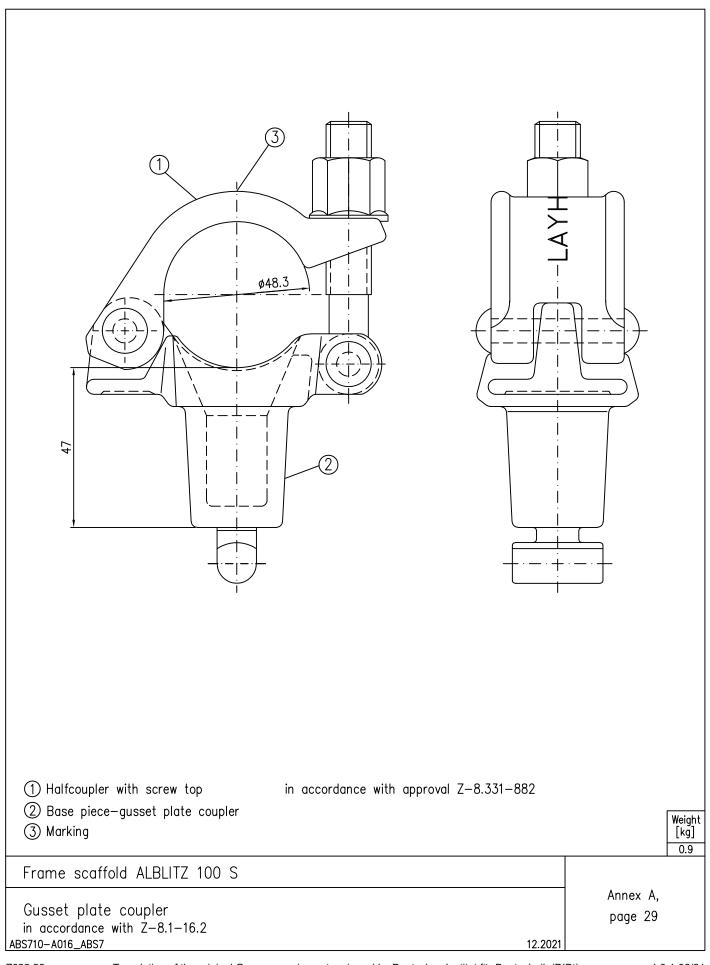


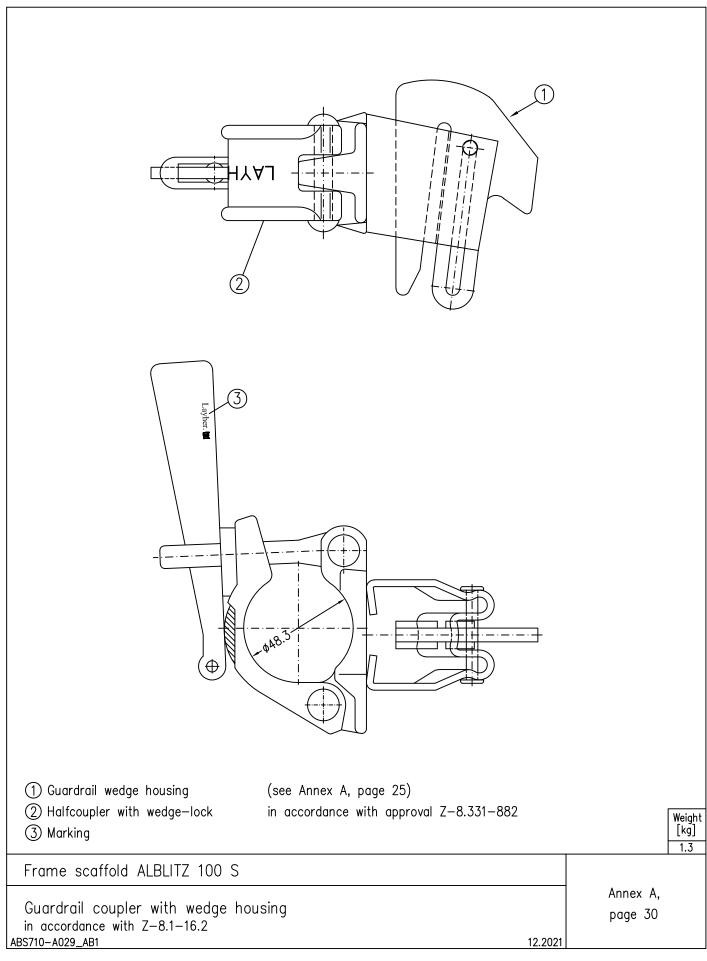


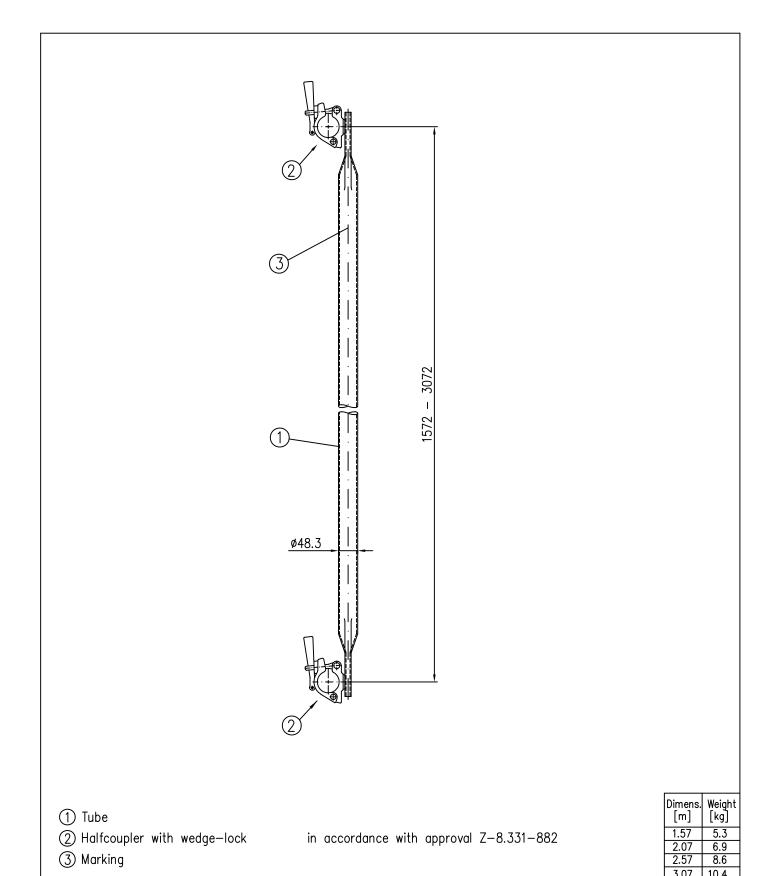




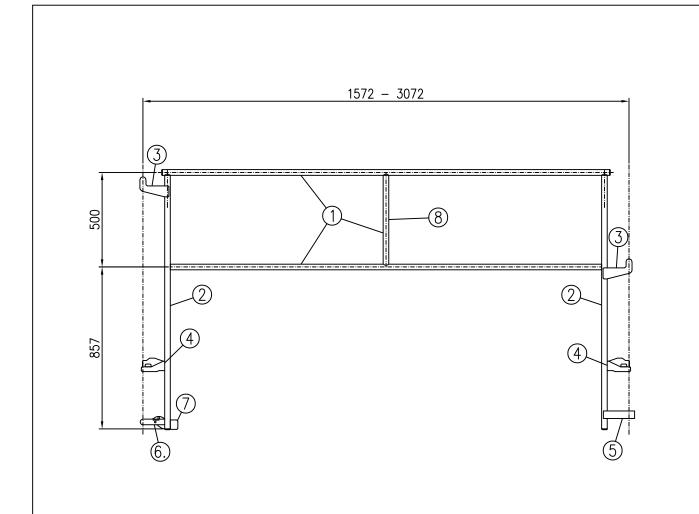








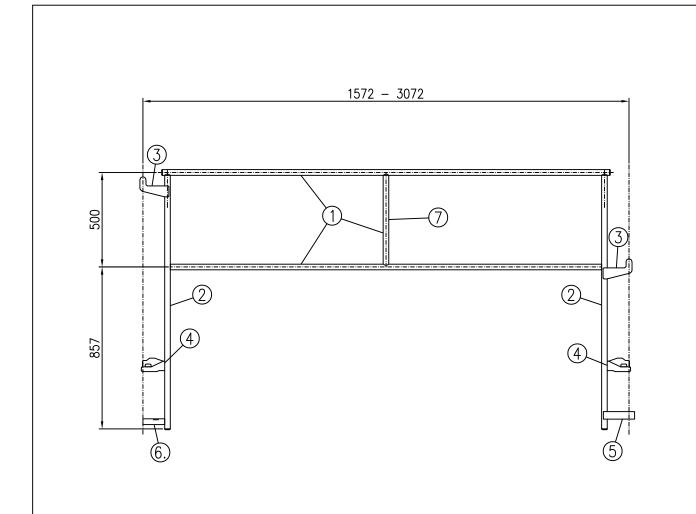
		3.07 10.4
Frame scaffold ALE	BLITZ 100 S	
Horizontal strut 1.5		Annex A, page 31
ABS710-A030_AB1	12.2	021



- 1) Tube
- ② Square tube
- 3 Suspension hook
- 4 Suspension fork (left / right)
- (5) Insertion hook
- 6. Fixing bracket turning bolt
- 7 Turning bolt
- 8 1.57 m without mid rung

Dimens. [m]	Weight [kg]
1.57	9.9
2.07	11.7
2.57	12.9
3.07	14.1

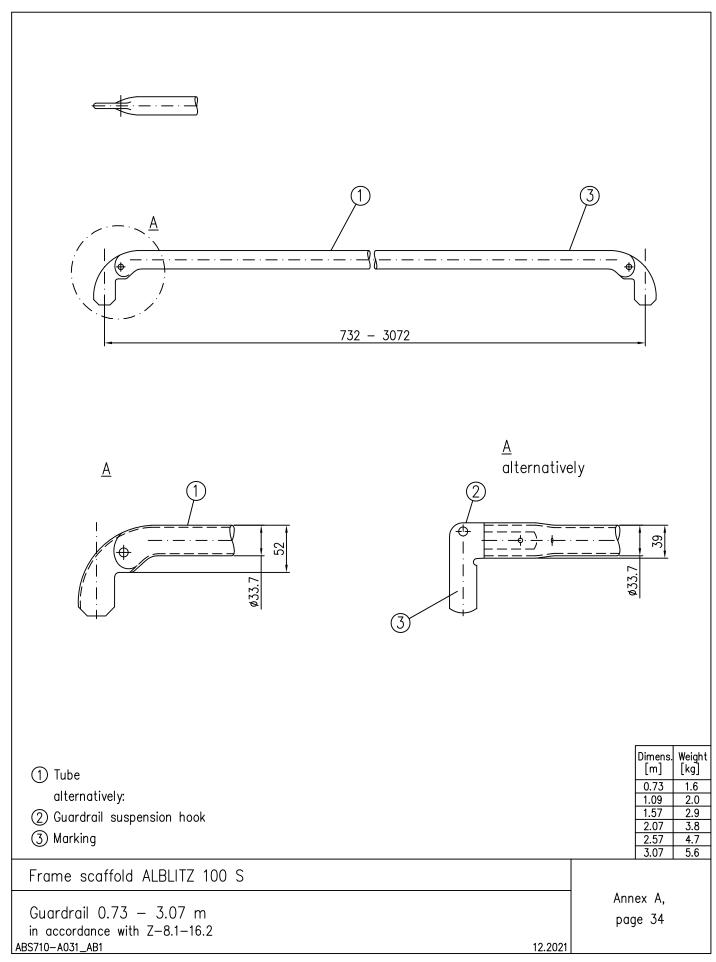
Frame scaffold ALBLITZ 100 S		
I-guardrail with turning bolt 1.57 - 3.07 m	Annex A, page 32	
in accordance with Z-8.1-16.2 ABS121-A001_AB1	12.2021	

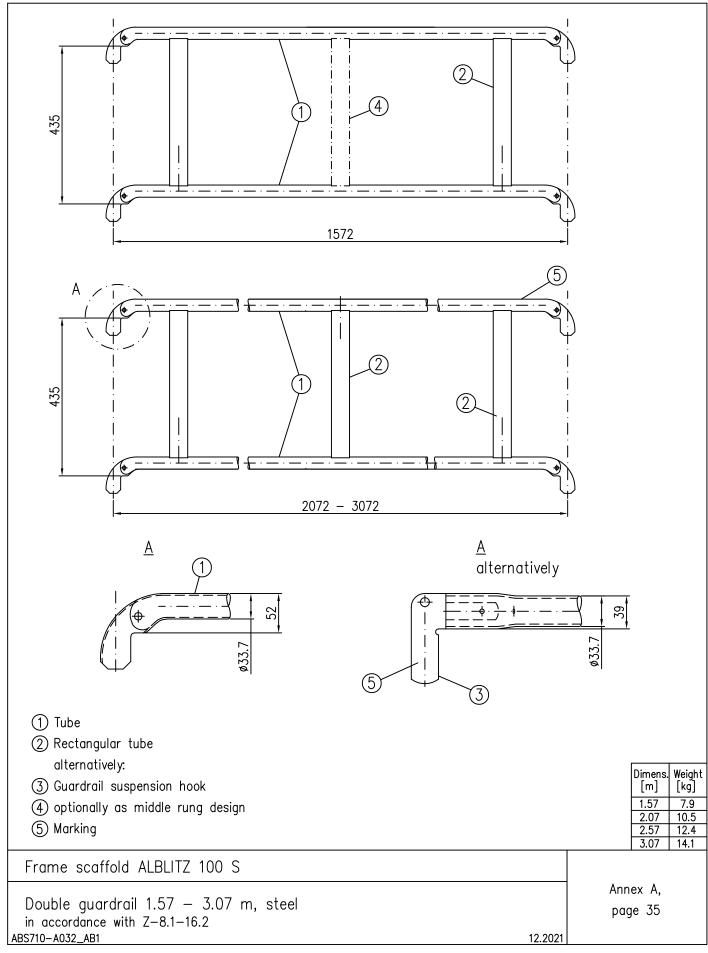


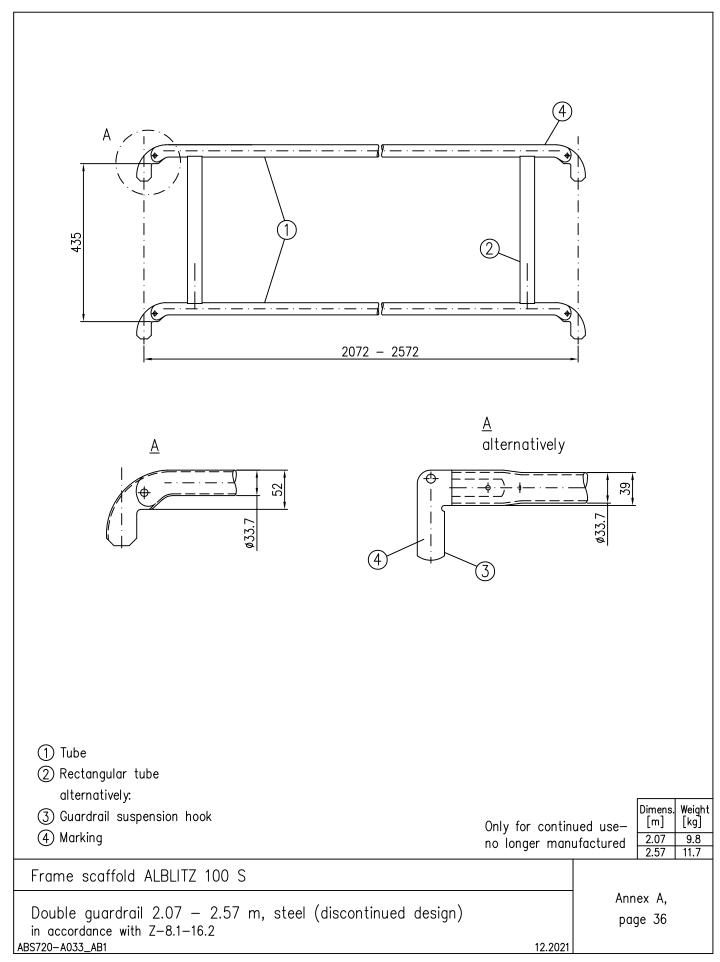
- 1) Tube
- ② Square tube
- 3 Suspension hook
- 4 Suspension fork (left / right)
- (5) Insertion hook
- 6. Fixing bracket
- 7) 1.57 m without mid rung

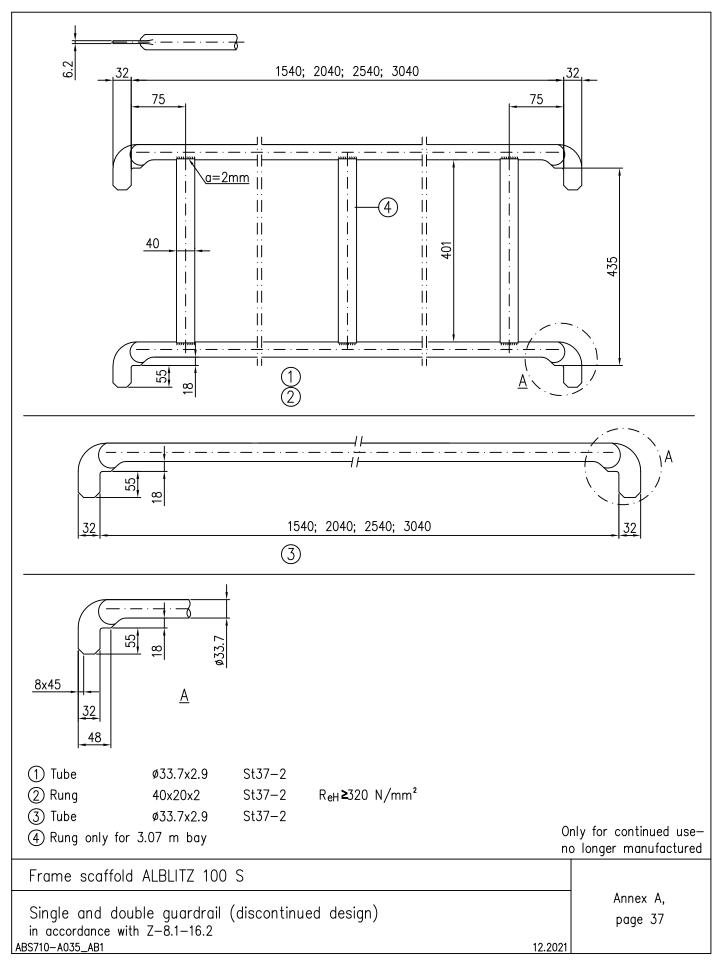
Dimens. [m]	Weight [kg]
1.57	9.9
2.07	11.7
2.57	12.9
3.07	14.1

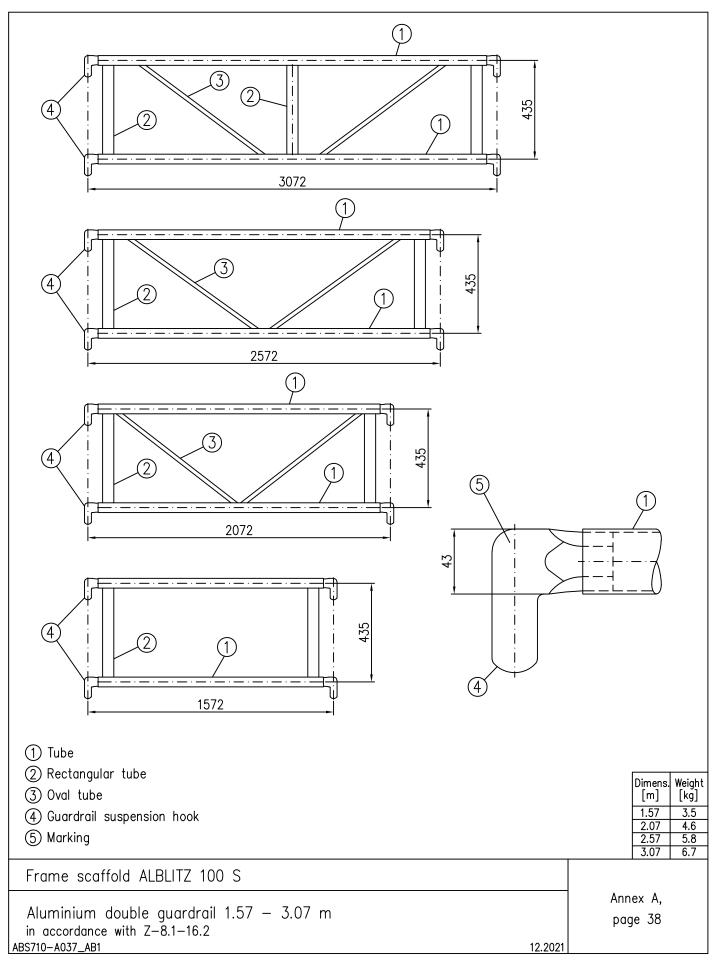
Frame scaffold ALBLITZ 100 S		
I—guardrail 1.57 — 3.07 m in accordance with Z—8.1—16.2		Annex A, page 33
ABS121-A002_AB1	12.2021	

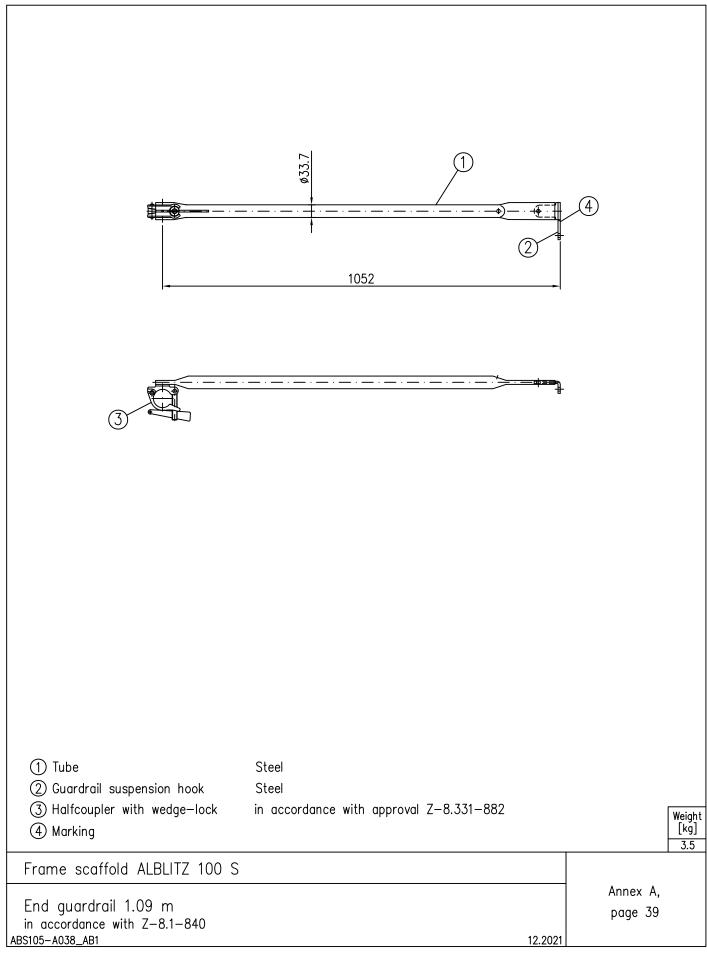


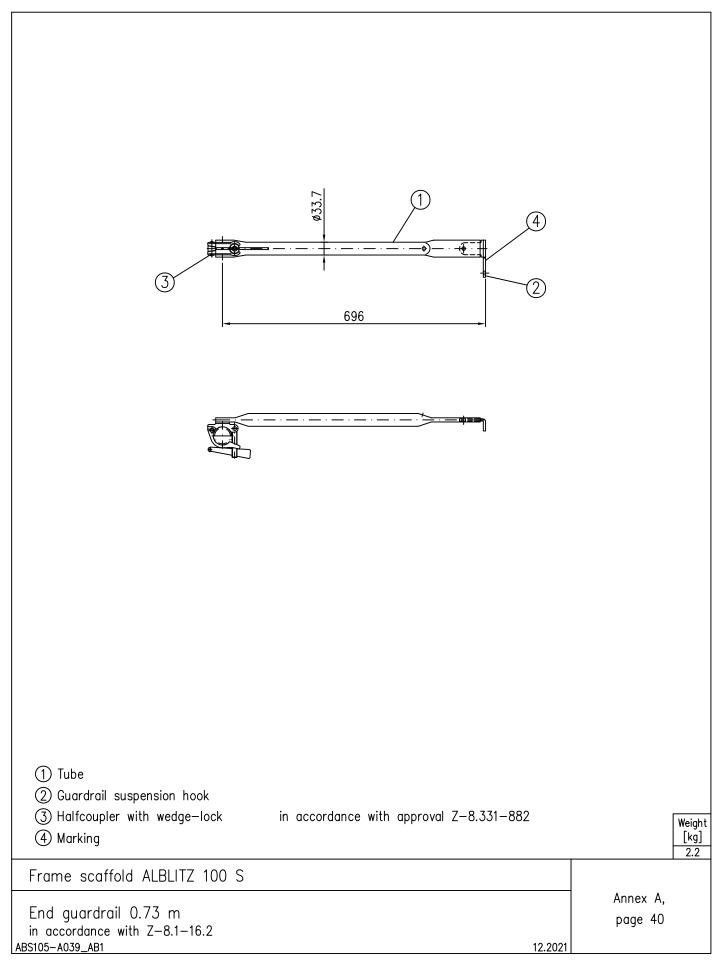


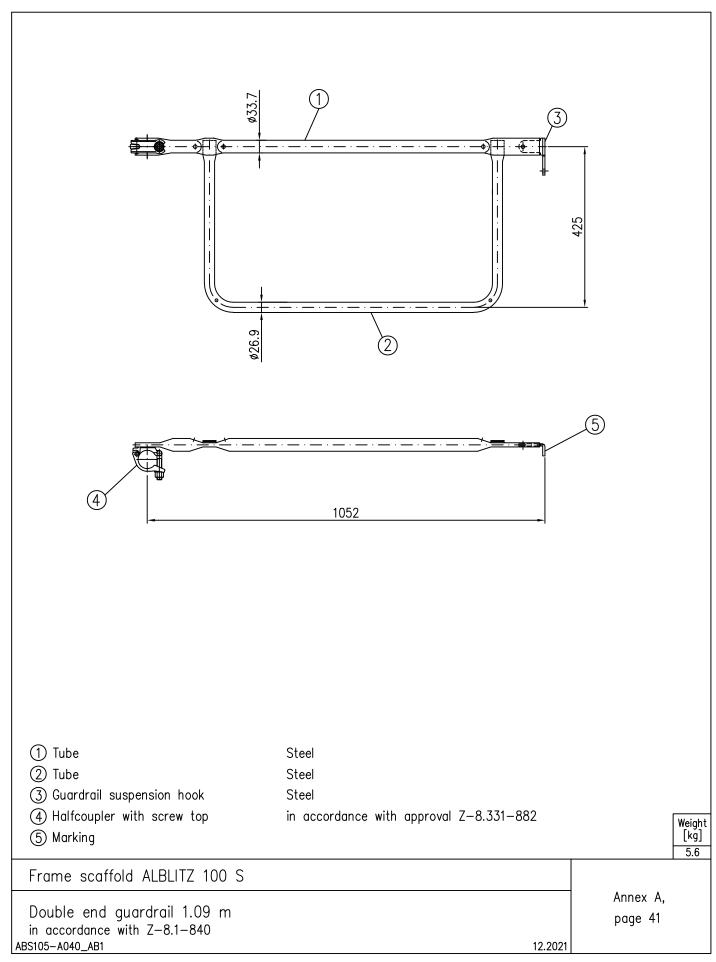


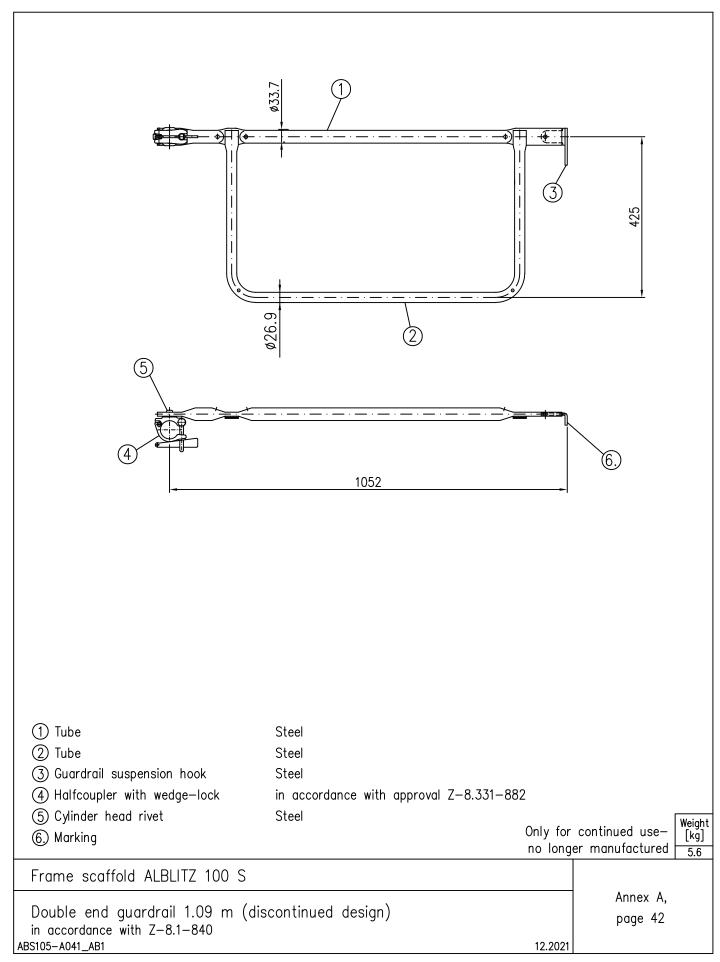


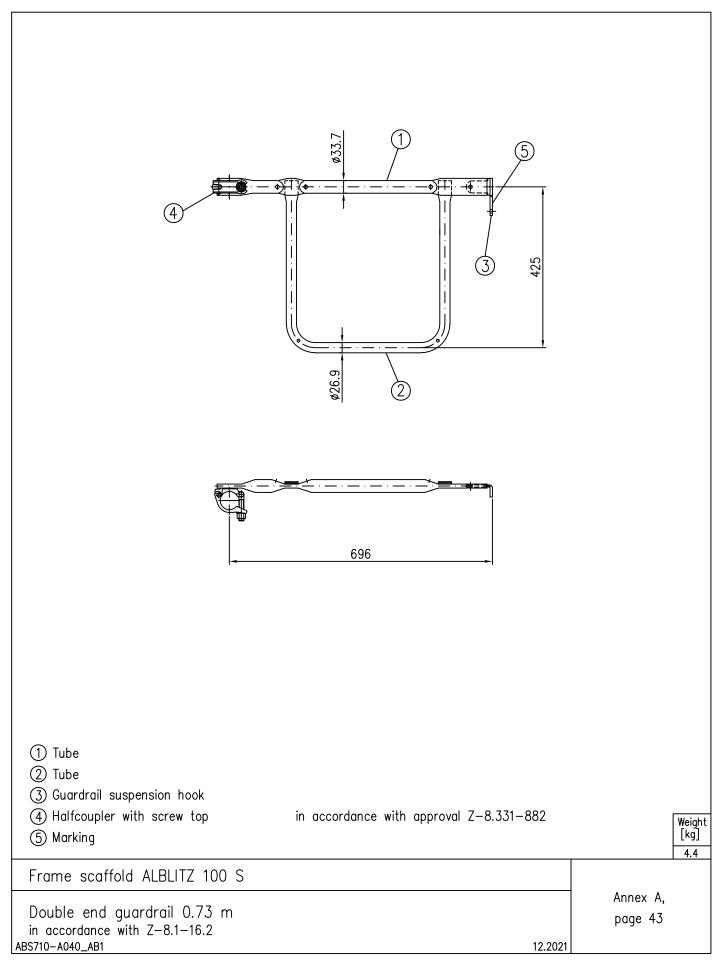


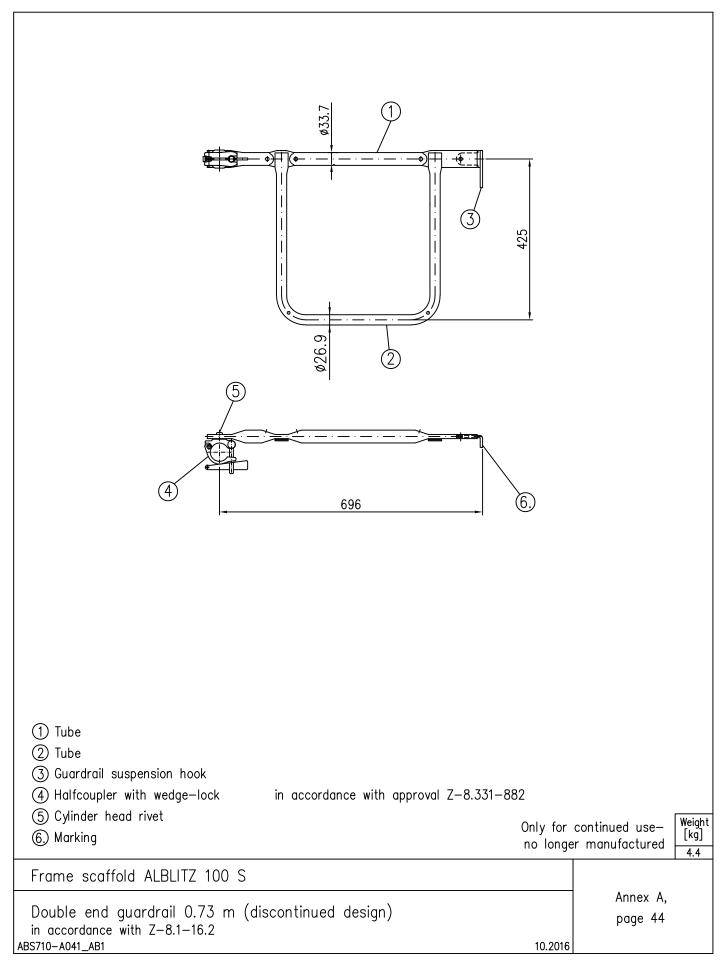


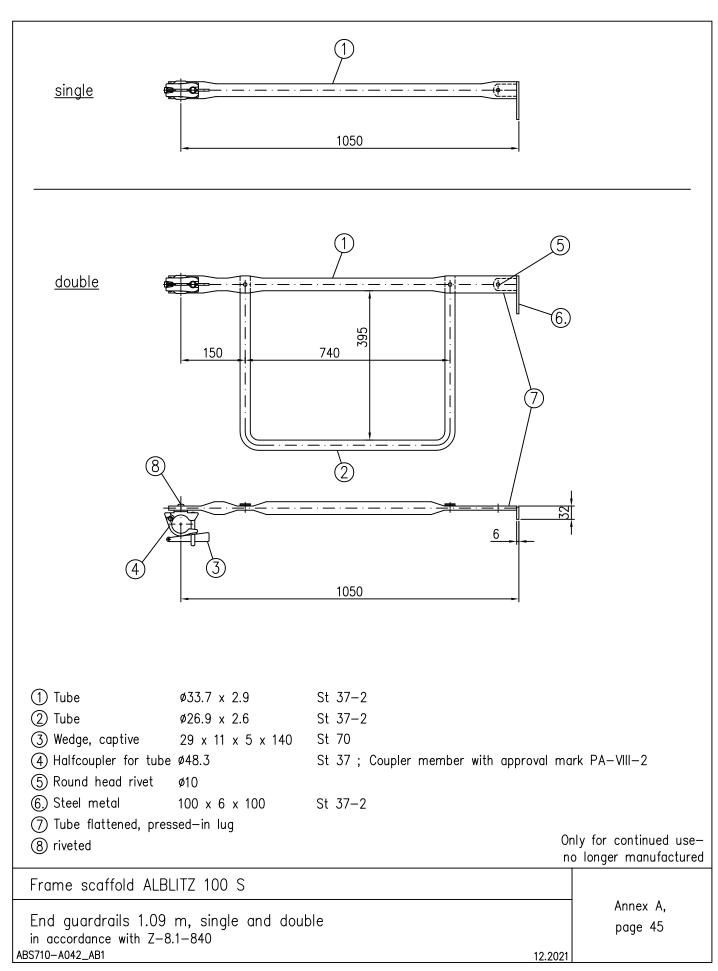


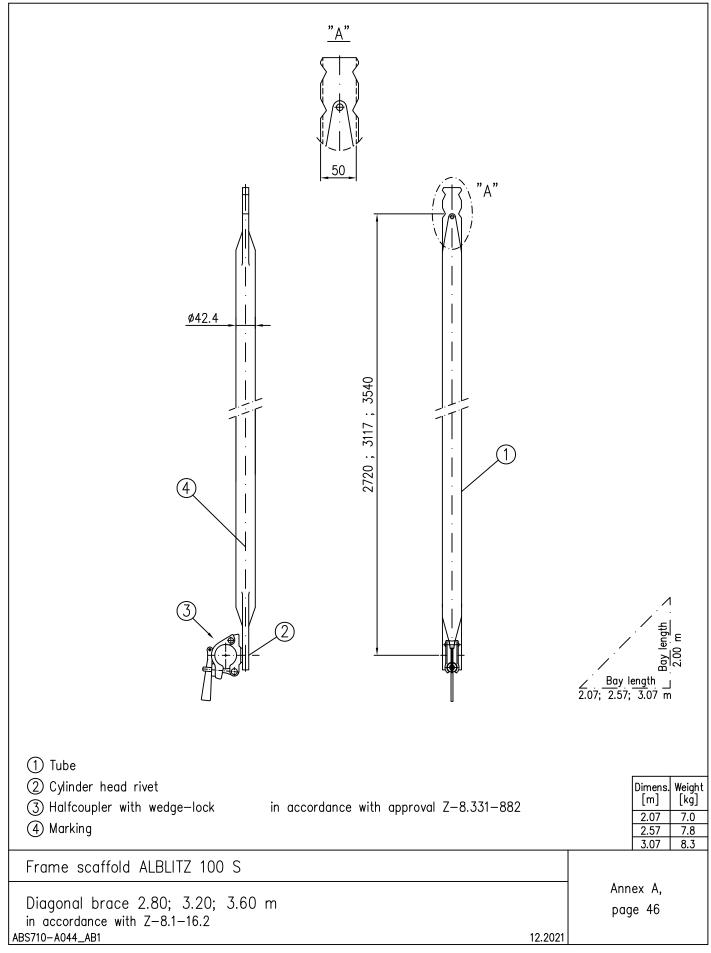


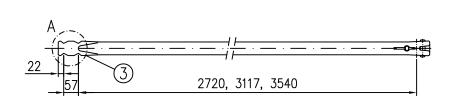


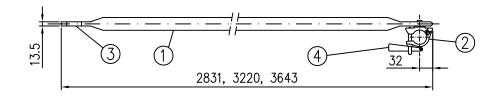


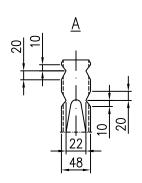












(1) Tube Ø42.4x2.6 St37-2

② Wedge coupler for tube Ø48.3 St37 Coupler member with approval mark PA-VIII-2

3 Tube, pressed

Wedge, captive

Only for continued use—
no longer manufactured

Frame scaffold ALBLITZ 100 S

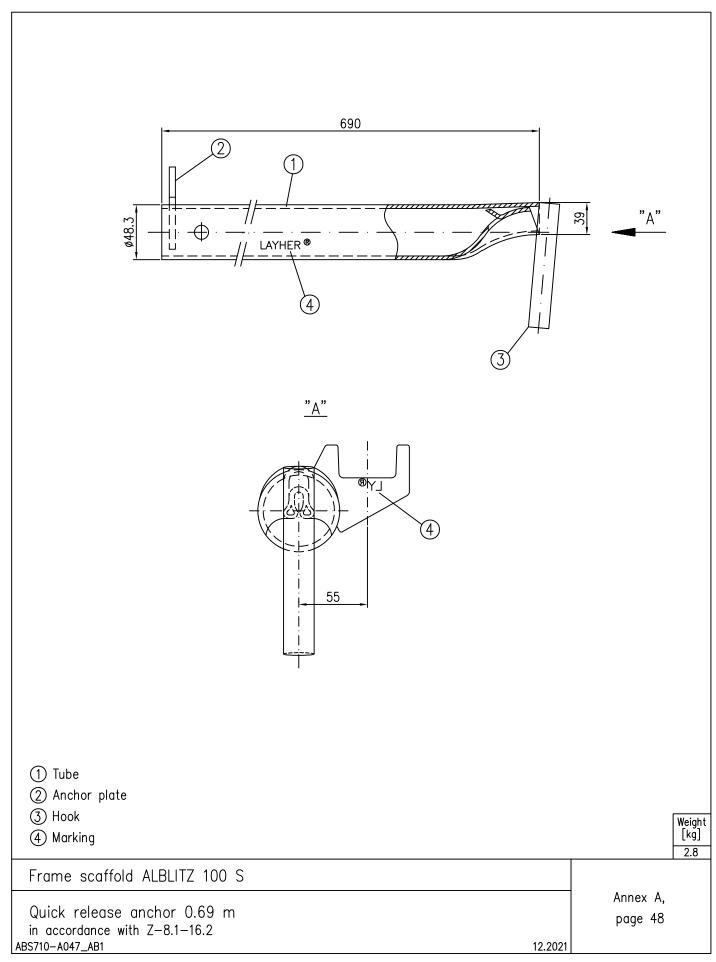
Diagonal brace for 2.07; 2.57 and 3.07 m (discontinued design) in accordance with Z-8.1-16.2

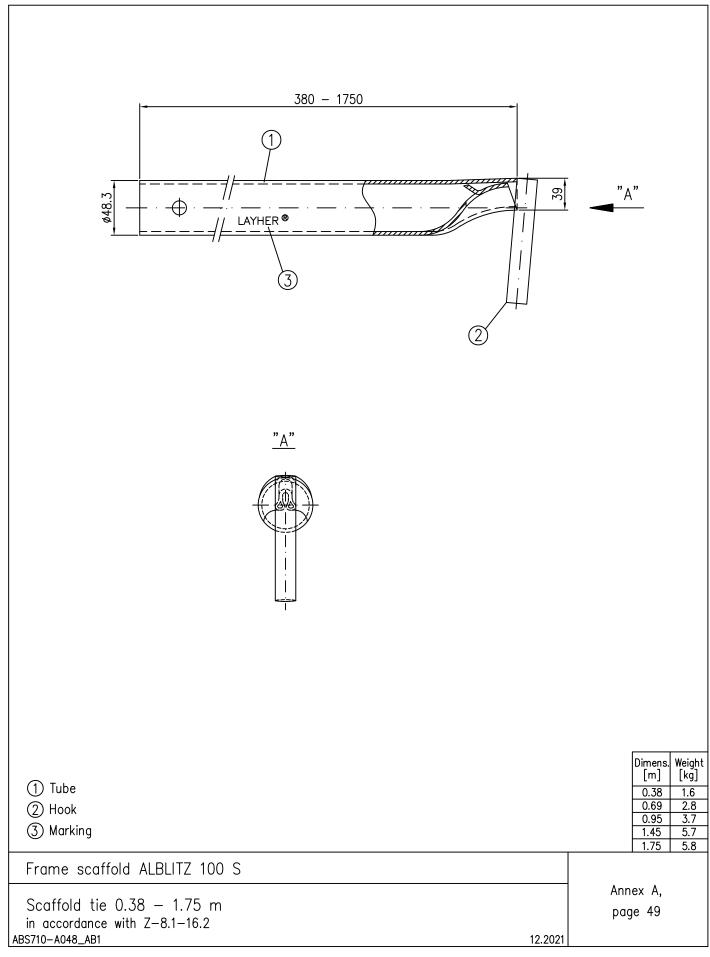
2 2021

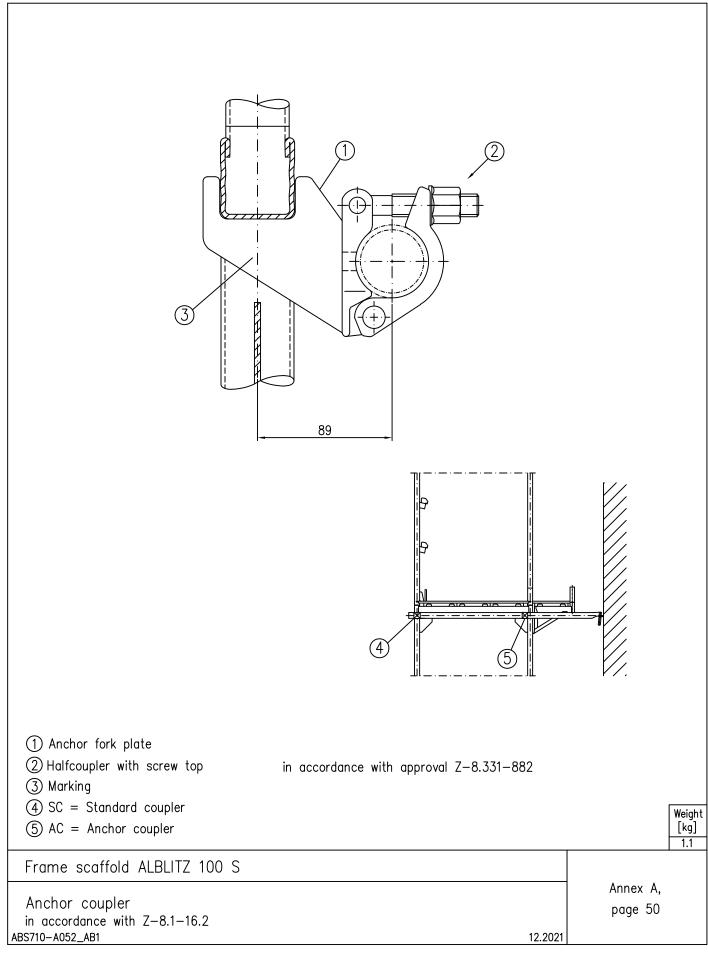
Annex A, page 47

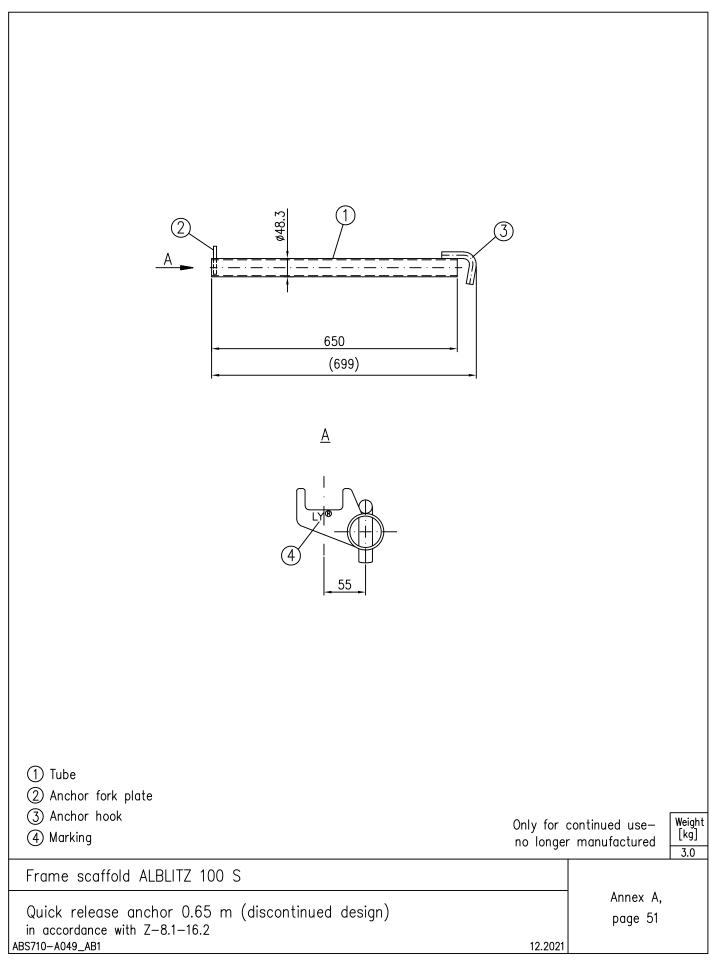
Translation of the original German version not reviewed by Deutsches Institut für Bautechnik (DIBt)

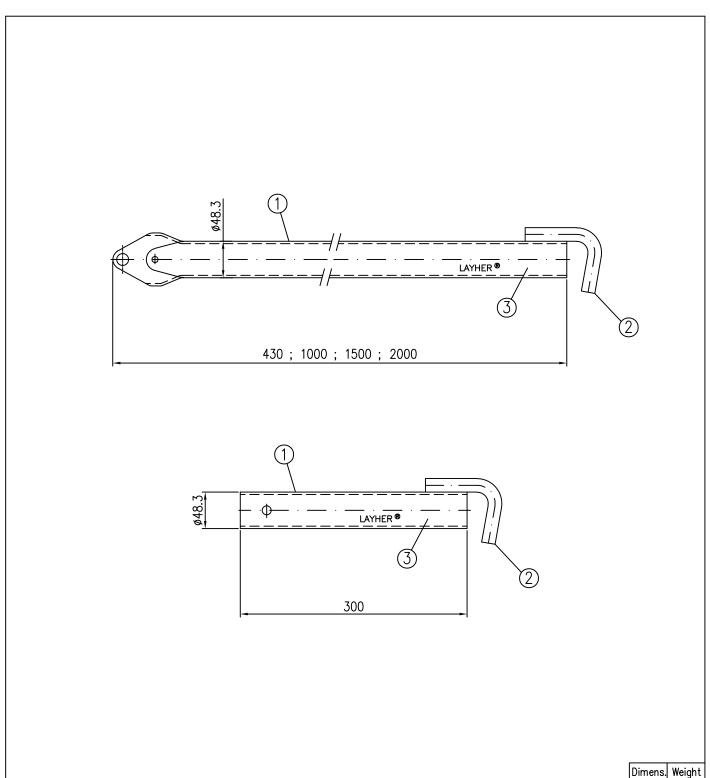
ABS710-A046_AB1











(1) Tul	be
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2 Anchor hook

(3) Marking

Only for continued useno longer manufactured

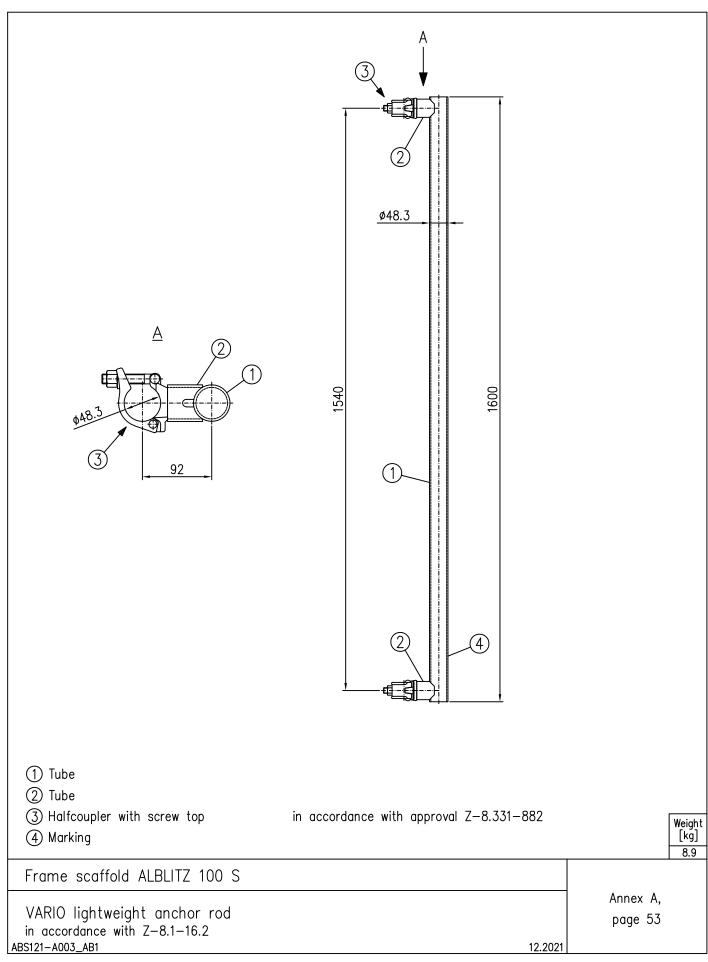
[m]	[kg]
0.30	1.5
0.43	1.8
1.00	3.8
1.50	5.9
2.00	7.3

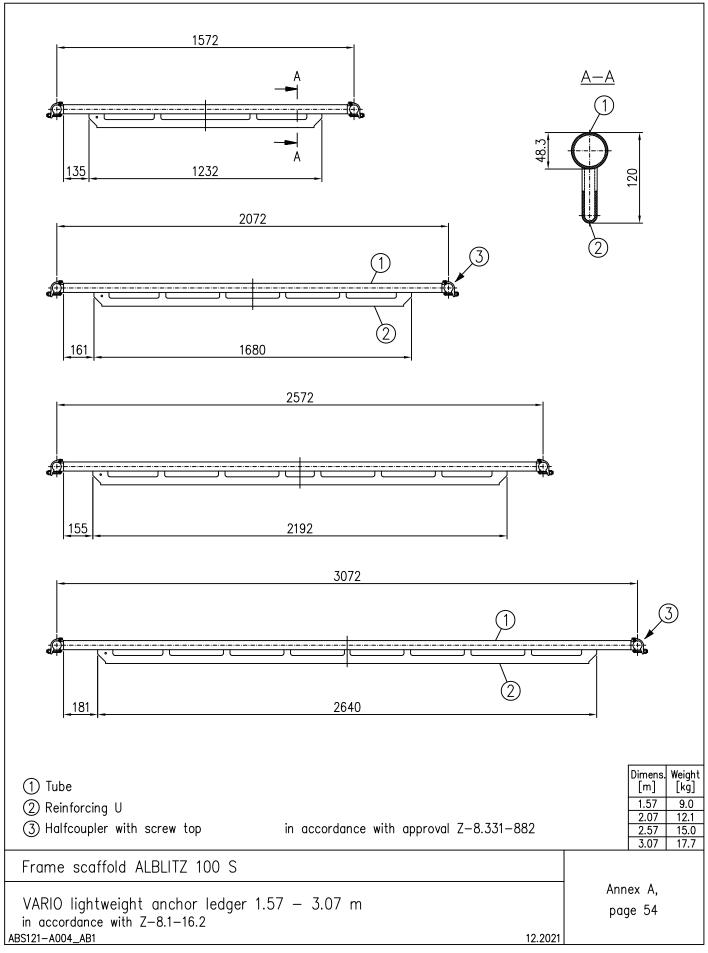
Frame	scaffold	AI BI IT7	100 S

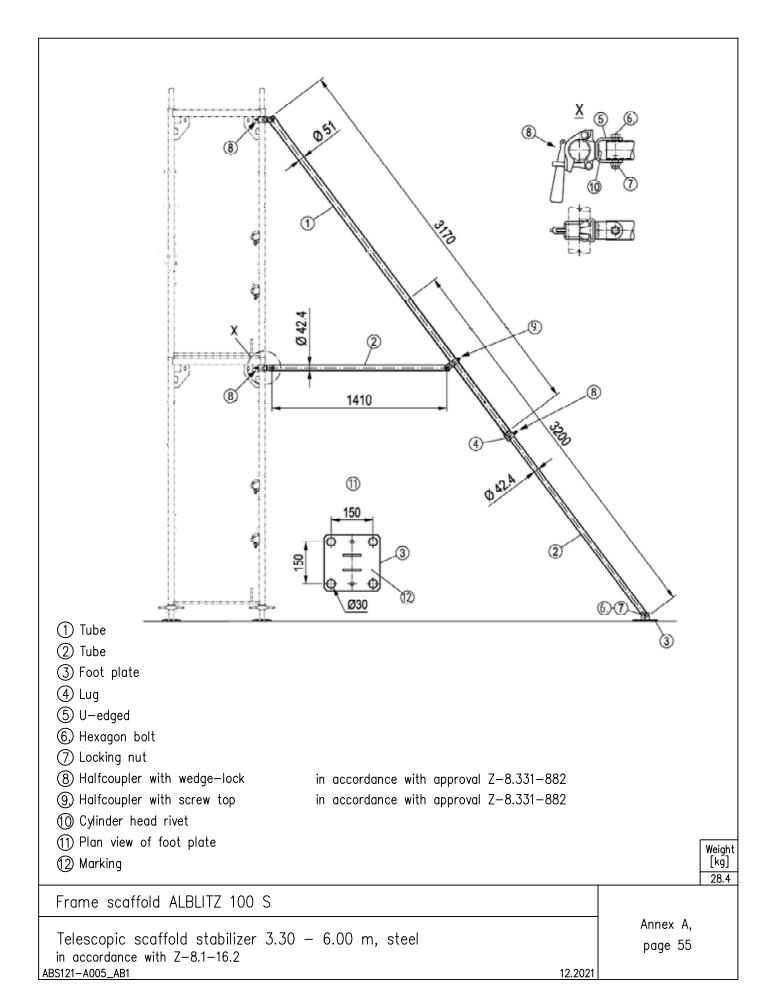
Scaffold tie 0.30 - 2.00 m (discontinued design) in accordance with Z-8.1-16.2
ABS710-A050_AB1

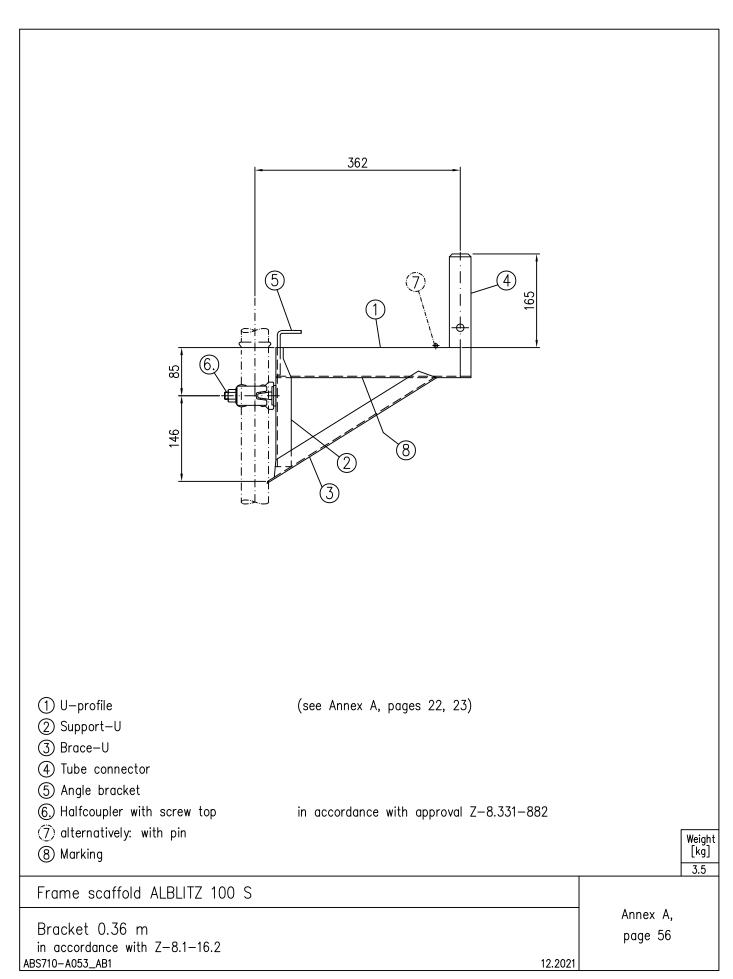
Annex A, page 52

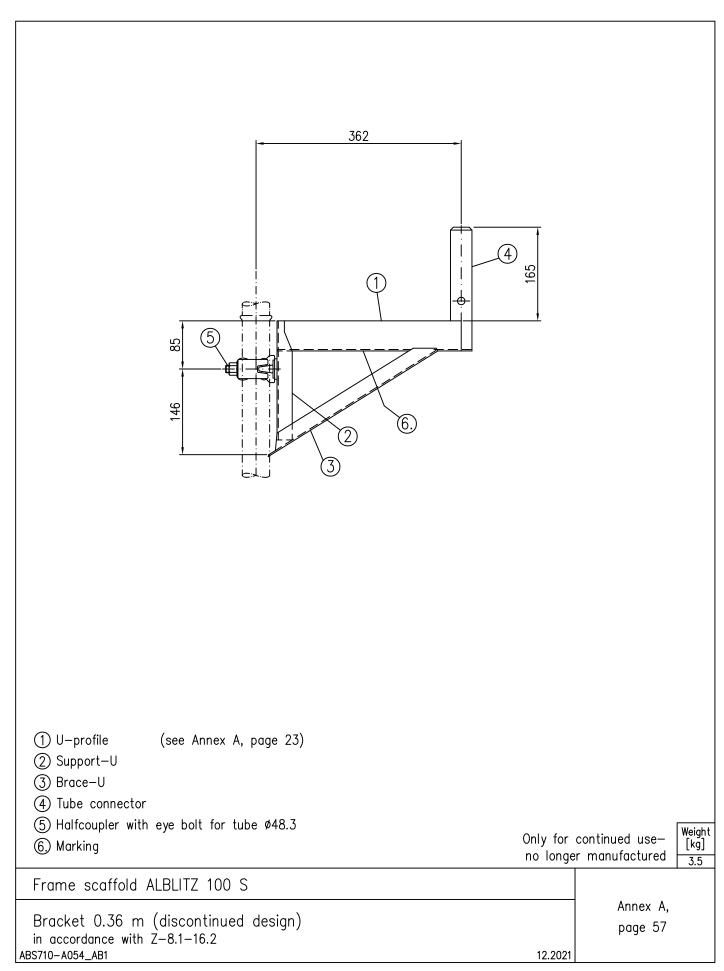
12 2021

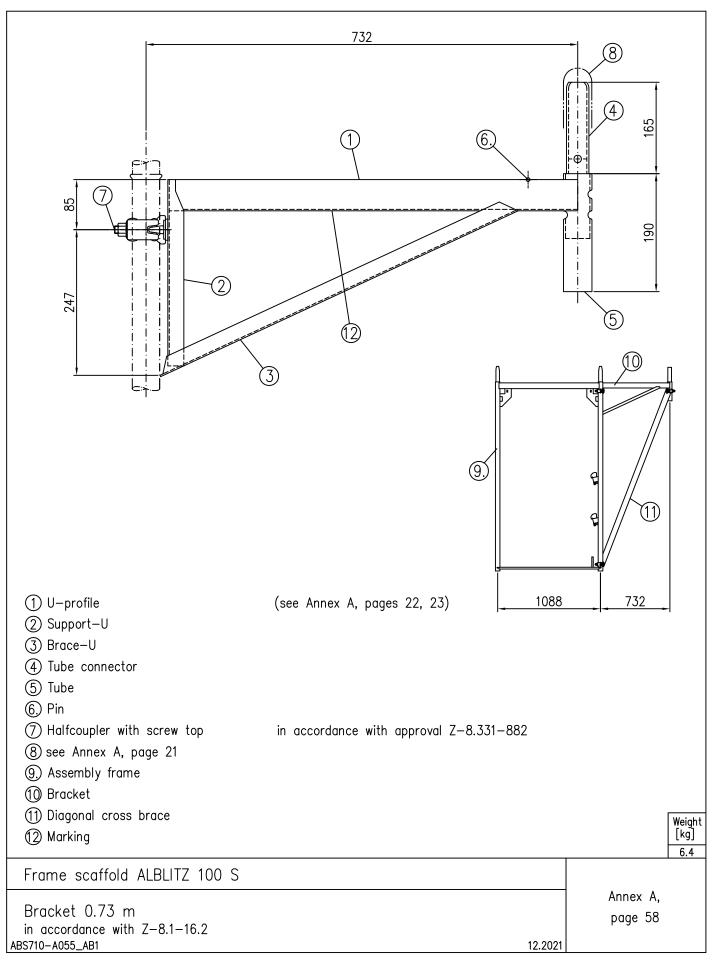


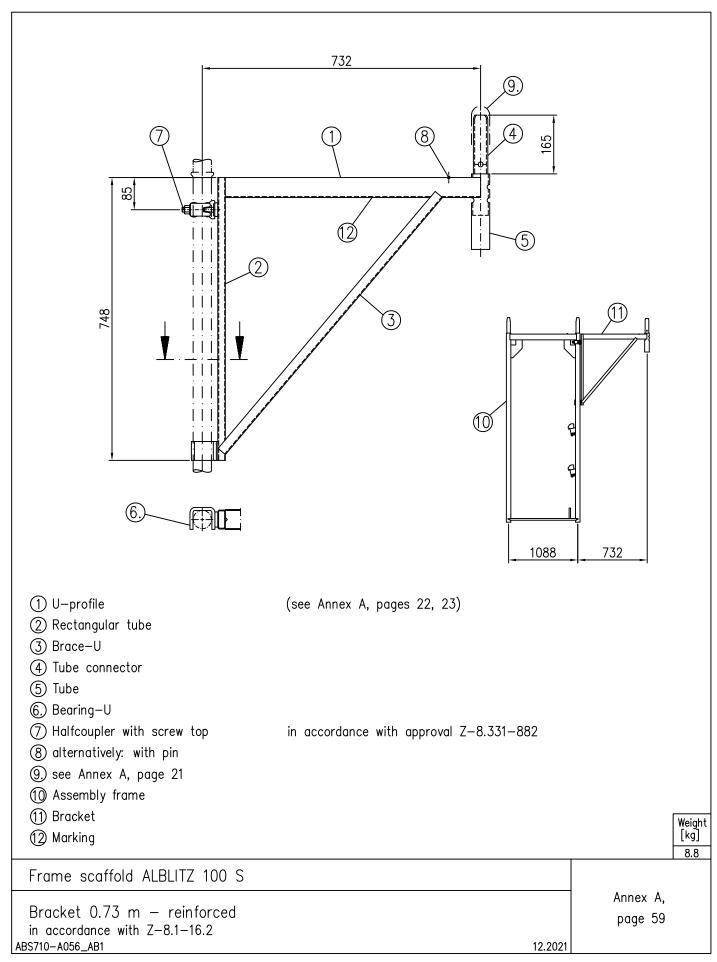


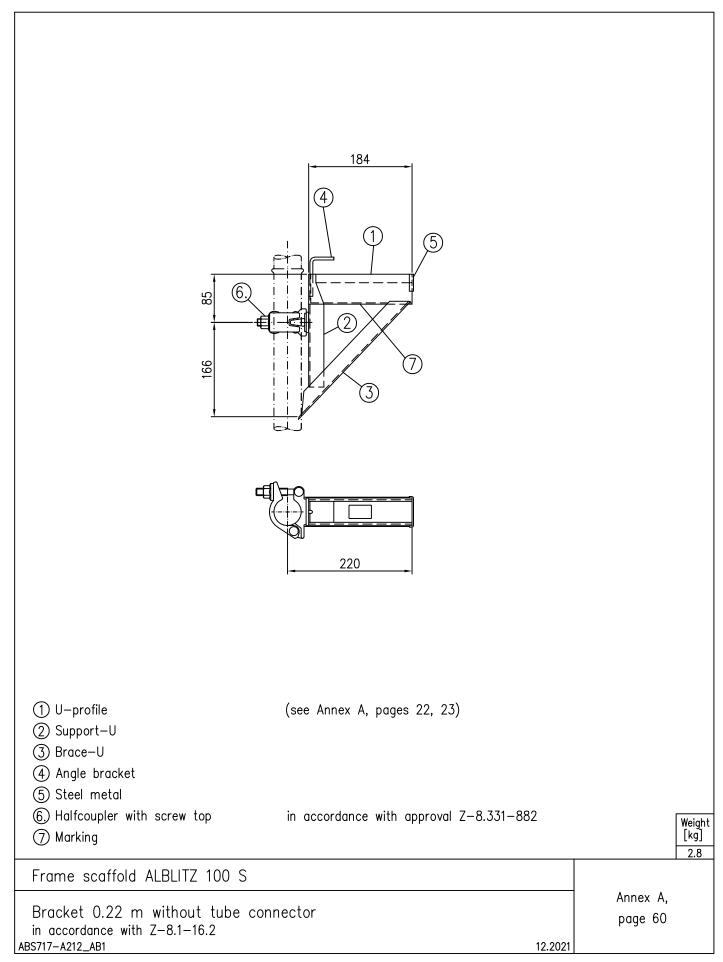


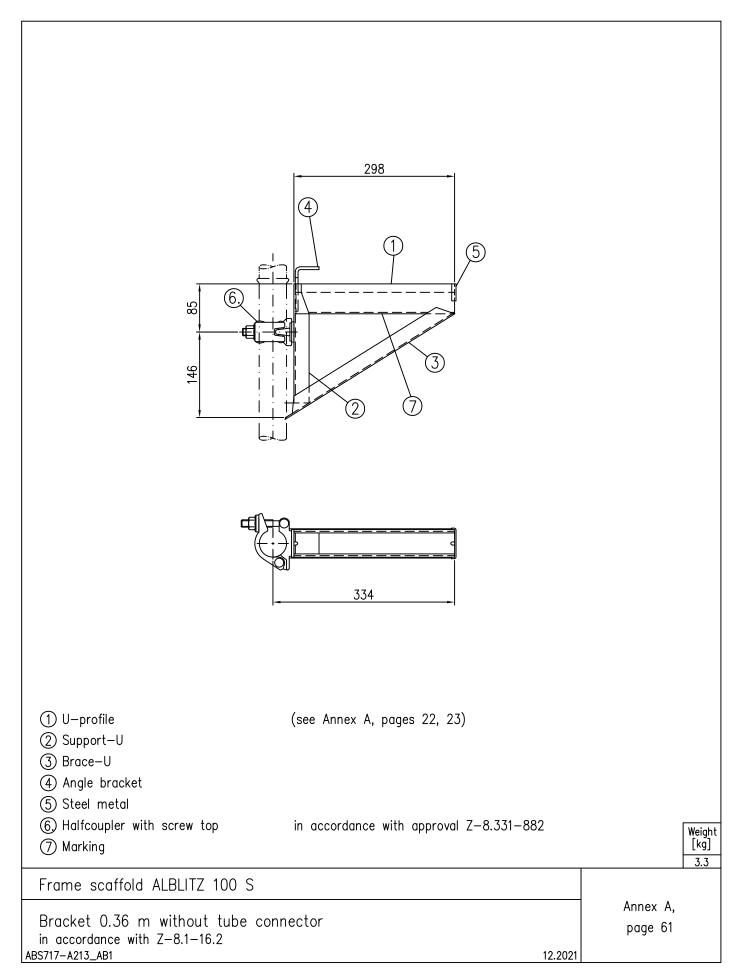


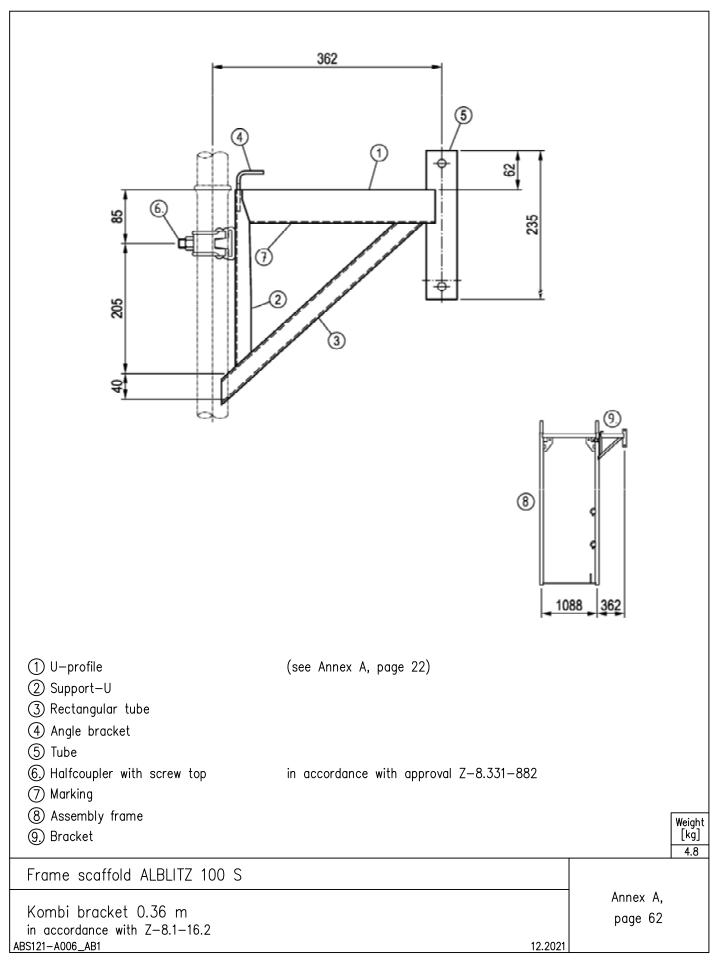


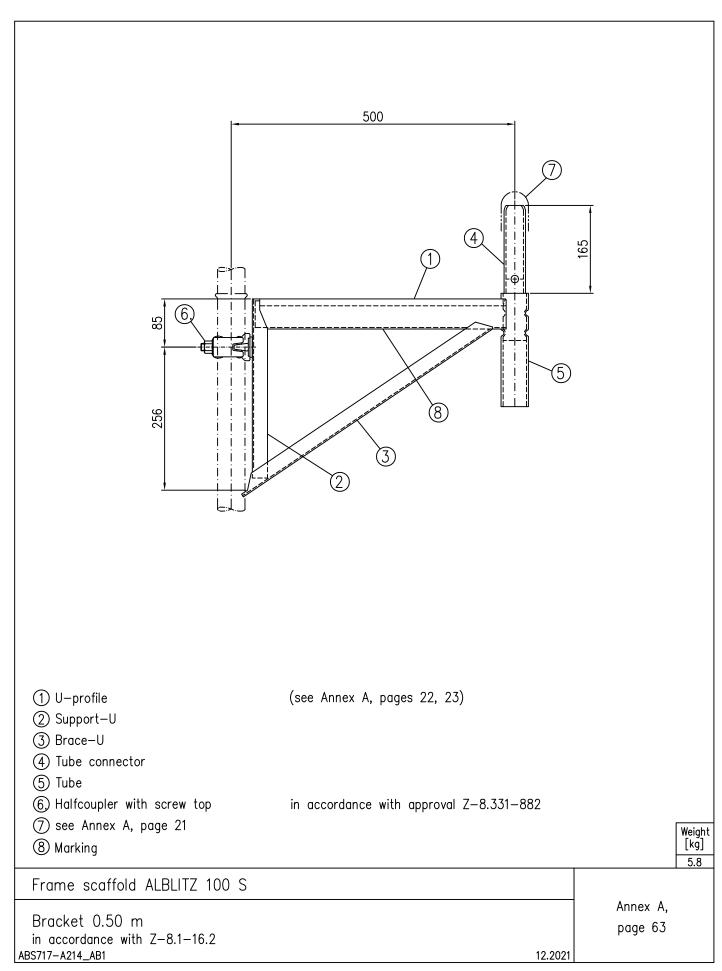


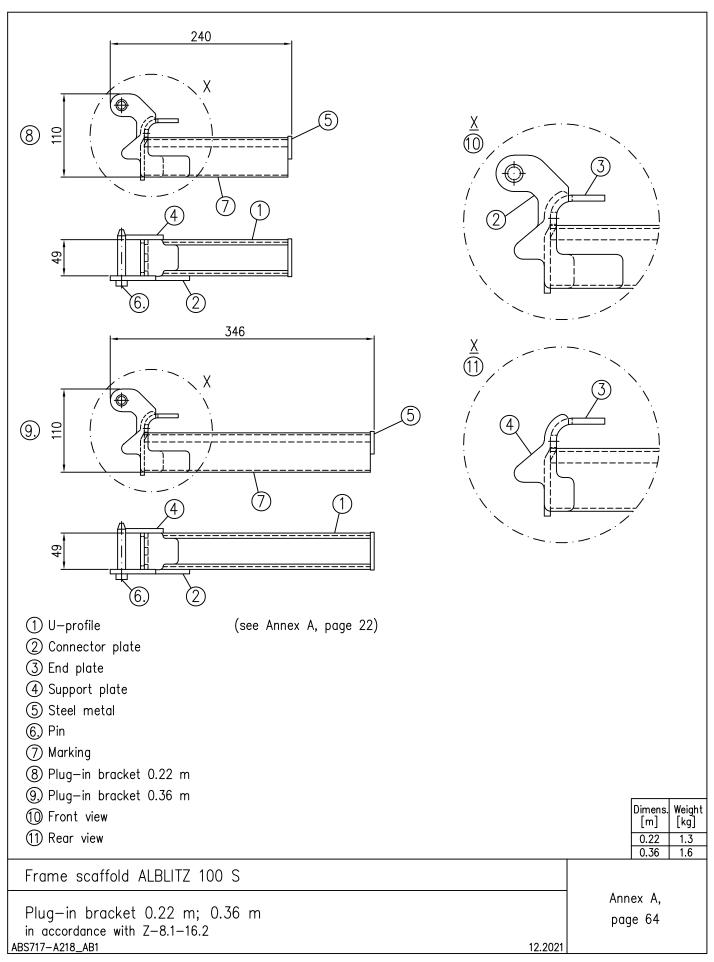


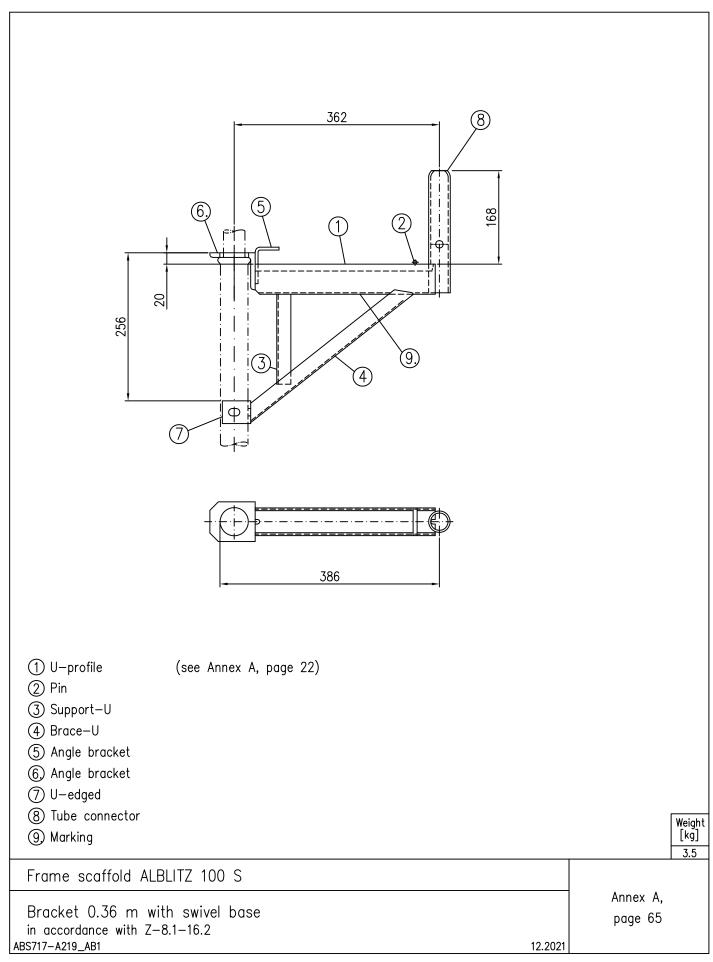


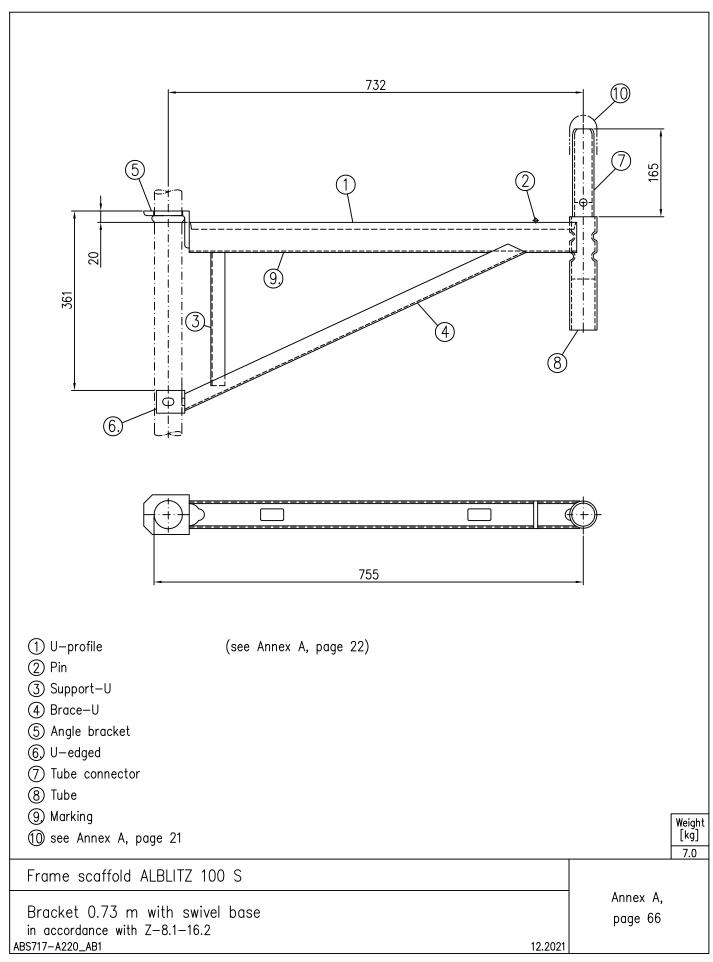


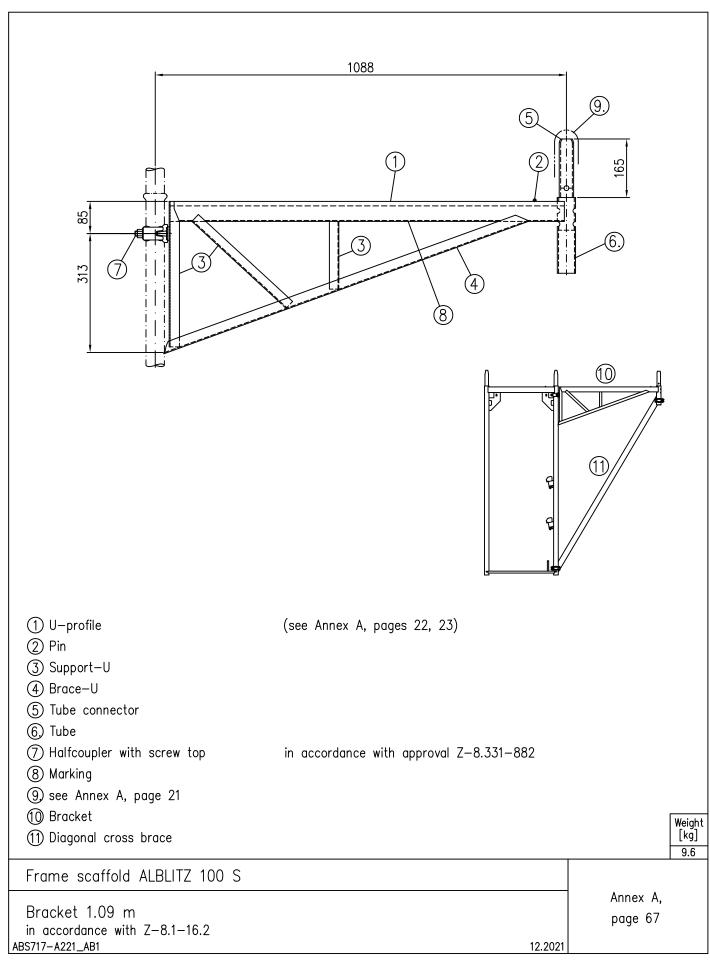


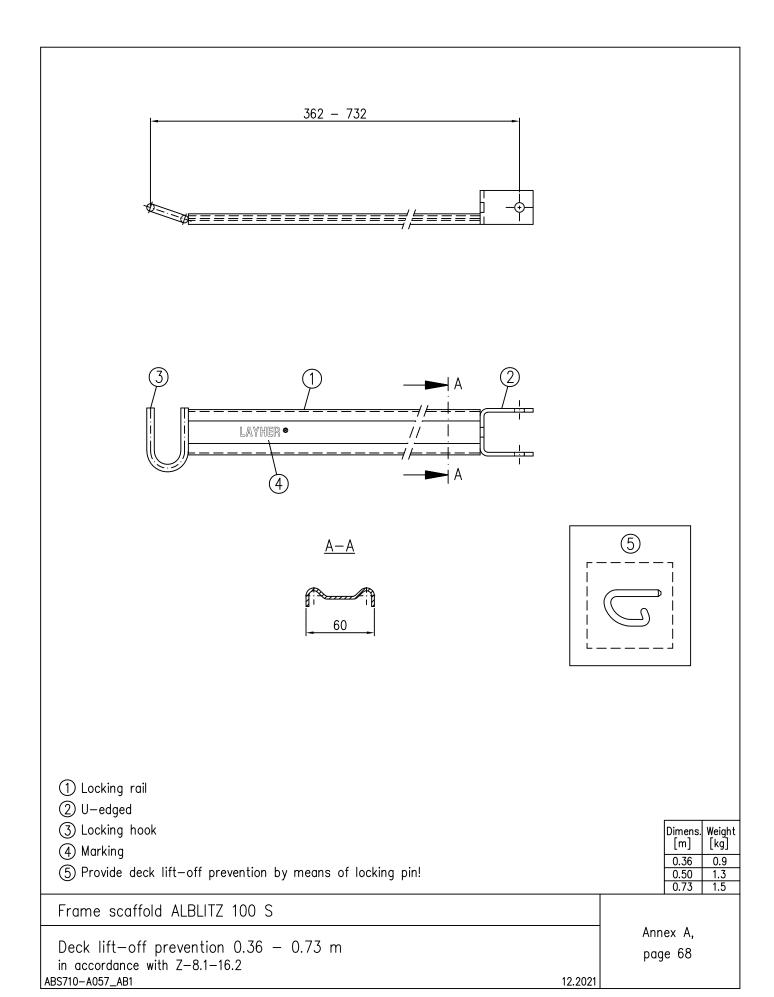


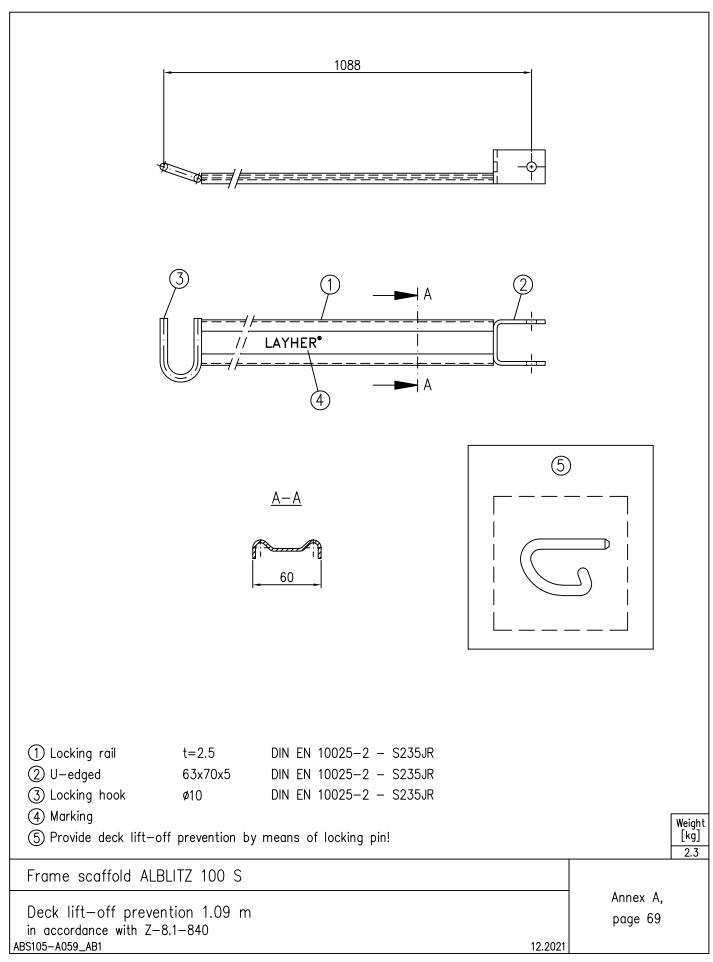


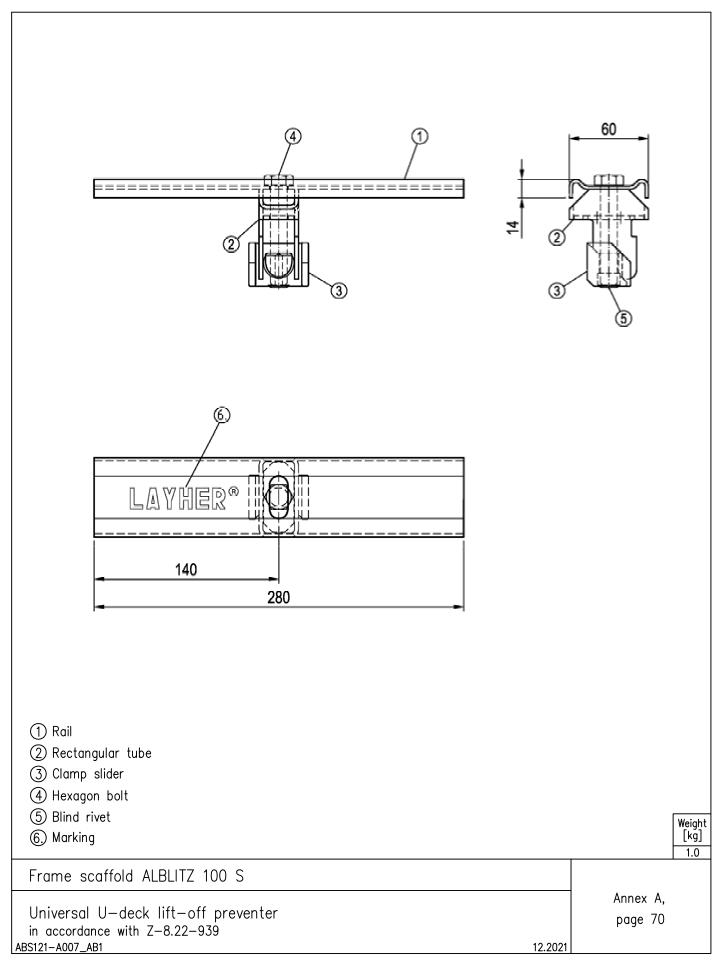


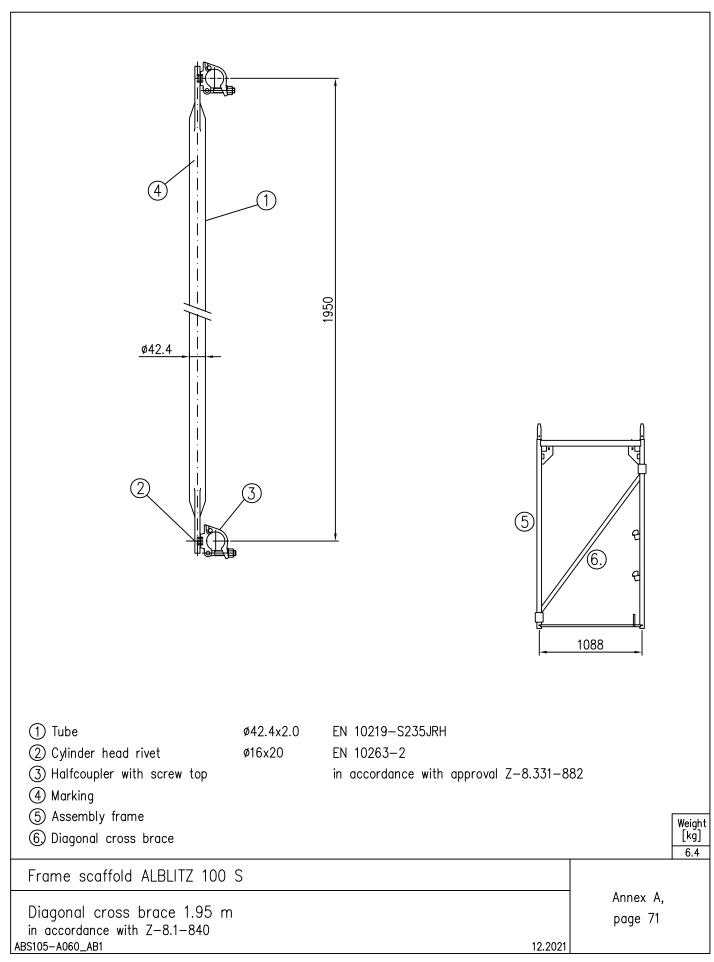


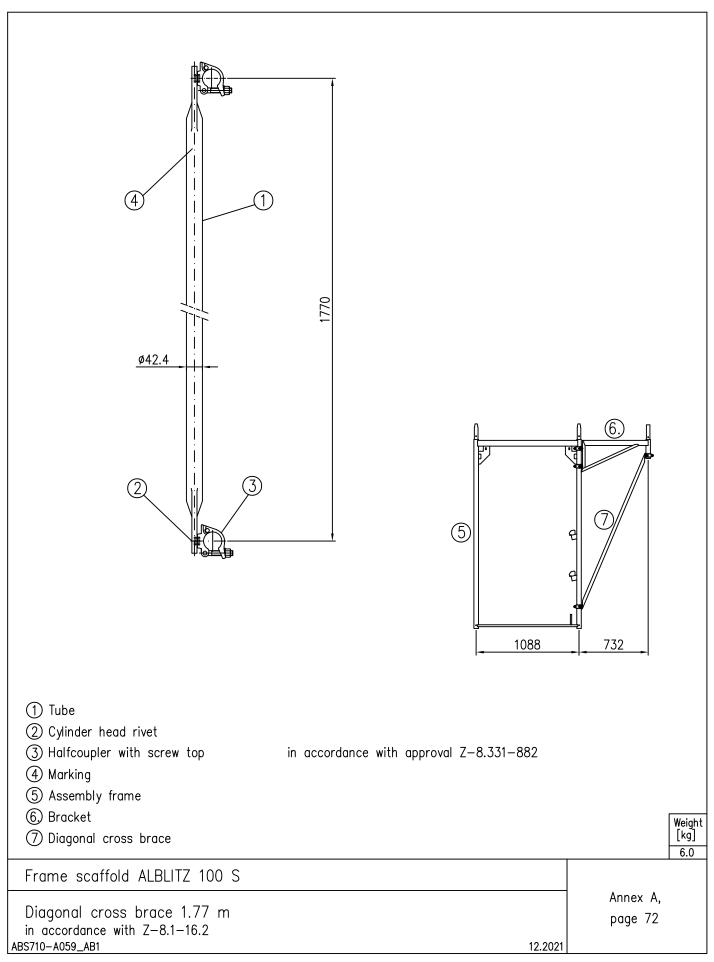


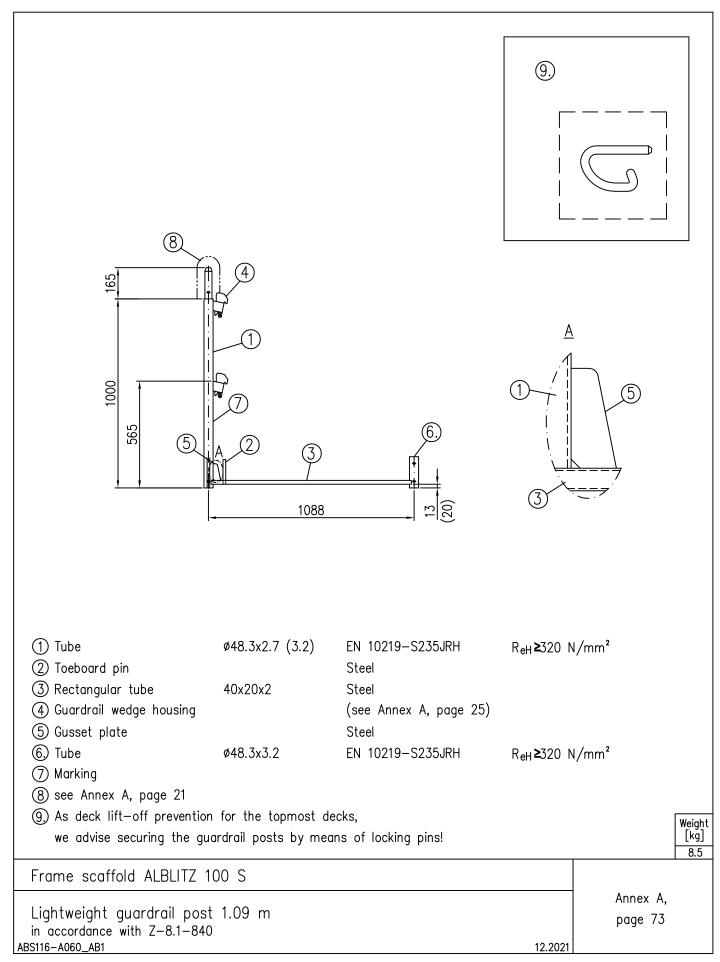


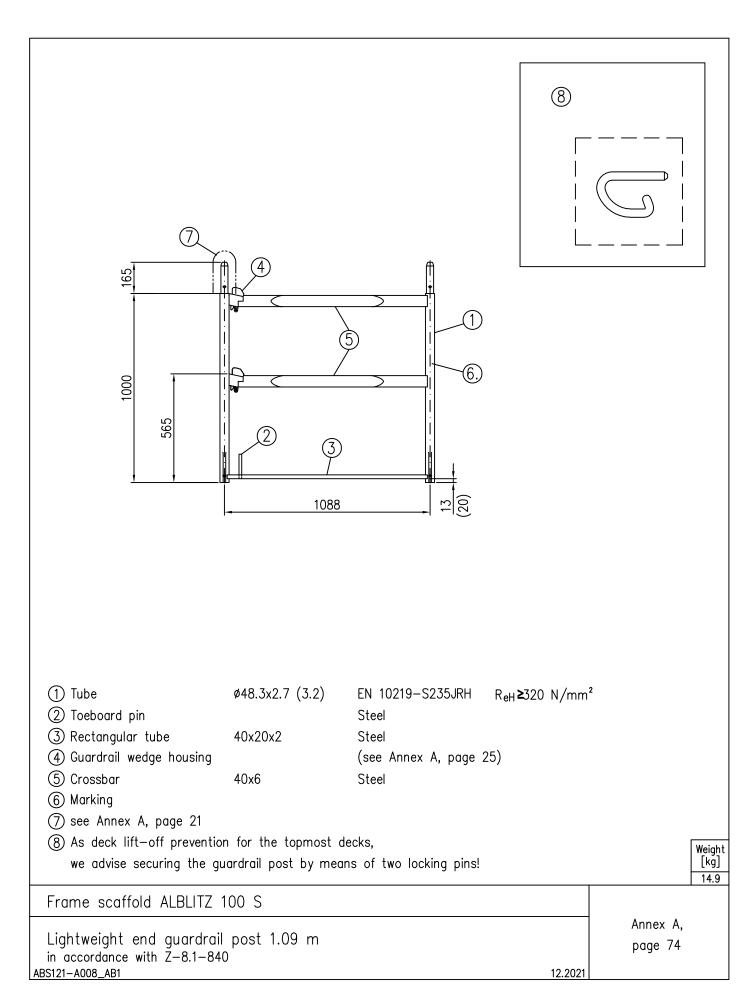


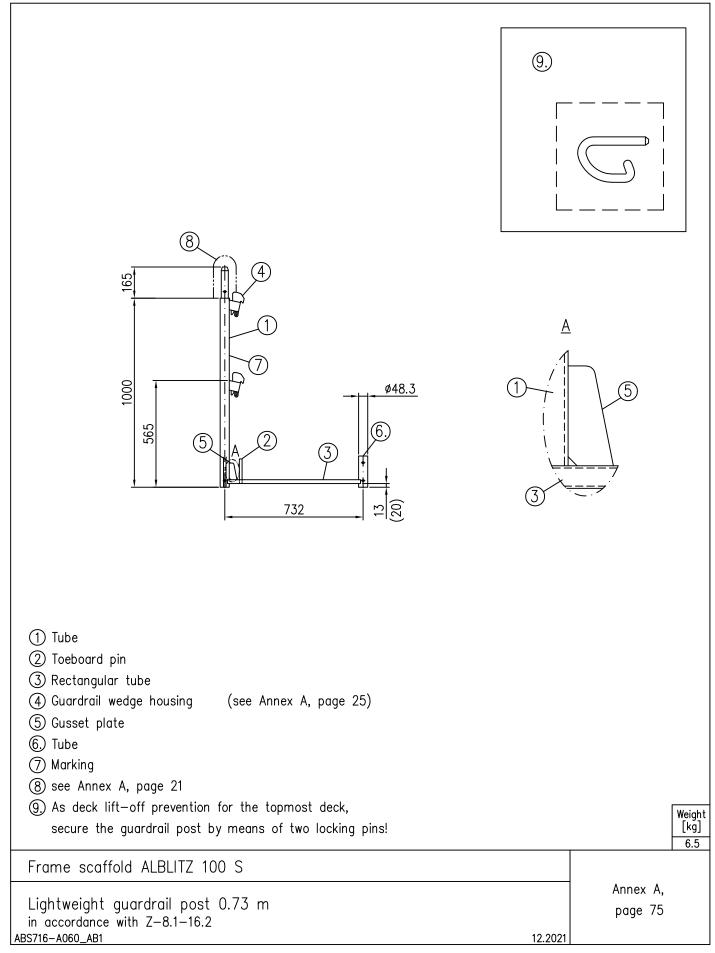


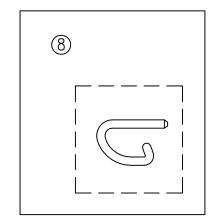


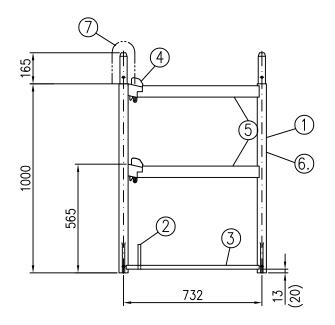








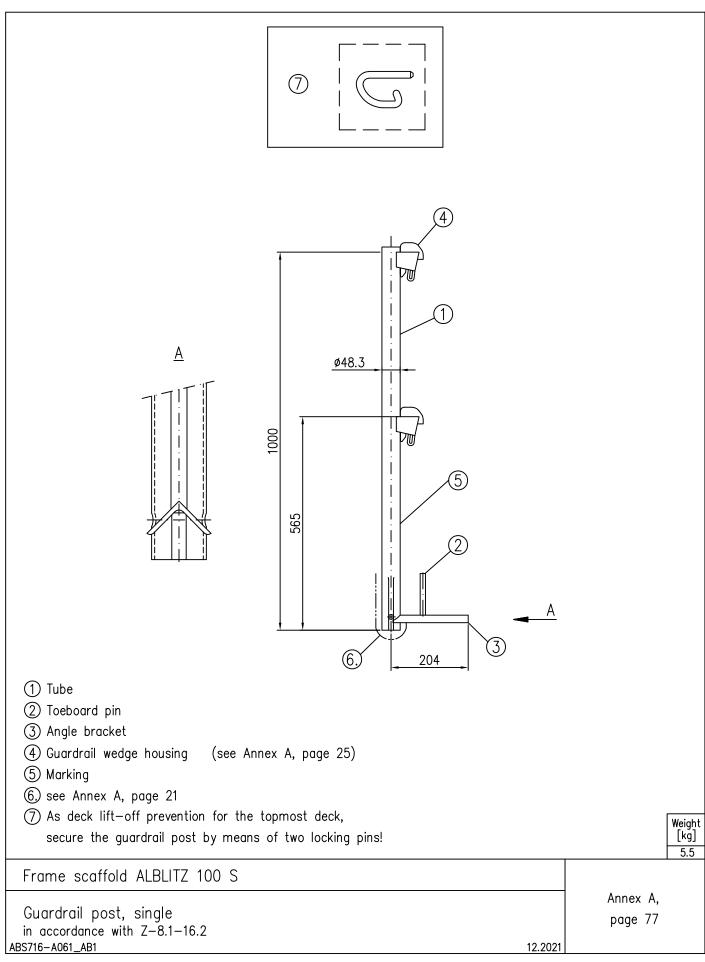


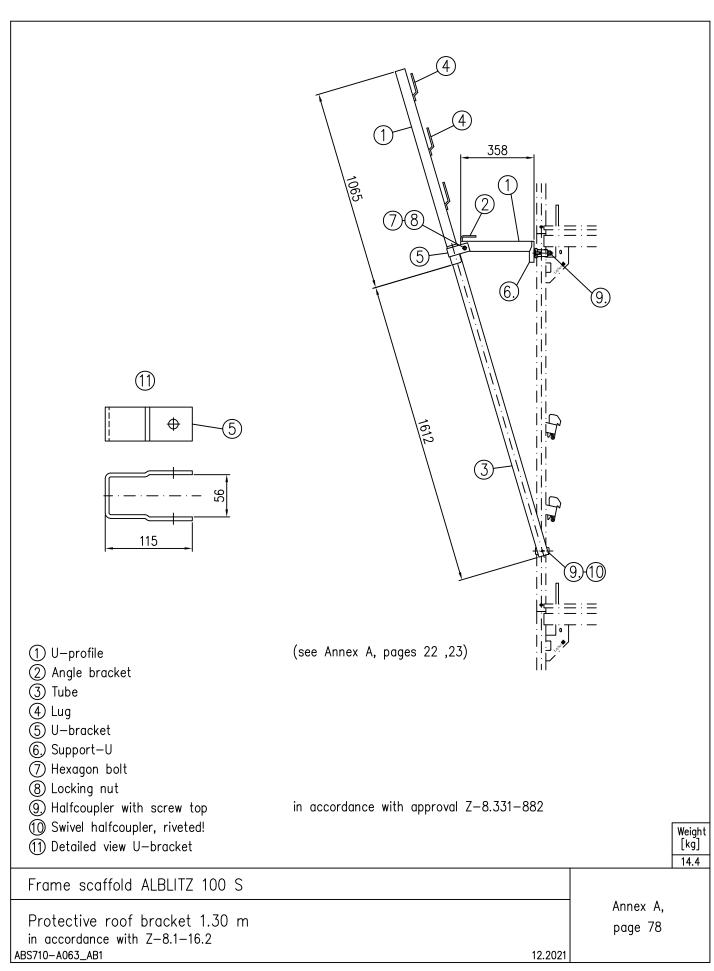


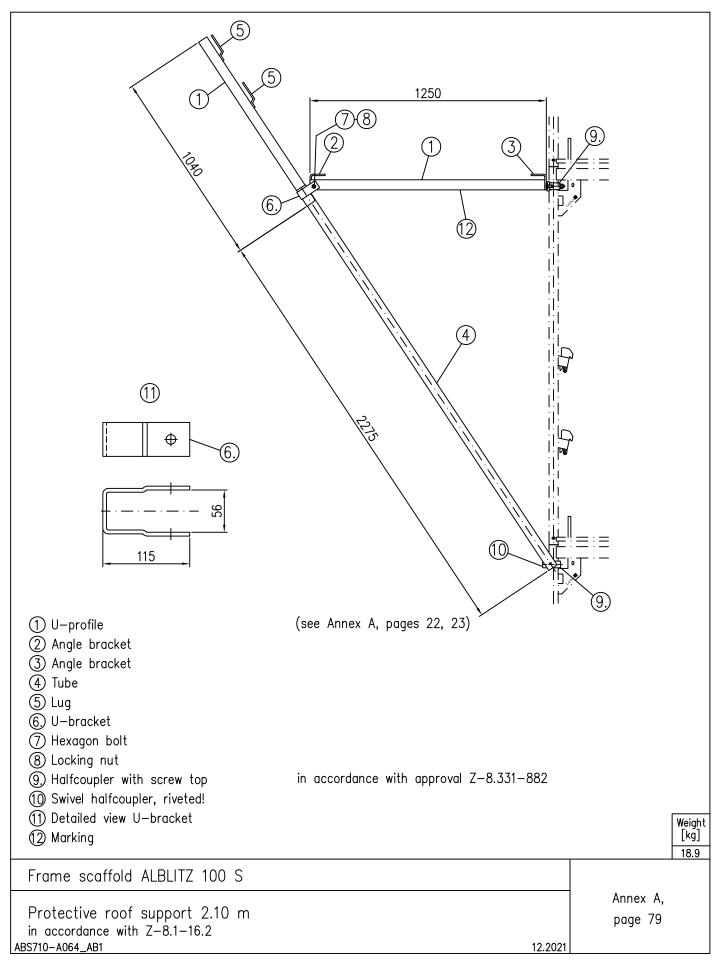
- 1) Tube
- 2 Toeboard pin
- 3 Rectangular tube
- (4) Guardrail wedge housing (see Annex A, page 25)
- (5) Crossbar
- 6. Marking
- (7) see Annex A, page 21
- (8) As deck lift-off prevention for the topmost deck, secure the guardrail post by means of two locking pins!

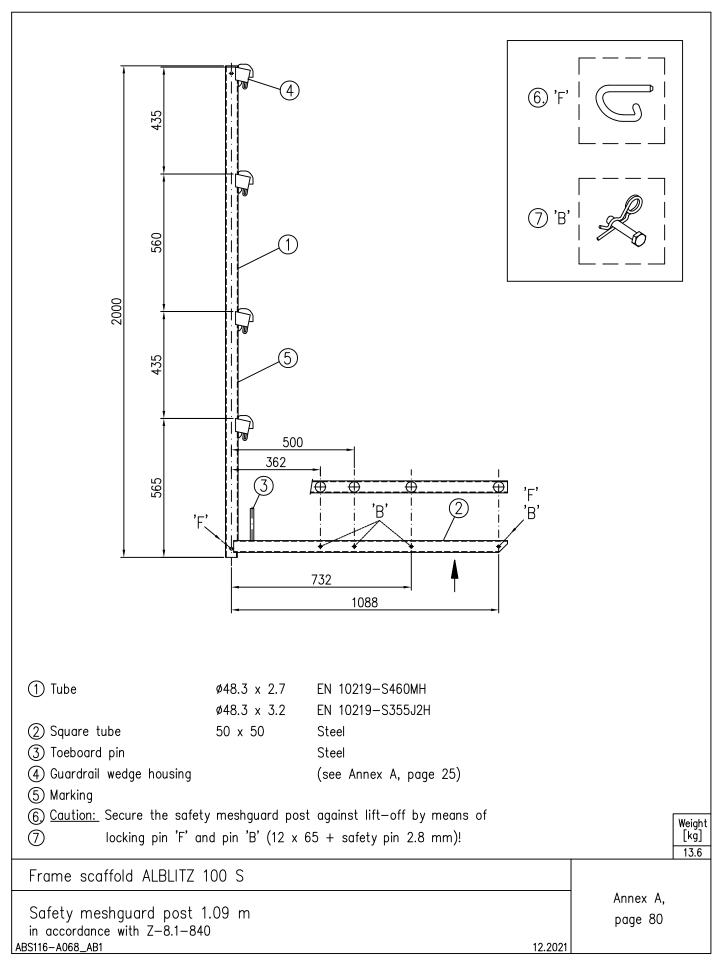
Weight [kg]

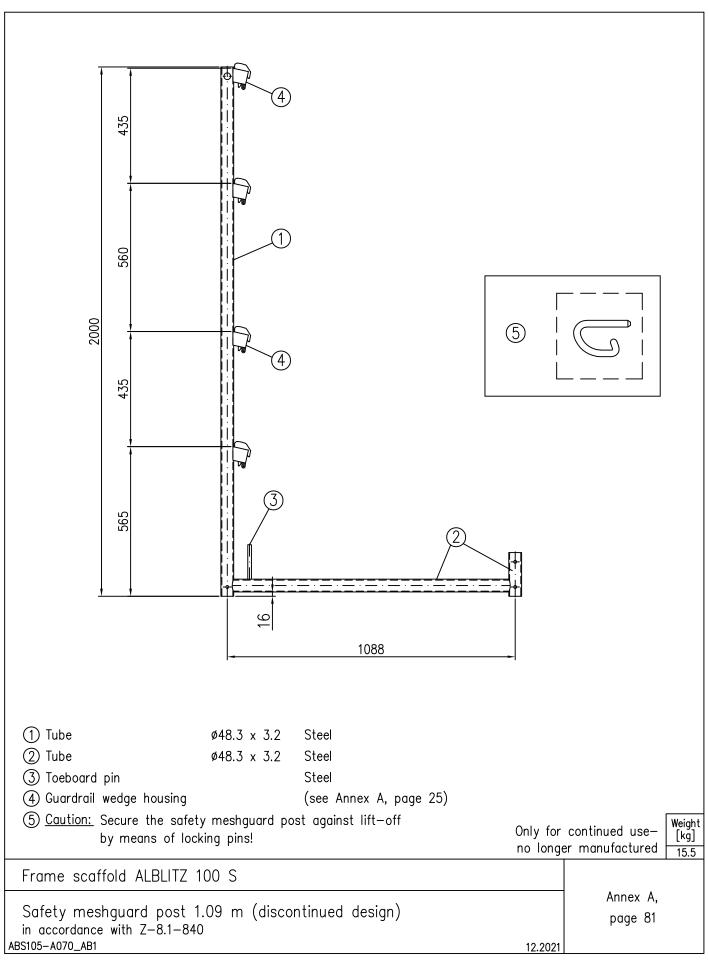
Frame scaffold ALBLITZ 100 S		
Lightweight end guardrail post 0.73 m in accordance with Z-8.1-16.2		Annex A, page 76
ABS721-A003_AB1	12.2021	

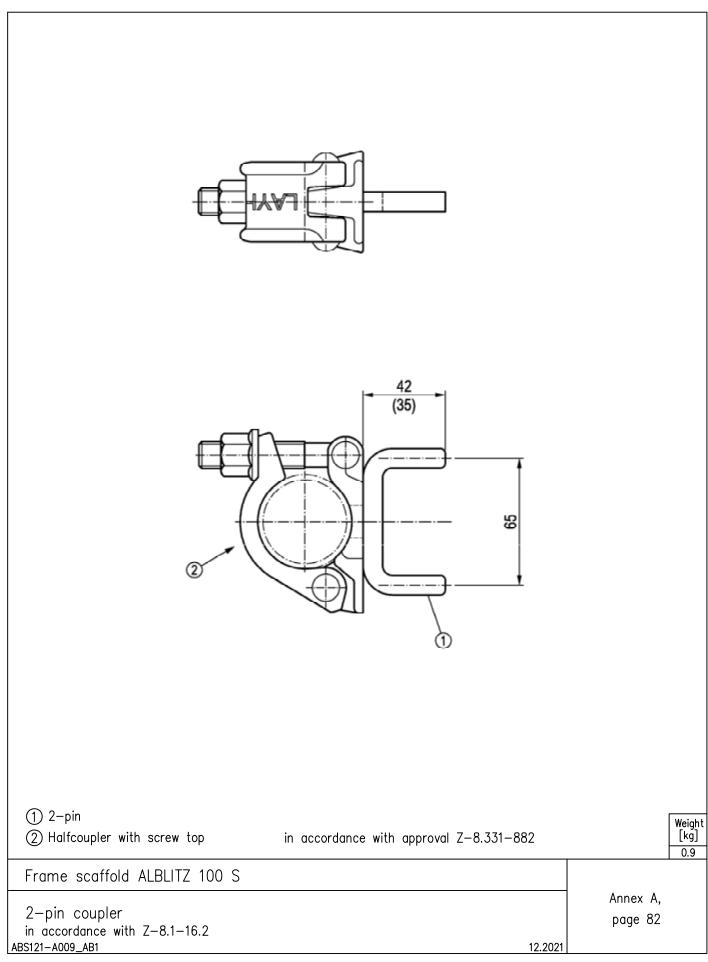


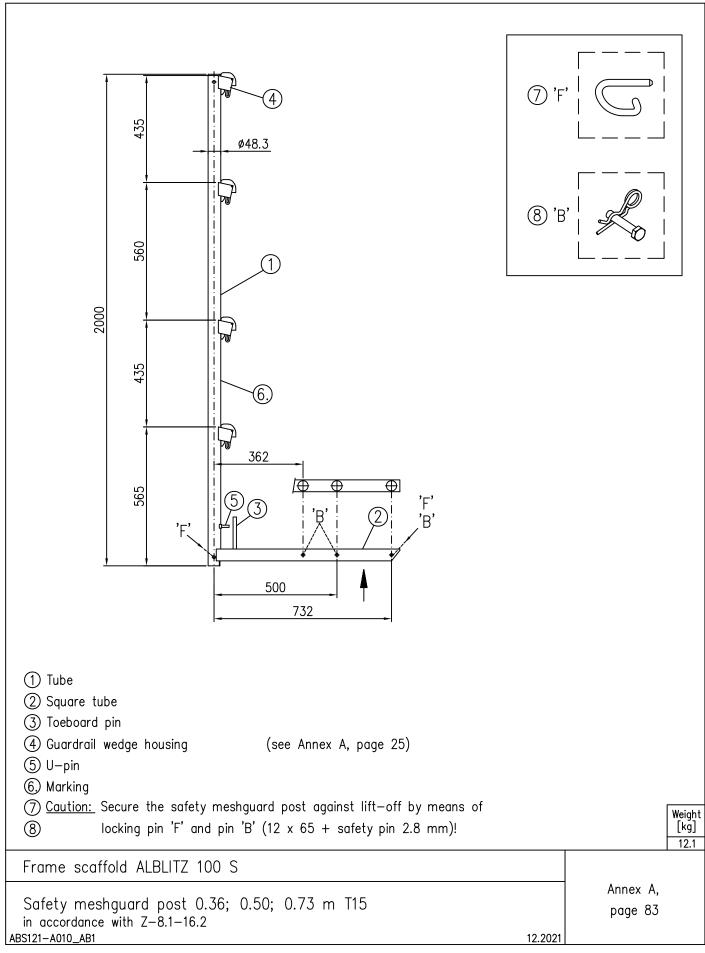


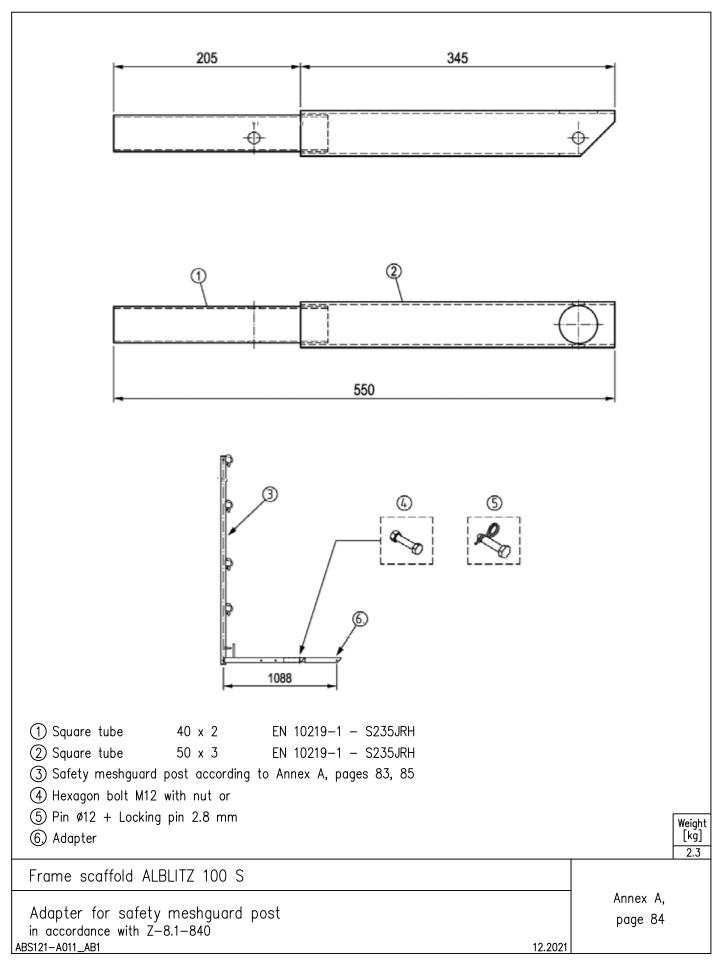


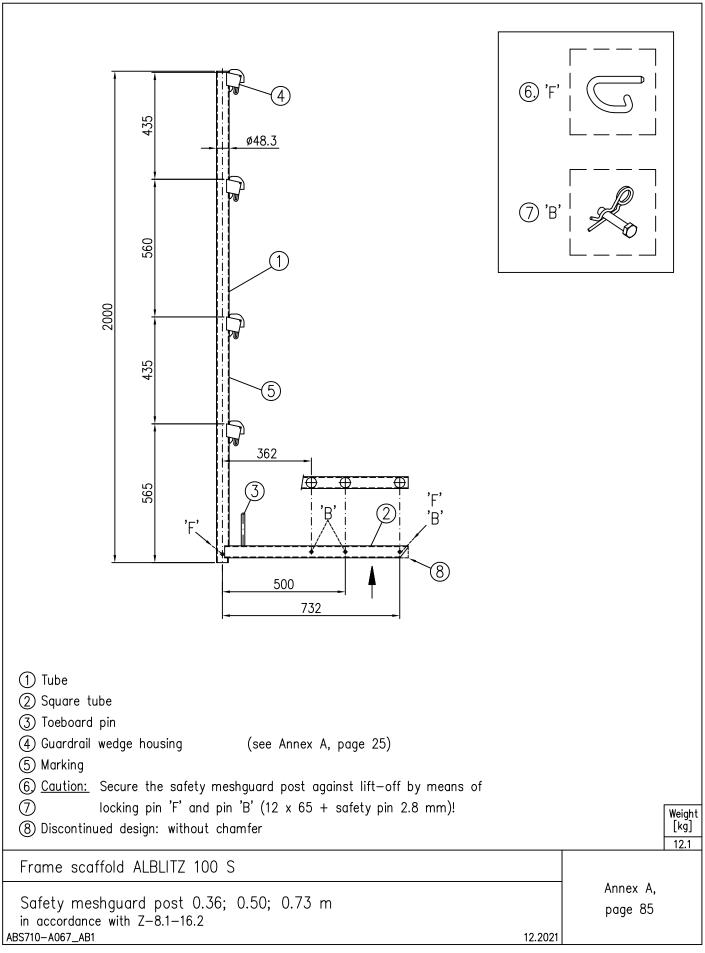


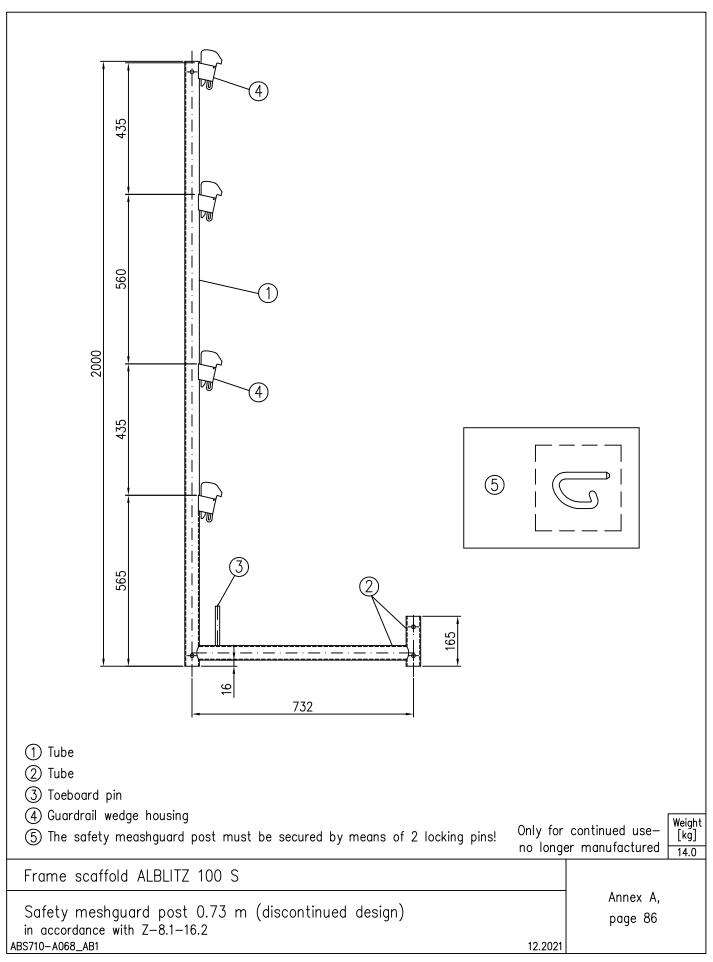


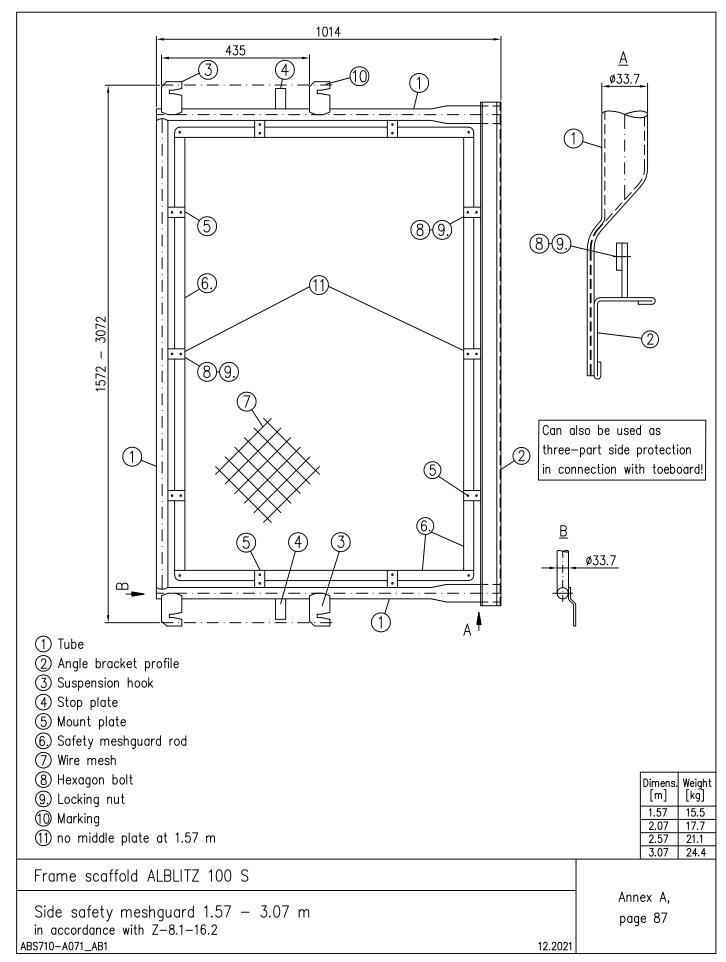


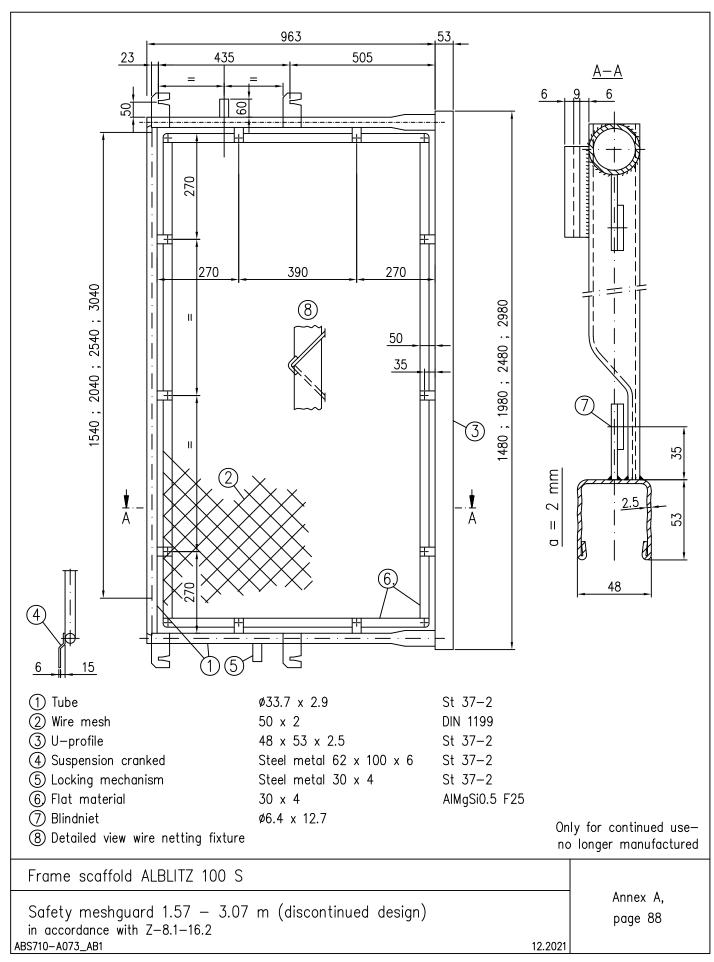


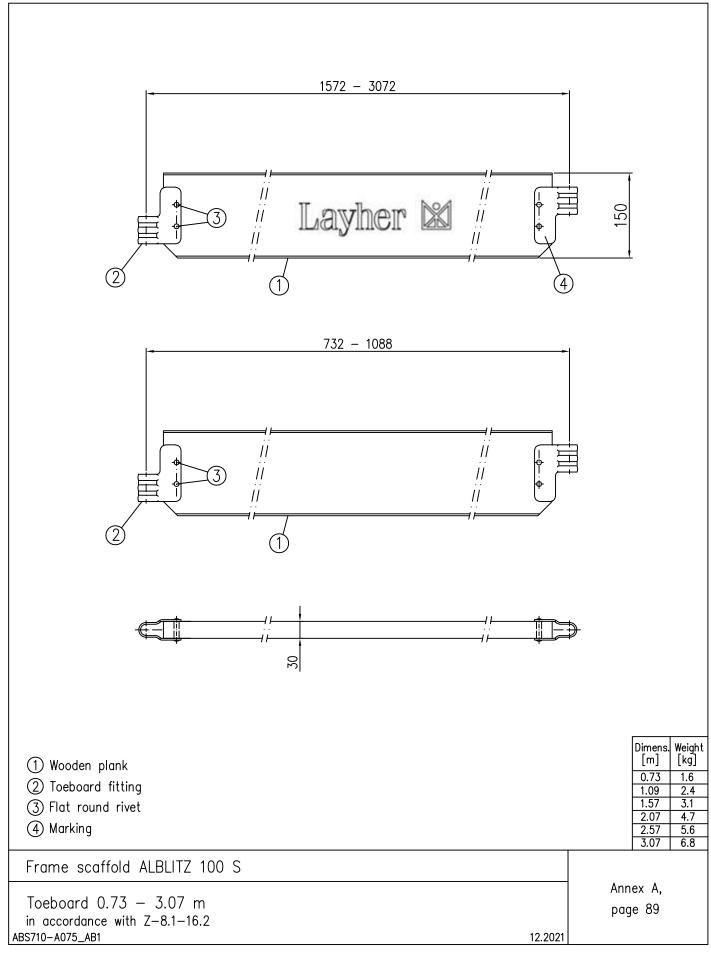


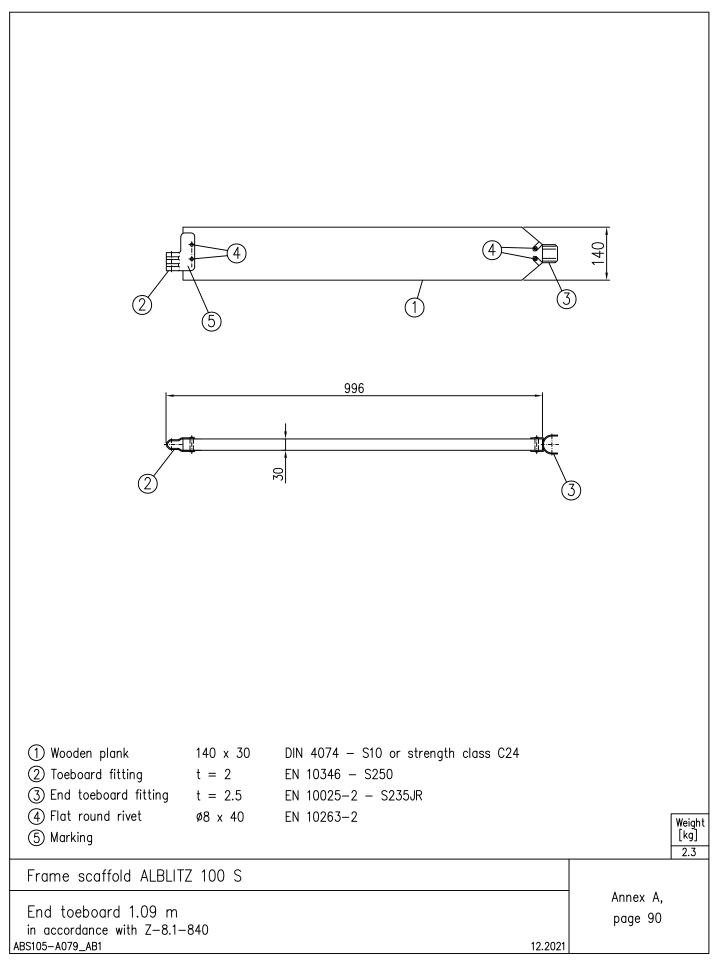


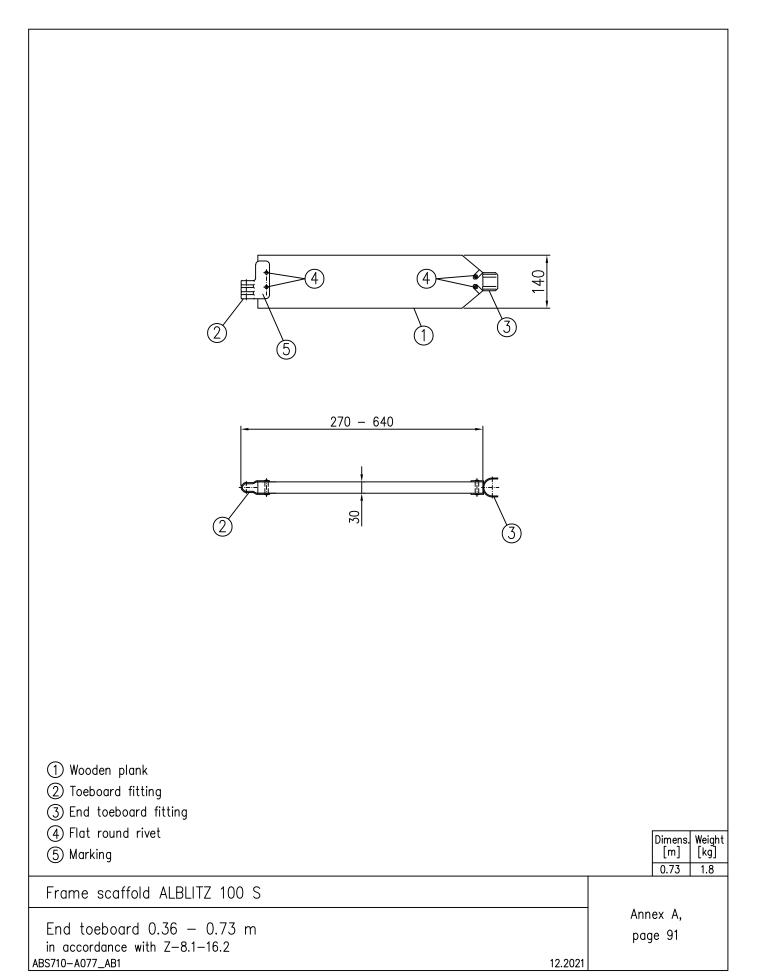


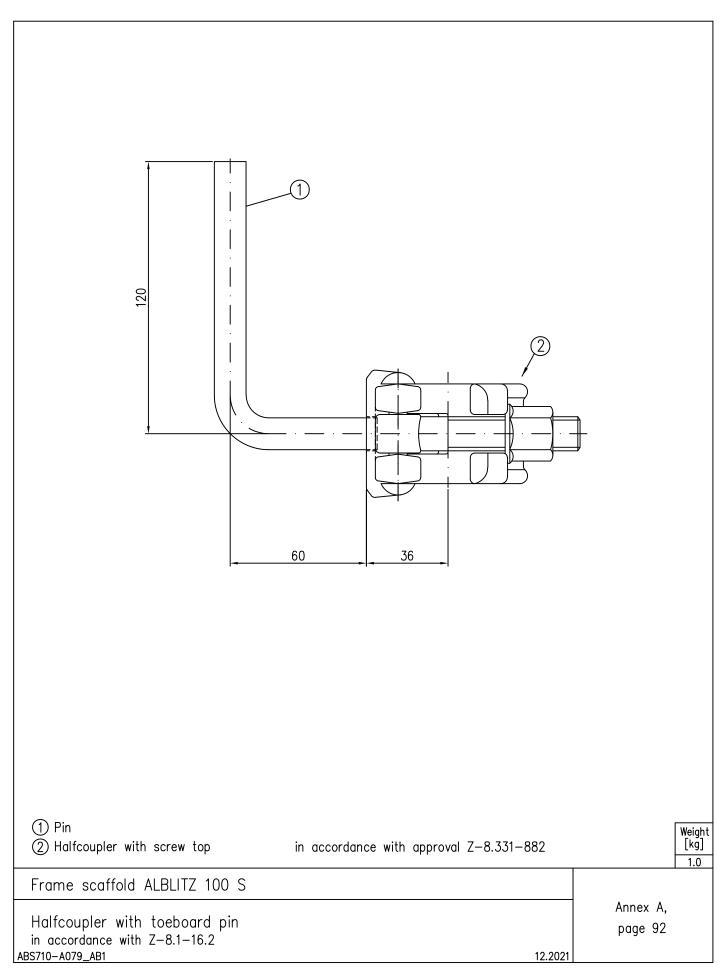


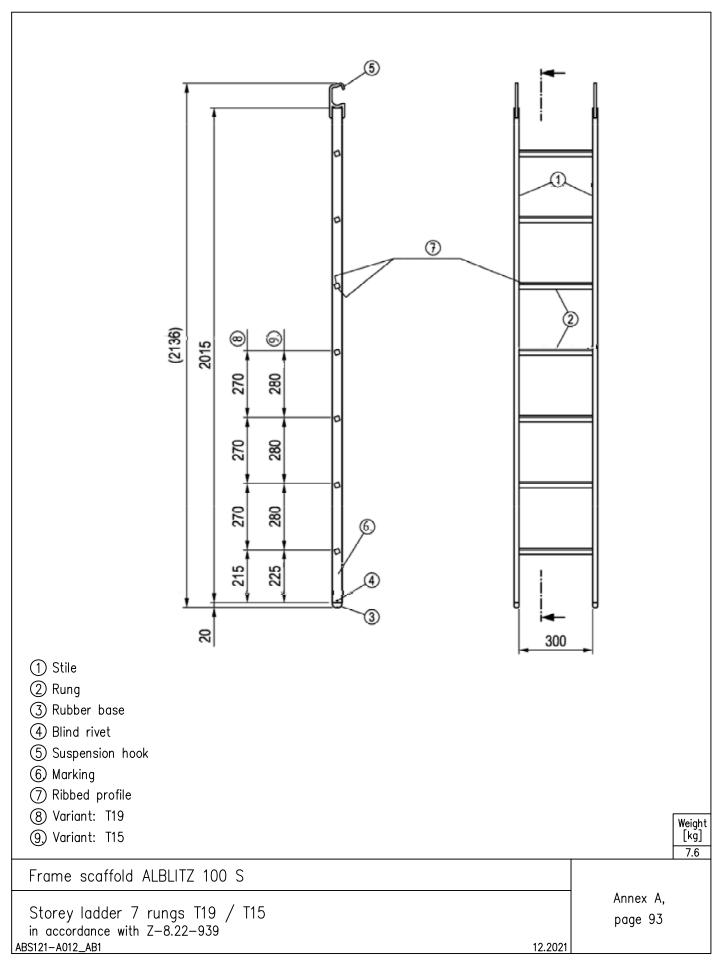


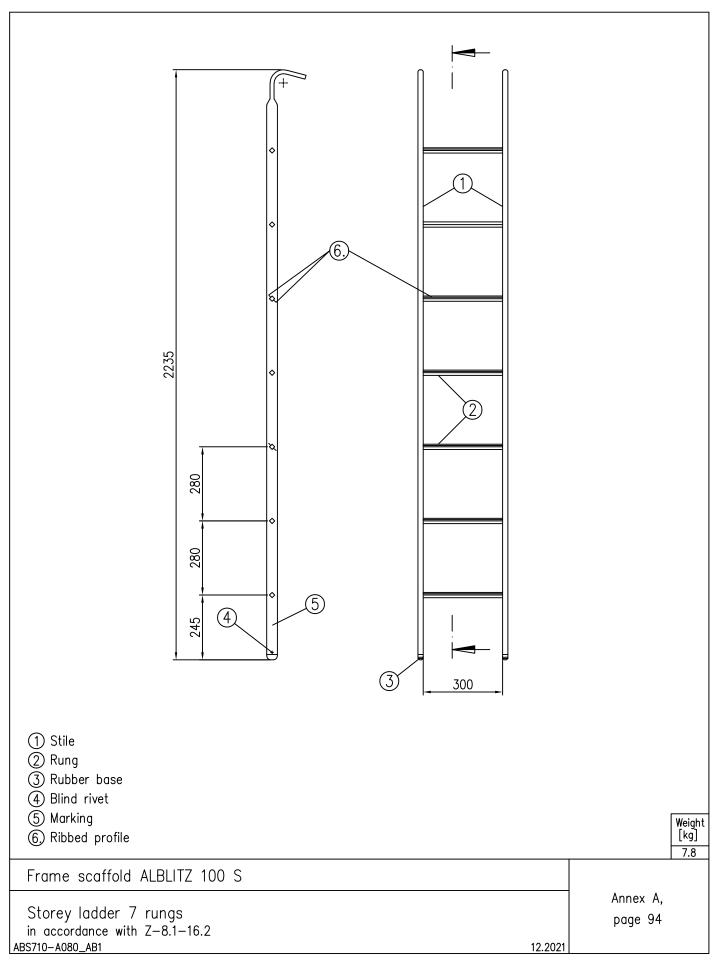


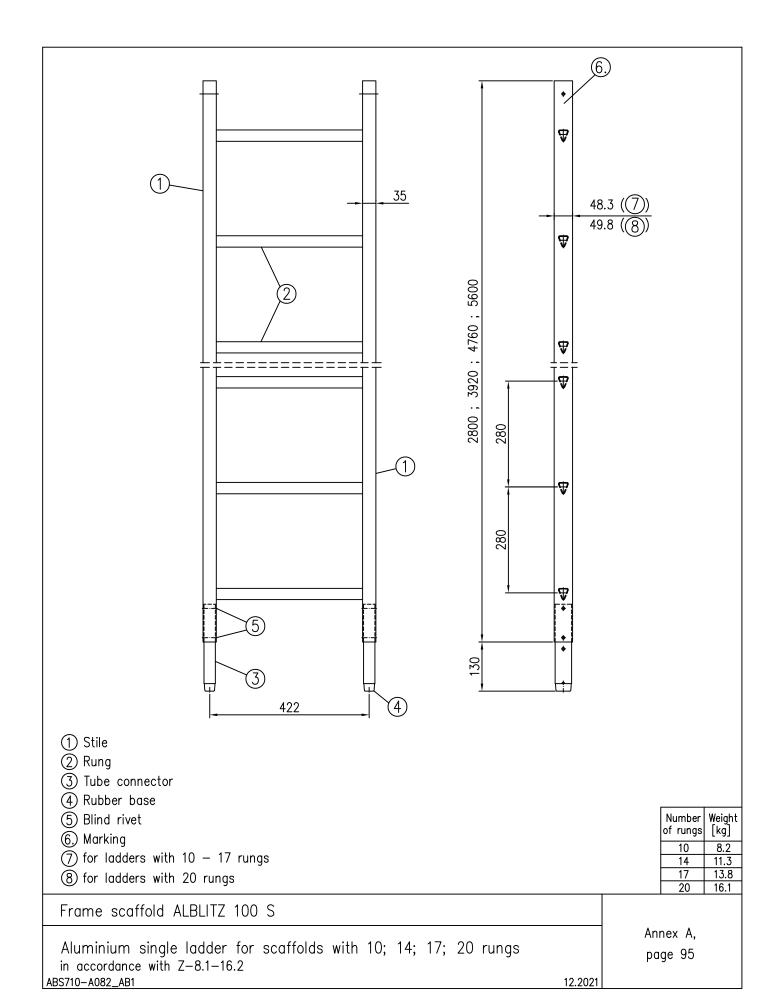


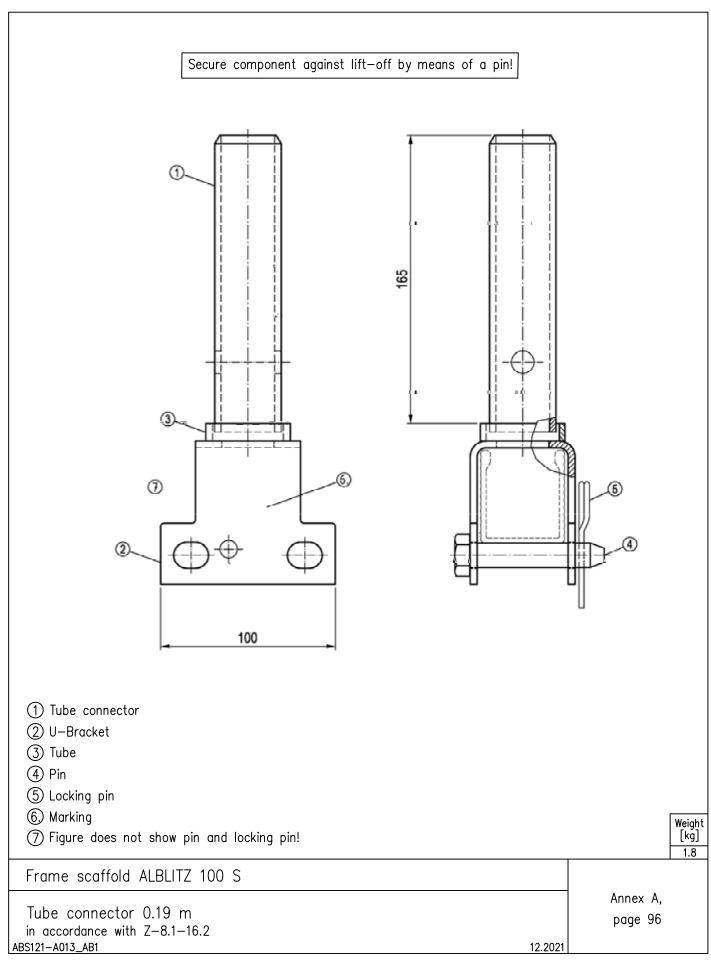


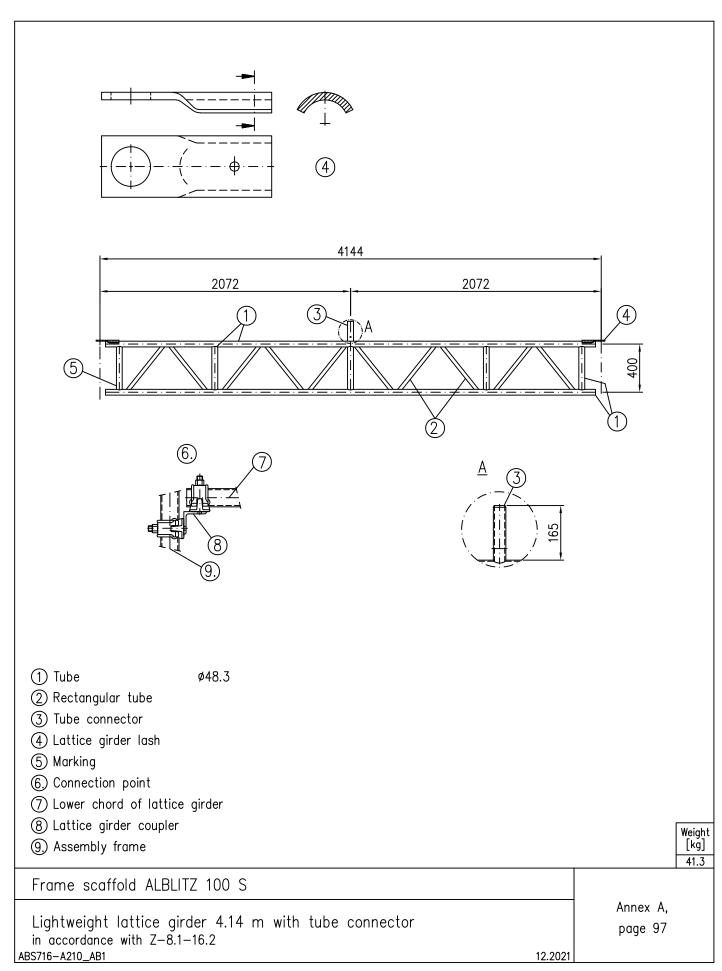


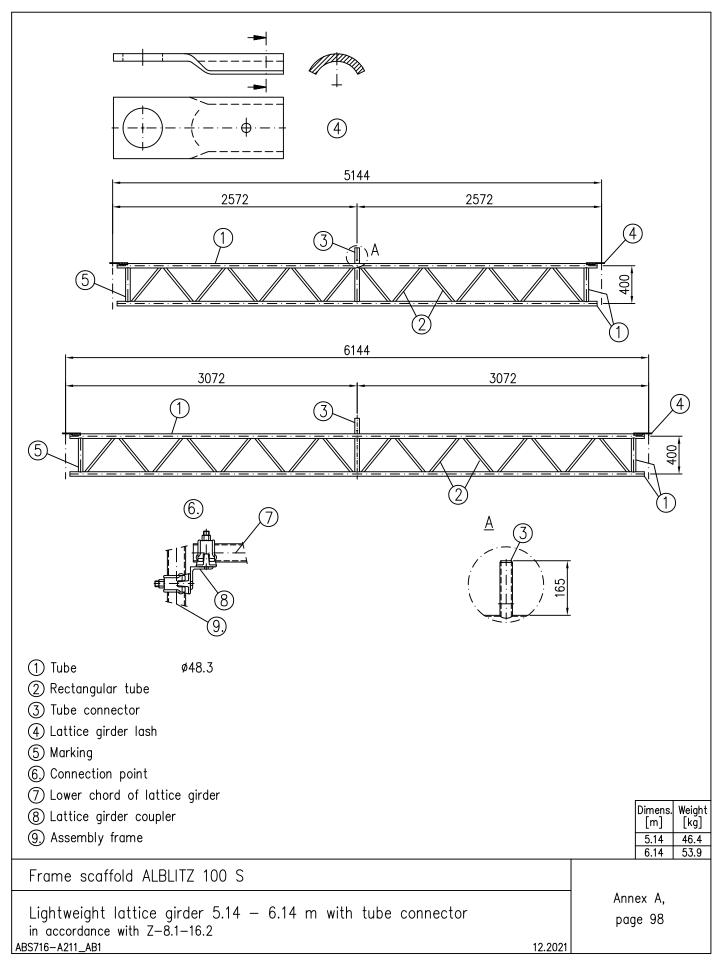


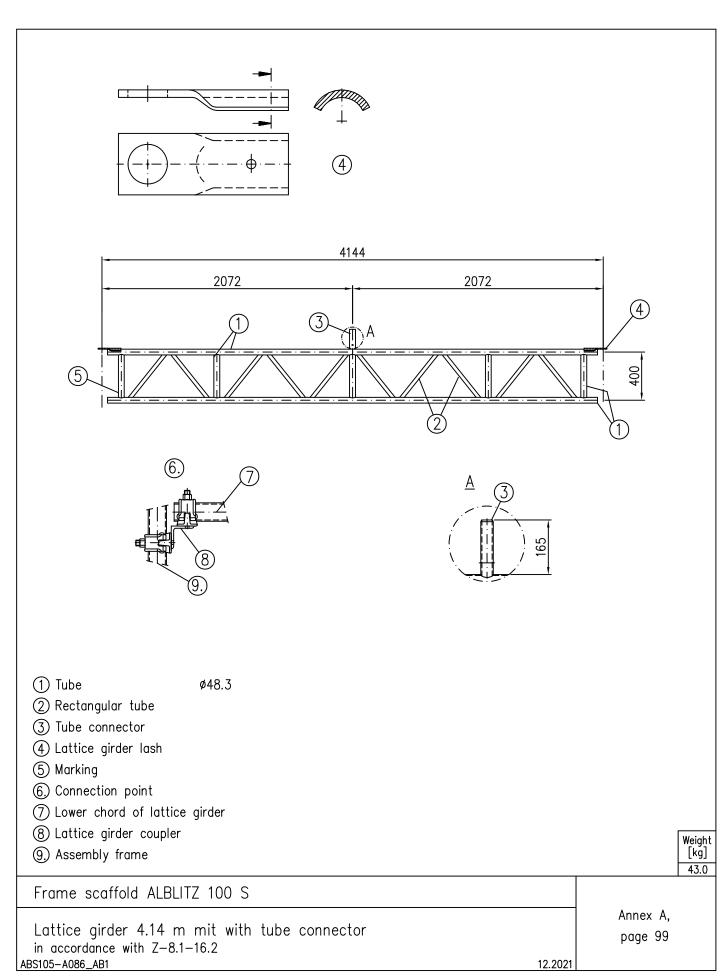


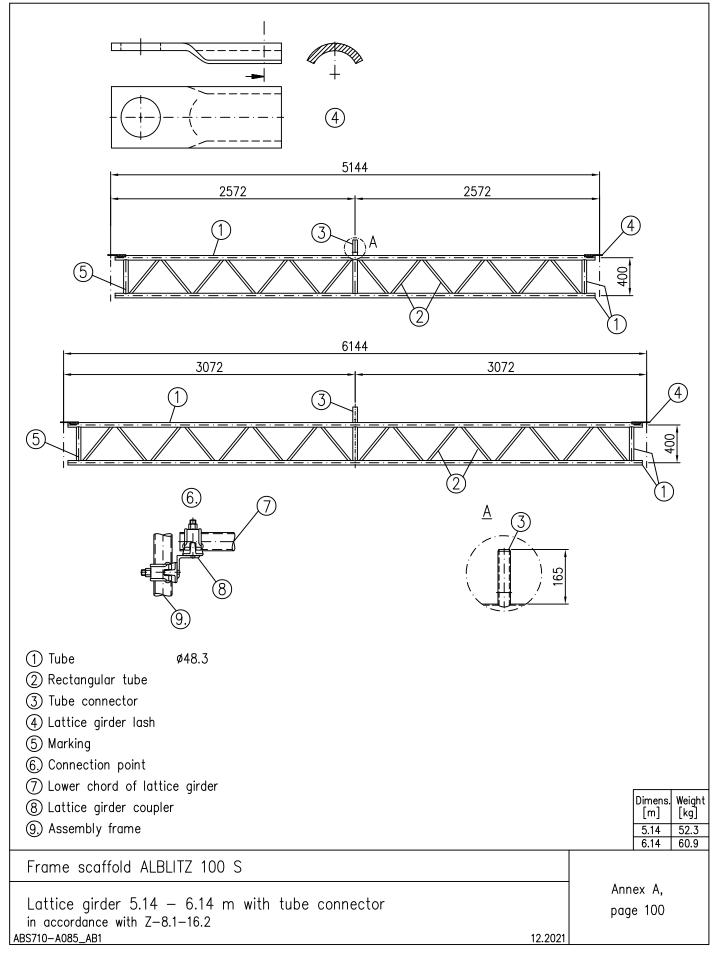


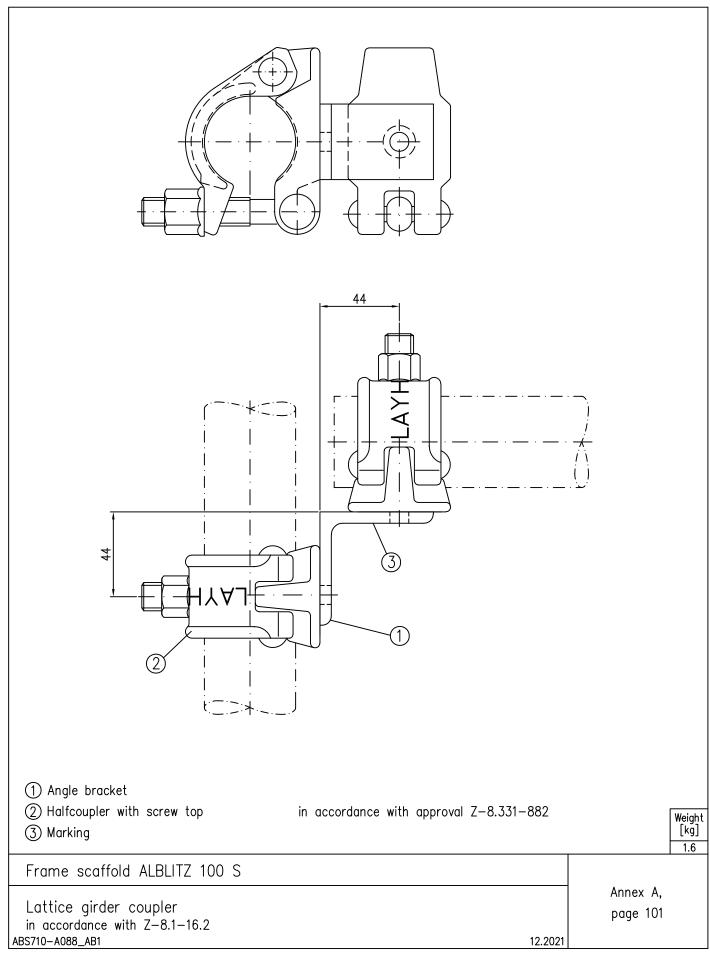


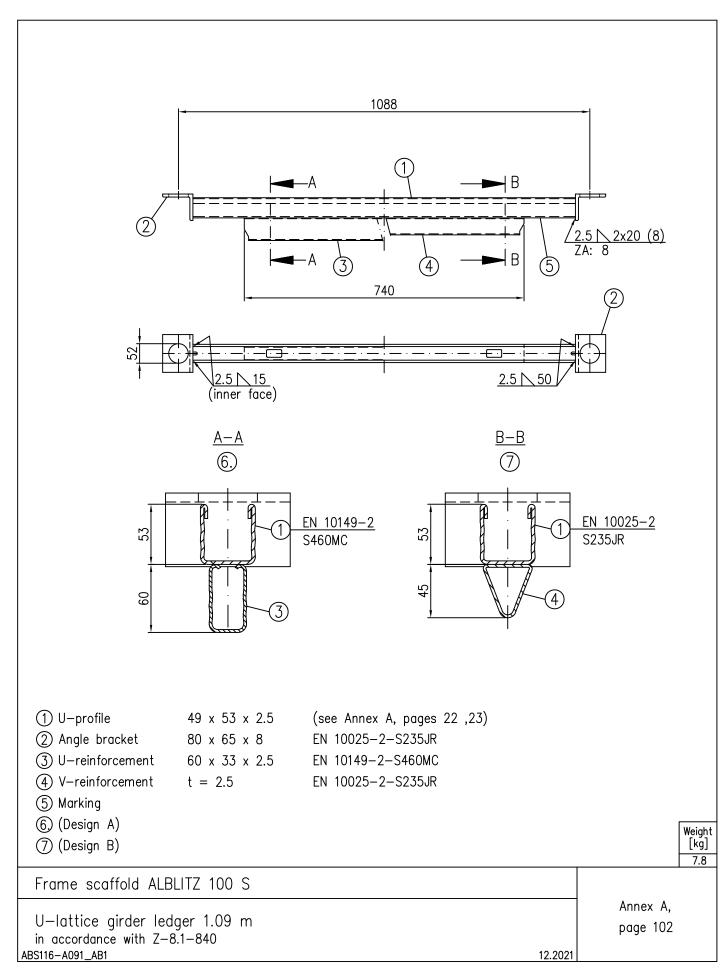


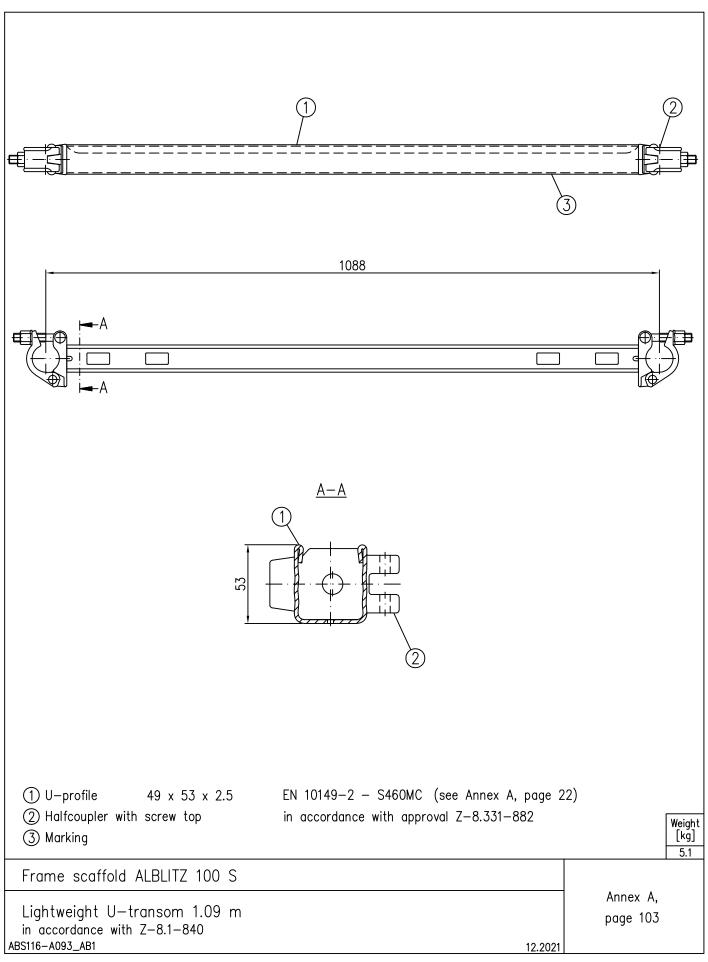


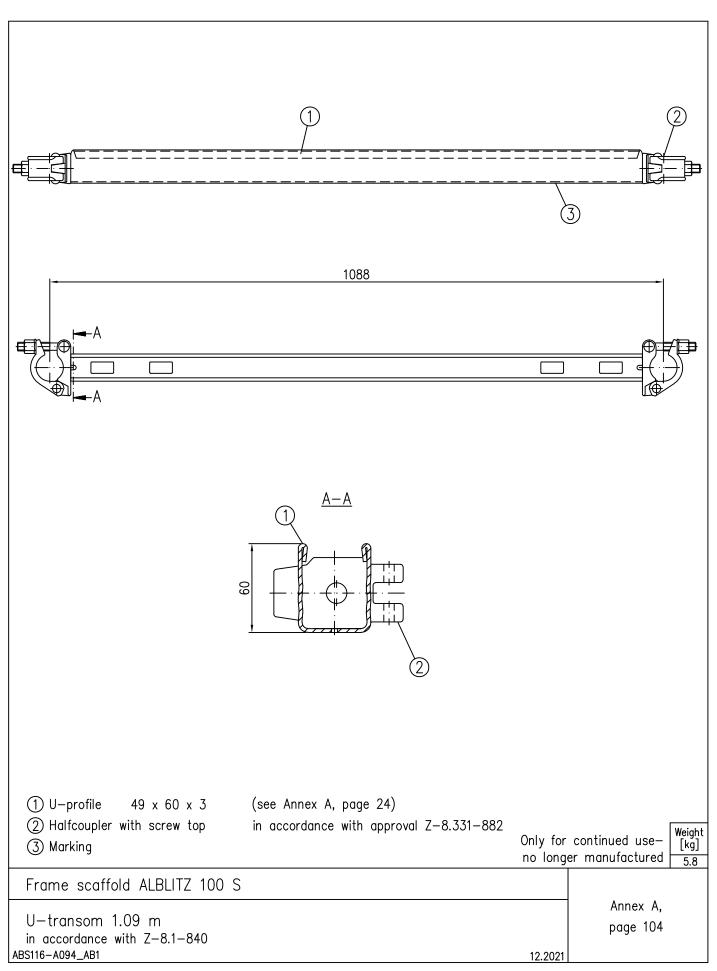


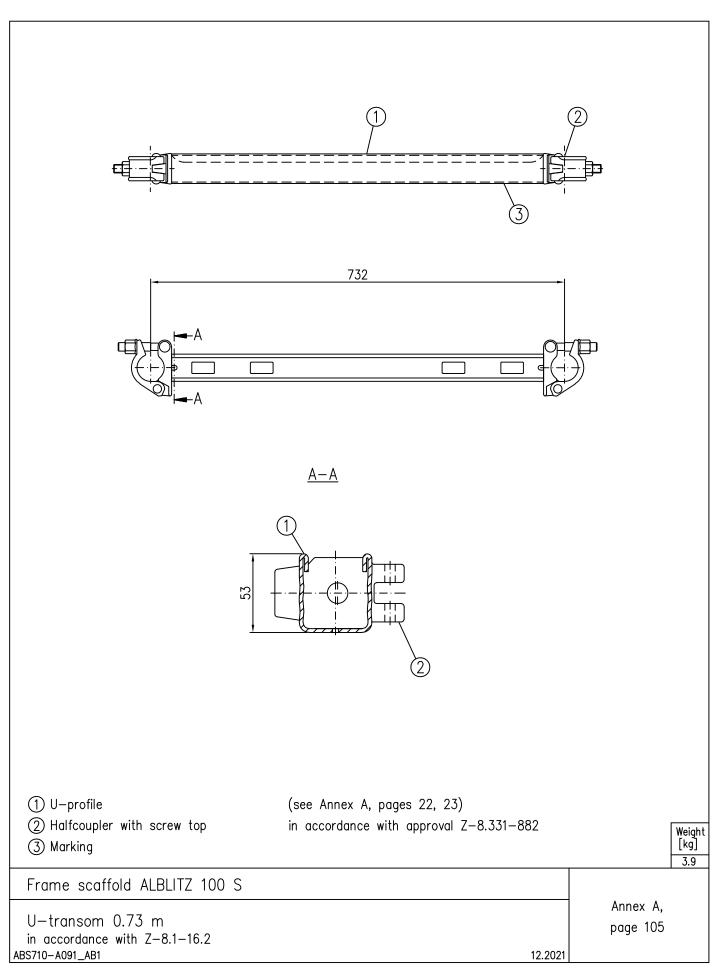


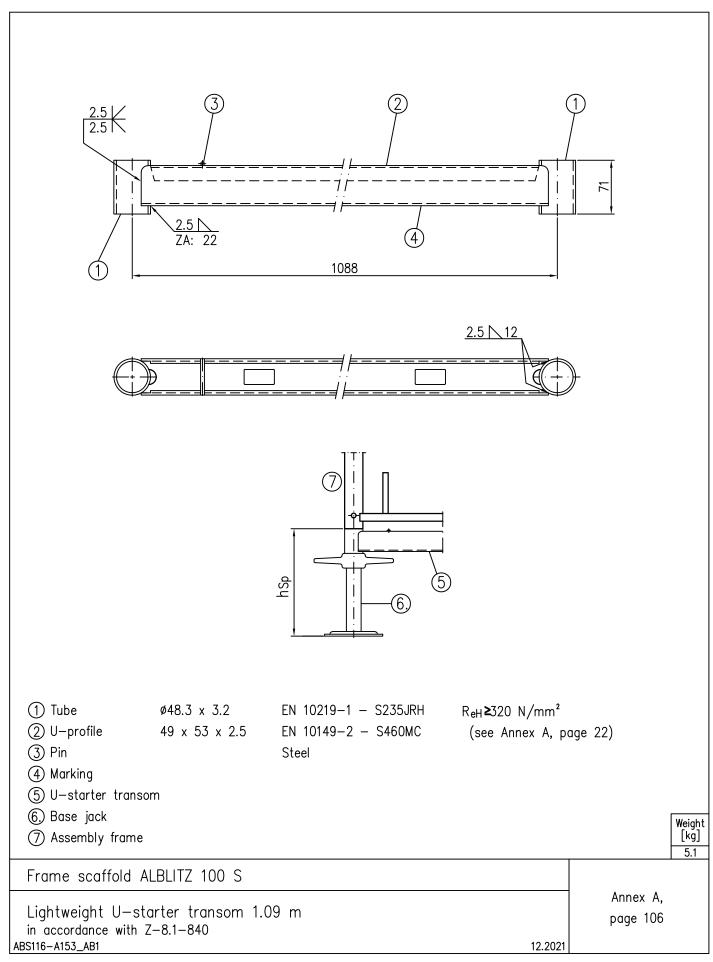


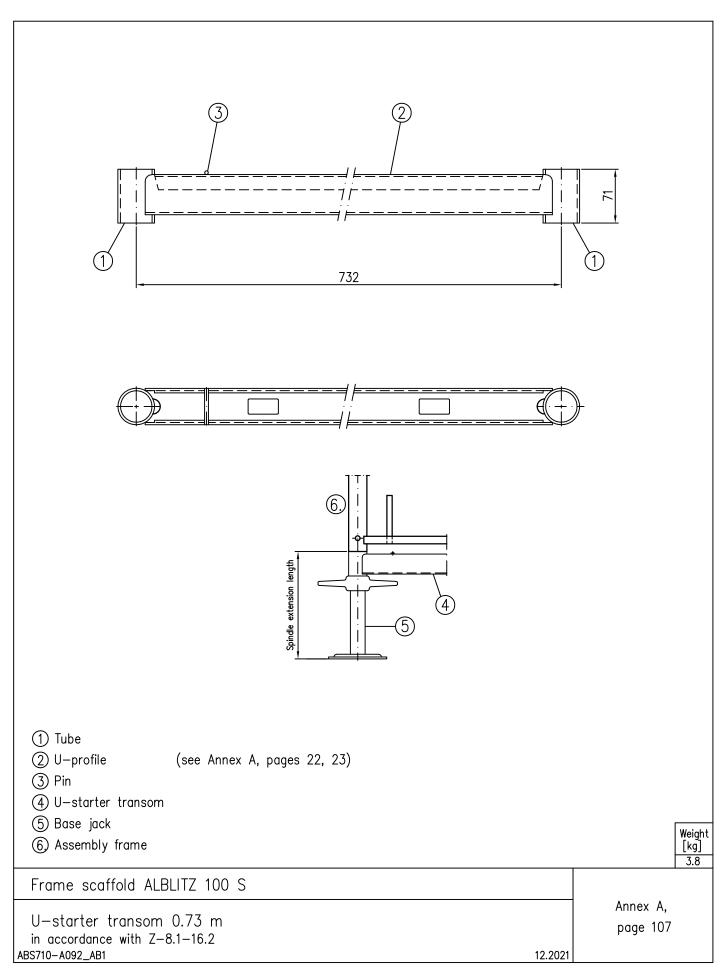


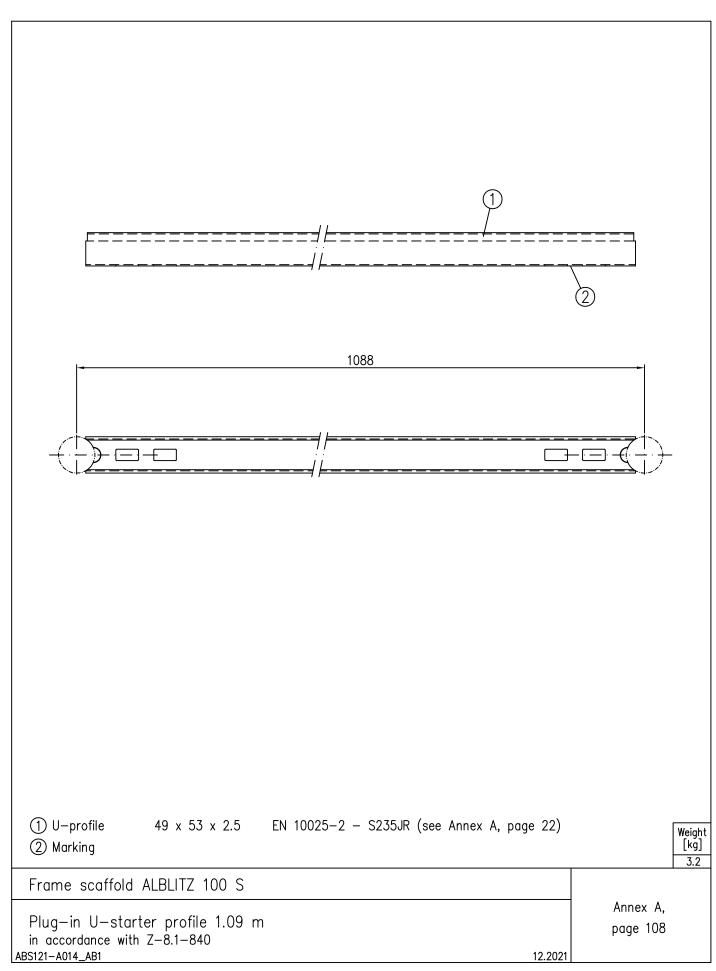


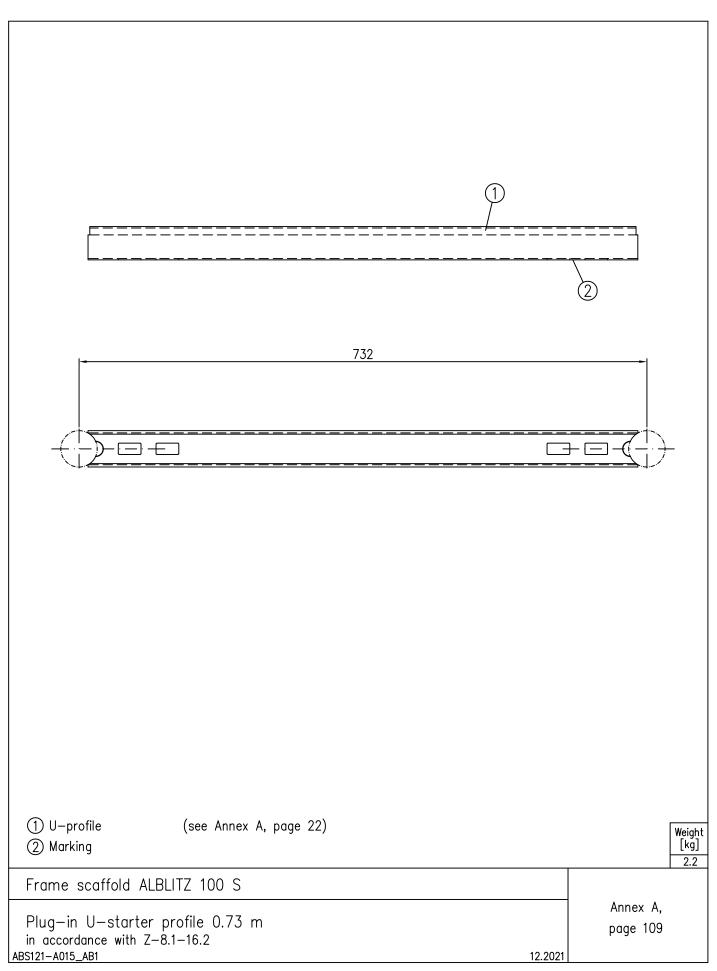


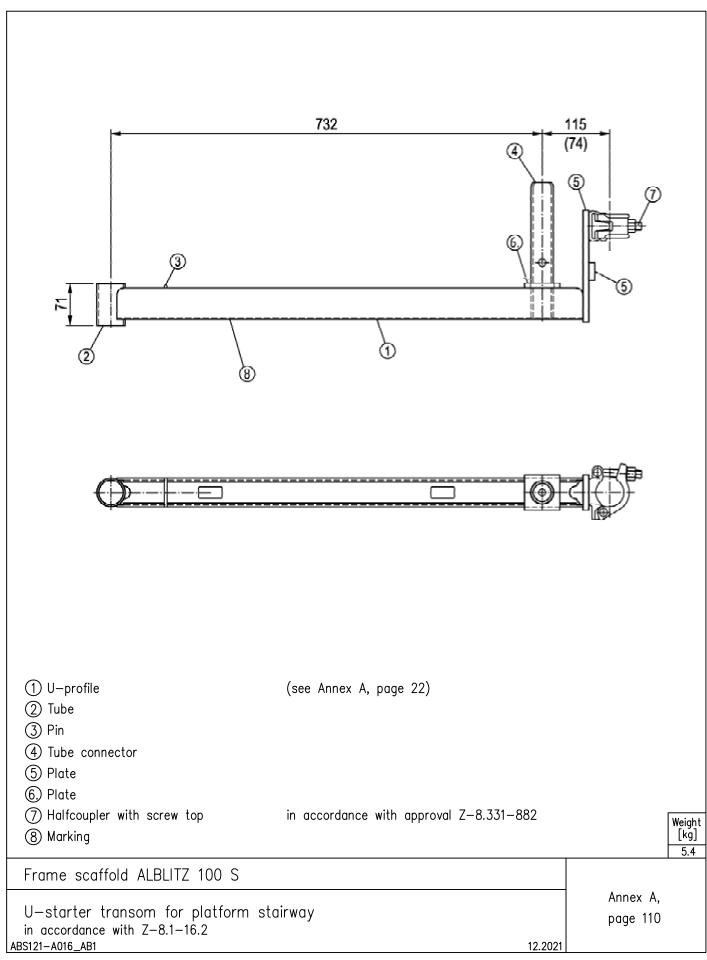


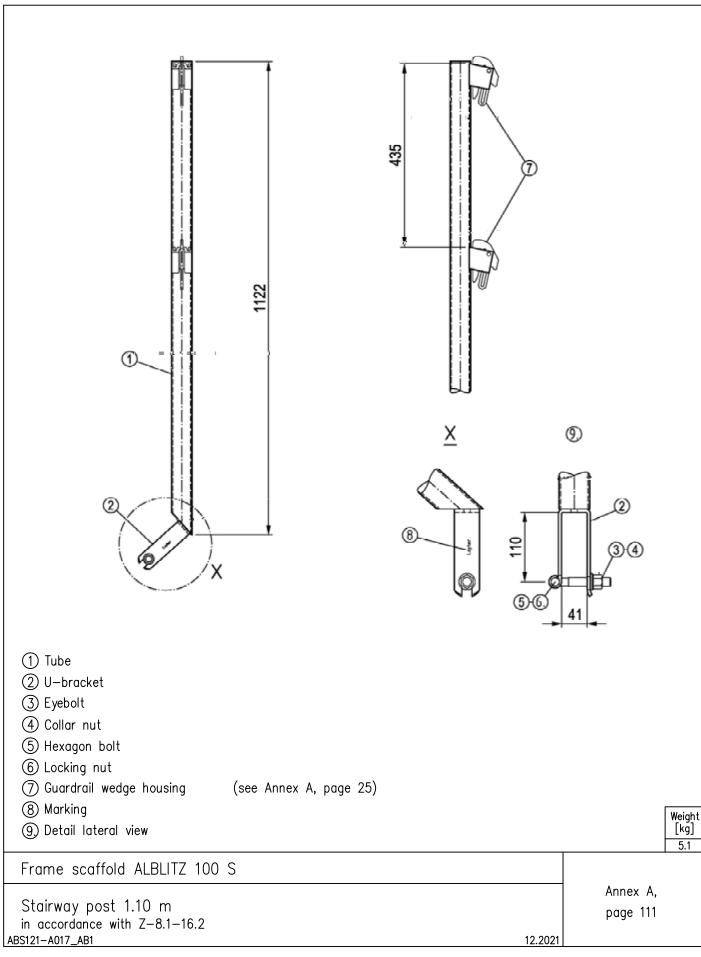


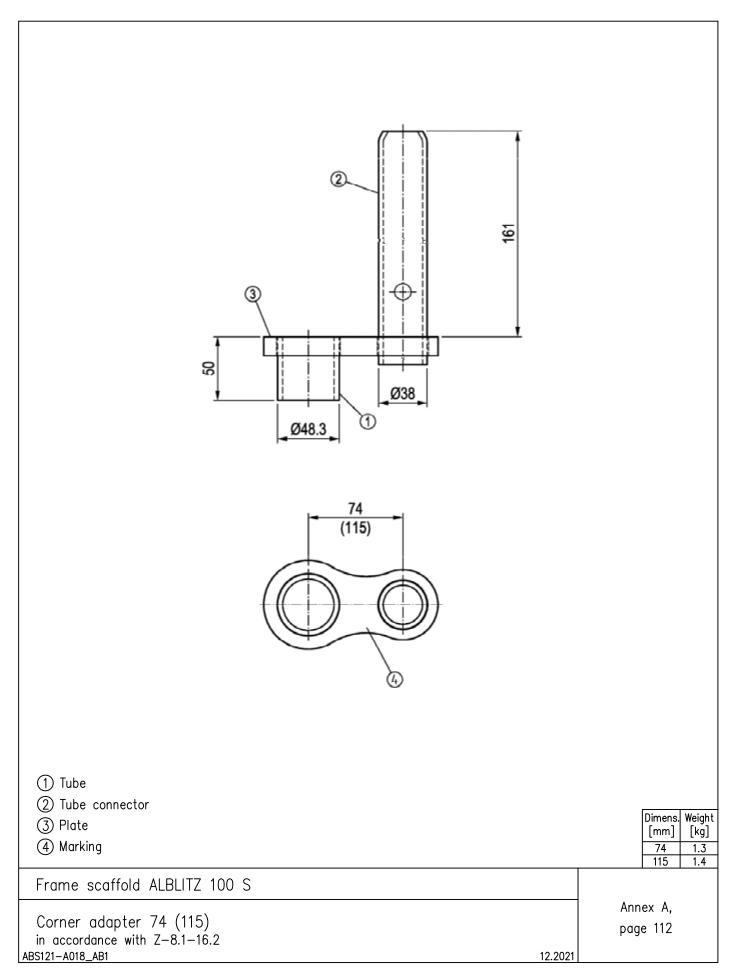


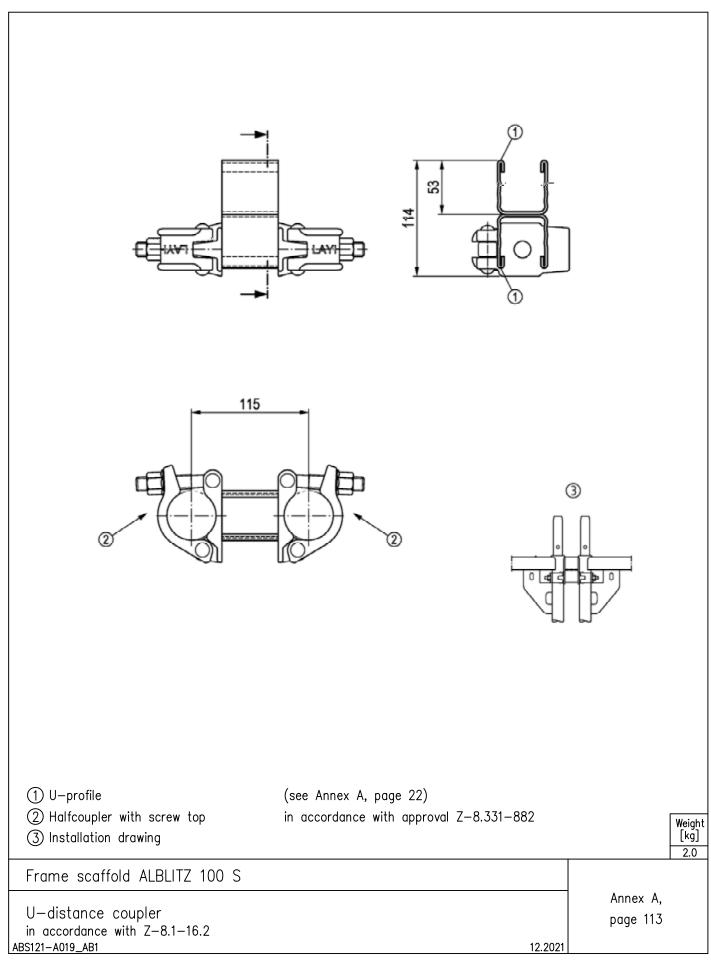


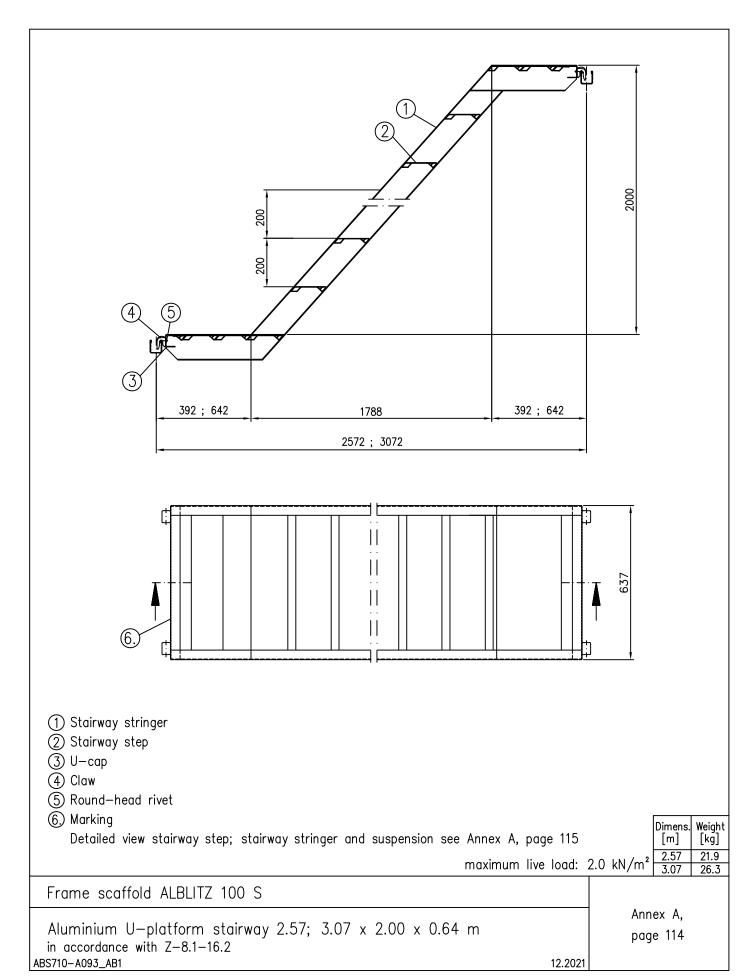


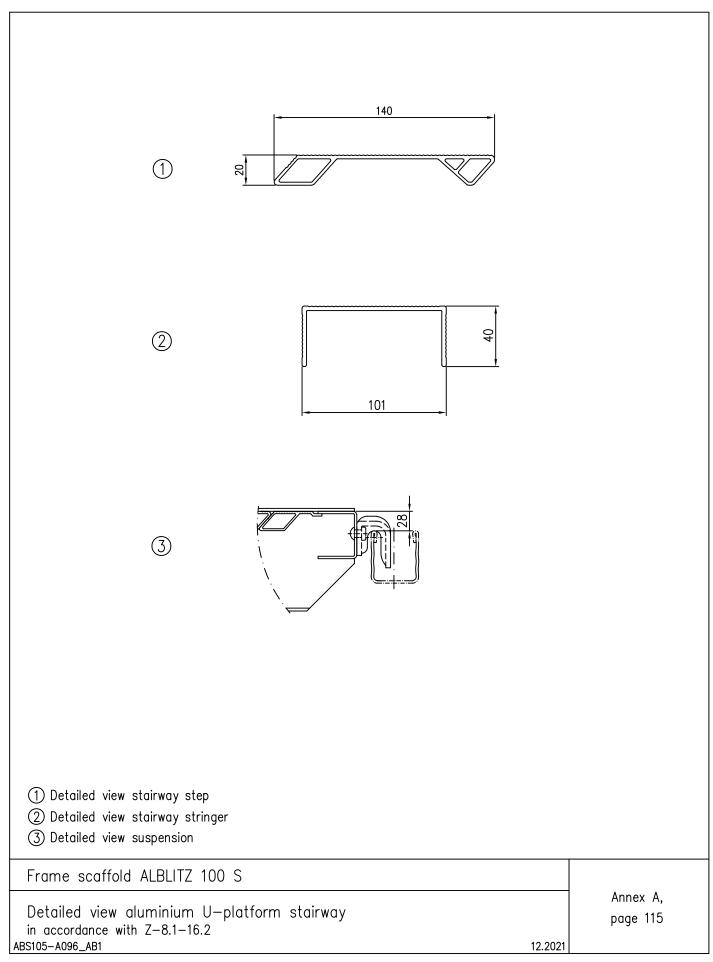


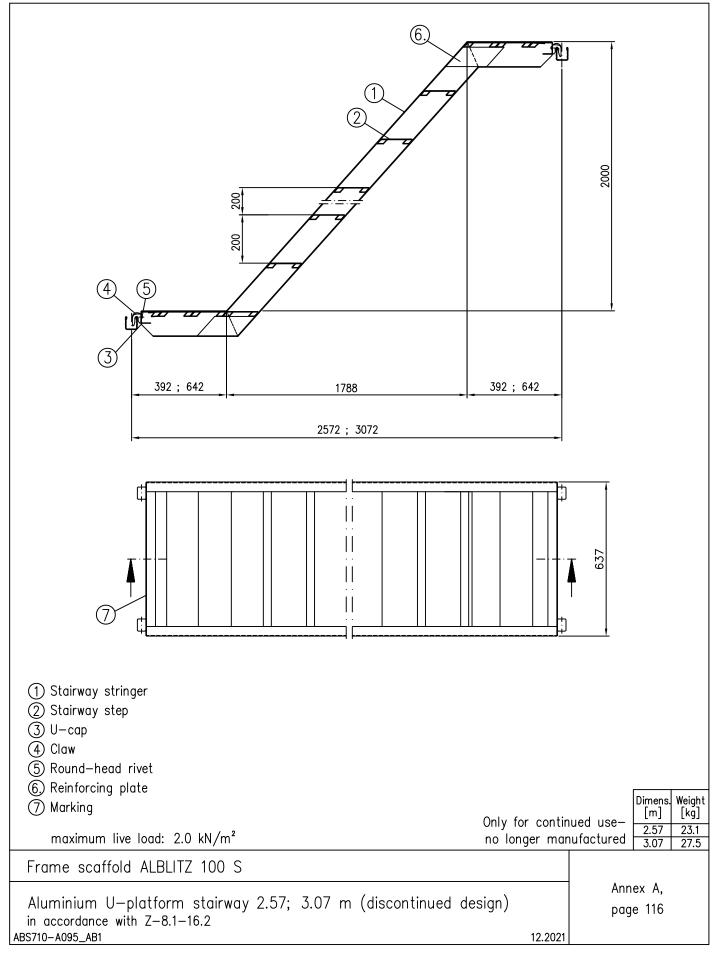


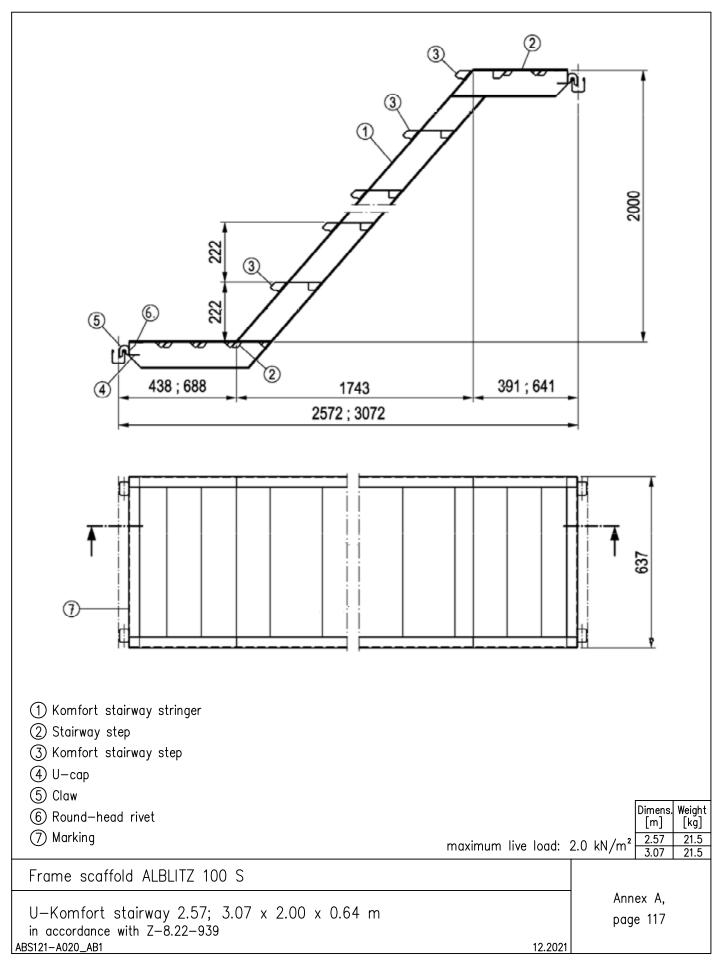


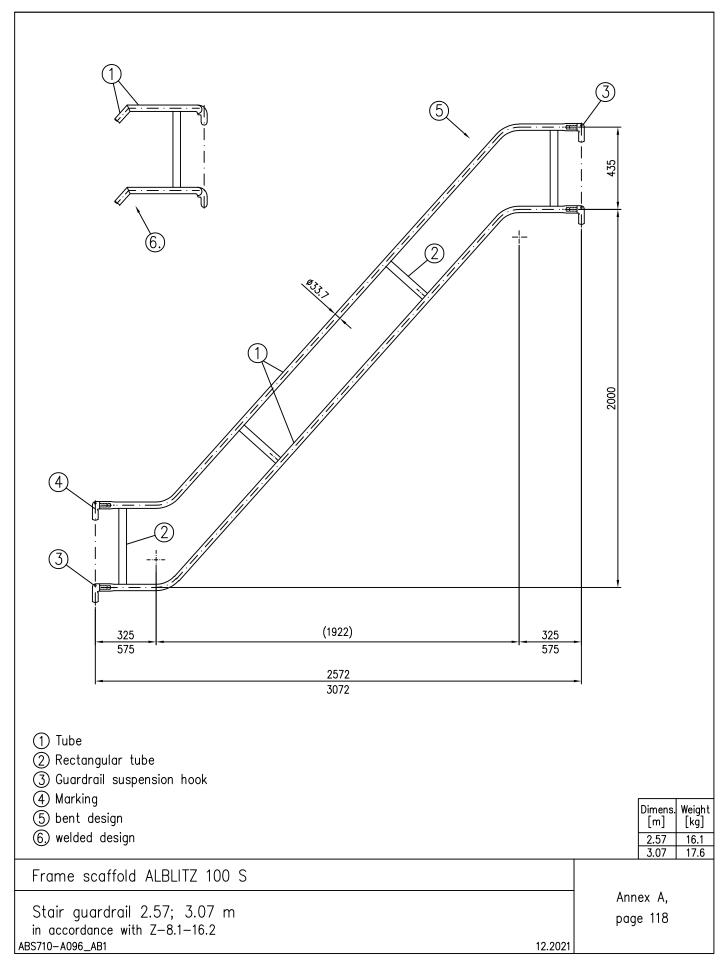


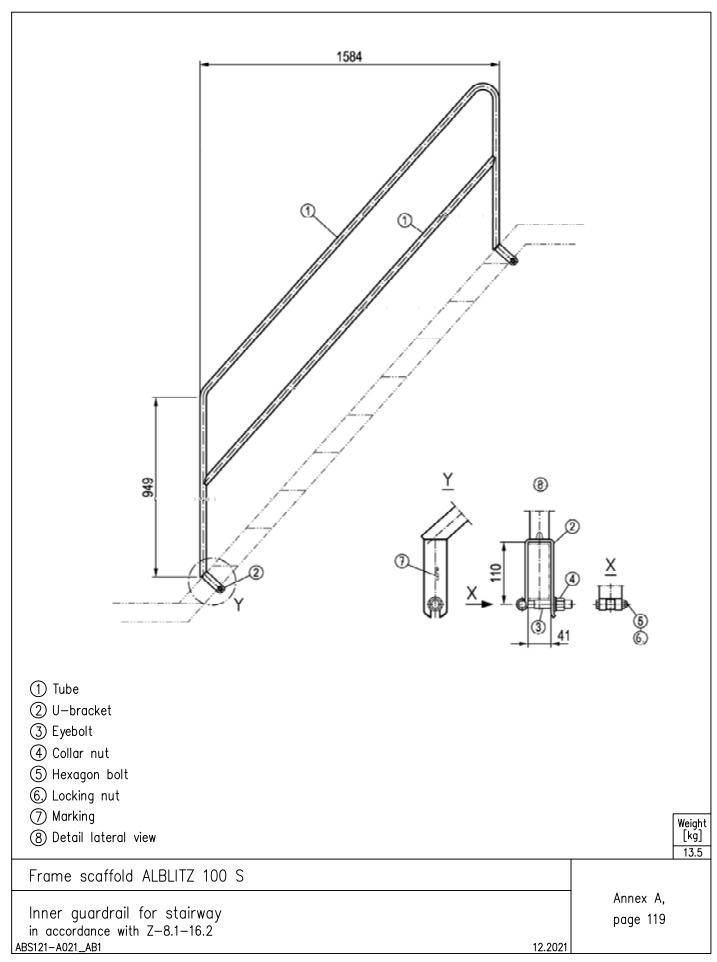


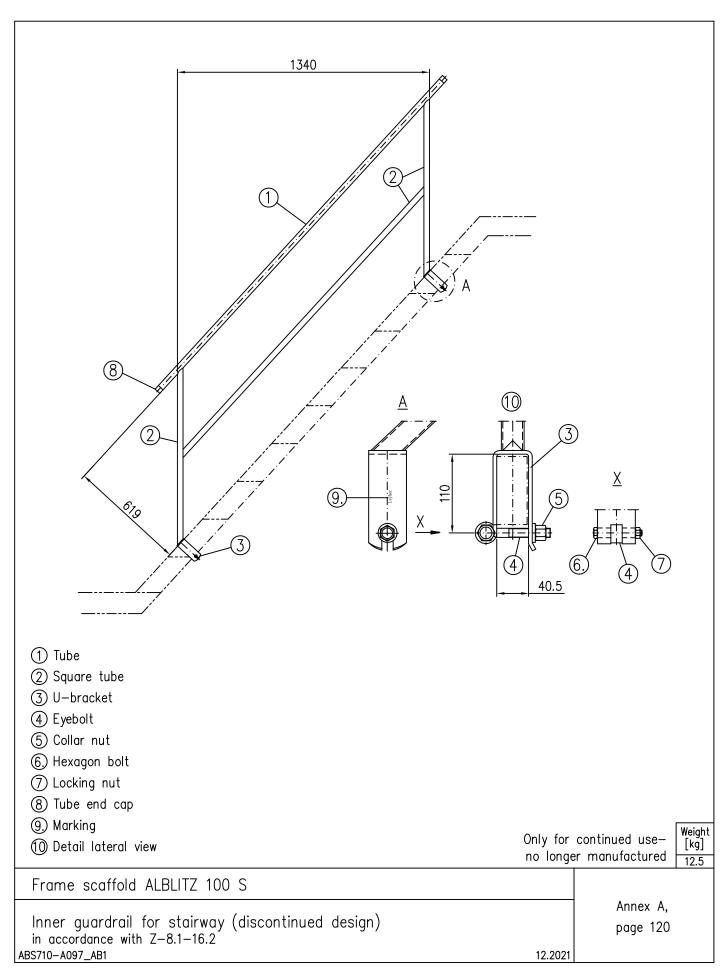


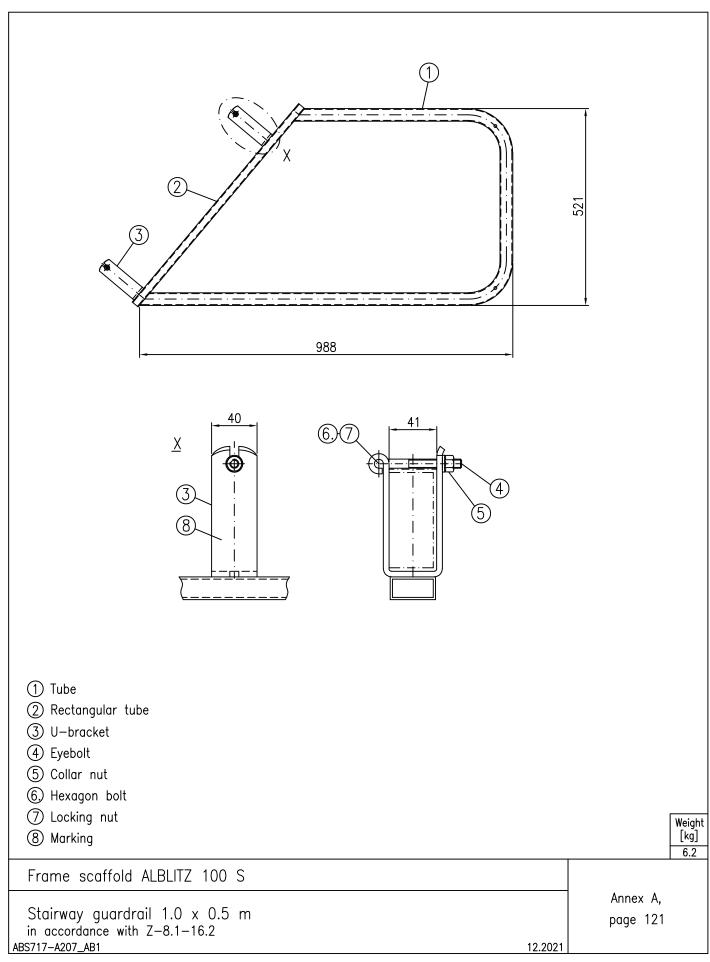


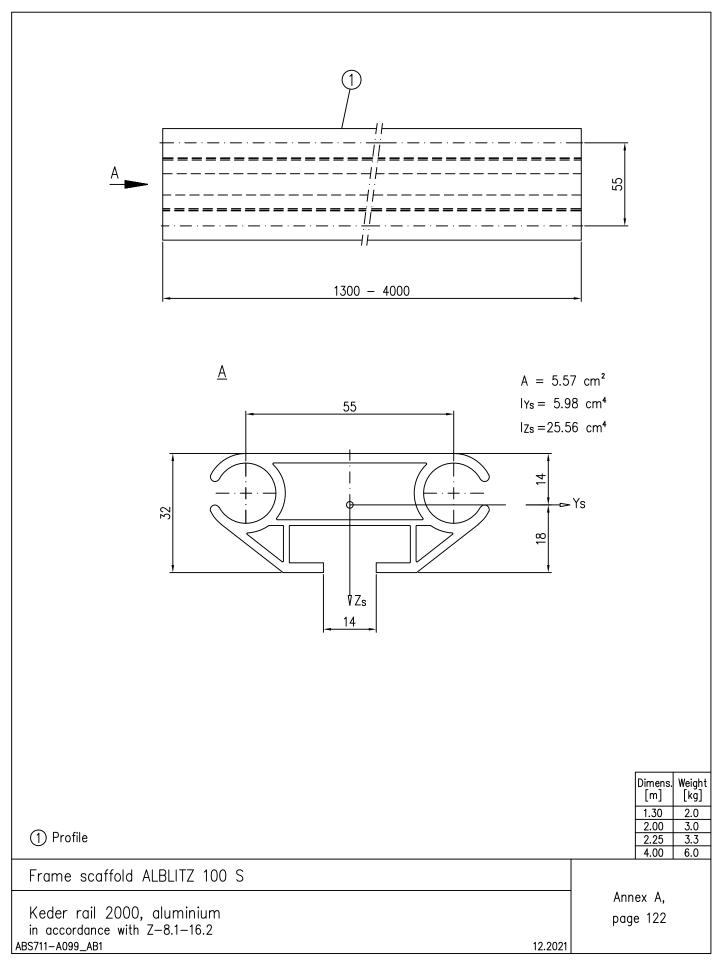


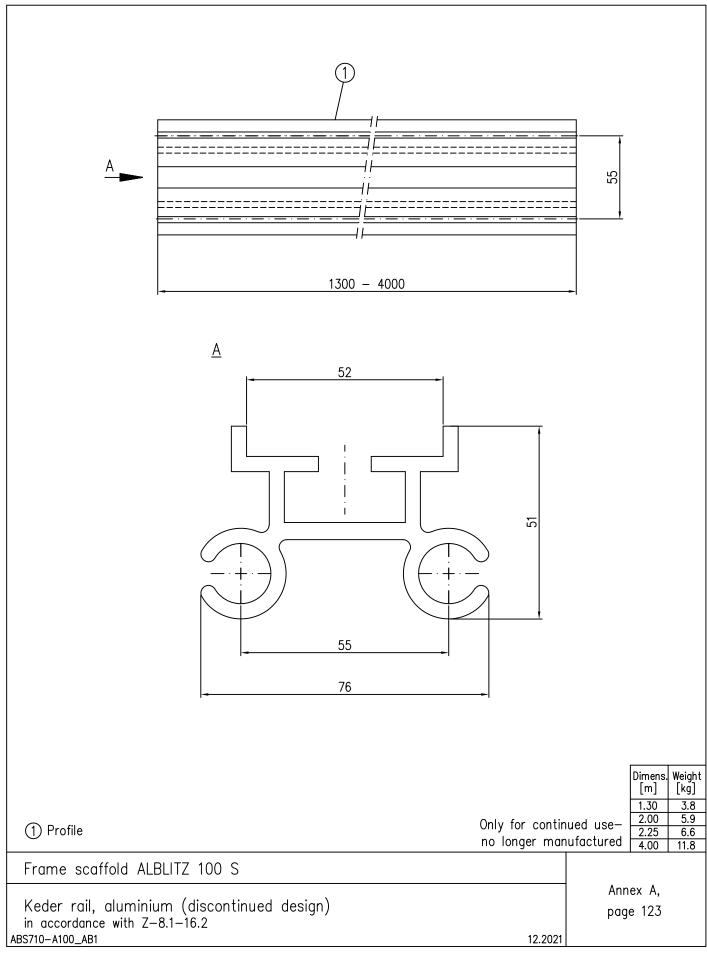


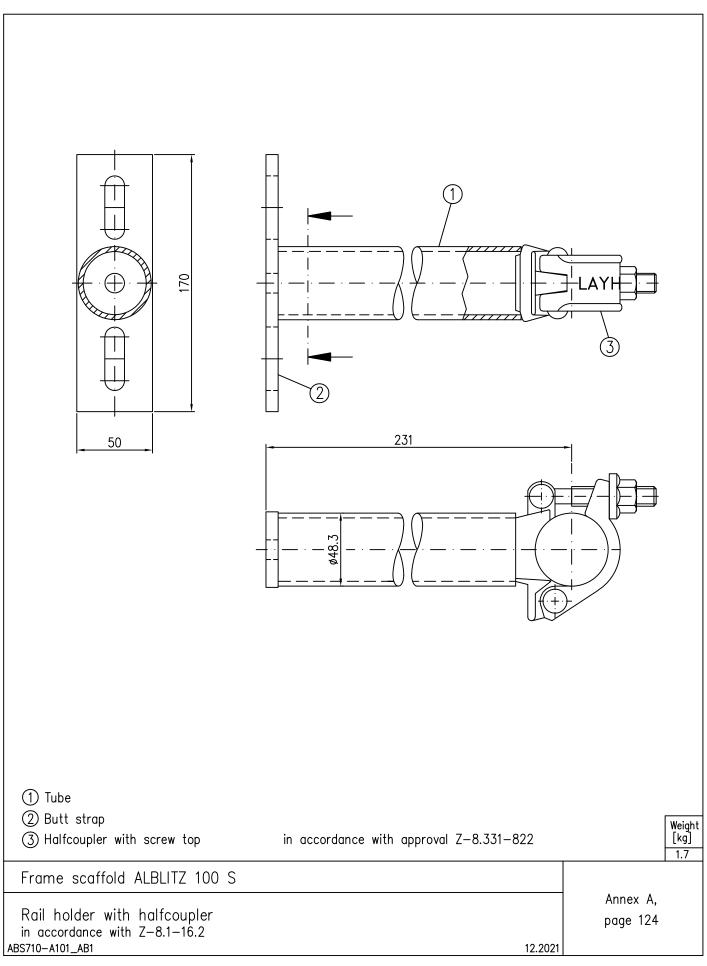


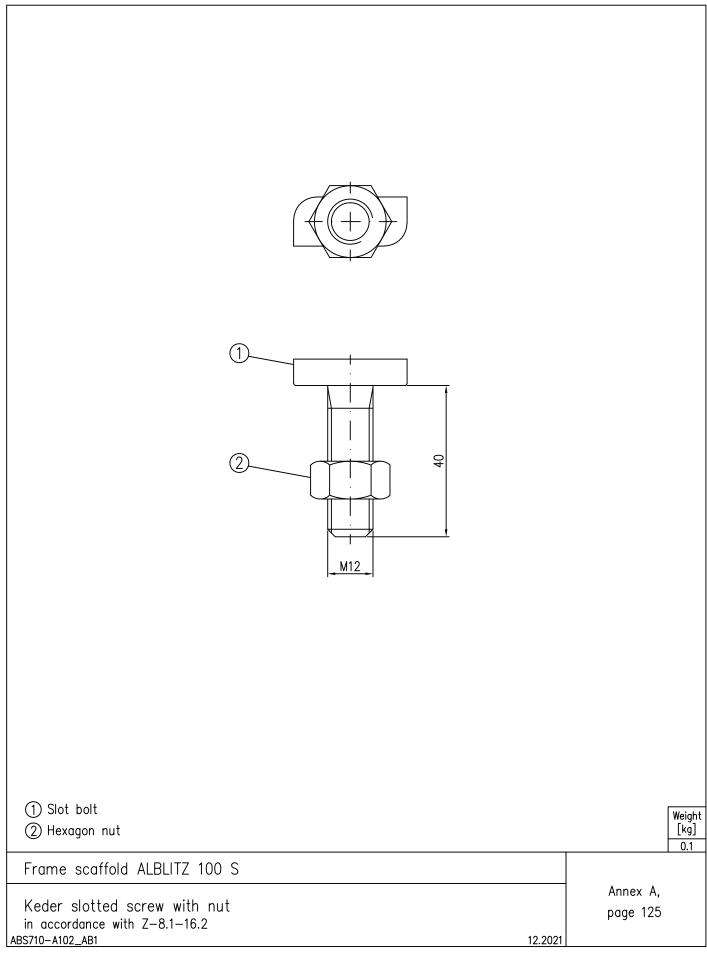


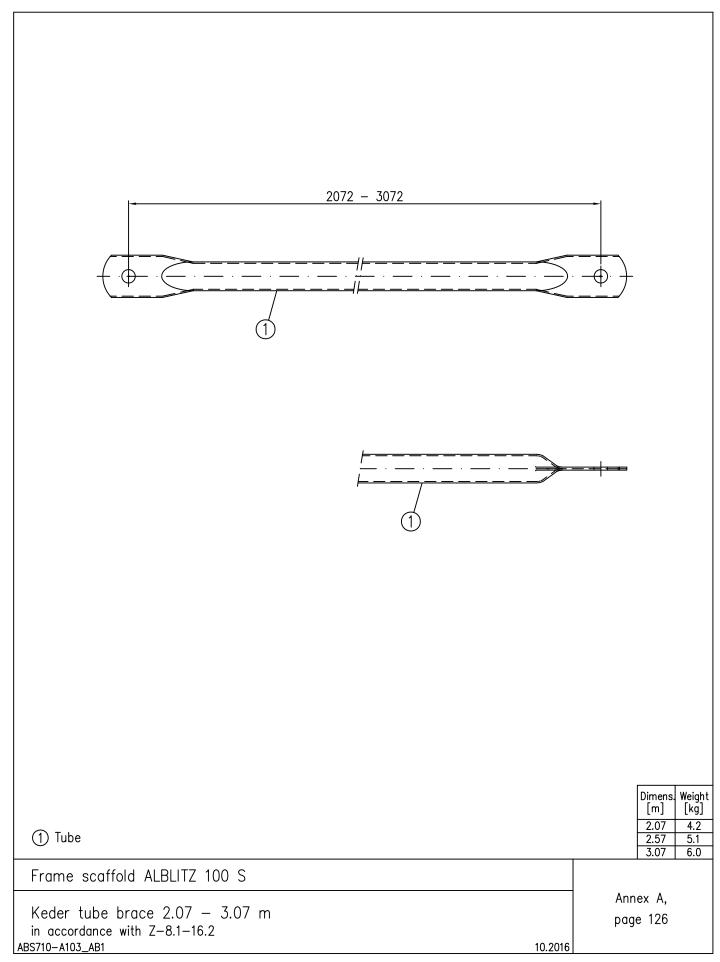


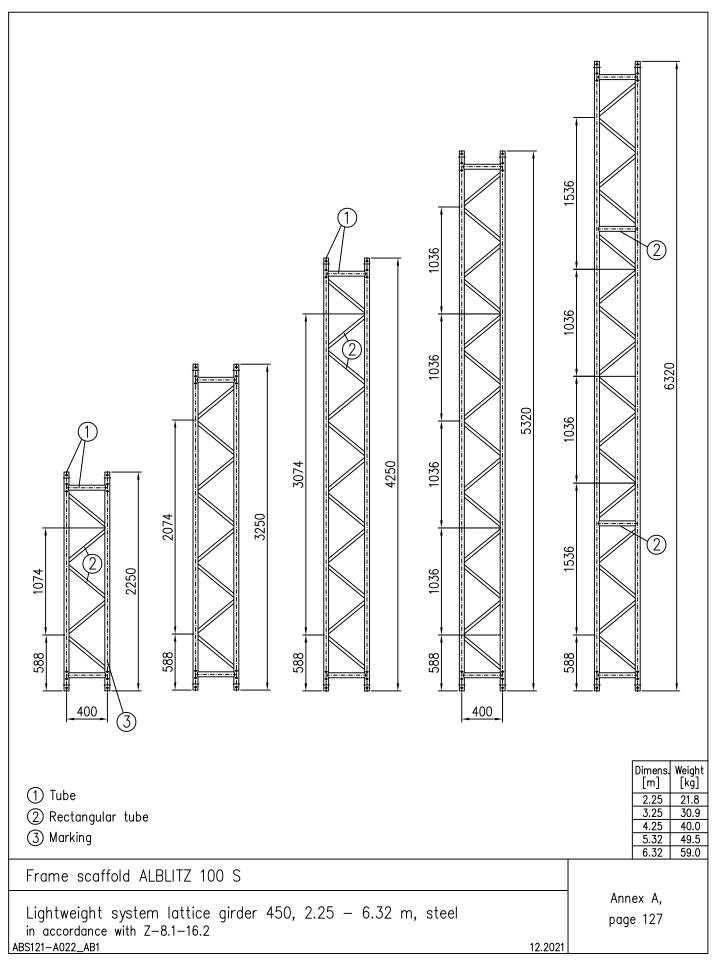


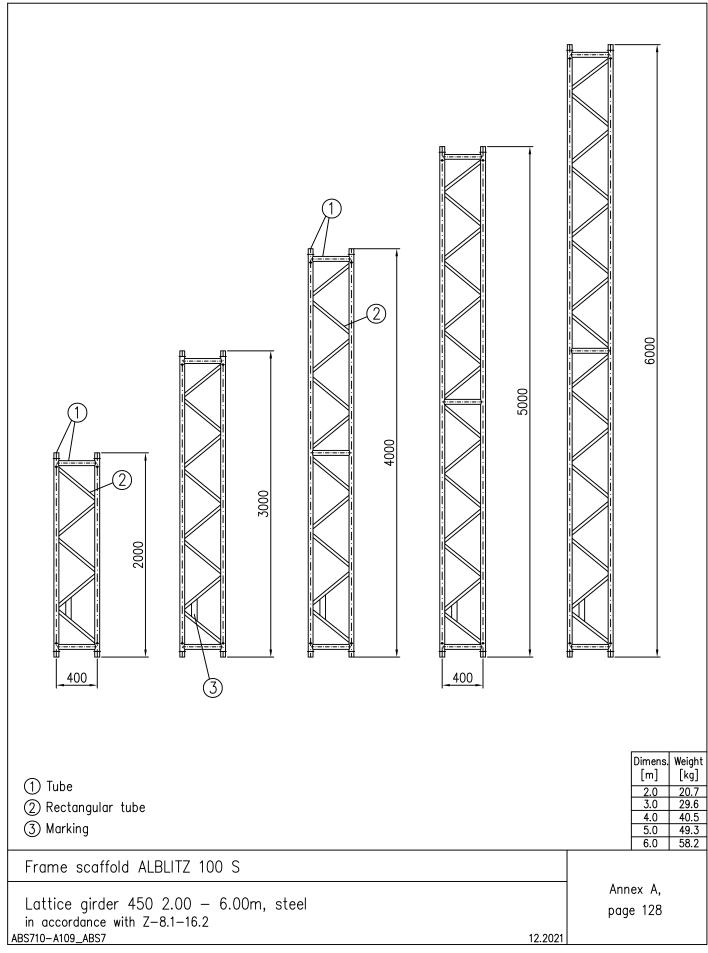


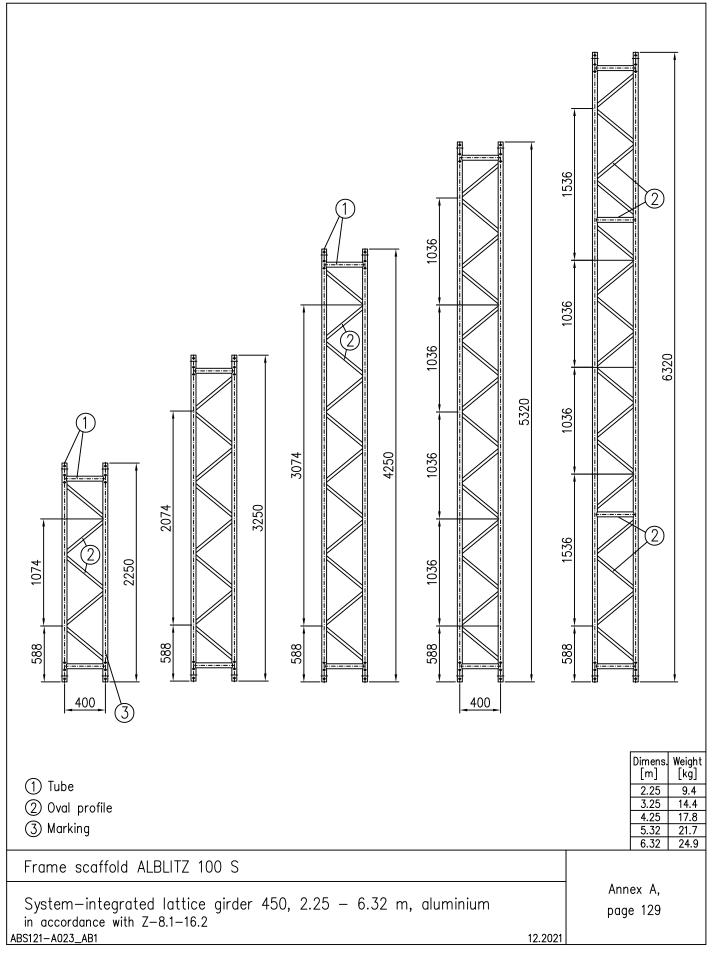


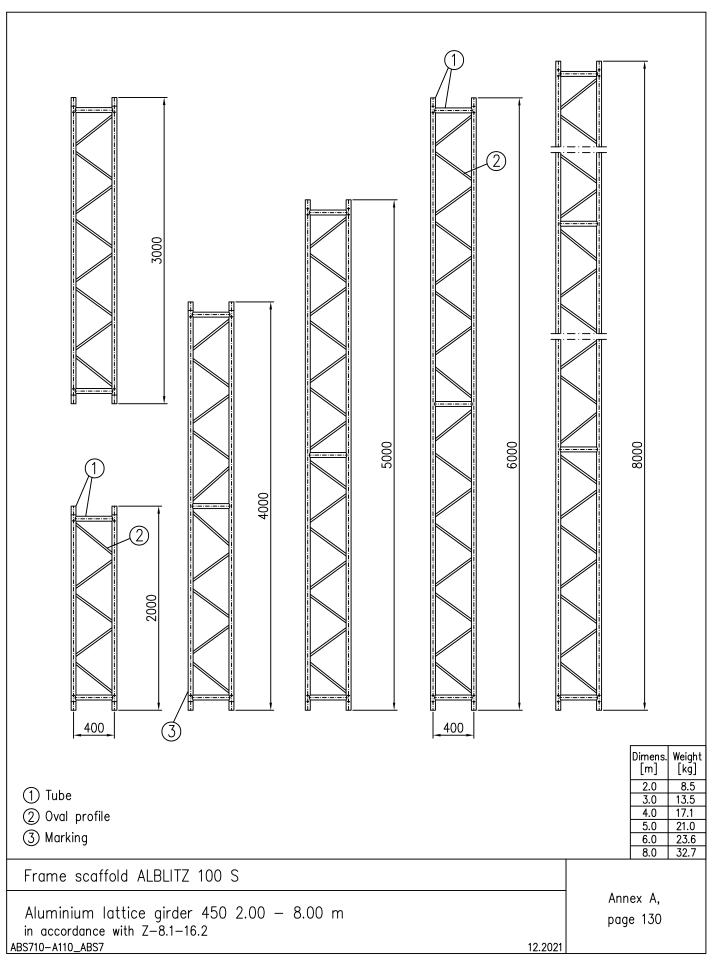


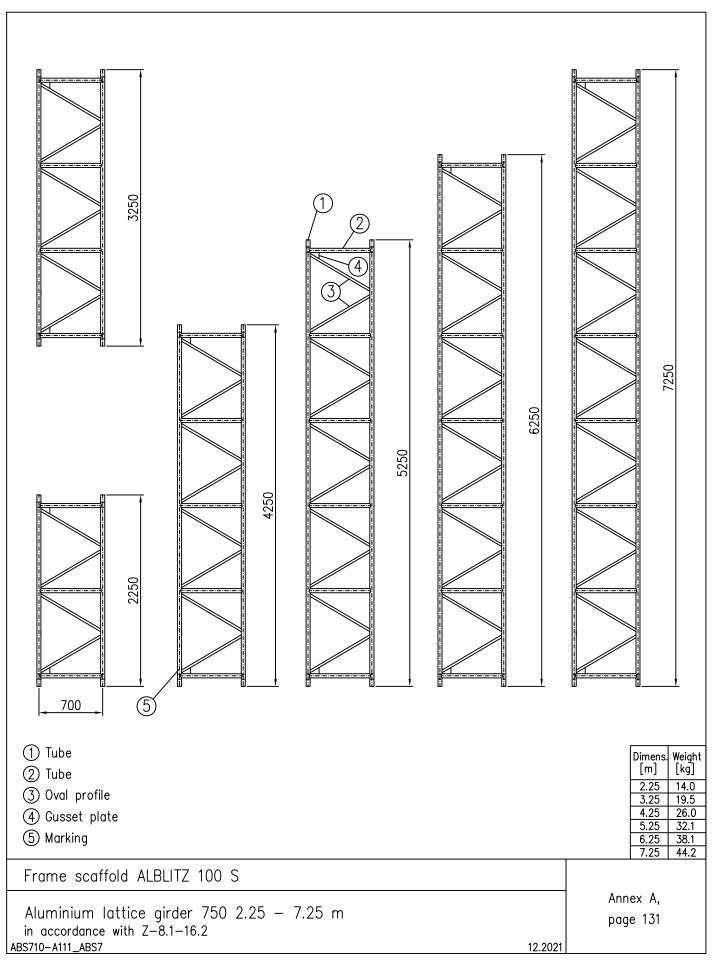


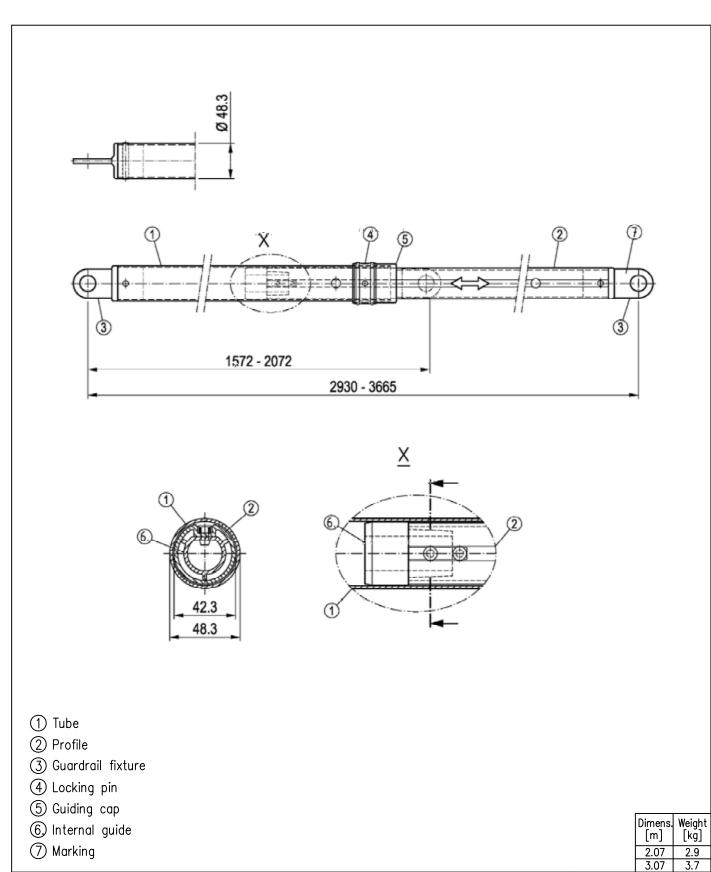




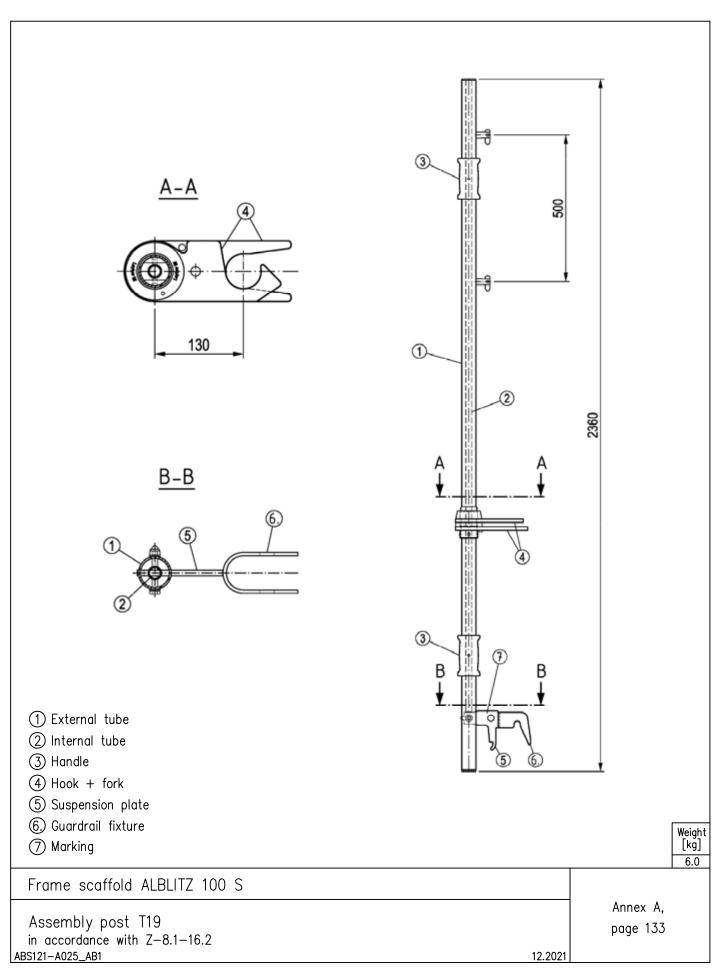


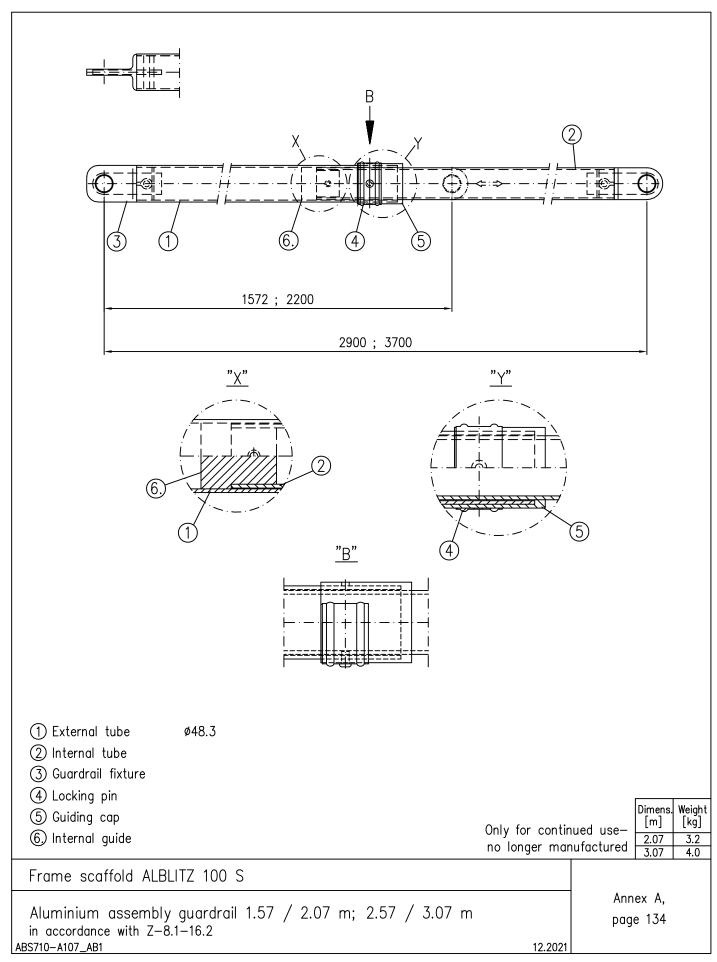


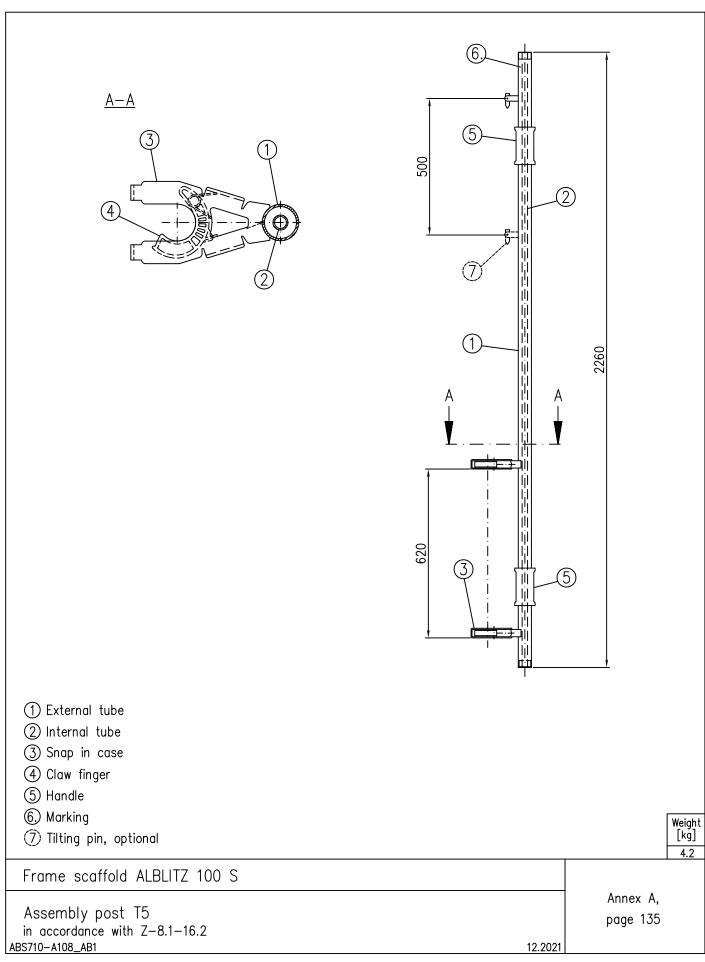


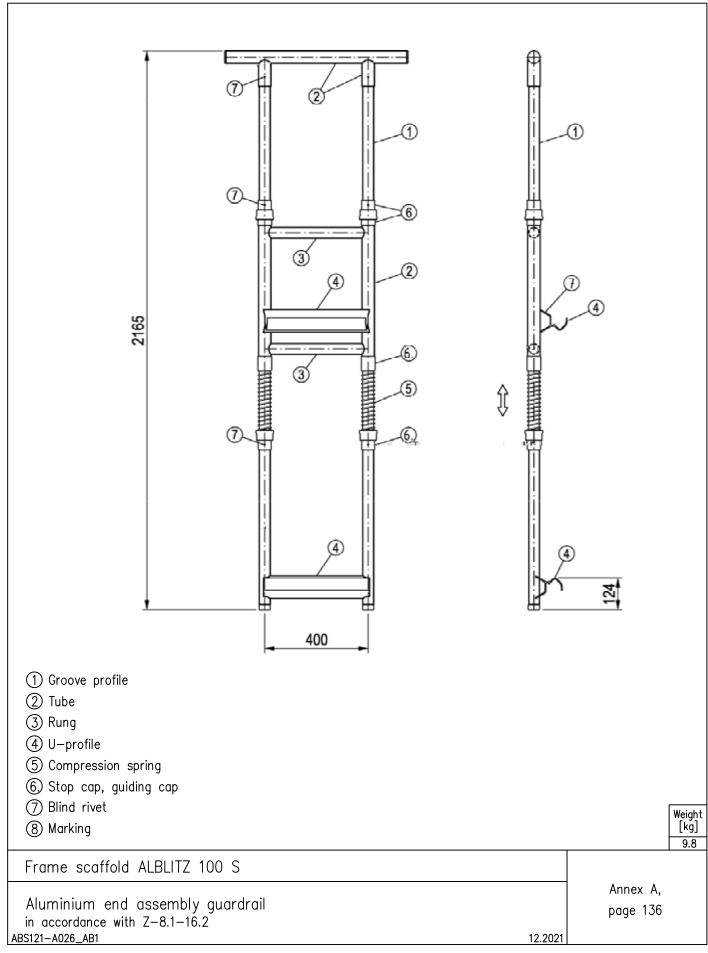


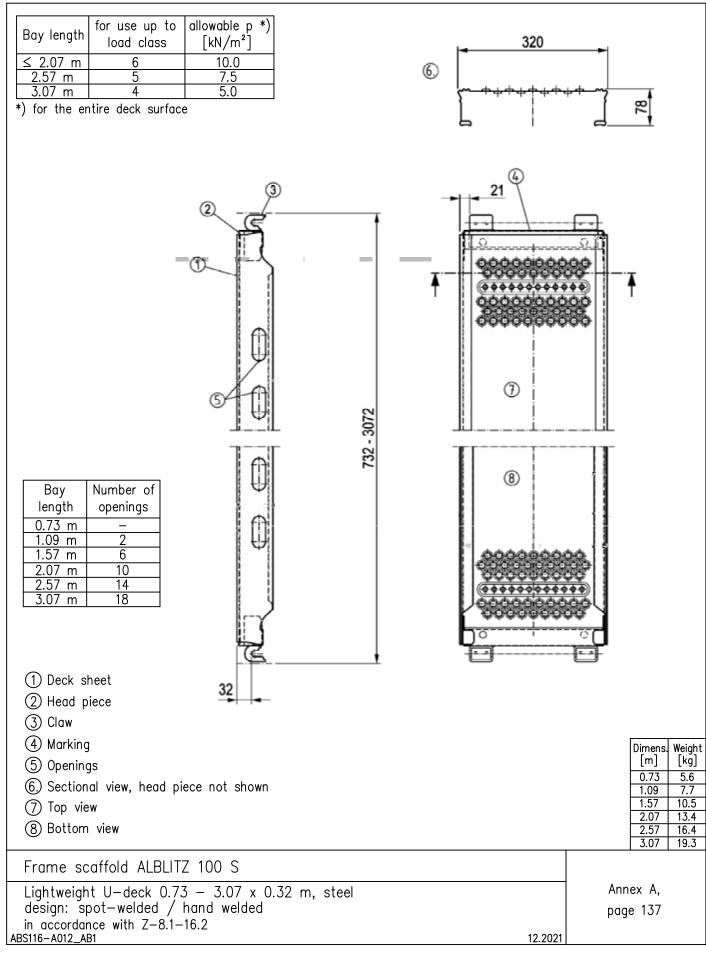
		0.07
Frame scaffold ALBLITZ 100 S		
Aluminium assembly guardrail T19 1.57 $/$ 2.07 m, 2.07 $/$ 3.07 m in accordance with Z-8.1-16.2		Annex A, page 132
ABS121-A024_AB1	12.2021	





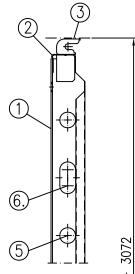




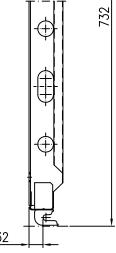


Bay length	for use up to load class	allowable p *) [kN/m²]
≤ 2.07 m	6	10.0
2.57 m	5	7.5
3.07 m	4	5.0

*) for the entire deck surface



Bay	Number of	Number of
length	opening 1	opening 2
0.73 m	2	_
1.09 m	2	2
1.57 m	4	2
2.07 m	6	4
2.57 m	8	6
3.07 m	10	8



- 320

- 1 Deck sheet
- 2 Head piece
- 3 Claw
- 4 Marking
- (5) Opening 1
- 6.) Opening 2
- 7 Sectional view, head piece not shown
- (8) Top view
- (9) Bottom view

Dimer [m]	ns. Weight [kg]
0.73	6.0
1.09	8.3
1.57	11.6
2.07	14.9
2.57	18.2
3.07	21.5

Frame	scaffold	ALBLITZ	100	S

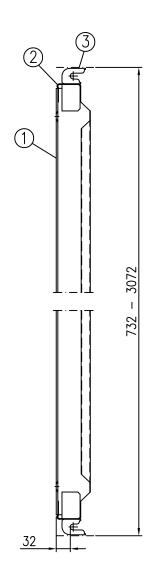
U-deck T4 0.73 - 3.07 x 0.32 m, steel design: spot-welded / hand welded accordance with Z-8.1-16.2

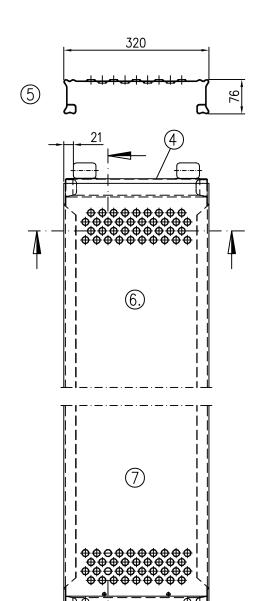
ABS710-A113_AB1

Annex A, page 138

Bay length	for use up to load class	allowable p *) [kN/m²]
≤ 2.07 m	6	10.0
2.57 m	5	7.5
3.07 m	4	5.0

*) for the entire deck surface





- 1) Deck sheet
- 2 Head piece
- 3 Claw
- 4 Marking
- (5) Sectional view, head piece not shown
- (6.) Top view
- (7) Bottom view

	Dimens [m]	. Weight [kg]
0.73 6.1		6.1
1.09 8.6	1.09	8.6
1.57 11.9	1.57	11.9
2.07 15.4	2.07	15.4
2.57 18.7	2.57	18.7
3.07 22.2	3.07	22.2

Frame	scaffold	ALBLITZ	100	S

U-deck $0.73-3.07 \times 0.32$ m, steel design: spot-welded / hand welded

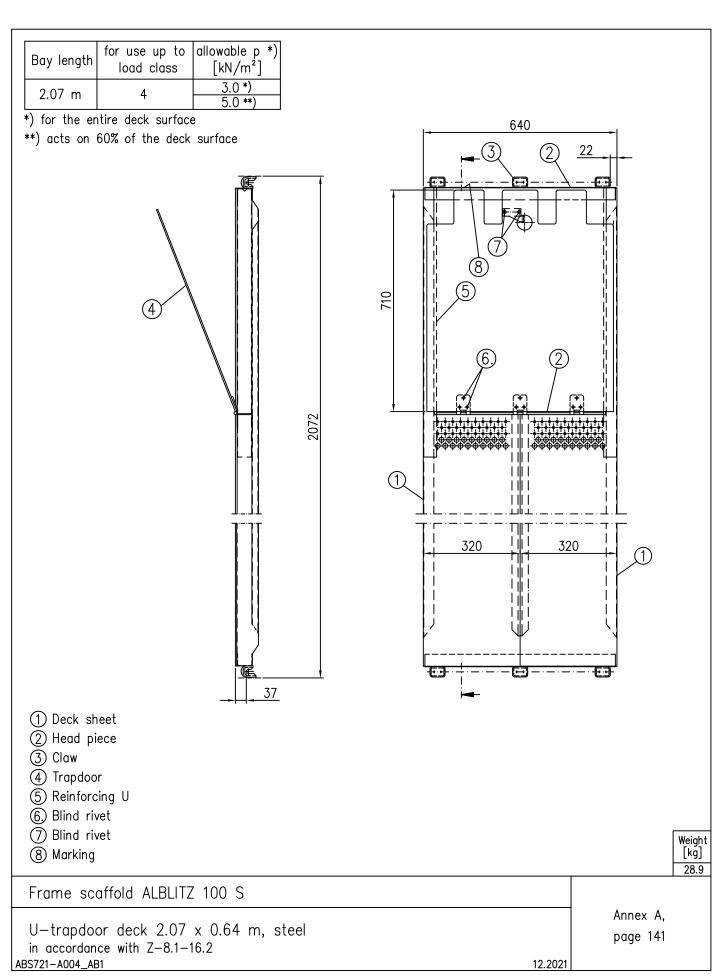
in accordance with Z-8.1-16.2ABS710-A116_AB1

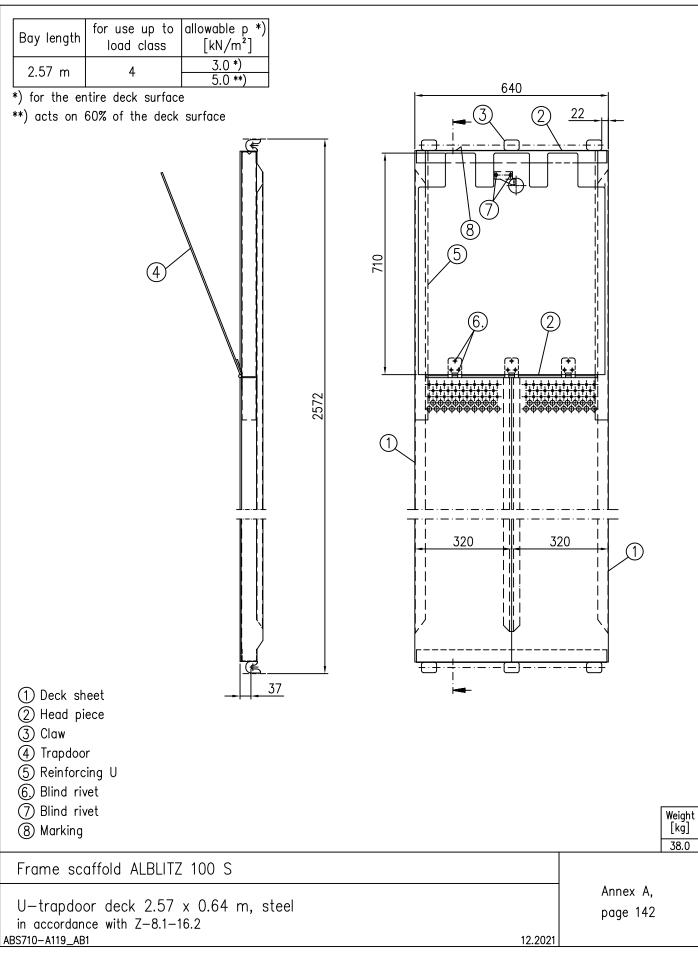
page 139

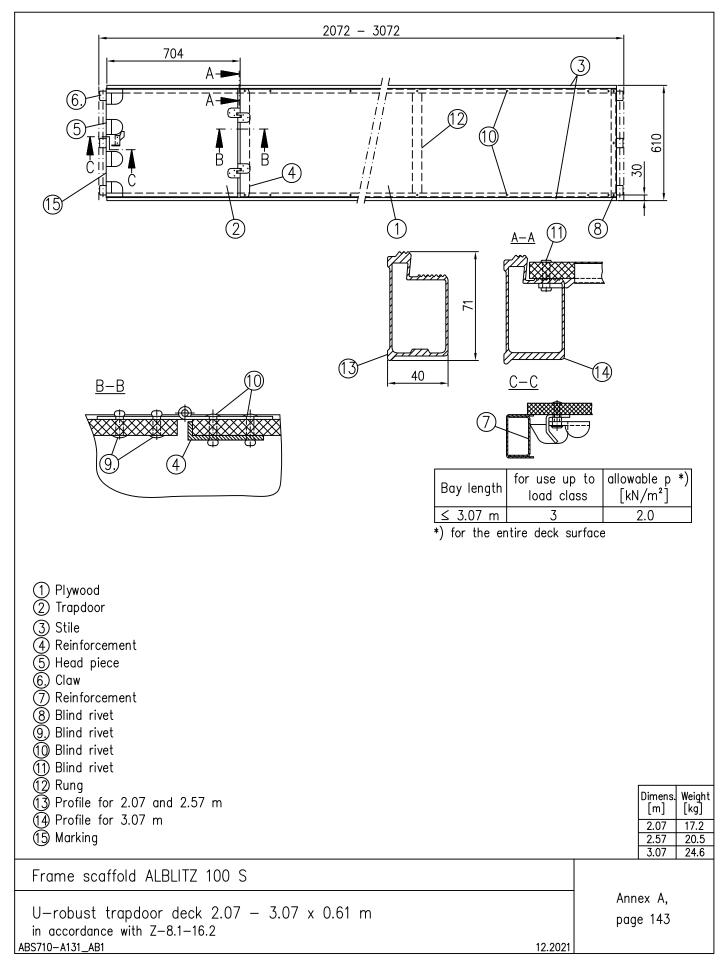
Annex A,

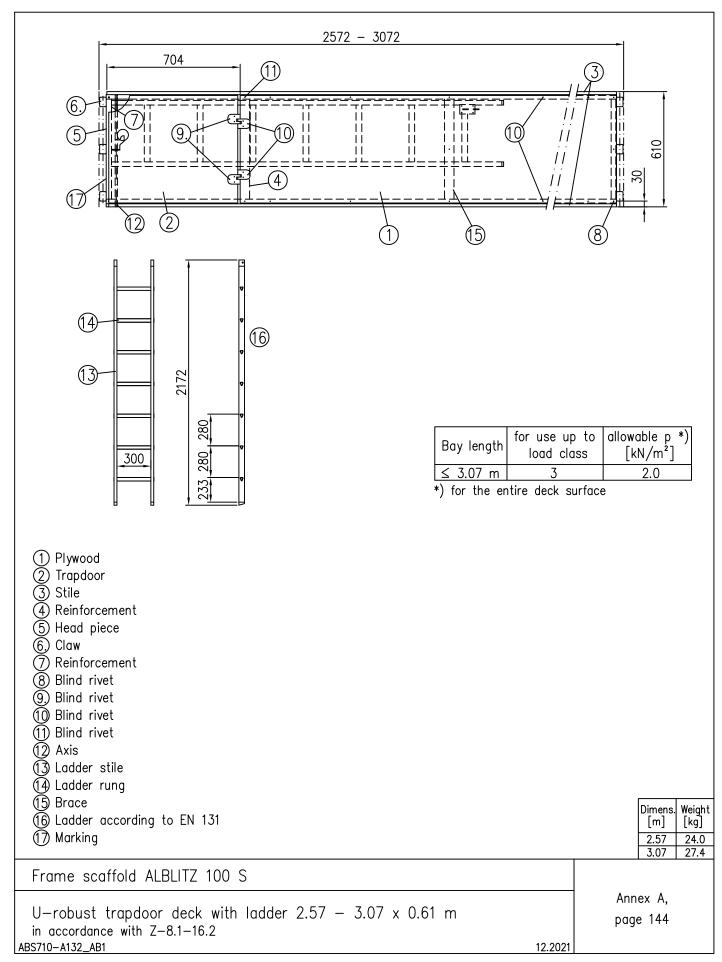
Bay length for use up to load class $[kN/m^2]$ $\leq 2.07 \text{ m} \qquad 6 \qquad 10.0$ $2.57 \text{ m} \qquad 5 \qquad 7.5$ $3.07 \text{ m} \qquad 4 \qquad 5.0$ *) for the entire deck surface	20
3 2 192 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
1 Deck sheet Steel 2 Head piece Steel 3 Claw Steel 4 Marking 5 Drawing of cross section (suspension not shown) 6 Top view 7 Bottom view	Dimens. Weight [m] [kg] 0.73 5.1 1.09 6.4 1.57 8.5 2.07 10.2 2.57 13.2 3.07 15.3
Frame scaffold ALBLITZ 100 S U-deck 0.73 - 3.07 x 0.19 m, steel in accordance with Z-8.1-16.2	Annex A, page 140

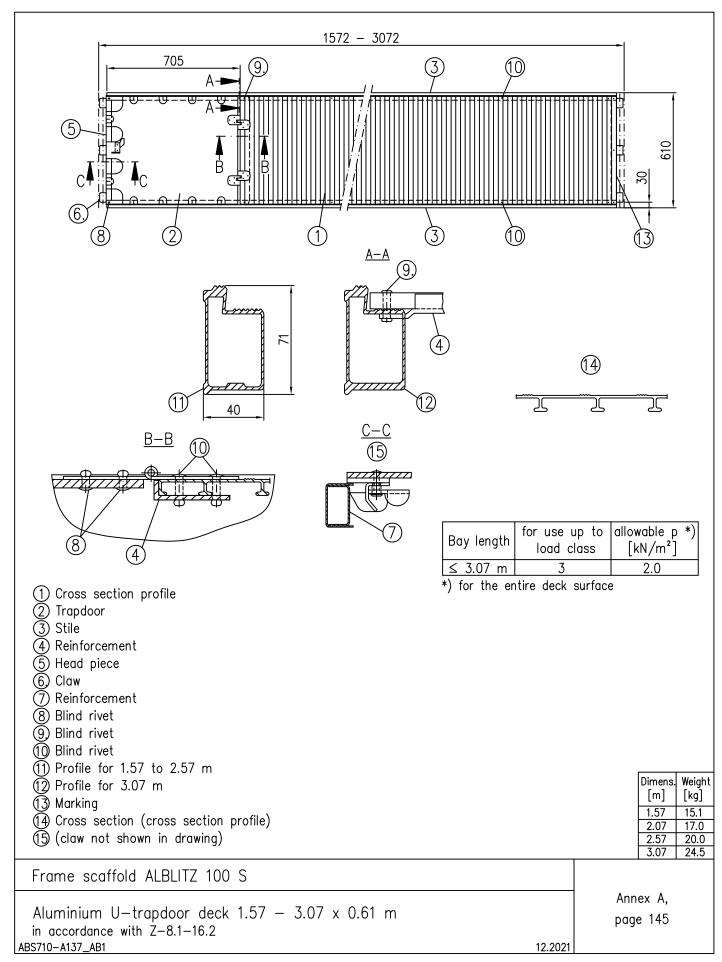
ABS710-A117_AB1

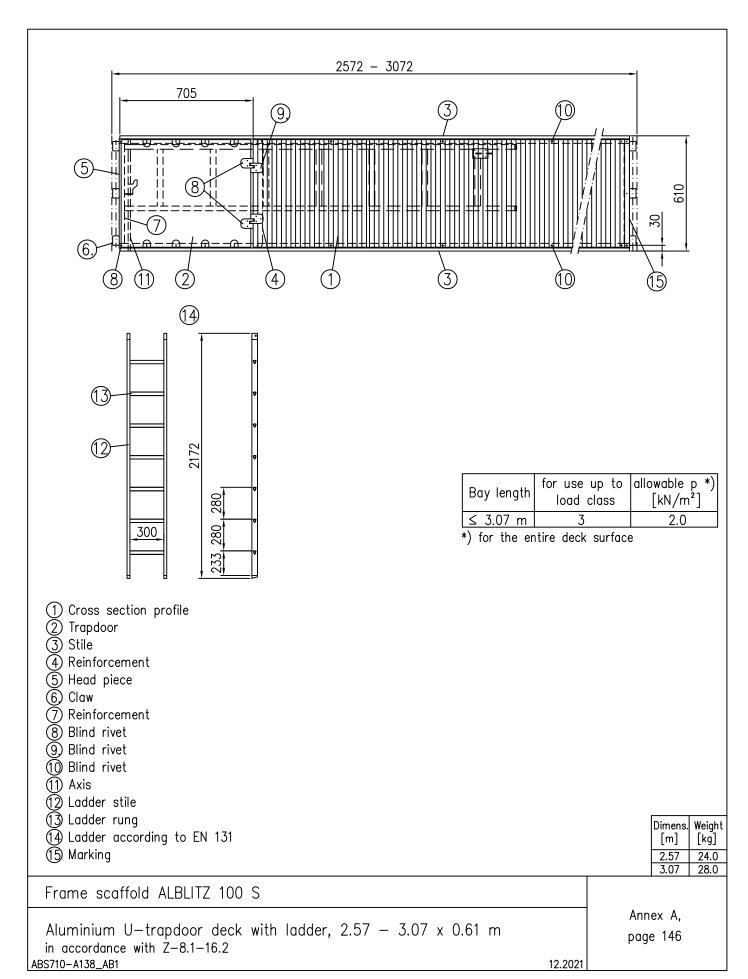


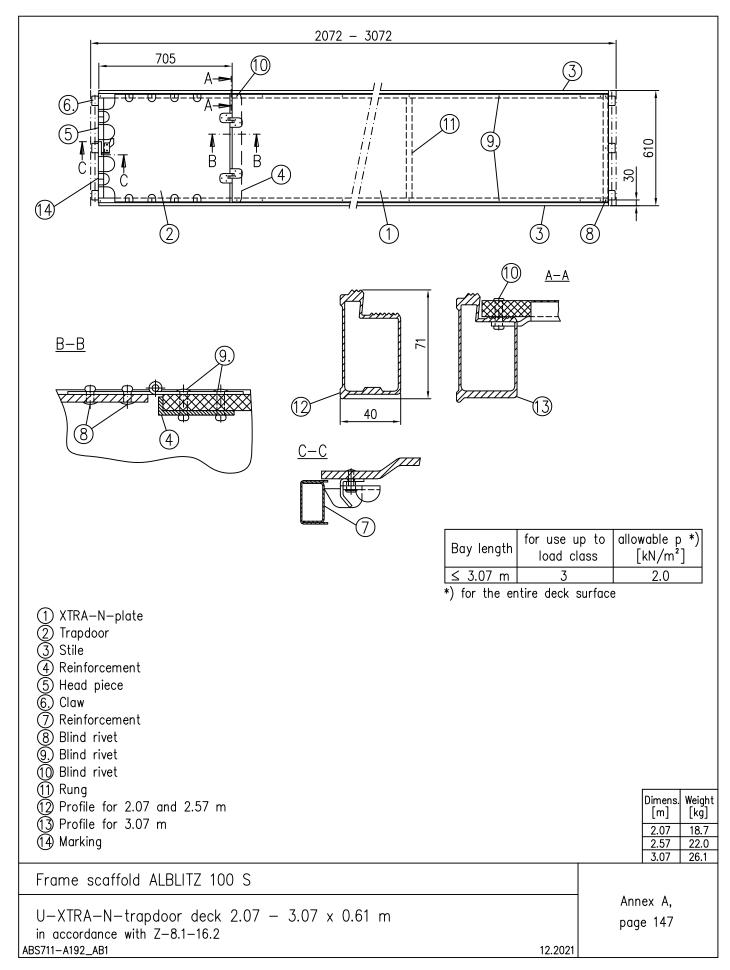


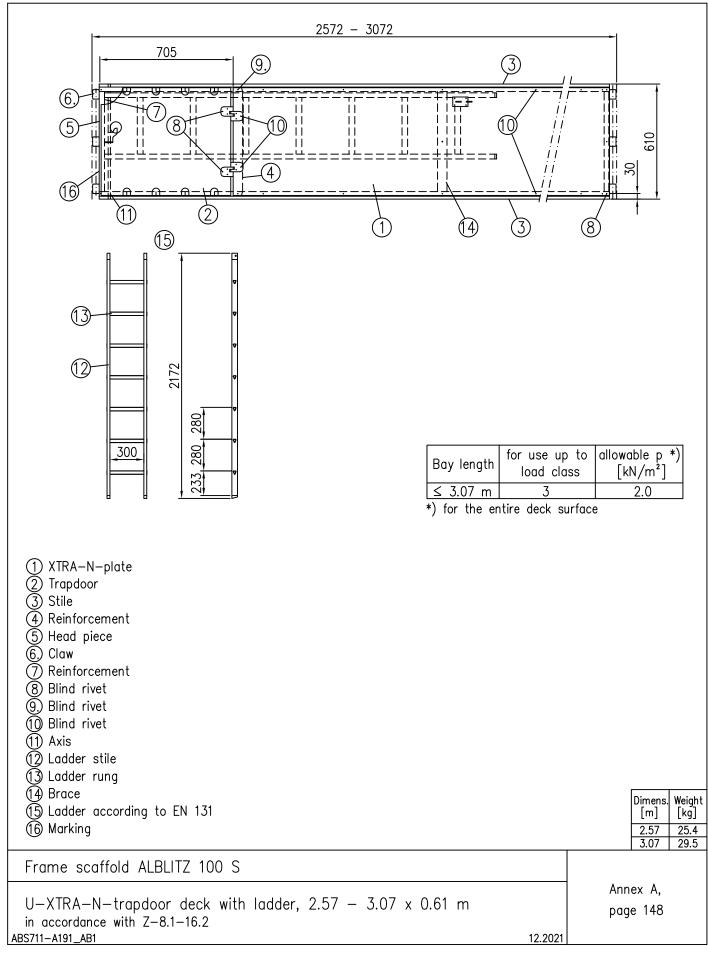


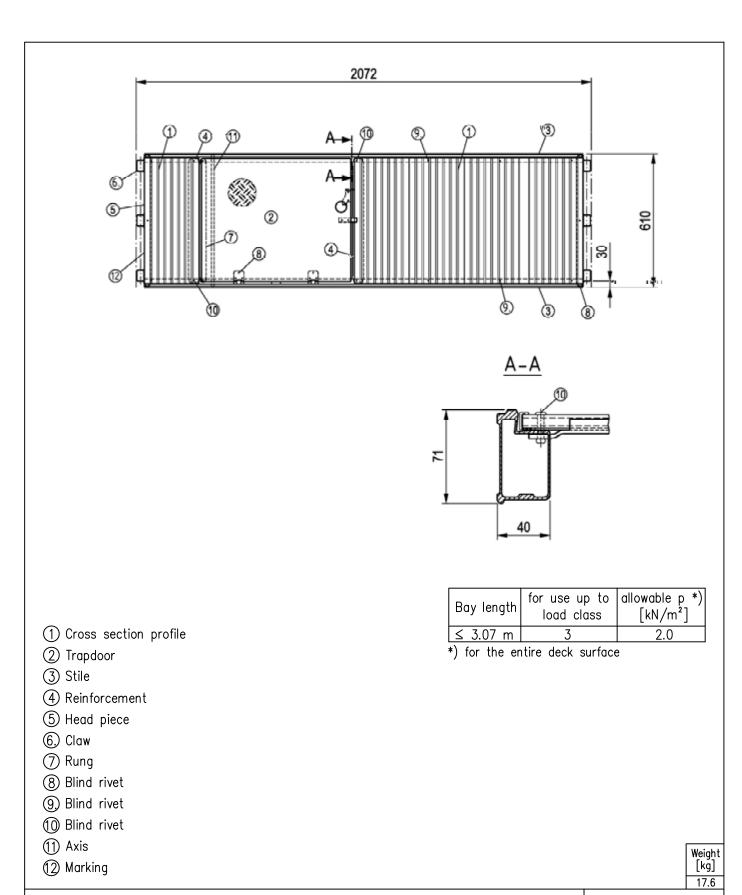




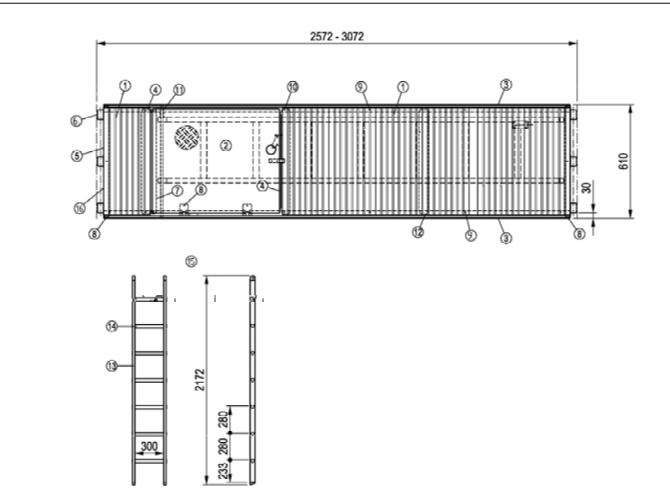








Frame scaffold ALBLITZ 100 S	
Aluminium U—trapdoor deck 2.07 x 0.61 m, trapdoor offset in accordance with Z—8.1—16.2	Annex A, page 149
ABS121-A028_AB1 12.2	021



- (1) Cross section profile
- 2 Trapdoor
- 3 Stile
- 4 Reinforcement
- (5) Head piece
- (6) Claw
- (7) Rung
- (8) Blind rivet
- (9) Blind rivet
- (10) Blind rivet
- (11) Axis
- (12) Brace
- (13) Ladder stile
- (14) Ladder rung
- (15) Ladder according to EN 131
- (16) Marking

Bay length	for use up to load class	allowable p *) [kN/m²]
≤ 3.07 m	3	2.0

^{*)} for the entire deck surface

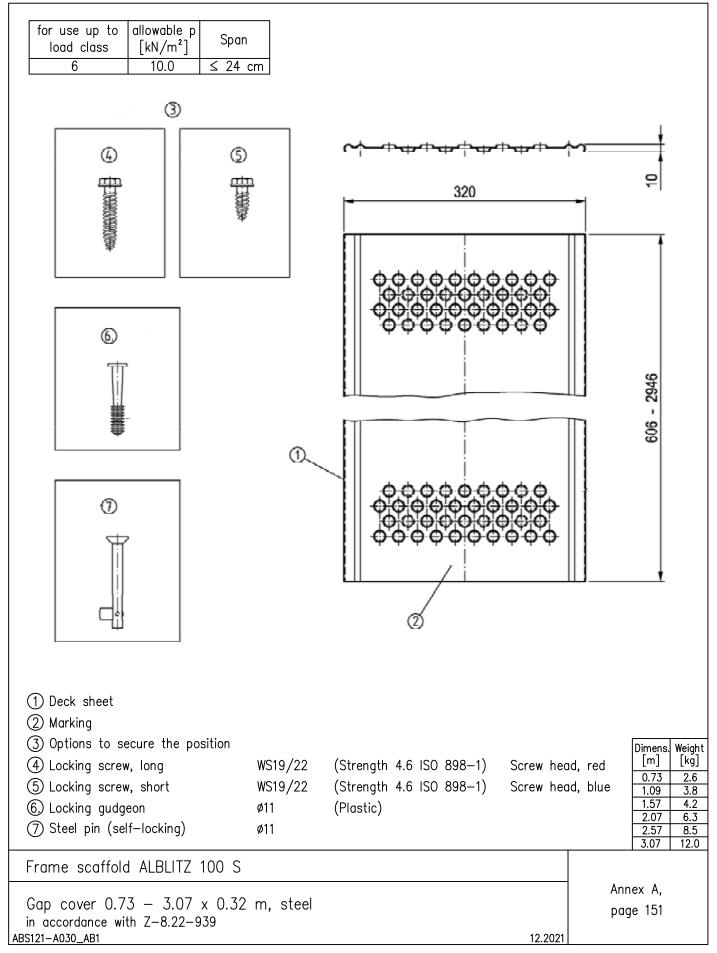
Dimens.	Weight [kg]
2.57	21.5
3.07	21.5

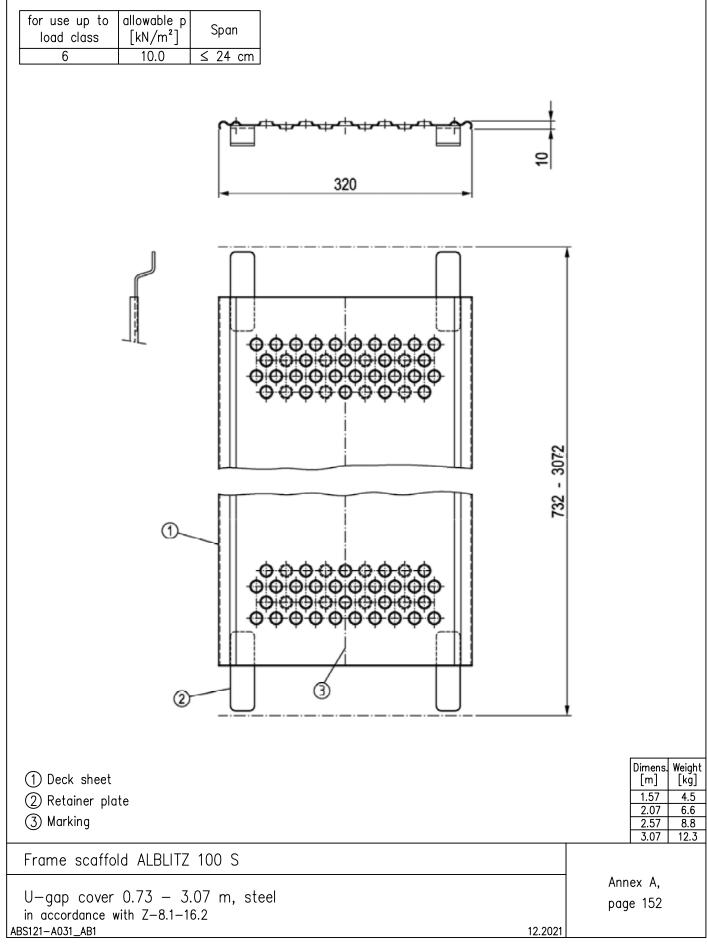
Frame scaffold ALBLITZ 100 S

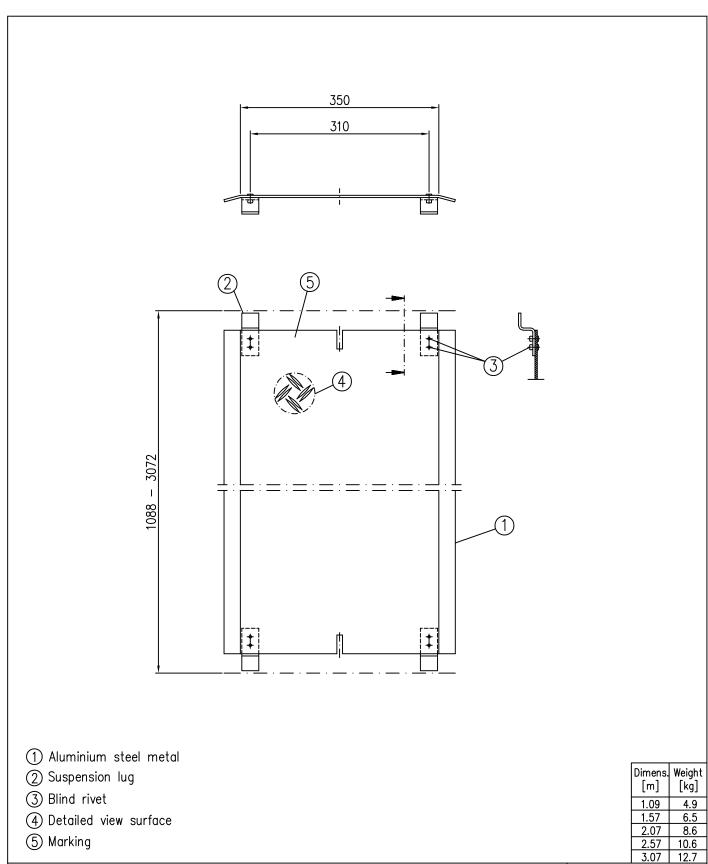
Aluminium U-trapdoor deck 2.57 - 3.07 x 0.61 m with ladder, trapdoor offset in accordance with Z-8.1-16.2

ABS121-A029_AB1 12.2021

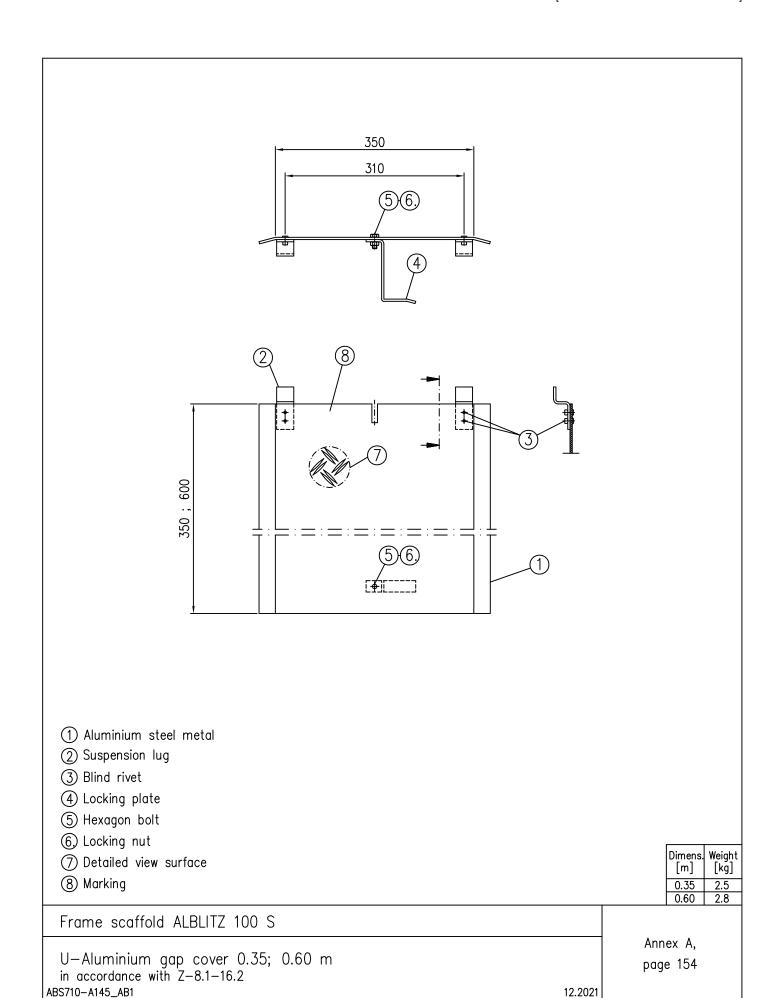
Annex A, page 150





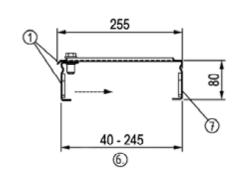


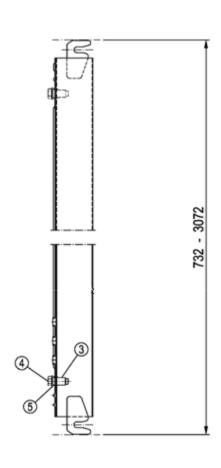
Frame scaffold ALBLITZ 100 S		
U-Aluminium gap cover 1.09 - 3.07 m in accordance with Z-8.1-16.2		Annex A, page 153
ABS710-A143_AB1	12.2021	

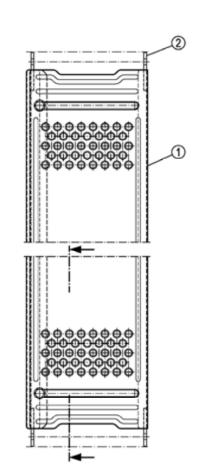


Bay length	for use up to load class	allowable p*) [kN/m²]
≤2.07 m	6	10.0
2.57 m	5	7.5
3.07 m	4	5.0

*) for the entire deck surface







- 1) Deck sheet
- 2 Suspension hook
- (3) Blind riveting nut
- 4 Hexagon bolt
- (5) Washer
- 6. Adjusting range
- (7) Marking

Dimens. [m]	Weight [kg]
0.73	5.2
1.09	7.8
1.57	11.4
2.07	14.9
2.57	18.6
3.07	22.3

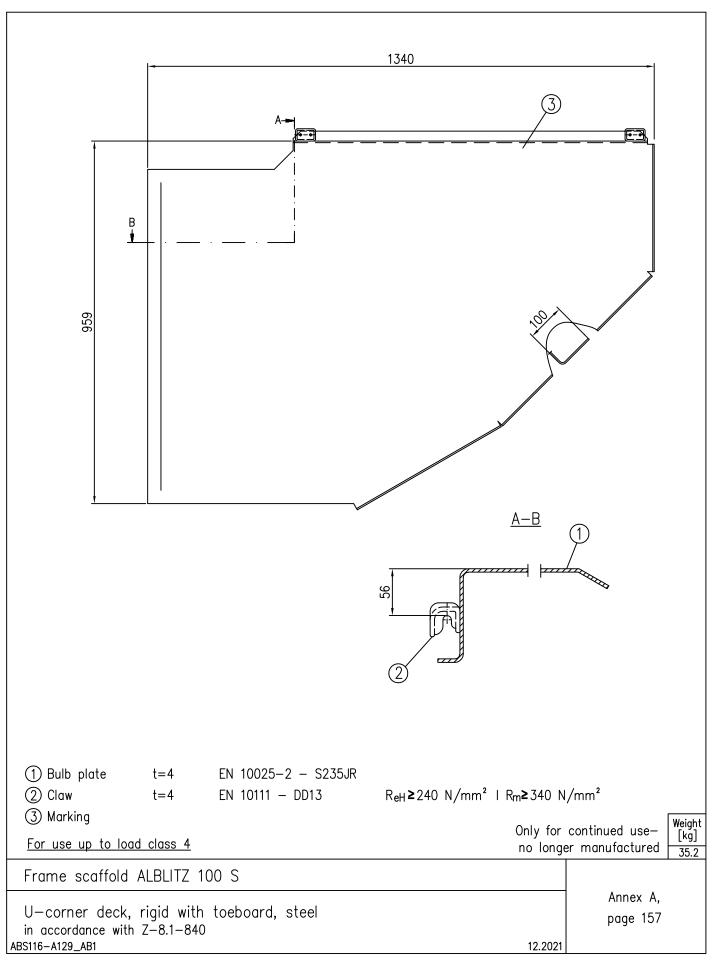
Frame scaffold ALBLITZ 100 S

U-gap deck 0.73 - 3.07 m, telescopic in accordance with Z-8.22-939
ABS121-A032_AB1

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12.2021

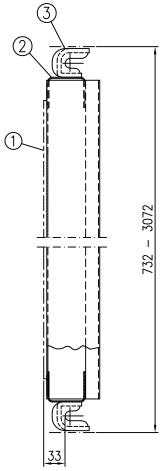
Deck width for use up to allowable p*) load class [kN/m²] 610	
3)	\$
497	497
0 (G)	310
1 Bulb plate 2 Claw 3 Marking 4 non—slip working surface	Dimens. We [m] [0.19 4 0.32 5 0.61 1
Frame scaffold ALBLITZ 100 S U—deck for compensation bay 0.19; 0.32; 0.6 in accordance with Z—8.1—16.2 S121—A033_AB1	Annex A, page 156

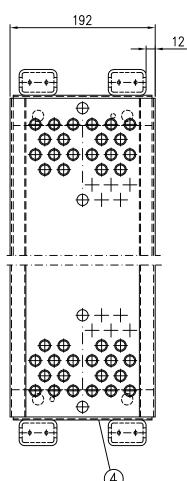


Bay length	for use up to load class	allowable p*) [kN/m²]
≤ 2.07 m	6	10.0
2.57 m	5	7.5
3.07 m	4	5.0

*) for the entire deck surface







- 1 Deck sheet
- ② Kappe
- (3) Claw
- (4) Marking
- (5) Drawing of cross section (suspension not shown)

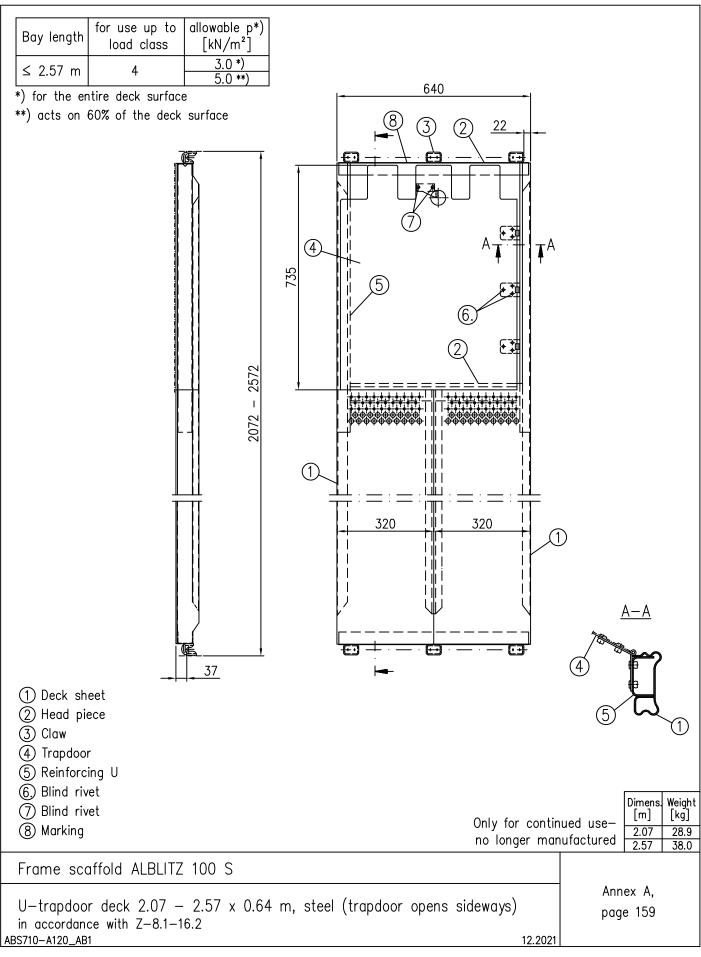
Frame scaffold ALBLITZ 100 S

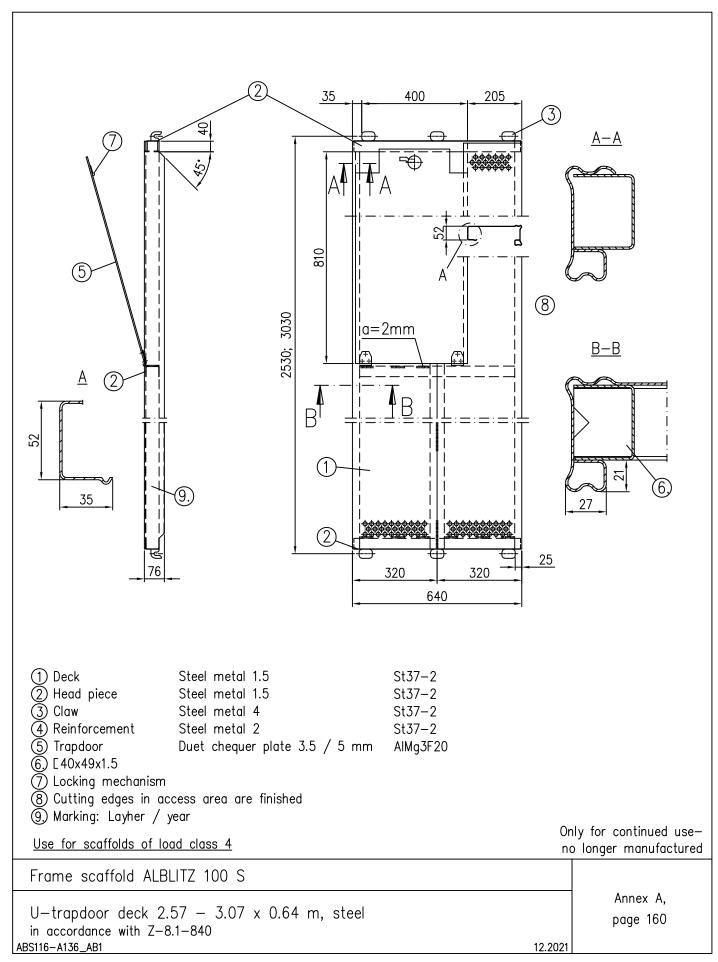
	Dimens. [m]	Weight [kg]
	0.73	4.5
	1.09	6.0
	1.57	8.5
for continued use-	2.07	10.2
longer manufactured	2.57	13.2
ionaer manujacturea	7.07	45.7

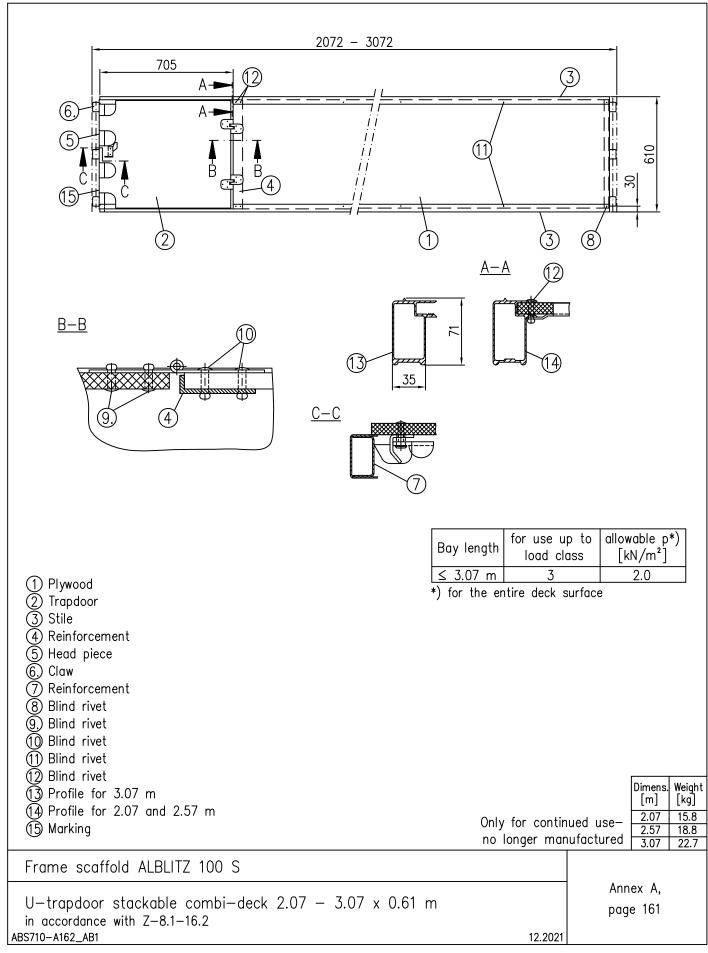
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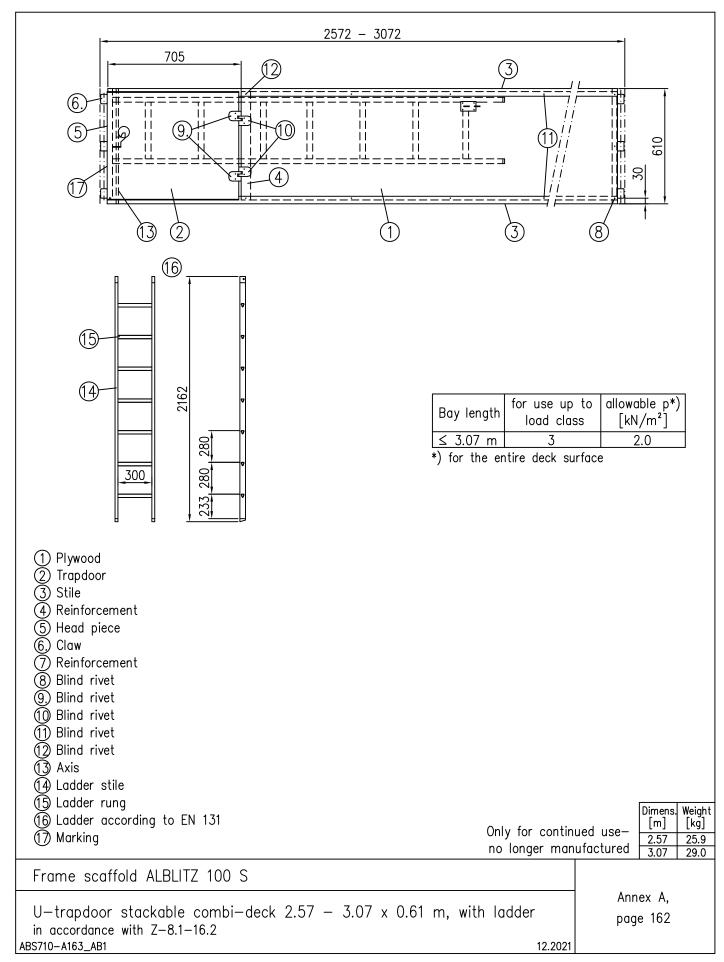
U-deck 0.73 - 3.07 x 0.19 m, steel (discontinued design) in accordance with Z-8.1-16.2ABS710-A118_AB1

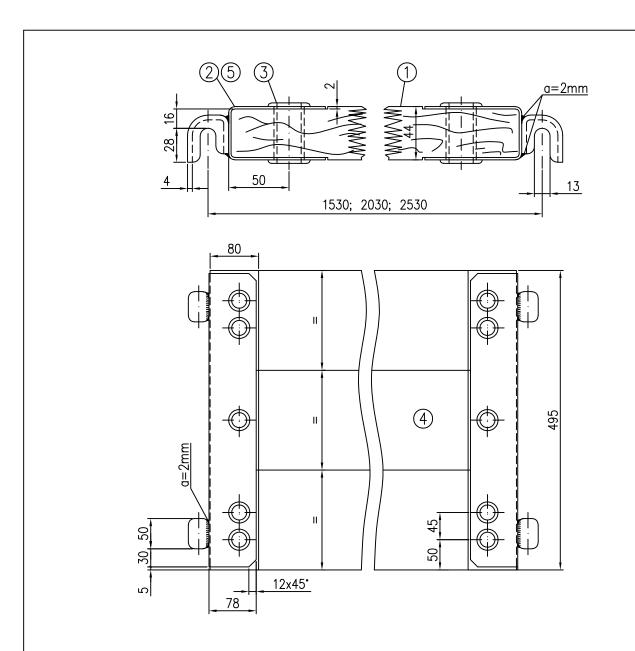
Annex A, page 158











① Wood	Grade II	Marking: Year of manufacturing with non-erasable
2 End piece with hook	St37-2	stamp imprint on the bottom side

(3) Hollow rivet Ø25x2.5 St37

4 Long edge suspension with 3 dowels St37 Distance: 1/4

(5) Cap 1.7 mm

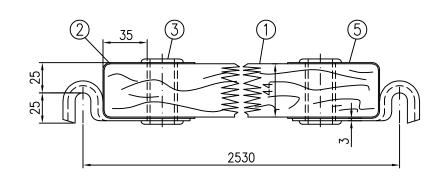
Use for scaffolds of load class 4

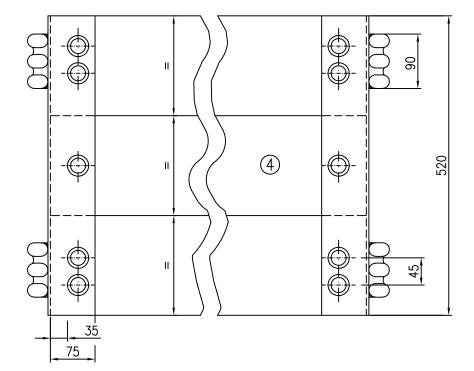
Design: Natural wood colour with stamp imprint

"Layher" frame platform with 300 kp/m² load capacity.

Only for continued use no longer manufactured

Frame scaffold ALBLITZ 100 S	
U-frame deck 1.57 - 2.57 x 0.50 m, solid wood in accordance with Z-8.1-840	Annex A, page 163
ABS105-A134_AB1 12.202	1





① Wood	Grade II
② End piece with hook	St37-2

3 Hollow rivet Ø25x1.5 St37

4 Long edge suspension with 3 dowels St37 Distance: 1/4

(5) Cap 1 mm

Use for scaffolds of load class 4

Design: Natural wood colour with stamp imprint

Layher frame platform for 300 kg/m² load capacity

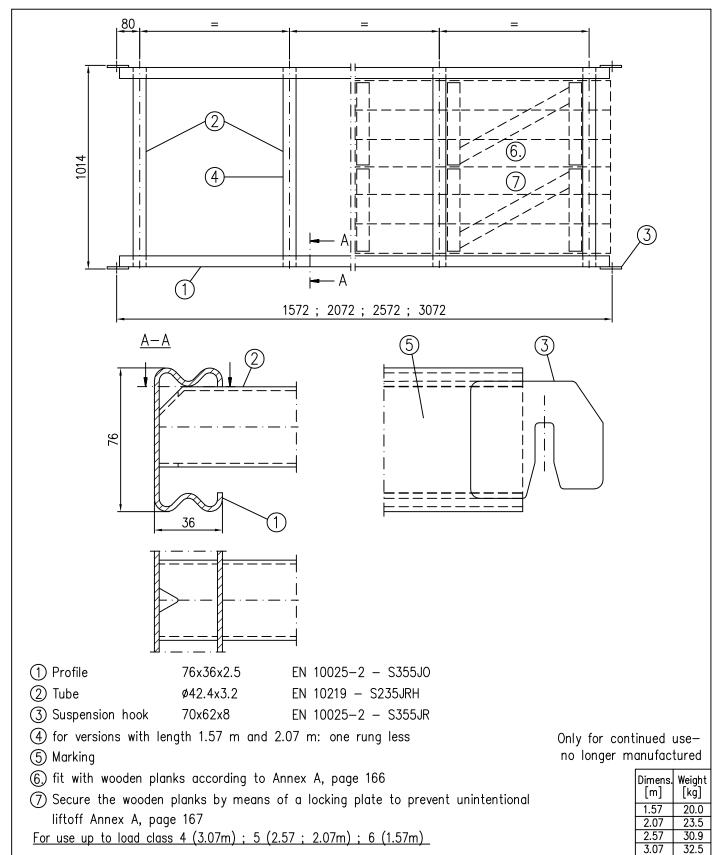
Only for continued useno longer manufactured

Frame	scaffold	ALBLITZ	100	S
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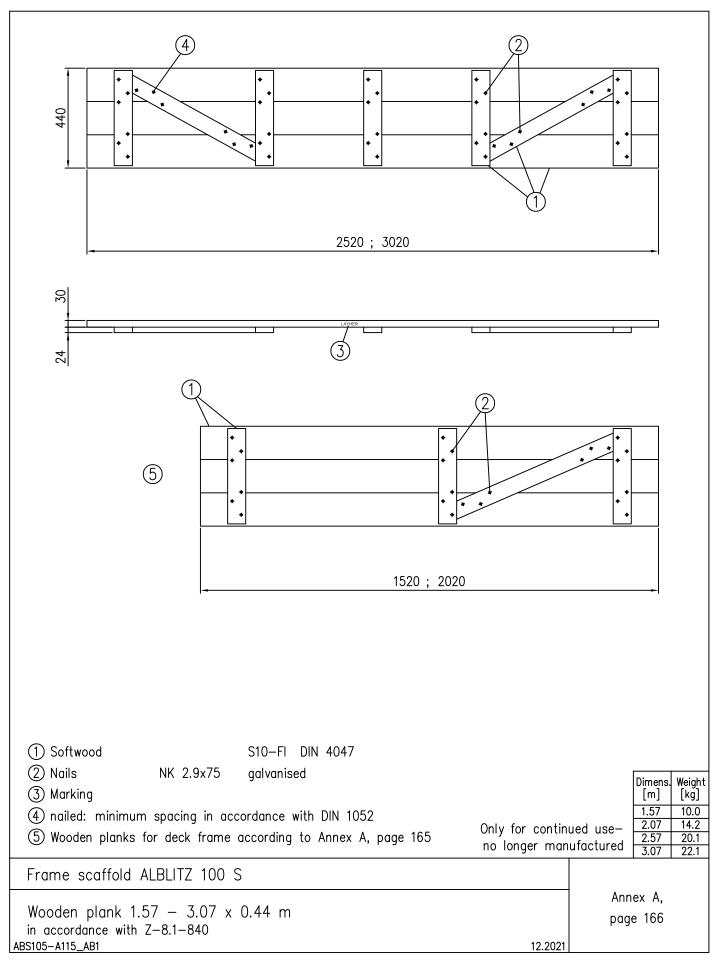
U-frame deck 2.57 x 0.52 m, solid wood in accordance with Z-8.1-840

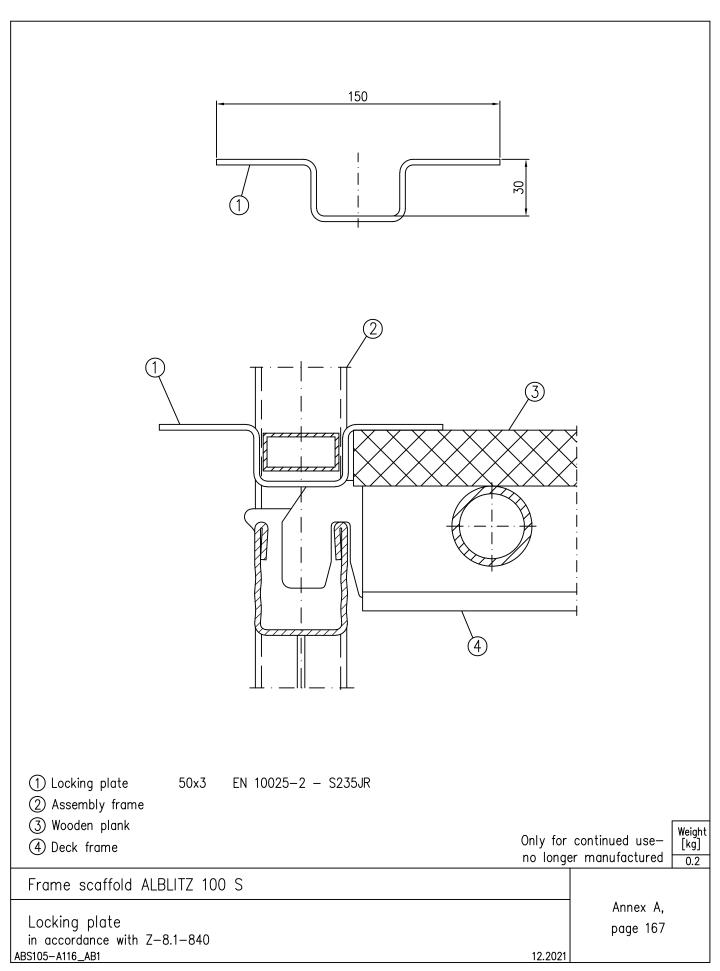
Annex A, page 164

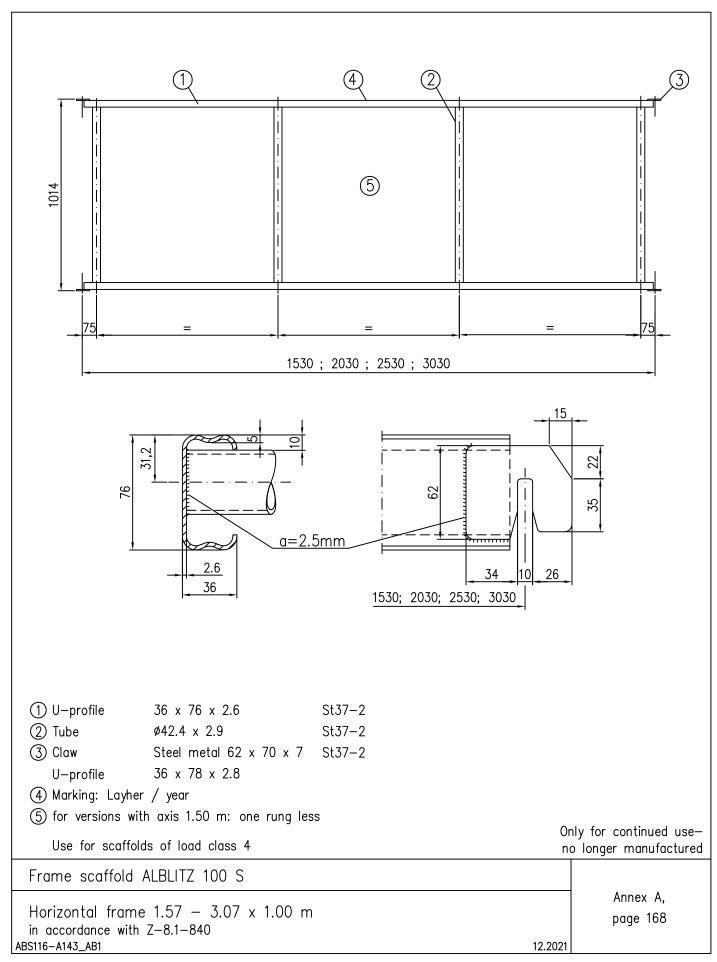
ABS105-A135_AB1

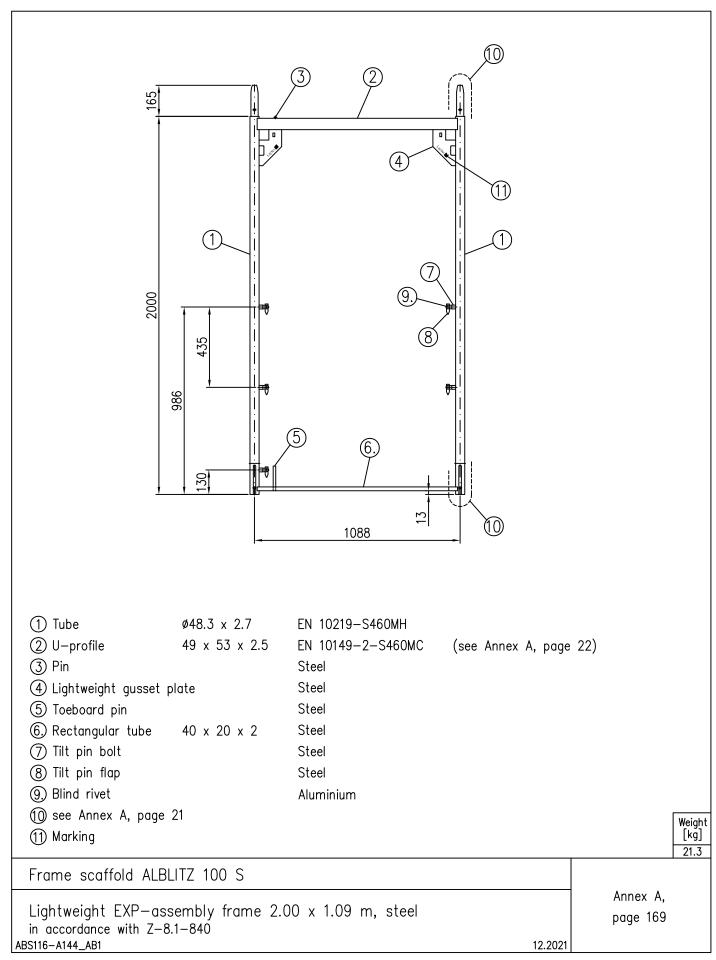


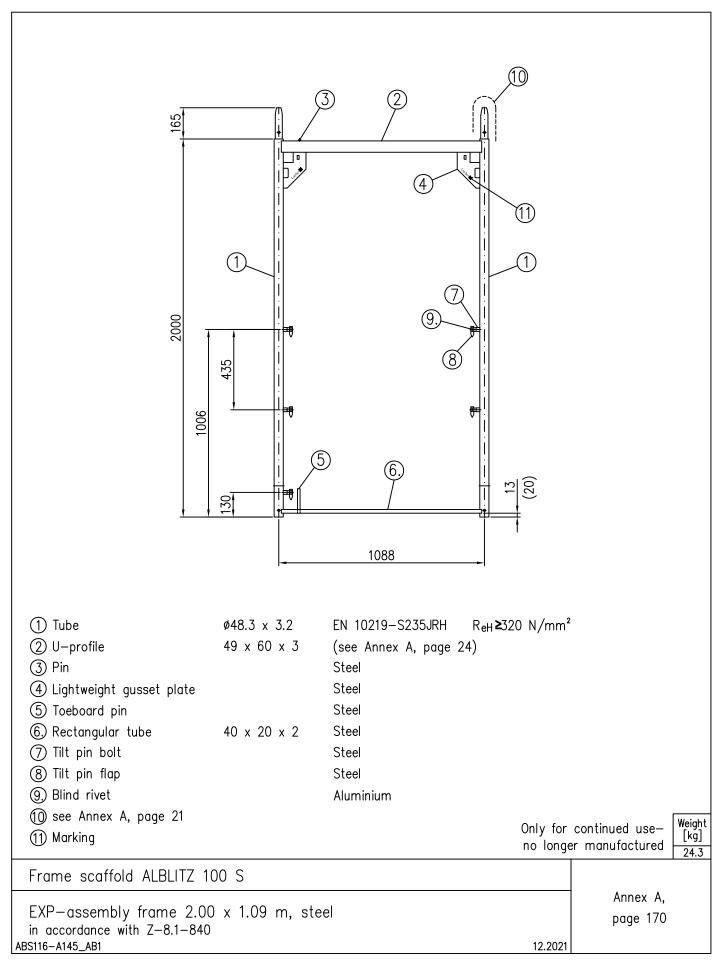
Frame scaffold ALBLITZ 100 S			
Deck frame 1.57 - 3.07 x 1.09 m in accordance with Z-8.1-840		Annex A, page 165	
ABS105-A114_AB1	12.2021		

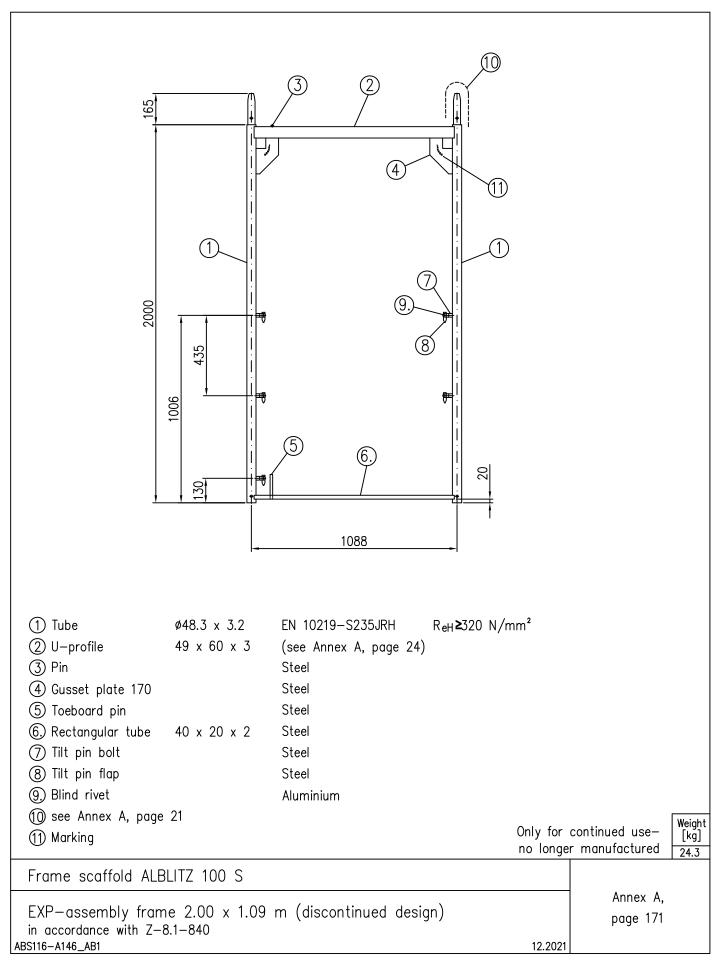


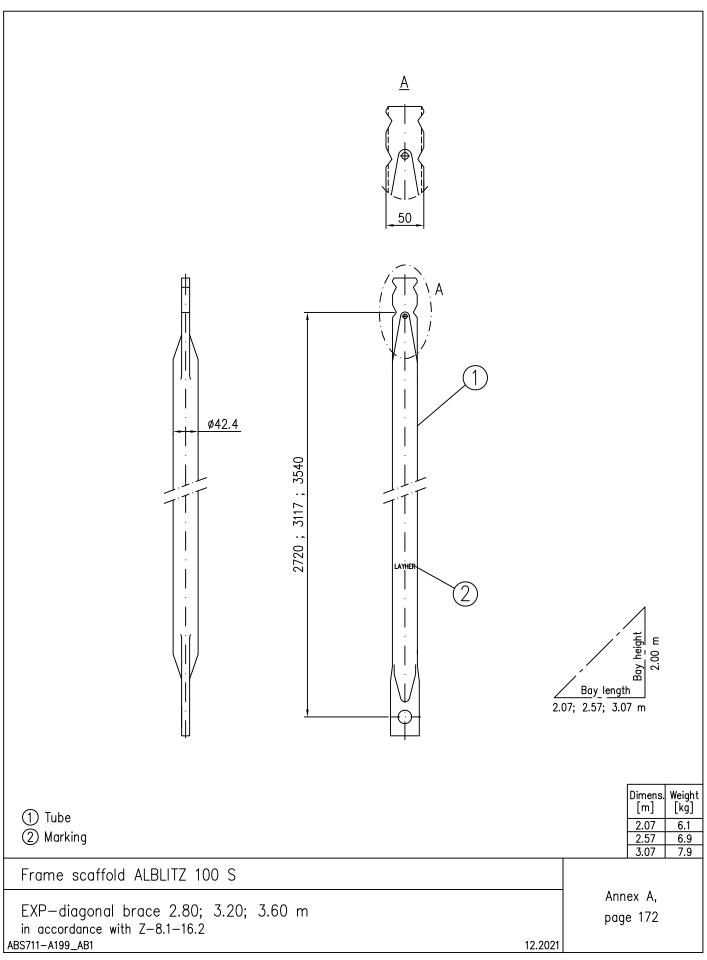


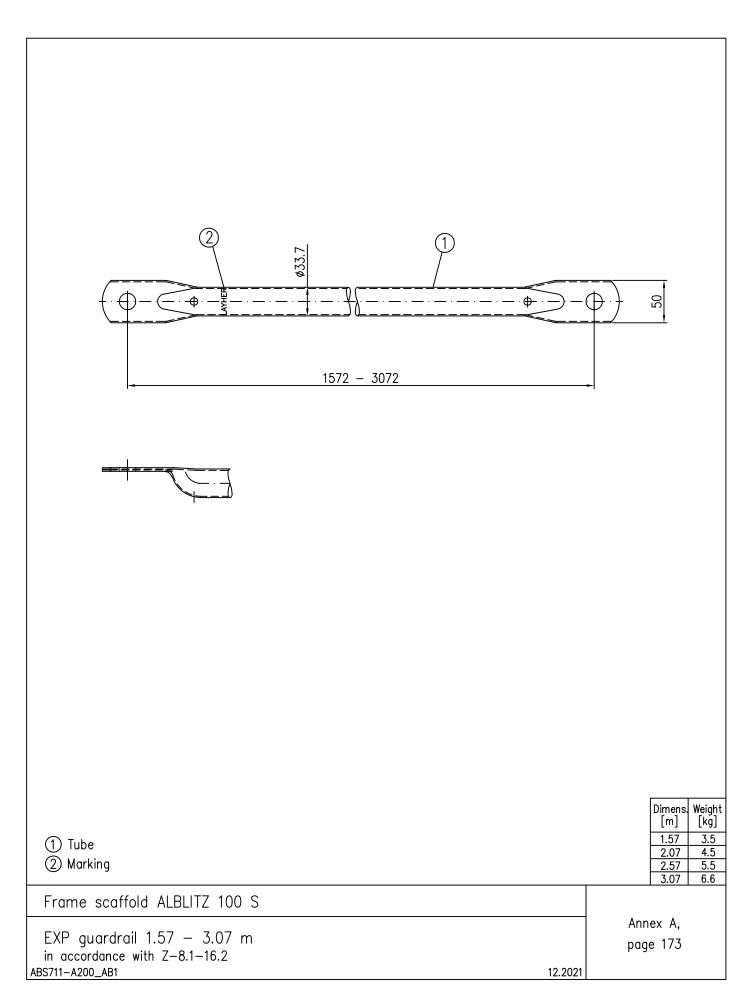


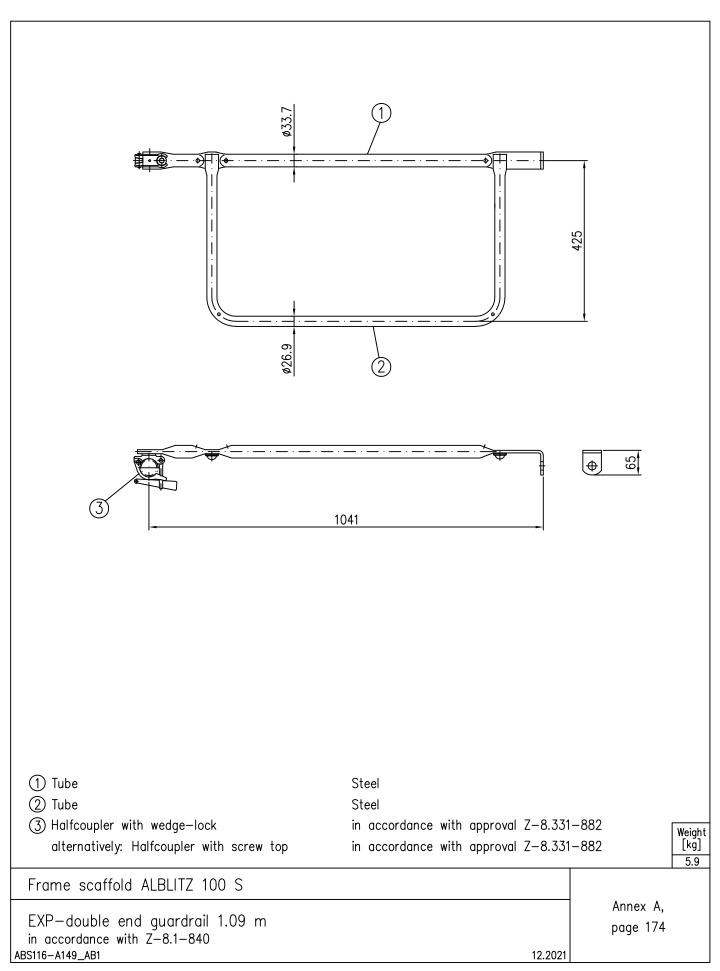


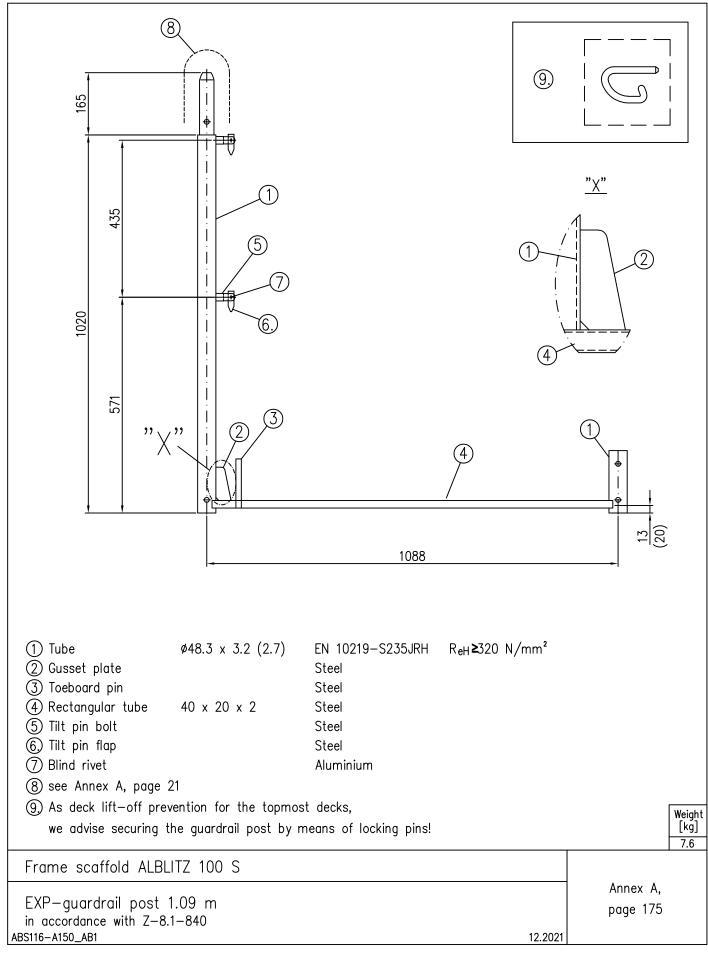


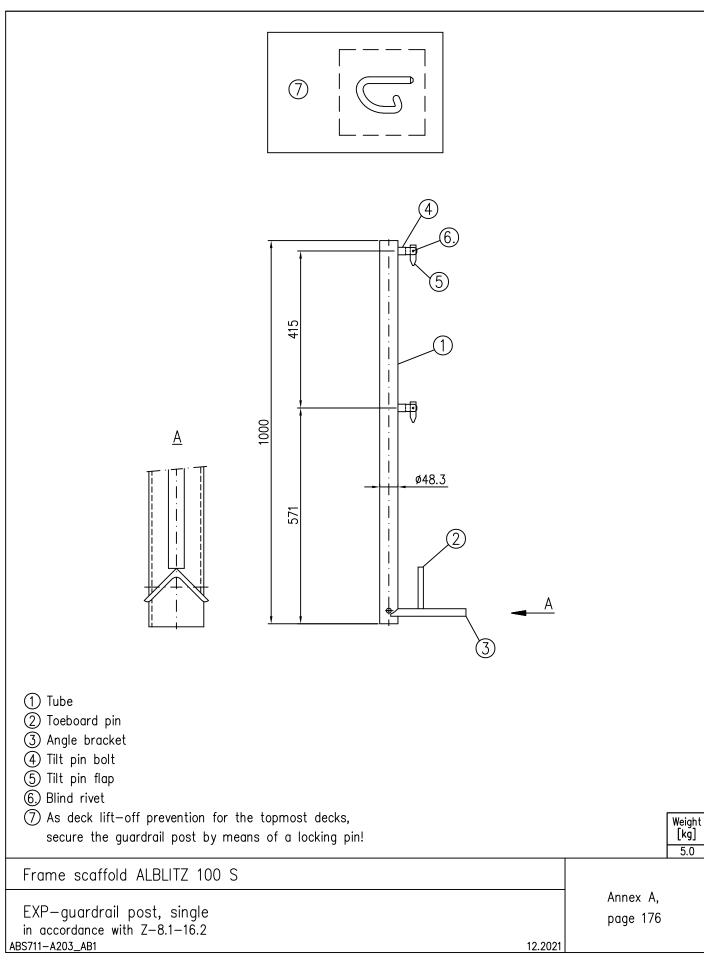


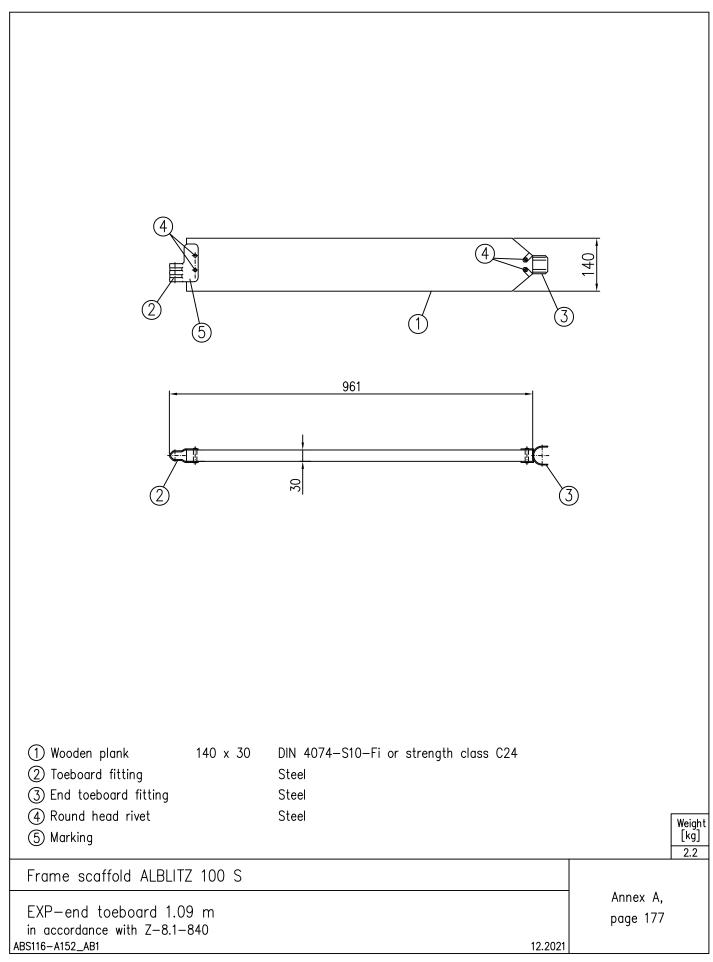


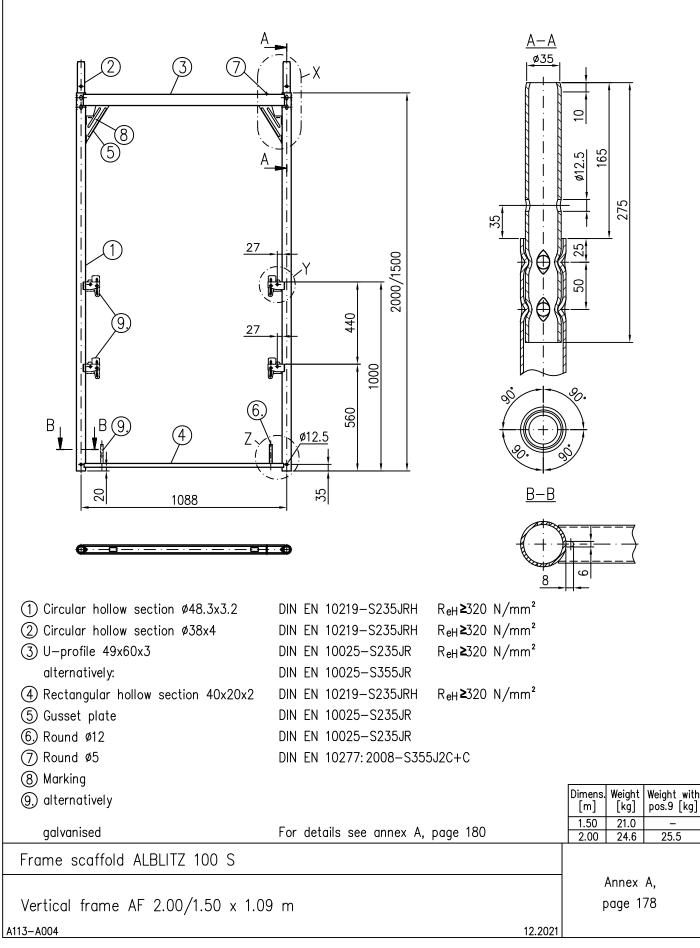


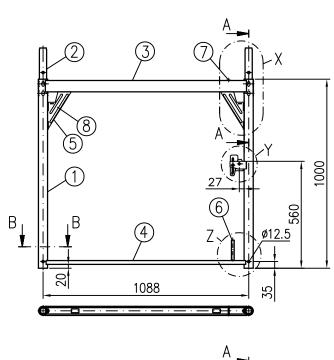


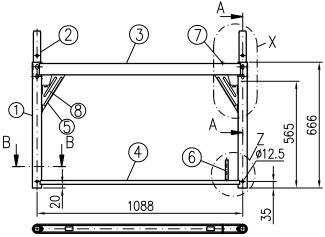


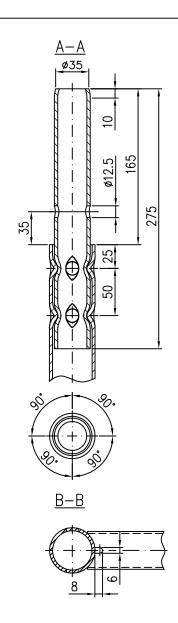












- (1) Circular hollow section Ø48.3x3.2
- 2 Circular hollow section Ø38x4
- 3 U-profile 49x60x3 alternatively:
- 4 Rectangular hollow section 40x20x2
- (5) Gusset plate
- (6) Round Ø12
- (7) Round ø5
- 8 Marking

DIN EN 10219-S235JRH R_{eH}≥320 N/mm²

DIN EN 10219-S235JRH R_{eH}≥320 N/mm²

DIN EN 10025-S235JR R_{eH}≥320 N/mm²

DIN EN 10025-S355JR

DIN EN 10219-S235JRH R_{eH}≥320 N/mm²

DIN EN 10025-S235JR

DIN EN 10025-S235JR

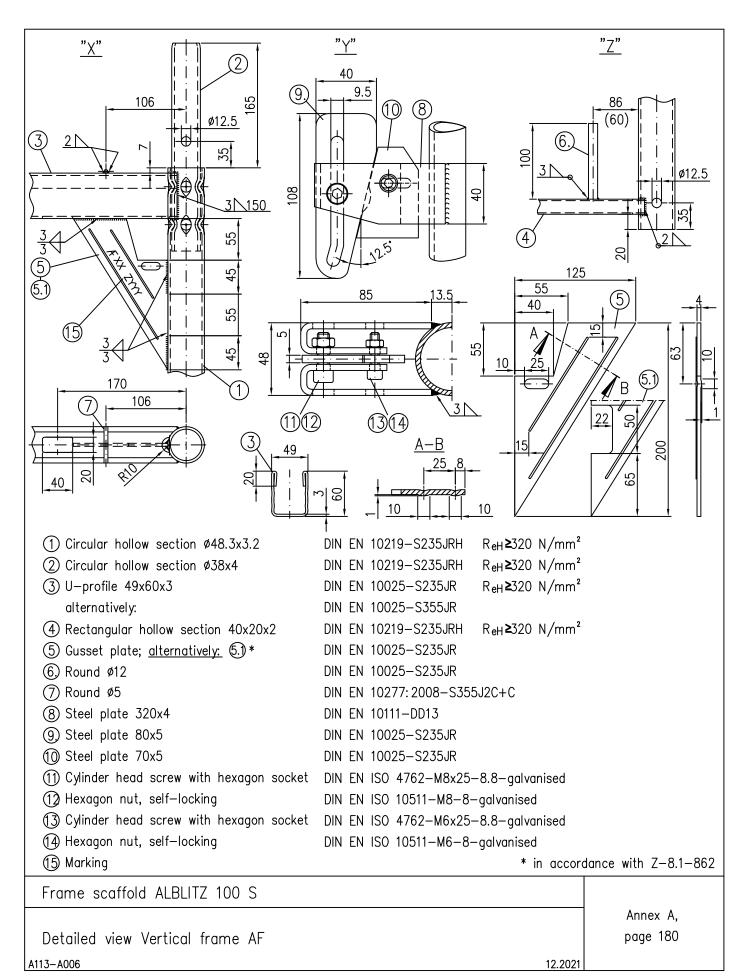
DIN EN 10277: 2008-S355J2C+C

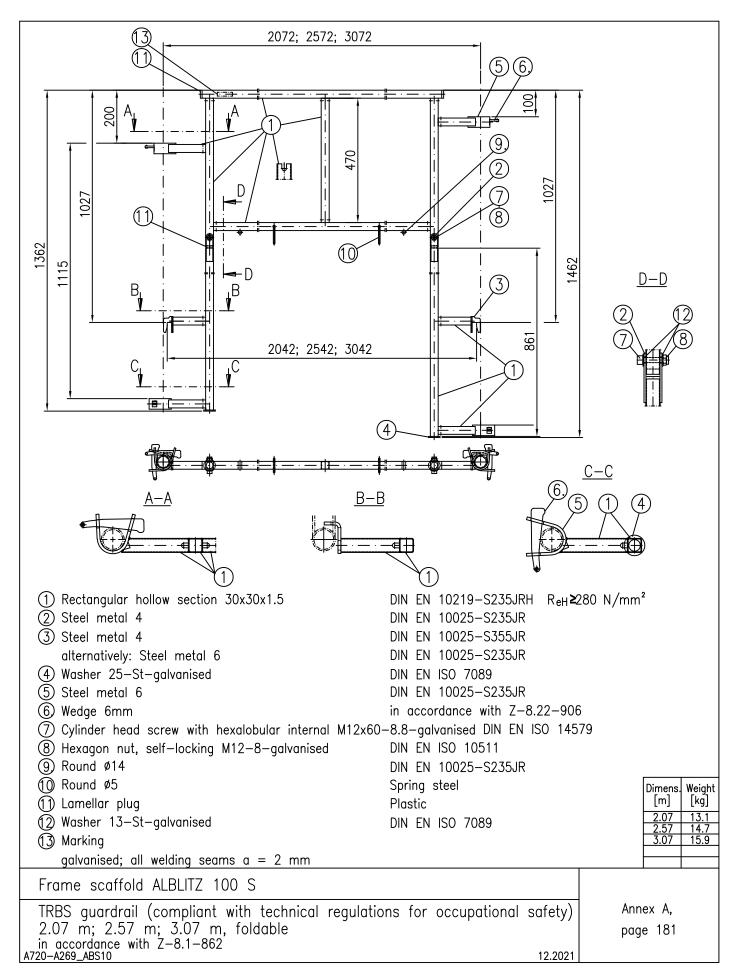
	Dimens. [m]	Weight [kg]
Ī	0.66	14.0
1	1.00	16.9

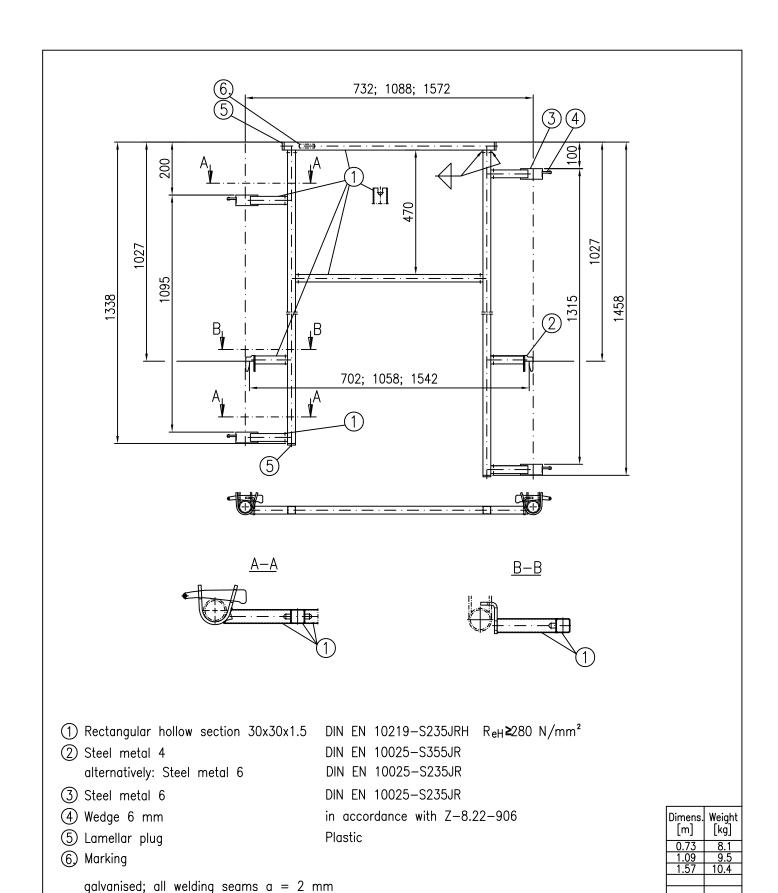
galvanised

For details see annex A, page 180

Frame scaffold ALBLITZ 100 S	
Vertical frame AF 1.00/0.66 x 1.09 m	Annex A, page 179
A113-A005 12.20)21



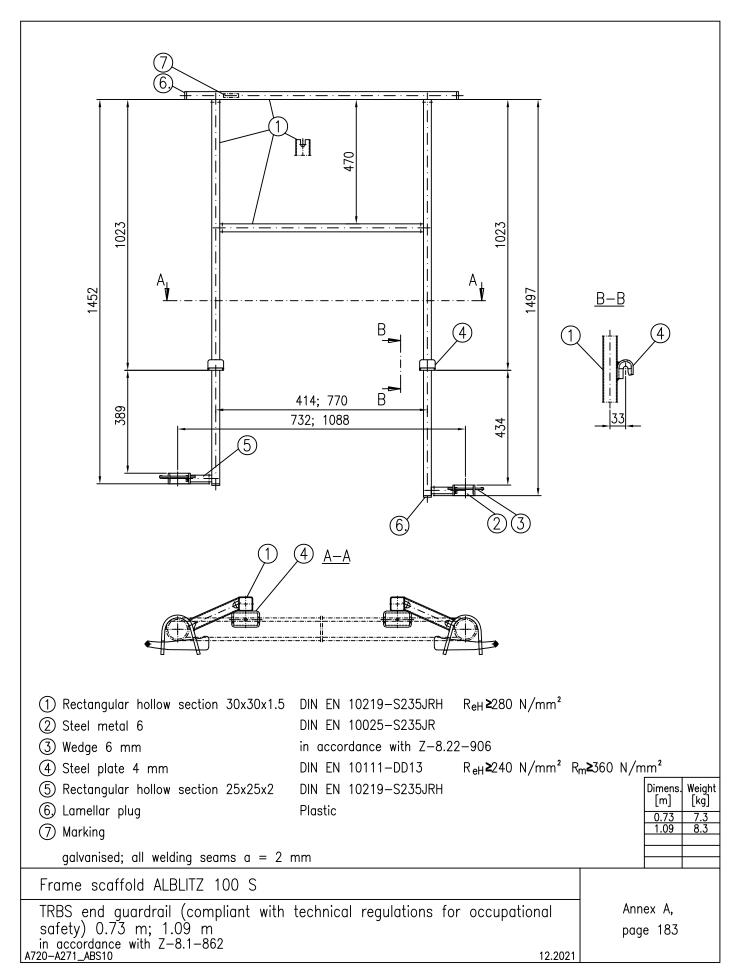




Frame scaffold ALBLITZ 100 S
TRBS guardrail (compliant with technical regulations for occupational safety)

0./3 m; 1.09 m; 1.5/ m, rigid in accordance with Z-8.1-862

Annex A, page 182



B.1 General provisions

In its standard system configuration in accordance with the assembly configuration and in accordance with the bay length ℓ , the scaffolding system may be used as a working scaffold of load classes ≤ 4 , 5 or 6 in accordance with DIN EN 12811-1:2004-03, and as a sprotection scaffold and roof edge protection scaffold in accordance with the regulations stipulated in Section B.2. The use of a protective roof in accordance with section B.11 has been verified in the standard system configuration.

The topmost horizontal level (scaffolding level) must not exceed 24 m above ground level, not including the spindle extension length (bottom edge of end plate up to upper edge of spindle nut). The standard system configuration of the scaffolding system is designed for use on a scaffold level in accordance with the regulations of the DIN EN 12811-1:2004-03 standard, Section 6.2.9.2 in front of a "partially open" facade with an open proportion of no more than 60%, and in front of closed facades. When determining the wind load, a service life factor of χ = 0.7, assuming a maximum service life of 2 years, has been taken into account. Scaffold cladding with nets or tarpaulins has been verified in the standard system configuration. The verifications of net-covered scaffolds apply to scaffolds with aerodynamic force coefficients of the entire structure (net and scaffold) are no greater than $c_{f,l,total} = 0.6$ and $c_{f,l,total} = 0.2$.

Without any further structural proof, the standard system configuration shall only be used if the loads of the bays will carry do not exceed the respective live loads in accordance with DIN EN 12811-1:2004-03, table 3.

For the standard system configuration of the "ALBLITZ 100 S" scaffolding system, the following designations in accordance with DIN EN 12810-1:2004-03 shall be used subject to the bay length, the load classes, the frames and anchorage used:

- Assembly frame according to Annex A, pages 11 to 16 and 178 / 179:
 - o Long scaffold ties (only for basic configuration without brackets)

```
Scaffold EN 12810 – 4D – SW09/307 – H1 – B – LS
Scaffold EN 12810 – 5D – SW09/257 – H1 – B – LS
Scaffold EN 12810 – 6D – SW09/207 – H1 – B – LS
```

o Short scaffold ties and V-type anchor

```
Scaffold EN 12810 - 4D - SW09/307 - H2 - B - LS
Scaffold EN 12810 - 5D - SW09/257 - H2 - B - LS
Scaffold EN 12810 - 6D - SW09/207 - H2 - B - LS
```

- EXP-assembly frame according to Annex A, pages 169 to 171:
 - Long scaffold ties (only for basic configuration without brackets)

```
Scaffold EN 12810 - 4D - SW09/307 - H1 - B - LS
```

o Short scaffold ties and V-type anchor

```
Scaffold EN 12810 - 4D - SW09/307 - H2 - B - LS
```

The standard system configuration distinguishes between the following assembly variants (see tables B.5 to B.7):

- Basic configuration (BC):
 - Facade scaffold consisting of basic components and side protection units only.
- Bracket configuration 1 (BrC1):

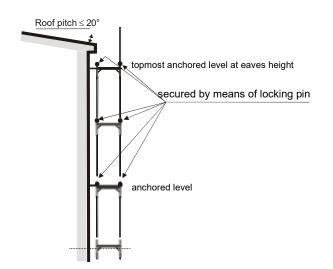
Facade scaffold consisting of basic components, side protection components, and brackets 0.36 m on the inner face of the scaffold on each scaffold level.

Scaffolding system "ALBLITZ 100 S"	
Standard system configuration - General Instructions	Annex B, page 1

• Bracket configuration 2 (BrC2):

Facade scaffold consisting of basic components, side protection units, brackets 0.36 m on the inner face of the scaffold on each working level, and brackets 0.73 m on the outer face of the scaffold on the topmost working level.

To secure the scaffold against uplifting wind forces, the topmost working levels of buildings with roof pitches ≤20° shall be connected in a tension-resistant manner up to the next anchored level below the topmost anchored level, e.g. using locking pins as shown in Fig. 1a; on buildings with inner corners, the tension-resistant connection shall be carried out as shown in Fig. 1b.



secured by means of locking pin

Figure 1a: Example of tension-resistant connection of the scaffold levels in case of uplift wind forces

Figure 1b: Example of tension-resistant connection of the working levels in case of uplift wind forces to constructions with inner corners

B.2 Protection scaffold and roof edge protection scaffold

In its standard system configuration, the scaffolding system may be used as a protection scaffold and roof edge protection scaffold with a top fall arresting layer of class FL 1 and as a roof edge protection scaffold with protective walls of class SWD 1 according to DIN 4420:2004-03. Trapdoor decks must not be fitted into brackets.

For the design as roof edge protection scaffold, the protective net posts shall be installed directly onto the assembly frames or the widening brackets 0.73 m and secured by means of locking pins or locking pins and pins with locking pin.

Alternatively, a protective net may be installed in the protective wall. The protective net shall have a mesh size of 100 mm and a rope diameter of 5 mm in accordance with DIN EN 1263-1:2015-03.

B.3 Components

The components intended for use are listed in Table B.1. Additionally, steel tubes according to DIN EN 39:2001-11 of at least type 3 and couplers according to DIN EN 12811-1:2004-03 may also be used as additional bracing measures in accordance with the respective specifications in the system presentations of Annex C.

Scaffolding system "ALBLITZ 100 S"	
Standard system configuration - General Instructions	Annex B, page 2

B.4 Bracing

According to the load class and the length of the scaffold bays, the following components shall be fitted continuously

• 3 steel decks with a width of 32 cm according to Annex A, pages 137 to 139 or

• 1 deck frame 1.09 m according to Annex A, page 165 or

2 solid wood U-frame planks according to Annex A, pages 163 / 164 or

1 horizontal frame according to Annex A, page 168

each.

Use trapdoor decks according to section B.9 for internal ladder access bays.

Only use steel U-decks 0.19 m according to annex A, pages 140 and 158 as compensation decks together with brackets.

Decks on each topmost working level shall be secured against accidental lift-off by means of guardrail posts, safety meshguard posts or lift-off preventers.

Install vertical diagonal braces to brace the outer vertical plane. In accordance with the configuration, 1 diagonal brace shall be used for a maximum of 4 or 5 scaffold bays.

Depending on the configuration, additional vertical diagonal braces may have to be installed.

Install a longitudinal ledger (horizontal strut) according to Annex A, page 31 at the level of the lowermost transom in each lowermost scaffold bay, to which a diagonal brace is connected.

In accordance with the configuration, fit, amongst others, diagonal cross braces in the lowermost vertical frames (see Annex C, pages 1 to 14) or longitudinal ledgers (see Annex C, pages 16 to 26).

B.5 Anchoring

Anchorage must be provided using scaffold ties in accordance with annex A, pages 49 and 52 or quick-release anchors in accordance with Annex A, pages 48 and 51.

According to the assembly variation and structural requirements, either install

- short scaffold ties to the inner vertical frame post by means of right-angle couplers (see Annex C, page 35) or
- as anchor pair at an angle of 90° (V-type anchor) only to the inner vertical frame post by means of right-angle couplers (see Annex C, page 36) or
- as long scaffold ties to the inner and outer vertical frame post with one right-angle coupler each or to both gusset plates with a gusset plate coupler each according to Annex A, page 29 (see Annex C, page 35).

In the basic configuration, a quick-release anchor may be used instead of the long scaffold tie. The quick-release anchor is fitted to the inner vertical frame post by means of a right-angle coupler to the transom and supported by the welded-on anchor fork plate (see Annex C, page 35).

The scaffold ties or V-type anchors must be attached in the immediate vicinity of the node points formed by the vertical frames and scaffold decks. On an anchor level, scaffold ties may be fitted up to 30 cm below the node points.

V-type wall ties may not be fitted to the outer frame sections.

The fastening devices to be positioned at the front of buildings in order to resist the anchor forces must be designed to meet at least the anchor forces given in annex C. The characteristic values given therein must be multiplied by the partial safety factor γ_F (generally $\gamma_F = 1.5$) to analyse the transfer of the loads to the anchor points.

Scaffolding system "ALBLITZ 100 S"	
Standard system configuration - General Instructions	Annex B, page 3

The following anchorage patterns are allowed depending on the scaffold configurations in accordance with Section B.1:

a) 8 m anchorage pattern, offset:

Each vertical frame section is anchored at vertical intervals of 8 m; anchoring points of neighbouring vertical frames must be arranged with a vertical offset of half the spacing. Vertical frame sections at the edge of a scaffolding must be anchored at a vertical interval of 4 m. On the topmost level, each standard must be anchored; every second anchorage may be omitted if the standard is anchored on the anchor level below the topmost level.

b) 4 m anchorage pattern, offset:

Each vertical frame section is anchored at vertical intervals of 4 m; anchoring points of neighbouring vertical frames must be arranged with a vertical offset of half the spacing. Vertical frame sections at the edge of a scaffolding must be anchored at a vertical interval of 2 m. On the topmost level, each standard must be anchored; every second anchorage may be omitted if the standard is anchored on the anchor level below the topmost level.

c) 4 m vertically anchorage pattern, continuous:

Each vertical frame section is anchored at vertical intervals of 4 m. On the topmost working level, each standard must be anchored.

d) 2 m vertically anchorage pattern, continuous:

Each vertical frame section is anchored at vertical intervals of 2 m (each node).

Additional anchorage may be required when using e.g. brackets, protective walls or bridging constructions and for some design configurations.

For the construction in front of buildings, the topmost working level may exceed the topmost anchored level by 2 m. In this case, the standard joints at the topmost working level must be secured by means of locking pins and, in accordance with the configuration, the outer standard of the vertical frame may have to be braced on the topmost anchor level (see Annex C, pages 32 to 34).

B.6 Foundation loads

In accordance with the load classes, it must be possible to resist and transfer the foundation loads given in tables B.2 to B.4 in the supporting surface. The characteristic values given therein must be multiplied by the partial safety factor γ_F (generally $\gamma_F = 1.5$) to analyse the transfer of the loads to the supporting surface.

B.7 Passage frame

At the level of the anchorage plane above the passage frames, every vertical frame section must be anchored. Additionally, bracing of the lowermost vertical frames above the passage frame in the level perpendicular to the facade by means of diagonal braces is required (cf. annex C, page 16 and 17). When using passage frames, additional measures up to the anchor level above the passage frames (up to $H \approx 4.2 \, m$) are required in accordance with the data listed in annex C, pages 16 and 17.

B.8 Bridging construction

The bridging girders may be used to bridge gate entrances or similar openings when the working levels underneath the bridging construction are omitted. The bridging girders must be anchored at the supporting members and at every forth part of the member at the height of the upper chord.

The bridging construction variants shall be constructed in accordance with the following annexes:

Bridging girder 4.14 m: according to Annex C, pages 24 to 26
 Bridging girder 5.14 m: according to Annex C, pages 21 to 23
 Bridging girder 6.14 m: according to Annex C, pages 18 to 20

Scaffolding system "ALBLITZ 100 S"	
Standard system configuration - General Instructions	Annex B, page 4

B.9 Internal ladder / add-on ladder access / add-on stairway access

The use of a stairway access with parallel stair arrangement in accordance with annex C, pages 27 and 28 or 31 is recommended.

Alternatively, an add-on ladder access in accordance with annex C, pages 29 to 31 or an internal ladder access can be used, taking into account the following specifications.

Taking into consideration its use in the fall arrest level for scaffolds of load class ≤ 3 with all trapdoor deck versions or for scaffolds of load class 4 with steel U-trapdoor decks $\ell \leq 2.57$ m (Annex A, pages 141, 142 and 159), an internal ladder may be used alternatively, whereby a steel deck 0.32 m must be installed additionally to the steel U-trapdoor decks (see Annex C, page 31).

B.10 Corner formation

Outer corners are to be designed in accordance with annex C, page 38.

For inner corners, observe the regulations for securing against uplifting wind forces in section B.1.

B.11 Protective roof

The protective roof may only be used on the outer face of a scaffold at the second scaffolding level.

Each vertical frame section at the height of the protective roof and at the height of the bracing point must be anchored (see Annex C, page 15). Decks are to be installed up to the face of the building.

B.12 Widening bracket

On the inner face of the scaffolding 0.36 m widening brackets may be used at all scaffolding levels; on the outer face of the scaffold, 0.36 m or 0.73 m widening brackets may be installed on the topmost scaffolding level only.

The widening bracket 0.73 m must be supported by means of a diagonal cross brace 1.77 m according to annex A, page 72 (see annex C, page 37).

Additional measures according to annex C, page 37 are required for scaffolds with widening brackets and a with protective wall.

Install gap covers between the main and the bracket deck for the inner brackets and gap cover or U-telescopic cover plates for the outer brackets.

B.13 Topmost working level not anchored

For the construction in front of buildings, the topmost working level may exceed the topmost anchored level by 2 m (topmost working level not anchored), see annex C, pages 32 to 34. In this case, all joints of the standards on the three topmost levels must be secured by means of locking pins.

In this intermediate state, the topmost working level must not be higher than H = 22 m (plus spindle extension length) within the scope of the verified system configuration.

Cladding must not exceed the topmost anchoring level.

Scaffolding system "ALBLITZ 100 S"	
Standard system configuration - General Instructions	Annex B, page 5

<u>Table B.1:</u>	Components of	of the standard	system	configuration

Designation	Annex A, page
Foot plate	2
Base jack 60	3
Base jack 80, reinforced	4
Base jack 150, reinforced	6
Base jack 40	7
Wedged swivel coupler with spindle	8
Locking pin red Ø 11 mm	9
Locking pin Ø 9 mm	10
Lightweight assembly frame 2.00 x 1.09 m, steel	11
Lightweight assembly frame 1.50 - 1.00 – 0.66 x 1.09 m, steel	12
Assembly frame 2.00 x 1.09 m, steel	13
Assembly frame 1.50 - 1.00 – 0.66 x 1.09m, steel	14
Assembly frame 2.00 x 1.09 m, steel (discontinued design)	15
Assembly frame 1.50 – 1.00 – 0.66 x 1.09 m, steel (discontinued design)	16
Lightweight assembly frame 2.00 x 0.73 m, steel *)	17
Lightweight assembly frame 1.50 – 1.00 – 0.66 x 0.73 m, steel *)	18
Assembly frame 2.00 x 0.73 m, steel (discontinued design) *)	19
Assembly frame 1.50 – 1.00 – 0.66 x 0.73 m (discontinued design) *)	20
Lightweight passage frame 2.20 x 1.50 m	26
Passage frame 2.20 x 1.50 m	27
Locking guardrail wedge housing	28
Gusset plate coupler	29
Guardrail coupler with wedge housing	30
Horizontal strut 1.57 – 3.07 m	31
l-guardrail with turning bolt 1.57 – 3.07 m ***)	32
l-guardrail 1.57 – 3.07 m ***)	33
Guardrail 0.73 – 3.07 m	34
Double guardrail 1.57 – 3.07 m, steel	35
Double guardrail 2.07 – 2.57 m, steel (discontinued design)	36
Single and double guardrail (discontinued design)	37
Aluminium double guardrail 1.57 – 3.07 m	38
End guardrail 1.09 m	39
End guardrail 0.73 m	40
Double end guardrail 1.09 m	41
Double end guardrail 1.09 m (discontinued design)	42
Double end guardrail 0.73 m	43
Double end guardrail 0.73 m (discontinued design)	44
End guardrails 1.09 m, single and double	45
Diagonal brace 2.80; 3.20; 3.60 m	46
Diagonal brace for 2.07; 2.57 and 3.07 m (discontinued design)	47
Quick release anchor 0.69 m	48

Scaffolding system "ALBLITZ 100 S"	
Standard system configuration - General Instructions	Annex B, page 6

Table B.1: (continued)

Designation	Annex A, page
Scaffold tie 0.38 – 1.75 m	49
Anchor coupler	50
Quick release anchor 0.65 m (discontinued design)	51
Scaffold tie 0.30 – 2.00 m (discontinued design)	52
Bracket 0.36 m	56
Bracket 0.36 m (discontinued design)	57
Bracket 0.73 m	58
Bracket 0.73 m - reinforced	59
Bracket 0.36 m without tube connector	61
Deck lift-off prevention 0.36 – 0.73 m	68
Deck lift-off prevention 1.09 m	69
Universal U-deck lift-off preventer	70
Diagonal cross brace 1.95 m	71
Diagonal cross brace 1.77 m	72
Lightweight guardrail post 1.09 m	73
Lightweight end guardrail post 1.09 m	74
Lightweight guardrail post 0.73 m	75
Lightweight end guardrail post 0.73 m	76
Guardrail post, single	77
Protective roof bracket 1.30 m	78
Protective roof support 2.10 m	79
Safety meshguard post 1.09 m	80
Safety meshguard post 1.09 m (discontinued design)	81
2-pin coupler	82
Safety meshguard post 0.36; 0.50; 0.73 m T15	83
Adapter for safety meshguard post	84
Safety meshguard post 0.36; 0.50; 0.73 m	85
Safety meshguard post 0.73 m (discontinued design)	86
Side safety meshguard 1.57 – 3.07 m	87
Safety meshguard 1.57 – 3.07 m (discontinued design)	88
Toeboard 0.73 – 3.07 m	89
End toeboard 1.09 m	90
End toeboard 0.36 – 0.73 m	91
Halfcoupler with toeboard pin	92
Storey ladder 7 rungs T19 / T15	93
Storey ladder 7 rungs	94
Aluminium single ladder for scaffolds with 10; 14, 17; 20 rungs	95
Lightweight lattice girder 4.14 m with tube connector	97
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Scaffolding system "ALBLITZ 100 S"	
Standard system configuration - General Instructions	Annex B, page 7

Table B.1: (ce	ontinued)
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Designation	Annex A, page
Lightweight lattice girder 5.14 m; 6.14 m with tube connector	98
Lattice girder 4.14 m with tube connector	99
Lattice girder 5.14 m; 6.14 m with tube connector	100
Lattice girder coupler	101
U-lattice girder ledger 1.09 m	102
Lightweight U-starter transom 1.09 m	106
U-starter transom 0.73 m	107
Aluminium U-platform stairway 2.57; 3.07 x 2.00 x 0.64 m	114
Aluminium U-platform stairway 2.57; 3.07 m (discontinued design)	116
U-Komfort stairway 2.57; 3.07 x 2,00 x 0.64 m	117
Stair guardrail 2.57; 3.07 m	118
Inner guardrail for stairway	119
Inner guardrail for stairway (discontinued design)	120
Stairway guardrail 1.0 x 0.5 m	121
Keder rail 2000, aluminium	122
Keder rail, aluminium (discontinued design)	123
Rail holder with halfcoupler	124
Keder slotted screw with nut	125
Keder tube brace 2.07 – 3.07 m	126
Lightweight U-deck 0.73 – 3.07 x 0.32 m, steel;	
design: spot-welded / hand welded	137
U-deck T4 0.73 – 3.07 x 0.32 m, steel;	400
design: spot-welded / hand welded	138
U-deck 0.73 – 3.07 x 0.32 m, steel;	139
design: spot-welded / hand welded	109
U-deck 0.73 – 3.07 x 0.19 m, steel	140
U-trapdoor deck 2.07 x 0.64 m, steel	141
U-trapdoor deck 2.57 x 0.64 m, steel	142
U-robust trapdoor deck 2.07 – 3.07 x 0.61 m **)	143
U-robust trapdoor deck with ladder 2.57 – 3.07 x 0.61 m **)	144
Aluminium U-trapdoor deck 1.57 – 3.07 x 0.61 m **)	145
Aluminium U-trapdoor deck with ladder, 2.57 – 3.07 x 0.61 m **)	146
U-XTRA-N-trapdoor deck 2.07 – 3.07 x 0.61 m **)	147
U-XTRA-N-trapdoor deck with ladder, 2.57 – 3.07 x 0.61 m **)	148
Aluminium U-trapdoor deck 2.07 x 0.61 m, trapdoor offset **)	149
Aluminium U-trapdoor deck 2.57 - 3.07 x 0.61 m with ladder, trapdoor offset **	150
Gap cover 0.73 – 3.07 x 0.32 m, steel	151
U-gap cover 0.73 – 3.07 m, steel	152
U-Aluminium gap cover 1.09 – 3.07 m	153
U-Aluminium gap cover 0.35; 0.60 m	154

Scaffolding system "ALBLITZ 100 S"	
Standard system configuration - General Instructions	Annex B, page 8

<u>Table B.1:</u> (continued)

Designation	Annex A, page		
U-gap deck 0.73 – 3.07 m, telescopic	155		
U-deck for compensation bay 0.19; 0.32; 0.61 x 0.50 m	156		
U-corner deck, rigid with toeboard, steel	157		
U-deck 0.73 – 3.07 x 0.19 m, steel (discontinued design)	158		
U-trapdoor deck 2.07 – 2.57 x 0.64 m, steel Z-8.1-16.2 (trapdoor opens sideways)	159		
U-trapdoor deck 2,57 - 3,07 x 0,64 m, steel	160		
U-trapdoor stackable combi-deck 2.07 - 3.07 x 0.61 m **)	161		
U-trapdoor stackable combi-deck 2.57 - 3.07 x 0.61 m, with ladder **)	162		
U-frame deck 1.57 – 2.57 x 0.50 m, solid wood	163		
U-frame deck 2.57 x 0.52 m, solid wood	164		
Deck frame 1.57 – 3.07 x 1.09 m	165		
Wooden plank 1.57 – 3.07 x 0.44 m	166		
Locking plate	167		
Horizontal frame 1.57 – 3.07 x 1.00 m	168		
Lightweight EXP-assembly frame 2.00 x 1.09 m, steel	169		
EXP-assembly frame 2.00 x 1.09 m, steel	170		
EXP-assembly frame 2.00 x 1.09 m (discontinued design)	171		
EXP-diagonal brace 2.80; 3.20; 3.60 m	172		
EXP guardrail 1.57 – 3.07 m	173		
EXP-double end guardrail 1.09 m	174		
EXP-guardrail post 1.09 m	175		
EXP-guardrail post, single	176		
EXP-end toeboard 1.09 m	177		
Vertical frame AF 2.00/1.50 x 1.09 m	178		
Vertical frame AF 1.00/0.66 x 1.09 m	179		
TRBS guardrail (compliant with technical regulations for occupational safety) 2.07 m; 2.57 m; 3.07 m, foldable ***)	181		
TRBS guardrail (compliant with technical regulations for occupational safety) 0.73 m; 1.09 m; 1.57 m, rigid ***)	182		
TRBS end guardrail (compliant with technical regulations for occupational safety) 0.73 m; 1.0 9m ***)	183		
*) Use within the scope of the standard system configuration only for the add-on access bay			

^{*)} Use within the scope of the standard system configuration only for the add-on access bay

Scaffolding system "ALBLITZ 100 S"		
Standard system configuration - General Instructions	Annex B, page 9	

^{**)} as inner ladder access only up to load class 3

When using these guardrails consistently install I-guardrails in accordance with Z-8.1-16.2 or TRBS-guardrails according to the working level in accordance with Z-8.1-862.

Table B.2: Foundation loads for configurations

Annex C, page	Overview *)	Load class	Protective	Foundation loads [kN]		
			wall	inner face	outer face	access
1	BC unclad	4	without	16.2	20.3	
		4	with	16.1	20.9	
2	BrC1 unclad	4	without	26.3	19.7	
			with	26.0	20.4	
3 B	BrC2 unclad	4	without	25.7	27.8	
			with	26.4	28.3	
5	BC net	4	without	16.3	20.0	
5		4	with	16.3	20.5	
6 / 4 Br0	BrC2 net	1	without	26.3	27.3	
		4	with	26.4	27.9	
7	BrC2 tarpaulin	4	without	27.0	27.3	
1		4	with	27.1	28.0	
15	Protective roof BC / BrC1 / BrC2	4	without / with	24.8	29.6	
16	Passage frame BC	4		22.5	14.9	
17	Passage frame BrC1 / BrC2	4		34.8	19.2	
18	Bridging construction L = 6.14 m BC unclad	4		24.5	29.0	
19	Bridging construction L = 6.14 m BrC1 / BrC2 unclad	4		38.2	40.9	
20	Bridging construction L = 6.14 m BC / BrC1/ BrC2 tarpaulin	4		40.1	42.4	
27	Stairway access with parallel stair arrangement BC / BrC1 / BrC2	4		see above		9.2
29	Ladder access BC / BrC1 / BrC2	4				9.2
32	Topmost level not anchored BC / BrC1	4	without			

^{*)} BC = Basic configuration / BrC1 = Bracket configuration 1 / BrC2 = Bracket configuration 2

Scaffolding system "ALBLITZ 100 S"

Standard system configuration - General Instructions

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Table B.3: Foundation loads for configurations L = 2.57 m, load class ≤ 5

Annex	Overview *)	Load	Protective	Foundation loads [kN]				
C, page	Overview)	class	wall	inner face	outer face	access		
9	BC unclad	≤ 5	without	18.4	22.2			
9	BC uriciau	≥ 5	with	17.4	22.8			
10	BrC1 unclad	≤ 5	without	28.5	22.0			
10	BICT UTICIAU	≥ 5	with	28.5	22.8			
8	BrC2 unclad	4	without	22.8	25.9			
	BIGZ UTICIAU	4	with	22.8	26.3			
12	BC net	≤ 5	without	17.9	21.3			
12	BC Het	≥ 3	with	17.9	21.8			
13 / 11	BrC1 net	≤ 5	without	27.8	21.0			
10 / 11	BIOT HEL		with	27.0	21.6			
14	BrC1 tarpaulin	≤ 5	without	27.9	21.0			
1-7	•		with	27.4	21.2			
15	Protective roof BC / BrC1	≤ 5		27.7	20.7			
16	Passage frame BC	≤ 5		24.2	15.5			
17	Passage frame BrC1	≤ 5		34.3	15.6			
21	Bridging construction L = 5.14 m BC unclad	≤ 5	without /	29.0	29.6			
22	Bridging construction L = 5.14 m BrC1 unclad	≤ 5	with	39.5	40.3			
23	Bridging construction L = 5.14 m BC / BrC1 tarpaulin	≤ 5		41.8	37.9			
27	Stairway access with parallel stair arrangement BC / BrC1	≤ 5			9.2			
29	Ladder access BC / BrC1	≤ 5		see ab	9.2			
33	Topmost level not anchored BC / BrC1	≤ 5	without					

^{*)} BC = Basic configuration / BrC1 = Bracket configuration 1 / BrC2 = Bracket configuration 2

Scaffolding system "ALBLITZ 100 S"	
Standard system configuration - General Instructions	Annex B, page 11

<u>Table B.4:</u> Foundation loads for configurations L = 2.07 m, load class ≤ 6

Annex	Overview *)	Load	Protective	Foundation loads [kN]				
C, page	Overview *)	class	wall	inner face	outer face	access		
9	BC unclad		without	17.7	22.0			
9	BC unclau	≤ 6	with	17.4	22.7			
10	BrC1 unclad	G	without	27.8	19.4			
10	DICT UTICIAU	≤ 6	with	27.8	19.9			
8	BrC2 unclad	4	without	19.1	22.4			
<u> </u>	DIOZ UNCIAU	4	with	19.1	23.0			
12	BC net	≤ 6	without	17.3	20.8			
12	DC Tiet	> 0	with	17.2	21.3			
13 / 11	BrC1 net	< 6	without	27.0	20.7			
10 / 11	DICT HEL	> 0	with	26.4	21.3			
14	BrC1 tarpaulin	≤ 6	without	27.2	21.1			
17	,	≥ 0	with	27.1	21.6			
15	Protective roof BC / BrC1	≤ 6		27.6	19.7			
16	Passage frame BC	≤ 6		23.5	14.8			
17	Passage frame BrC1	≤ 6	without /	33.6	14.9			
21	Bridging construction L = 4.14 m BC unclad	≤ 6	with	30.6	28.5			
22	Bridging construction L = 4.14 m BrC1 unclad	≤ 6		39.6	39.5			
23	Bridging construction L = 4.14 m BC / BrC1 tarpaulin	≤ 6		41.0	39.1			
34	Topmost level not anchored BC / BrC1	≤ 6	without	see a	bove			

^{*)} BC = Basic configuration / BrC1 = Bracket configuration 1 / BrC2 = Bracket configuration 2

Scaffolding system "ALBLITZ 100 S"

Standard system configuration - General Instructions

Annex B, page 12

Bracket configuration 2 (BrC2)	{ = 2.57 m				Annex C, page 3		Annex C, page 4		Annex C, page 7			1	Annex C, page 6
٥	2.5			1	Annex C, page 8		Annex C, page 4		Annex C, page 7			1	Annex C, page 6
lss ≤4 Bracket configuration 1 (BrC1) Bracket co	{ ≤ 2.07 m			1	Annex C, page 8		Annex C, page 4		Annex C, page 7			1	Annex C, page 6
	{ = 3.07 m	ade		-	Annex C, page 2		Annex C, page 4		Annex C, page 7		-	Annex C, page 6	
	{ = 2.57 m			ı	Annex C, page 2		Annex C, page 4	us	Annex C, page 7				Annex C, page 6
Load class ≤ 4 Bracket c	{ ≤ 2.07 m	partially open / closed facade	unclad	-	Annex C, page 2	Cladding with nets	Annex C, page 4	Cladding with tarpaulins	Annex C, page 7	closed facade	Cladding with nets	-	Annex C, page 6
Load in (BC)	l = 3.07 m	artially ope	5	Annex C, page 1	Annex C, page 2	Claddin	Annex C, page 4	Cladding v	Annex C, page 7	close	Claddin	Annex C, page 5	Annex C, page 6
configuration (BC)	l = 2.57 m	E 76.7	Annex C, page 1	Annex C, page 2		Annex C, page 4		Annex C, page 7			Annex C, page 5	Annex C, page 6	
Basic	{ ≤ 2.07 m			Annex C, page 1 Annex C, page 2	Annex C, page 4		Annex C, page 7			Annex C, page 5	Annex C, page 6		
	Configuration			with or without protective wall, long scaffold tie or quick-release anchor, maximum spindle height 41.5 cm	with or without protective wall, V-type anchor and short scaffold tie, maximum spindle height 25 cm		with or without protective wall, V-type anchor and short scaffold tie, maximum spindle height 25 cm		with or without protective wall, V-type anchor and short scaffold tie, maximum spindle height 41.5 cm			with or without protective wall, long scaffold tie or quick- release anchor, maximum spindle height 41.5 cm	with or without protective wall, V-type anchor and short scaffold tie, maximum spindle height 25 cm

:XP-frames)	Bracket configuration 1 (BrC1)	{ ≤ 2.07 m			1	Annex C, page 10		Annex C, page 11		Annex C, page 14			1	Annex C, page 13	
Load class ≤ 6 (NOT for EXP-frames)	Basic configuration Bracl (BC)	ℓ ≤ 2.07 m			Annex C, page 9	Annex C, page 10		Annex C, page 11		Annex C, page 14			Annex C, page 12	Annex C, page 13	
ames)	figuration C1)	<i>l</i> = 2.57 m	osed facade	q	1	Annex C, page 10	th nets	Annex C, page 11	tarpaulins	Annex C, page 14	cade	th nets	,	Annex C, page 13	
_oad class ≤ 5 (NOT for EXP-frames)	Bracket configuration 1 (BrC1)	{ ≤ 2.07 m	partially open / closed facade	unclad	1	Annex C, page 10	Cladding with nets	Annex C, page 11	Cladding with tarpaulins	Annex C, page 14	closed facade	Cladding with nets	1	Annex C, page 13	
slass ≤ 5 (NC	figuration C)	<i>l</i> = 2.57 m	parti	•	Annex C, page 9	Annex C, page 10		Annex C, page 11	ַ	Annex C, page 14			Annex C, page 12	Annex C, page 13	
Poad c	Basic configuration (BC)	ℓ ≤ 2.07 m			·	Annex C, page 9 Annex C, Annex C, page 10	Annex C, page 10		Annex C, page 11		Annex C, page 14			Annex C, page 12	Annex C, page 13
		Configuration			with or without protective wall, long scaffold tie or quick-release anchor, maximum spindle height 41.5 cm	with or without protective wall, V-type anchor and short scaffold tie, maximum spindle height 25 cm		with or without protective wall, V-type anchor and short scaffold tie, maximum spindle height 30 cm		with or without protective wall, V-type anchor and short scaffold tie, maximum spindle height 41.5 cm			with or without protective wall, long scaffold tie or quick-release anchor, maximum spindle height 41.5 cm	with or without protective wall, V-type anchor and short scaffold tie, maximum spindle height 30 cm	

Table B.7: Additional measures for variants of the standard system configuration with additional components													
n 2 (BrC2)	$\ell = 3.07 \mathrm{m}$			Annex C, page 15	ı	Annex C, page 17	ı	Annex C, page 19		Annex C, page 27	Annex C, page 29		Annex C, page 20
onfiguratio	l = 2.57 m			Annex C, page 15	•	Annex C, page 17		Annex C, page 22		Annex C, page 27	Annex C, page 29		Annex C, page 23
Bracket c	{ ≤ 2.07 m			Annex C, page 15	-	Annex C, page 17		Annex C, page 25	1	Annex C, page 27	Annex C, page 29		Annex C, page 26
1 (BrC1)	<i>l</i> = 3.07 m			Annex C, page 15	•	Annex C, page 17		Annex C, page 19	Annex C, page 32	Annex C, page 27	Annex C, page 29		Annex C, page 20
onfiguration	<i>l</i> = 2.57 m	cade		Annex C, page 15	-	Annex C, page 17		Annex C, page 22	Annex C, page 32 and 33	Annex C, page 27	Annex C, page 29	aulins	Annex C, page 23
Bracket c	{ ≤ 2.07 m	/ closed fac	ıclad	Annex C, page 15	-	Annex C, page 17		Annex C, page 25	Annex C, page 32, 33 and 34	Annex C, page 27	Annex C, page 29	nets or tarp	Annex C, page 26
n (BC)	<i>l</i> = 3.07 m	artially oper	5	Annex C, page 15	Annex C, page 16	Annex C, page 17	Annex C, page 18	Annex C, page 19	Annex C, page 32	Annex C, page 27	Annex C, page 29	adding with	Annex C, page 20
configuratio	{ = 2.57 m	ď		Annex C, page 15	Annex C, page 16	Annex C, page 17	Annex C, page 21	Annex C, page 22	Annex C, page 32 and 33	Annex C, page 27	Annex C, page 29	ซื	Annex C, page 23
Basic	{ ≤ 2.07 m			Annex C, page 15	Annex C, page 16	Annex C, page 17	Annex C, page 24	Annex C, page 25	Annex C, page 32, 33 and 34	Annex C, page 27	Annex C, page 29		Annex C, page 26
	Configuration			for protective roof, spindle height in accordance with the respective configuration	for passage frame, maximum spindle height 41.5 cm	for passage frame, maximum spindle height 25 cm	for bridging girder, maximum spindle height 41.5 cm	for bridging girder, maximum spindle height 25 cm	Topmost working level not anchored with or without protective wall, short scaffold ties	Stairway access with parallel stair arrangement, access bay $\ell \le 2.57$ m, maximum spindle height of the access: 34.4 cm	add-on ladder access, maximum spindle height of the access: 34.4 cm		for bridging girder, maximum spindle height 25 cm
	configuration (BC) Bracket configuration 1 (BrC1) Bracket configuration	Basic configuration (BC)Bracket configuration 1 (BrC1)Bracket configuration 2 l	Basic configuration (BC)Bracket configuration 1 (BrC1)Bracket configuration 2 (BrC2) $\ell \le$ $\ell =$ $\ell =$ $\ell =$ $\ell =$ $\ell =$ 2.07m 2.57m 2.57m 2.57m 2.57m partially open / closed facade	Basic configuration (BC)Bracket configuration 1 (BrC1)Bracket configuration 2 (BrC2) $\ell \le$ $\ell =$ $\ell =$ $\ell =$ $\ell =$ $\ell =$ 2.07m 2.07m 2.57m 2.57m 2.57m partially open / closed facade	Basic configuration (BC)Bracket configuration 1 (BrC1)Bracket configuration 2 (BrC2) $\ell \le$ $\ell =$ $\ell =$ $\ell =$ $\ell =$ $\ell =$ 2.07 m 2.57 m 2.57 m 2.57 m 2.57 m 3.07 m and a substitution of a substit	Basic configuration (BC)Bracket configuration 1 (BrC1)Bracket configuration 2 (BrC2) l <td>Basic configuration (BC)Bracket configuration 1 (BrC1)Bracket configuration 1 (BrC1)Bracket configuration 2 (BrC2)l \leq l l \leq l l l l l l l l l l</td> <td>Basic configuration (BC)Bracket configuration 1 (BrC1)Bracket configuration 2 (BrC2)$\ell \le 1$$\ell = 1$$\ell = 1$$\ell = 1$$\ell = 1$$\ell = 1$$\ell = 1$$\ell \le 1$$\ell = 1$$\ell = 1$$\ell = 1$$\ell = 1$$\ell = 1$$\ell = 1$Annex C, page 15Annex C, page 15Annex C, page 15Annex C, page 15Annex C, Annex C, page 15Annex C, Annex C, Annex</td> <td>Rasic configuration (BC)Bracket configuration 1 (BrC1)Bracket configuration 2 (BrC2)l \leq l l l l l l l l l l</td> <td>Basic configuration (BC)Bracket configuration 1 (BrC1)Bracket configuration 2 (BrC2)$t \le 1$ 2.07 m$t = 1$ 3.07 m$t \le 1$ 3.07 m$t \le 1$ 2.57 m$t \le 1$ 3.07 m$t \le 1$ 2.57 m$t \le 1$ 3.07 mAnnex C, page 15 page 16Annex C, page 15 page 16Annex C, Annex C,</td> <td>Basic configuration (BC)Bracket configuration 1 (BC1)Bracket configuration 2 (BrC2)$t \le 1$$t = 1$$t \le 1$$t \ge 1$$t \le 1$$t \le 1$$t \le 1$$t \le 1$$t \le 1$$t \le 1$$t \ge 1$$t \le 1$$t \le 1$$t \le 1$$t \le 1$$t \le 1$$t \le 1$$t \ge 1$$t \ge 1$$t \le 1$$t \le 1$$t \le 1$$t \le 1$$t \le 1$$t \ge 1$<td>Basic configuration (BC) Bracket configuration 1 (BrC1) Bracket configuration 2 (BrC2) ℓ ≤ 1 ℓ</td><td>easic configuration (BC) Bracket configuration 1 (BrC1) Bracket configuration 1 (BrC2) Bracket configuration 2 (BrC2) (Brc2) m 3.07 m 2.57 m 3.07 m 2.67 m 3.07 m</td></td>	Basic configuration (BC)Bracket configuration 1 (BrC1)Bracket configuration 1 (BrC1)Bracket configuration 2 (BrC2) l \leq l l \leq l	Basic configuration (BC)Bracket configuration 1 (BrC1)Bracket configuration 2 (BrC2) $\ell \le 1$ $\ell = 1$ $\ell \le 1$ $\ell = 1$ Annex C, page 15Annex C, page 15Annex C, page 15Annex C, page 15Annex C, Annex C, page 15Annex C, Annex	Rasic configuration (BC)Bracket configuration 1 (BrC1)Bracket configuration 2 (BrC2) l \leq l	Basic configuration (BC)Bracket configuration 1 (BrC1)Bracket configuration 2 (BrC2) $t \le 1$ 2.07 m $t = 1$ 3.07 m $t \le 1$ 3.07 m $t \le 1$ 2.57 m $t \le 1$ 3.07 m $t \le 1$ 2.57 m $t \le 1$ 3.07 mAnnex C, page 15 page 16Annex C, page 15 page 16Annex C, Annex C,	Basic configuration (BC)Bracket configuration 1 (BC1)Bracket configuration 2 (BrC2) $t \le 1$ $t = 1$ $t \le 1$ $t \ge 1$ $t \le 1$ $t \ge 1$ $t \le 1$ $t \ge 1$ $t \ge 1$ $t \le 1$ $t \ge 1$ <td>Basic configuration (BC) Bracket configuration 1 (BrC1) Bracket configuration 2 (BrC2) ℓ ≤ 1 ℓ</td> <td>easic configuration (BC) Bracket configuration 1 (BrC1) Bracket configuration 1 (BrC2) Bracket configuration 2 (BrC2) (Brc2) m 3.07 m 2.57 m 3.07 m 2.67 m 3.07 m</td>	Basic configuration (BC) Bracket configuration 1 (BrC1) Bracket configuration 2 (BrC2) ℓ ≤ 1 ℓ	easic configuration (BC) Bracket configuration 1 (BrC1) Bracket configuration 1 (BrC2) Bracket configuration 2 (BrC2) (Brc2) m 3.07 m 2.57 m 3.07 m 2.67 m 3.07 m

Standard system configuration - General Instructions

Annex B, page 15

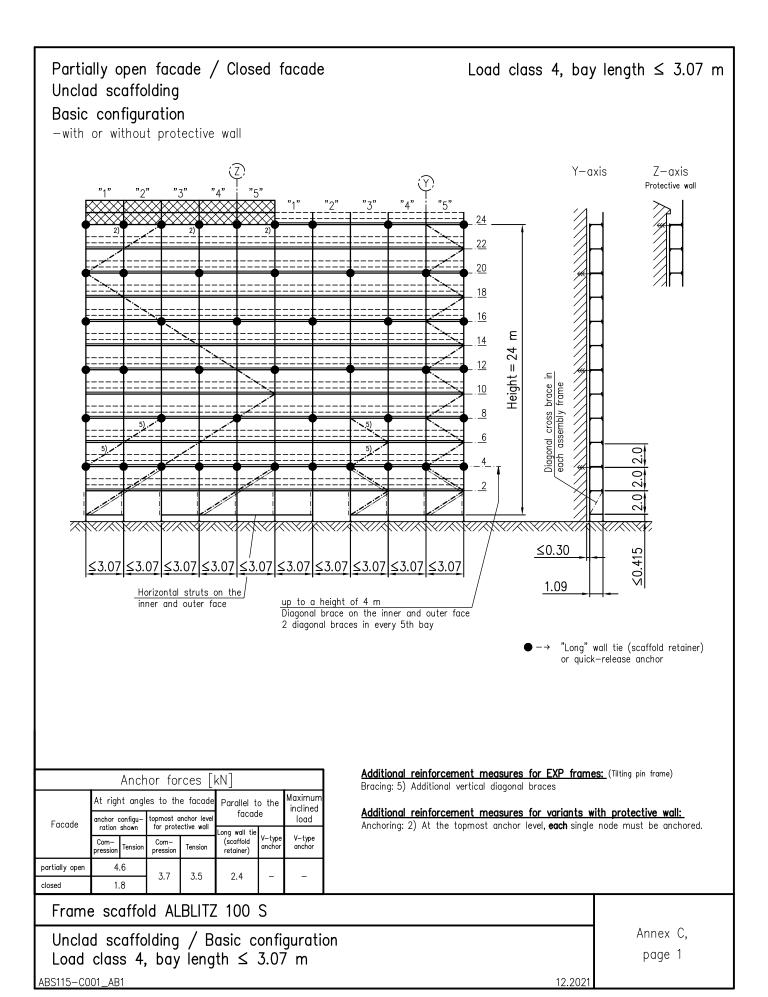
<u>Table B.8:</u> Overview assembly instructions and details

Content	Annex C, page
3D layout of stairway access with parallel stair arrangement	28
3D layout of add-on ladder access	30
Assembling the stairway or ladder access	31
Anchorage (scaffold ties long/short; quick-release anchor)	35
Anchorage (V-type anchor)	36
Bracket configuration 2 (BrC2)	37
Corner formation	38

Scaffolding system "ALBLITZ 100 S"

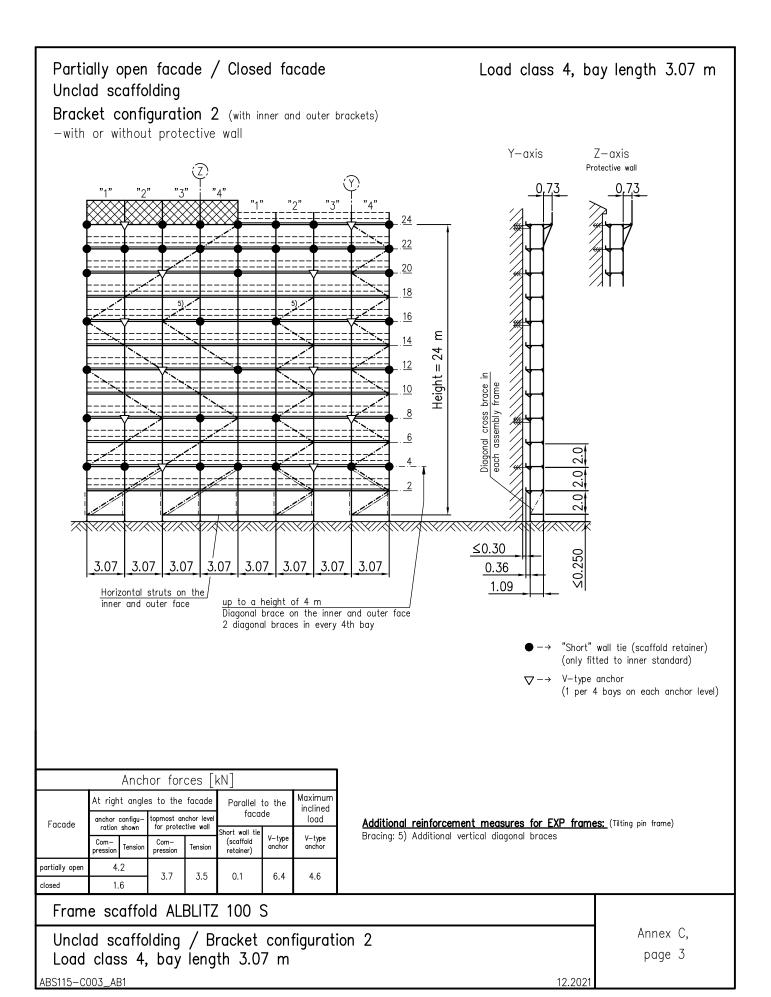
Standard system configuration - General Instructions

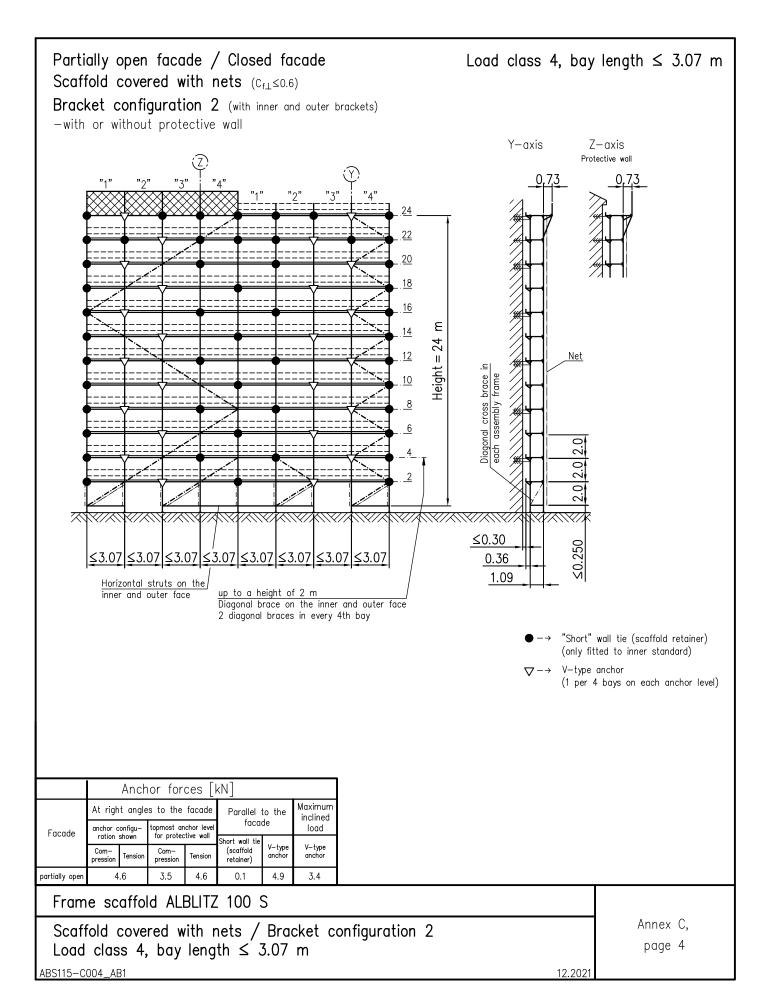
Annex B, page 16

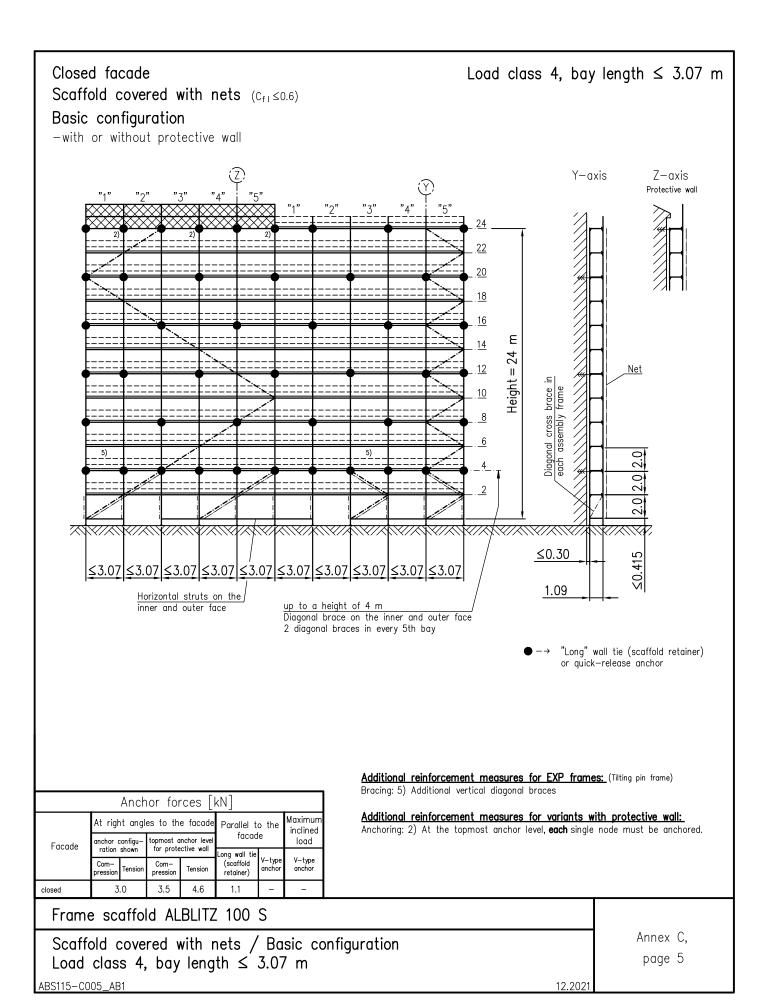


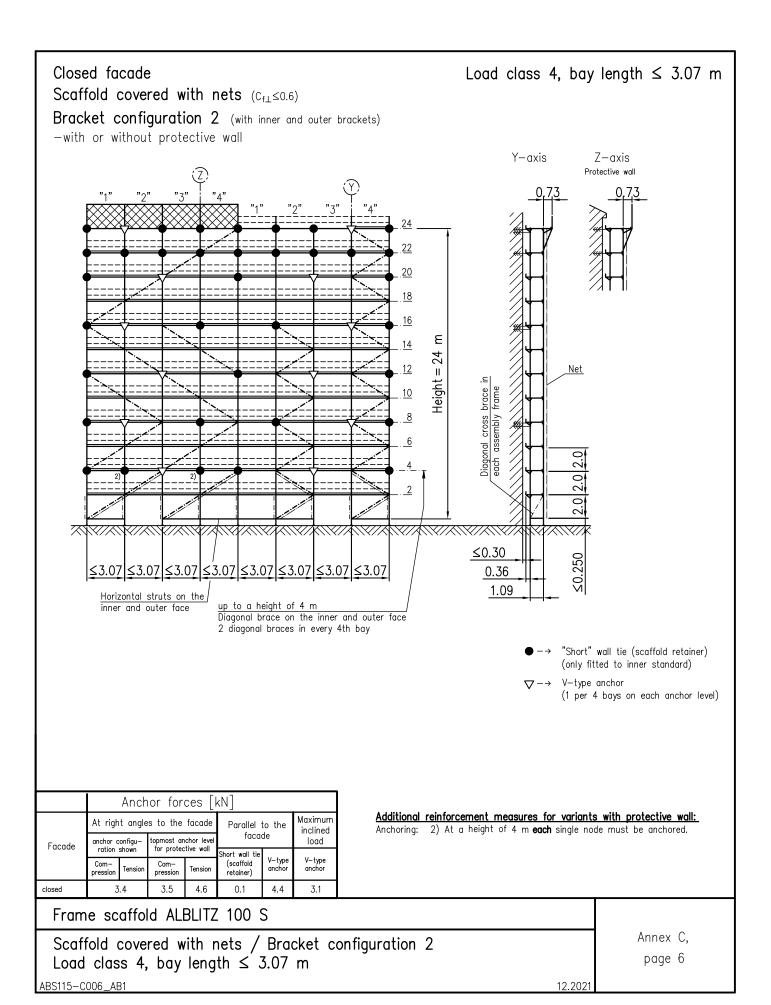
Partially open facade / Closed facade Load class 4, bay length \leq 3.07 m Unclad scaffolding Bracket configuration 1 (with inner brackets) -with or without protective wall Y-axisZ-axis Protective wall 20 <u>16</u> <u>14</u> <u>10</u> Diagonal cross brace assembly ≤0.30 ≤3.07 ≤3.07 ≤3.07 0.36 1.09 Horizontal struts on the up to a height of 2 m Diagonal brace on the inner and outer face 2 diagonal braces in every 4th bay inner and outer face "Short" wall tie (scaffold retainer) (only fitted to inner standard) V-type anchor (1 per 4 bays on each anchor level) Additional reinforcement measures for EXP frames: (Tilting pin frame) Anchor forces [kN] Bracing: 5) Additional vertical diagonal braces Maximum At right angles to the facade Parallel to the inclined Additional reinforcement measures for variants with protective wall: opmost anchor leve for protective wall anchor configu-ration shown load Facade Anchoring: 2) At the topmost anchor level, each single node must be anchored. V-type anchor V-type anchor (scaffold retainer) partially open 4.5 3.5 6.5 3.7 0.1 4.6 1.8 Frame scaffold ALBLITZ 100 S Unclad scaffolding / Bracket configuration 1 Annex C. Load class 4, bay length \leq 3.07 m page 2

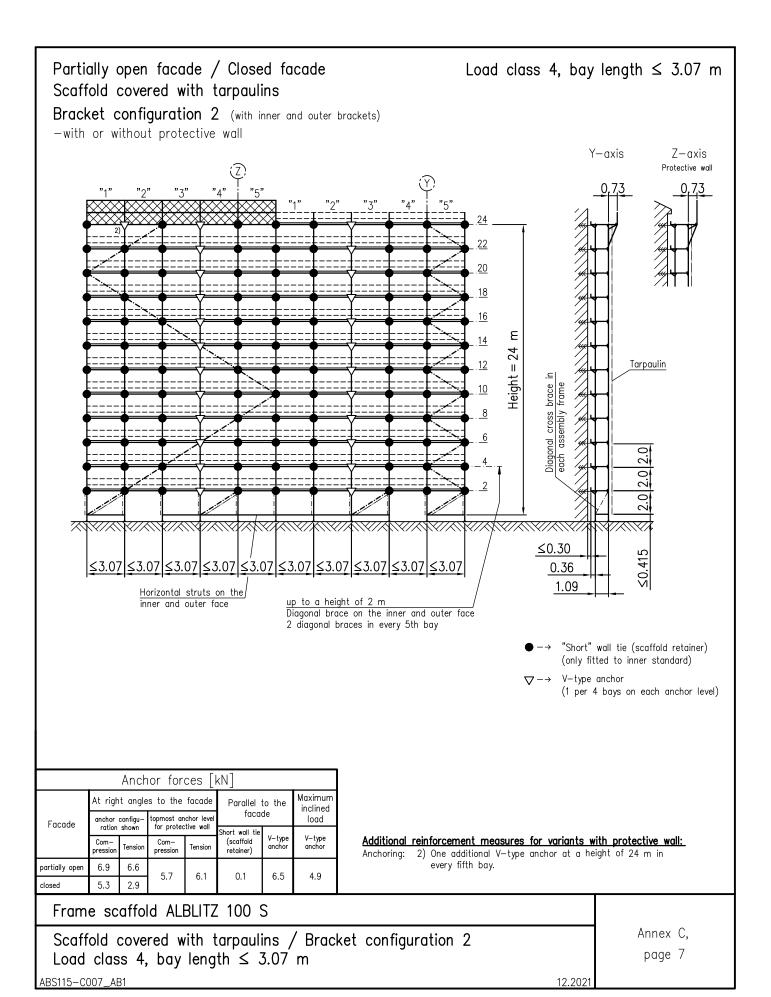
ABS115-C002_AB1

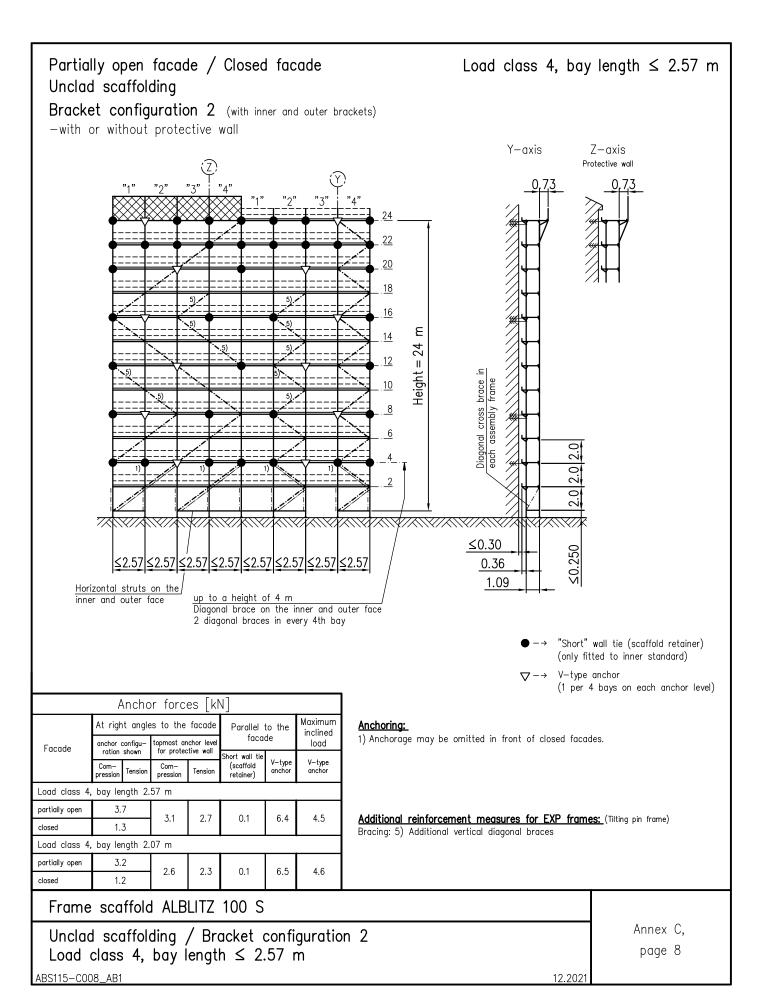






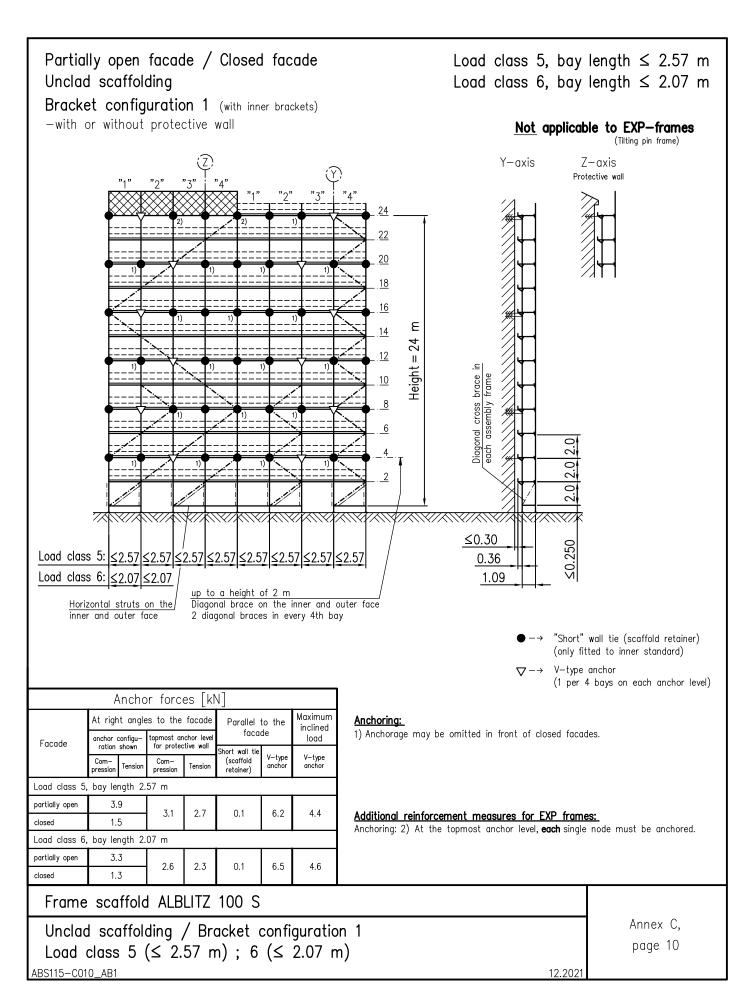


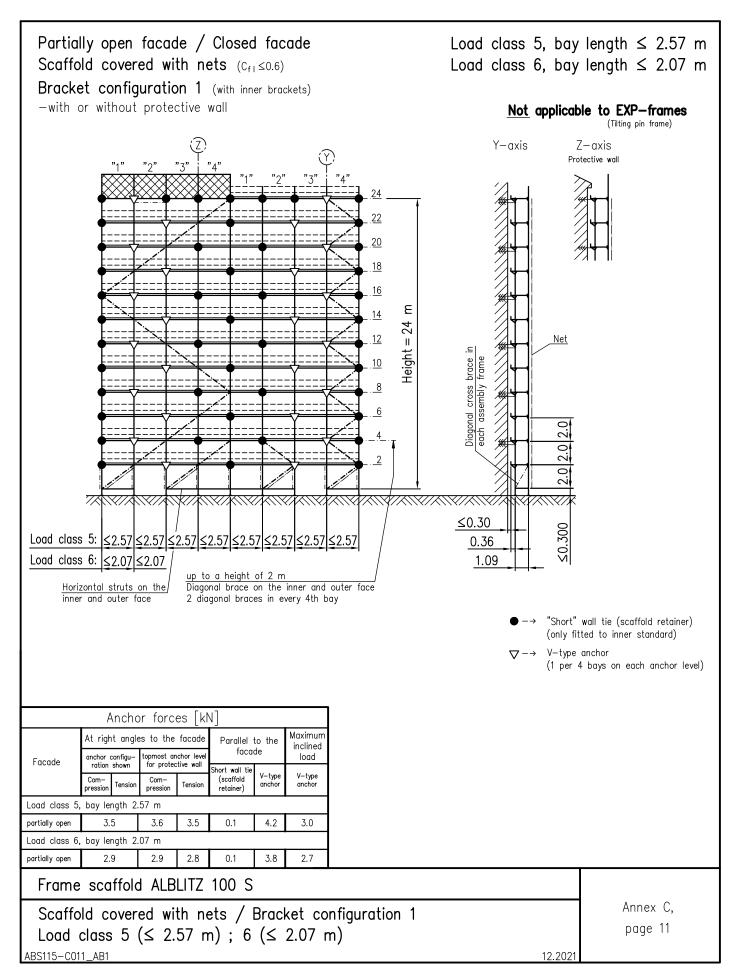


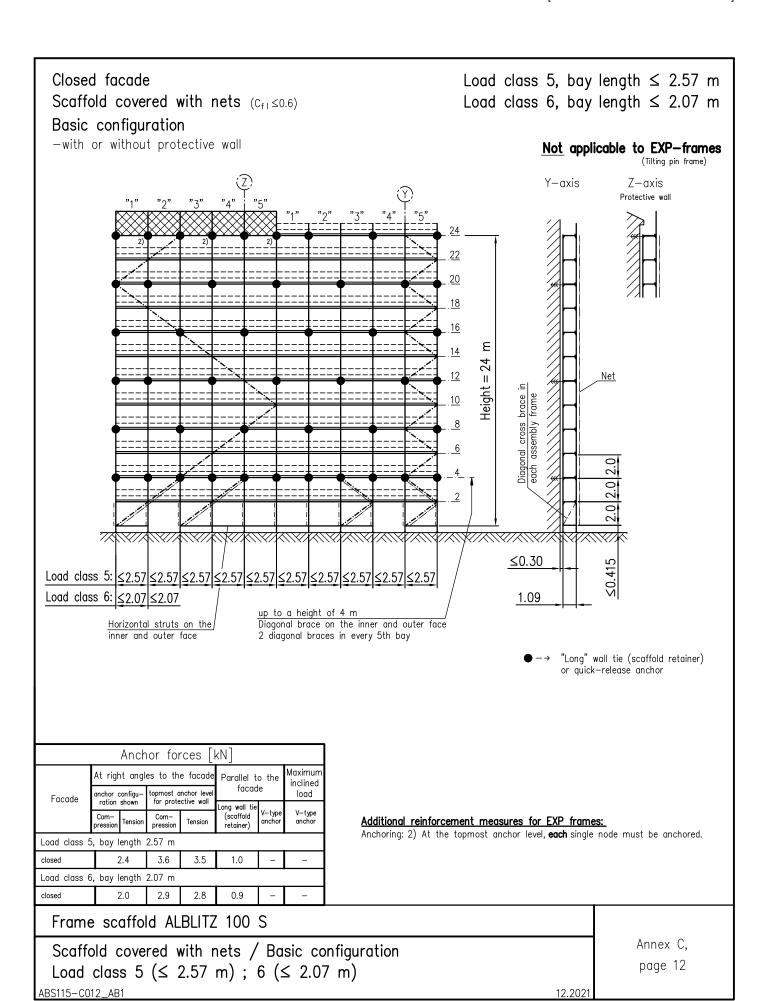


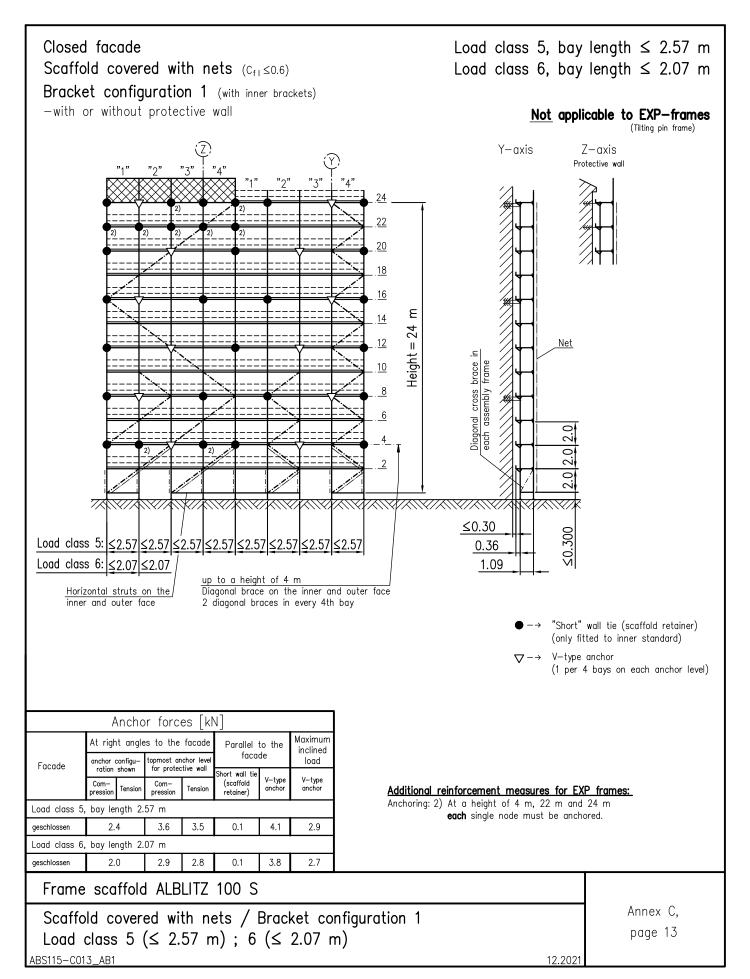
Partially open facade / Closed facade Load class 5, bay length ≤ 2.57 m Unclad scaffolding Load class 6, bay length \leq 2.07 m Basic configuration -with or without protective wall Not applicable to EXP-frames (Tilting pin frame) Y-axisZ-axis Protective wall ≤0.30 Load class 5: $|\leq 2.57| \leq 2.57$ Load class 6: $|\leq 2.07| \leq 2.07$ 1.09 up to a height of 2 m Diagonal brace on the inner and outer face Horizontal struts on the 2 diagonal braces in every 5th bay inner and outer face "Long" wall tie (scaffold retainer) or quick-release anchor Anchor forces [kN] Maximum At right angles to the facade Parallel to the inclined load Facade ong wall tie (scaffold V-type anchor Com-pressio Tension retainer) 3) Diagonal cross braces may be omitted in front of closed facades. Load class 5, bay length 2.57 m Additional reinforcement measures for EXP frames: partially open 4.0 1.6 Anchoring: 2) At the topmost anchor level, each single node must be anchored. 1.5 closed Load class 6, bay length 2.07 m partially open 3.4 2.3 2.6 1.6 1.3 Frame scaffold ALBLITZ 100 S Annex C. Unclad scaffolding / Basic configuration page 9 Load class 5 (\leq 2.57 m); 6 (\leq 2.07 m)

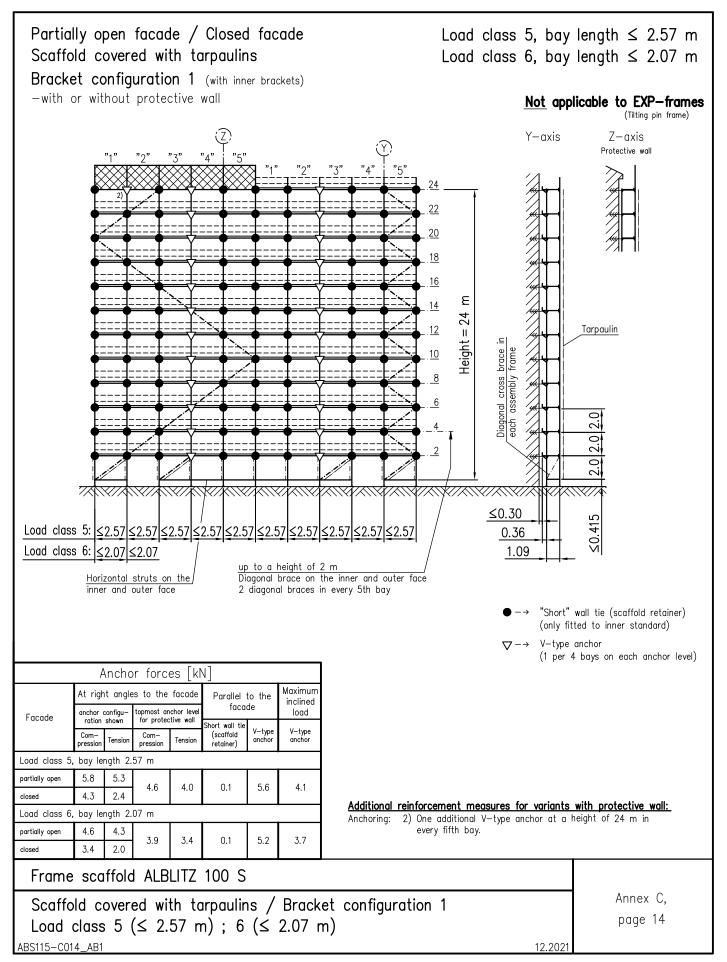
ABS115-C009_AB1











Additional measures for the protective roof

Load class 4, bay length \leq 3.07 m

Load class 5, bay length ≤ 2.57 m

Not applicable to EXP-frames (Tilting pin frame)

Load class 6, bay length \leq 2.07 m

Partially open facade / Closed facade Unclad scaffolding

Basic and bracket configuration

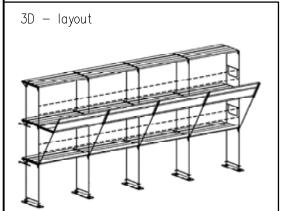
The anchors shown **must be installed additionally** if they are not comprised in the respective assembly configuration. V-type anchor required at a height of 4 m!

Other design variants in accordance with assembly configuration Annex C, pages 1, 2, 3, 9, 10

≤0.30 ≤3.07 ≤3.07 1.09

> "Short" wall tie (scaffold retainer) (only fitted to inner standard)

Y-axis



Additional measures for the protective roof:

Anchoring: At a height of 2 m and 4 m each single node must be

Further instructions: Diagonal cross brace in lowermost frame is not required for designs with protective roof.

Anchor forces in accordance with the assembly variant

Frame scaffold ALBLITZ 100 S

Unclad scaffolding / Basic and bracket configuration Protective roof / Load class 4; 5; 6

Annex C. page 15

Z618.22

ABS115-C015_AB1

Additional measures for configuration with passage frame

Load class 4, bay length \leq 3.07 m

Load class 5, bay length \leq 2.57 m Load class 6, bay length \leq 2.07 m

Not applicable to EXP-frames

(Tilting pin frame)

Partially open facade / Closed facade Unclad scaffolding Basic configuration

The anchors and bracing elements shown **must be installed additionally** if they are not comprised in the respective assembly configuration. V—type anchor required at a height of 4 m!

Other design variants in accordance with assembly configuration

Annex C, pages 1, 9

Y-axis

Y-axis

Y-axis

Y-axis

Y-axis

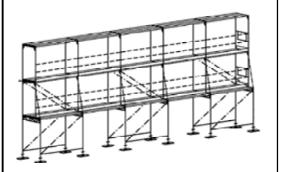
Y-axis

Y-axis

Y-axis

→ Scaffold tie





Additional measures for configuration with passage frame:

Anchorage: At a height of 4 m every node must be anchored.

Bracing: Horizontal struts above spindle nut on the inner and outer face in **every second bay**.

Diagonal brace on the inner and outer face up to a height of 4 m in **every second bay**.

 Tube Ø48.3 x 3.2 on the outer face above the passage frame on each post axis. Connection with swivel coupler.

Anchor forces in accordance with the assembly variant

Frame scaffold ALBLITZ 100 S

Unclad scaffolding / Basic configuration Passage frame / Load class 4; 5; 6

Annex C, page 16

12.2021

ABS115-C016_AB1

Additional measures for configuration with passage frame

Load class 4, bay length \leq 3.07 m

Load class 5, bay length \leq 2.57 m Load class 6, bay length \leq 2.07 m

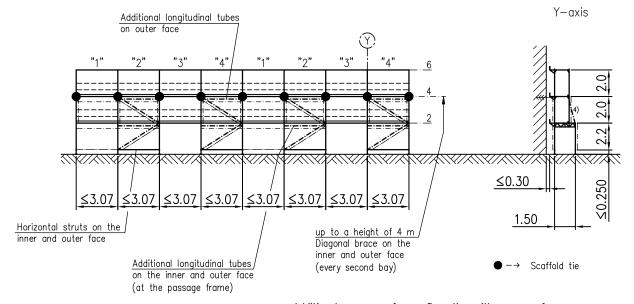
Not applicable to EXP-frames

(Tilting pin frame)

Partially open facade / Closed facade Unclad scaffolding Bracket configurations

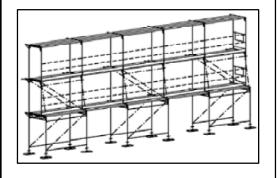
The anchors and bracing elements shown **must be installed additionally** if they are not comprised in the respective assembly configuration. V—type anchor required at a height of 4 m!

Other design variants in accordance with assembly configuration Annex C, pages 2, 3, 8, 10



Bracina:

3D — layout



Additional measures for configuration with passage frame:

Anchoring: At a height of 4 m every node must be anchored.

Diagonal brace on the inner and outer face up to a height of 4 m in **every second bay**. Horizontal struts or longitudinal tubes \(\text{\$\phi}48.3 \times 3.2 \) with right—angle couplers on outer face in **every second bay** and on inner face in **3 out of 4 bays:**

- above spindle nut
- at a height of 2 m
- at a height of 4 m
- 4) Tube Ø 48.3 x 3.2 on the outer face above the passage frame on each post axis. Connection by means of right—angle coupler at the longitudinal tubes.

Anchor forces in accordance with the assembly variant

Frame scaffold ALBLITZ 100 S

Unclad scaffolding / Bracket configurations Passage frame / Load class 4 ; 5 ; 6

Annex C, page 17

10.2016

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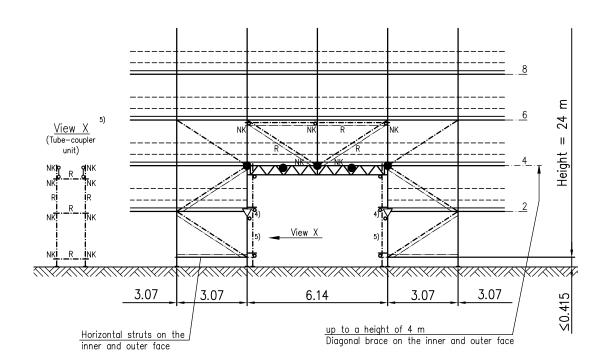
ABS115-C017_AB1

Additional measures for bridging girder 6.14 m Load class 4, bay length 3.07 m

Partially open facade Closed facade Unclad scaffolding Basic configuration

The anchors and bracing elements shown must be installed additionally if they are not comprised in the respective assembly configuration. V-type anchor required!

Other design variants in accordance with assembly configuration Annex C, page 1



Additional measures at the bridging construction:

Anchorage:

Edge distances next to the bridging construction at a height of 2 m (V-type anchor).

4) Additional coupler tube (48.3 x 3.2 + standard coupler) between inner and outer post at the height of the anchor.

Longitudinal bracing: Vertical diagonal braces on the outer face and tube-coupler bracing above the bridging girder on the inner and outer face as shown.

Vertical diagonal braces on the inner face up to a height of 4 m next to the

Horizontal strut above base jack on the inner and outer face next to the bridging construction

Further instructions: Anchoring of the lattice girders in the bay

5) Additional scaffold section (tube-coupler unit) below the bridging girder,

(at a height of 2 m on the inner and outer face, coupled to scaffold)

"Long" wall tie (scaffold retainer) or quick-release anchor

V-type anchor

= Scaffold tube NK = Standard coupler

Anchor forces in accordance with the assembly variant

Frame scaffold ALBLITZ 100 S

Unclad scaffolding / Basic configuration

Bridging construction L = 6.14 m / Load class 4, bay length 3.07 m ABS115-C018 AB1

Annex C. page 18

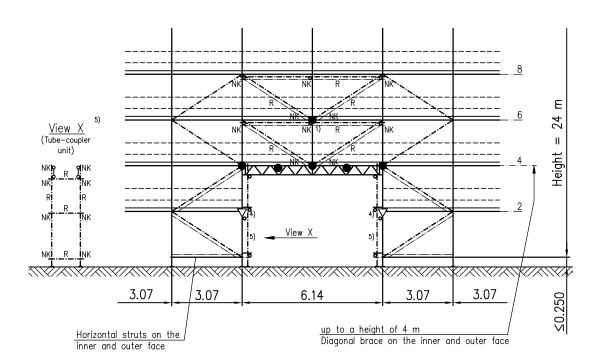
Additional measures for bridging girder 6.14 m Load class 4, bay length 3.07 m

Partially open facade Closed facade Unclad scaffolding Bracket configurations

The anchors and bracing elements shown **must be installed additionally** if they are not comprised in the respective assembly configuration. V—type anchor required!

Other design variants in accordance with assembly configuration

Annex C, pages 2, 3



Additional measures at the bridging construction:

Anchorage:

Edge distances next to the bridging construction at a height of 2 m (V-type anchor).

- Additional coupler tube (48.3 x 3.2 + standard coupler) between inner and outer post at the height of the anchor.
- 1) Additional anchor at a height of 6 m centrally positioned above the bridging construction

Longitudinal bracing: Vertical diagonal braces on the outer face and tube—coupler bracing above the bridging girder on the inner and outer face as shown.

- Vertical diagonal braces on the inner face up to a height of 4 m next to the bridging construction
- Horizontal strut above base jack on the inner and outer face next to the bridging construction

Further instructions: Anchoring of the lattice girders in the bay

 Additional scaffold section (tube-coupler unit) below the bridging girder, design see view X.
 (at a height of 2 m on the inner and outer face, coupled to scaffold)

Anchor forces in accordance with the assembly variant

Frame scaffold ALBLITZ 100 S

Unclad scaffolding / Bracket configurations

Bridging construction L = 6.14 m / Load class 4, bay length 3.07 m

ABS115-C019_AB1

Annex C, page 19

Scaffold tie

= Scaffold tube

= Standard coupler

V-type anchor

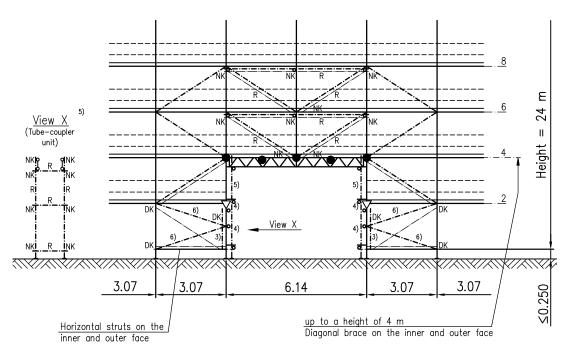
Additional measures for bridging girder 6.14 m Load class 4, bay length 3.07 m

Partially open facade Closed facade Clad scaffolding Basic and bracket configurations

The anchors and bracing elements shown must be installed additionally if they are not comprised in the respective assembly configuration. V-type anchor required!

Other design variants in accordance with assembly configuration Annex C, pages 4, 5, 6, 7

> At the bridging construction (up to a height of 8 m) anchorage of configurations cladded with nets must be executed as for configurations cladded with tarpaulins.



Additional measures at the bridging construction:

Anchorage:

Edge distances next to the bridging construction at a height of 2 m (V-type anchor).

4) Additional coupler tube (48.3 x 3.2 + standard coupler) between inner and outer post at the height of the anchor.

Longitudinal bracing: Vertical diagonal braces on the outer face and tube-coupler bracing above the bridging girder on the inner and outer face as shown.

Vertical diagonal braces on the inner face up to a height of 4 m next to the bridging construction

Horizontal strut above base jack on the inner and outer face next to the bridging construction

Further instructions: Anchoring of the lattice girders in the bay

5) Additional scaffold section (tube-coupler unit) below the bridging girder, design see view X. (at a height of 2 m on the inner and outer face, coupled to scaffold)

6) Diagonal brace on the outer face (tubes + swivel coupler) as shown.

3) Additional diagonal cross brace next to bridging construction

Anchor forces in accordance with the assembly variant

Scaffold tie

= Scaffold tube

NK = Standard coupler

DK = Swivel coupler

V-type anchor

Frame scaffold ALBLITZ 100 S

Clad scaffolding / Basic and bracket configurations Bridging construction L = 6.14 m / Load class 4, bay length 3.07 m

page 20

Annex C.

ABS115-C020 AB1

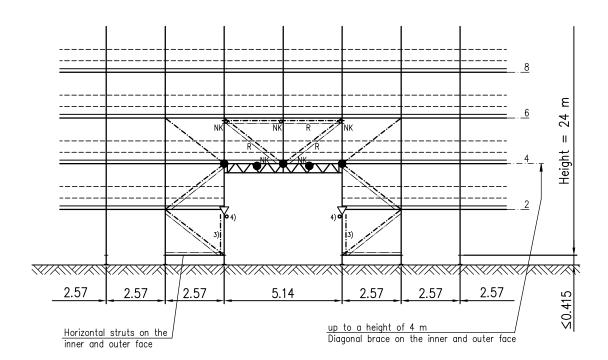
Additional measures for bridging girder 5.14 m Load class 5, bay length 2.57 m

Not applicable to EXP-frames (Tilting pin frame)

Partially open facade Closed facade Unclad scaffolding Basic configuration

The anchors and bracing elements shown must be installed additionally if they are not comprised in the respective assembly configuration. V-type anchor required!

Other design variants in accordance with assembly configuration Annex C, page 9



Additional measures at the bridging construction:

Anchorage:

Edge distances next to the bridging construction at a height of 2 m (V-type anchor).

4) Additional coupler tube (48.3 x 3.2 + standard coupler) between inner and outer post at the height of the anchor.

Longitudinal bracing: Vertical diagonal braces on the outer face and tube-coupler bracing above the bridging girder on the inner and outer face as shown.

Vertical diagonal braces on the inner face up to a height of 4 m next to the bridging construction

Horizontal strut above base jack on the inner and outer face next to the bridging construction

Further instructions: Anchoring of the lattice girders in the bay

3) Diagonal cross brace on lowermost level next to the bridging construction

"Long" wall tie (scaffold retainer) or quick-release anchor

V-type anchor

= Scaffold tube NK = Standard coupler

Anchor forces in accordance with the assembly variant

Frame scaffold ALBLITZ 100 S

Unclad scaffolding / Basic configuration Bridging construction L = 5.14 m / Load class 5, bay length 2.57 m

Annex C. page 21

ABS115-C021_AB1

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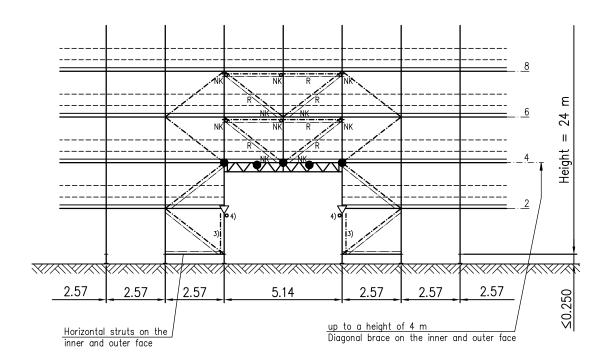
Additional measures for bridging girder 5.14 m Load class 5, bay length 2.57 m

Not applicable to EXP-frames (Tilting pin frame)

Partially open facade Closed facade Unclad scaffolding Bracket configuration

The anchors and bracing elements shown must be installed additionally if they are not comprised in the respective assembly configuration. V-type anchor required!

Other design variants in accordance with assembly configuration Annex C, page 10



Additional measures at the bridging construction:

Anchorage:

Edge distances next to the bridging construction at a height of 2 m (V-type anchor).

4) Additional coupler tube (48.3 x 3.2 + standard coupler) between inner and outer post at the height of the anchor.

Longitudinal bracing: Vertical diagonal braces on the outer face and tube-coupler bracing above the bridging girder on the inner and outer face as shown.

Vertical diagonal braces on the inner face up to a height of 4 m next to the bridging construction

Horizontal strut above base jack on the inner and outer face next to the bridging construction

Scaffold tie V-type anchor

= Scaffold tube NK = Standard coupler

Further instructions: Anchoring of the lattice girders in the bay

3) Diagonal cross brace on lowermost level next to the bridging construction

Anchor forces in accordance with the assembly variant

Frame scaffold ALBLITZ 100 S

Unclad scaffolding / Bracket configuration Bridging construction L = 5.14 m / Load class 5, bay length 2.57 m ABS115-C022_AB1

Annex C. page 22

Additional measures for bridging girder 5.14 m Load class 5, bay length 2.57 m

Not applicable to EXP-frames
(Tilting pin frame)

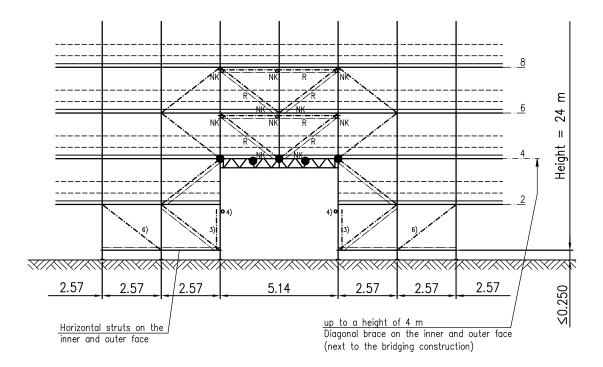
Partially open facade Closed facade Clad scaffolding Basic and bracket configuration

The anchors and bracing elements shown **must be installed additionally** if they are not comprised in the respective assembly configuration. V—type anchor required!

Other design variants in accordance with assembly configuration

Annex C, pages 11, 12, 13, 14

At the bridging construction (up to a height of 8 m) anchorage of configurations cladded with nets must be executed as for configurations cladded with tarpaulins.



Additional measures at the bridging construction:

Anchorage:

Edge distances next to the bridging construction at a height of 2 m (V-type anchor).

4) Additional coupler tube (48.3 x 3.2 + standard coupler) between inner and outer post at the height of the anchor.

Longitudinal bracing: Vertical diagonal braces on the outer face and tube—coupler bracing above the bridging girder on the inner and outer face as shown.

- Vertical diagonal braces on the inner face up to a height of 4 m next to the bridging construction
- Horizontal strut above base jack on the inner and outer face next to the bridging construction
- 6) Additional diagonal braces as shown

Further instructions: Anchoring of the lattice girders in the bay

3) Diagonal cross brace on lowermost level next to the bridging construction

lacktriangledown \longrightarrow Scaffold tie \lacktriangledown V-type anchor

R = Scaffold tube NK = Standard coupler

Anchor forces in accordance with the assembly variant

Frame scaffold ALBLITZ 100 S

Clad scaffolding / Basic and bracket configuration

Bridging construction L = 5.14 m / Load class 5, bay length 2.57 m

ABS115-C023_AB1

Annex C, page 23

2.2021

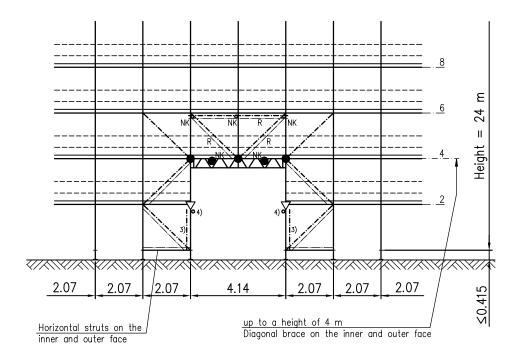
Additional measures for bridging girder 4.14 m Load class 6, bay length 2.07 m

Not applicable to EXP-frames (Tilting pin frame)

Partially open facade Closed facade Unclad scaffolding Basic configuration

The anchors and bracing elements shown must be installed additionally if they are not comprised in the respective assembly configuration. V-type anchor required!

Other design variants in accordance with assembly configuration Annex C, page 9



Additional measures at the bridging construction:

Anchorage:

Edge distances next to the bridging construction at a height of 2 m (V-type anchor).

4) Additional coupler tube (48.3 x 3.2 + standard coupler) between inner and outer post at the height of the anchor.

Longitudinal bracing: Vertical diagonal braces on the outer face and tube-coupler bracing above the bridging girder on the inner and outer face as shown.

Vertical diagonal braces on the inner face up to a height of 4 m next to the bridging construction

Horizontal strut above base jack on the inner and outer face next to the bridging construction

"Long" wall tie (scaffold retainer) or quick-release anchor

V-type anchor

= Scaffold tube NK = Standard coupler

Further instructions: Anchoring of the lattice girders in the bay

3) Diagonal cross brace on lowermost level next to the bridging construction

Anchor forces in accordance with the assembly variant

Frame scaffold ALBLITZ 100 S

Unclad scaffolding / Basic configuration

Bridging construction L = 4.14 m / Load class 6, bay length 2.07 m ABS115-C024_AB1

Annex C. page 24 Additional measures for bridging girder 4.14 m Load class 6, bay length 2.07 m

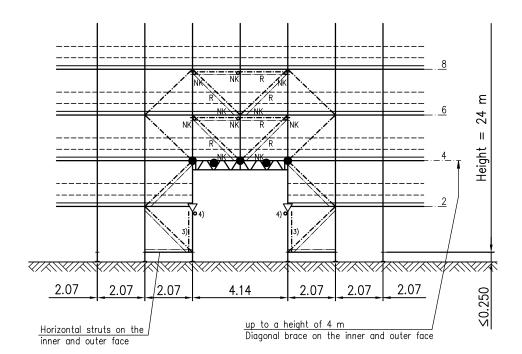
Not applicable to EXP-frames
(Tilting pin frame)

Partially open facade Closed facade Unclad scaffolding Bracket configuration

The anchors and bracing elements shown **must be installed additionally** if they are not comprised in the respective assembly configuration. V—type anchor required!

Other design variants in accordance with assembly configuration

Annex C, page 10



Additional measures at the bridging construction:

Anchorage:

Edge distances next to the bridging construction at a height of 2 m (V-type anchor).

4) Additional coupler tube (48.3 x 3.2 + standard coupler) between inner and outer post at the height of the anchor.

Longitudinal bracing: Vertical diagonal braces on the outer face and tube—coupler bracing above the bridging girder on the inner and outer face as shown.

 Vertical diagonal braces on the inner face up to a height of 4 m next to the bridging construction

 Horizontal strut above base jack on the inner and outer face next to the bridging construction → Scaffold tie

 $\nabla \rightarrow V$ -type anchor

R = Scaffold tube NK = Standard coupler

Further instructions: Anchoring of the lattice girders in the bay

3) Diagonal cross brace on lowermost level next to the bridging construction

Anchor forces in accordance with the assembly variant

Frame scaffold ALBLITZ 100 S

Unclad scaffolding / Bracket configuration

Bridging construction L = 4.14 m / Load class 6, bay length 2.07

AB\$\mathref{m}_{5-\cos_AB1}\$

Annex C, page 25

12.2021

Additional measures for bridging girder 4.14 m Load class 6, bay length 2.07 m

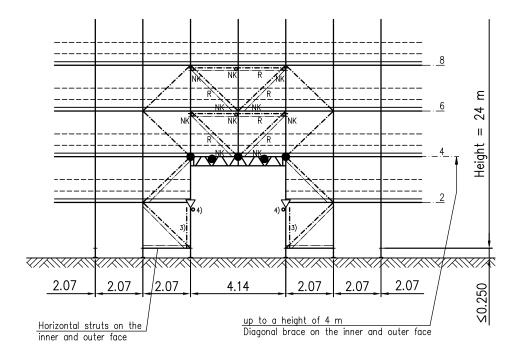
Not applicable to EXP-frames (Tilting pin frame)

Partially open facade Closed facade Clad scaffolding Basic and bracket configuration

The anchors and bracing elements shown must be installed additionally if they are not comprised in the respective assembly configuration. V-type anchor required!

Other design variants in accordance with assembly configuration Annex C, pages 11, 12, 13, 14

> At the bridging construction (up to a height of 8 m) anchorage of configurations cladded with nets must be executed as for configurations cladded with tarpaulins.



Additional measures at the bridging construction:

Anchorage:

Edge distances next to the bridging construction at a height of 2 m (V-type anchor).

4) Additional coupler tube (48.3 x 3.2 + standard coupler) between inner and outer post at the height of the anchor.

Longitudinal bracing: Vertical diagonal braces on the outer face and tube-coupler bracing above the bridging girder on the inner and outer face as shown.

Vertical diagonal braces on the inner face up to a height of 4 m next to the bridging construction

Horizontal strut above base jack on the inner and outer face next to the bridging construction

Further instructions: Anchoring of the lattice girders in the bay
3) Diagonal cross brace on lowermost level next to the bridging construction Anchor forces in accordance with the assembly variant

Frame scaffold ALBLITZ 100 S

Clad scaffolding / Basic and bracket configuration Bridging construction L = 4.14 m / Load class 6, bay length 2.07 m ABS115-C026_AB1

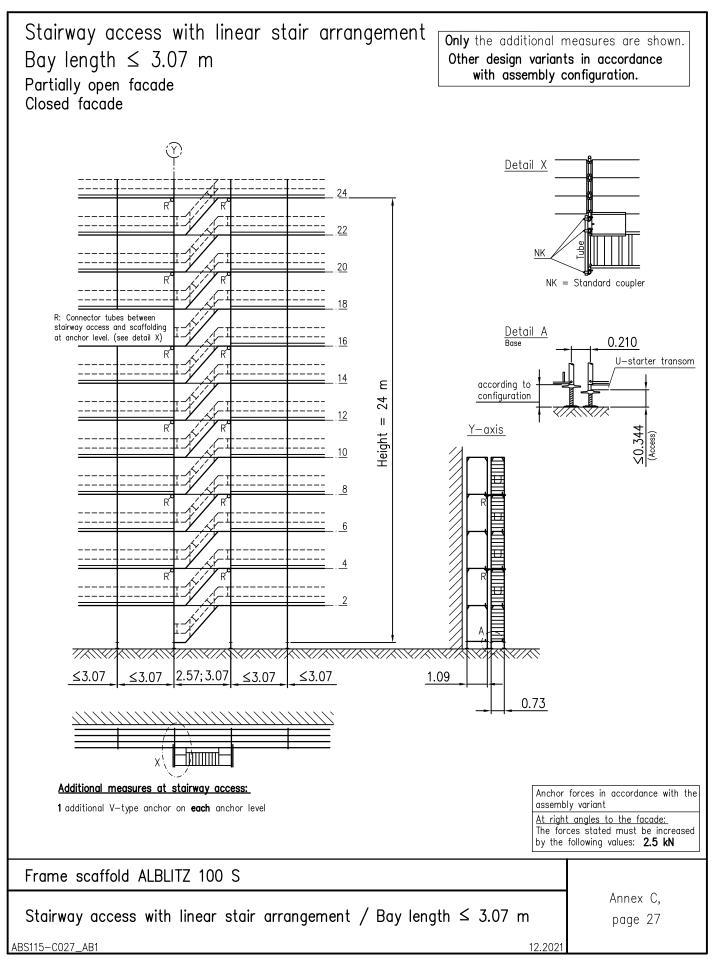
Annex C. page 26

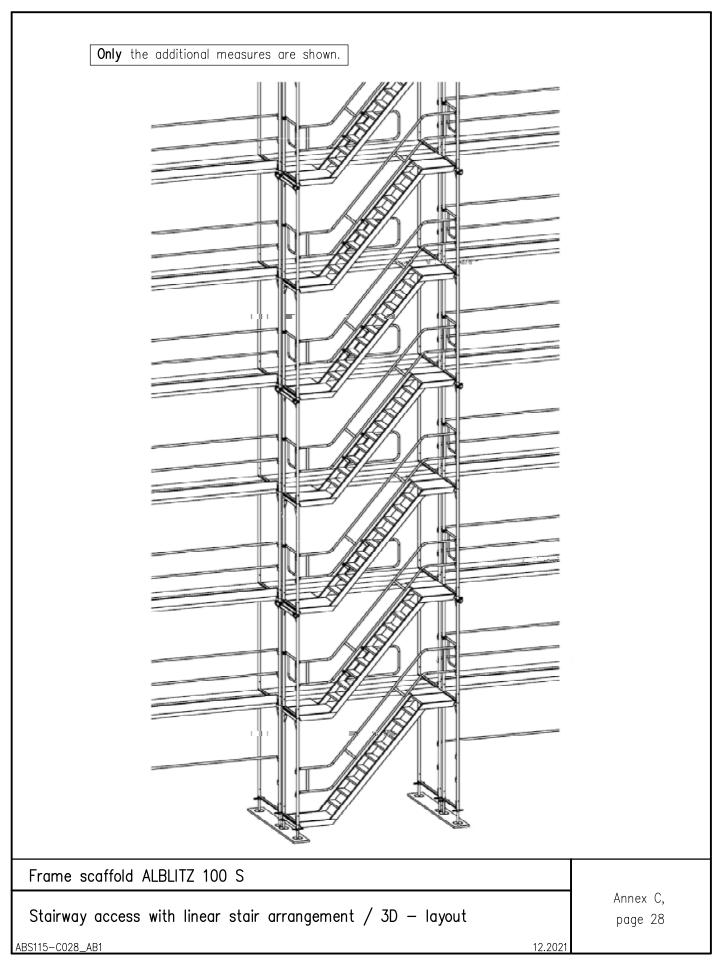
Scaffold tie

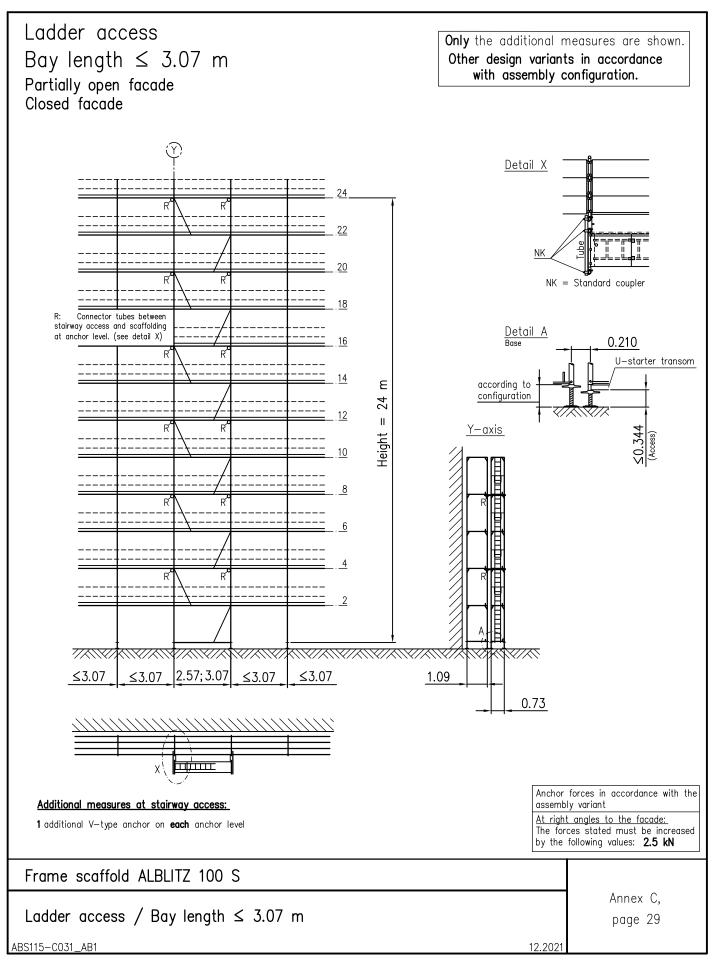
= Scaffold tube

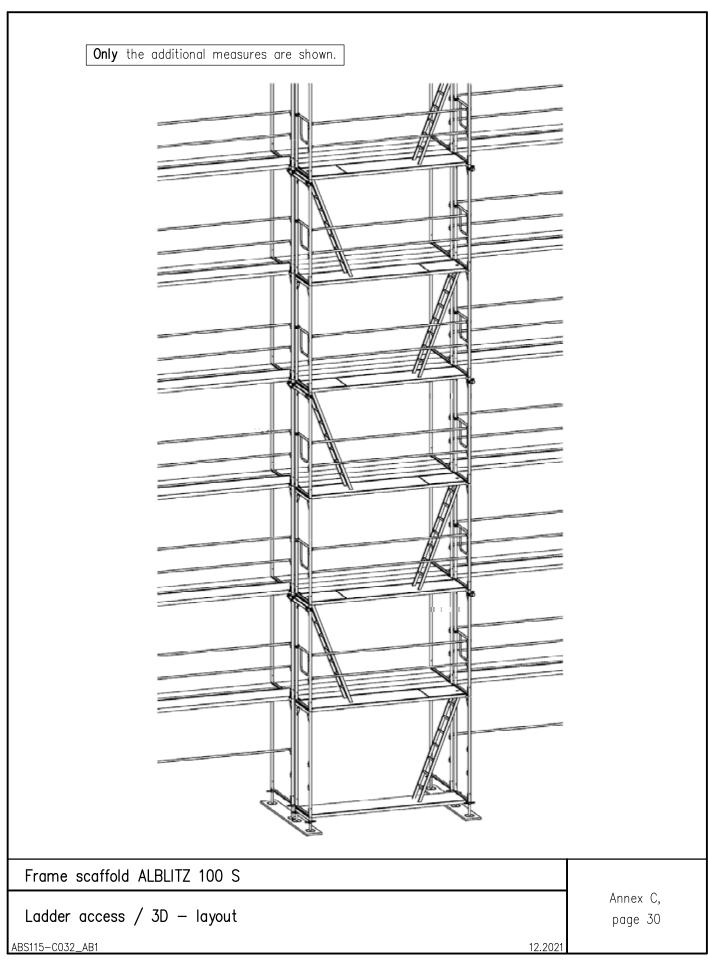
NK = Standard coupler

V-type anchor

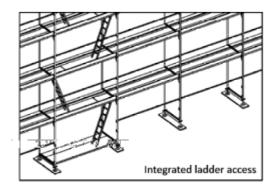








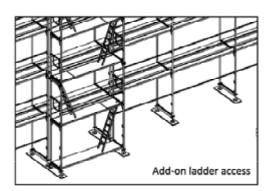
Assembling the stairway or ladder access



Integrated ladder access

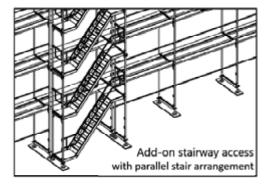
- a) Load class 4¹⁾
 with steel U—trapdoor deck (with storey ladder)
 2.07 m / 2.57 m bay
- b) Load class 3¹⁾
 with all trapdoor decks according to table 3 of the approval

Only use trapdoor decks on the topmost level for brick guard and roof edge protection scaffolds that are suitable in accordance with table 3 of the approval.



Add-on ladder access

Load class 3²⁾ with U-robust trapdoor decks or aluminium U-trapdoor decks (with storey ladder or integrated ladder)
2.07 m / 2.57 m / 3.07 m bay



Add-on stairway access

Load class 3 with aluminium platform stairway 2.07 m / 2.57 m / 3.07 m bay

Frame scaffold ALBLITZ 100 S Assembling the stairway or ladder access Annex C, page 31

¹⁾ Only use the working scaffold up to the stated load class.

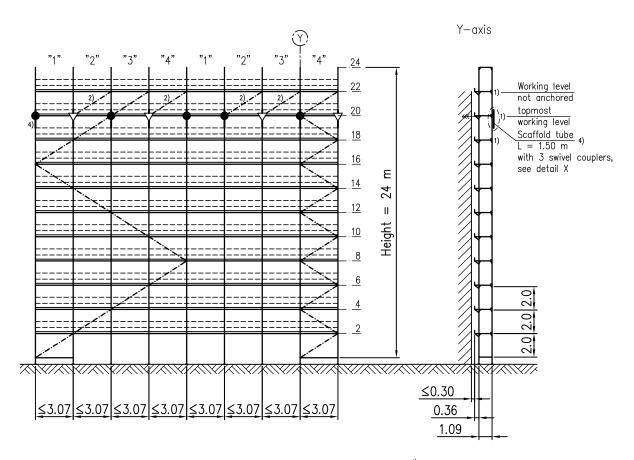
²⁾ The load class of the working scaffold is independent of the mentioned load class 3 of the access bay.

Topmost working level not anchored Load class 4, bay length ≤ 3.07 m Partially open facade Closed facade Unclad scaffolding Basic and bracket configuration 1

Only the additional measures are shown.

Other design variants in accordance with assembly configuration.

Annex C, pages 1, 2



Additional measures:

Anchoring of the topmost anchor level:

Basic configuration: each node with "long" scaffold tie

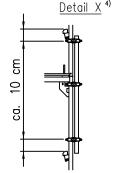
Bracket configuration: 2 V—type anchors per 4 bays, remaining anchors "short" scaffold ties (as shown)

Bracing:

- 2) Additionally install 2 diagonal braces per 4 bays
- 4) Fit additional scaffold tubes Ø 48.3 x 3.2 (L = 1.50 m) using 3 swivel couplers to the outer standard in **every** standard axis at the height of the topmost anchor level. (Distance of the outer couplers:

approximately 10 cm from guardrail)
Standard joints: 1) Levels tension—resistant

(Secure standard joints by means of locking pins!)



→ Scaffold tie "short" (only fitted to inner standard)

 $\nabla \rightarrow V$ -type anchor

Anchor forces in accordance with the assembly variant
Topmost anchor level

at right angles to the facade:

3.3 kN (LF = 2.07 m) **3.8 kN** (LF = 2.57 m)

4.5 kN (LF = 3.07 m)

Frame scaffold ALBLITZ 100 S

Unclad scaffolding / Basic and bracket configuration 1
Topmost working level not anchored / Load class 4 (≤ 3.07 m)

ABS115-C034_AB1

2021

page 32

Annex C.

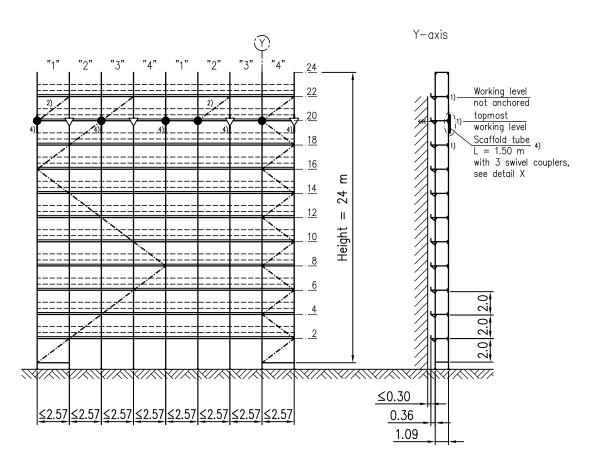
Topmost working level not anchored Load class 5, bay length ≤ 2.57 m Partially open facade Closed facade Unclad scaffolding Basic and bracket configuration 1

Not applicable to EXP-frames

(Tilting pin frame)

Only the additional measures are shown. Other design variants in accordance with assembly configuration.

Annex C, pages 9, 10



Additional measures:

Anchoring of the topmost anchor level:

Basic configuration: each node with "long" scaffold tie Bracket configuration: 2 V-type anchors per 4 bays, remaining anchors "short" scaffold ties (as shown)

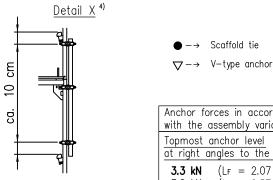
Bracing:

- 2) Additionally install 1 diagonal brace per 4 bays
- On every second standard axis at the height of the topmost anchor level additional scaffold tubes \emptyset 48.3 x 3.2 (L = 1.50 m) must be fitted to the outer standard using 3 swivel couplers. (Distance of the outer couplers:

approximately 10 cm from guardrail)

Standard joints: 1) Levels tension-resistant

(Secure standard joints by means of locking pins!)



Anchor forces in accordance with the assembly variant

at right angles to the facade:

 $(L_F = 2.07 \text{ m})$ 3.8 kN $(L_F = 2.57 \text{ m})$

Frame scaffold ALBLITZ 100 S

Unclad scaffolding / Basic and bracket configuration 1 Topmost working level not anchored / Load class 5 (\leq 2.57 m) ABS115-C035_AB1

page 33

Annex C.

Topmost working level not anchored Load class 6, bay length ≤ 2.07 m Partially open facade Closed facade Unclad scaffolding Basic and bracket configuration 1

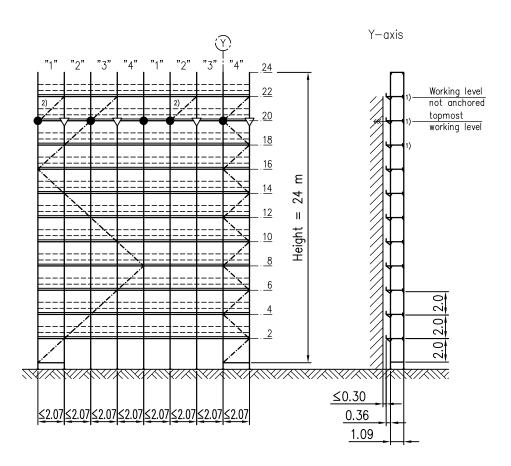
Not applicable to EXP-frames

(Tilting pin frame)

Only the additional measures are shown.

Other design variants in accordance
with assembly configuration.

Annex C, pages 9, 10



Additional measures:

Anchoring of the topmost anchor level:

Basic configuration: each node with "long" scaffold tie
Bracket configuration: 2 V—type anchors per 4 bays, remaining
anchors "short" scaffold ties (as shown)

Bracing: 2) Additionally install 1 diagonal brace per 4 bays

Standard joints: 1) Levels tension-resistant

(Secure standard joints by means of locking pins!)

→ Scaffold tie "short" (only fitted to inner standard)

▽-→ V-type anchor

Anchor forces in accordance with the assembly variant

Topmost anchor level at right angles to the facade:

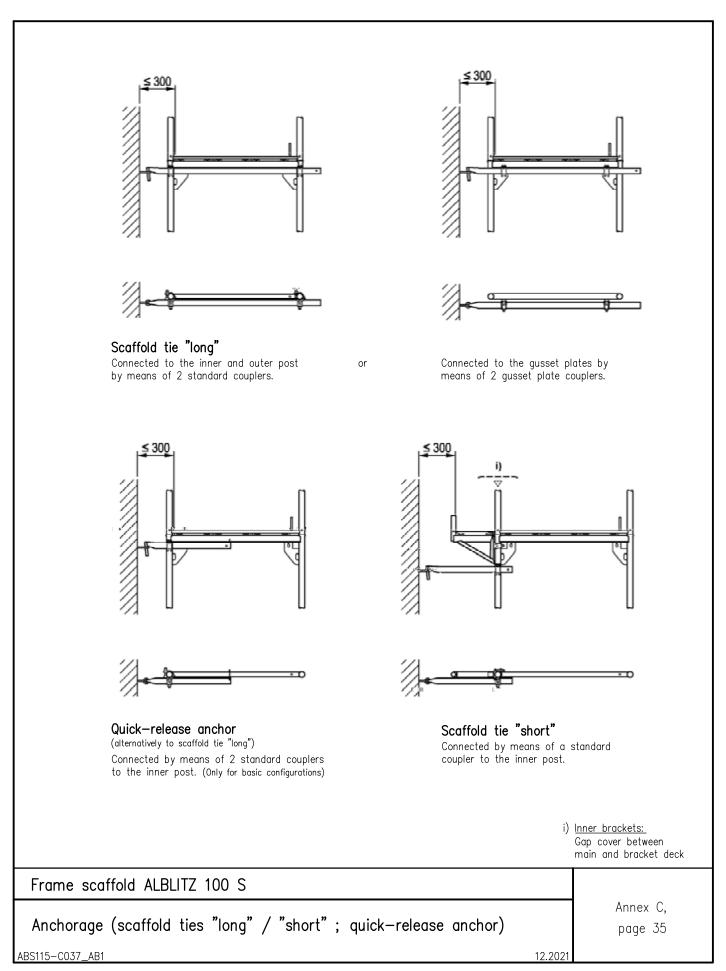
3.3 kN ($L_F = 2.07 \text{ m}$)

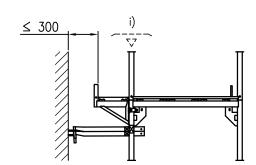
Frame scaffold ALBLITZ 100 S

Unclad scaffolding / Basic and bracket configuration 1
Topmost working level not anchored / Load class 6 (≤ 2.07 m)

ABS115-C036_AB1

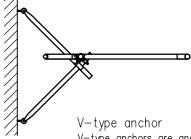
Annex C, page 34





One scaffold tie connected to the post. Second scaffold tie connected to the first wall tie. Alternatively:

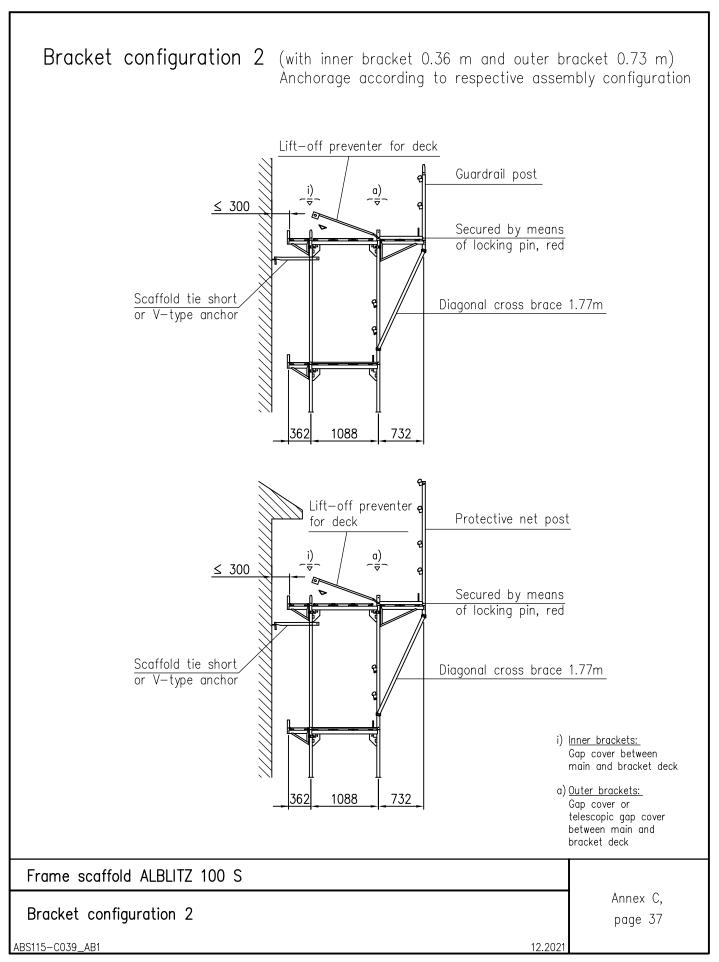
Both scaffold ties connected to the post.

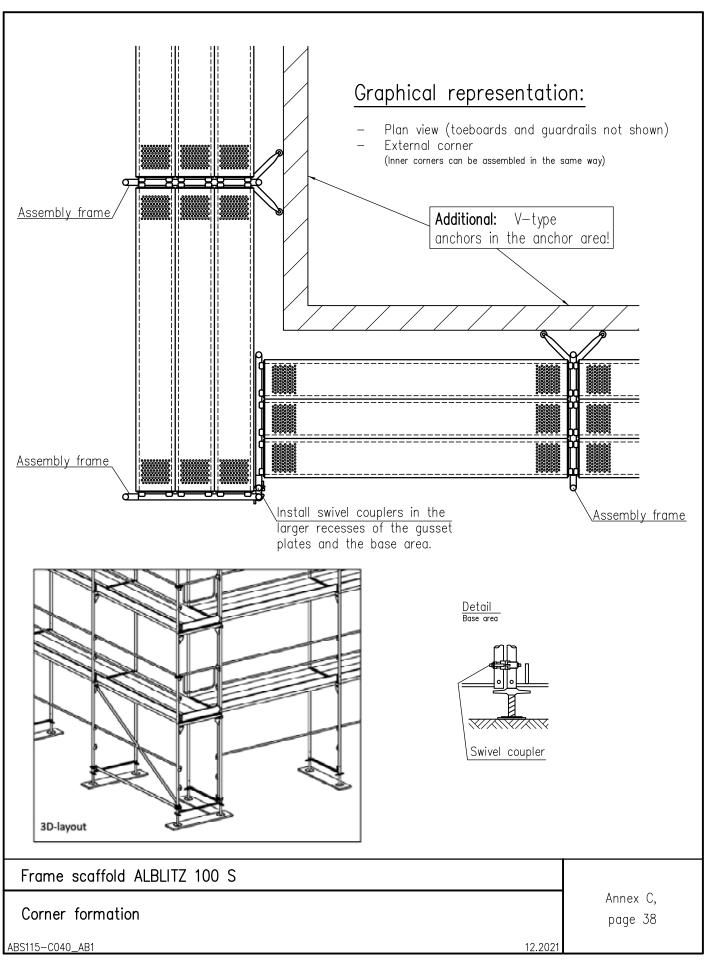


V-type anchors are anchor pairs arranged in a V-shape, connected to the inner standard by means of standard couplers and have an inclination of $\pm 45^{\circ}$ vis-a-vis the frame level.

i) Inner brackets:
 Gap cover between main and bracket deck

Frame scaffold ALBLITZ 100 S	
	Annex C,
Anchorage (V—type anchor)	page 36
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