ALFIX®
SECURELY SCAFFOLDED

NATIONAL TECHNICAL APPROVAL

ALFIX 70

[Seal: Deutsches Institut für Bautechnik]

Notification

of amendents and supplement and the extension of the period of validity of the national technical approval / general construction technique permit of 16 December 2020

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

Approval Body for Construction Products & Techniques

Date: 03 January 2022 | Reference number: 37.1-1.8.1-71/21

Approval number:
Z-8.1-862

Period of validity:
from: **5 January 2022**
to: **5 January 2027**

Applicant:
Alfix GmbH
Langhennersdorfer Straße 15
09603 Großschirma (Germany)

Subject of approval:
"Frame Scaffold ALFIX 70" scaffolding system

This notification amends, supplements and extends the period of vailidity of the national technical approval / general construction technique permit no. Z-8.1-862 of 16 December 2020.
This national technical approval includes eight pages and 24 annexes.
It shall only be valid in connection with above mentioned national technical approval / general construction technique permit and shall only be used in conjuction with it.

[Seal: Deutsches Institut für Bautechnik]

I GENERAL PROVISIONS

The general provisions of the national technical approval and the general construction technique permit Z-8.1-862 are replaced by the following version:

1 This decision confirms the usability and / or applicability of the subject matter of the permit 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.

3 This decision is granted without prejudice to the rights of third parties, especially private property rights.

4 The user of the subject matter of the decision 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 of the decision. The user of 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.

5 This decision may only be reproduced in its entirety. Publication of the approval 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".

6 This decision is issued as a revocable decision. The provisions of this decision may be amended or modified at a later time, particularly if new technical knowledge requires this.

7 This decision relates to the information on the subject matter of the decision 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.

II SPECIAL PROVISIONS

The special provisions of the national technical approval are changed and supplemented as follows:

a) Table 1 is changed as follows:

Table 1: Scaffold components of the ALFIX 70 frame scaffold

Designation	Annex A, page	Detailed view / components in accordance with annex A, page
Vertical frame 18/70 1.5m and 2.0m, steel	1a	3a
Protective net post AF 2.00 x 0.36 / 0.50 / 0.73 / 1.09m	128a	3a
Vertical frame AF 1.50m and 2.00m, steel	129a	3a
Aluminium frame platform AB with plywood 0.50m – 3.07m	146a	147

b) The following components are no longer listed in Table 1:

Table 1: Scaffold components of the ALFIX 70 frame scaffold

Designation	Annex A, page	Detailed view / components in accordance with annex A, page
~~Aluminium trapdoor deck with aluminium chequer plate 2.57m~~	~~117~~	~~18, 119~~
~~Aluminium trapdoor deck with aluminium chequer plate 3.07m~~	~~118~~	~~18, 119~~
~~Aluminium trapdoor deck with aluminium chequer plate 1.57m; 2.07m without ladder~~	~~120~~	~~119~~

c) Table 1 is supplemented as follows:

Table 1: Scaffold components of the ALFIX 70 frame scaffold

Designation	Annex A, page	Detailed view / components in accordance with annex A, page
Aluminium frame platform AB with hatch 2.57m; 3.07m	148	18, 147, 149
Aluminium frame platform AB with hatch 1.57m – 3.07m without ladder	150	147, 149
Aluminium frame platform AB with hatch, aluminium chequer plate 2.57m; 3.07m	151	18, 152
Aluminium frame platform AB with hatch, aluminium chequer plate 1.57m – 3.07m without ladder	153	152

d) Section 2.2.2 is replaced by the following version:

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 "862",
- the identifying mark (logo) of the manufacturer, and
- the last two digits of the year of manufacture.

For more detailed information on marking, please refer to annex A, page 154.
These identifying marks may only be applied if the requirements under Section 2.3 are fulfilled.

e) Table 3 is changed as follows:

Table 3: Further scaffolding components for use in ALFIX 70 frame scaffold

Designation	Annex A, page	Detailed view / components in accordance with annex A, page	Regulations for manufacturing, marking and certificate of conformity
Aluminium frame platform with plywood 0.50m – 2.07m	110a	112a	according to Z-8.22-906
Aluminium frame platform with plywood 2.57m; 3.07m	111a	112a	
Aluminium frame platform with internal hatch 2.57m; 3.07m	113a	18, 112a, 115a	
Aluminium frame platform with internal hatch 1.09m – 3.07m without ladder	114a	112a, 115a	
Aluminium trapdoor deck with aluminium chequer plate 2.57m	117a	18, 119a	according to Z-8.1-862 (No longer manufactured.)
Aluminium trapdoor deck with aluminium chequer plate 3.07m	118a	18, 119a	
Aluminium trapdoor deck with aluminium chequer plate 1.57m; 2.07m without ladder	120a	119a	

f) The page numbers in table 12 are changed and supplemented as follows:

Table 12: Assignment of decking to scaffold load classes (service classes)

Designation	Annex A, page	Bay length ℓ [m]	Use in load class (service class)
Aluminium frame platform with plywood	110a, 111a, 146a	≤ 3.07	≤ 3
Aluminium frame platform with internal hatch	113a, 114a	≤ 3.07	≤ 3
Aluminium trapdoor deck with aluminium chequer plate	117a, 118a, 120a,	≤ 3.07	≤ 3
Aluminium frame platform AB with hatch	148, 150, 151, 153	≤ 3.07	≤ 3

g) Tables 13.1, 13.2 and 13.3 are replaced by table 13:

Table 13: Design values of the horizontal travel springs

Deck	Annex A, page	Bay length ℓ [m]	Number of decks per scaffold bay	Clearance $f_{0,\perp}$ [cm]	Stiffness $c_{\perp,d}$ [kN/cm]		$N_{1,2}$ [kN]	Spring force $N_{\perp,Rd}$ [kN]
					$0 < N_\perp \leq N_{1,2}$	$N_{1,2} < N_\perp \leq N_{\perp,Rd}$		
Steel deck AF	7	3.07	2	4.7	0.62	0.20	1.82	2.73
Steel deck	8	3.07	2	4.7	0.62	0.20		
		≤ 2.57		3.8	0.69	0.27		
Aluminium deck with plywood	12, 13, 19, 20	3.07	1	2.0	0.38	0.26		1.86
		≤ 2.57		2.2	0.65	0.34		
Wooden deck	28	≤ 2.57	2	3.3	0.51	0.31		2.35
Solid wood deck 48	26	≤ 3.07	2	3.9	0.41	0.22	2.00	2.35
Solid wood deck 45	27	≤ 2.57						
Aluminium frame platform with plywood	110a, 111a	3.07	1	2.0	0.38	0.26	1.82	1.86
		≤ 2.57		2.2	0.65	0.34		
Aluminium deck 0.60m, lightweight	116	≤ 3.07	1	4.7	0.69	0.20	1.50	2.08
Aluminium frame platform AB with plywood	146a	≤ 3.07	1	3.0	0.26	---	---	3.00
Access decks	all	≤ 3.07	1	4.4	0.26	---	---	1.89

h) Tables 14.1, 14.2 and 14.3 are replaced by table 14:

Table 14: Design values of the horizontal coupler springs per scaffold bay

Deck	Annex A, page	Bay length ℓ [m]	Number of decks per scaffold bay	Clearance $f_{o//}$ [cm]	Stiffness $c_{//,d}$ [kN/cm]			$N_{1,2}$ [kN]	$N_{2,3}$ [kN]	Spring force $F_{//,Rd}$ [kN]
					$0 < F_{//} \le N_{1,2}$	$N_{1,2} < F_{//} \le N_{2,3}$	$N_{2,3} < F_{//} \le F_{//,Rd}$			
Steel deck AF	7	≤ 3.07	2	1.0	2.22	2.37	1.25	1.14	2.27	4.55
Steel deck	8	≤ 3.07	2	1.0	2.22	2.37	1.25			4.55
Aluminium deck with plywood	12, 13, 19, 20	≤ 3.07	1	0.3	2.20	2.22	0.94			3.94
Wooden deck	28	3.07*)	2	1.0	1.99	1.95	1.22			4.55
		≤ 2.57		1.0	1.67	1.63	1.02			3.83
Solid wood deck 48	26	≤ 3.07	2	0.9	2.31	1.38	---	3.0	---	4.58
Solid wood deck 45	27	≤ 2.57			1.93	1.16	---		---	3.83
Aluminium frame platform with plywood	110a, 111a	≤ 3.07	1	0.3	2.20	2.22	0.94	1.14	2.27	3.94
Aluminium deck 0.60m, lightweight	116	≤ 3.07	1	0.4	3.41	---	---	---	---	3.82
Aluminium frame platform AB with plywood	146a	≤ 3.07	1	0.1	1.27	---	---	---	---	5.75
Access decks	all	≤ 3.07	1	0.2	1.50	---	---	---	---	4.08

*) Only in case of anchorage pattern ≤ 4 m (Figure 1, type b in DIN EN 12810-1:2004-03)

i) Table 15.1 is replaced by the following version:

Table 15.1: Design values of the horizontal travel springs

Deck	Bay length ℓ [m]	Clearance $f_{o\perp}$ [cm]	Stiffness [kN/cm]		$N_{\perp 1,2}$ [kN]	$N_{\perp,Rd}$ [kN]
			$c_{\perp 1,d}$	$c_{\perp 2,d}$		
all decks without hatch	≤ 3.07	4.7	0.62	0.26	0.75	1.86
all decks including hatch	≤ 3.07	4.7	0.27	---	---	1.86

j) Table 15.2 is replaced by the following version:

Table 15.2: Design values of the horizontal coupler springs per scaffold bay

Deck	Bay length ℓ [m]	Clearance f_{oII} [cm]	Stiffness [kN/cm]			$N_{II1,2}$ [kN]	$N_{II2,3}$ [kN]	$N_{II,Rd}$ [kN]
			$c_{II1,d}$	$c_{II2,d}$	$c_{II3,d}$			
all decks including hatch	≤ 3.07	1.0	1.67	1.63	1.00	1.14	2.27	3.83

REGARDING ANNEX A:

k) In annex A, pages 1, 3, 109 to 115, 117 to 120, 128, 129 and 146 are replaced by pages 1a, 3a, 109a to 115a, 117a to 120a, 128a, 129a and 146a.

l) In annex A, pages 147 to 154 are supplemented.

REGARDING ANNEX B:

m) Table B.2 is changed and supplemented as follows:

Table B.2: Components of the standard system configuration

Designation	**Annex A, page**
Vertical frame 18/70; 1.5m and 2.0m, steel	1a
Aluminium frame platform with plywood 1.57m; 2.07m	110a
Aluminium frame platform with plywood 2.57m; 3.07m	111a
Aluminium frame platform with internal hatch 2.57m; 3.07m	113a
Aluminium frame platform with internal hatch 1.57m; 2.07m	114a
Aluminium trapdoor deck with aluminium chequer plate 2.57m	117a
Aluminium trapdoor deck with aluminium chequer plate 3.07m	118a
Aluminium trapdoor deck with aluminium chequer plate 1.57m; 2.07m without ladder	120a
Protective net post AF	128a
Vertical frame AF 1.50m and 2.00m, steel	129a
Aluminium frame platform AB with plywood 0.50m – 3.07m	146a
Aluminium frame platform AB with hatch 2.57m; 3.07m	148
Aluminium frame platform AB with hatch 1.57m – 3.07m without ladder	150
Aluminium frame platform AB with hatch, aluminium chequer plate 2.57m; 3.07m	151
Aluminium frame platform AB with hatch, aluminium chequer plate 1.57m – 3.07m without ladder	153

n) Table B.3 is changed and supplemented as follows:

Table B.3: Scaffold decks in the main bay

Scaffold deck	Deck width [m]	Number per bay	in accordance with annex A, page
Aluminium frame platform with plywood	61	1	110a, 111a
Aluminium frame platform AB with plywood 0.50m – 3.07m	61	1	146a

o) Table B.6 is changed and supplemented as follows:

Table B.6: Trapdoor decks

Trapdoor decks	Deck width [m]	Number per bay	in accordance with annex A, page
Aluminium frame platform with internal hatch	61	1	113a, 114a
Aluminium trapdoor deck with aluminium chequer plate	61	1	117a, 118a, 120a
Aluminium frame platform AB with hatch	61	1	148, 150, 151, 153

Head of Division

Certified

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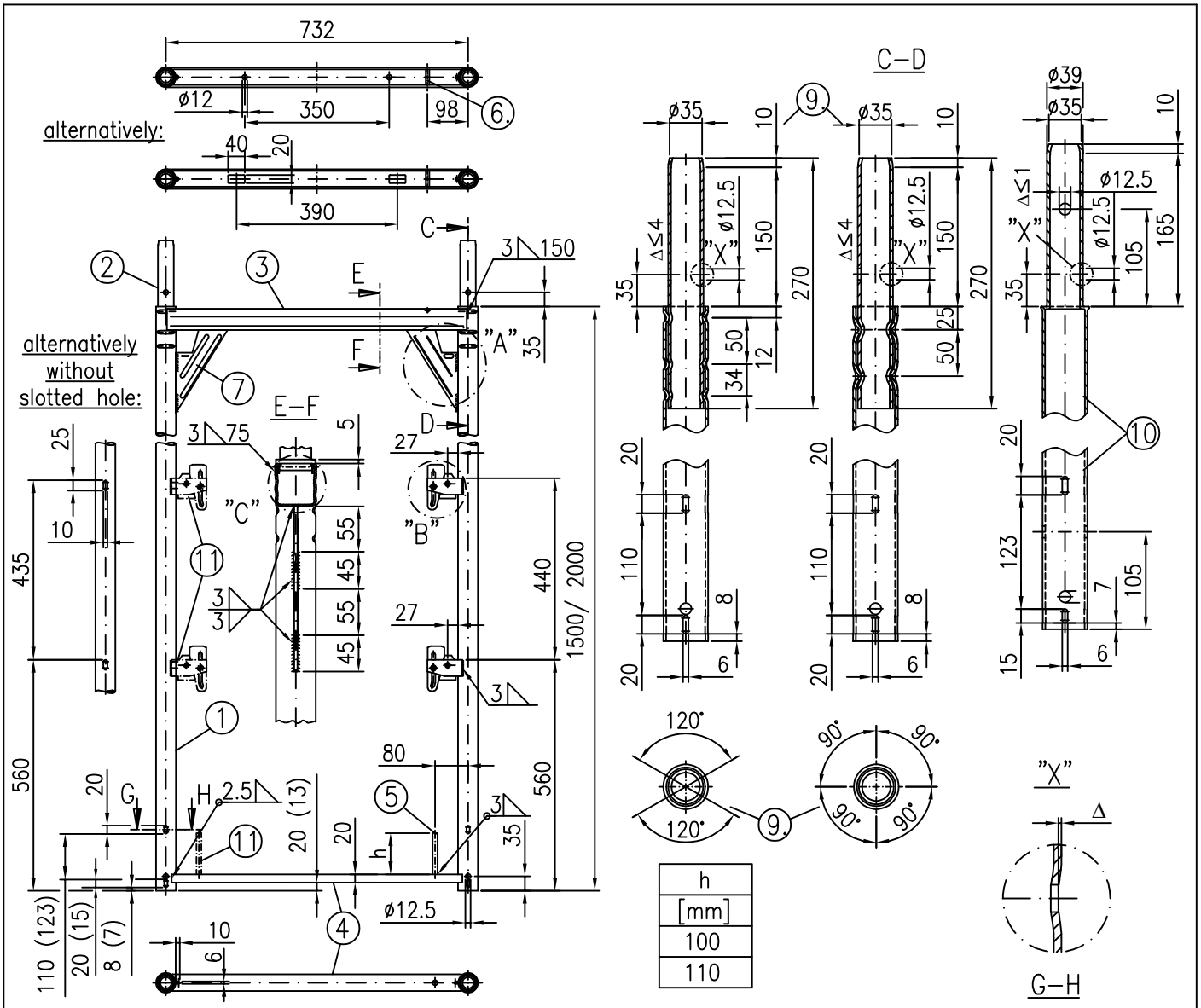


h
[mm]
100
110

① Circular hollow section ø48.3x2.7 DIN EN 10219–S235JRH R_{eH}≥320N/mm²
alternatively: DIN EN 10219–S460MH
② Circular hollow section ø38x3.6 DIN EN 10219–S235JRH R_{eH}≥320N/mm²
③ U–profile 48x52x2.5 made of steel metal 169x2.5 DIN EN 10025–S235JR
④ Rectangular hollow section 40x20x2 DIN EN 10219–S235JRH R_{eH}≥320N/mm²
⑤ Round ø12xh DIN EN 10025–S235JR
⑥ Round ø8 DIN EN 10277–2–S235JRC+C
⑦ Marking
⑧ 4 recesses 20(15)x6; t=1
⑨ Linear pressed connection; alternatively: 4 point–joint pressed connections
⑩ Circular hollow section ø48.3x2.7 without ② DIN EN 10219–S460MH
⑪ alternatively: every 2.0m with 4 guardrail wedge housings and 2 toeboard pins galvanised

( ) Dimensions as for design

	Dimension [m]	Weight [kg]
⑩	1.50x0.73	16.5
	2.00x0.73	18.6
⑪	2.00x0.73	19.6

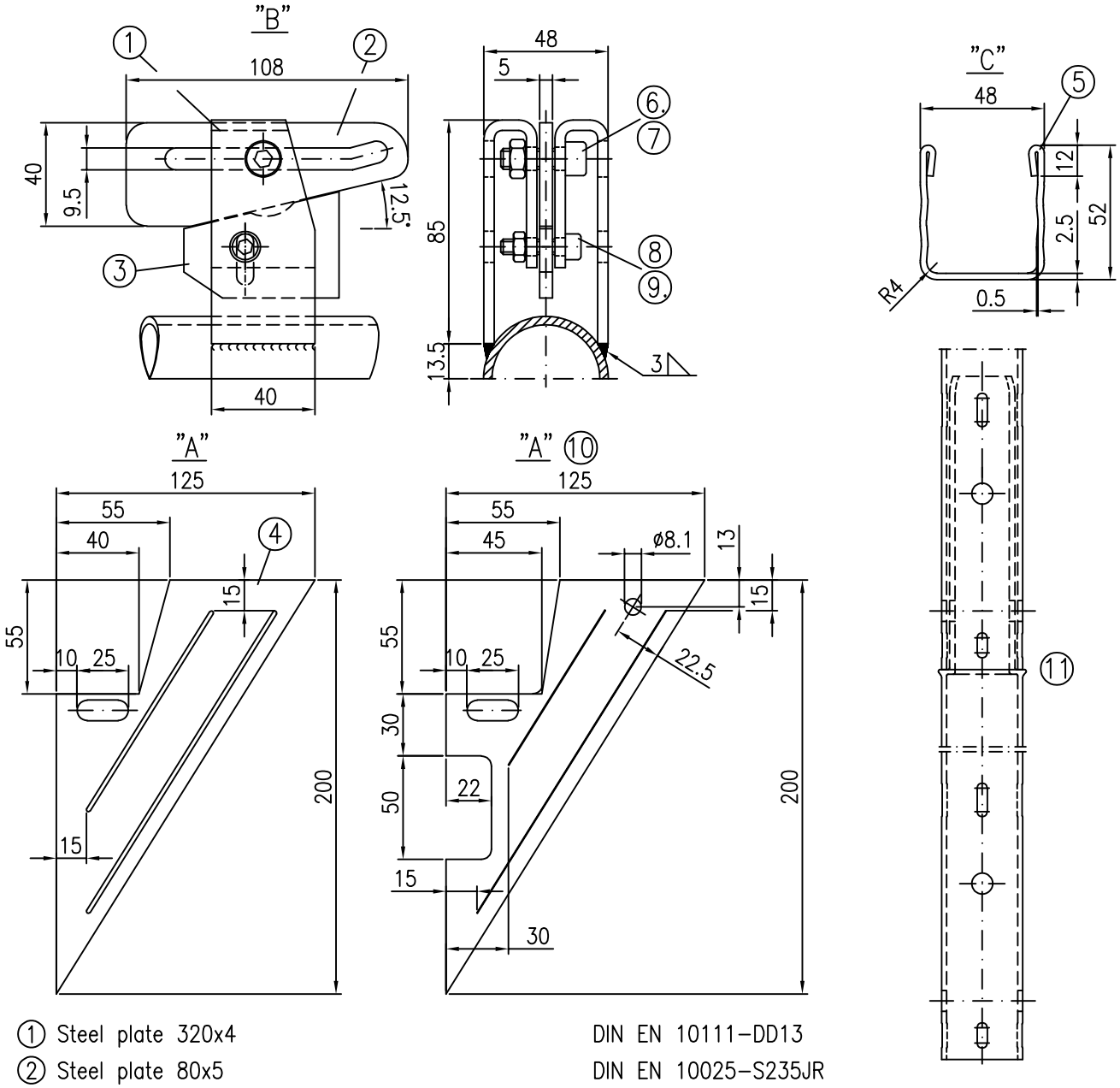
For details see annex A, page 3a

Frame scaffold ALFIX 70

Vertical frame 18/70 1.5m and 2.0m, steel

Annex A,
page 1a

A709–A101 11.2021



①	Steel plate 320x4	DIN EN 10111–DD13
②	Steel plate 80x5	DIN EN 10025–S235JR
③	Steel plate 70x5	DIN EN 10025–S235JRH
④	Gusset plate	DIN EN 10025–S235JR
⑤	U–profile 48x52x2.5 made of steel metal 169x2.5	DIN EN 10025–S235JR
⑥,	Cylinder head screw with hexagon socket	DIN EN ISO 4762–M8x25–8.8–galvanised
⑦	Hexagon nut, self–locking	DIN EN ISO 10511–M8–8–galvanised
⑧	Cylinder head screw with hexagon socket	DIN EN ISO 4762–M6x25–8.8–galvanised
⑨,	Hexagon nut, self–locking	DIN EN ISO 10511–M6–8–galvanised
⑩	alternatively: Gusset plate	DIN EN 10025–S235JR
⑪	Detailed view tube connector see annex A, page 1a	

Frame scaffold ALFIX 70

Detailed view of vertical frame 18/70 2.0m, steel

A705–A003 11.2021

Annex A,
page 3a

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Frame scaffold ALFIX 70	Annex A, page 109a
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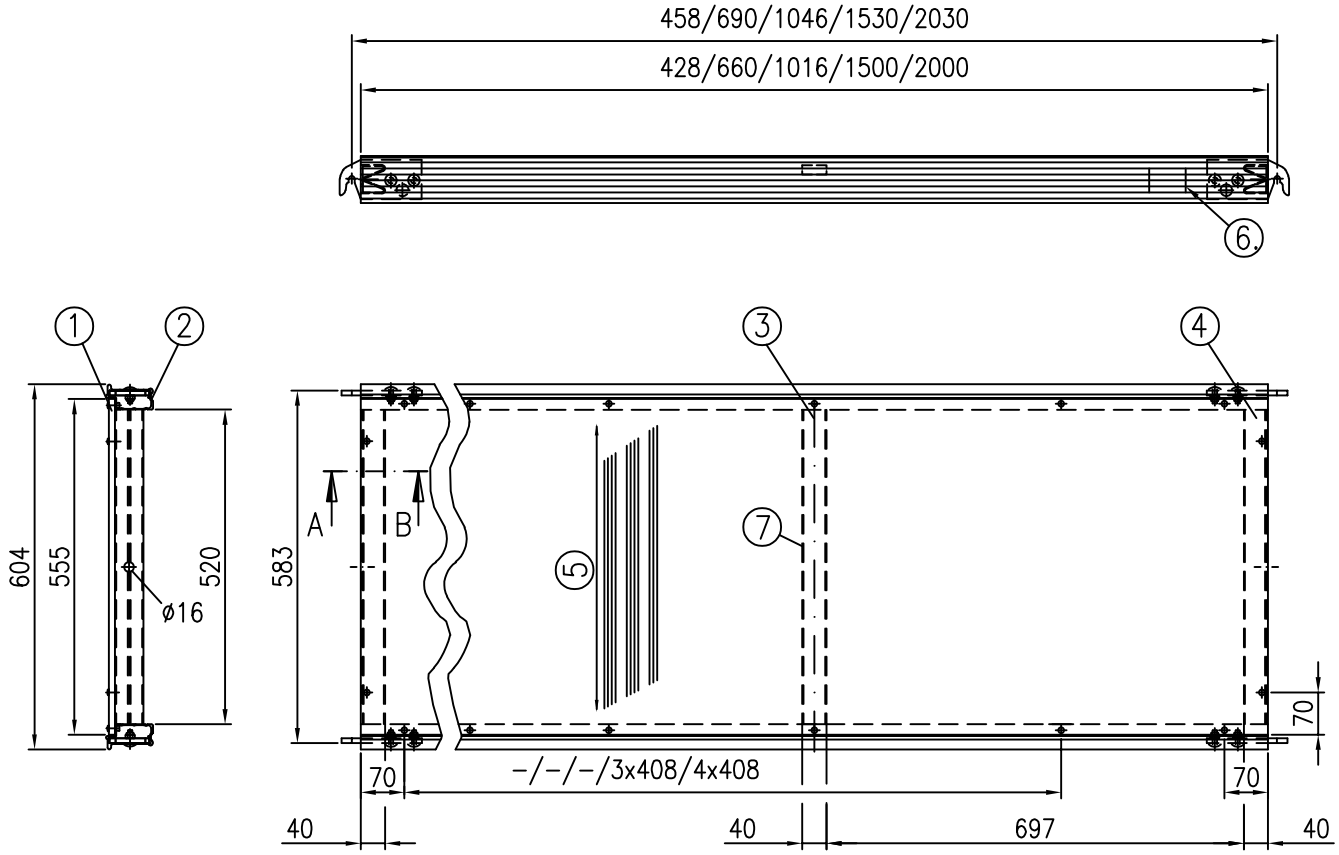

①	Plywood 10x555	Plywood for use in scaffolding with national technical approval
②	Rail profile 78x42	DIN EN 755−2 EN AW−6063−T66
③	Rectangular hollow section 40x15x2	DIN EN 755−2 EN AW−6063−T66
④	Grip profile; bridging deck thickness 2mm	DIN EN 755−2 EN AW−6063−T66
⑤	Grain direction	
⑥	Marking	
⑦	not applicable for 0.50m − 1.09m for 0.73m and 1.09m blind rivet in centre	

Component no longer manufactured
−only approved for continued use−

Dimens. [m]	Weight [kg]
0.50	4.8
0.73	6.8
1.09	9.5
1.57	11.5
2.07	14.5

131−MIG: Type 4 filler material (EC9)

For details see annex A, page 112a Load class 3

Frame scaffold ALFIX 70

Aluminium frame platform with plywood 0.50m − 2.07m
in accordance with Z−8.22−906

A713−A230_AF 08.2021

Annex A,
page 110a

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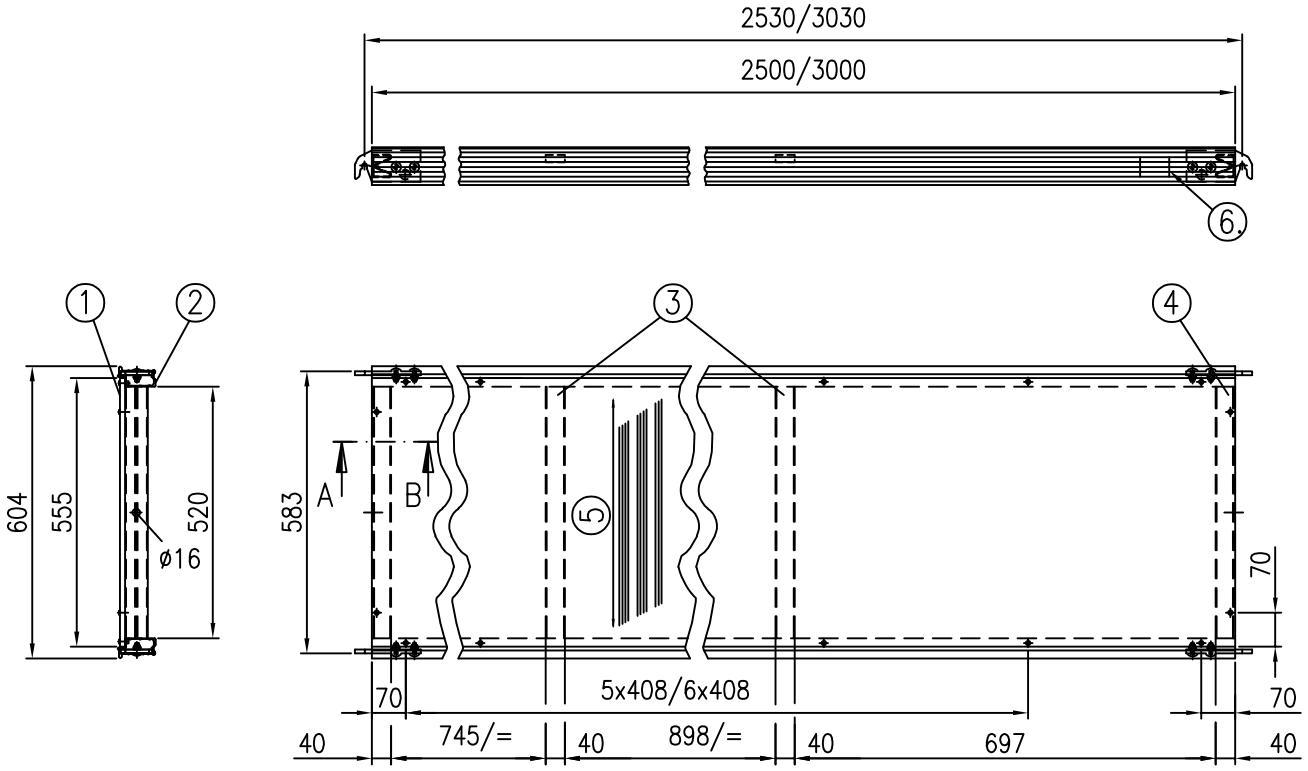


①	Plywood 10x555	Plywood for use in scaffolding with national technical approval
②	Rail profile 78x42	DIN EN 755-2 EN AW-6063-T66
③	Rectangular hollow section 40x15x2	DIN EN 755-2 EN AW-6063-T66
④	Grip profile; bridging deck thickness 2mm	DIN EN 755-2 EN AW-6063-T66
⑤	Grain direction	
⑥	Marking	131-MIG: Type 4 filler material (EC9)

Component no longer manufactured
-only approved for continued use-

For details see annex A, page 112a

Load class 3

Dimens. [m]	Weight [kg]
2.57	17.6
3.07	20.7

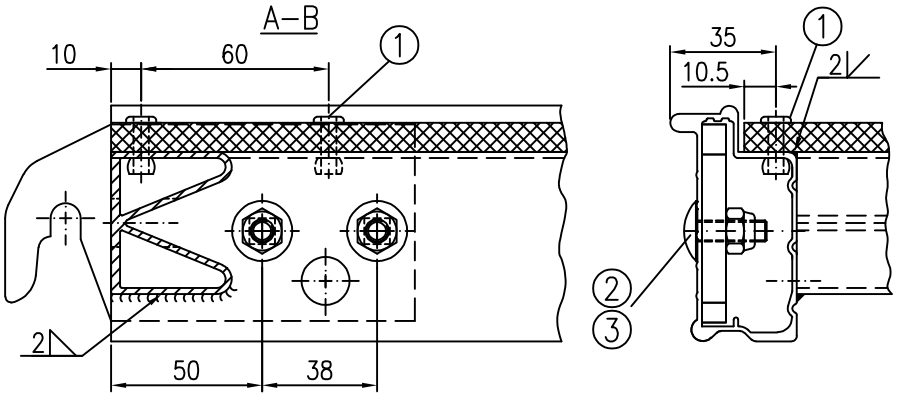
Frame scaffold ALFIX 70

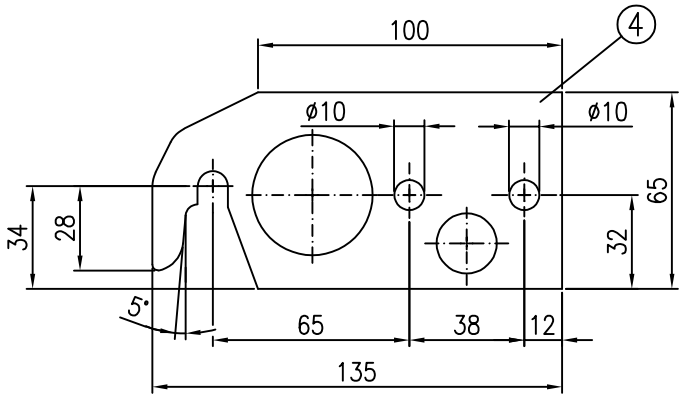
Aluminium frame platform with plywood 2.57m; 3.07m
in accordance with Z-8.22-906

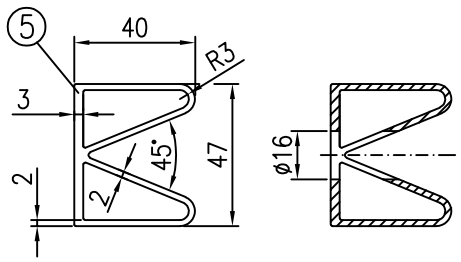
A713-A231_AF 08.2021

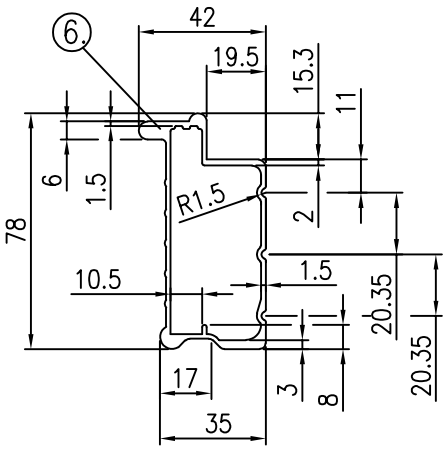
Annex A,
page 111a

[Seal Deutsches Institut für Bautechnik]









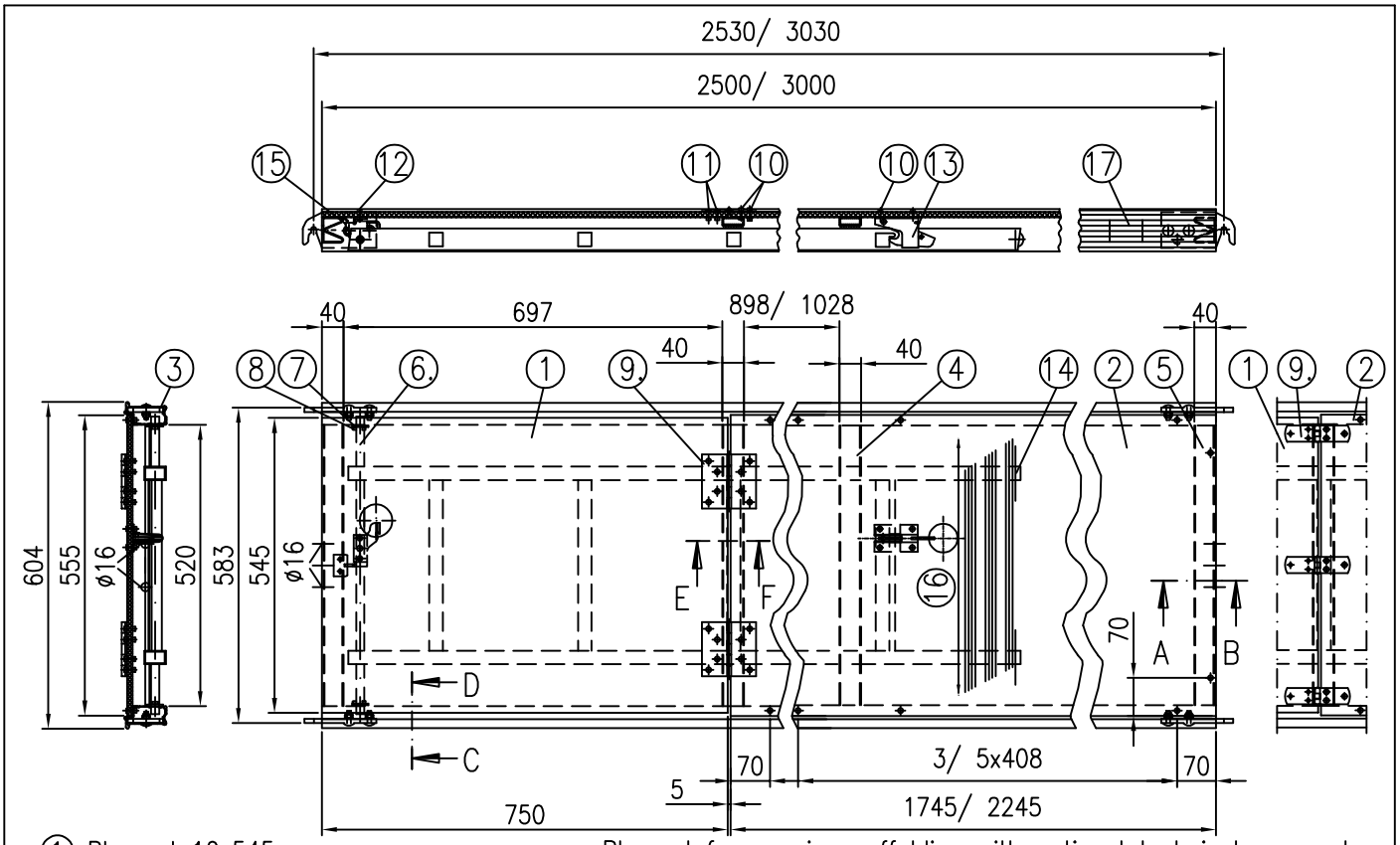
① Blind rivet ø5x20	DIN EN ISO 15979	EN AW–5754 H112	
② Round–head screw	DIN 603–M8x20–8.8–galvanised		
③ Nut, self–locking	DIN EN ISO 7042–M8–8–galvanised		
④ Suspension claw, steel metal t=8mm	DIN EN 10025	S235JR hot–dip galvanised	Component no longer manufactured –only approved for continued use–
⑤ Grip profile; bridging deck thickness 2mm	DIN EN 755–2	EN AW–6063–T66	
⑥ Aluminium rail profile	DIN EN 755–2	EN AW–6063–T66	

Frame scaffold ALFIX 70

Detailed view of aluminium frame platform
in accordance with Z–8.22–906

Annex A,
page 112a

A713–A232_AF 08.2021



①	Plywood 10x545	Plywood for use in scaffolding with national technical approval	
②	Plywood 10x555	Plywood for use in scaffolding with national technical approval	
③	Rail profile 78x42	DIN EN 755-2	EN AW-6063-T66
④	Rectangular hollow section 40x15x2	DIN EN 755-2	EN AW-6063-T66
⑤	Grip profile; bridging deck thickness 2mm	DIN EN 755-2	EN AW-6063-T66
⑥	Circular hollow section 15x2	DIN EN 10219	S235JRH
	alternatively:	DIN EN 10296-2	1.4301
⑦	Disc	DIN EN ISO 7089-A 17-steel-galvanised	
⑧	Split pin	DIN EN ISO 1234-4x25-steel-galvanised	
⑨	Hinge 100x100x1.6	DIN EN 10025-S235JR; electrogalvanized	
	alternatively: Hinge 120x30x1.6	DIN EN 10025-S235JR; electrogalvanized	
⑩	Blind rivet ø5x20	DIN EN ISO 15979 EN AW-5754 H112	
⑪	Blind rivet ø5x18	DIN EN ISO 15979 EN AW-5754 H112	
⑫	Blind rivet ø4.8x16 alternatively: ø5x18	DIN EN ISO 15979 EN AW-5754 H112	
⑬	Ladder bracket	DIN EN 10025-S235JR; electrogalvanized	
⑭	Ladder	see annex A, page 18	
⑮	Ledger	DIN EN 10025-S235JR; electrogalvanized	
⑯	Grain direction		
⑰	Marking	131-MIG: Type 4 filler material (EC9)	

Component no longer manufactured -only approved for continued use-

Dimens. [m]	Weight [kg]
2.57	24.0
3.07	27.0

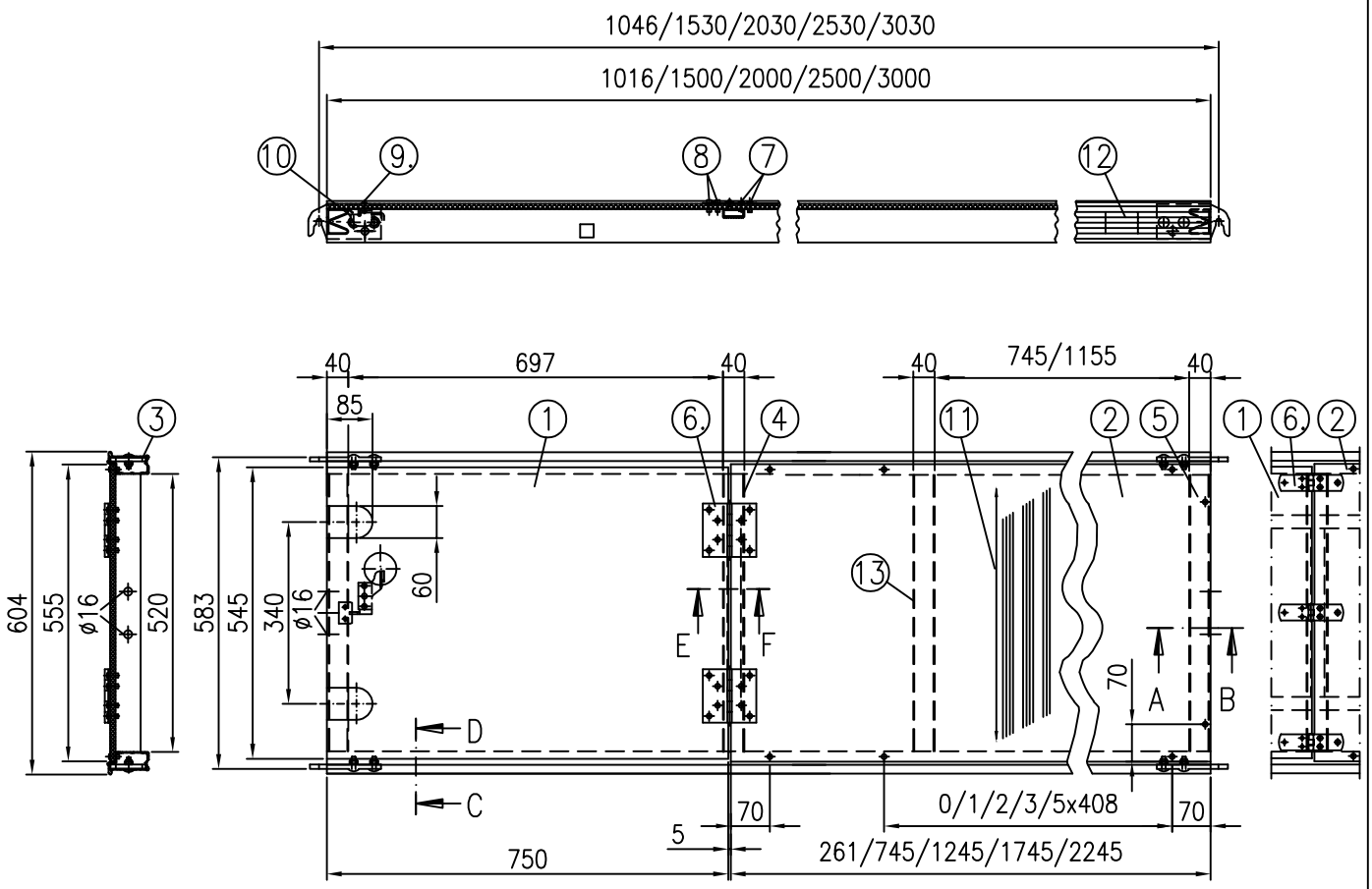
For details see annex A, pages 112a and 115a Load class 3

Frame scaffold ALFIX 70

Aluminium frame platform with internal hatch 2.57m; 3.07m
in accordance with Z-8.22-906

Annex A,
page 113a

A713-A233_AF 08.2021



①	Plywood 10x545	Plywood for use in scaffolding with national technical approval
②	Plywood 10x555	Plywood for use in scaffolding with national technical approval
③	Rail profile 78x42	DIN EN 755-2 EN AW-6063-T66
④	Rectangular hollow section 40x15x2	DIN EN 755-2 EN AW-6063-T66
⑤	Grip profile; bridging deck thickness 2mm	DIN EN 755-2 EN AW-6063-T66
⑥	Hinge 100x100x1.6	DIN EN 10025-S235JR; electrogalvanized
	alternatively: Hinge 120x30x1.6	DIN EN 10025-S235JR; electrogalvanized
⑦	Blind rivet ø5x20	DIN EN ISO 15979 EN AW-5754 H112
⑧	Blind rivet ø5x18	DIN EN ISO 15979 EN AW-5754 H112
⑨	Blind rivet ø4.8x16 alternatively: ø5x18	DIN EN ISO 15979 EN AW-5754 H112
⑩	Ledger	DIN EN 10025-S235JR; electrogalvanized
⑪	Grain direction	
⑫	Marking	
⑬	not applicable for 1.09m to 2.07m	

Component no longer manufactured –only approved for continued use–

Dimens. [m]	Weight [kg]
1.09	10.5
1.57	13.0
2.07	17.0
2.57	22.0
3.07	25.5

131-MIG: Type 4 filler material (EC9)

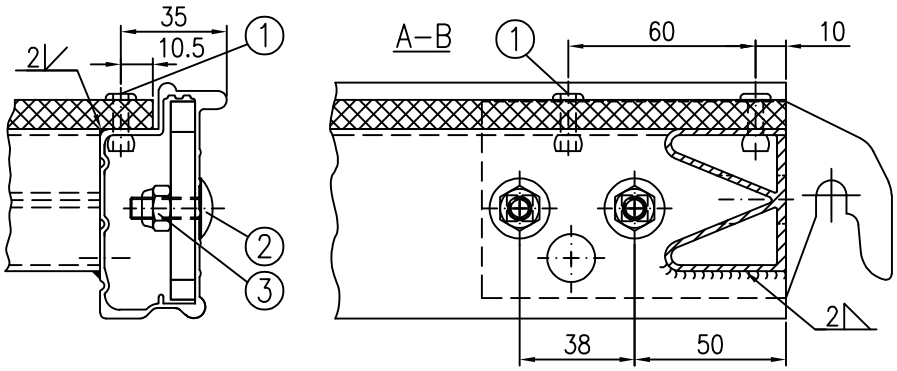
For details see annex A, pages 112a and 115a Load class 3

Frame scaffold ALFIX 70

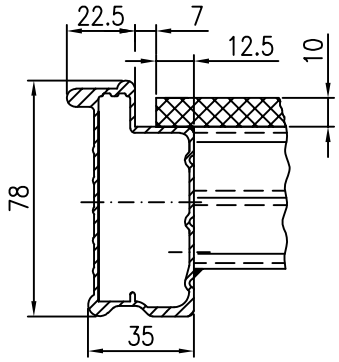
Aluminium frame platform with internal hatch 1.09m – 3.07m without ladder

Annex A, page 114a

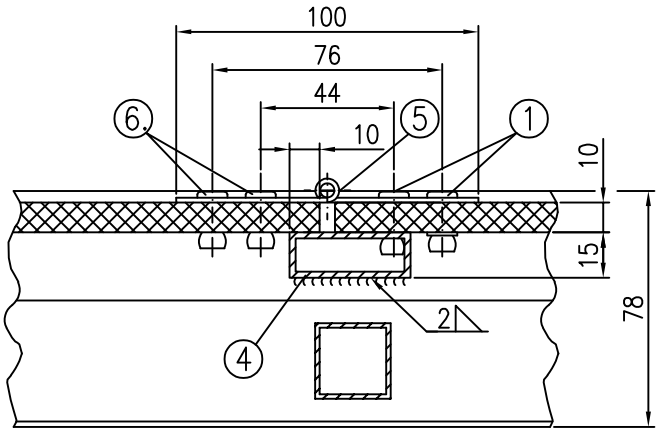
A713-A236 08.2021



C–D



E–F



①	Blind rivet ø5x20	DIN EN ISO 15979 EN AW–5754 H112
②	Round–head screw	DIN 603–M8x20–8.8–galvanised
③	Nut, self–locking	DIN EN ISO 7042–M8–8–galvanised
④	Rectangular hollow section 40x15x2	DIN EN 755–2 EN AW–6063–T66
⑤	Hinge 100x100x1.6	DIN EN 10025–S235JR; electrogalvanized
	alternatively: Hinge 120x30x1.6	DIN EN 10025–S235JR; electrogalvanized
⑥	Blind rivet ø5x18	DIN EN ISO 15979 EN AW–5754 H112

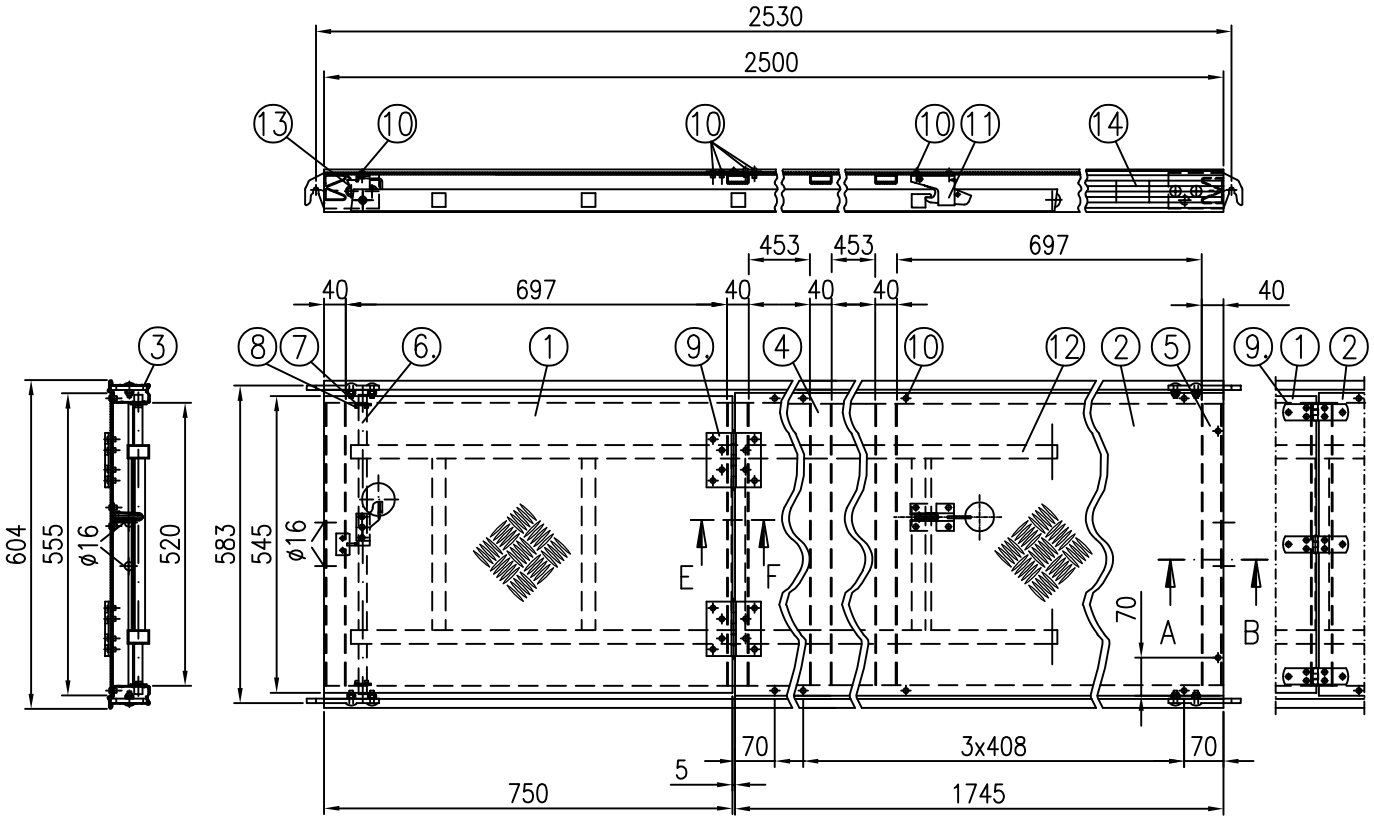
Component no longer manufactured –only approved for continued use–

Frame scaffold ALFIX 70

Sectional views of aluminium frame platform with internal hatch in accordance with Z–8.22–906

Annex A, page 115a

A713–A235_AF 08.2021



①	Chequer plate with 5 bar pattern t=3/4.5	DIN EN 1386	EN AW-5083 H114
	alternatively:	DIN EN 1386	EN AW-5083 H224
②	Chequer plate with 5 bar pattern t=3/4.5	DIN EN 1386	EN AW-5083 H114
	alternatively:	DIN EN 1386	EN AW-5083 H224
③	Rail profile 78x42	DIN EN 755-2	EN AW-6063-T66
④	Rectangular hollow section 40x15x2	DIN EN 755-2	EN AW-6063-T66
⑤	Grip profile; bridging deck thickness 2mm	DIN EN 755-2	EN AW-6063-T66
⑥	Circular hollow section 15x2	DIN EN 10219	S235JRH
	alternatively:	DIN EN 10296-2	1.4301
⑦	Disc	DIN EN ISO 7089-A 17-steel-galvanised	
⑧	Split pin	DIN EN ISO 1234-4x25-steel-galvanised	
⑨	Hinge 100x100x1.6	DIN EN 10025-S235JR; electrogalvanized	
	alternatively: Hinge 120x30x1.6	DIN EN 10025-S235JR; electrogalvanized	
⑩	Blind rivet ø5x12	DIN EN ISO 15979 EN AW-5754 H112	
⑪	Ladder bracket	DIN EN 10025-S235JR; electrogalvanized	
⑫	Ladder	see Annex A, page 18	
⑬	Ledger	DIN EN 10025-S235JR; electrogalvanized	
⑭	Marking	131-MIG: Type 4 filler material (EC9)	

Component no longer manufactured -only approved for continued use-

Dimens. [m]	Weight [kg]
2.57	25.5

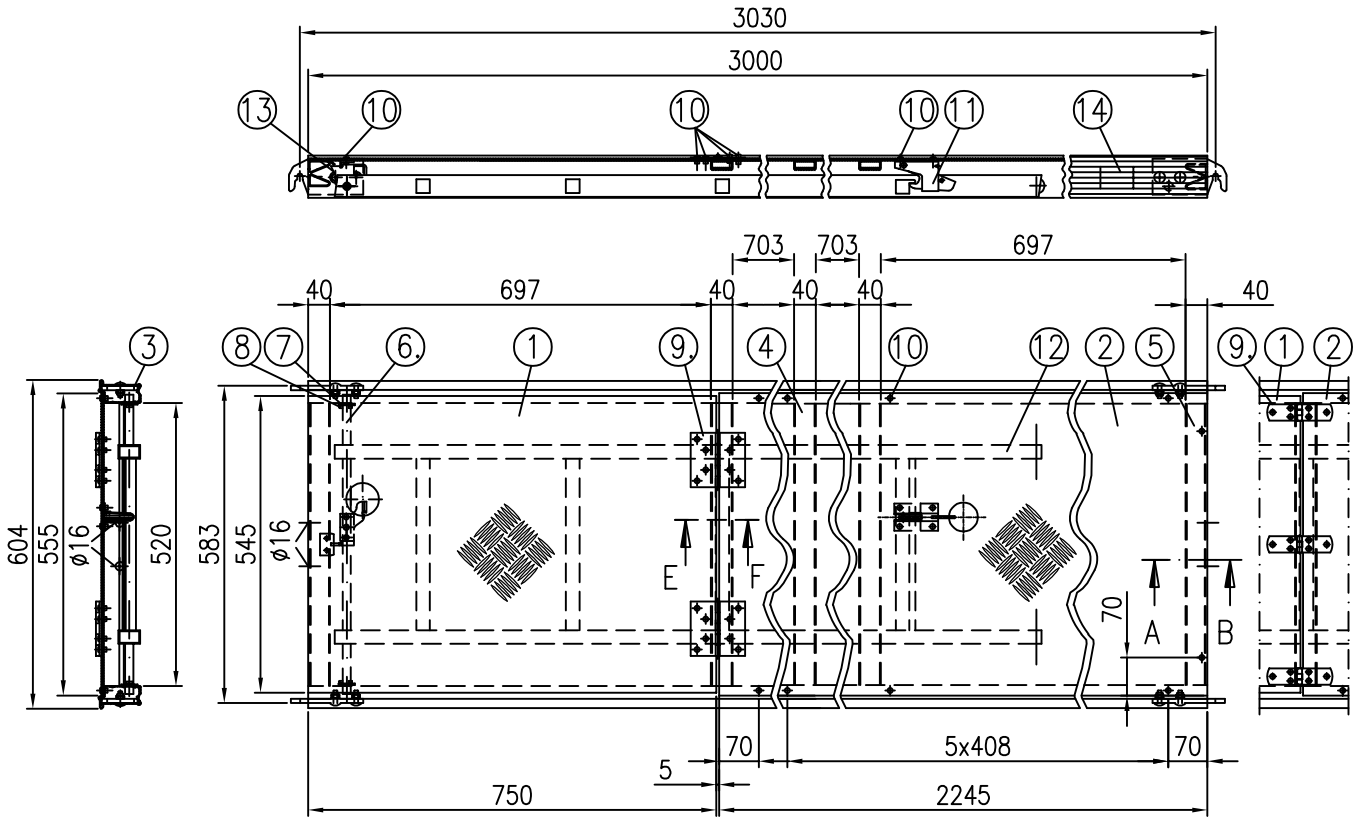
For details see annex A, page 119a Load class 3

Frame scaffold ALFIX 70

Aluminium trapdoor deck with aluminium chequer plate 2.57m

Annex A, page 117a

A713-A217 08.2021



①	Chequer plate with 5 bar pattern t=3/4.5	DIN EN 1386	EN AW-5083 H114
	alternatively:	DIN EN 1386	EN AW-5083 H224
②	Chequer plate with 5 bar pattern t=3/4.5	DIN EN 1386	EN AW-5083 H114
	alternatively:	DIN EN 1386	EN AW-5083 H224
③	Rail profile 78x42	DIN EN 755-2	EN AW-6063-T66
④	Rectangular hollow section 40x15x2	DIN EN 755-2	EN AW-6063-T66
⑤	Grip profile; bridging deck thickness 2mm	DIN EN 755-2	EN AW-6063-T66
⑥	Circular hollow section 15x2	DIN EN 10219	S235JRH
	alternatively:	DIN EN 10296-2	1.4301
⑦	Disc	DIN EN ISO 7089-A 17-steel-galvanised	
⑧	Split pin	DIN EN ISO 1234-4x25-steel-galvanised	
⑨	Hinge 100x100x1.6	DIN EN 10025-S235JR; electrogalvanized	
	alternatively: Hinge 120x30x1.6	DIN EN 10025-S235JR; electrogalvanized	
⑩	Blind rivet ø5x12	DIN EN ISO 15979 EN AW-5754 H112	
⑪	Ladder bracket	DIN EN 10025-S235JR; electrogalvanized	
⑫	Ladder	see annex A, page 18	
⑬	Ledger	DIN EN 10025-S235JR; electrogalvanized	
⑭	Marking	131-MIG: Type 4 filler material (EC9)	

For details see annex A, page 119a Load class 3

Component no longer manufactured -only approved for continued use-

Dimens. [m]	Weight [kg]
3.07	29.5

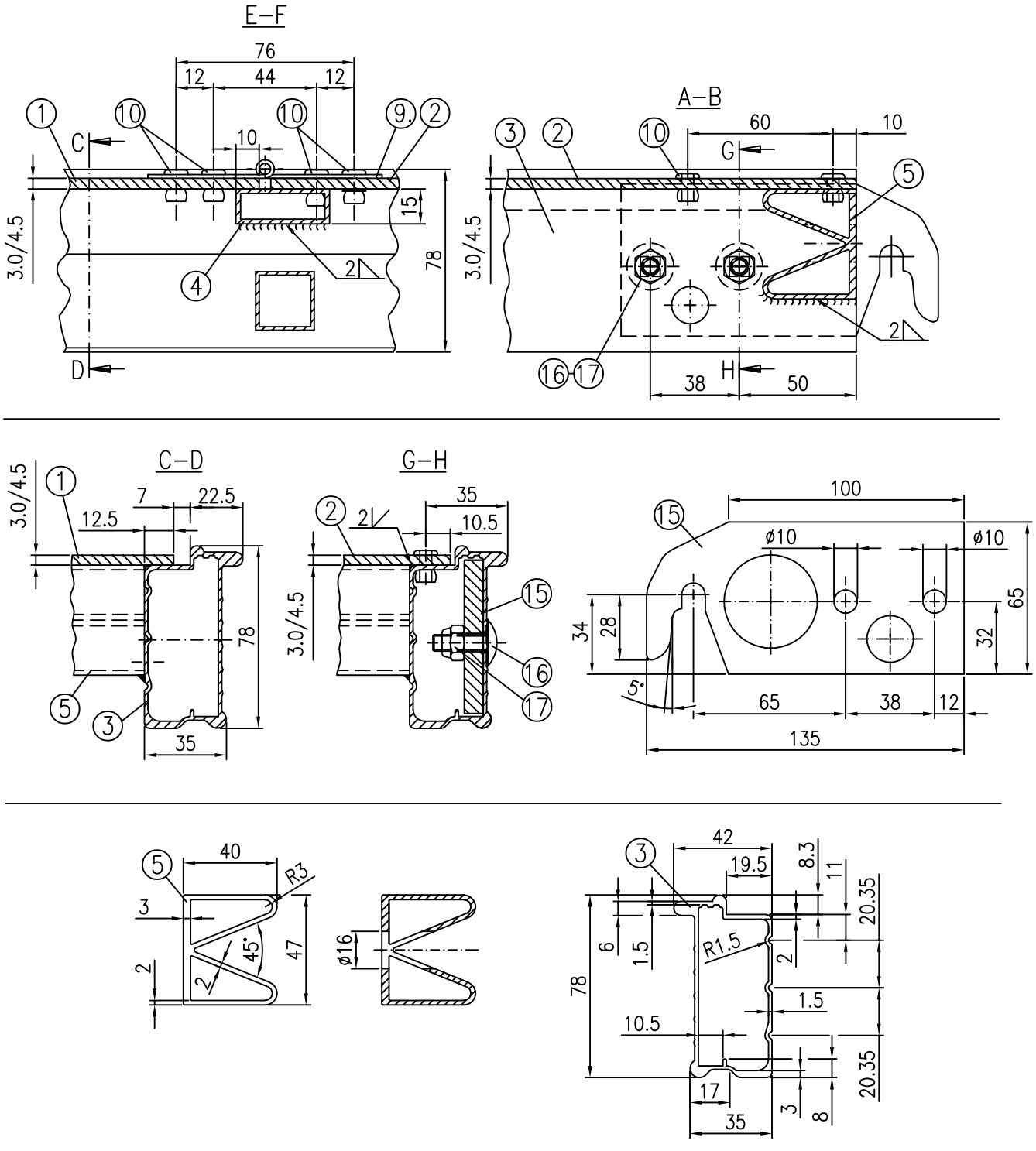
Frame scaffold ALFIX 70

Aluminium trapdoor deck with aluminium chequer plate 3.07m

Annex A, page 118a

A713-A218 08.2021

[Seal Deutsches Institut für Bautechnik]



⑮ Steel metal s=8mm — DIN EN 10025–S235JR; hot–dip galvanised

⑯ Round–head screw — DIN 603–M8x20–8.8–galvanised

⑰ Nut, self–locking — DIN EN ISO 7042–M8–8–galvanised

Component no longer manufactured
–only approved for continued use–

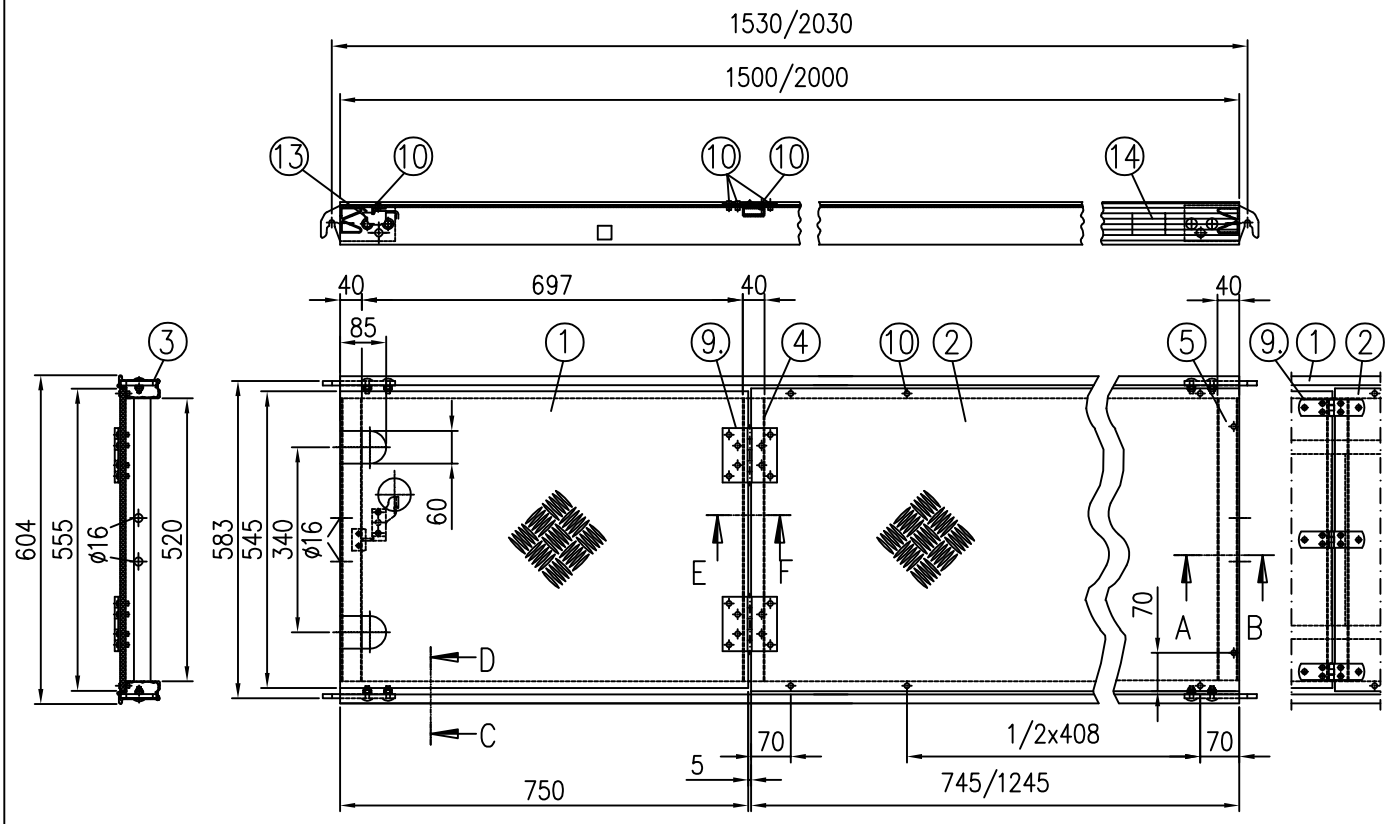
Frame scaffold ALFIX 70

Sectional and detailed views of aluminium trapdoor deck with aluminium chequer plate

Annex A,
page 119a

A713–A219 08.2021

[Seal Deutsches Institut für Bautechnik]



① Chequer plate with 5 bar pattern t=3/4.5	DIN EN 1386	EN AW–5083 H114
alternatively:	DIN EN 1386	EN AW–5083 H224
② Chequer plate with 5 bar pattern t=3/4.5	DIN EN 1386	EN AW–5083 H114
alternatively:	DIN EN 1386	EN AW–5083 H224
③ Rail profile 78x42	DIN EN 755–2	EN AW–6063–T66
④ Rectangular hollow section 40x15x2	DIN EN 755–2	EN AW–6063–T66
⑤ Grip profile; bridging deck thickness 2mm	DIN EN 755–2	EN AW–6063–T66
⑥ not applicable		
⑦ not applicable		
⑧ not applicable		
⑨ Hinge 100x100x1.6	DIN EN 10025–S235JR; electrogalvanized	
alternatively: Hinge 120x30x1.6	DIN EN 10025–S235JR; electrogalvanized	
⑩ Blind rivet ø5x12	DIN EN ISO 15979 EN AW–5754 H112	
⑪ not applicable		
⑫ not applicable		
⑬ Ledger	DIN EN 10025–S235JR; electrogalvanized	
⑭ Marking	131–MIG: Type 4 filler material (EC9)	

Component no longer manufactured –only approved for continued use–

Dimens. [m]	Weight [kg]
1.57	14.8
2.07	18.0

For details see annex A, page 119a

Load class 3

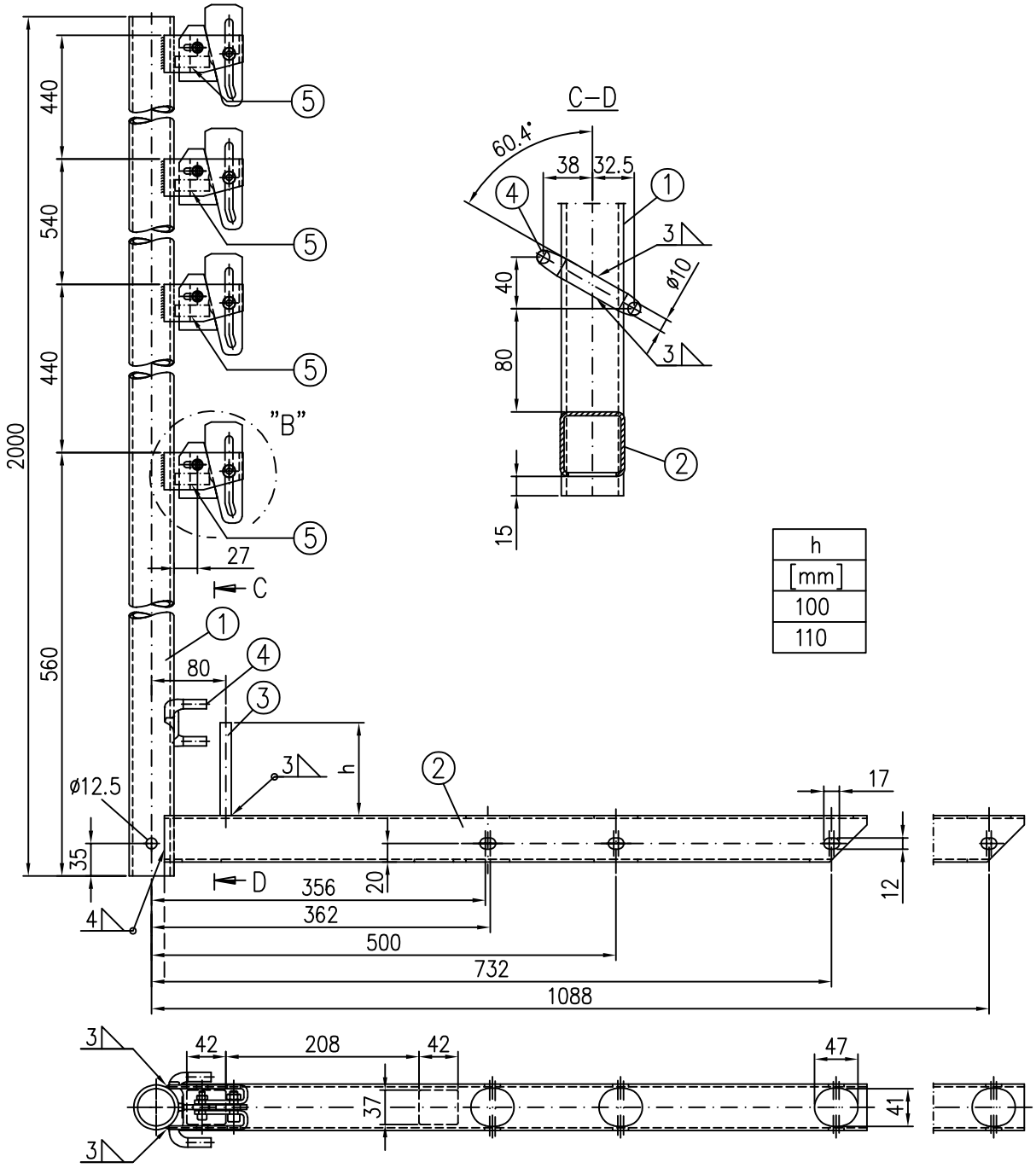
Frame scaffold ALFIX 70

Aluminium trapdoor deck with aluminium chequer plate 1.57m; 2.07m
without ladder

Annex A,
page 120a

A713–A220 08.2021

[Seal Deutsches Institut für Bautechnik]



h [mm]
100
110

①	Circular hollow section ø48.3x4.05	DIN EN 10219–S235JRH $R_{eH} \geq 320 N/mm^2$
②	Rectangular hollow section 50x50x3	DIN EN 10219–S235JRH
③	Round ø12xh	DIN EN 10025–S235JR
④	alternatively: with ring	DIN EN 10025–S235JR
⑤	Marking	
	galvanised	For details see annex A, page 3a

Dimension [m]	Weight [kg]
2.00x0.73	14.0
2.00x1.09	15.4

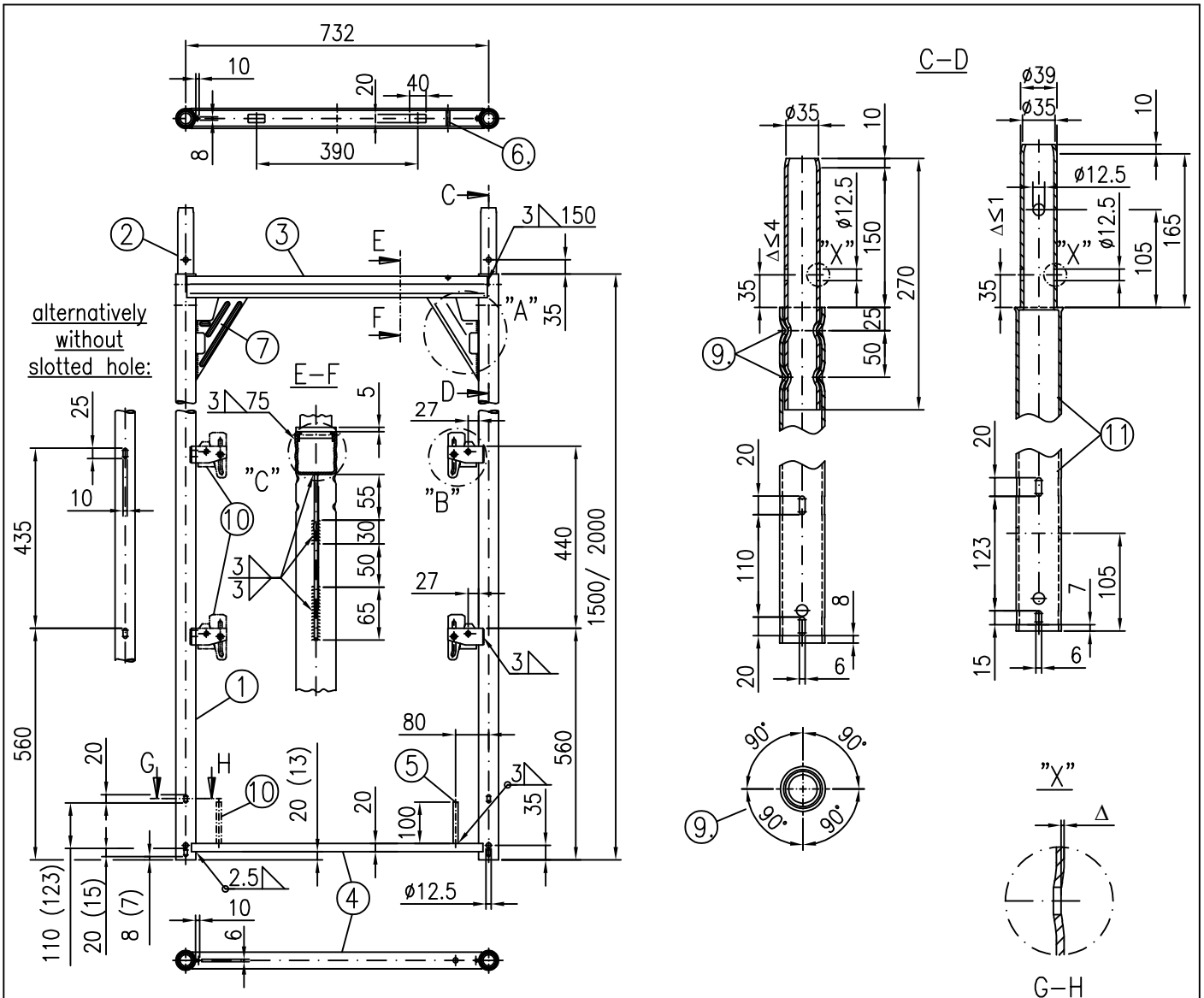
Frame scaffold ALFIX 70

Protective net post AF 2.00 x 0.36/ 0.50/ 0.73/ 1.09m

A715–A238 11.2021

Annex A,
page 128a

[Seal Deutsches Institut für Bautechnik]



① Circular hollow section ø48.3x2.7 DIN EN 10219–S235JRH R_{eH}≥320N/mm²
alternatively: DIN EN 10219–S460MH
② Circular hollow section ø38x3.6 DIN EN 10219–S235JRH R_{eH}≥320N/mm²
③ U–profile 48x52x2.5 made of steel metal 169x2.5 DIN EN 10025–S235JR
④ Rectangular hollow section 40x20x2 DIN EN 10219–S235JRH R_{eH}≥320N/mm²
⑤ Round ø12 DIN EN 10025–S235JR
⑥ Round ø8 DIN EN 10277–2–S235JRC+C
⑦ Marking
⑧ 4 recesses 20(15)x6; t=1
⑨ 4 point–joint pressed connections
⑩ every 2.00m with 4 guardrail wedge housings and 2 toeboard pins
⑪ alternatively: Circular hollow section ø48.3x2.7 without galvanised ② DIN EN 10219–S460MH

( ) Dimensions as for design ⑪

	Dimens. [m]	Weight [kg]
	1.50	16.5
	2.00	18.6
⑩	2.00	19.6

For details see annex A, page 3a

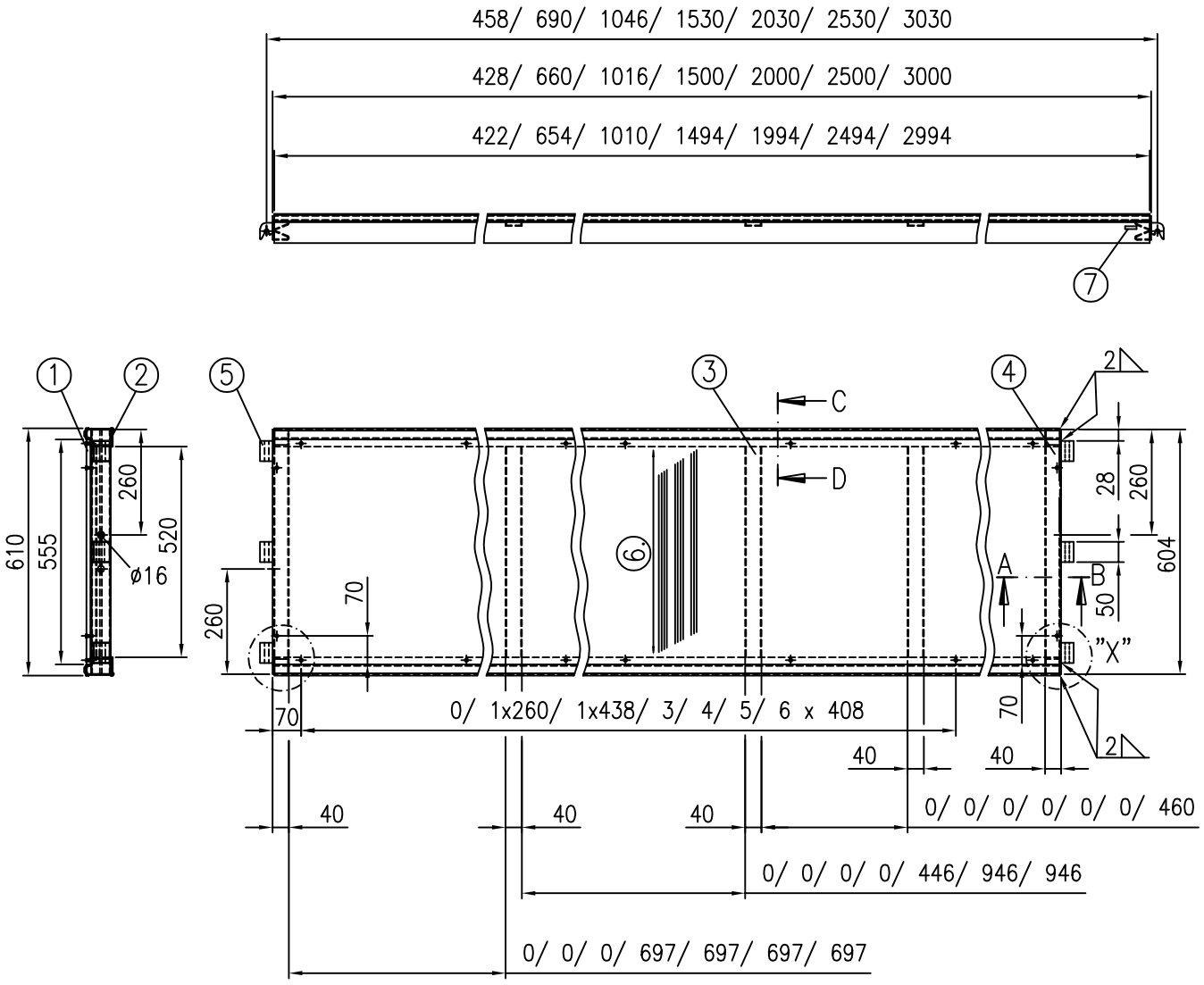
Frame scaffold ALFIX 70

Vertical frame AF 1.50m and 2.00m, steel

Annex A,
page 129a

A715–A245 11.2021

[Seal Deutsches Institut für Bautechnik]



①	Plywood 10x555	Plywood for use in scaffolding with national technical approval
②	Rail profile 72x45	DIN EN 755-2 EN AW-6063-T66
③	Rectangular hollow section 40x15x2	DIN EN 755-2 EN AW-6063-T66
④	Grip profile; bridging deck thickness 2mm	DIN EN 755-2 EN AW-6063-T66
⑤	Profile hook	DIN EN 755-2 EN AW-6063-T66
⑥	Grain direction	
⑦	Marking	

131-MIG: Type 4 filler material (EC9)

For details see annex A, page 147 Load class 3

Dimension [m]	Weight [kg]
0.50x0.60	4.8
0.73x0.60	6.5
1.09x0.60	8.4
1.57x0.60	11.8
2.07x0.60	15.1
2.57x0.60	18.3
3.07x0.60	21.7

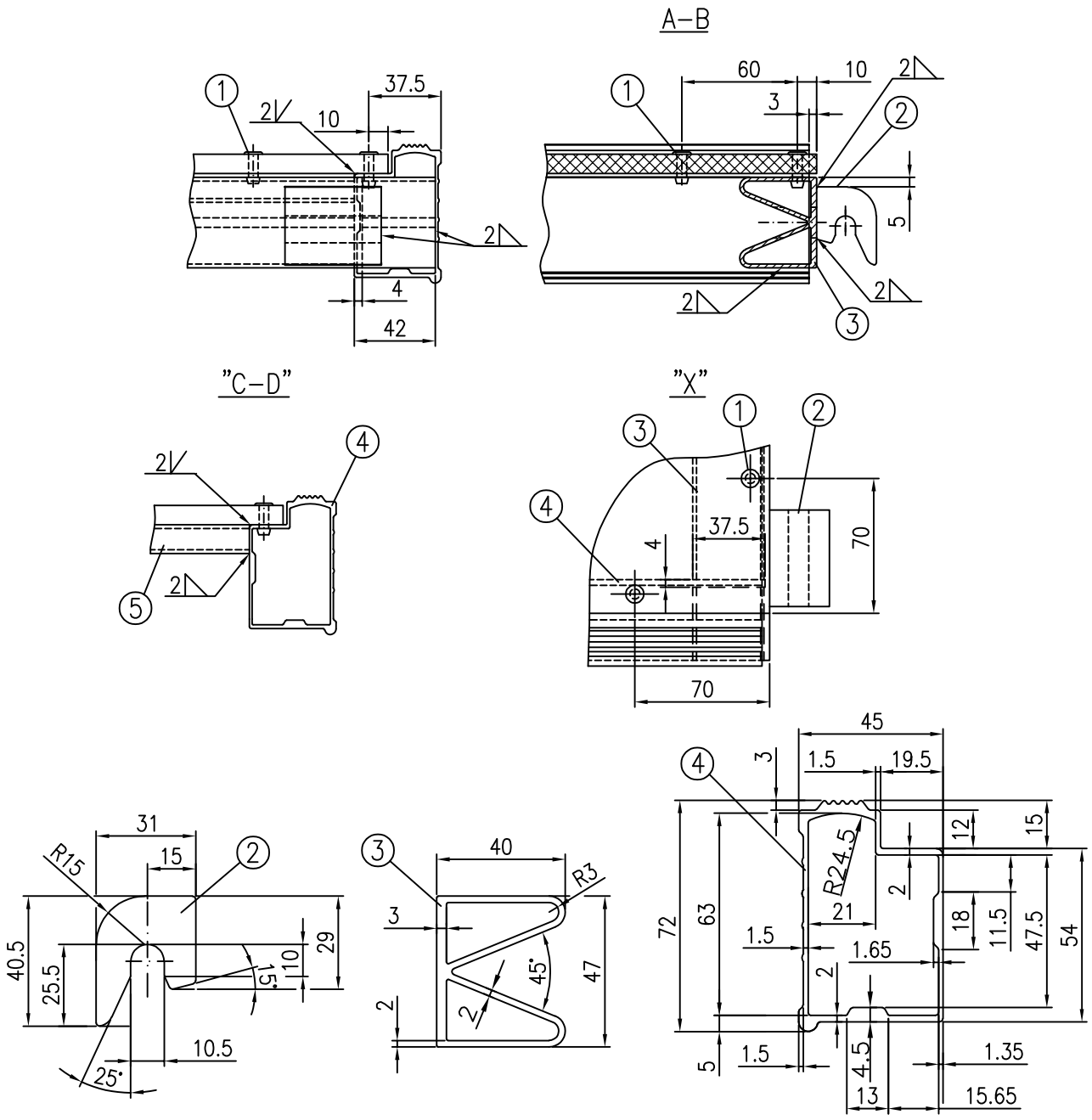
Frame scaffold ALFIX 70

Aluminium frame platform AB with plywood 0.50m – 3.07m

A721-A272 11.2021

Annex A,
page 146a

[Seal Deutsches Institut für Bautechnik]



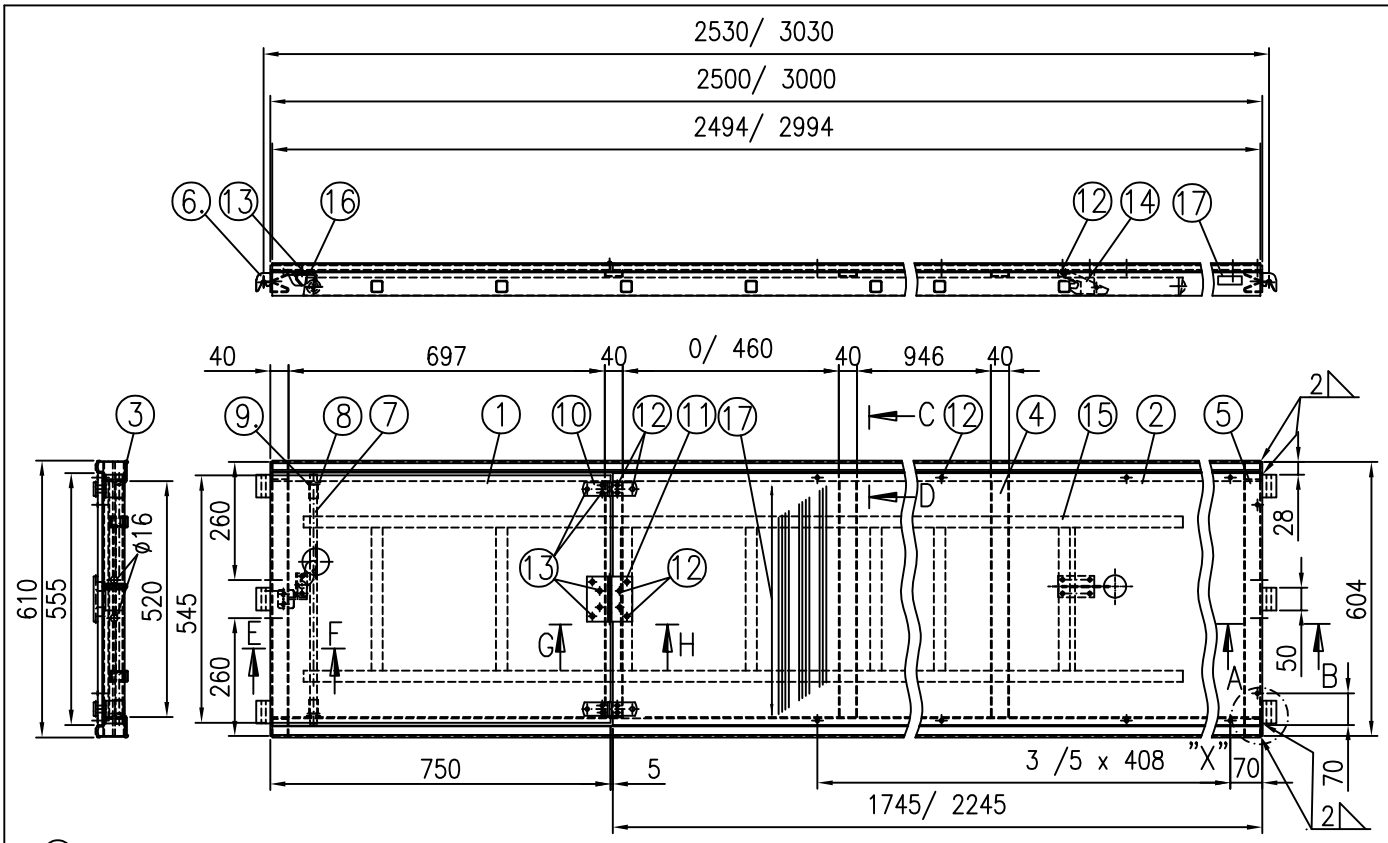
①	Blind rivet ø5x20	DIN EN ISO 15979 EN AW–5754 H112
②	Profile hook	DIN EN 755–2 EN AW–6063–T66
③	Grip profile; bridging deck thickness 2mm	DIN EN 755–2 EN AW–6063–T66
④	Rail profile 72x45	DIN EN 755–2 EN AW–6063–T66
⑤	Rectangular hollow section 40x15x2	DIN EN 755–2 EN AW–6063–T66

Frame scaffold ALFIX 70

Detailed view of aluminium frame platform AB with plywood

A721–A273 11.2021

Annex A,
page 147



①	Plywood 10x545	Plywood for use in scaffolding with national technical approval	
②	Plywood 10x555	Plywood for use in scaffolding with national technical approval	
③	Rail profile 72x45	DIN EN 755-2	EN AW-6063-T66
④	RHP 40x15x2	DIN EN 755-2	EN AW-6063-T66
⑤	Grip profile; bridging deck thickness 2mm	DIN EN 755-2	EN AW-6063-T66
⑥	Profile hook	DIN EN 755-2	EN AW-6063-T66
⑦	Circular hollow section 15x2	DIN EN 10219	S235JRH
	alternatively:	DIN EN 10296-2	1.4301
⑧	Disc	DIN EN ISO 7089-A 17-steel-galvanised	
⑨	Split pin	DIN EN ISO 1234-4x25-steel-galvanised	
⑩	Hinge 30x120x1.6	DIN EN 10025-S235JR; electrogalvanized	
⑪	Hinge 100x100x1.6	DIN EN 10025-S235JR; electrogalvanized	
⑫	Blind rivet ø5x20	DIN EN ISO 15979	EN AW-5754 H112
⑬	Blind rivet ø5x18	DIN EN ISO 15979	EN AW-5754 H112
⑭	Ladder bracket	DIN EN 10025-S235JR; electrogalvanized	
⑮	Ladder	see Annex A, page 18	
⑯	Ledger	DIN EN 10025-S235JR; electrogalvanized	
⑰	Grain direction		
	Marking	131-MIG: Type 4 filler material (EC9)	

Dimension [m]	Weight [kg]
2.57x0.60	22.0
3.07x0.60	25.5

For details see annex A, pages 147 and 149 Load class 3

Frame scaffold ALFIX 70

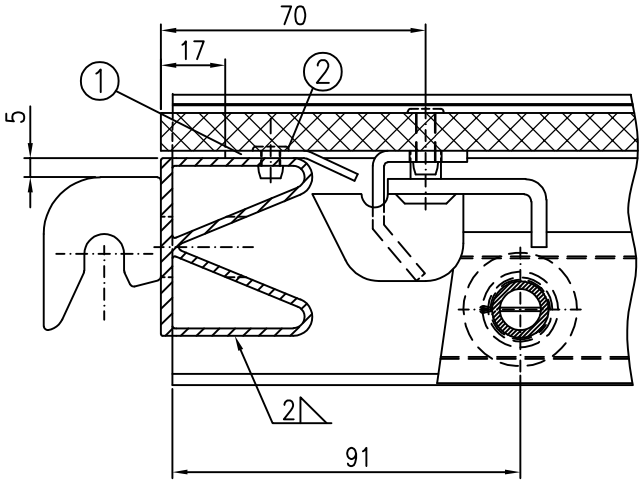
Aluminium frame platform AB with hatch 2.57m; 3.07m

A721-A274 11.2021

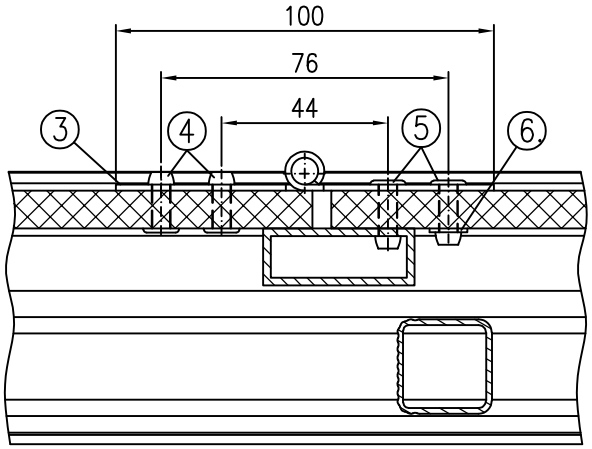
Annex A,
page 148

[Seal Deutsches Institut für Bautechnik]

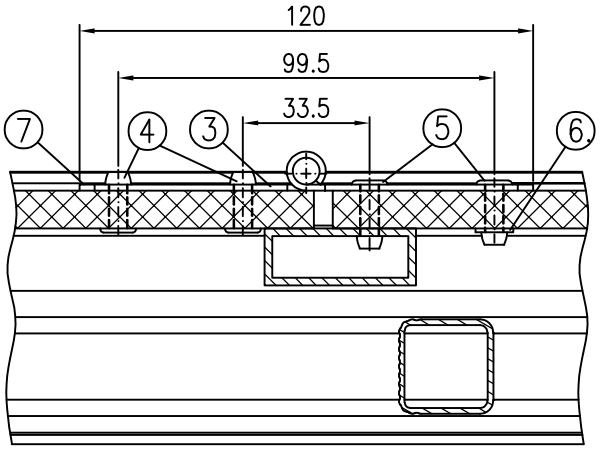
E–F



G–H



G–H
(cutting depth 200mm)



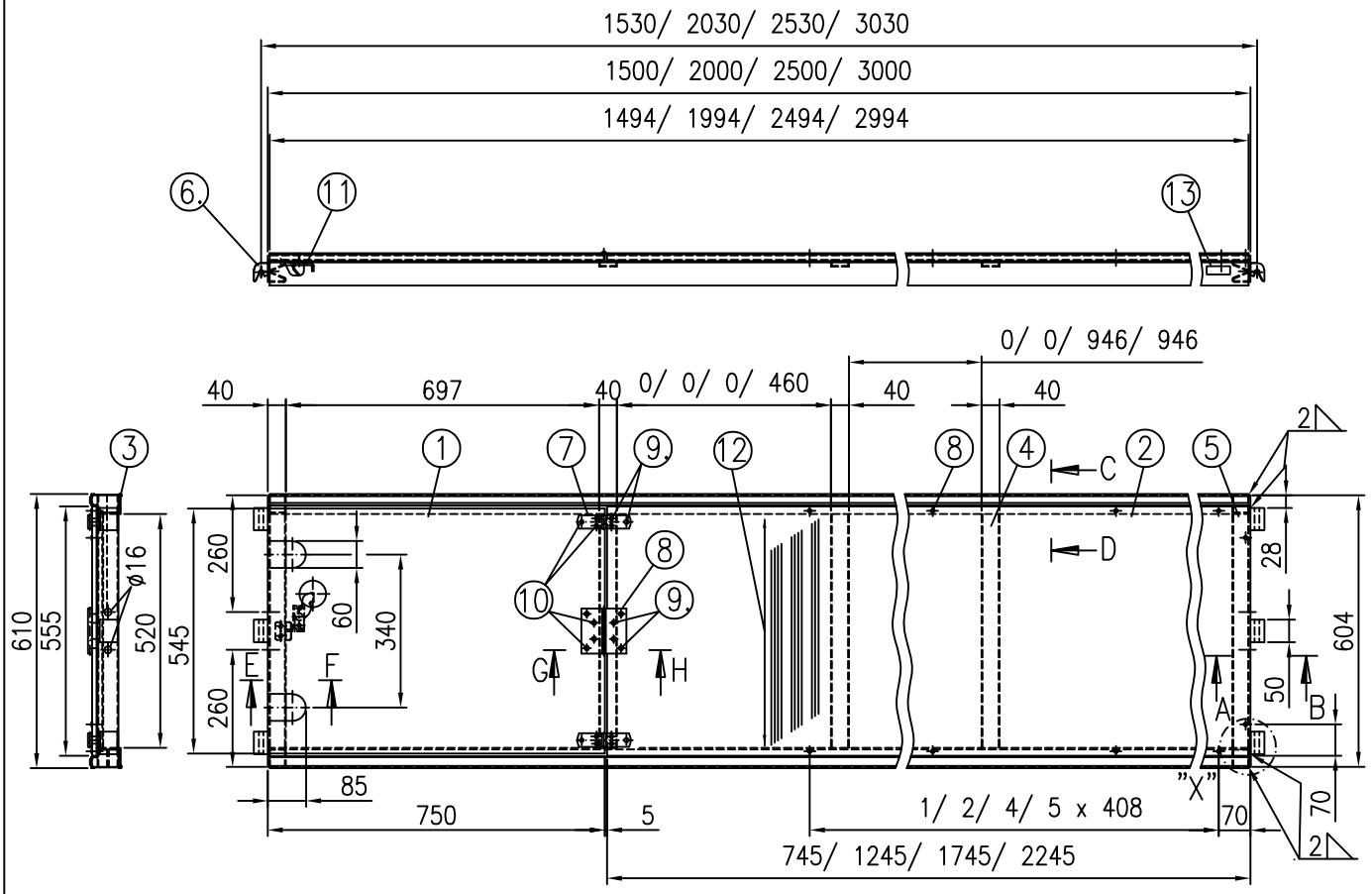
① Locking lug	EN 10088–3	1.4301
② Blind rivet ø5x10	DIN EN ISO 15979	EN AW–5754 H112
③ Hinge 100x100x1.6	DIN EN 10025	S235JR electrogalvanized
④ Blind rivet ø5x18	DIN EN ISO 15979	EN AW–5754 H112
⑤ Blind rivet ø5x20	DIN EN ISO 15979	EN AW–5754 H112
⑥ Disc ø5.3	DIN EN ISO 7089–steel–galvanised	
⑦ Hinge 120x30x1.6	DIN EN 10025	S235JR electrogalvanized

Frame scaffold ALFIX 70

Sectional views of aluminium frame platform AB with hatch

A721–A275 11.2021

Annex A,
page 149



① Plywood 10x545	Plywood for use in scaffolding with national technical approval	
② Plywood 10x555	Plywood for use in scaffolding with national technical approval	
③ Rail profile 72x45	DIN EN 755-2	EN AW-6063-T66
④ Rectangular hollow section 40x15x2	DIN EN 755-2	EN AW-6063-T66
⑤ Grip profile; bridging deck thickness 2mm	DIN EN 755-2	EN AW-6063-T66
⑥ Profile hook	DIN EN 755-2	EN AW-6063-T66
⑦ Hinge 30x120x1.6	DIN EN 10025-S235JR; electrogalvanized	
⑧ Hinge 100x100x1.6	DIN EN 10025-S235JR; electrogalvanized	
⑨ Blind rivet ø5x20	DIN EN ISO 15979	EN AW-5754 H112
⑩ Blind rivet ø5x18	DIN EN ISO 15979	EN AW-5754 H112
⑪ Ledger	DIN EN 10025-S235JR; electrogalvanized	
⑫ Grain direction		
⑬ Marking	131-MIG: Type 4 filler material (EC9)	

Dimension [m]	Weight [kg]
1.57x0.60	12.0
2.07x0.60	15.2
2.57x0.60	18.1
3.07x0.60	21.4

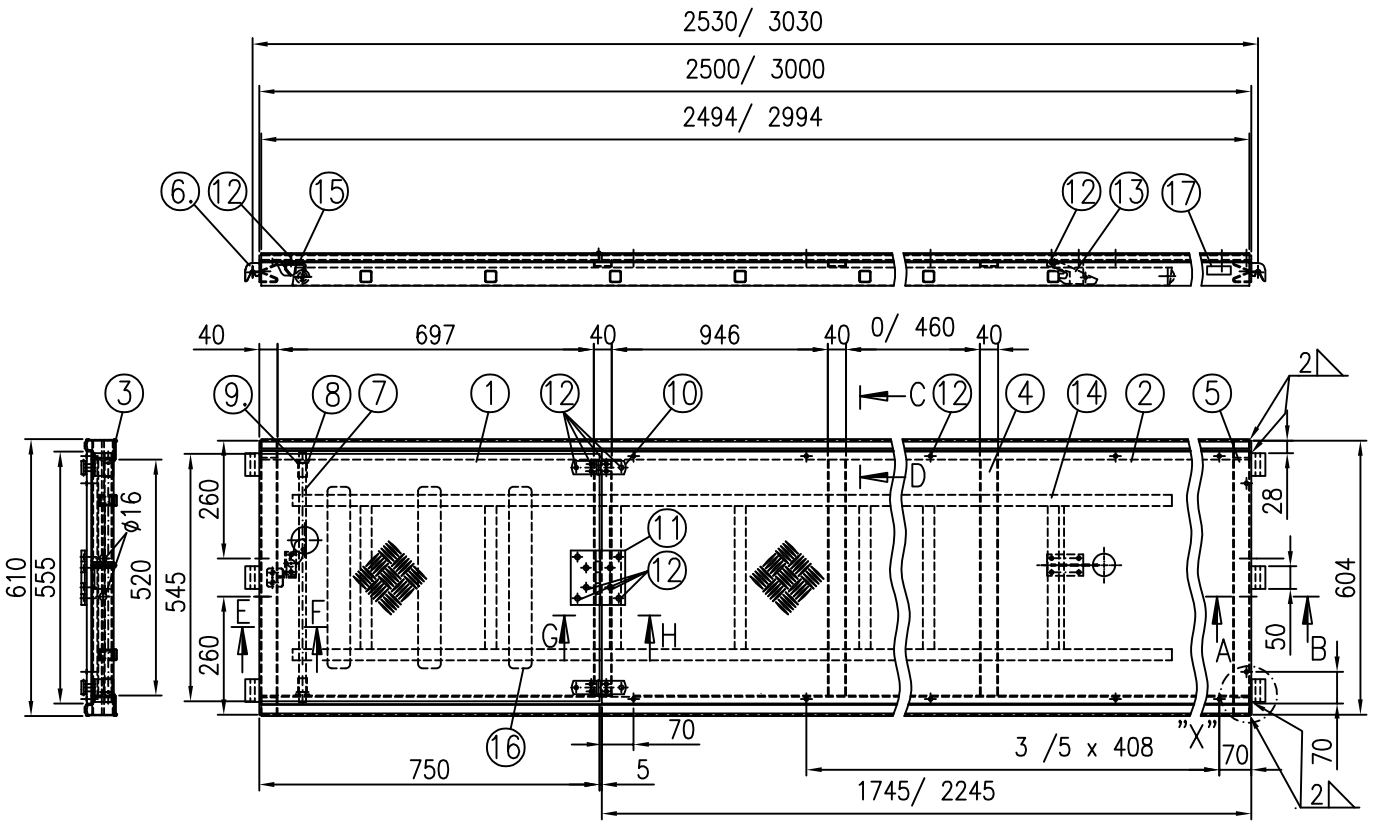
For details see annex A, pages 147 and 149 Load class 3

Frame scaffold ALFIX 70

Aluminium frame platform AB 1.57m – 3.07m without ladder

A721-A276 11.2021

Annex A,
page 150



①	Chequer plate with 5 bar pattern t=3/4.5	DIN EN 1386	EN AW-5083 H114
	alternatively:	DIN EN 1386	EN AW-5083 H224
②	Chequer plate with 5 bar pattern t=3/4.5	DIN EN 1386	EN AW-5083 H114
	alternatively:	DIN EN 1386	EN AW-5083 H224
③	Rail profile 72x45	DIN EN 755-2	EN AW-6063-T66
④	Rectangular hollow section 40x15x2	DIN EN 755-2	EN AW-6063-T66
⑤	Grip profile; bridging deck thickness 2mm	DIN EN 755-2	EN AW-6063-T66
⑥	Profile hook	DIN EN 755-2	EN AW-6063-T66
⑦	Circular hollow section 15x2	DIN EN 10219	S235JRH
	alternatively:	DIN EN 10296-2	1.4301
⑧	Disc	DIN EN ISO 7089-A 17-steel-galvanised	
⑨	Split pin	DIN EN ISO 1234-4x25-steel-galvanised	
⑩	Hinge 30x120x1.6	DIN EN 10025-S235JR; electrogalvanized	
⑪	Hinge 100x100x1.6	DIN EN 10025-S235JR; electrogalvanized	
⑫	Blind rivet ø5x12	DIN EN ISO 15979	EN AW-5754 H112
⑬	Ladder bracket	DIN EN 10025-S235JR; electrogalvanized	
⑭	Ladder	see Annex A, page 18	
⑮	Ledger	DIN EN 10025-S235JR; electrogalvanized	
⑯	Anti-slip strip 50x400		
⑰	Marking	131-MIG: Type 4 filler material (EC9)	

For details see annex A, page 152 Load class 3

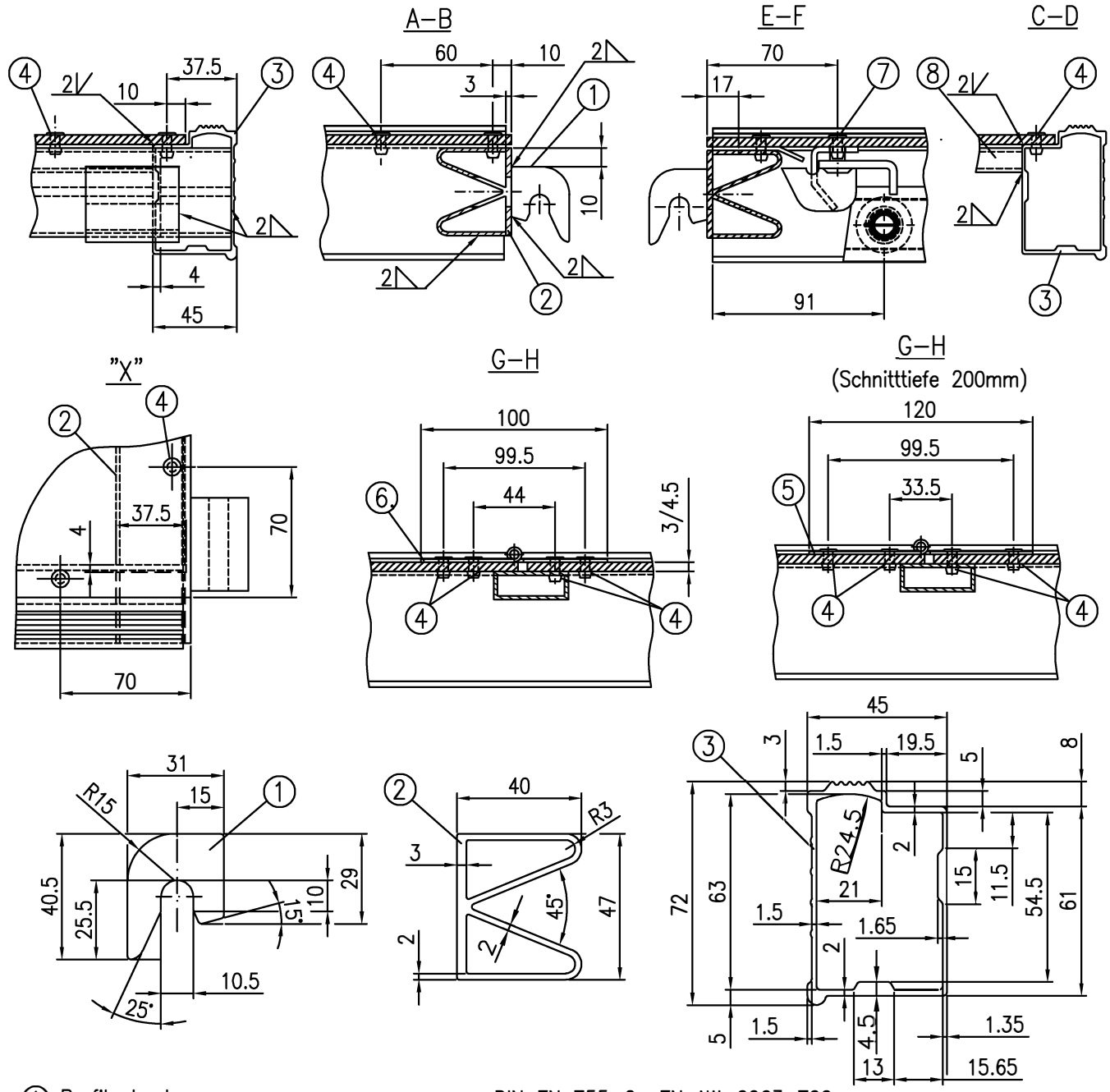
Dimension [m]	Weight [kg]
2.57x0.60	26.0
3.07x0.60	30.0

Frame scaffold ALFIX 70

Aluminium frame platform AB with hatch, aluminium chequer plate 2.57m; 3.07m

A721-A277 11.2021

Annex A,
page 151



①	Profile hook	DIN EN 755–2 EN AW–6063–T66
②	Grip profile; bridging deck thickness 2mm	DIN EN 755–2 EN AW–6063–T66
③	Rail profile 72x45	DIN EN 755–2 EN AW–6063–T66
④	Blind rivet ø5x12	DIN EN ISO 15979 EN AW–5754 H112
⑤	Hinge 30x120x1.6	DIN EN 10025–S235JR; electrogalvanized
⑥	Hinge 100x100x1.6	DIN EN 10025–S235JR; electrogalvanized
⑦	Blind rivet ø5x10	DIN EN ISO 15979 EN AW–5754 H112
⑧	Rectangular hollow section 40x15x2	DIN EN 755–2 EN AW–6063–T66

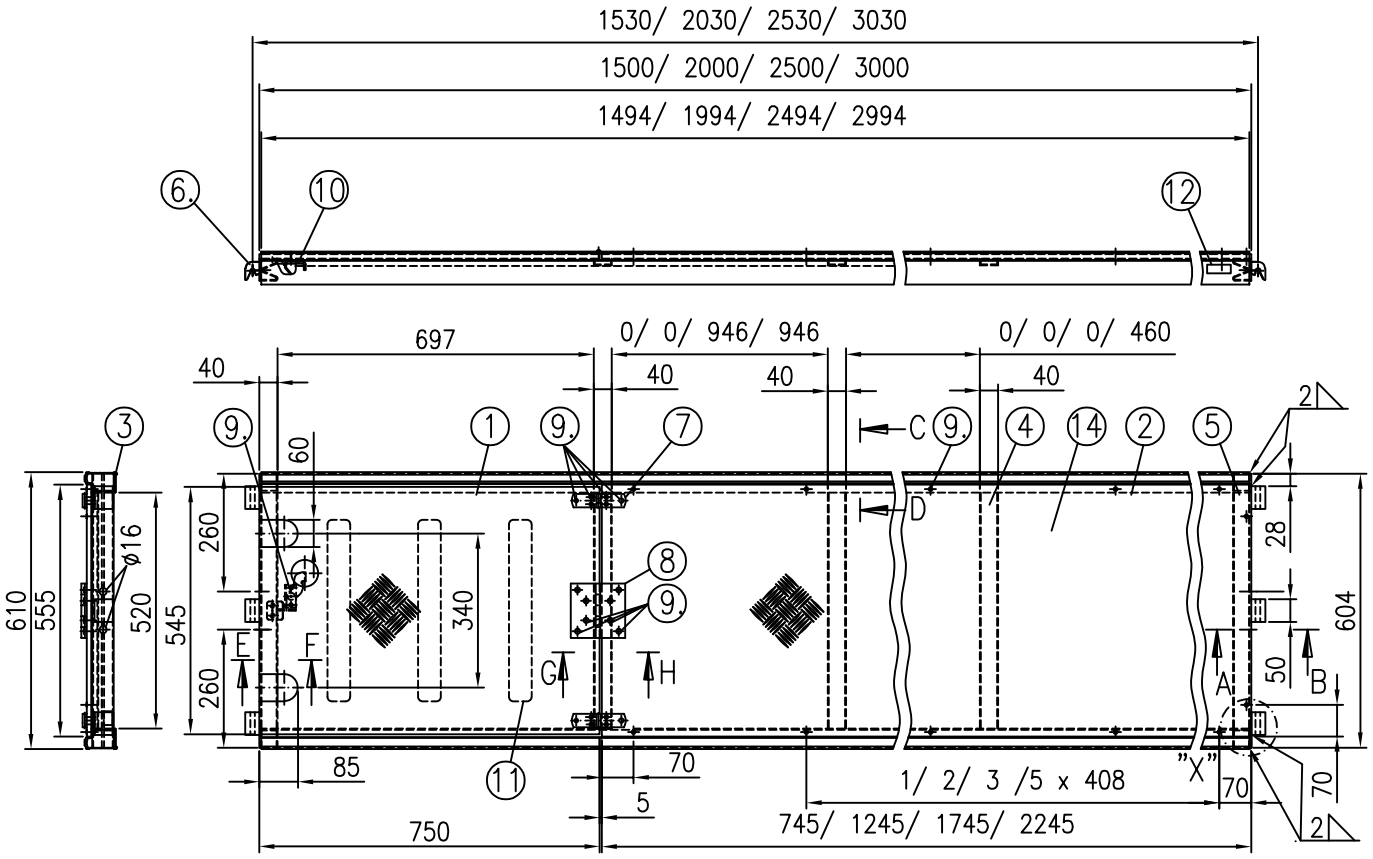
Frame scaffold ALFIX 70

Detailed view of aluminium frame platform AB with hatch, aluminium chequer plate

Annex A, page 152

A721–A278 11.2021

[Seal Deutsches Institut für Bautechnik]



① Chequer plate with 5 bar pattern t=3/4.5	DIN EN 1386	EN AW-5083 H114
alternatively:	DIN EN 1386	EN AW-5083 H224
② Chequer plate with 5 bar pattern t=3/4.5	DIN EN 1386	EN AW-5083 H114
alternatively:	DIN EN 1386	EN AW-5083 H224
③ Rail profile 72x45	DIN EN 755-2	EN AW-6063-T66
④ Rectangular hollow section 40x15x2	DIN EN 755-2	EN AW-6063-T66
⑤ Grip profile; bridging deck thickness 2mm	DIN EN 755-2	EN AW-6063-T66
⑥ Profile hook	DIN EN 755-2	EN AW-6063-T66
⑦ Hinge 30x120x1.6	DIN EN 10025-S235JR; electrogalvanized	
⑧ Hinge 100x100x1.6	DIN EN 10025-S235JR; electrogalvanized	
⑨ Blind rivet ø5x12	DIN EN ISO 15979	EN AW-5754 H112
⑩ Ledger	DIN EN 10025-S235JR; electrogalvanized	
⑪ Anti-slip strip 50x400		
⑫ Marking	131-MIG: Type 4 filler material (EC9)	

Dimension [m]	Weight [kg]
1.57x0.60	14.1
2.07x0.60	17.9
2.57x0.60	21.8
3.07x0.60	25.8

For details see annex A, page 152 Load class 3

Frame scaffold ALFIX 70

Aluminium frame platform AB with hatch, aluminium chequer plate
1.57m – 3.07m without ladder

A721-A279 11.2021

Annex A,
page 153

Product marking code key

AF XX Ü 862 XX

AF = ALFIX manufacturer's logo

XX = Year of manufacture

Ü = Mark of conformity

862 = Abbreviated approval number

XX = Supplier number or supplier's company logo in case of third-party manufacturing

Year	XX
2015	15
2016	16
2017	17
2018	18
2019	19
2020	20
2021	21
2022	22
etc.	etc.

[Seal: Deutsches Institut für Bautechnik]

Approval body for construction products and construction techniques

Structural safety control authority

An institution under public law jointly funded by the German Federation and the federal states (Länder)
Member of EOTA, UEAtc and WFTAO

National technical approval / general construction technique permit

Date: 16 December 2020 | Reference number: 37.1-1.8.1-33/20

Approval number:
Z-8.1-862

Period of validity:
from: **16 December 2020**
to: **4 January 2022**

Applicant:
Alfix GmbH
Langhennersdorfer Straße 15
09603 Großschirma (Germany)

Subject of approval:
"Frame Scaffold ALFIX 70" scaffolding system

The above-mentioned subject is hereby granted general construction technique permit.
This decision comprises 26 pages as well as annex A (pages 1 to 146), annex B (pages 1 to 11), and annex C (pages 1 to 27).
This national technical approval / general construction technique permit replaces national technical approval Z-8.1-862 of 9 December 2016. The subject was first granted general construction technique permit on 27 May 1999.

[Seal: Deutsches Institut für Bautechnik]

I GENERAL PROVISIONS

1 This decision confirms the usability and / or applicability of the subject matter of the permit 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.

3 This decision is granted without prejudice to the rights of third parties, especially private property rights.

4 The user of the subject matter of the decision 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 of the decision. The user of 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.

5 This decision may only be reproduced in its entirety. Publication of the approval 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".

6 This decision is issued as a revocable decision. The provisions of this decision may be amended or modified at a later time, particularly if new technical knowledge requires this.

7 This decision relates to the information on the subject matter of the decision 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.

8 The general construction technique permit covered by this decision also serves as national technical approval for the construction technique.

II SPECIAL PROVISIONS

1 Subject matter of the decision / approval and scope of use and application

Subject matter of the approval are prefabricated scaffolding components in accordance with Table 1 for use in the "ALFIX 70 frame scaffold".

Subject matter of the decision is the planning, design, and execution of the "ALFIX 70 frame scaffold", 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 according to the respective scope of application.

The main load-bearing structure consists of steel vertical frames b = 0.732 m, decks $\ell \leq 3.07$ m and diagonal braces (vertical diagonal braces) in the outer vertical plane.

The scaffold 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[1] and DIN 4420-1:2004-03.

2 Provisions for the scaffolding 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 "ALFIX 70 frame scaffold"

Designation	Annex A, page	Detailed view / components in accordance with annex A, page
Vertical frame 18/70; 1.5m and 2.0m, steel	1	3
Vertical frame 18/70; 1.0m and 0.67m, steel	2	1, 3
Steel deck AF 0.32m	7	---
Steel deck AF 0.30m; 0.34m	9	---
Intermediate deck AF 0.16m; 0.19m	10	---
Intermediate deck	11	---
Aluminium corner deck with toeboard, rigid	25	---
Solid wood deck 45	26	---
Solid wood deck 48	27	---
Diagonal brace 3.07m	29	95
Diagonal brace 2.57m	30	95
Diagonal brace 2.07m	31	95
Horizontal strut	32	95
Scaffold tie	33	---
Quick-release scaffold tie	34	---

[1] see DIBt-Mitteilungen (notifications of the DIBt), issue 2/2006, p. 61 et seq.

Table 1: (continued)

Designation	Annex A, page	Detailed view / components in accordance with annex A, page
Guardrail AF	36	---
Double guardrail AF	38	---
Double guardrail AF, aluminium	40	---
Advanced guardrail post	42	---
Telescopic guardrail, aluminium	44	---
Double end guardrail AF, Single end guardrail	47	95
Guardrail post AF, single	49	1, 3
Guardrail post AF	51	1, 3
End guardrail frame	53	1, 3
Protective wall post AF	56	3
Bracket AF 0.36m	58	3
Bracket AF 0.73m	60	1, 3
Protective roof extension	62	1, 3
Lift-off preventer	64	---
Transom 0.73m; 1.09m	65	3
Side-protection meshguard	66	---
Lattice girder, steel	68	---
Passage frame, in sections, 1.57m, upper part	71	3
Passage frame, in sections, tubular post, 1.90m	72	3
Gap cover	73	---
Double guardrail AF 4.14m	74	---
Steel plank 0.30m	75	---
Aluminium stairway AF -0.62m 2.57m; 3.07m	78	---
Stair guardrail AF 2.57m; 3.07m	79	---
Inner guardrail for aluminium stairway 2.00m	80	---
Stair stringer fall protection 1.00 x 0.50m	81	---
Cantilever frame 2.00 x 0.37m	82	1, 3
Cantilever frame 2.00 x 0.53m	83	1, 3
Roof guard extension frame 2.00 x 0.73m to 1.09m	84	1,3
Bracket 0.36m, special design	85	---
Assembly frame 0.37m; 0.67 – 2.00m	86	3
Starter transom 0.73m; 1.09m	87	3, 65
DS bracket frame 0.99 x 0.73m	88	1, 3
Aluminium stairway AF-0.62m 1.09m; 1.40m	89	---
Spacer tube	90	---
Bracket AF 0.50m	91	1, 3
Lattice girder suspension	92	---
Lattice girder cross brace 0.73m; 1.09m	93	3, 87

Table 1: (continued)

Designation	Annex A, page	Detailed view / components in accordance with annex A, page
Tube connector for lattice girder	94	---
Guardrail coupler AF	95	---
Toeboard coupler; Halfcoupler with hook	96	---
Squared timber coupler	97	---
Lattice girder, aluminium	98	---
Toeboard support	99	---
Locking pin	100	---
Putlog coupler	101	---
Diagonal cross brace	103	---
Scaffold tie EIFS	105	---
EIFS deck AF 190; Tube linchpin	106	---
EIFS anchor 300/350/475	107	---
Aluminium deck 0.60m, lightweight	116	---
Aluminium trapdoor deck with aluminium chequer plate 2.57m	117	18, 119
Aluminium trapdoor deck with aluminium chequer plate 3.07m	118	18, 119
Aluminium trapdoor deck with aluminium chequer plate 1.09m – 2.07m without ladder	120	119
AB Base jack	121	---
Base jack, with swivel base	122	---
Anchor coupler	123	---
Toeboard, End toeboard AF	124	---
Toeboard 4.14m AF	125	---
Aluminium toeboard; Aluminium end toeboard AF	126	---
Steel toeboard; Steel end toeboard AF	127	---
Protective net post AF 2.00 x 0.36 / 0.50 / 0.73m	128	3
Vertical frame AF 1.50m and 2.00m, steel	129	3
Vertical frame AF 1.0m and 0.67m, steel	130	3, 129
Aluminium double guardrail AF 1.57m; 2.07m; 2.57m; 3.07m	131	---
Guard net system	132	36
Gusset coupler	133	---
ALBLITZ stair guardrail post 1.10m	134	3
Inner guardrail post 1.00m	135	3
Guardrail holder for internal corner	136	3
Bracket AF 0.36m, lift-off preventer for inner face	137	3
Weather protection add-on unit 2.00 x 0.73m	138	3
Weather protection sleeve 2.00m	139	3
Corner guardrail wedge housing	140	---

Table 1: (continued)

Designation	Annex A, page	Detailed view / components in accordance with annex A, page
DS bracket frame 0.99 x 1.09m	141	3
Aluminium stairway AF-0.62m 2.07m	142	---
TRBS guardrail (compliant with technical regulations for occupational safety) 2.07m; 2.57m; 3.07m, folding	143	---
TRBS guardrail (compliant with technical regulations for occupational safety) 0.73m; 1.09m; 1.57m, rigid	144	---
TRBS end guardrail (compliant with technical regulations for occupational safety) 0.73m; 1.09m	145	---

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.

Material test certificates for aluminium alloys must contain at least information on the chemical composition, tensile strength R_m, yield point $R_{p0,2}$ and strain A or A_{50mm}.

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

- For structural steel without an increased nominal yield strength and with a defined minimum nominal 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.

The wedges used in connection with some of the components must be manufactured, inspected and marked in accordance with the rules laid out in Z-8.22-906.

Table 2: Technical provisions and material test certificates for the metal materials of the scaffolding components

Material	Material number	Designation	Technical regulation	Material test certificate according to DIN EN 10204: 2005-01
Structural steel	1.0039	S235JRH *)	DIN EN 10219-1: 2006-07	2.2 *)
	1.0576	S355J2H		3.1
	1.8849	S460MH		
	1.0038	S235JR *)	DIN EN 10025-2: 2019-10	2.2 *)
	1.0577	S355J2		3.1
	1.0122	S235JRC+C	DIN EN 10277: 2018-09	2.2
Steel plate and steel metal	1.0242	S250GD+Z275**)	DIN EN 10346: 2015-10	3.1
	1.0918	DX52D+Z275**)		
Rolled flats	1.0332	DD11**)	DIN EN 10111: 2008-06	
	1.0335	DD13**)		
	1.0330	DC01	DIN EN 10130: 2007-02	
	1.0982	S460MC	DIN EN 10149-1: 2013-12	

Table 2: (continued)

Material	Material number	Designation	Technical regulation	Material test certificate according to DIN EN 10204: 2005-01
Cold extruded steel	1.0214	C10C	DIN EN 10263-2: 2018-02	
	1.1122	C10E2C	DIN EN 10263-3: 2018-02	
Cast steel	1.0446	GE240+N	DIN EN 10293: 2015-04	
Malleable cast iron	5.4201 (EN-JM1020)	EN-GJMW-360-12	DIN EN 1562: 2019-06	
	5.4202 (EN-JM1030)	EN-GJMW-400-5		
	5.4205 (EN-JM1140)	EN-GJMB-450-6		
Ductile iron (nodular cast iron)	5.3106 (EN-JS1030)	EN-GJS-400-15	DIN EN 1563: 2019-04	
Aluminium alloy	EN AW-5083 H114	EN AW-Al Mg4,5Mn0,7	DIN EN 1386: 2008-05	3.1
	EN AW-5083 H224			
	EN AW-5754 H114	EN AW-Al Mg3		
	EN AW-5754 H24 / H34	EN AW-Al Mg3	DIN EN 485-2: 2018-12	
	EN AW-6060 T66	EN AW-Al MgSi	DIN EN 755-2: 2016-10	
	EN AW-6063 T66	EN AW-Al Mg0,7Si		
	EN AW-6082 T5	EN AW-Al Si1MgMn		

*) For some scaffolding components, a higher nominal yield strength $R_{eH} \geq 280$ N/mm² or $R_{eH} \geq 320$ N/mm² has been determined. 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 nominal yield strength, the strain at fracture and the tensile strength shall be confirmed by means of an inspection certificate 3.1 in accordance with DIN EN 10204:2005-01. The purchase requisition regarding the increased nominal yield strength shall be indicated in the inspection certificate 3.1 as a desired value.

**) R_{eH} in accordance with the figures in the annexes

2.1.2.2 Extruded section profiles

The extruded section profiles must meet the requirements of the DIN EN 755 standards.

2.1.2.3 Solid wood

Solid wood must meet at least the requirements of visual strength grade S10 or S13 in accordance with DIN 4074-1:2012-06 or the minimum strength of strength class C 24 in accordance with DIN EN 338:2010-02.

2.1.2.4 Constructional veneer plywood

Constructional veneer plywood shall meet at least the requirements of the “Approval Principles for the use of constructional veneer plywood in scaffolding”[2] as well as the specifications in the drawings of annex A.

2.1.3 Couplers

Class B halfcouplers in accordance with DIN EN 74-2:2009-01 must be used as couplers that are fitted to various components. In deviation from DIN EN 74-2:2009-01, proof must be provided for the halfcouplers of the components according to Table 1 that they have a breaking force of $F_{f,c}$ = 30 kN.

2.1.4 Corrosion protection

The technical building regulations shall apply.

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.

For aluminium components, this proof shall be considered to be furnished, if welding procedures and welding personnel are qualified in accordance with DIN EN 1090-2:2019-07 and the company holds a welding certificate of at least execution class 2 (EXC 2) in accordance with DIN EN 1090-1:2012-02.

Companies that manufacture glued (bonded) scaffolding components in accordance with the present National Technical Approval shall demonstrate that they are qualified for this task. Proof of suitability for the production of glued (bonded) components shall be considered as provided if the company holds at least a C1 certificate in accordance with DIN 1052-10:2012-05.

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",
- minat least the abbreviated approval number "862",
- the identifying mark (logo) of the manufacturer, and
- the last two digits of the year of manufacture.

Alternatively, a coded identifying mark in accordance with annex A, page 146, may be used.

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

[2] see also DIBt-Mitteilungen (notifications of the DIBt) issue 3/1999, p. 122 et seq.

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.

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 certifying body shall provide Deutsches Institut für Bautechnik (DIBt) with a copy of the certificate of conformity issued by the former, and the supervisory body shall provide it with a copy of the supervision report upon request.

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.

The 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.
  - At least 0.1‰ of the cold worked U-claws of some of the fittings in accordance with this decision, shall be subjected to a factory production control according to the documents filed with the Deutsches Institut für Bautechnik.
  - A tensile test shall be carried out on at least 0.1‰ of the non-galvanised pressed-in tube connectors. The breaking load value F_{Break} must not be lower than 13.75 kN.
  - Inspections shall be carried out on at least 0.1 ‰ of the integrated tube connectors of the standards according to annex A, pages 1 and 3, however at least once every production week, in accordance with the documents filed with the Deutsches Institut für Bautechnik (DIBt).

  - The increased breaking load of the class B halfcouplers fitted to some of the components, shall be verified and documented within the course of a factory production control in accordance with Table A.2 of DIN EN 74-2:2009-01, unless this has already been verified for the production of the couplers.
- 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.
  - At least 0.1‰ of the components with riveted halfcouplers shall be subjected to a factory production control according to the documents filed with the Deutsches Institut für Bautechnik.

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 the Deutsches Institut für Bautechnik and to the competent superior building inspection authority.

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. In deviation thereof, the integrated tube connector shall be inspected in accordance with annex A, pages 1 and/or 3 at least two times a year by a recognised inspection body.

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 welding and bonding certificate

- At least 5 each of the following components / details manufactured in accordance with this decision shall be inspected by the external supervisory body in accordance with the documents filed with the Deutsches Institut für Bautechnik (DIBt):
  - cold worked U-claws of several decks
  - integrated and pressed-in tube connectors
  - components with rivited halfcouplers
- The increased breaking load of the class B halfcouplers fitted to some of the components shall be verified in accordance with level M according to Table A.2 of DIN EN 74-2:2009-01, unless this has already been verified within the course of the production of the couplers.

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 Deutsches Institut für Bautechnik 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 "ALFIX 70 frame scaffold" consists of scaffolding components in accordance with section 1. Scaffolding components in accordance with table 3, which refer to provisions for manufacturing, marking and mark of conformity set out in this decision, are no longer manufactured and are, therefore, only approved for continued use.

Table 3: Further scaffolding components for use in the "ALFIX 70 frame scaffold"

Designation	Annex A, page	Detailed view / components in accordance with annex A, page	Regulations for manufacturing, marking and certificate of conformity
Vertical frame 70; 2.0m, steel	4	6	according to Z-8.1-862 (No longer manufactured.)
Vertical frame 70; 1.0 and 0.66m, steel	5	4, 6	
Steel deck	8	---	
Aluminium deck with plywood 2.57m; 3.07m	12	14	
Aluminium deck with plywood 1.57m; 2.07m	13	14	
Aluminium access deck 3.07m with ladder	15	14, 17, 18	
Aluminium access deck 2.57m with ladder	16	14, 17, 18	
Aluminium deck with plywood 3.07m	19	21	
Aluminium deck with plywood 1.57m; 2.07m; 2.57m	20	21	
Aluminium access deck with ladder 3.07m	22	18, 21	
Aluminium access deck with ladder 2.57m	23	18, 21	

Table 3: (continued)

Designation	Annex A, page	Detailed view / components in accordance with annex A, page	Regulations for manufacturing, marking and certificate of conformity
Wooden deck	28	---	according to Z-8.1-862 (No longer manufactured.)
Base jack	35	---	
Handrail	37	---	
Double guardrail	39	---	
Double guardrail, aluminium	41	---	
Advanced guardrail post	43	---	
Advanced end guardrail	44	---	
Telescopic guardrail 2.00 – 3.07m	45	---	
Toeboard; End toeboard	46	---	
Double end guardrail	48	---	
Guardrail post, single	50	6	
Guardrail post	52	6	
End guardrail post AF	54	3	
End guardrail post	55	6	
Protective wall post	57	6	
Bracket 0.36m	59	---	
Bracket 0.73m	61	4, 6	
Protective roof extension	63	---	
Protection net	67	---	
Passage frame AF	69	6	
Passage frame	70	6	
Toeboard 4.14m	76	---	
Aluminium toeboard; Aluminium end toeboard	77	---	
Protective wall post, telescopic 0.36m – 1.73m	102	3	
Protective wall post, telescopic 0.73m – 1.09m	104	3	
Base jack with swivel base	108	---	according to Z-8.22-906
Aluminium frame platform with plywood 0.50m – 2.07m	110	112	
Aluminium frame platform with plywood 2.57m; 3.07m	111	112	
Aluminium frame platform with internal hatch 2.57m; 3.07m	113	18, 112, 115	
Aluminium frame platform with internal hatch 1.09m – 3.07m without ladder	114	112, 115	

3.1.2 Standard system configuration

The use of the scaffolding 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 configuration 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 scaffold system may be used with system widths b = 0.732 m and bay length ≤ 3.07 m for working scaffolds of load classes ≤ 3 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 roof edge protection scaffold with protective walls of class SWD 1 in accordance with DIN 4420-1:2004-03.

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 scaffolds 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. The characteristic values to be used for the proof of structural stability are specified in this decision.

Other anchorage patterns are possible and other nettings may be used as scaffold cladding. In a scaffold, any increased stresses / loads (e.g. from higher dead weights and wind loads or from increased live loads) must be verified up to the anchors and the supporting surface (ground). The impact of building hoists or other lifting equipment must also be taken into account if they are not operated independently of the scaffold.

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]

Only the transmission of normal forces at the connections of the diagonals is allowed.

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] To be obtained from the Deutsches Institut für Bautechnik.

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

3.2.2 Vertical frame

3.2.2.1 Corner plate in vertical frame

Proof of structural stability of the scaffold system may be furnished assuming the values of Figure 1 for the corner plate according to annex A, pages 3 and 6 in the vertical frame.

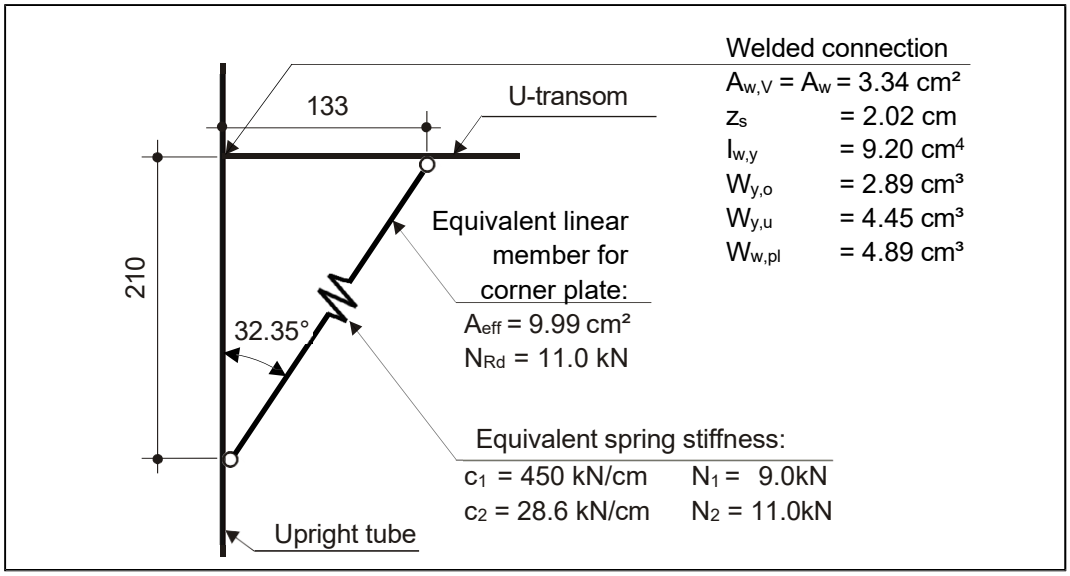


Figure 1: Characteristic values of the corner plate

3.2.2.2 Connection lower transom – 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 4. Please note that the connection is related to the outer side of the upright tubes.

Table 4: Characteristic values of the connection lower transom - upright tube

Component	Resistance capacity $M_{y,Rd}$ [kNcm]	Rotation ϕ_d [rad]
Vertical frame	±33.5	$\varphi_d = \frac{M_y}{4\,520 - 24{,}7 \cdot M_y}$ with M_y in $[kNcm]$

3.2.2.3 Configuration and proof of structural stability of the standard joints

3.2.2.3.1 General provisions

Unless otherwise specified below, the joints of the standards in the ALFIX 70 frame scaffold are 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 joints with one-sided, centrally fixed joint pins for working and service scaffolds, and for shoring scaffolds made of steel"[5].

The decision comprises four configurations of this detail. Table 5 summarizes these configurations and lists the most important characteristic values. If it is not possible to ensure which standard joint configuration shall be used, any proof of structural stability shall assume the least favourable variant.

[5] see DIBt Newsletter 4/2017

Table 5: Standard and tube connector configurations

Type	Standard		with tube connector		Material
	Annex A, page	Tube	Provisions for execution	Tube	$f_{y,k}$ (R_{eH})
1	1, 2, 129, 130	Ø 48.3x2.7	integrated	Ø 39.0x3.3	460 N/mm²
2	1, 2, 82, 83, 84, 88, 90, 129, 130		plugged in, pressed	Ø 38.0x3.6	320 N/mm²
3	69, 71, 72, 88	Ø 48.3x3.2			
4	4, 5, 70, 141			Ø 38.0x4.0	

3.2.2.3.2 Load-bearing model “lap joint”

In accordance with the "Calculation notes for standard joints with one-sided centrally fixed joint pins for working and service scaffolds, and for shoring scaffolds made of steel” [5] ”, the standard joint parameters as per Table 6 shall be taken into account for the structural analysis of type 1 standard joints with standard tubes Ø 48.3 x 2.7 mm made of steel grade S460MH with integrated tube connectors in the load-bearing model “lap joint”.

Table 6: Load-bearing capacities and load-deformation behaviour for type 1

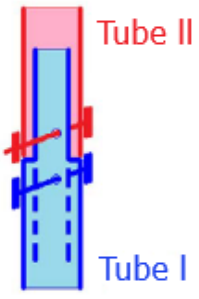
Forces and moments	Tube connector	Resistance capacity	Load-deformation behaviour
Bending moment	Type 1	$M_{Rd} = 111\ kNcm$*)	Stiffness behaviour: $\varphi_d = \frac{M}{13000 - 41 \cdot \lvert M \rvert}$ with M in [kNcm]
*) Separate proof of stability of the net section at the tube connector is not mandatory.			

3.2.2.3.3 Structural behaviour under tensile stress

If tensile forces must be transmitted via a standard joint, the tubes shall be connected by means of bolt connections whereby the looseness at the connecting members are to be taken into consideration. Connecting members are to be passed through the openings in the joint area intended for this use and secured against unintended lift-off (e.g. by means of a screw joint tightened by hand). Depending on the connecting member used and the standard joint variant, the loads in accordance with Table 7 can be transmitted.

Table 7: Tension stress resistance of the standard joints

Tensile stress resistance $N_{z,Rd}$ [kN] when using screws



			Tube II			
			Type 1	**Type 2**	**Type 3**	**Type 4**
Tube I	**Type 1**	**M10-8.8**	30.1	23.6	27.9	
		M12-8.8	40.6	28.3	33.5	
	Type 2		10.0			
	Type 3					
	Type 4					

For standard joints with standard tubes Ø 48.3 x 2.7 mm made of steel grade S460MH with integrated tube connector Ø39 x 3.3 mm according to annex A, pages 1 and 129, it shall additionally be shown that proof of structural stability (eq. 1) has been provided.

$$\frac{M_{Ed}}{M_{Rd} \cdot cos\left(\frac{\pi}{2} \cdot \frac{N_{Z,Ed}}{50{,}7\ kN}\right)} \leq 1 \qquad \text{(Eq. 1)}$$

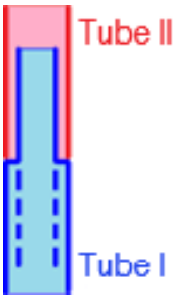
Where:

M_{Ed}	Bending stress
M_{Rd}	Bending capacity according to Table 6
$N_{Z,Ed}$	Tensile force load

3.2.2.3.4 Structural behaviour under compressive stress

Please refer to table 8 for the compressive stress resistance of the standard joints in accordance with the respective assembly variant.
Proof of interaction for the lap joint supporting structure model is not mandatory in case standard joints are simultaneously subject to compressive and bending stress.

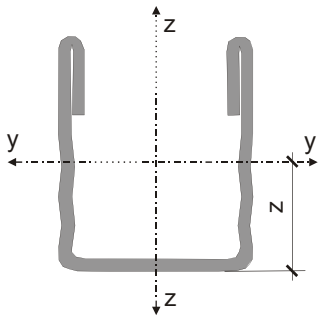
Table 8: Compressive stress resistance of the standards

Standard joint 	Compressive stress resistance $N_{D,Rd}$ [kN]		Tube II			
			Type 1	**Type 2**	**Type 3**	**Type 4**
	Tube I	**Type 1**	162	113	129	
		Type 2	74.3		70.1	
		Type 3	82.9		80.9	
		Type 4				

3.2.3 Cross-section properties of the U-profiles

3.2.3.1 U-profile 53 without holes

U-profile 53 without holes according to annex A, pages 3 and 6, e.g. the upper transom U48 x 52 x 2.5 of the vertical frame according to annex A, pages 1, 2, 4, 5, 129 and 130 shall be verified assuming the characteristic values in accordance with figure 2.

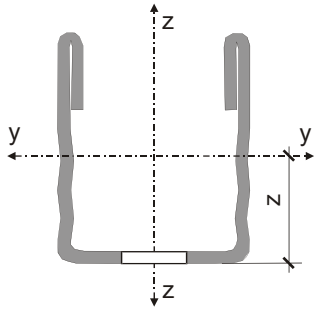


A	=	4.14 cm²
A_v	=	2.47 cm²
z_s	=	2.30 cm
I_y	=	13.6 cm⁴
$W_{y,pl}$	=	6.81 cm³
$W_{y,o}$	=	4.70 cm³
$W_{y,u}$	=	5.92 cm³

Figure 2: Characteristic values of U-profile 53 without holes according to annex A, pages 3 and 6

3.2.3.2 U-profile 53 with holes

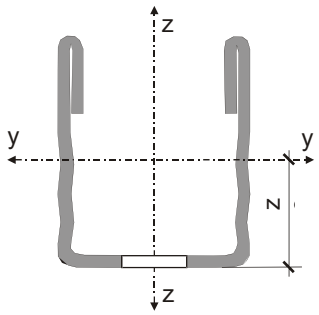
U-profile 53 with holes Ø 12 mm according to Annex A, pages 3 and 6, e.g. the upper transom U48 x 52 x 2.5 of the vertical frame according to Annex A, pages 1, 2, 4, 5, 129 and 130 shall be verified assuming the characteristic values in accordance with figure 3.



A	=	3.84 cm²
A_v	=	2.47 cm³
z_s	=	2.47 cm
I_y	=	12.1 cm⁴
$W_{y,pl}$	=	6.15 cm³
$W_{y,o}$	=	4.43 cm³
$W_{y,u}$	=	4.89 cm³

Figure 3: Characteristic values of U-profile with holes Ø 12 mm according to annex A, pages 3 and 6

U-profile 53 with holes Ø 8 mm according to Annex A, pages 3 and 6, e.g. the upper transom U48x52x2.5 of the vertical frame according to Annex A, pages 1, 2, 4, 5, 129 and 130, shall be verified assuming the characteristic values in accordance with figure 4.

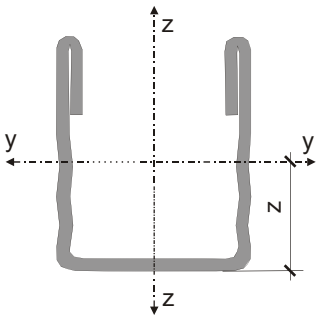


A	=	3.94 cm²
A_v	=	2.47 cm³
z_s	=	2.41 cm
I_y	=	12.60 cm⁴
$W_{y,pl}$	=	6.36 cm³
$W_{y,o}$	=	4.53 cm³
$W_{y,u}$	=	5.24 cm³

Figure 4: Characteristic values of U-profile 53 with holes Ø 8 mm according to annex A, pages 3 and 6

3.2.3.3 U-profile 60 without holes

U-profile 60 without holes according to annex A, pages 6, 71 and 141, e.g. the upper transom U49 x 60 x 3 of the different frames according to annex A, pages 69, 70, 71 and 141 shall be verified assuming the characteristic values in accordance with figure 5.

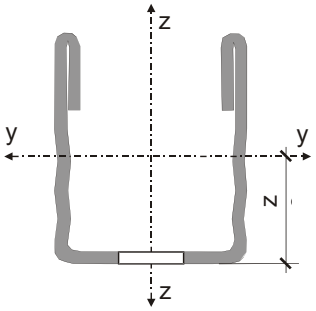


A	=	5.86 cm²
S_y	=	5.41 cm³
z_s	=	2.84 cm
I_y	=	24.30 cm⁴
$W_{y,pl}$	=	10.80 cm³
$W_{y,o}$	=	7.69 cm³
$W_{y,u}$	=	8.58 cm³

Figure 5: Characteristic values of U-profile 60 without holes according to annex A, pages 6, 71 and 141

3.2.3.4 U-profile 60 with holes

U-profile 53 with holes Ø 12 mm according to Annex A, pages 6, 71 and 141, e.g. the upper transom U49x60x3 of the vertical frame according to Annex A, pages 69, 70, 71 and 141, shall be verified assuming the characteristic values in accordance with figure 6.



A	=	5.20 cm²
S_y	=	4.41 cm³
z_s	=	3.18 cm
I_y	=	19.0 cm⁴
$W_{y,pl}$	=	8.73 cm³
$W_{y,o}$	=	6.72 cm³
$W_{y,u}$	=	5.97 cm³

Figure 6: Characteristic values of U-profile 60 with holes □ 20 x 40 mm according to annex A, pages 6, 71 and 141

3.2.4 Vertical diagonal braces

For the vertical diagonal braces according to Annex A, pages 29 to 31, proof shall be provided that the loads shall not exceed the load-bearing capacities given in table 9.

In the overall system, the vertical diagonal braces may be taken into account as an equivalent strut which is connected in an articulated manner between the node points formed by upright tubes and decks, with an effective equivalent cross-sectional area A_{eff} in accordance with table 9 and a corresponding equivalent stiffness $E \cdot A_{eff}$, as well as the connection eccentricities in accordance with figure 7.

Table 9: Characteristic values of the vertical diagonal braces

Component	Annex A, page	Bay length ℓ [m]	Stiffness $E_d \cdot A_{eff}$ [kN]	Resistance capacity N_{Rd} [kN]
Diagonal brace 2.07m	29	2.07	1102	7.65
Diagonal brace 2.57m	30	2.57	1154	6.51
Diagonal brace 3.07m	31	3.07	1212	5.37
when E_d = (21.000 / 1.1) kN/cm²				

with A_D Cross-sectional area of the diagonal tube
A_{eff} Effective equivalent cross-sectional area
N_{Rd} Load-bearing capacity of the diagonal braces

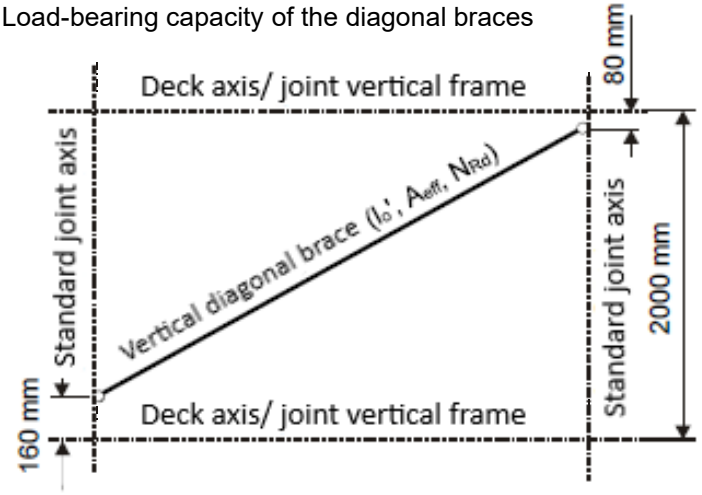


Figure 7: Connection eccentricities

3.2.5 Longitudinal ledger

For the proof of structural stability of the overall system, the longitudinal ledgers (horizontal struts) according to Annex A, page 32 in connection with the equivalent stiffness values and load-bearing capacities given in table 10 shall be taken into consideration.

Table 10: Characteristic values of longitudinal ledgers

Scaffold bay length [m]	Load	Stiffness $E_d \cdot A_{eff}$ [kN]	Resistance capacity N_{Rd} [kN]
ℓ = 3.07	Compression	2620	6.94
	Tension	5950	18.2
ℓ = 2.57	Compression	3180	9.54
	Tension	5090	18.2
ℓ = 2.07	Compression	3360	13.3
	Tension	4190	18.2
ℓ = 1.57	Compression	3010	18.2
	Tension	3260	18.2
when E_d = (21.000 / 1.1) kN/cm²			

3.2.6 Diagonal cross brace

For the proof of structural stability of the overall system, the diagonal cross braces according to Annex A, page 103 in connection with the equivalent stiffness values and load-bearing capacities given in table 11 shall be taken into consideration.

Table 11: Characteristic values of the diagonal cross brace

Scaffold width [m]	System length [m]	Load	Stiffness $E_d \cdot A_{eff}$ [kN]	Resistance capacity N_{Rd} [kN]
0.732	1.95	Compression	2730	10.2
1.088		Tension	2890	10.2
0.732	1.77	Compression	2570	10.2
1.088		Tension	2670	10.2
when E_d = (21.000 / 1.1) kN/cm²				

3.2.7 Vertical load-bearing capacity of decks

The decks of the "ALFIX 70 frame scaffold" are verified in accordance with table 12 for live loads of the scaffold load classes / service classes according to DIN EN 12811-1:2004-03, table 3 and for use in protection scaffolds 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).

Table 12: Assignment of decks to scaffold load classes (service classes)

Designation	Annex A, page	Bay length ℓ [m]	Use in load class (service class)
Steel deck AF	7, 9	≤ 2.07	≤ 6
		2.57	≤ 5
		3.07	≤ 4
		4.14	≤ 3
Steel deck	8	≤ 3.07	≤ 4

Table 12: (continued)

Designation	Annex A, page	Bay length ℓ [m]	Use in load class (service class)
Intermediate deck AF 0.19m	10	≤ 2.07	≤ 6
		2.57	≤ 5
		3.07	≤ 4
		4.14	≤ 3
Intermediate deck AF 0.16m		≤ 2.07	≤ 6
		2.57	≤ 5
		3.07	≤ 4
Intermediate deck	11	≤ 2.07	≤ 6
		2.57	≤ 5
		3.07	≤ 4
Aluminium deck with plywood	12, 13, 19, 20	≤ 3.07	≤ 3
Aluminium access deck with ladder	15, 16, 22, 23	≤ 3.07	≤ 3
Aluminium corner deck with toeboard, rigid	25	---	≤ 3
Solid wood deck 45	26	≤ 1.57	≤ 5
		2.07	≤ 4
		2.57	≤ 3
Solid wood deck 48	27	≤ 1.57	≤ 6
		2.07	≤ 5
		2.57	≤ 4
		3.07	≤ 3
Wooden deck	28	1.57	≤ 6
		2.07	≤ 5
		2.57	≤ 4
		3.07	≤ 3
Gap cover	73	≤ 2.07	≤ 6
		2.57	≤ 5
		3.07	≤ 4
		4.14	≤ 3
Steel plank 0.30m	75	≤ 1.57	≤ 4
		2.07	≤ 3
		2.57	≤ 3
EIFS deck AF 190	106	≤ 4.14	≤ 3
Aluminium frame platform with plywood	110, 111	≤ 3.07	≤ 3
Aluminium frame platform with internal hatch	113, 114	≤ 3.07	≤ 3
Aluminium deck 0.60m, lightweight	116	≤ 2.57	≤ 4
		3.07	≤ 3
Aluminium trapdoor deck with aluminium chequer plate	117, 118, 120	≤ 3.07	≤ 3

3.2.8 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. This elastic support can be taken into account for scaffolds of load classes / service classes ≤ 3 depending on the points of contraflexure by assuming a trilinear travel spring in accordance with figure 9, having the design values given in tables 13.1 to 13.3.

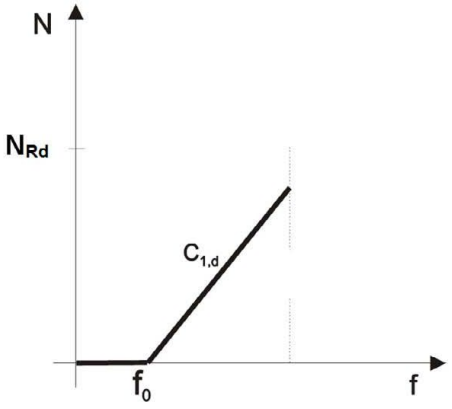


Figure 8: Bilinear spring characteristics

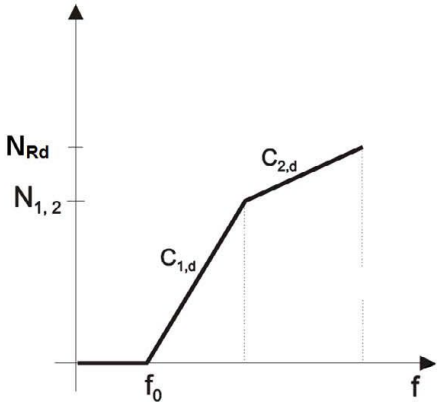


Figure 9: Trilinear spring characteristics

Table 13.1: Design values for the horizontal travel spring ($N_{1,2}$ = 1.82 kN)

Deck	Annex A, page	Bay length ℓ [m]	Number of decks per scaffold bay	Clearance $f_{o\perp}$ [cm]	Stiffness $c_{\perp,d}$ [kN/cm]		Spring force $N_{\perp,Rd}$ [kN]
					$0 < N_\perp \leq 1.82\ kN$	$1.82\ kN < N_\perp \leq N_{\perp,Rd}$	
Steel deck AF	7	3.07	2	4.7	0.62	0.20	2.73
Steel deck	8	3.07	2	4.7	0.62	0.20	
		≤ 2.57		3.8	0.69	0.27	
Aluminium deck with plywood	12, 13, 19, 20	3.07	1	2.0	0.38	0.26	1.86
		≤ 2.57		2.2	0.65	0.34	
Wooden deck	28	≤ 2.57	2	3.3	0.51	0.31	2.35
Aluminium frame platform with plywood	110, 111	3.07	1	2.0	0.38	0.26	1.86
		≤ 2.57		2.2	0.65	0.34	

Table 13.2: Design values of the horizontal travel springs ($N_{1,2}$ = 2.00 kN)

Deck	Annex A, page	Bay length ℓ [m]	Number of decks per scaffold bay	Clearance $f_{o\perp}$ [cm]	Stiffness $c_{\perp,d}$ [kN/cm]		Spring force $N_{\perp,Rd}$ [kN]
					$0 < N_\perp \leq 2.00\ kN$	$2.0\ kN < N_\perp \leq N_{\perp,Rd}$	
Solid wood deck 48	26	≤ 3.07	2	3.9	0.41	0.22	2.35
Solid wood deck 45	27	≤ 2.57					

Tabelle 13.3: Design values of the horizontal travel springs ($N_{1,2}$ = 1.50 kN)

Deck	Annex A, page	Bay length ℓ [m]	Number of decks per scaffold bay	Clearance $f_{o\perp}$ [cm]	Stiffness $c_{\perp,d}$ [kN/cm]		Spring force $N_{\perp,Rd}$ [kN]
					$0 < N_\perp \leq 1{,}50\ kN$	$1.50\ kN < N_\perp \leq N_{\perp,Rd}$	
Aluminium deck 0.60m, lightweight	116	≤ 3.07	1	4.7	0.69	0.20	2.08

3.2.9 Elastic coupling of the vertical levels

The inner and outer vertical level of a scaffold 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). This elastic coupling can be taken into account for scaffolds of load classes / service classes ≤ 3 depending on the spring characteristics by assuming a bi-, tri- or multilinear coupling spring in accordance with figure 8 or figure 9, having the design values given in tables 14.1 to 14.3.

Table 14.1: Design values of the horizontal coupler springs per scaffold bay

Deck	Annex A, page	Bay length ℓ [m]	Number of decks per scaffold bay	Clearance $f_{o/l}$ [cm]	Stiffness $c_{//,d}$ [kN/cm]			Spring force $F_{//,Rd}$ [kN]
					$0 < F_{//} \leq 1.14\,kN$	$1.14 < F_{//} \leq 2.27\,kN$	$2.27 < F_{//} \leq F_{//,Rd}$	
Steel deck AF	7	≤ 3.07	2	1.0	2.22	2.37	1.25	4.55
Steel deck	8	≤ 3.07	2	1.0	2.22	2.37	1.25	4.55
Aluminium deck with plywood	12, 13, 19, 20	≤ 3.07	1	0.3	2.20	2.22	0.94	3.94
Wooden deck	28	3.07*)	2	1.0	1.99	1.95	1.22	4.55
		≤ 2.57		1.0	1.67	1.63	1.02	3.83
Aluminium frame platform with plywood	110, 111	≤ 3.07	1	0.3	2.20	2.22	0.94	3.94
*) Only in case of anchorage pattern ≤ 4 m (Figure 1, type b in DIN EN 12810-1:2004-03)								

Table 14.2: Design values of the horizontal coupler springs per scaffold bay

Deck	Annex A, page	Bay length ℓ [m]	Number of decks per scaffold bay	Clearance $f_{o/l}$ [cm]	Stiffness $c_{//,d}$ [kN/cm]		Spring force $F_{//,Rd}$ [kN]
					$0 < F_{//} \leq 3.0\,kN$	$3.0 < N_{//} \leq F_{//,Rd}$	
Solid wood deck 48	26	≤ 3.07	2	0.90	2.31	1.38	4.58
Solid wood deck 45	27	≤ 2.57			1.93	1.16	3.83

Table 14.3: Design values of the horizontal coupler springs per scaffold bay

Deck	Annex A, page	Bay length ℓ [m]	Number of decks per scaffold bay	Clearance $f_{o/l}$ [cm]	Stiffness $c_{//,d}$ [kN/cm]	Spring force $F_{//,Rd}$ [kN]
					$0 < N_{//} \leq F_{//,Rd}$	
Aluminium deck 0.60m, lightweight	116	≤ 3.07	1	0.35	3.41	3.82

3.2.10 Summary of the horizontal travel and coupling springs for “all deck types"

The stiffness relationships given in tables 15.1 and 15.2 for “all deck types” represent the minimum value for all decks listed in tables 13.1 to 14.3. These values provide a secure basis for the structural analysis. The values given in tables 15.1 and 15.2 apply to all load (service) classes ≤ 3.

Table 15.1: Design values of the horizontal travel springs

Deck	Bay length ℓ [m]	Clearance $f_{o\perp}$ [cm]	Stiffness [kN/cm]		$N_{\perp 1,2}$ [kN]	$N_{\perp,Rd}$ [kN]
			$c_{\perp 1,d}$	$c_{\perp 2,d}$		
all decks	≤ 3.07	4.7	0.62	0.41	1.00	1.86

Table 15.2: Design values of the horizontal coupler springs per scaffold bay

Deck	Bay length ℓ [m]	Clearance $f_{o\perp}$ [cm]	Stiffness [kN/cm]			$N_{\perp 1,2}$ [kN]	$N_{\perp 2,3}$ [kN]	$N_{\perp,Rd}$ [kN]
			$c_{II1,d}$	$c_{II2,d}$	$c_{II3,d}$			
all decks	≤ 3.07	1.00	1.67	1.63	1.00	1.14	2.27	3.83

3.2.11 Material parameters

For components made of S235JR/S235JRH steel with an increased nominal yield strength ($R_{eH} \geq 280$ N/mm² or $R_{eH} \geq 320$ N/mm²) - any such components are marked accordingly in the drawings of annex A - the design value of the nominal yield strength $f_{y,d} = 254$ N/mm² or $f_{y,d} = 291$ N/mm² may be used for the calculation. All other parameters are to be applied according to the basic material.

3.2.12 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 (see also annex B of DIN EN 12811-1:2004-03) shall be assumed as follows:

- Scaffolding spindles (base jacks) according to annex A, pages 35 and 108:

$A = A_S = 3.52\ cm^2$
$I = 4.00\ cm^4$
$W_{el} = 2.68\ cm^3$
$W_{pl} = 1.25 \bullet 2.68 = 3.35\ cm^3$

- Scaffolding spindles (base jacks) according to annex A, pages 121 and 122:

$A = A_S = 3.85\ cm^2$
$I = 4.27\ cm^4$
$W_{el} = 2.83\ cm^3$
$W_{pl} = 1.25 \bullet 2.83 = 3.54\ cm^3$

The cosine interaction in accordance with DIN 4420- 1:1990-12, table 7 may be used to provide proof of stability of the load-bearing capacity of the scaffolding spindles / base jacks.

3.2.13 Couplers

For the verification of the halfcouplers attached to the various components, the load-bearing capacities and stiffnesses shall be applied in accordance with annex A and the data provided in DIN EN 74-2:2009-01.
Notwithstanding DIN EN 74-2:2009-01, a load-bearing capacity of the breaking load of $F_{f,Rd} = 27.3\ kN$ may be assumed for the proof of structural stability.

3.3 Provisions for execution

3.3.1 General provisions

The assembly, alteration and dismantling of the scaffold must be carried out in compliance with the Instructions for Assembly and Use[6] and is not the 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.

3.3.3 Structural design

3.3.3.1 General provisions

Scaffolds in accordance with this decision shall be erected using the components listed in section 1. Only use components that have been marked in accordance with the provisions of this decision.

The wedges of the connector heads and the wedges of the guardrail wedge housings are to be fixed by driving the wedge from top to bottom to the end-stop with a 0.5 kg hammer (or heavier).

3.3.3.2 Base area

The lower vertical frames (scaffold frames) must be placed on scaffolding spindles / base jacks and aligned in such a way that the working areas are horizontal. It must be ensured that the base plates of the base jacks are horizontal and supported over the entire area to absorb and transmit the forces resulting from the scaffolding in the supporting surface.

3.3.3.3 Height equalisation

The vertical frames 1.0 m and 0.666 m according to annex A, pages 2, 5 and 130 may be used as adjustment frames for height equalisation. Do not work on working areas directly below these frames.

3.3.3.4 Scaffolding decks

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

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. Toeboards are mandatory in add-on (external) stairway accesses.

The TRBS-Guardrails according to annex A, pages 143 to 145 are connected to the standards by driving the wedges to their end-stop with a 0.5 kg hammer (or heavier).

3.3.3.6 Bracing

Scaffolds must be braced.

For facade scaffolds, the outer vertical level is to be braced parallel to the facade by means of vertical diagonal braces according to section 3.2.4 fitted spaced along the scaffolding or one above another. The required number of diagonal braces is determined by means of the structural analysis. However, at least 1 diagonal shall be fitted per 5 scaffolding bays. Longitudinal ledgers according to section 3.2.5 shall be fitted in at least in the bays to which a diagonal brace is fitted at the height of the base jacks.

Decks or horizontal struts are to be fitted continuously on all scaffold (working) levels to provide horizontal bracing. The characteristic values of the deck levels in accordance with sections 3.2.8 to 3.2.10 and of the horizontal struts in accordance with section 3.2.5 may be assumed for the design calculations.

[6] 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.

The EIFS deck AF 190 in accordance with Annex A, page 106 must not be used as a bracing component. Only use these decks in connection with inner brackets.

The steel decks AF 0.30 m, 0.34 m according to Annex A, page 9 is a compensation deck (to compensate for different deck widths) and must not be used as a bracing component.

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 decision. The user must ensure that the respective forces can be securely absorbed and transmitted 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, bolts/screws must be easy to reposition.

When connecting couplers with wedge-lock 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 Protective wall post

Protective wall posts in accordance with Annex A, pages 56, 57, 102 and 104 shall be secured by means of a gravity pin in all standards.

3.3.3.10 Lift-off preventer against uplifting forces

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

3.3.4 Attestation of conformity

The building contractor shall submit a declaration of conformity in accordance with §§ 16 a (5) in conjunction with Section 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

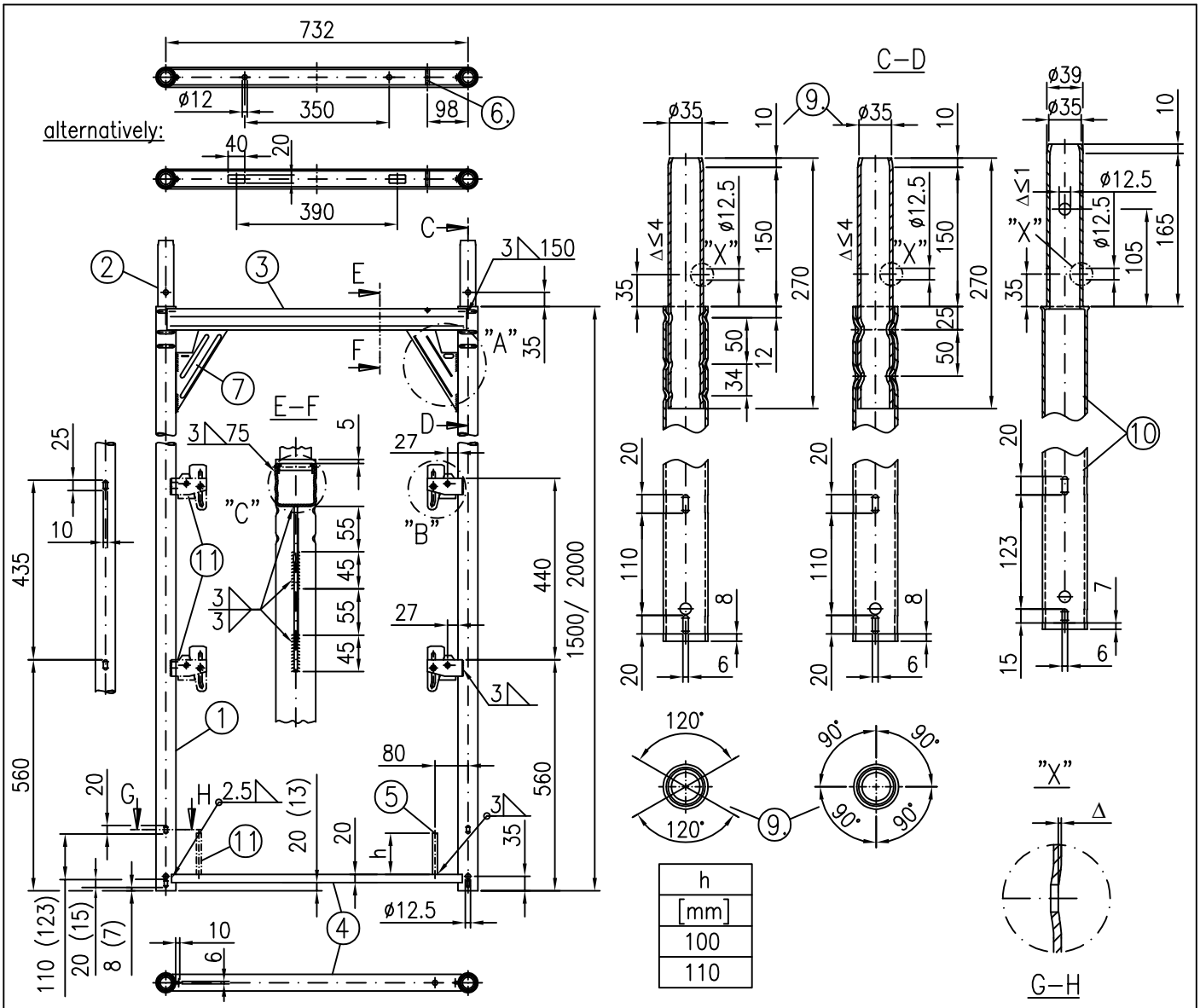
4.1 General provisions

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

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



h
[mm]
100
110

① Circular hollow section ø48.3x2.7 DIN EN 10219–S235JRH R_{eH}≥320N/mm²
alternatively: DIN EN 10219–S460MH
② Circular hollow section ø38x3.6 DIN EN 10219–S235JRH R_{eH}≥320N/mm²
③ U–profile 48x52x2.5 made of steel metal 169x2.5 DIN EN 10025–S235JR
④ Rectangular hollow section 40x20x2 DIN EN 10219–S235JRH R_{eH}≥320N/mm²
⑤ Round ø12xh DIN EN 10025–S235JR
⑥ Round ø8 DIN EN 10277–2–S235JRC+C
⑦ Marking
⑧ 4 recesses 20(15)x6; t=1
⑨ Linear pressed connection; alternatively: 4 point–joint pressed connections
⑩ Circular hollow section ø48.3x2.7 without ② DIN EN 10219–S460MH
⑪ alternatively: every 2.0m with 4 guardrail wedge housings and 2 toeboard pins galvanised

( ) Dimensions as for design

	Dimension [m]	Weight [kg]
⑩	1.50x0.73	16.5
	2.00x0.73	18.6
⑪	2.00x0.73	19.6

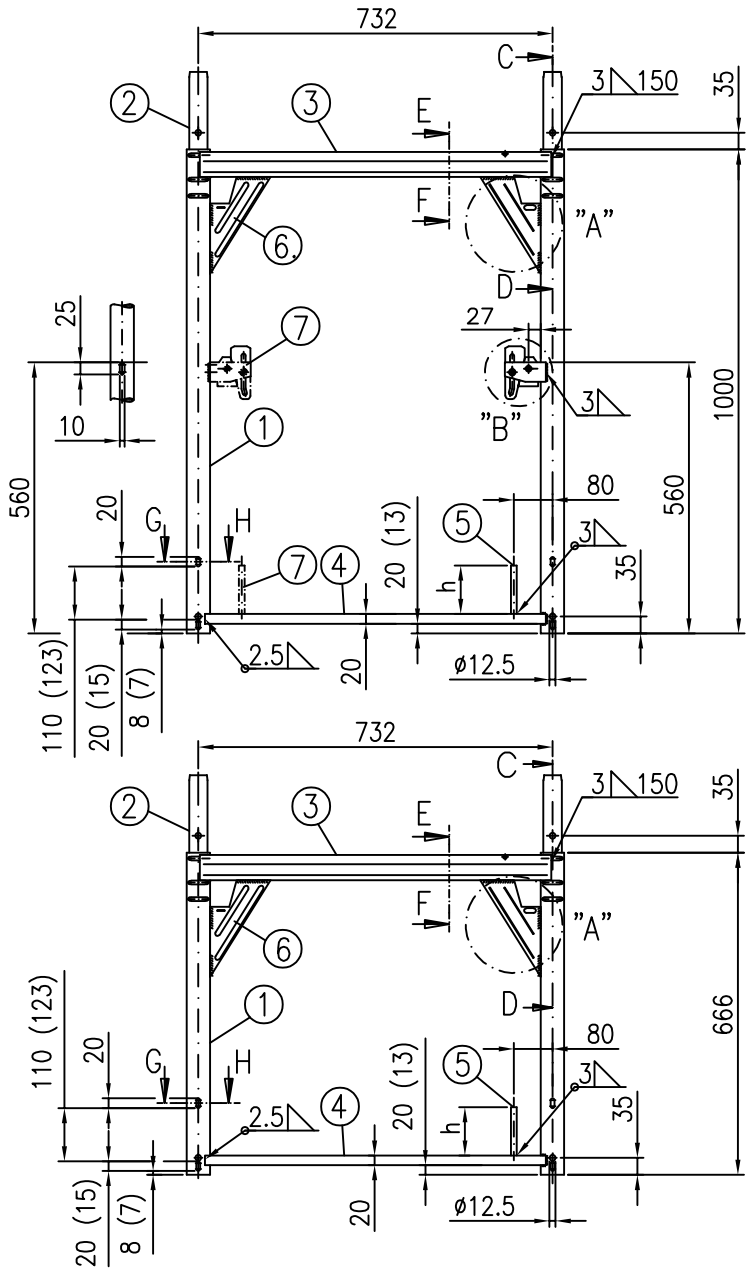
For details see annex A, page 3

Frame scaffold ALFIX 70

Vertical frame 18/70 1.5m and 2.0m, steel

A709–A101 06.2020

Annex A,
page 1



h
[mm]
100
110

①	Circular hollow section ø48.3x2.7	DIN EN 10219–S235JRH R_{eH}≥320N/mm²
	alternatively:	DIN EN 10219–S460MH
②	Circular hollow section ø38x3.6	DIN EN 10219–S235JRH R_{eH}≥320N/mm²
③	U–profile 48x52x2.5 made of steel metal 169x2.5	DIN EN 10025–S235JR
④	Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH R_{eH}≥320N/mm²
⑤	Round ø12xh	DIN EN 10025–S235JR
⑥	Marking	
⑦	alternatively: with 2 guardrail wedge housings and 2 toeboard pins	

( ) see Annex A, page 1

galvanised — Sectional views see annex A, page 1; for details see annex A, page 3

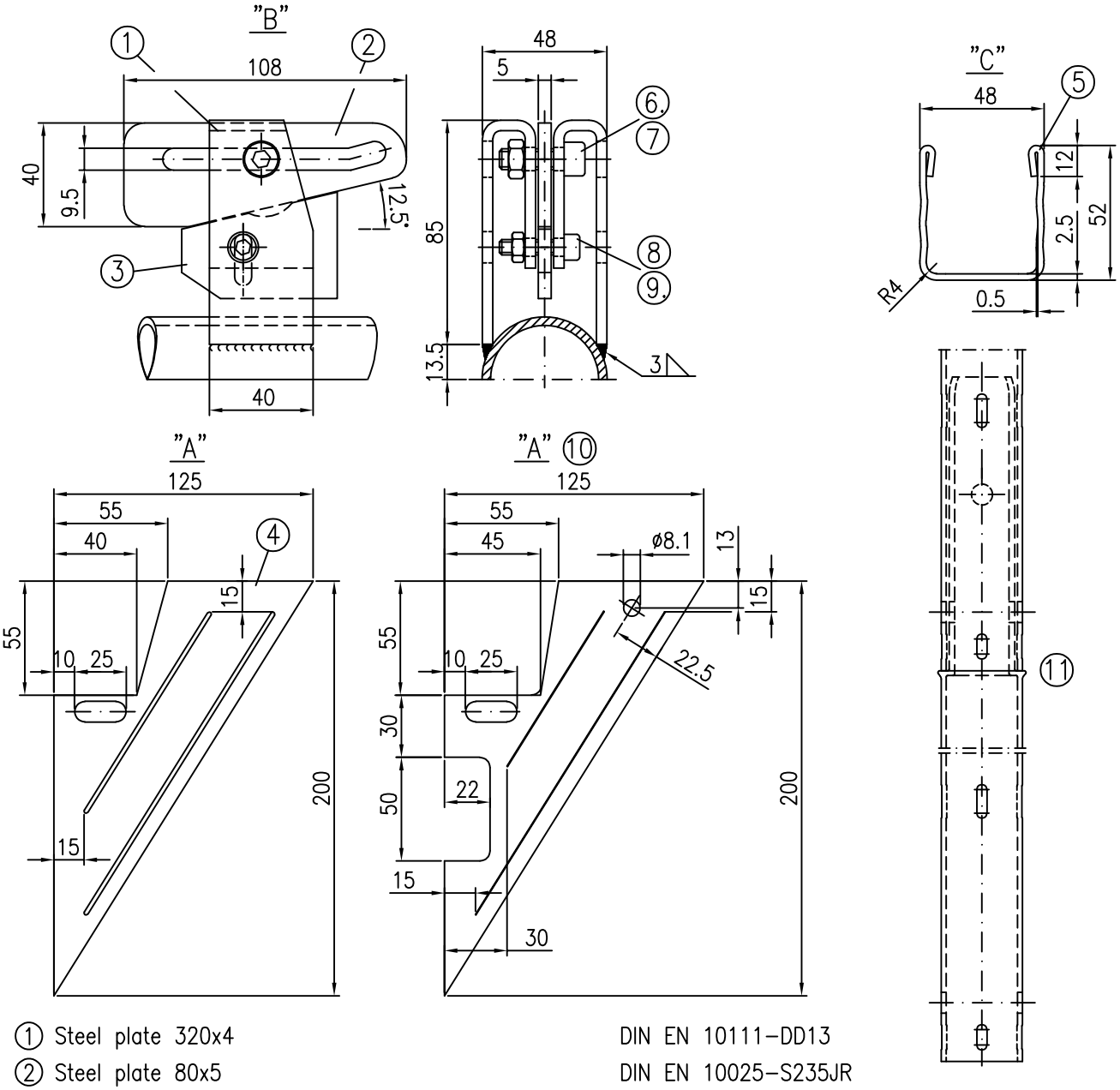
Dimension [m]	Weight [kg]
0.67x0.73	10.4
1.00x0.73	12.9

Frame scaffold ALFIX 70

Vertical frame 18/70 1.0m and 0.67m, steel

Annex A, page 2

A709–A102 06.2020



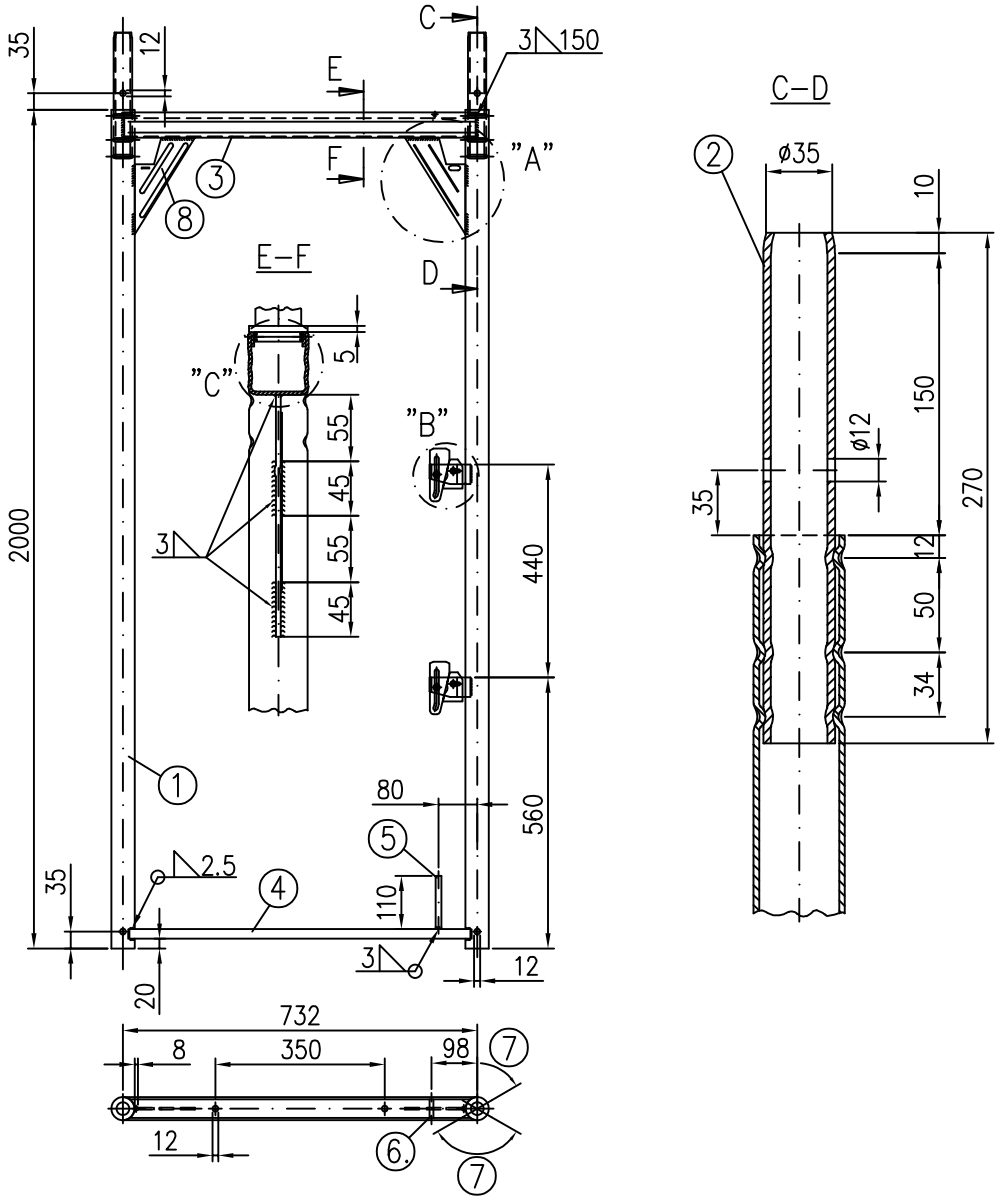
① Steel plate 320x4	DIN EN 10111–DD13
② Steel plate 80x5	DIN EN 10025–S235JR
③ Steel plate 70x5	DIN EN 10025–S235JRH
④ Gusset plate	DIN EN 10025–S235JR
⑤ U–profile 48x52x2.5 made of steel metal 169x2.5	DIN EN 10025–S235JR
⑥, Cylinder head screw with hexagon socket	DIN EN ISO 4762–M8x25–8.8–galvanised
⑦ Hexagon nut, self–locking	DIN EN ISO 10511–M8–8–galvanised
⑧ Cylinder head screw with hexagon socket	DIN EN ISO 4762–M6x25–8.8–galvanised
⑨, Hexagon nut, self–locking	DIN EN ISO 10511–M6–8–galvanised
⑩ alternatively: Gusset plate	DIN EN 10025–S235JR
⑪ Detailed view tube connector see annex A, page 1	

Frame scaffold ALFIX 70

Detailed view of vertical frame 18/70 2.0m, steel

A705–A003 10.2020

Annex A,
page 3



① Tube ø48.3x3.2 $R_{eH} \geq 320 N/mm^2$
② Tube ø38x4 $R_{eH} \geq 320 N/mm^2$
③ U–profile 48x52x2.5
④ Tube 45x20x2
⑤ Round ø12x110
⑥ Round ø8x38
⑦ Pressed connection 120°
⑧ Marking

S235JRG2; galvanised

For details see annex A, page 6

Component no longer manufactured
–only approved for continued use–

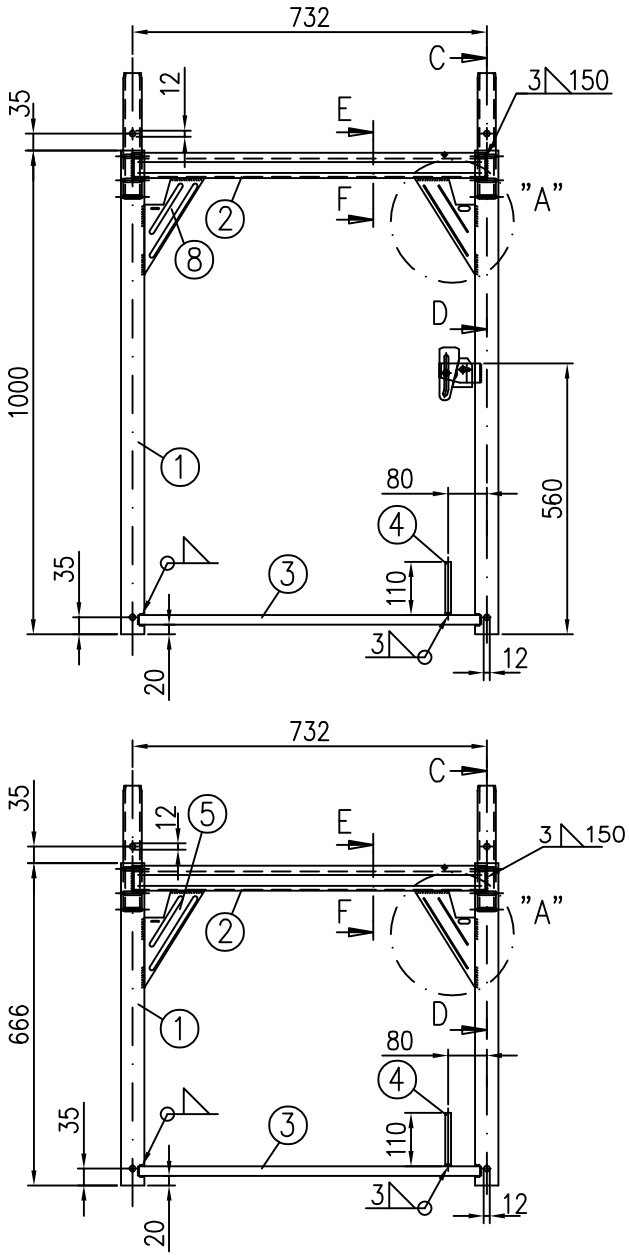
Dimension [m]	Weight [kg]
2.00x0.73	20.0

Frame scaffold ALFIX 70

Vertical frame 70 2.0m, steel

A705–A004 09.2020

Annex A,
page 4



① Tube ø48.3x3.2 $R_{eH} \geq 320 N/mm^2$
② U-profile 48x52x2.5 $R_{eH} \geq 320 N/mm^2$
③ Tube 45x20x2
④ Round ø12x110
⑤ Marking

Component no longer manufactured
-only approved for continued use-

Dimension [m]	Weight [kg]
0.67x0.73	10.0
1.00x0.73	12.0

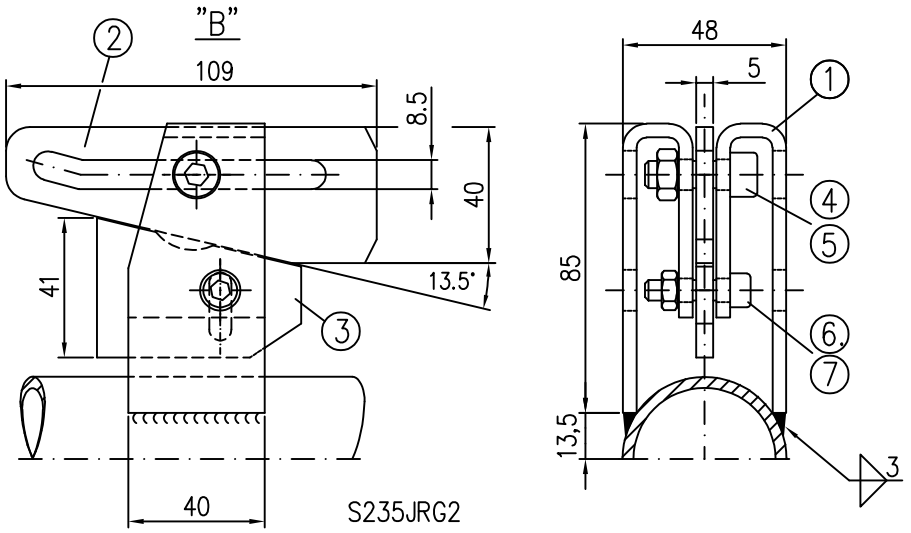
S235JRG2; galvanised Sectional views see annex A, page 4; for details see annex A, page 6

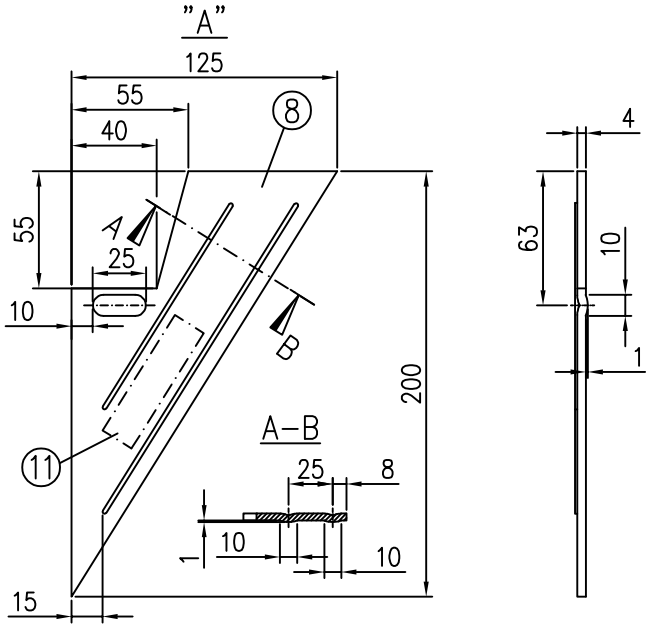
Frame scaffold ALFIX 70

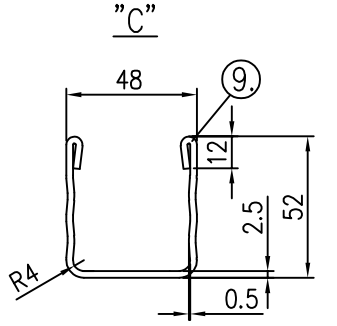
Vertical frame 70 1.0m and 0,66m, steel

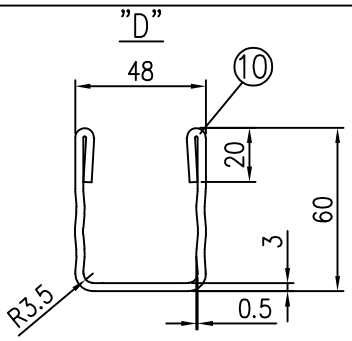
A705-A005 09.2020

Annex A,
page 5









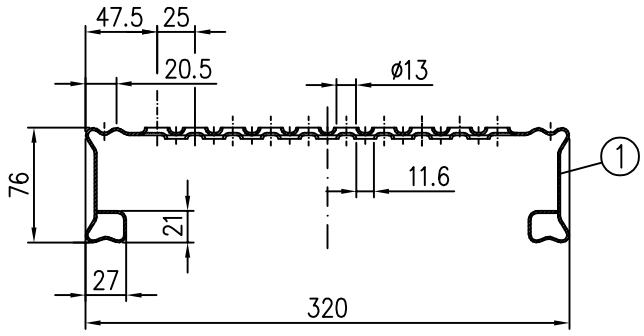
① Flat 40x4x150		
② Flat 40x5x109	DD13 DIN EN 10051; steel DIN EN 10111	
③ Flat 60x5x41		
④ Screw M8x25–8.8	DIN 912	
⑤ Nut M8	DIN 982	
⑥ Screw M6x25–8.8	DIN 912	
⑦ Nut M6	DIN 982	
⑧ Steel metal 125x200x4	S235JR	Component no longer manufactured –only approved for continued use–
⑨ U–profile 48x52x2.5 made of steel metal 169x2.5	S235JR	
⑩ U–profile 48x60x3 made of steel metal 196x3	S235JR see Annex A, pages 69 and 70	
⑪ Marking		

Frame scaffold ALFIX 70

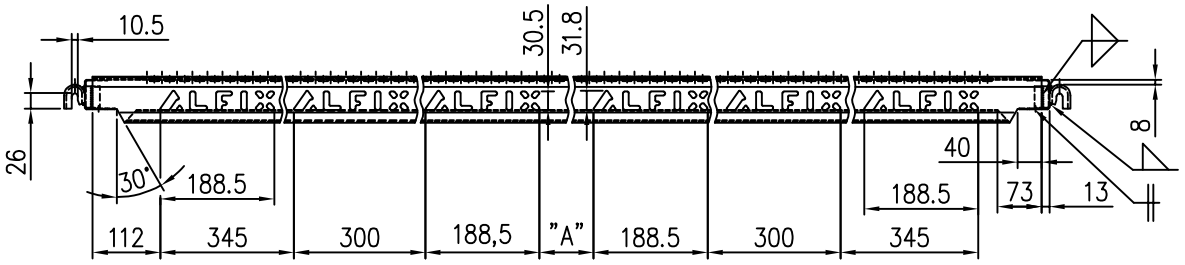
Detailed view of vertical frame 70, steel

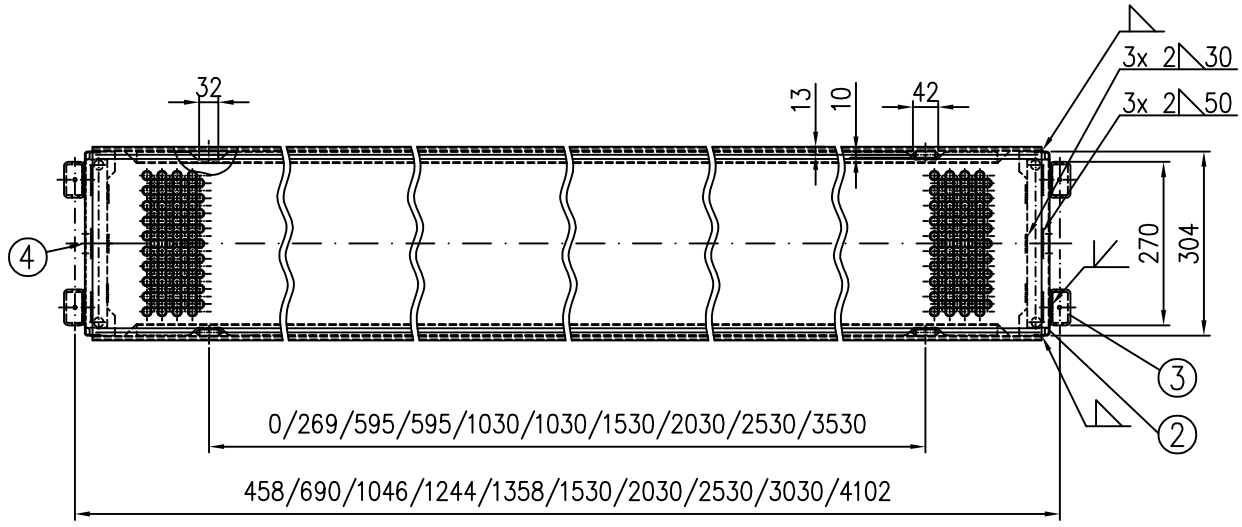
A705–A006 10.2020

Annex A,
page 6



Bay length [mm]	Number of logos [left/right]	Dimension "A" [mm]	Load class	Weight [kg]
500	1/–	–	6	4.1
732	1/1	36	6	5.6
1088	1/1	392	6	8.1
1286	1/1	590	6	9.5
1400	1/1	704	6	10.2
1572	1/1	876	6	11.4
2072	2/2	686	6	13.7
2572	2/2	1186	5	17.1
3072	3/3	1086	4	20.5
4144	3/3	2203	3	32.1





① Steel plate 1.5mm DIN EN 10111–DD11 (DD12) $R_{eH} \geq 280 N/mm^2$ $R_m \geq 360 N/mm^2$
alternatively: DIN EN 10025–2 S235JR $R_{eH} \geq 280 N/mm^2$ $R_m \geq 360 N/mm^2$
② Steel plate 1.5mm DIN EN 10111–DD11 $R_{eH} \geq 240 N/mm^2$ $R_m \geq 360 N/mm^2$
③ Steel plate 4mm DIN EN 10111–DD13 $R_{eH} \geq 240 N/mm^2$ $R_m \geq 360 N/mm^2$
④ Marking

galvanised; all welding seams a=2mm

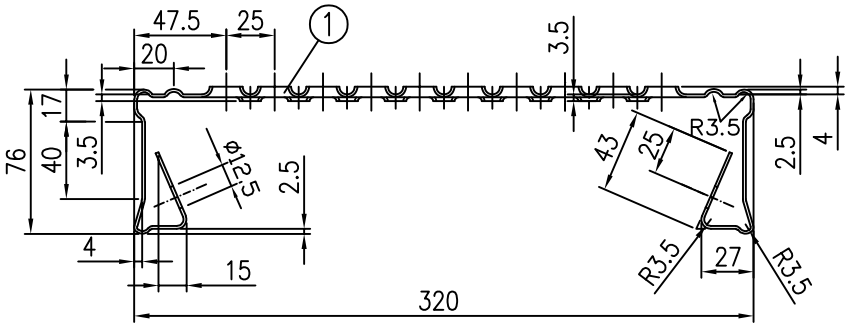
Frame scaffold ALFIX 70

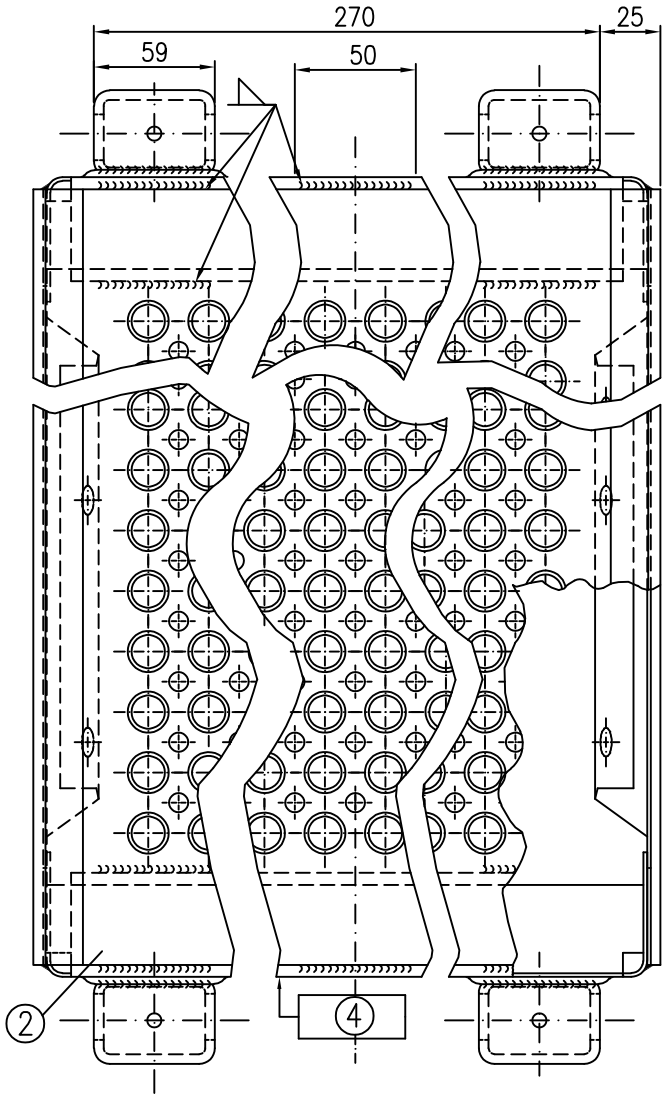
Steel deck AF 0.32m

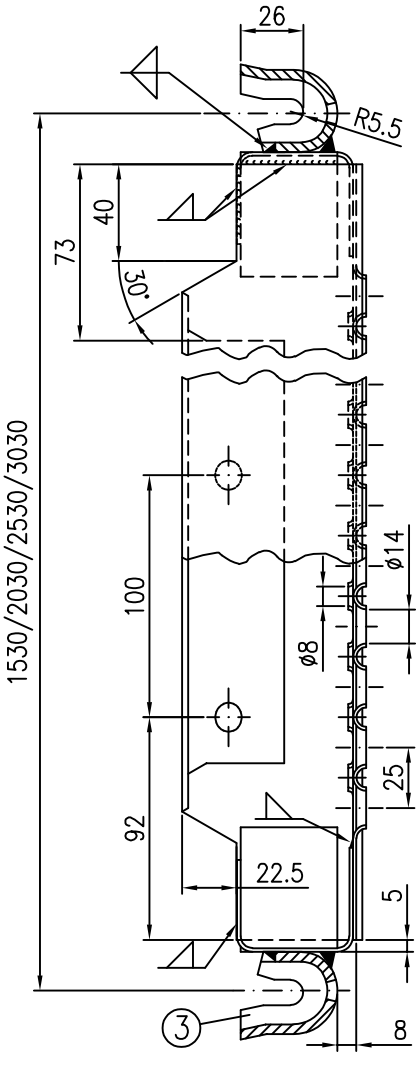
A709–A107 06.2020

Annex A,
page 7

Bay length [mm]	Load class	Weight [kg]
1572	6	12.0
2072	6	15.0
2572	5	19.5
3072	4	23.0







①	Steel plate 590x1.5	DIN EN 10111–DD11	$R_{eH} \geq 280 N/mm^2$
②	Steel plate 120x2; alternatively steel plate 120x1.5	DIN EN 10111–DD11	$R_{eH} \geq 240 N/mm^2$
③	Steel plate 70x4	DIN EN 10111–DD13	$R_{eH} \geq 240 N/mm^2$
④	Marking		

galvanised; all welding seams a=3mm

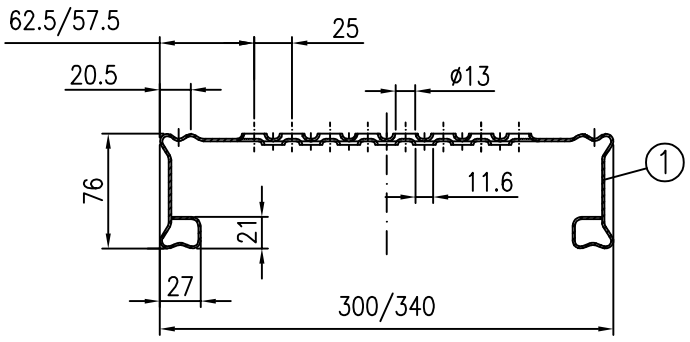
Component no longer manufactured
–only approved for continued use–

Frame scaffold ALFIX 70

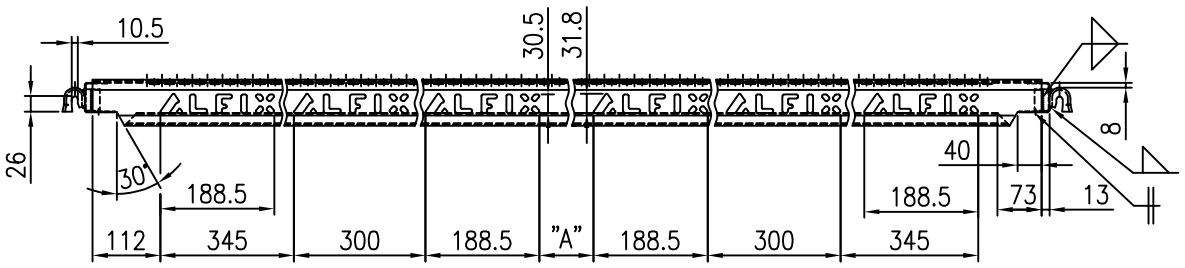
Steel deck

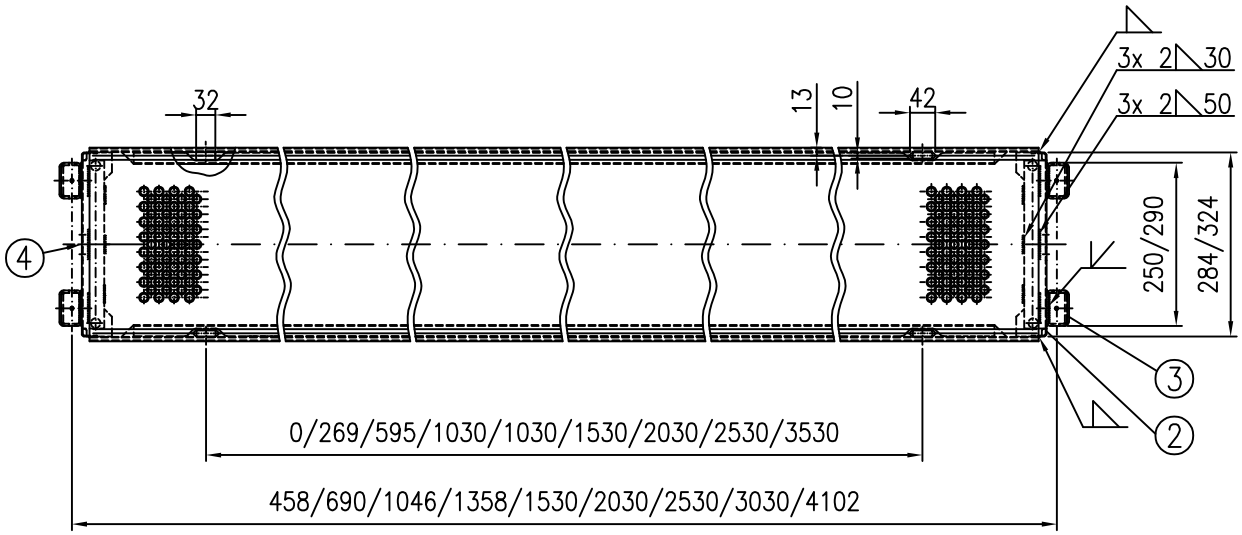
A705–A007 09.2020

Annex A,
page 8



Bay length [mm]	Number of logos [left/right]	Dimension "A" [mm]	Load class
500	1/–	–	6
732	1/1	36	6
1088	1/1	392	6
1400	1/1	704	6
1572	1/1	876	6
2072	2/2	686	6
2572	2/2	1186	5
3072	3/3	1086	4
4144	3/3	2203	3





①	Steel plate 1.5mm	DIN EN 10111–DD11 (DD12)	$R_{eH} \geq 280 N/mm^2$	$R_m \geq 360 N/mm^2$
	alternatively:	DIN EN 10025–2 S235JR	$R_{eH} \geq 280 N/mm^2$	$R_m \geq 360 N/mm^2$
②	Steel plate 1.5mm	DIN EN 10111–DD11	$R_{eH} \geq 240 N/mm^2$	$R_m \geq 360 N/mm^2$
③	Steel plate 4mm	DIN EN 10111–DD13	$R_{eH} \geq 240 N/mm^2$	$R_m \geq 360 N/mm^2$
④	Marking			

galvanised; all welding seams a=2mm

Frame scaffold ALFIX 70

Steel deck AF 0.30m; 0.34m

A709–A167 06.2020

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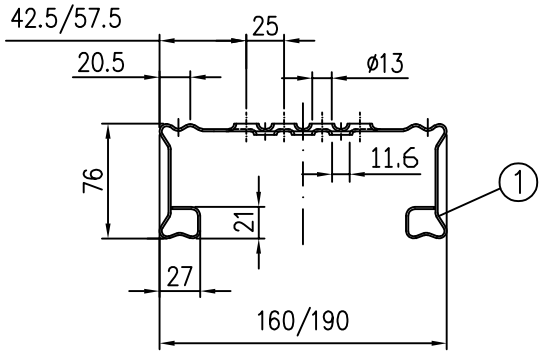
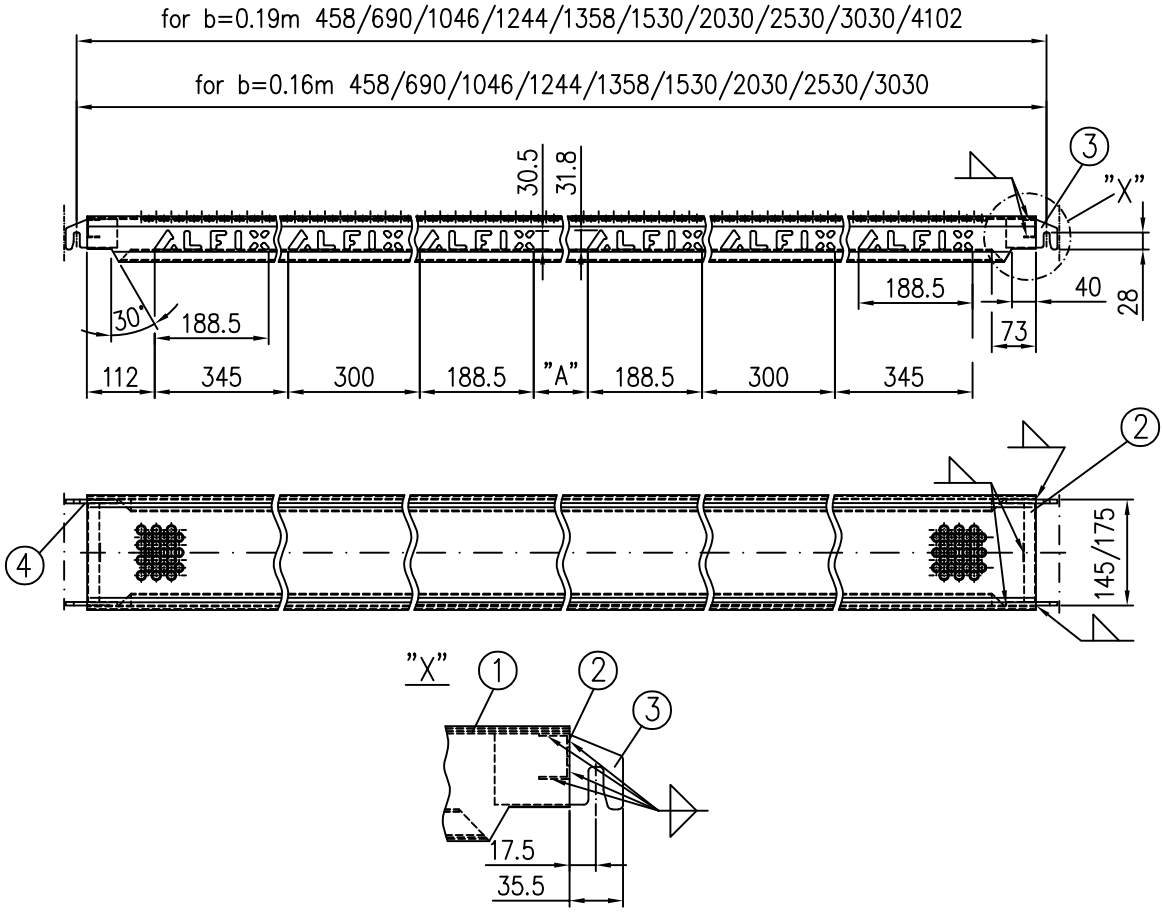
page 9



Bay length [mm]	Number of logos [left/right]	Dimension "A" [mm]	Load class	Weight 0.19m [kg]
500	1/–	–	6	3.1
732	1/1	61	6	4.3
1088	1/1	417	6	6.1
1286	1/1	615	6	7.1
1400	1/1	729	6	7.7
1572	1/1	901	6	8.6
2072	2/2	711	6	11.2
2572	2/2	1211	5	13.9
3072	3/3	1111	4	16.5
4144	3/3	2228	3	22.0



① Steel plate 1.5mm	DIN EN 10111–DD11 (DD12)	$R_{eH} \geq 280 N/mm^2$	$R_m \geq 360 N/mm^2$
alternatively:	DIN EN 10025–2 S235JR	$R_{eH} \geq 280 N/mm^2$	$R_m \geq 360 N/mm^2$
② U–profile 30x20x1.5	DIN EN 10025–2 S235JR		
alternatively: U–profile 25x25x1.5	DIN EN 10162 S235JR		
③ Flat 50x6	DIN EN 10025–2 S235JR		
④ Marking			

galvanised; all welding seams a=2mm

Frame scaffold ALFIX 70

Intermediate deck AF 0.16m; 0.19m

Annex A,
page 10

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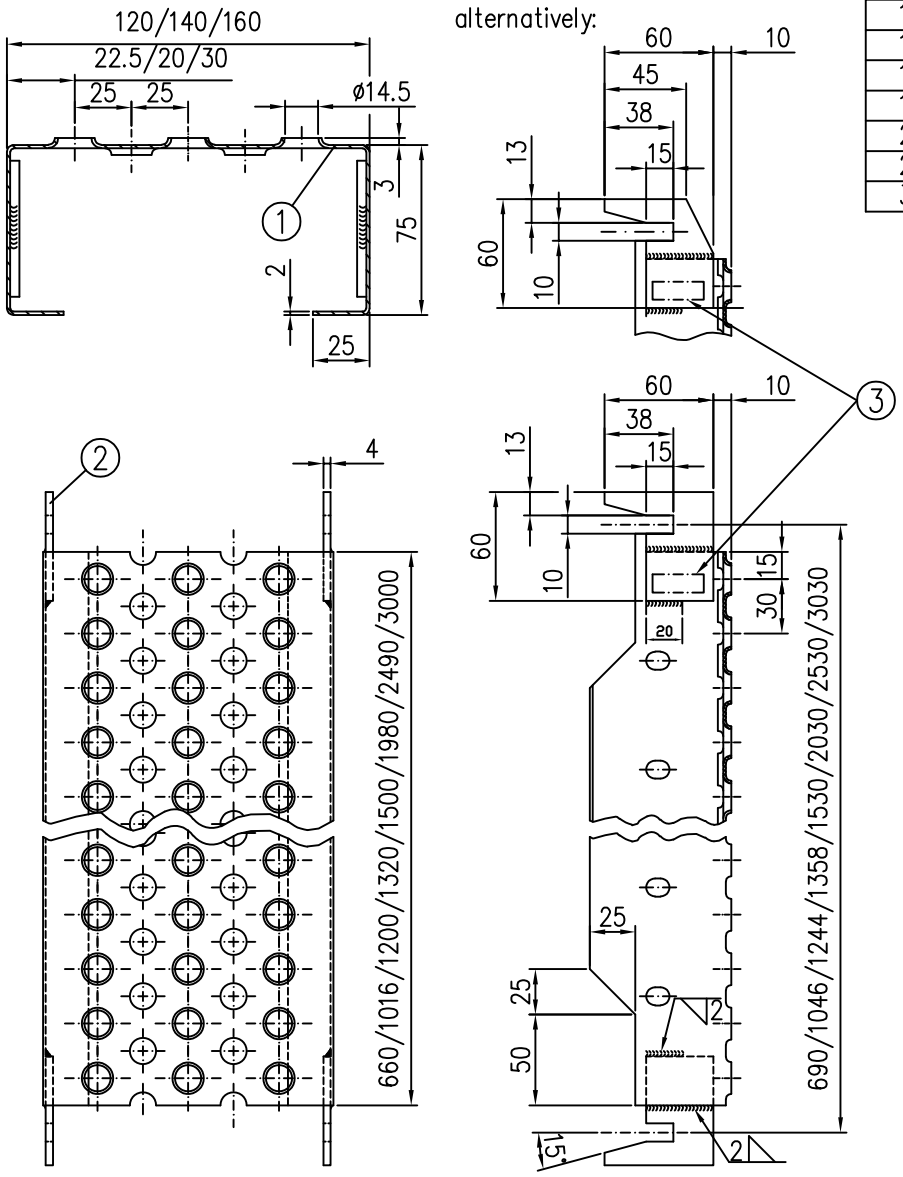
Bay length	Load class	Weight 0.16m
[mm]		[kg]
732	6	4.6
1088	6	6.0
1286	6	7.2
1400	6	7.8
1572	6	8.7
2072	6	11.4
2572	5	14.2
3072	4	16.7



① Steel plate 2mm	DIN EN 10025-2 S235JR		
alternatively:	DIN EN 10111-DD11	$R_{eH} \geq 240 N/mm^2$	$R_m \geq 360 N/mm^2$
alternatively: Steel plate 1.5mm	DIN EN 10025-2 S235JR		
alternatively:	DIN EN 10111-DD11	$R_{eH} \geq 240 N/mm^2$	$R_m \geq 360 N/mm^2$
② Steel metal 4x60x60	DIN EN 10025-2 S235JR		
③ Marking			
galvanised			

Frame scaffold ALFIX 70

Intermediate deck

Annex A,
page 11

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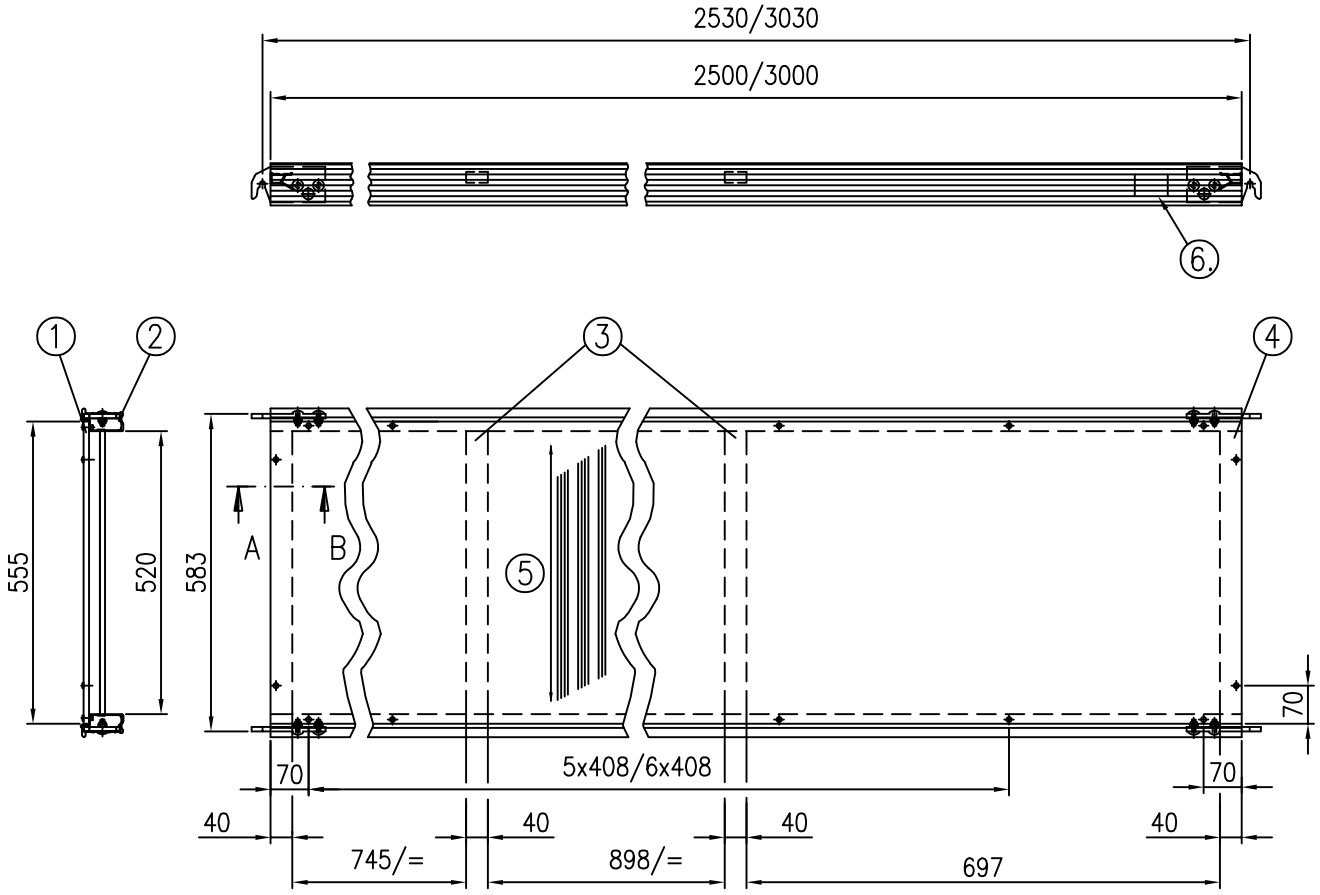


① Combi-Mirror WISA plywood 10x555 in accordance with Z-9.1-430 BFU 100-G
② Rail profile 78x42 EN AW-6063-T66 (AlMgSi0.5F25)
③ Tube connector 40x20x2 EN AW-6063-T66 (AlMgSi0.5F25)
④ Grip profile EN AW-6063-T66 (AlMgSi0.5F25)
⑤ Grain direction
⑥ Marking

Component no longer manufactured
-only approved for continued use-

Dimension [m]	Weight [kg]
2.57x0.60	17.5
3.07x0.60	21.0

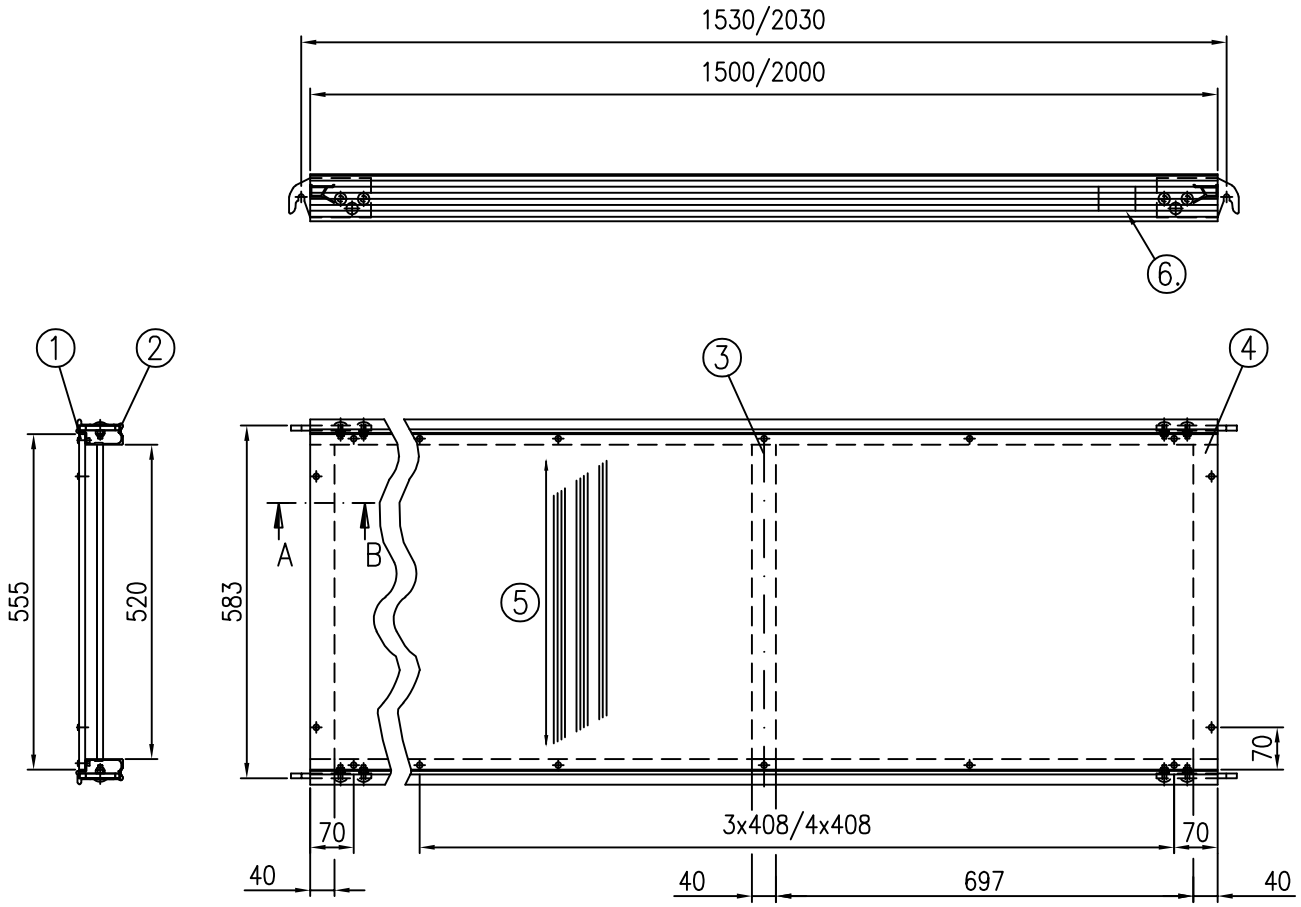
For details see annex A, page 14 Load class 3

Frame scaffold ALFIX 70

Aluminium deck with plywood 2.57m; 3.07m

A705-A009 09.2020

Annex A,
page 12



① Combi-Mirror WISA plywood 10x555 in accordance with Z-9.1-430 BFU 100-G
② Rail profile 78x42 EN AW-6063-T66 (AlMgSi0.5F25)
③ Tube connector 40x20x2 EN AW-6063-T66 (AlMgSi0.5F25)
④ Grip profile EN AW-6063-T66 (AlMgSi0.5F25)
⑤ Grain direction
⑥ Marking

Component no longer manufactured
-only approved for continued use-

Dimension [m]	Weight [kg]
1.57x0.60	11.0
2.07x0.60	14.5

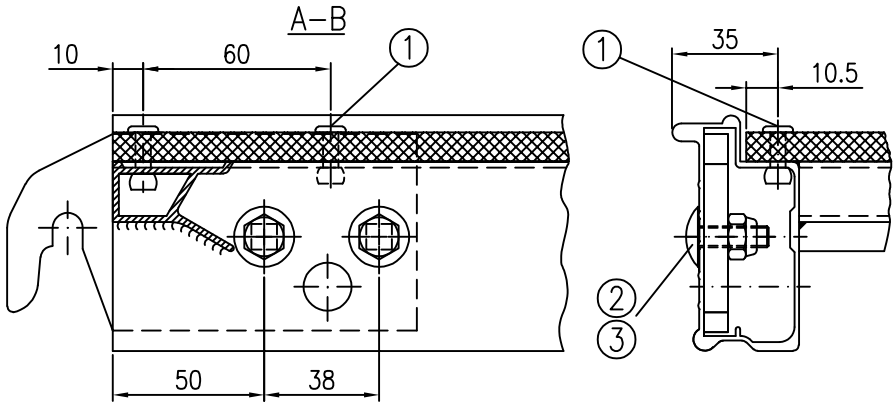
For details see annex A, page 14 Load class 3

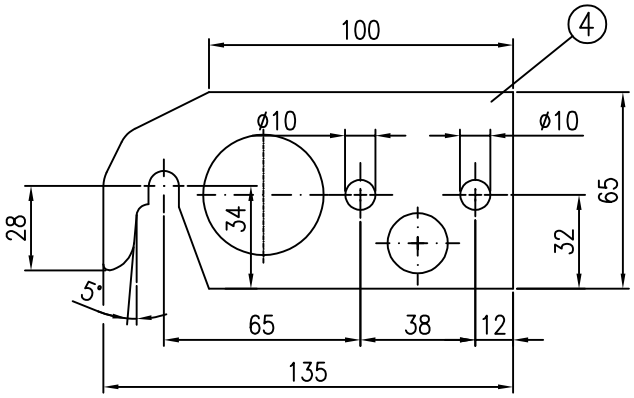
Frame scaffold ALFIX 70

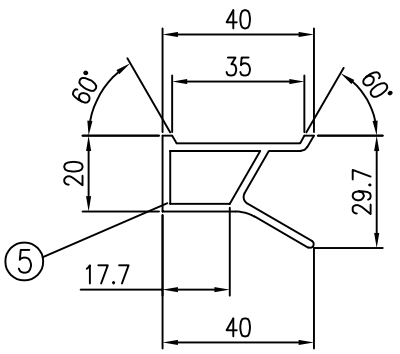
Aluminium deck with plywood 1.57m; 2.07m

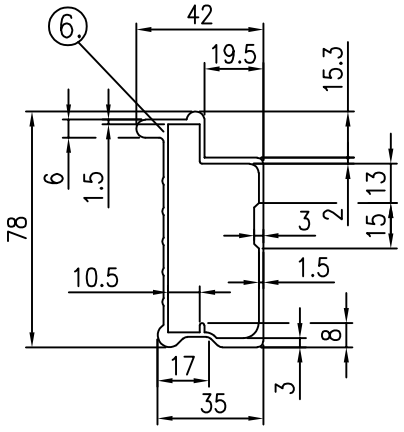
A705-A010 09.2020

Annex A,
page 13









①	Blind rivet ø5x20	EN AW–5754 H112 (AlMg3)
②	Round–head screw	M8x20 DIN 603
③	Nut, self–locking	M8 DIN 980
④	Suspension hook t=8mm, steel metal	S235JRG2 hot–dip galvanised
⑤	Grip profile; bridging deck thickness 2mm	EN AW–6063–T66 (AlMgSi0.5F25)
⑥	Aluminium rail profile	EN AW–6063–T66 (AlMgSi0.5F25)

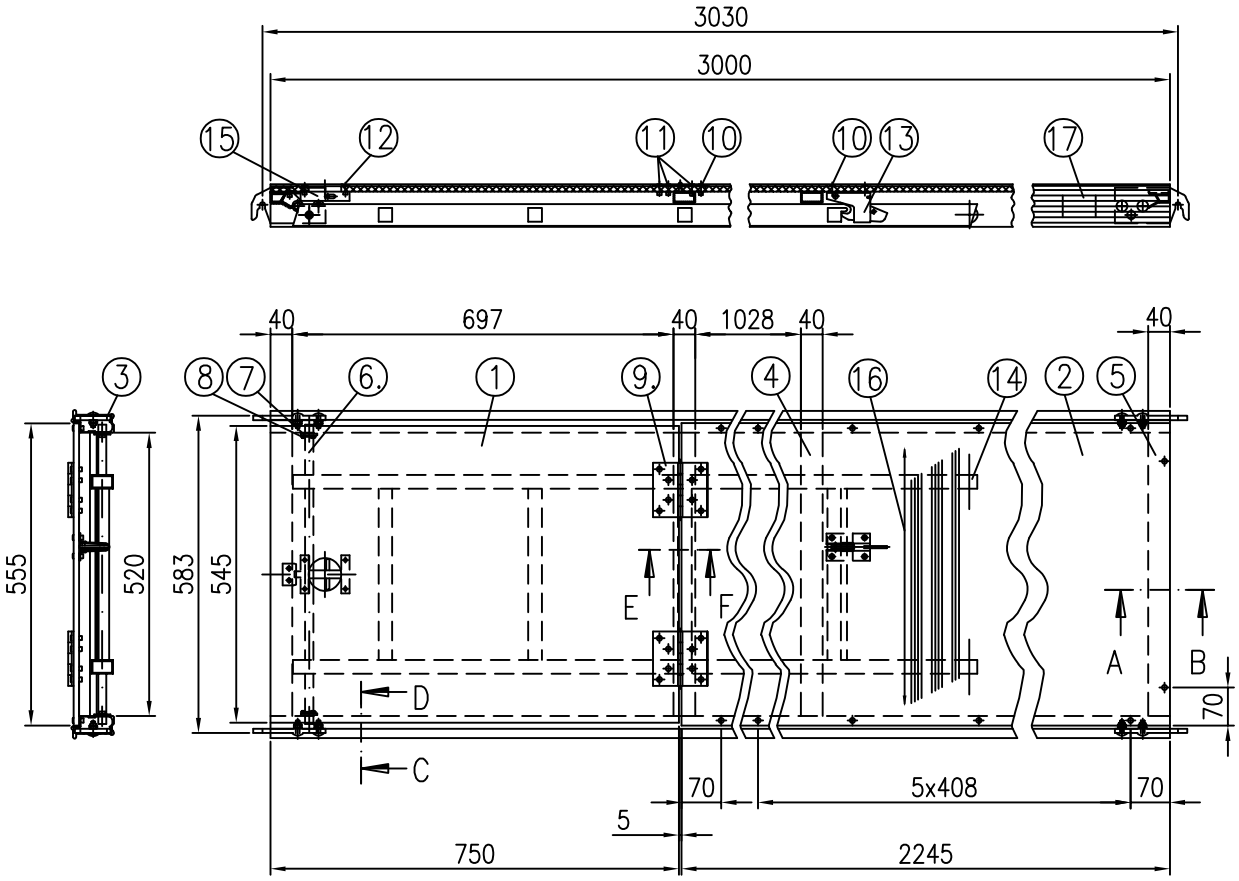
Component no longer manufactured
–only approved for continued use–

Frame scaffold ALFIX 70

Detailed view of aluminium deck

A705–A011 07.2016

Annex A,
page 14



① Combi-Mirror WISA plywood 10x545 in accordance with Z-9.1-430 BFU 100-G
② Combi-Mirror WISA plywood 10x555 in accordance with Z-9.1-430 BFU 100-G
③ Rail profile 78x42 EN AW-6063-T66 (AlMgSi0.5F25)
④ Tube connector 40x20x2 EN AW-6063-T66 (AlMgSi0.5F25)
⑤ Grip profile EN AW-6063-T66 (AlMgSi0.5F25)
⑥ Tube ø15x2 S235JRH
⑦ Disc ø17 DIN 125
⑧ Split pin ø4x25 DIN 94
⑨ Hinge 100x100x1.6
⑩ Blind rivet ø5x20 EN AW-5754 H112 (AlMg3)
⑪ Blind rivet ø4.8x18 EN AW-5754 H112 (AlMg3)
⑫ Blind rivet ø4.8x16 EN AW-5754 H112 (AlMg3)
⑬ Ladder bracket
⑭ Ladder
⑮ Ledger
⑯ Grain direction
⑰ Marking

Component no longer manufactured
–only approved for continued use–

Dimension [m]	Weight [kg]
3.07x0.60	22.5

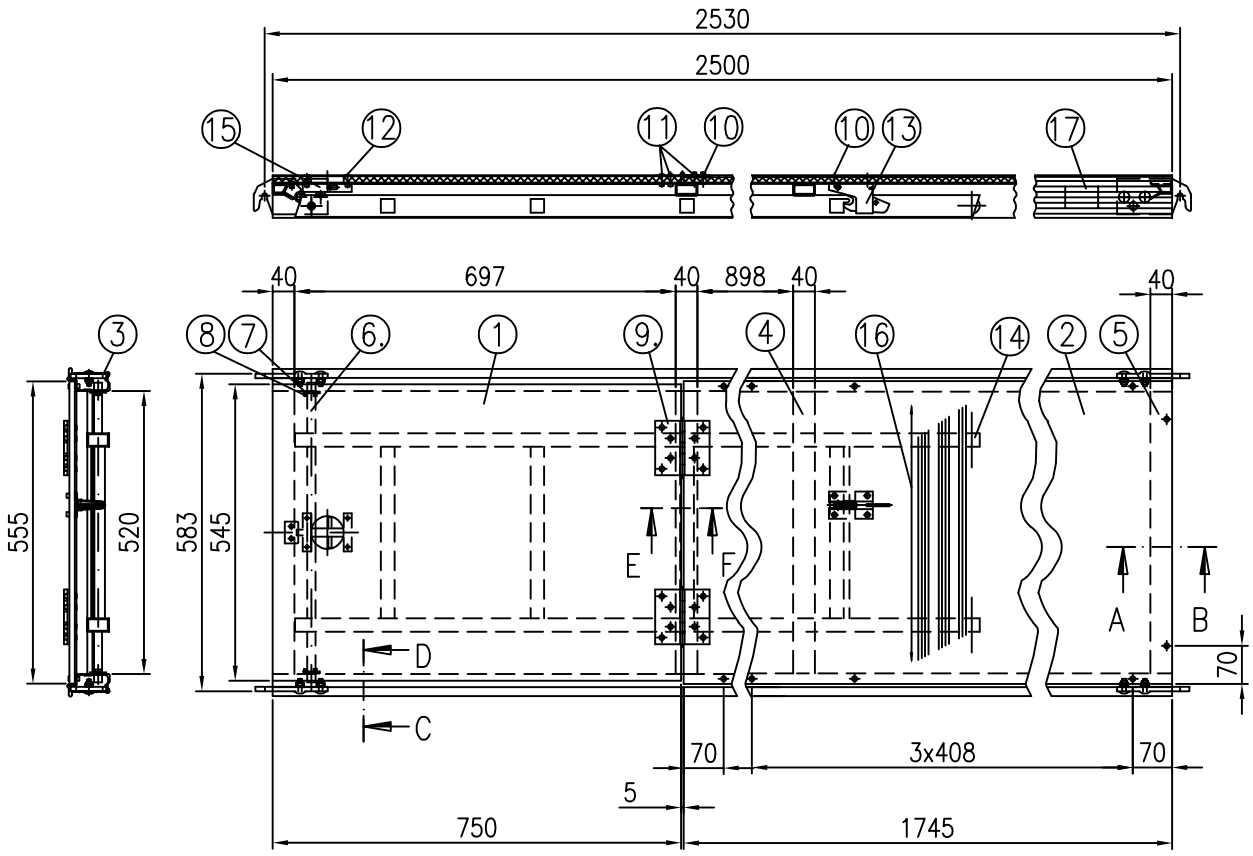
For details see annex A, pages 14 and 17 Load class 3

Frame scaffold ALFIX 70

Aluminium access deck 3.07m with ladder

A705-A012 09.2020

Annex A,
page 15



① Combi-Mirror WISA plywood 10x545 in accordance with Z-9.1-430 BFU 100-G
② Combi-Mirror WISA plywood 10x555 in accordance with Z-9.1-430 BFU 100-G
③ Rail profile 78x42 EN AW-6063-T66 (AlMgSi0.5F25)
④ Tube connector 40x20x2 EN AW-6063-T66 (AlMgSi0.5F25)
⑤ Grip profile EN AW-6063-T66 (AlMgSi0.5F25)
⑥ Tube ø15x2 S235JRH
⑦ Disc ø17 DIN 125
⑧ Split pin ø4x25 DIN 94
⑨ Hinge 100x100x1.6
⑩ Blind rivet ø5x20 EN AW-5754 H112 (AlMg3)
⑪ Blind rivet ø4.8x18 EN AW-5754 H112 (AlMg3)
⑫ Blind rivet ø4.8x16 EN AW-5754 H112 (AlMg3)
⑬ Ladder bracket
⑭ Ladder
⑮ Ledger
⑯ Grain direction
⑰ Marking

Component no longer manufactured
-only approved for continued use-

Dimension [m]	Weight [kg]
2.57x0.60	18.5

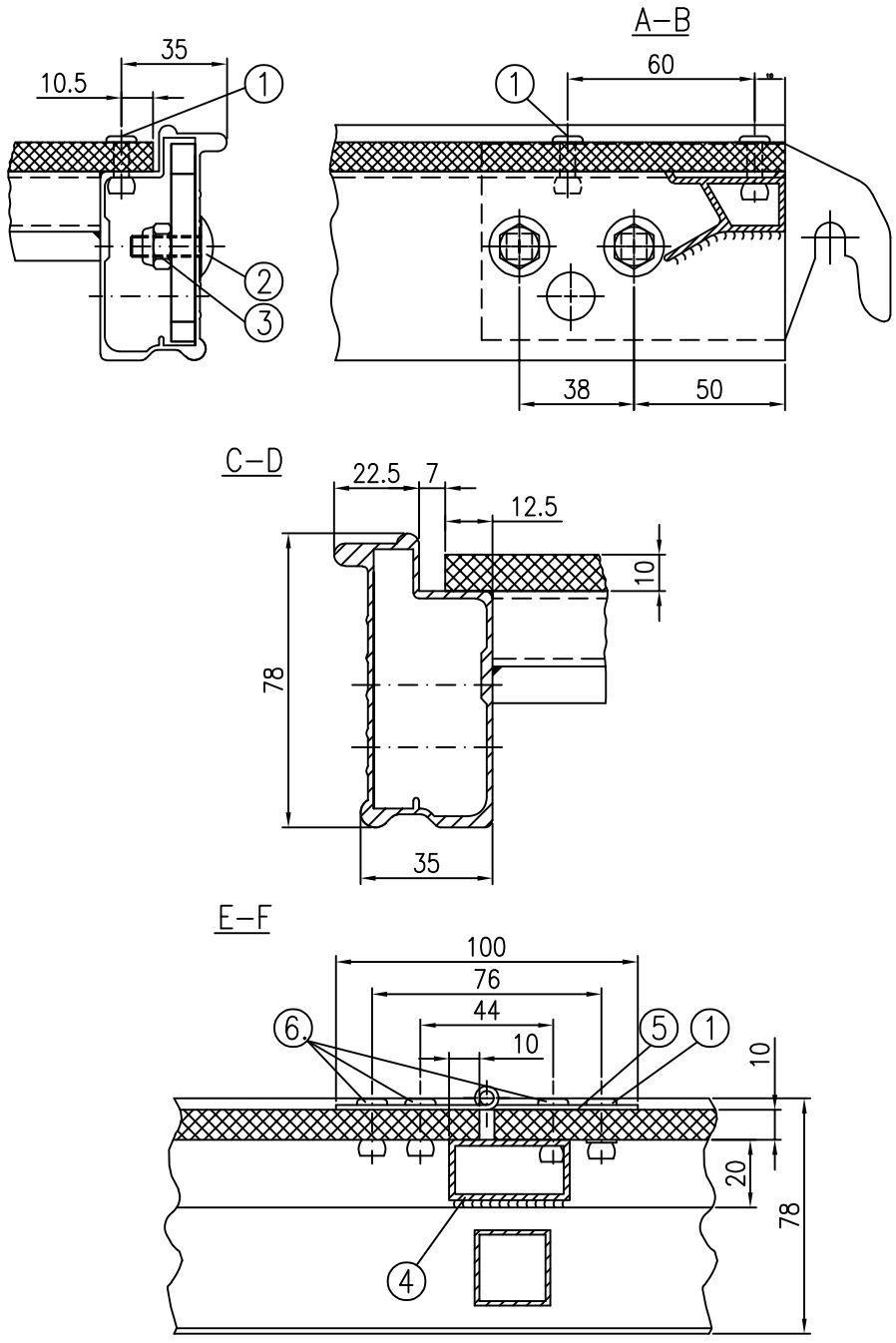
For details see annex A, pages 14 and 17 Load class 3

Frame scaffold ALFIX 70

Aluminium access deck 2.57m with ladder

A705-A013 09.2020

Annex A,
page 16



①	Blind rivet ø5x20	EN AW–5754 H112 (AlMg3)
②	Round–head screw	M8x20 DIN 603
③	Nut, self–locking	M8 DIN 980
④	Box 40x20x2	EN AW–6063–T66 (AlMgSi0.5F25)
⑤	Hinge 100x100x1.6	
⑥	Blind rivet ø4.8x18	EN AW–5754 H112 (AlMg3)

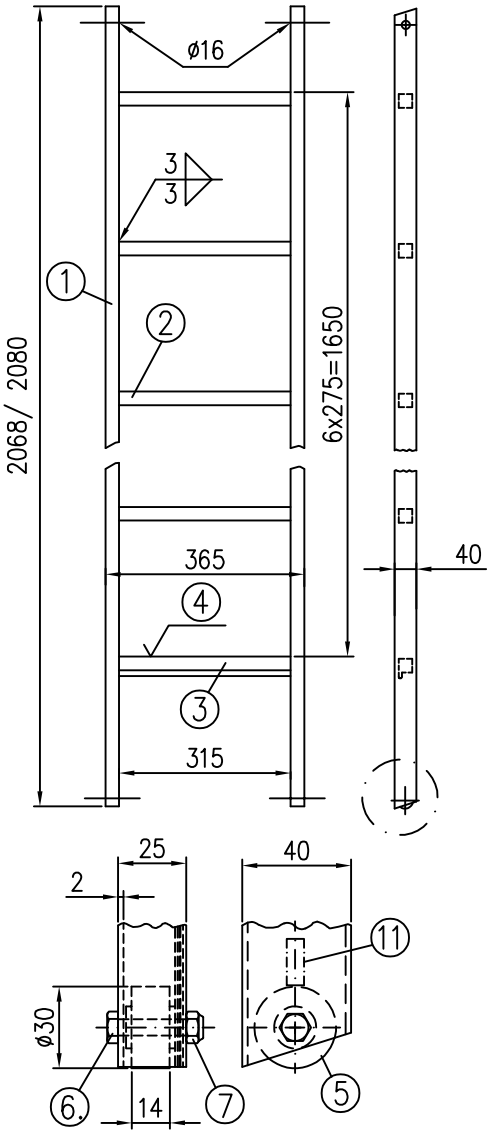
Component no longer manufactured
–only approved for continued use–

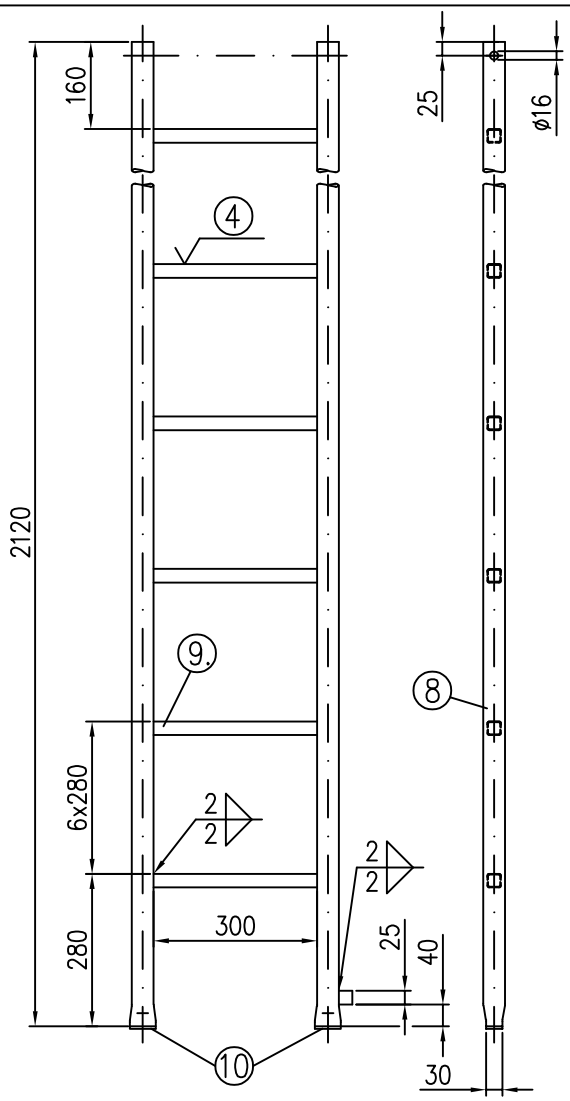
Frame scaffold ALFIX 70

Sectional views of aluminium access deck

A705–A014 07.2016

Annex A,
page 17





Discontinued design

– only approved for continued use –

①	Rail profile 25x40x2	DIN EN 755–2 EN AW–6063–T66
②	Rung section 25x25x1.5	DIN EN 755–2 EN AW–6063–T66
③	Locking rung section 25x25x1.5	DIN EN 755–2 EN AW–6063–T66
④	Ribbed profile	
⑤	Rolled steel plate, round Ø30x18	130PA/030/011/1/6
⑥	Hexagon screw	DIN EN ISO 4014–M6x30–8.8–galvanised
⑦	Hexagon nut, self–locking	DIN EN ISO 10511–M6–8–galvanised
⑧	Circular hollow section ø40x2	AlMgSi1F28
⑨	Rung section	AlMgSi1F28
⑩	Tube end cap PVC	
⑪	Marking	

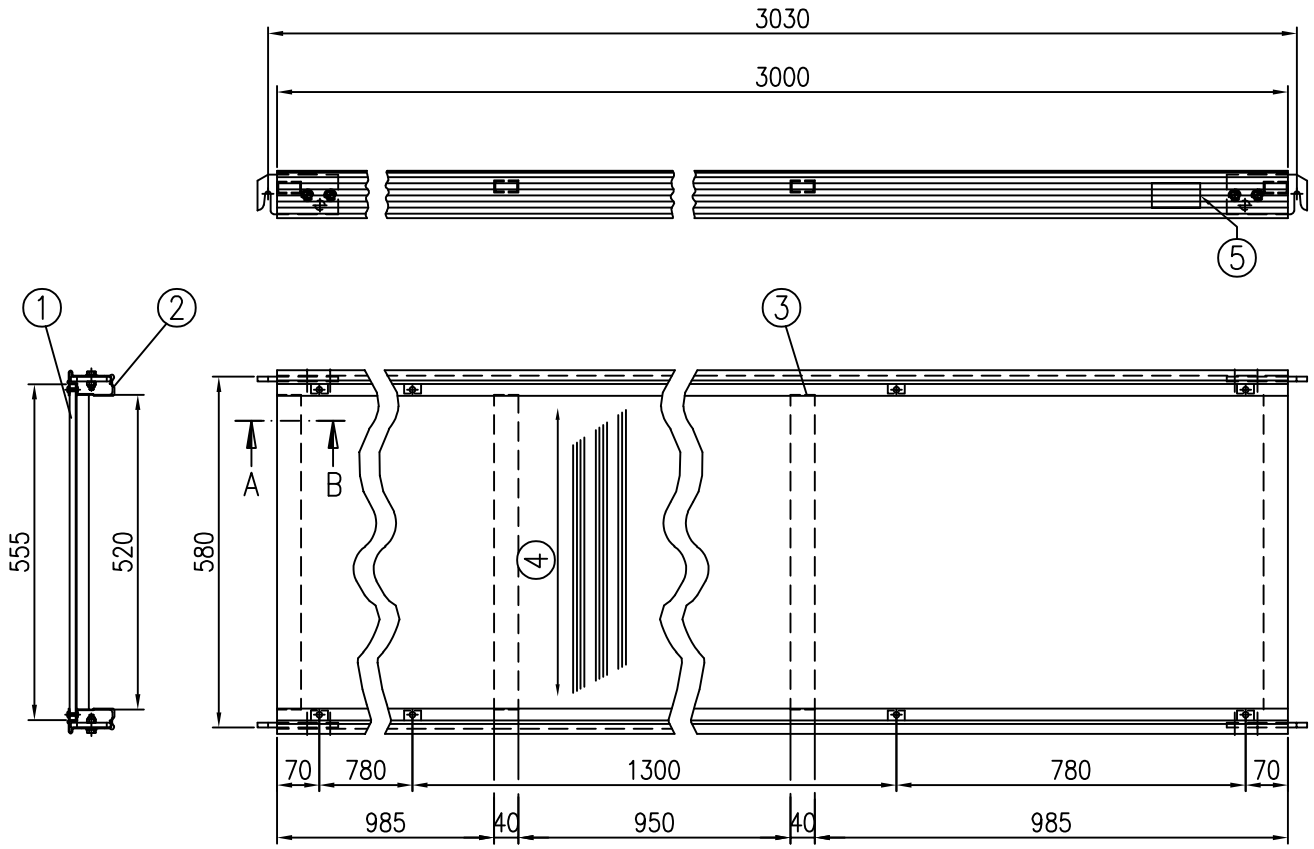
Dimens. [m]	Weight [kg]
2.00	3.5

Frame scaffold ALFIX 70

Internal ladder

A709–A115 06.2020

Annex A,
page 18



① Film-coated plywood 10x555 (BFU 100-10 DIN 68705 sheet 3) until 1997
BFU 100G-10 DIN 68705 sheet 3

② Rail profile 78x42 (35) design A AlMgSi0.5F25

③ Box 40x20x2 AlMgSi0.5F25

④ Grain direction

⑤ Marking

Component no longer manufactured
-only approved for continued use-

( ) = discontinued design, with marking: manufacturer's logo, year of manufacturing, Z-8.1-310. Ü

Dimension [m]	Weight [kg]
3.07x0.60	21.0

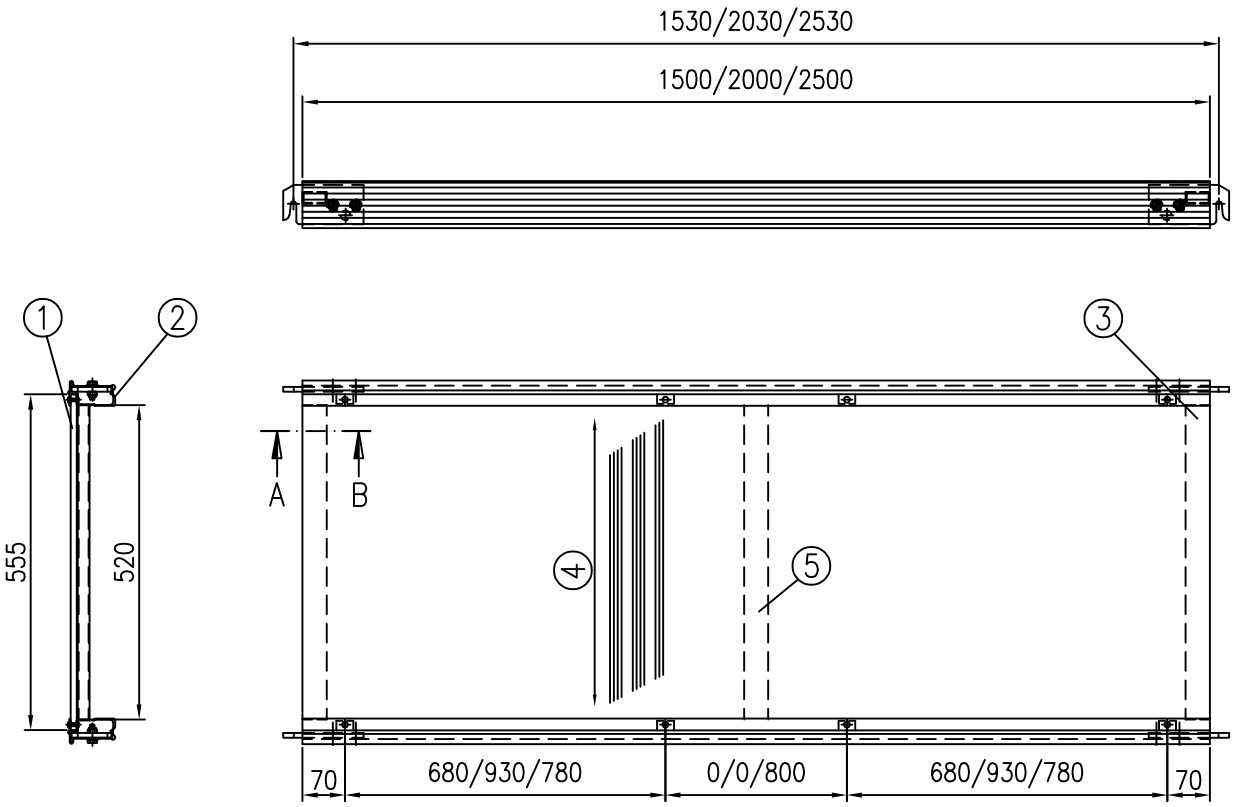
For details see annex A, page 21 Load class 3

Frame scaffold ALFIX 70

Aluminium deck with plywood 3.07m

A705-A016 09.2020

Annex A,
page 19



① Film-coated plywood 10x555 (BFU 100-10 DIN 68705 sheet 3) until 1997
BFU 100G-10 DIN 68705 sheet 3

② Rail profile 78x42 (35) design A AlMgSi0.5F25

③ Box 40x20x2 AlMgSi0.5F25

④ Grain direction

⑤ only for bay length 2.5m

Component no longer manufactured
-only approved for continued use-

( ) = discontinued design, with marking: manufacturer's logo, year of manufacturing, Z-8.1-310. Ü

Dimension [m]	Weight [kg]
1.57x0.60	11.0
2.07x0.60	14.5
2.57x0.60	17.5

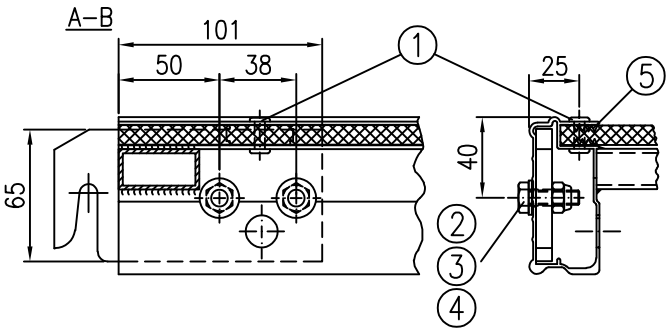
For details see annex A, page 21 Load class 3

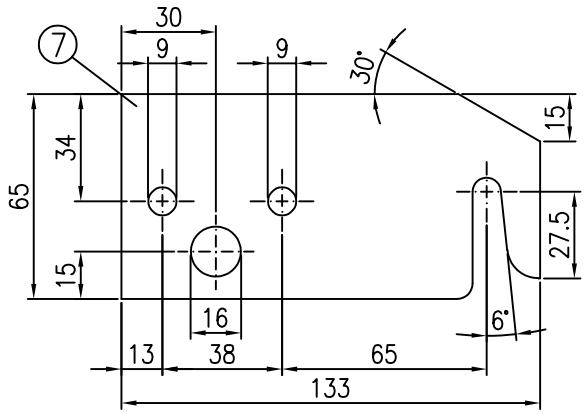
Frame scaffold ALFIX 70

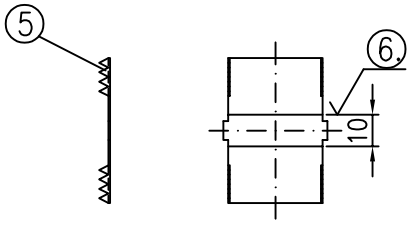
Aluminium deck with plywood 1.57m; 2.07m; 2.57m

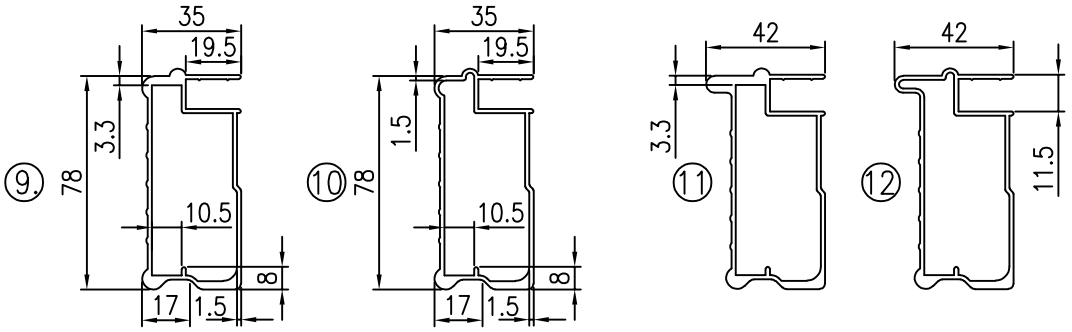
A705-A017 09.2020

Annex A,
page 20









①	Rivet ø5x21	AlMg3 DIN 7337
②	Screw M8x25	DIN 933
③	Disc ø8.4	DIN 125
④	Nut, self–locking M8	DIN 982
⑤	Cramp; steel metal t=0.5; as of year of manufacture 1992	S235JRG2 hot–dip galvanised
⑥	Stamped for later bending	EN AW–6063–T66 (AlMgSi0.5F25)
⑦	Suspension claw; steel metal t=8	S235JRG2 hot–dip galvanised
⑧	Aluminium rails	AlMgSi0.5F25
⑨	Design A (discontinued design)	
⑩	Design B (discontinued design)	
⑪	Design A as of 01/1995	
⑫	Design B as of 01/1995	

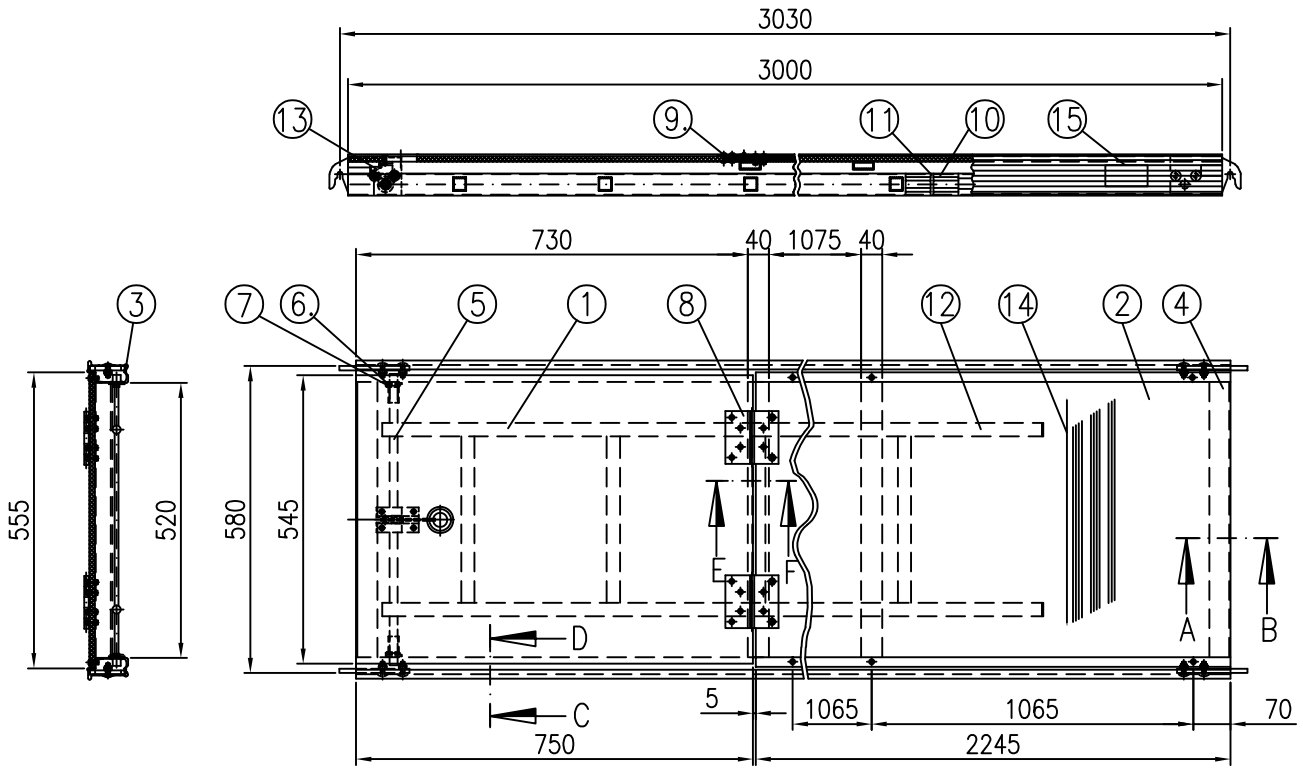
Component no longer manufactured
–only approved for continued use–

Frame scaffold ALFIX 70

Detailed view of aluminium deck

A705–A018 07.2016

Annex A,
page 21



①	Film-coated plywood 10x545	(BFU100-12 DIN 68705 sheet 3) until 1997 BFU100G-12 DIN 68705 sheet 3
②	Film-coated plywood 10x555	(BFU100-10 DIN 68705 sheet 3) until 1997 BFU100G-10 DIN 68705 sheet 3
③	Aluminium rails 78x42(35) /A	AlMgSi0.5F25
④	Box 40x20x2	AlMgSi0.5F25
⑤	(Tube 15x1	AlMgSi0.5F25) until 1997
	Round ø15	AlMgSi0.5F22
⑥	Disc ø15	DIN 125
⑦	Split pin ø4x32	DIN 94
⑧	Hinge 100x100x1.6	
⑨	Rivet ø5x16	DIN 7337
⑩	Rivet ø5x18	DIN 7337
⑪	Ledger 100mm	
⑫	Ladder	see Annex A, page 18
⑬	Cranked ledger with ring 100mm	
⑭	Grain direction	
⑮	Marking	

Component no longer manufactured
-only approved for continued use-

Dimension [m]	Weight [kg]
3.07x0.60	22.5

( ) = discontinued design, with marking: manufacturer's logo, year of manufacturing, Z-8.1-310, Ü

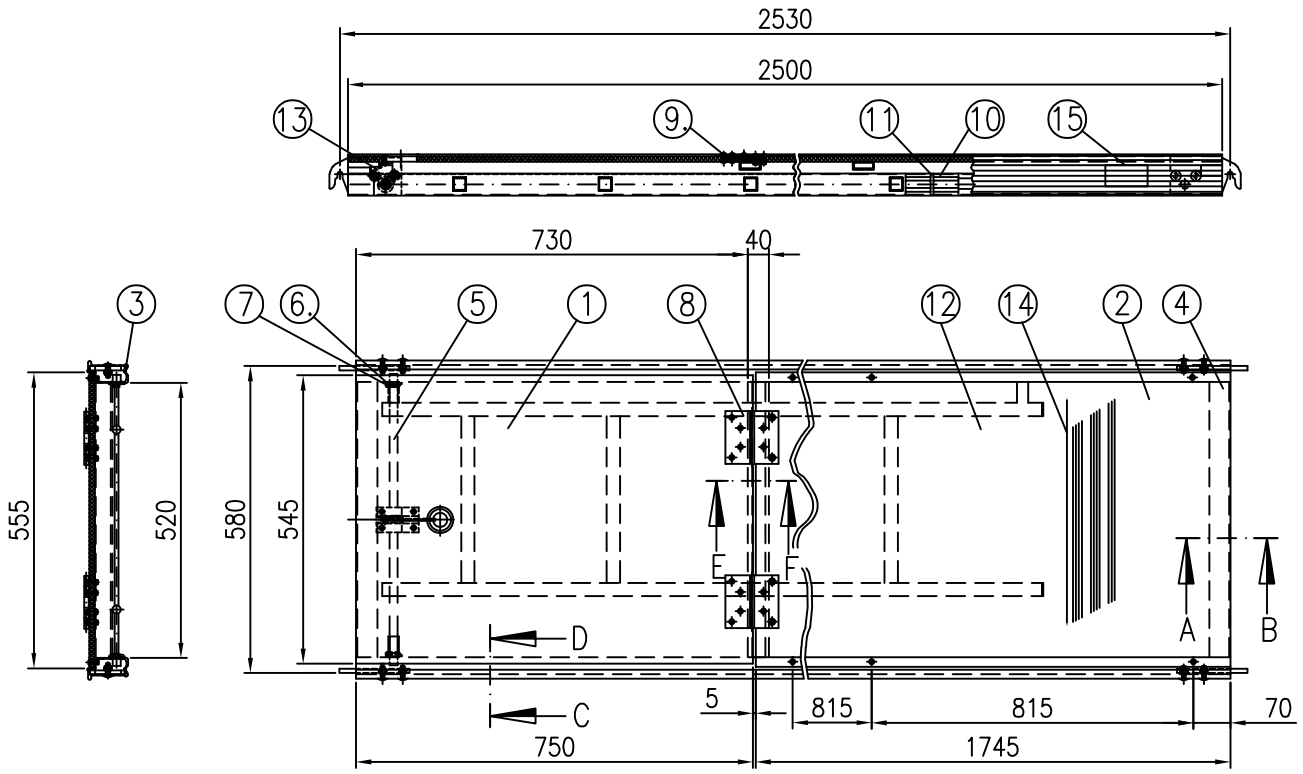
For details see annex A, pages 21 and 24 Load class 3

Frame scaffold ALFIX 70

Aluminium access deck with ladder 3.07m

A705-A019 07.2016

Annex A,
page 22



①	Film-coated plywood 10x545	(BFU100-12 DIN 68705 sheet 3) until 1997 BFU100G-12 DIN 68705 sheet 3
②	Film-coated plywood 10x555	(BFU100-10 DIN 68705 sheet 3) until 1997 BFU100G-10 DIN 68705 sheet 3
③	Aluminium rails 78x42(35) /A	AlMgSi0.5F25
④	Box 40x20x2	AlMgSi0.5F25
⑤	(Tube 15x1 Round ø15	AlMgSi0.5F25) until 1997 AlMgSi0.5F22
⑥	Disc ø15	DIN 125
⑦	Split pin ø4x32	DIN 94
⑧	Hinge 100x100x1.6	
⑨	Rivet ø5x16	DIN 7337
⑩	Rivet ø5x18	DIN 7337
⑪	Ledger 100mm	
⑫	Ladder	see Annex A, page 18
⑬	Cranked ledger with ring 100mm	
⑭	Grain direction	
⑮	Marking	

Component no longer manufactured
-only approved for continued use-

( ) = discontinued design, with marking: manufacturer's logo, year of manufacturing, Z-8.1-310, Ü

Dimension [m]	Weight [kg]
2.57x0.60	18.5

For details see annex A, pages 21 and 24 Load class 3

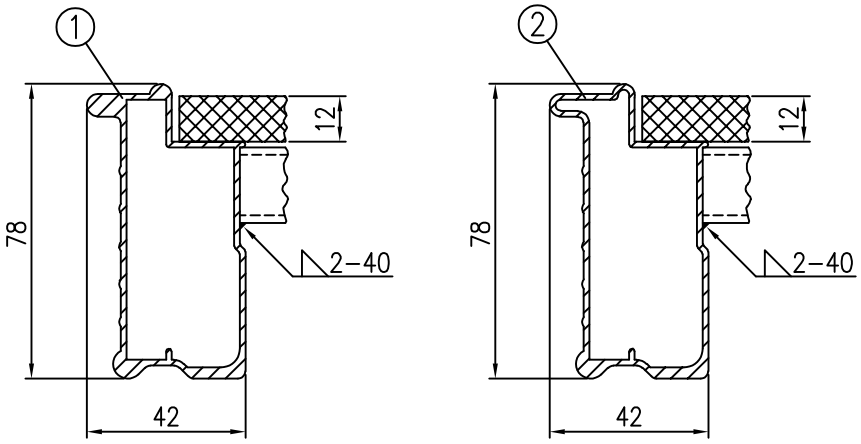
Frame scaffold ALFIX 70

Aluminium access deck with ladder 2.57m

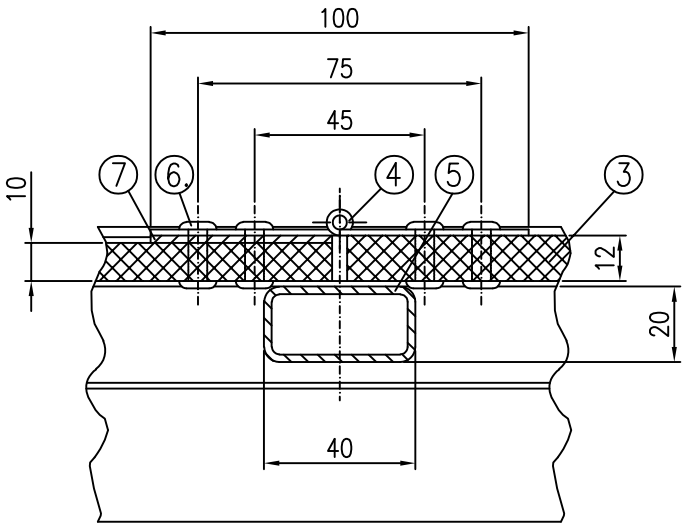
A705-A020 09.2020

Annex A,
page 23

C–D



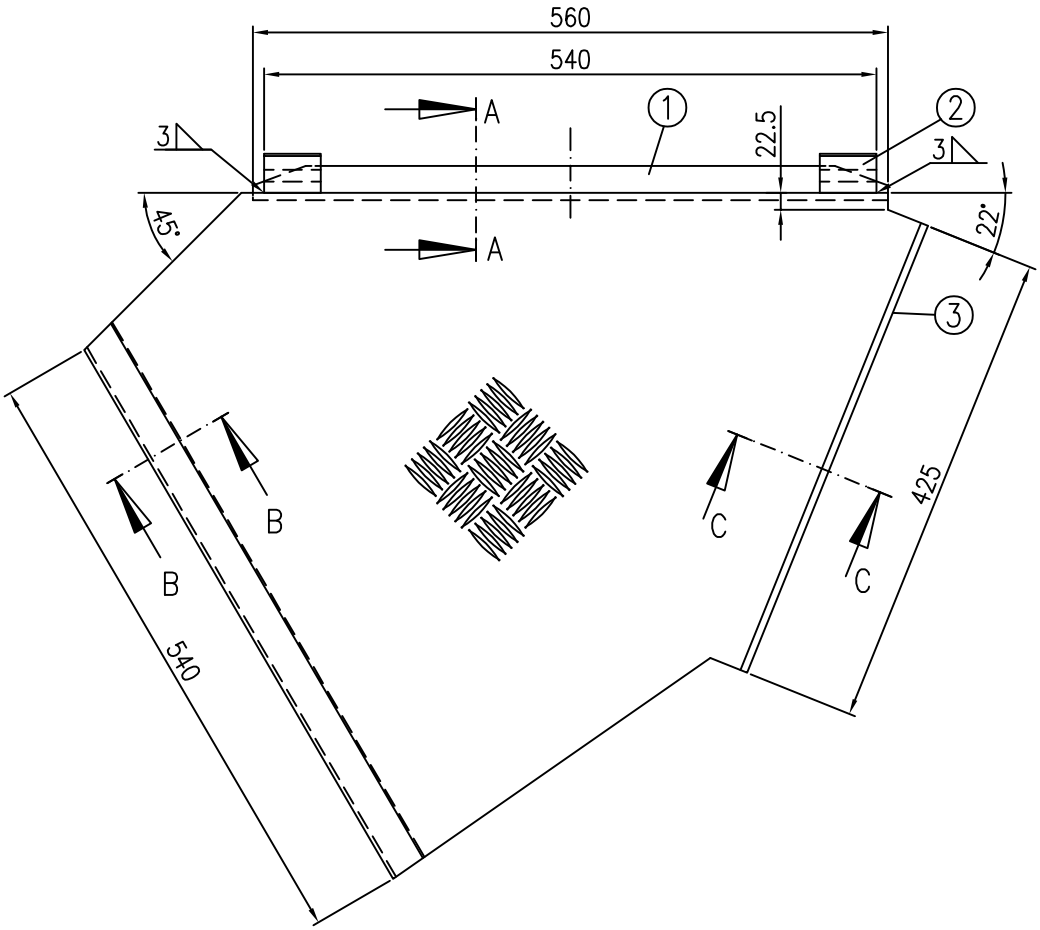
E–F



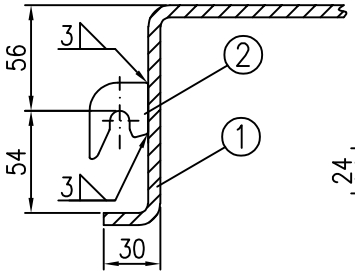
① Design A
② Design B
③ Hatch
④ Hinge 100x100x1.6
⑤ Box 40x20x2 AlMgSi0.5F25
⑥ Aluminium blind rivet ø5x16 DIN 7340
⑦ Thickness compensation

Component no longer manufactured
–only approved for continued use–

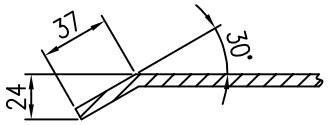
Frame scaffold ALFIX 70	Annex A, page 24
Sectional views of aluminium access deck	
A705–A021 07.2016	



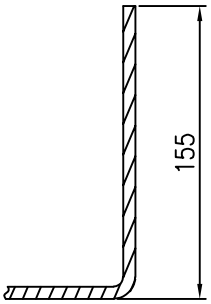
A–A

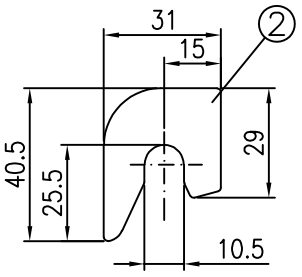


B–B



C–C





		Dimens. [m]	Weight [kg]
①	Chequer plate with 5 bar pattern 5/6.5 DIN EN 1386 EN AW–5754–H114	–	10.6
②	Suspension hook DIN EN 755 EN AW–6063–T66		
③	Marking 131–MIG: type 5 filler material (EC9)		

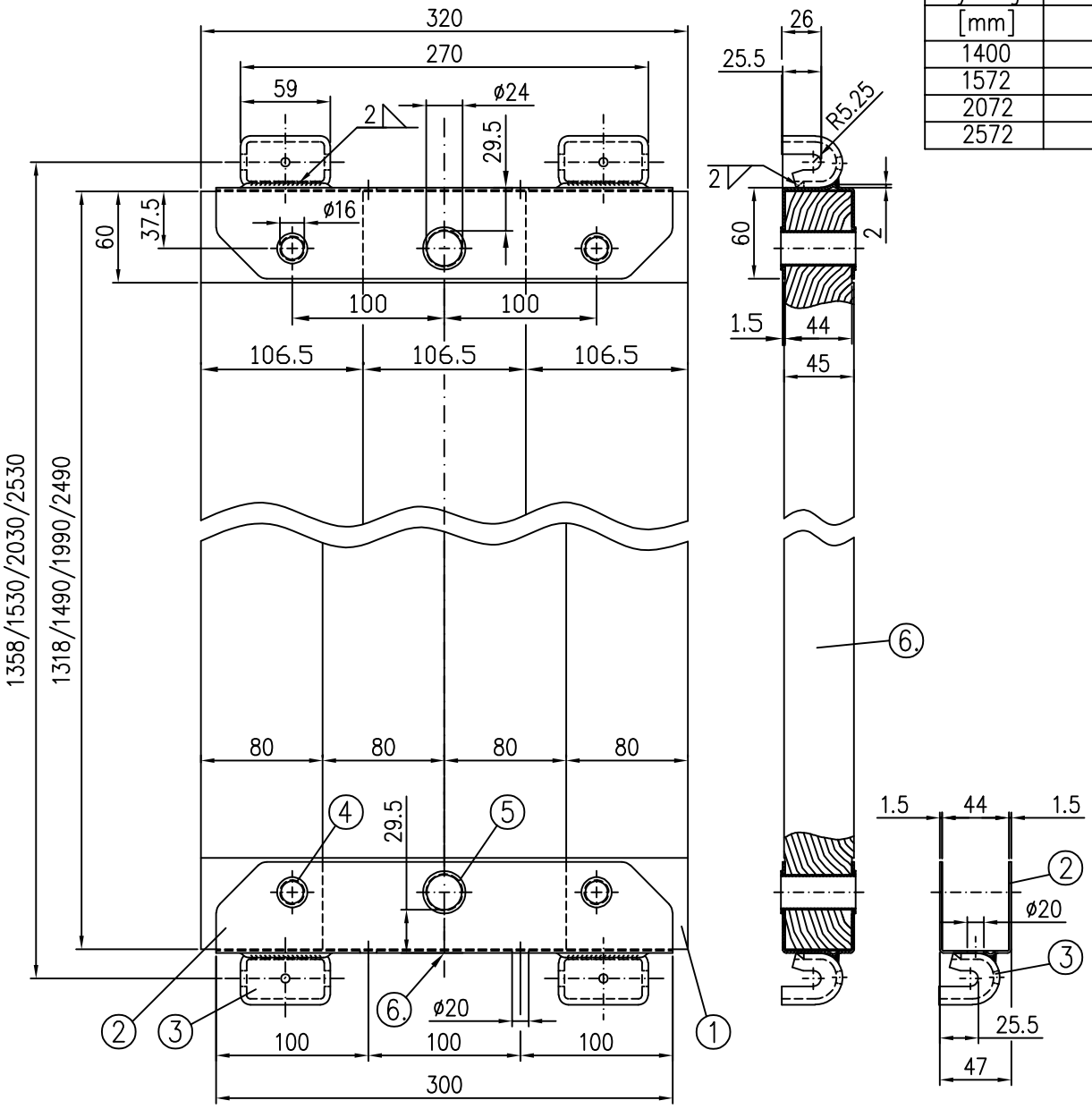
Frame scaffold ALFIX 70

Aluminium corner deck with toeboard, rigid

A709–A122 07.2016

Annex A,
page 25

Bay length [mm]	Load class	Weight [kg]
1400	5	10.0
1572	5	11.1
2072	4	14.4
2572	3	17.6



① Solid wood deck — DIN 4074-1-S10/S13 or DIN EN 338 C24/C30
4 planks 80x45; alternatively 3 planks 106.5x45

② Steel plate 162x1.5 — DIN EN 10111-DD11 — $R_{eH} \geq 240 N/mm^2$

③ Steel plate 70x4 — DIN EN 10111-DD13 — $R_{eH} \geq 240 N/mm^2$

④ Tubular rivet — DIN 7340-B15x1x53-steel

⑤ Tubular rivet — DIN 7340-B23x1x53-steel

⑥ Marking

all components made of galvanised steel

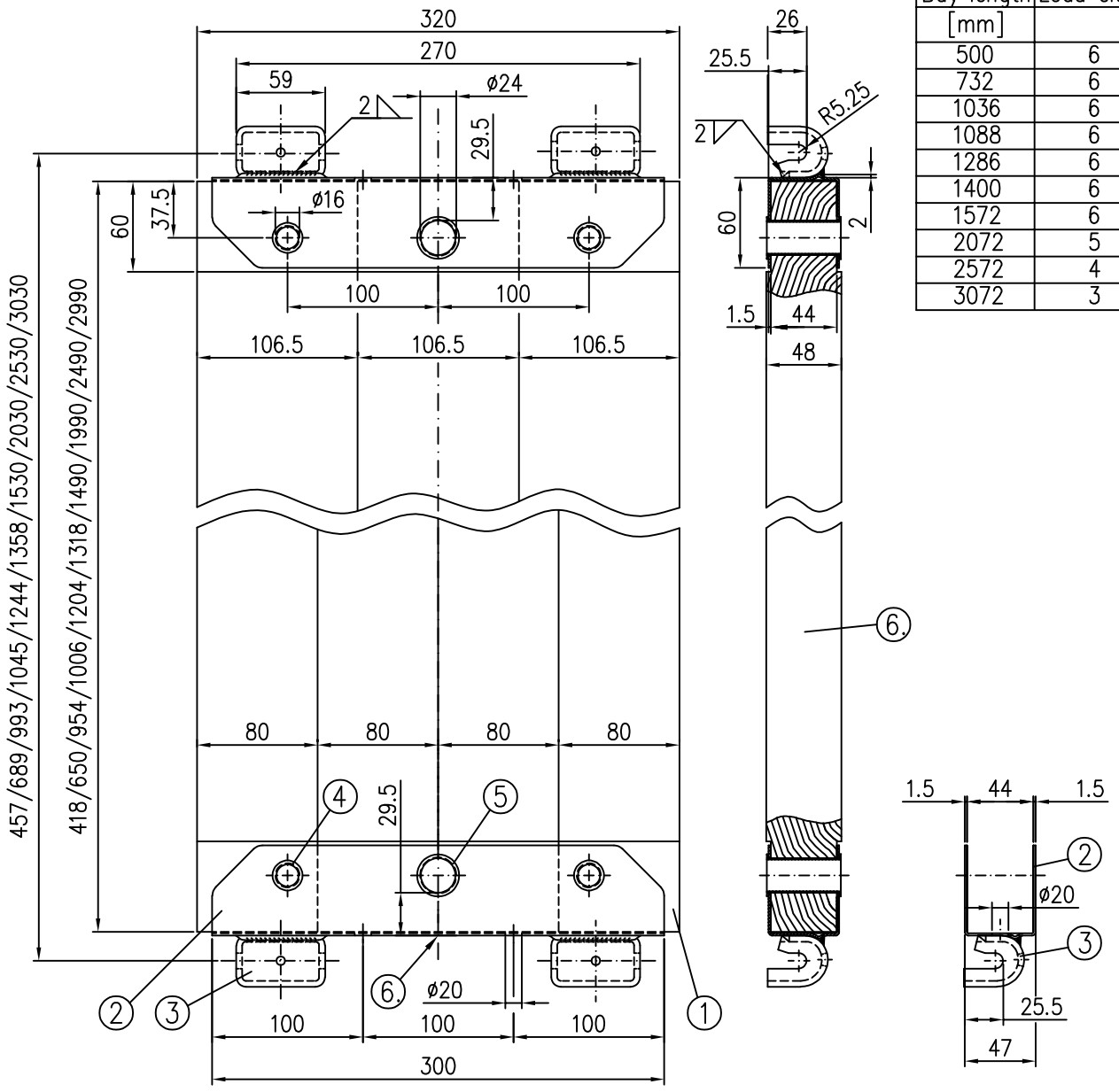
Frame scaffold ALFIX 70

Solid wood deck 45

A709-A200 09.2020

Annex A,
page 26

Bay length [mm]	Load class	Weight [kg]
500	6	4.5
732	6	6.0
1036	6	8.2
1088	6	8.6
1286	6	9.7
1400	6	10.5
1572	6	11.4
2072	5	14.5
2572	4	18.6
3072	3	23.0



① Solid wood deck — DIN 4074-1-S10/S13* or DIN EN 338 C24/C30*
4 planks 80x48; alternatively 3 planks 106.5x48

② Steel plate 162x1.5 — $R_{eH} \geq 240 N/mm^2$

③ Steel plate 70x4 — DIN EN 10111-DD13 — $R_{eH} \geq 240 N/mm^2$

④ Tubular rivet — DIN 7340-B15x1x53-steel

⑤ Tubular rivet — DIN 7340-B23x1x53-steel

⑥ Marking

all components made of galvanised steel * for 3.07m

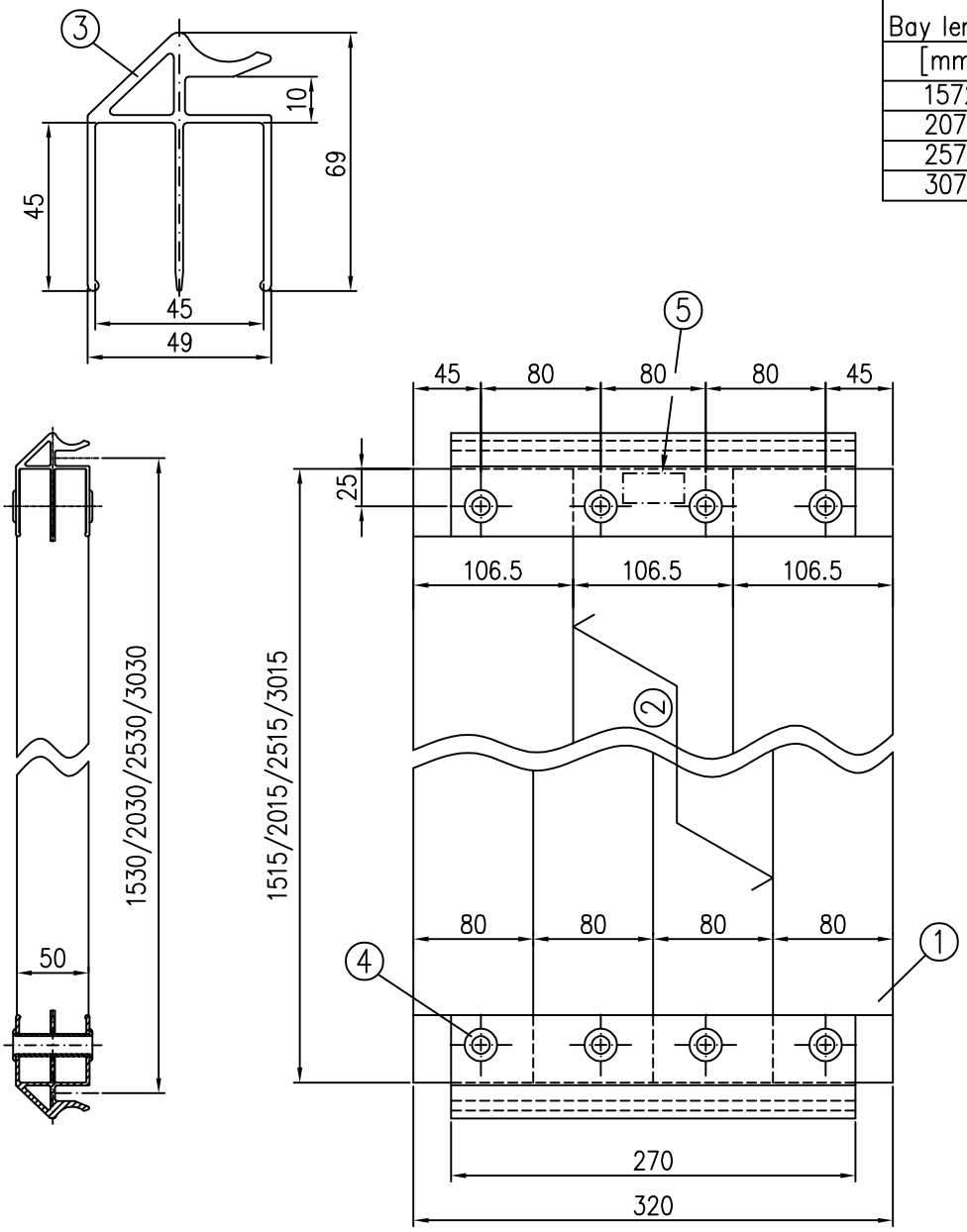
Frame scaffold ALFIX 70

Solid wood deck 48

A709-A124 09.2020

Annex A,
page 27

Bay length [mm]	Load class	Weight [kg]
1572	6	13.0
2072	5	16.0
2572	4	19.0
3072	3	22.0



① Pine wooden deck visual strength grade S13 for bay length L=3.07m
or S10 for bay length L=2.57m (single plank S10)
alternatively: – 4 planks, made of decks 8x50
– 3 planks, made of decks 106.5x50

② glued as structural component

③ Suspension section EN AW–6082–T5 (AlMgSi1F28)

④ Tubular rivet DIN 7340–B15x1x53–steel–galvanised

⑤ Marking

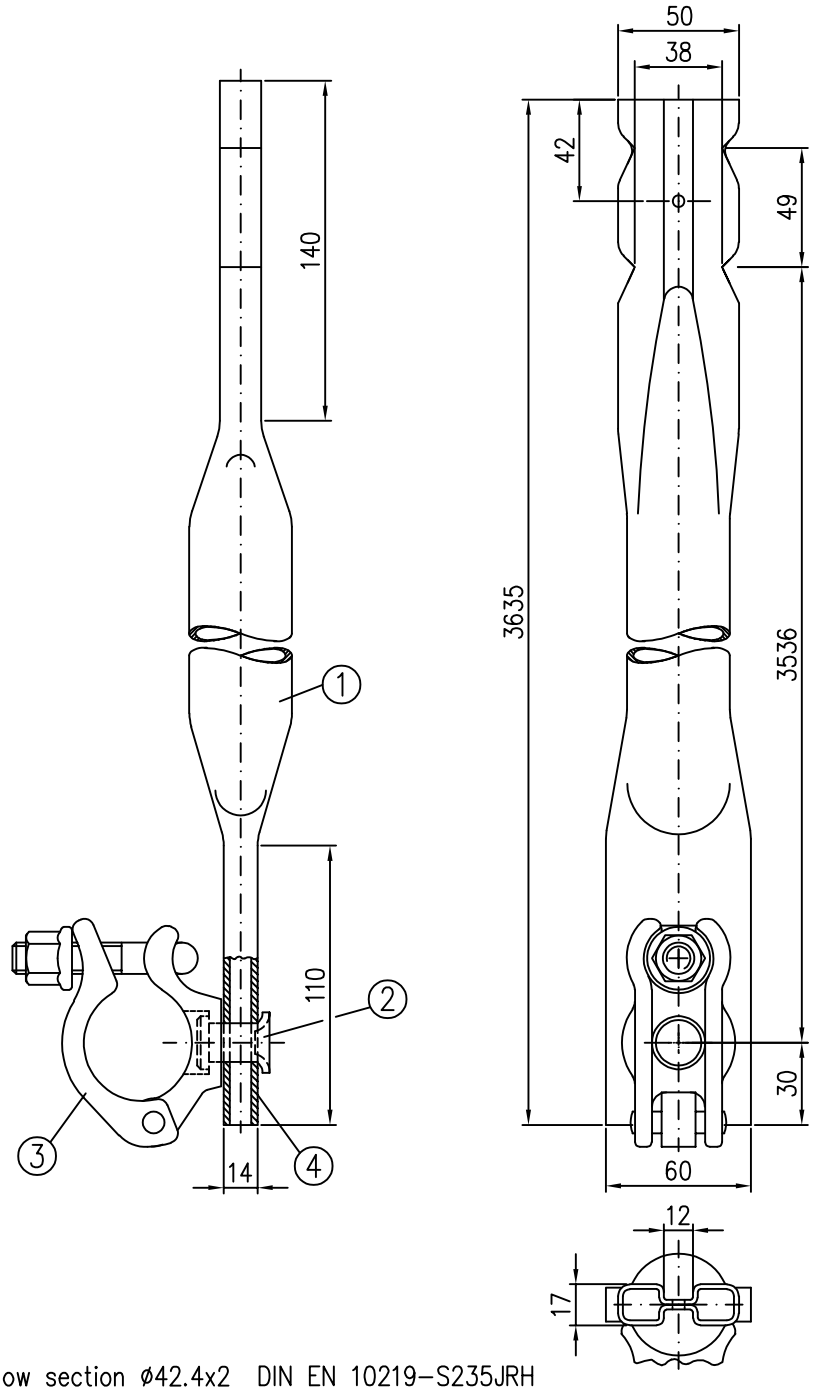
Component no longer manufactured
–only approved for continued use–

Frame scaffold ALFIX 70

Wooden deck

A705–A124 09.2020

Annex A,
page 28



①	Circular hollow section ø42.4x2	DIN EN 10219–S235JRH
②	Rivet for diagonal brace ø16	DIN EN 10263–1/2–C10C+C
	alternatively:	DIN EN 10263–3–C10E2C
③	Halfcoupler, class B	DIN EN 74–2
	alternatively: Wedge coupler	see Annex A, page 95
④	Marking	
	galvanised	

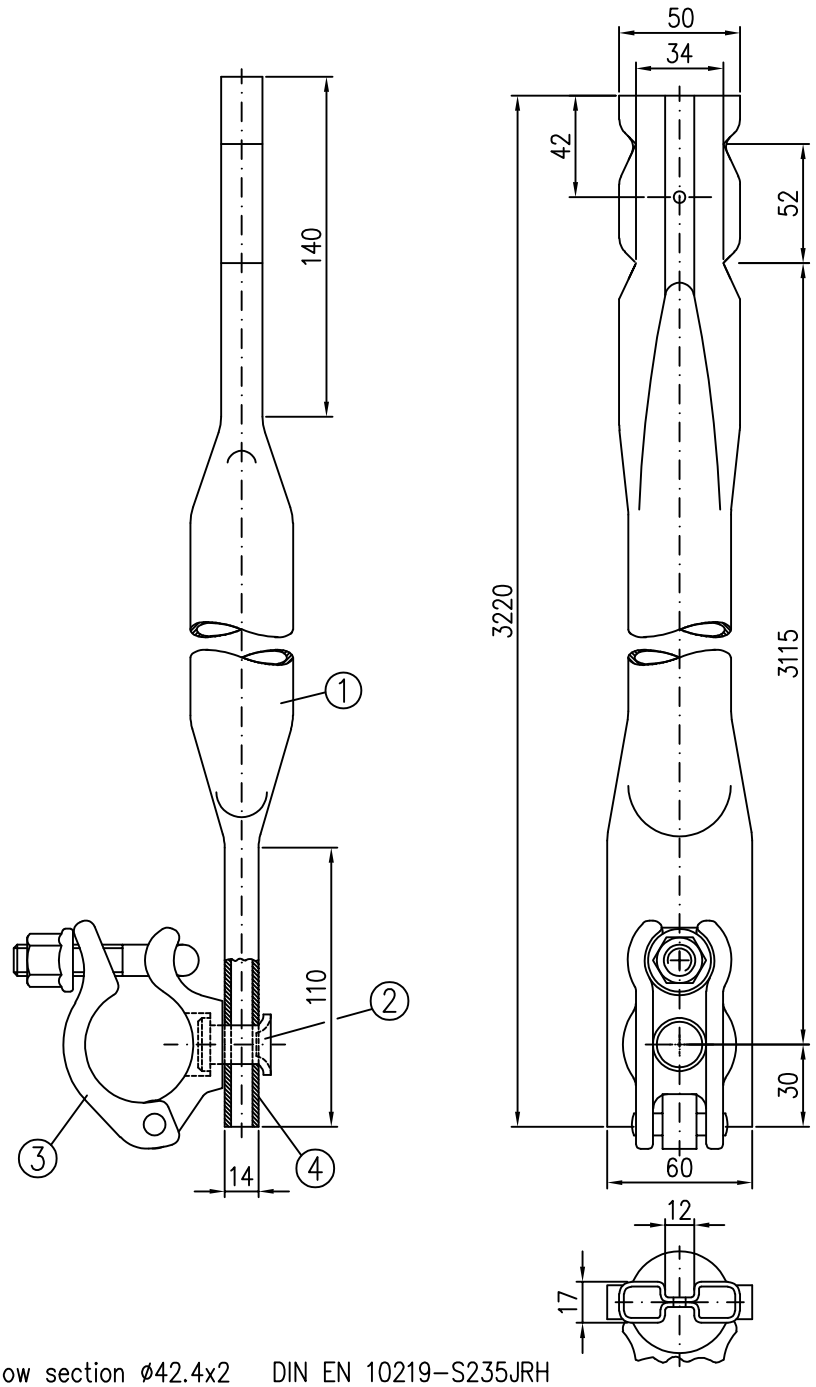
Dimens. [m]	Weight [kg]
3.07	3.6

Frame scaffold ALFIX 70

Diagonal brace 3.07m

A705–A025 06.2020

Annex A,
page 29



①	Circular hollow section ø42.4x2	DIN EN 10219–S235JRH
②	Rivet for diagonal brace ø16	DIN EN 10263–1/2–C10C+C
	alternatively:	DIN EN 10263–3–C10E2C
③	Halfcoupler, class B	DIN EN 74–2
	alternatively: Wedge coupler	see Annex A, page 95
④	Marking	
	galvanised	

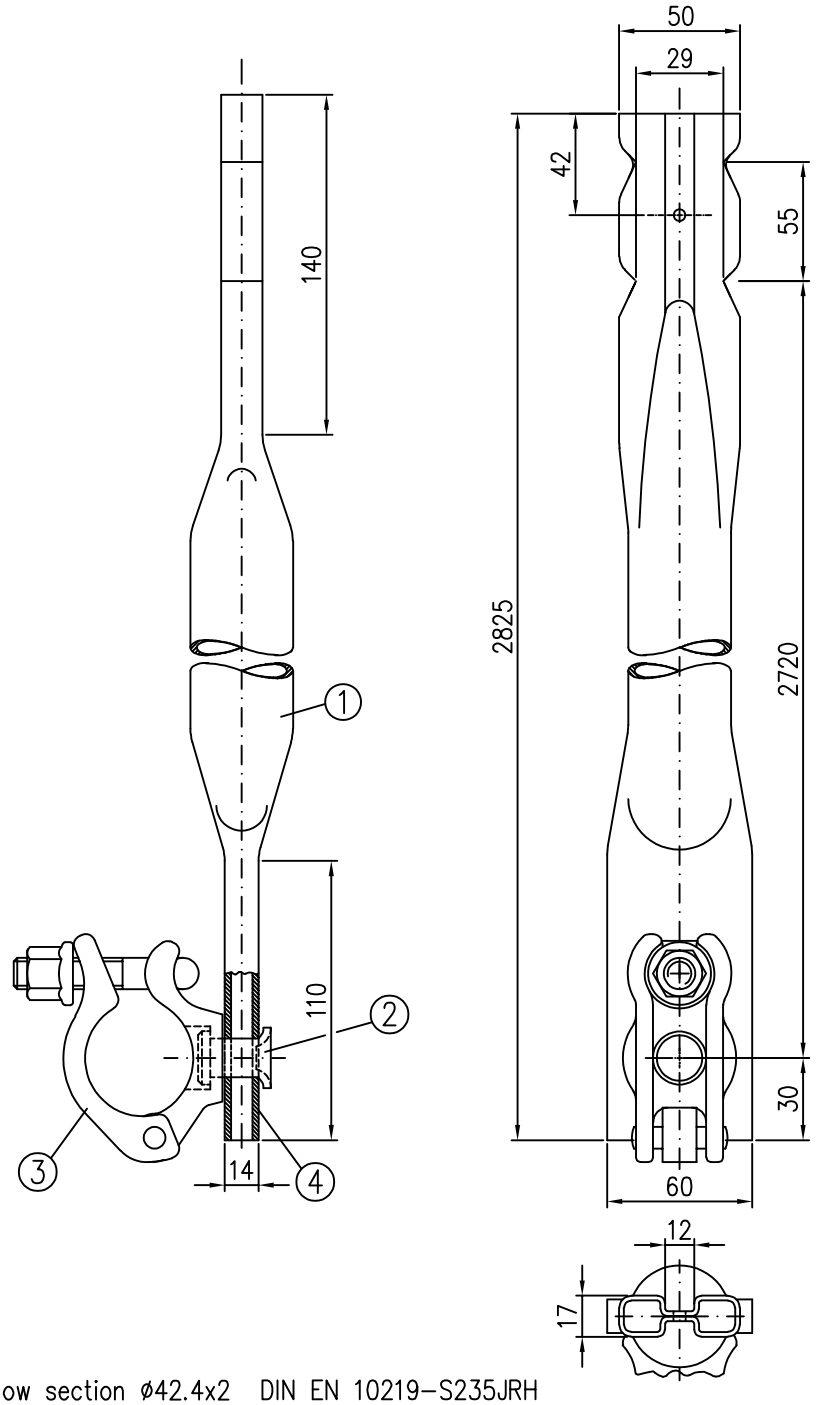
Dimens. [m]	Weight [kg]
2.57	3.2

Frame scaffold ALFIX 70

Diagonal brace 2.57m

A705–A026 06.2020

Annex A,
page 30



①	Circular hollow section ø42.4x2	DIN EN 10219–S235JRH
②	Rivet for diagonal brace ø16	DIN EN 10263–1/2–C10C+C
	alternatively:	DIN EN 10263–3–C10E2C
③	Halfcoupler, class B	DIN EN 74–2
	alternatively: Wedge coupler	see Annex A, page 95
④	Marking	
	galvanised	

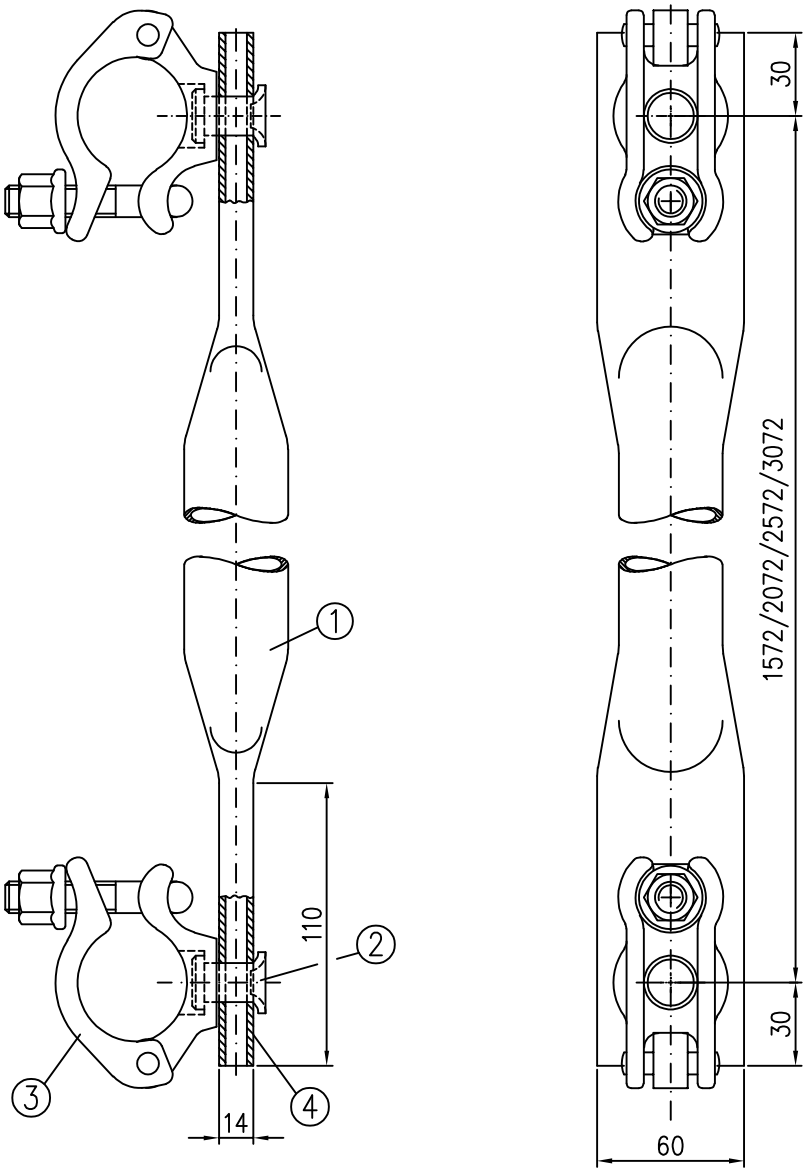
Dimens. [m]	Weight [kg]
2.07	2.8

Frame scaffold ALFIX 70

Diagonal brace 2.07m

A705–A027 06.2020

Annex A,
page 31



①	Circular hollow section ø42.4x2	DIN EN 10219–S235JRH
②	Rivet for diagonal brace ø16	DIN EN 10263–1/2–C10C+C
	alternatively:	DIN EN 10263–3–C10E2C
③	Halfcoupler, class B	DIN EN 74–2
	alternatively: Wedge coupler	see Annex A, page 95
④	Marking	
	galvanised	

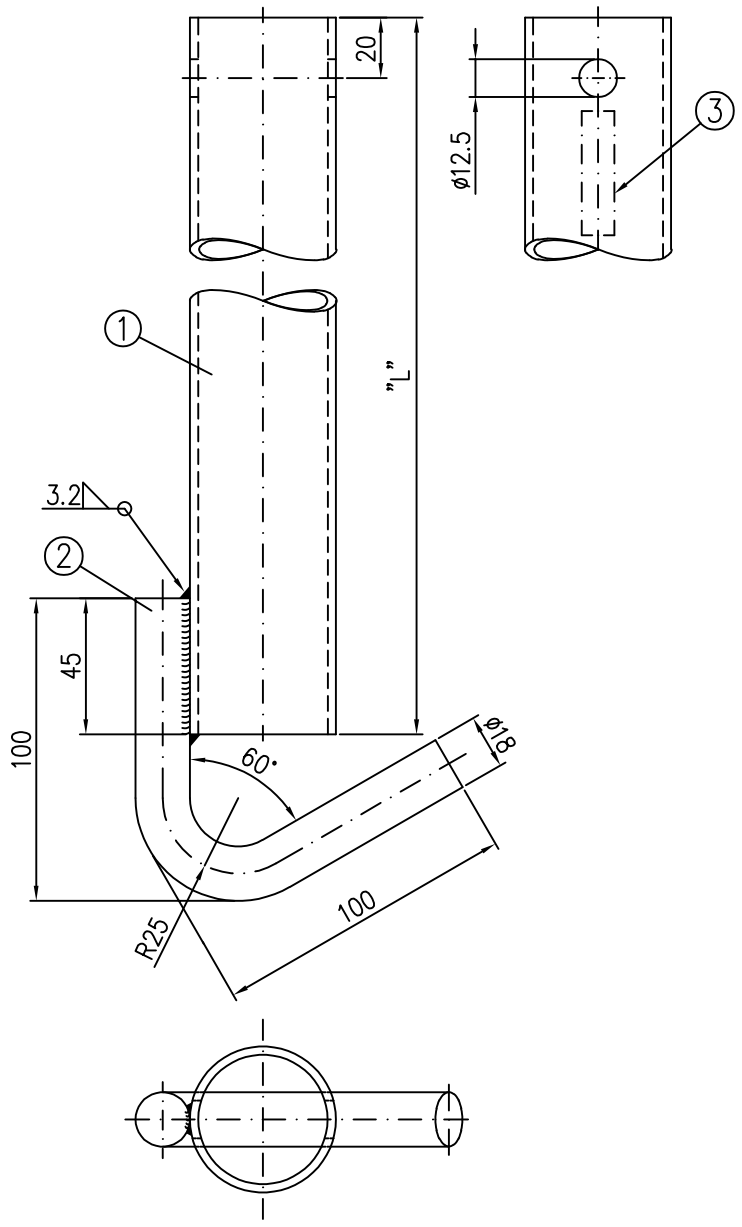
Dimens. [m]	Weight [kg]
1.57	4.9
2.07	5.5
2.57	6.5
3.07	7.6

Frame scaffold ALFIX 70

Horizontal strut

A709–A028 06.2020

Annex A,
page 32



"L" [m]	Weight [kg]
0.15	0.8
0.20	0.9
0.25	1.0
0.30	1.2
0.40	1.5
0.50	1.8
0.60	2.1
0.65	2.3
0.70	2.4
0.80	2.7
1.00	3.3
1.30	4.2
1.50	4.8
2.00	6.2

① Circular hollow section ø48.3xt DIN EN 10219–S235JRH $R_{eH} \geq 320 N/mm^2$
t=2.7mm; alternatively: 3.2mm
② Round ø18 DIN EN 10025–S355J2
③ Marking

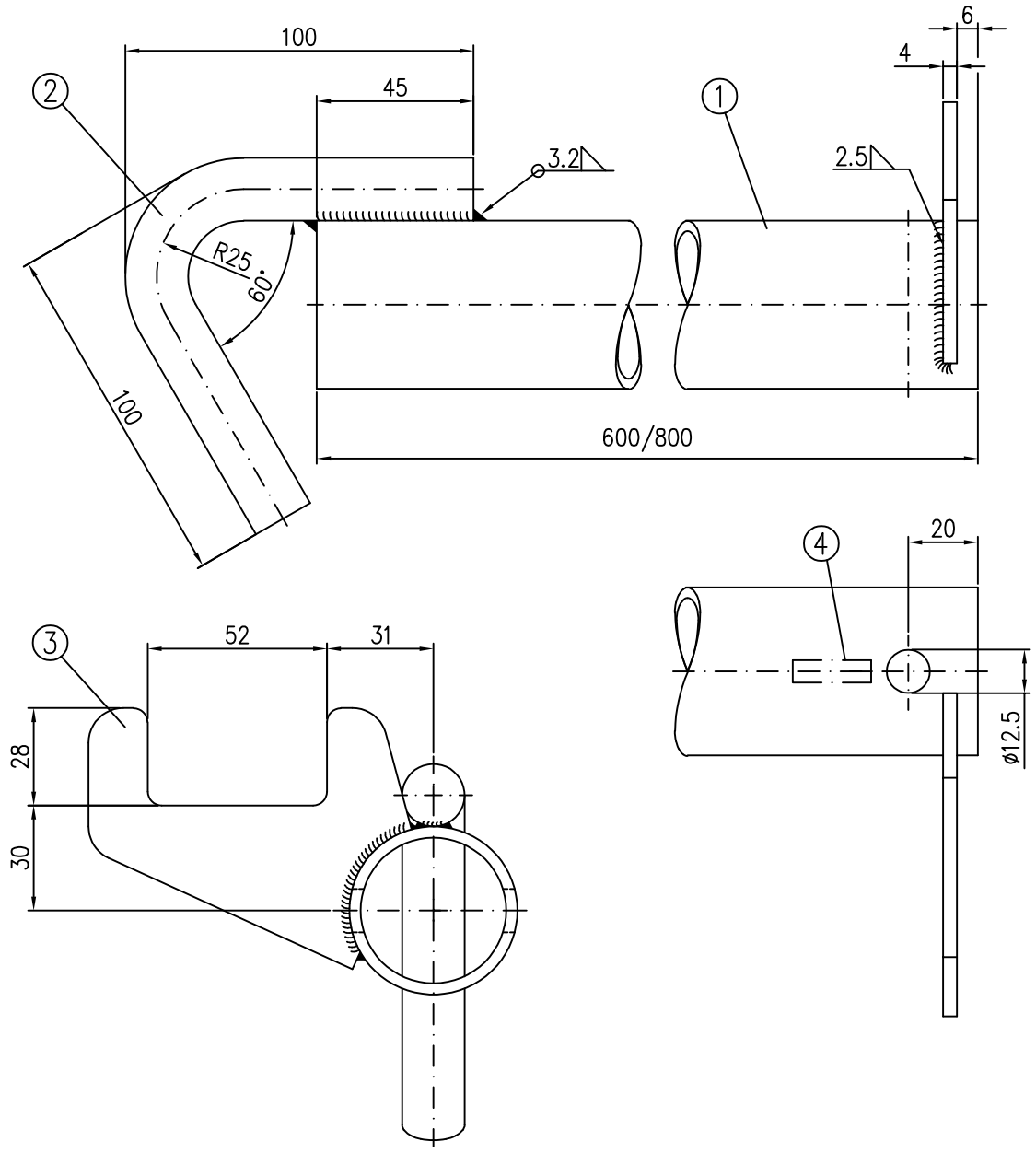
galvanised

Frame scaffold ALFIX 70

Scaffold tie

A709–A129 06.2020

Annex A,
page 33



① Circular hollow section ø48.3xt t=2.7mm; alternatively: 3.2mm	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
② Round ø18	DIN EN 10025–S355J2	
③ Steel metal 4	DIN EN 10025–S235JR	
④ Marking		
galvanised		

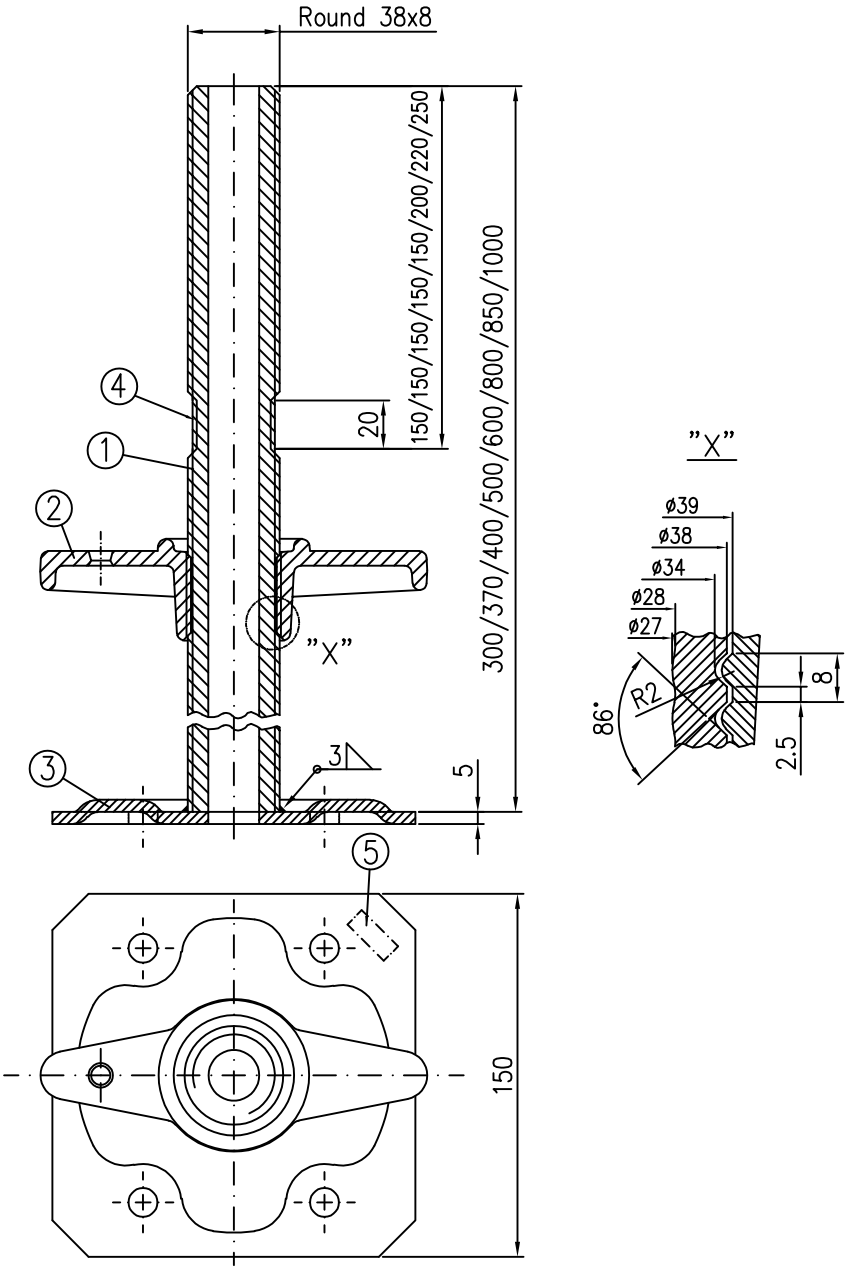
Dimens. [m]	Weight [kg]
0.65	2.3
0.80	2.8

Frame scaffold ALFIX 70

Quick–release scaffold tie

A709–A130 06.2020

Annex A,
page 34



Component no longer manufactured
–only approved for continued use–

① Thread rolled onto circular hollow section ø38x4.5 DIN EN 10219–S355J2H
② Adjusting nut DIN EN 10293–G20Mn5 electrogalvanized
③ Steel metal t=5mm DIN EN 10025–S235JR
④ Thread ruined due to 2 indentations
⑤ Marking

galvanised

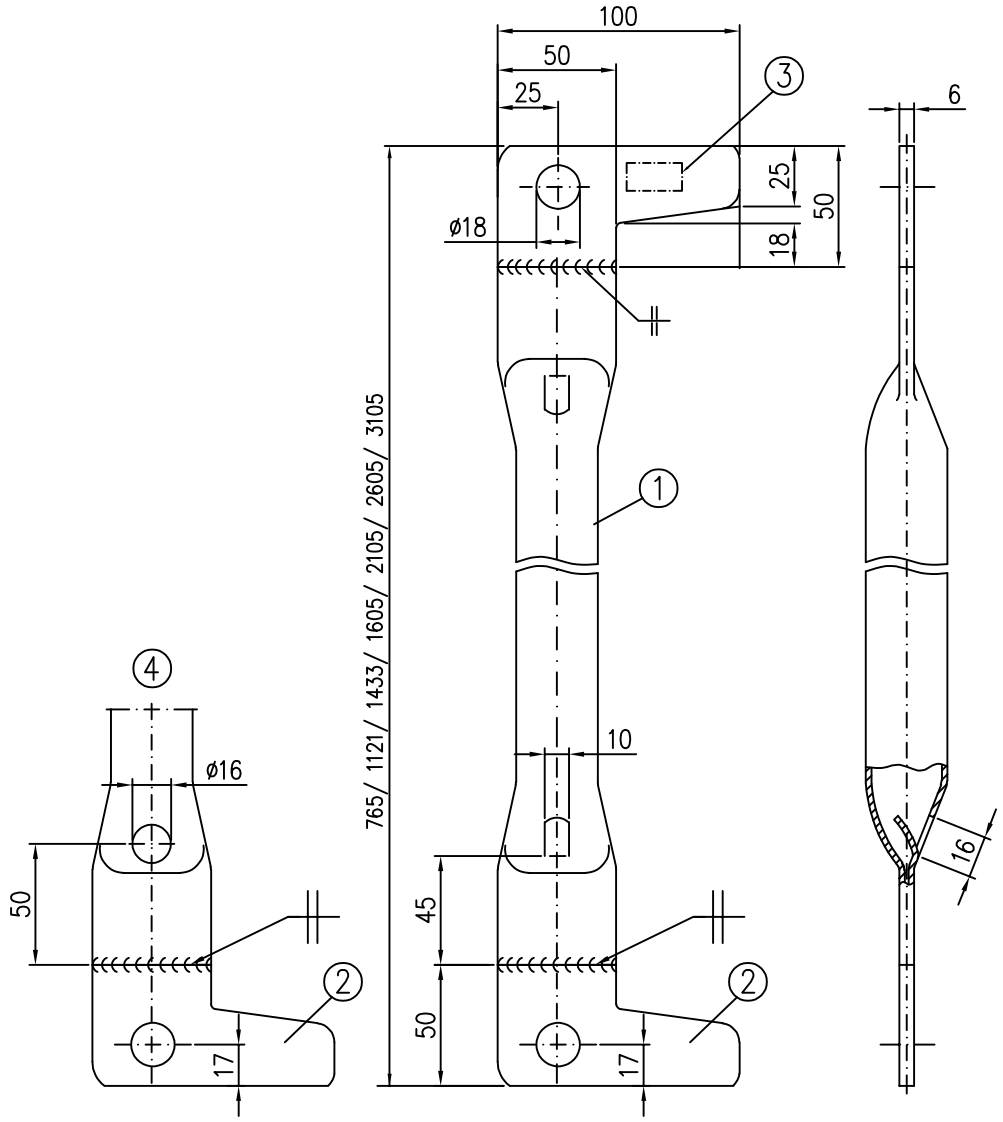
Dimens. [m]	Weight [kg]
0.30	2.5
0.40	2.9
0.50	3.2
0.60	3.6
0.80	4.3
1.00	5.0

Frame scaffold ALFIX 70

Base jack

A709–A031 09.2020

Annex A,
page 35



① <u>for bay length 3.07m</u>

Circular hollow section ø33.7x2.0	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
alternatively: Circular hollow section ø33.7x2.3	DIN EN 10219–S235JRH	
alternatively: Circular hollow section ø38x1.8	DIN EN 10219–S235JRH	

<u>up to bay length 2.57m</u>

Circular hollow section ø33.7x1.8	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
alternatively: Circular hollow section ø33.7x2.0	DIN EN 10219–S235JRH	
alternatively: Circular hollow section ø38x1.8	DIN EN 10219–S235JRH	

② Flat 50x6 DIN EN 10025–S235JR

③ Marking

④ alternatively

galvanised; all welding seams a=2.5mm

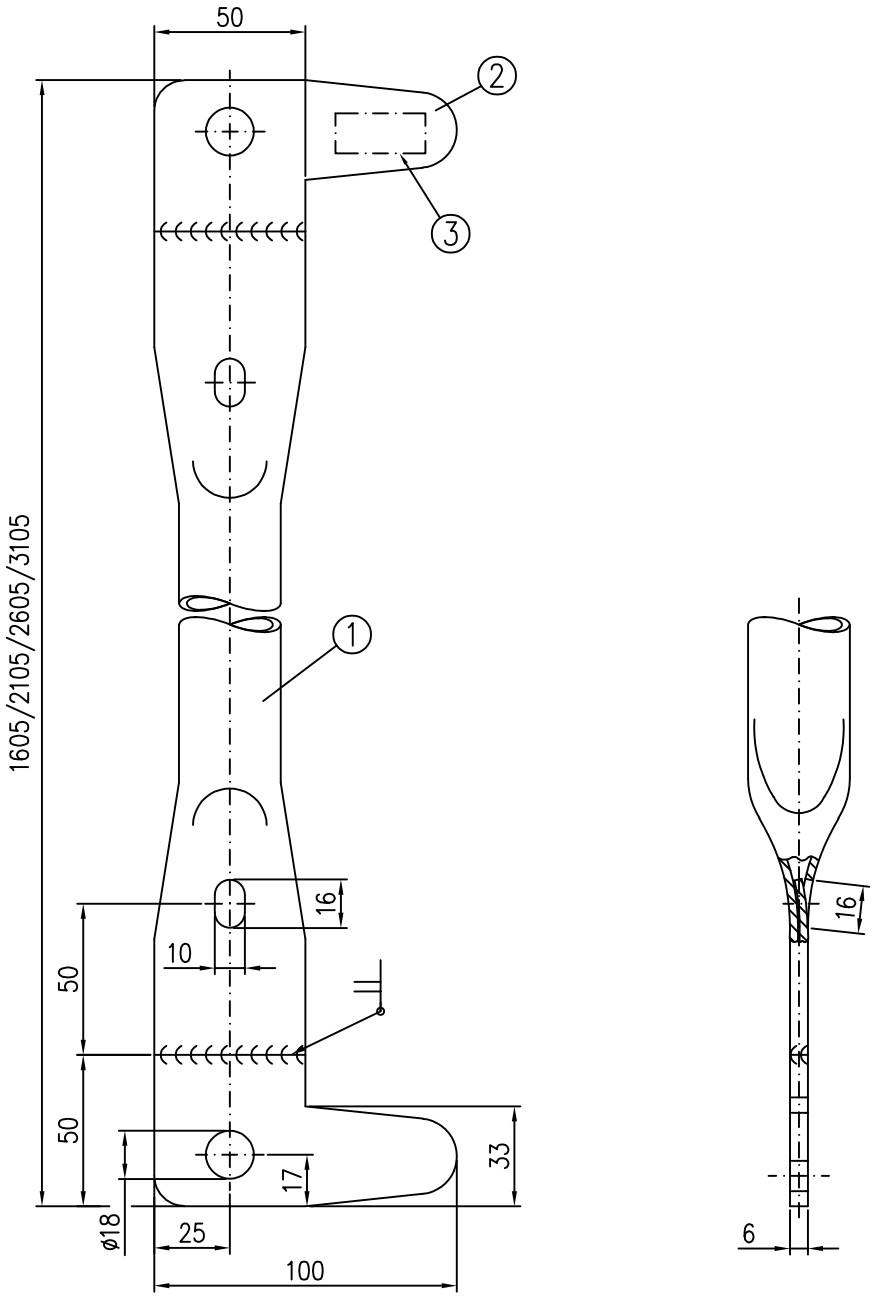
Dimens. [m]	Weight [kg]
0.73	1.7
1.09	2.4
1.40	3.0
1.57	3.4
2.07	4.4
2.57	5.2
3.07	5.7

Frame scaffold ALFIX 70

Guardrail AF

A709–A132 06.2020

Annex A,
page 36



Component no longer manufactured
–only approved for continued use–

① Tube ø33.7x2.6/2.6/2.6/2.9 S235JRH $R_{eH} \geq 320 N/mm^2$
② Flat 50x6 S235JRG2
③ Marking

galvanised; all welding seams a=2.5mm

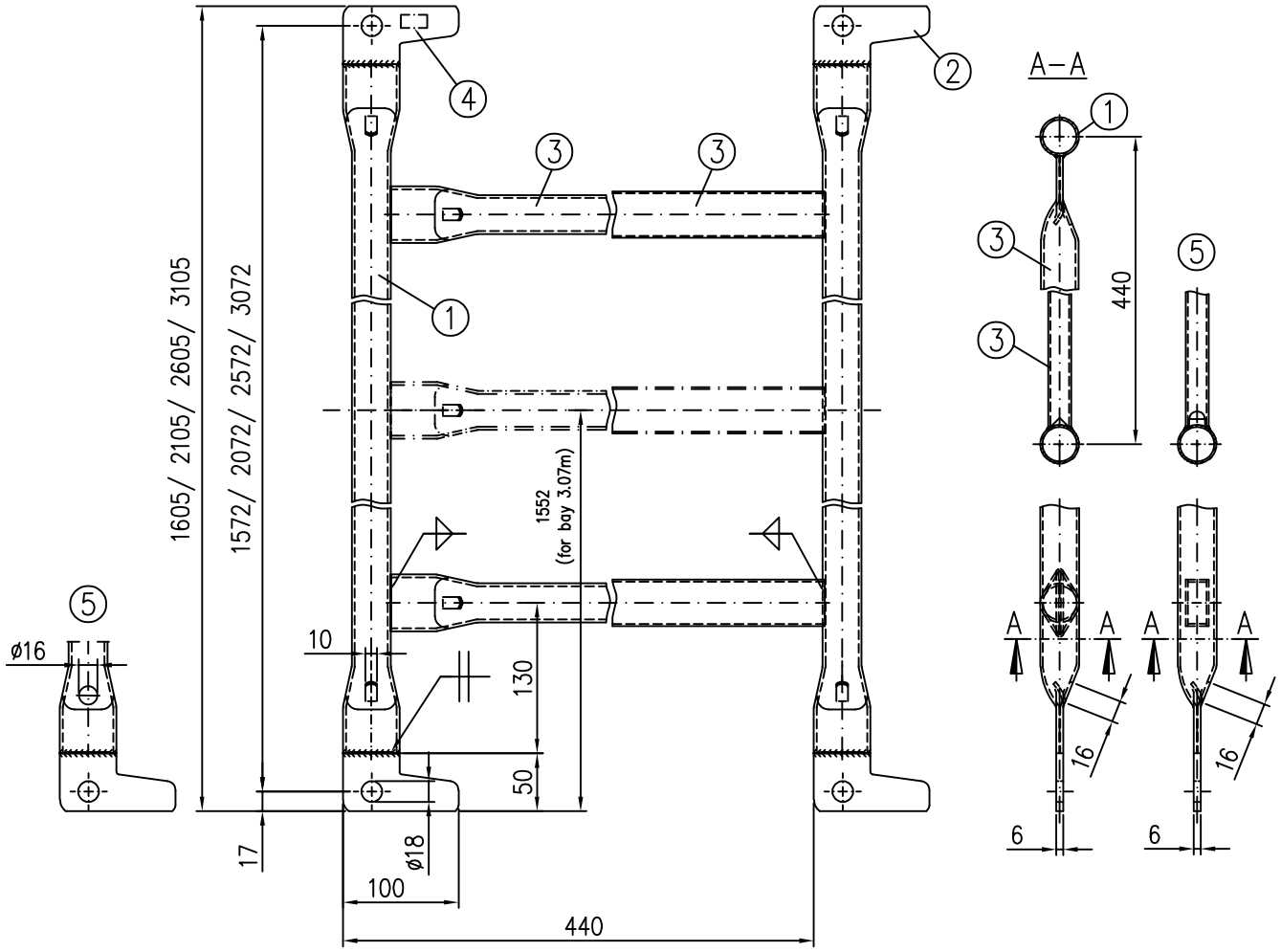
Dimens. [m]	Weight [kg]
1.57	3.0
2.07	4.0
2.57	5.0
3.07	6.0

Frame scaffold ALFIX 70

Handrail

A705–A032 09.2020

Annex A,
page 37



① for bay length 3.07m

Circular hollow section ø33.7x2.0	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
alternatively: Circular hollow section ø33.7x2.3	DIN EN 10219–S235JRH	
alternatively: Circular hollow section ø38x1.8	DIN EN 10219–S235JRH	

up to bay length 2.57m

Circular hollow section ø33.7x1.8	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
alternatively: Circular hollow section ø33.7x2.0	DIN EN 10219–S235JRH	
alternatively: Circular hollow section ø38x1.8	DIN EN 10219–S235JRH	

② Flat 50x6	DIN EN 10025–S235JR	
③ Circular hollow section ø33.7x1.8	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
alternatively: Circular hollow section ø33.7x2.0	DIN EN 10219–S235JRH	
alternatively: Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH	

④ Marking

⑤ alternatively

galvanised; all welding seams a=2.5mm

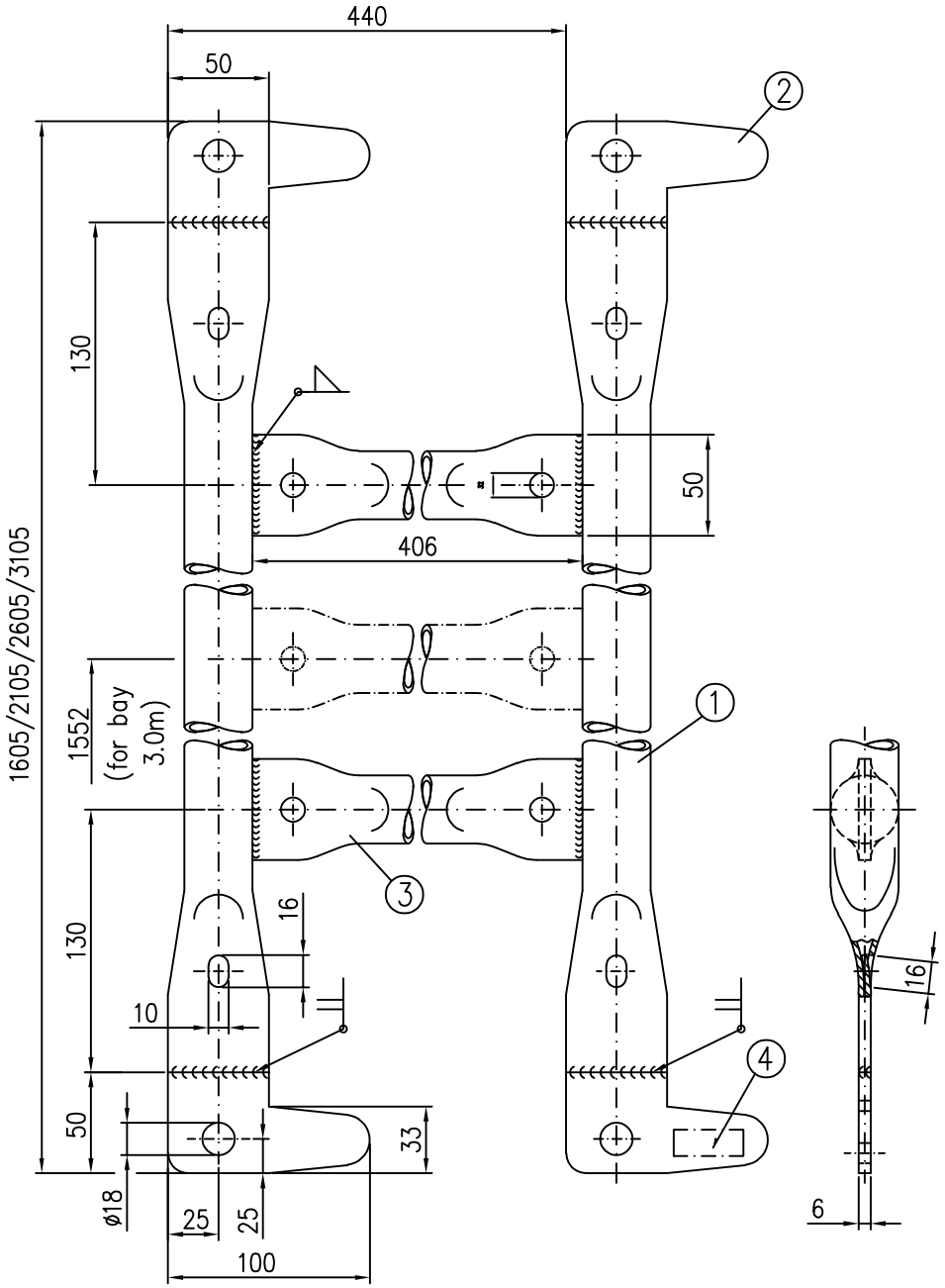
Dimens. [m]	Weight [kg]
1.57	8.4
2.07	10.4
2.57	12.1
3.07	15.6

Frame scaffold ALFIX 70

Double guardrail AF

A709–A133 06.2020

Annex A,
page 38



Component no longer manufactured
–only approved for continued use–

①	Tube ø33.7x2.6/2.6/2.6/2.9	S235JRH
②	Flat 50x6	S235JRG2
③	Tube ø33.7x2.6	S235JRH
④	Marking	

galvanised; all welding seams a=2.5mm

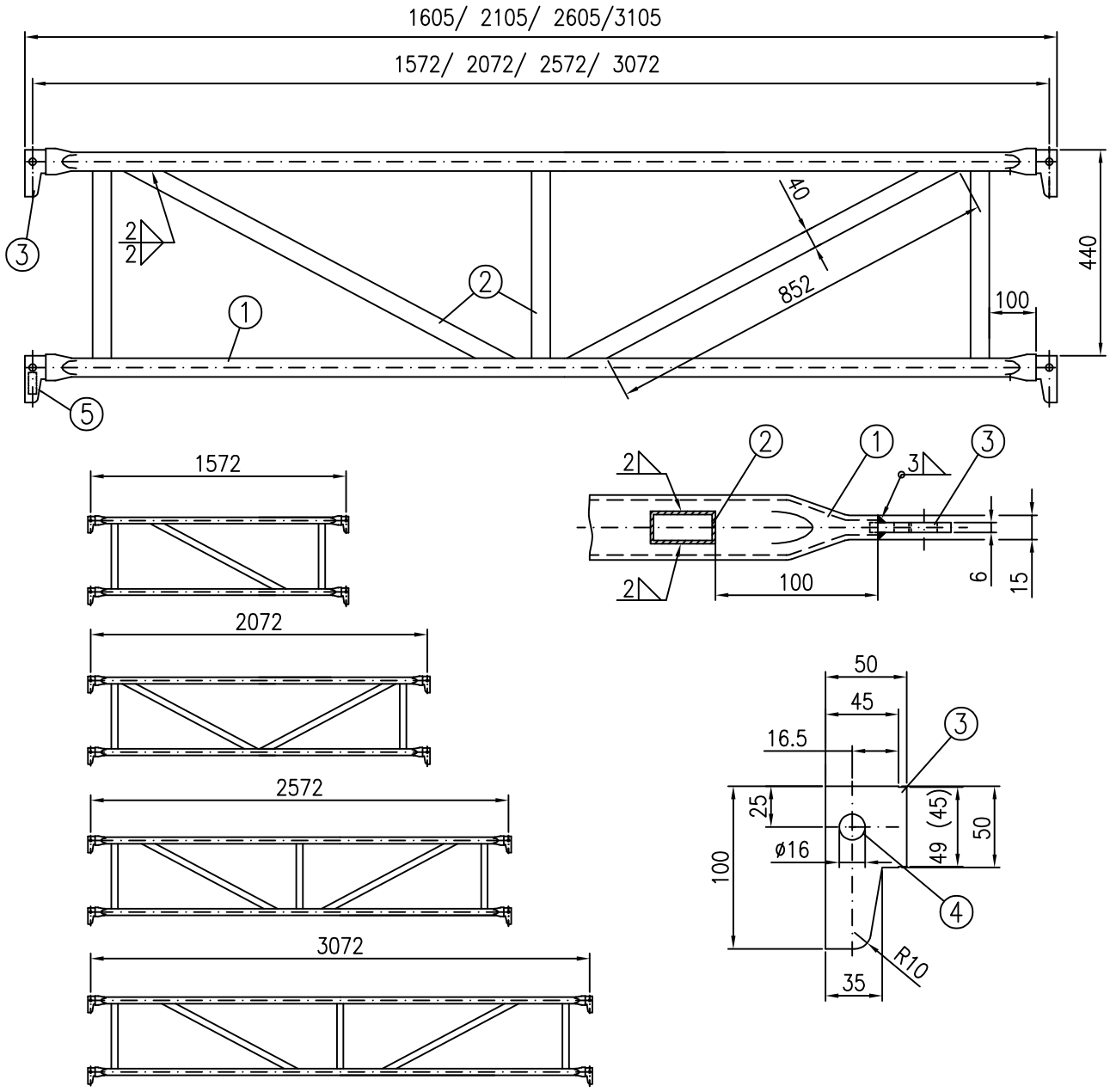
Dimens. [m]	Weight [kg]
1.57	8.0
2.07	11.0
2.57	12.0
3.07	13.5

Frame scaffold ALFIX 70

Double guardrail

A705–A033 09.2020

Annex A,
page 39



①	Circular hollow section ø40x2	DIN EN 755-2	EN AW-6082-T5
②	Rectangular hollow section 40x20x2	DIN EN 755-2	EN AW-6063-T66
③	Flat 50x6	DIN EN 755-2	EN AW-6060-T66
④	alternatively without boreholes ø16		
⑤	Marking	131-MIG: type 4 filler material (EC9)	

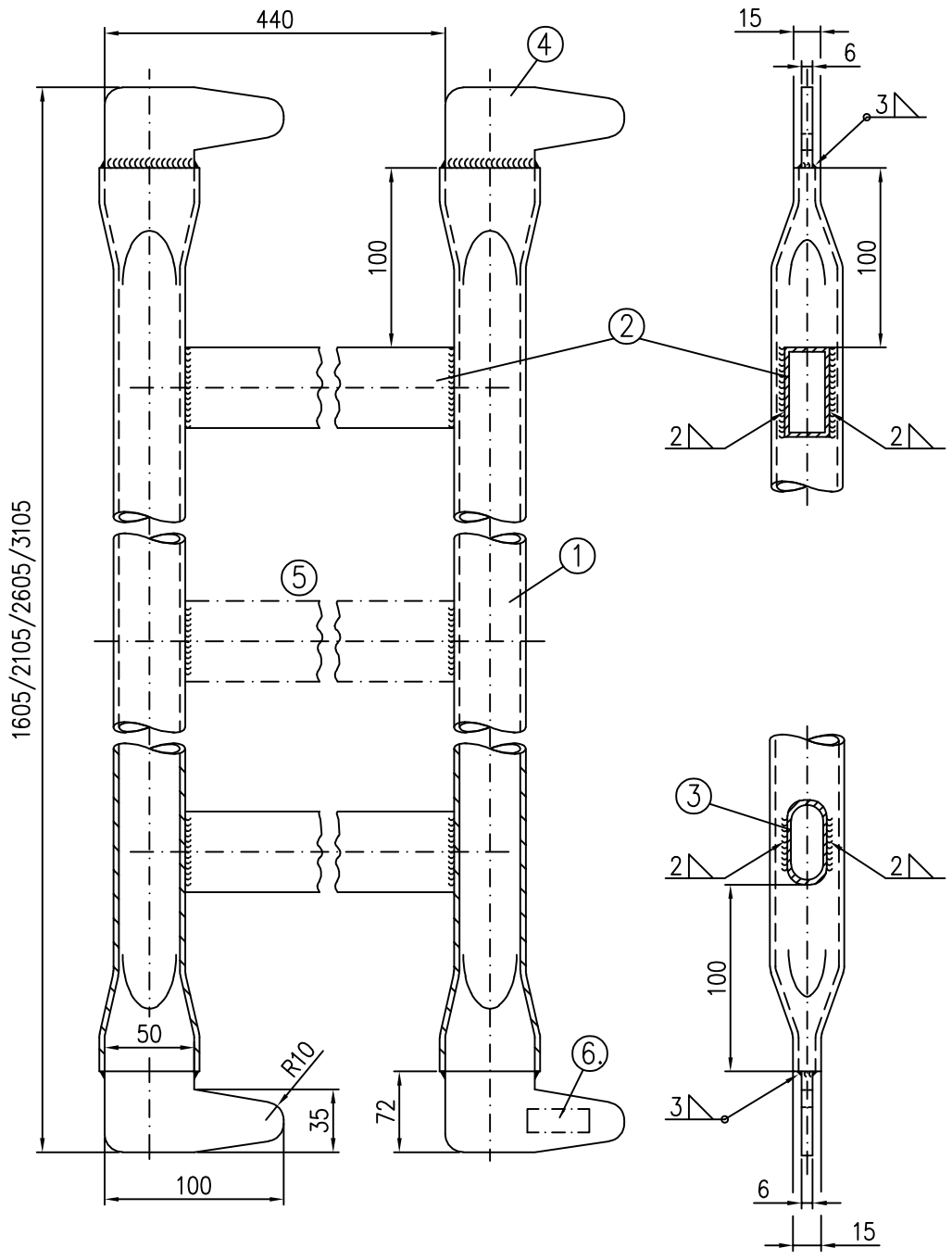
Dimens. [m]	Weight [kg]
1.57	3.3
2.07	4.5
2.57	5.4
3.07	6.0

Frame scaffold ALFIX 70

Double guardrail AF, aluminium

A709-A134 10.2020

Annex A,
page 40



① Tube ø40x3 — EN AW-6082-T5 (AlMgSi1F28)
② Box 40x20x2 — EN AW-6063-T66 (AlMgSi0.5F22)
③ End-of-life product with oval tube — AlMgSi0.5F22
④ Flat 50x6 — EN AW-6060-T66 (AlMgSi0.5F22)
⑤ for lengths of 2.5m and longer
⑥ Marking

Component no longer manufactured
-only approved for continued use-

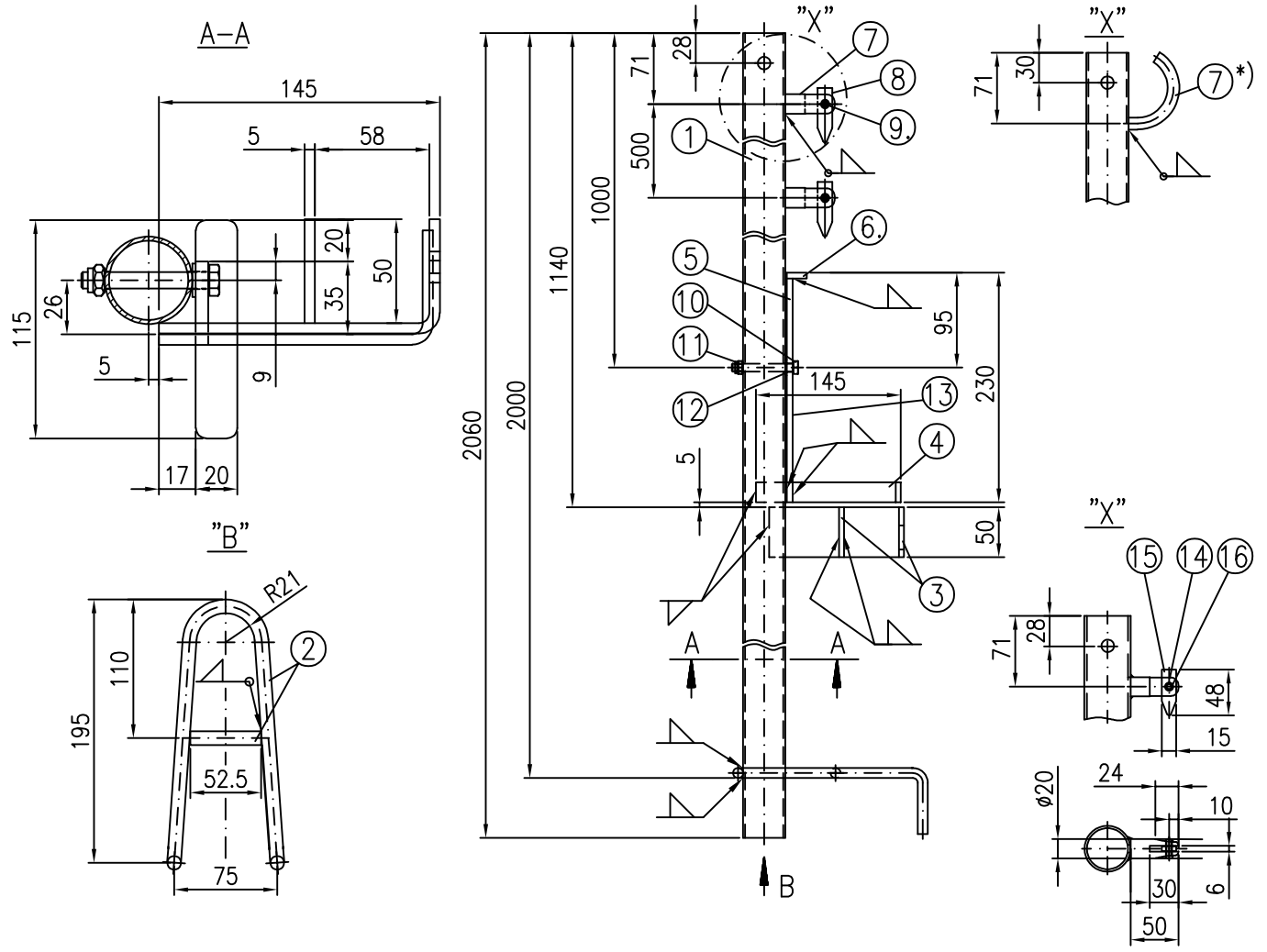
Dimens. [m]	Weight [kg]
1.57	3.0
2.07	3.5
2.57	4.0
3.07	4.5

Frame scaffold ALFIX 70

Double guardrail, aluminium

A705-A034 09.2020

Annex A,
page 41



①	Circular hollow section ø42.4x2	DIN EN 10219–S235JRH
②	Round ø10	DIN EN 10025–S235JR
③	Flat 50x5	DIN EN 10025–S235JR
④	Flat 20x6	DIN EN 10025–S235JR
⑤	Flat 35x6	DIN EN 10025–S235JR
⑥	Flat 20x6	DIN EN 10025–S235JR
⑦	Tilting pin ø20x50 alternatively changed design ⑭	DIN EN 10025–S235JR
	*) alternatively discontinued design round ø12	DIN EN 10025–S235JR
⑧⑮	Locking lug t=4	DIN EN 10025–S235JR
⑨	Thread pin	DIN EN ISO–M6x18–steel–galvanised
	alternatively: Blind rivet A 6x18 aluminium/steel ⑯	DIN EN ISO 15983
⑩	Hexagon screw	DIN EN ISO 4014–M8x60–8.8–galvanised
⑪	Hexagon nut, self–locking	DIN EN ISO 10511–M8–8–galvanised
⑫	Disc	DIN EN ISO 7089–8.4–steel–galvanised
⑬	Marking	
	galvanised; all welding seams a=2mm	

Dimens. [m]	Weight [kg]
2.00	6.2

Frame scaffold ALFIX 70

Advanced guardrail post

A709–A135 06.2020

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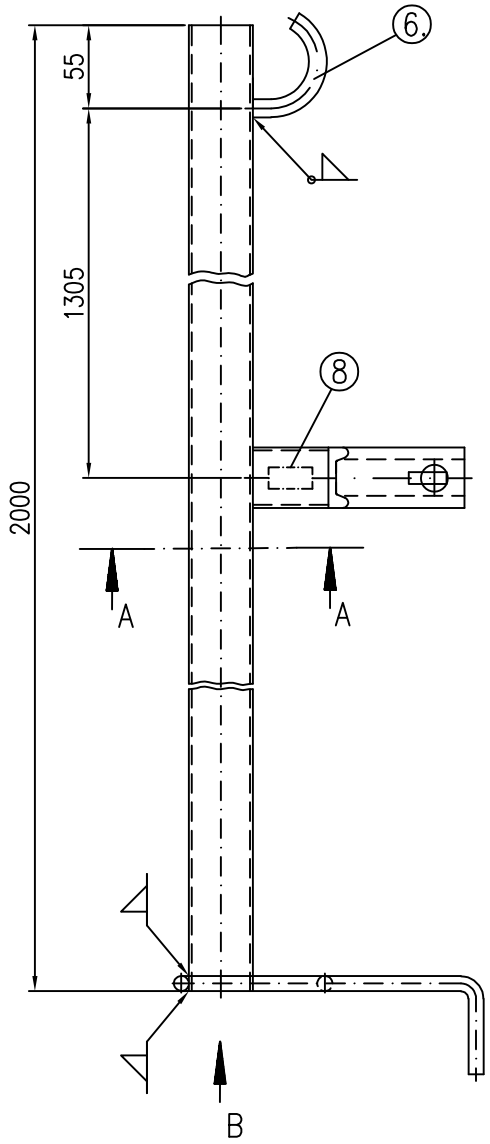
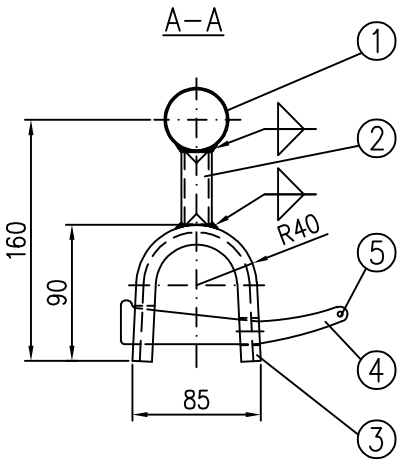
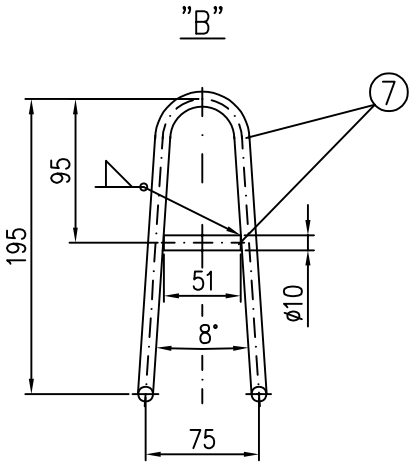
page 42







① Tube 42.4x2	S235JRG2	
② Box 40x20x2	S235JRH	
③ Bended profile section 40x12x5x7	S235JRH	Component no longer manufactured –only approved for continued use–
④ Wedge plus II	S550MC	
⑤ Round head rivet ø5x10	QSt 32–2 DIN 660 galvanised with rivet head of rivet Ø4	
⑥ Round ø12	S235JRG2	
⑦ Round ø10	S235JRG2	
⑧ Marking		

galvanised; all welding seams a=2mm

Dimens. [m]	Weight [kg]
2.00	6.2

Frame scaffold ALFIX 70

Advanced guardrail post 2.00m

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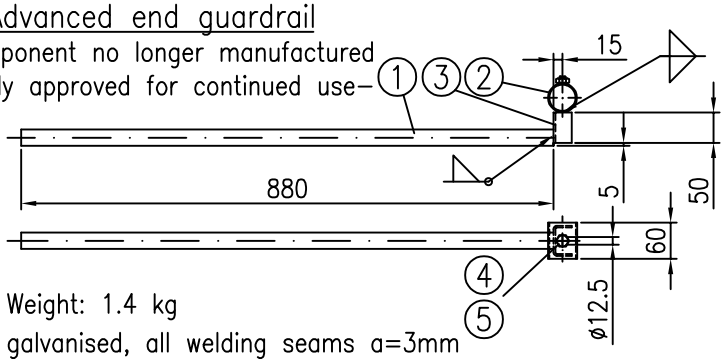
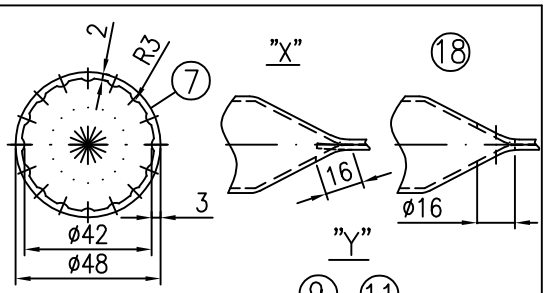
page 43

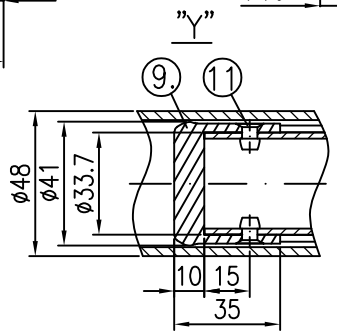
Advanced end guardrail

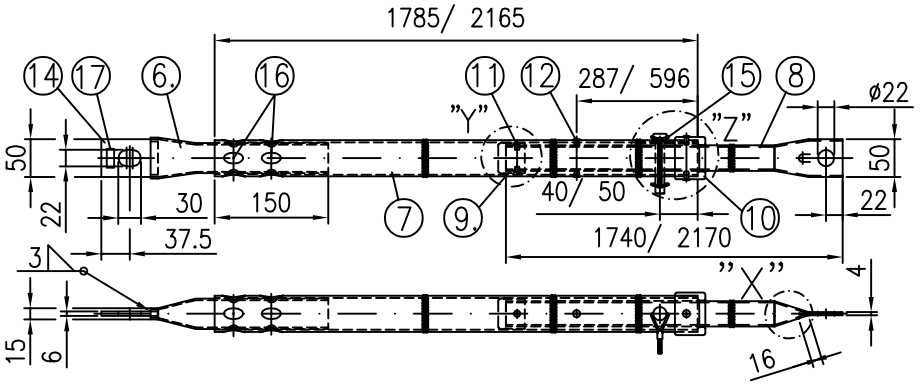
Component no longer manufactured
–only approved for continued use–

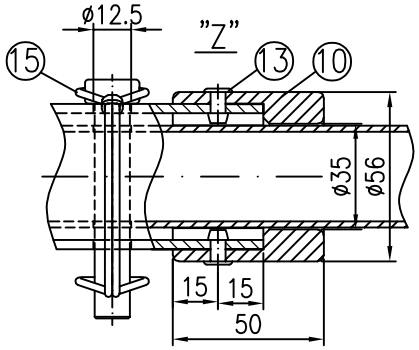


Weight: 1.4 kg
galvanised, all welding seams a=3mm









①	Circular hollow section ø26.9x2.6	DIN EN 10219–S235JRH
②	Circular hollow section ø48.3x2.3	DIN EN 10219–S235JRH
③	U–profile 50x30x3	DIN EN 10025–2–S235JR
	alternatively: U–profile 47x30x3	DIN EN 10025–2–S235JR
④	Hexagon screw	DIN EN ISO 4014–M10x60–8.8–galvanised
⑤	Hexagon nut, self–locking	DIN EN ISO 10511–M10–8–galvanised
⑥	Circular hollow section 40x2	DIN EN 755–2 EN AW–6060–T66
⑦	Circular hollow section special section ø48 2/3	DIN EN 755–2 EN AW–6063–T66
⑧	Circular hollow section ø33.7x2	DIN EN 10219–S235JRH
⑨	Sleeve ø41x35	PA6
⑩	Sleeve ø56x50	PA6
⑪	Blind rivet, stainless steel A2/A2 5x10	DIN EN ISO 15984
⑫	Blind rivet A 5x8	DIN EN ISO 15979 aluminium/steel
⑬	Blind rivet A 5x12	DIN EN ISO 15979 aluminium/steel
⑭	Flat 50x6	DIN EN 755–2 EN AW–6060–T66
⑮	Tube linchpin 11 10x50	Transport security
	alternatively: tube linchpin 12 10x60	
⑯	4 point–joint pressed connections	
⑰	Marking	
⑱	alternatively	131–MIG: type 4 filler material (EC9)
	all components made of galvanised steel	

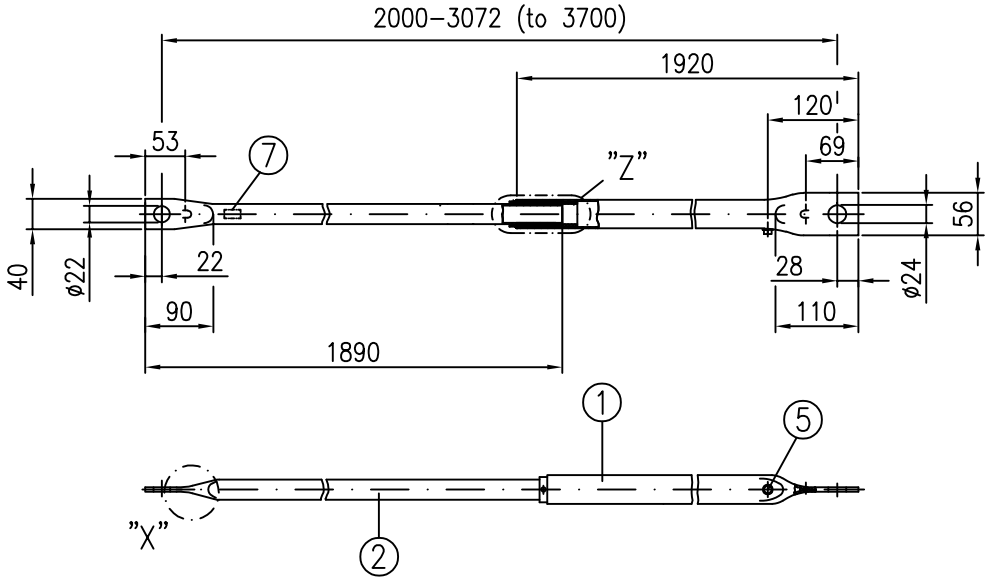
Dimension [m]	Weight [kg]
2.00–2.57	4.7
2.50–3.07	6.0

Frame scaffold ALFIX 70

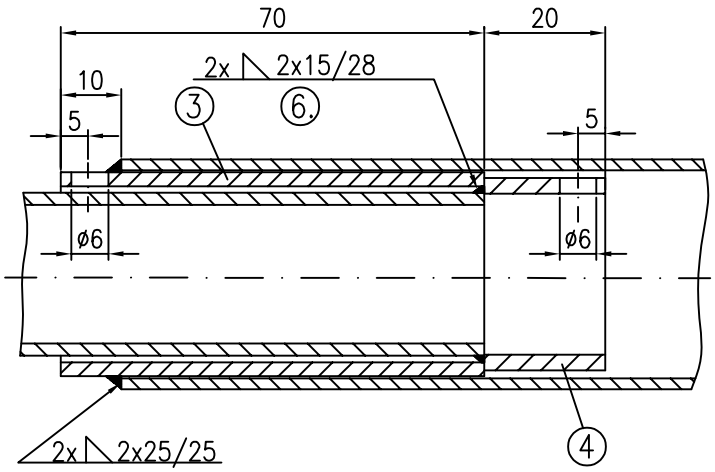
Advanced end guardrail / Aluminium telescopic guardrail

A709–A136 10.2020

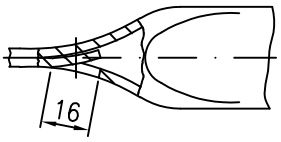
Annex A,
page 44



"Z"



"X"



①	Tube 38x2	S235JRH
②	Tube 26.9x2.6	S235JRH
③	Tube 33.7x2.3	S235JRH
④	Tube 31.8x2.6	S235JRH
⑤	Self–drilling screw ST6 3x16	DIN 7504–K–steel–galvanised
⑥	Pos. 2 and 4: finish after welding	
⑦	Marking	

galvanised

Component no longer manufactured
–only approved for continued use–

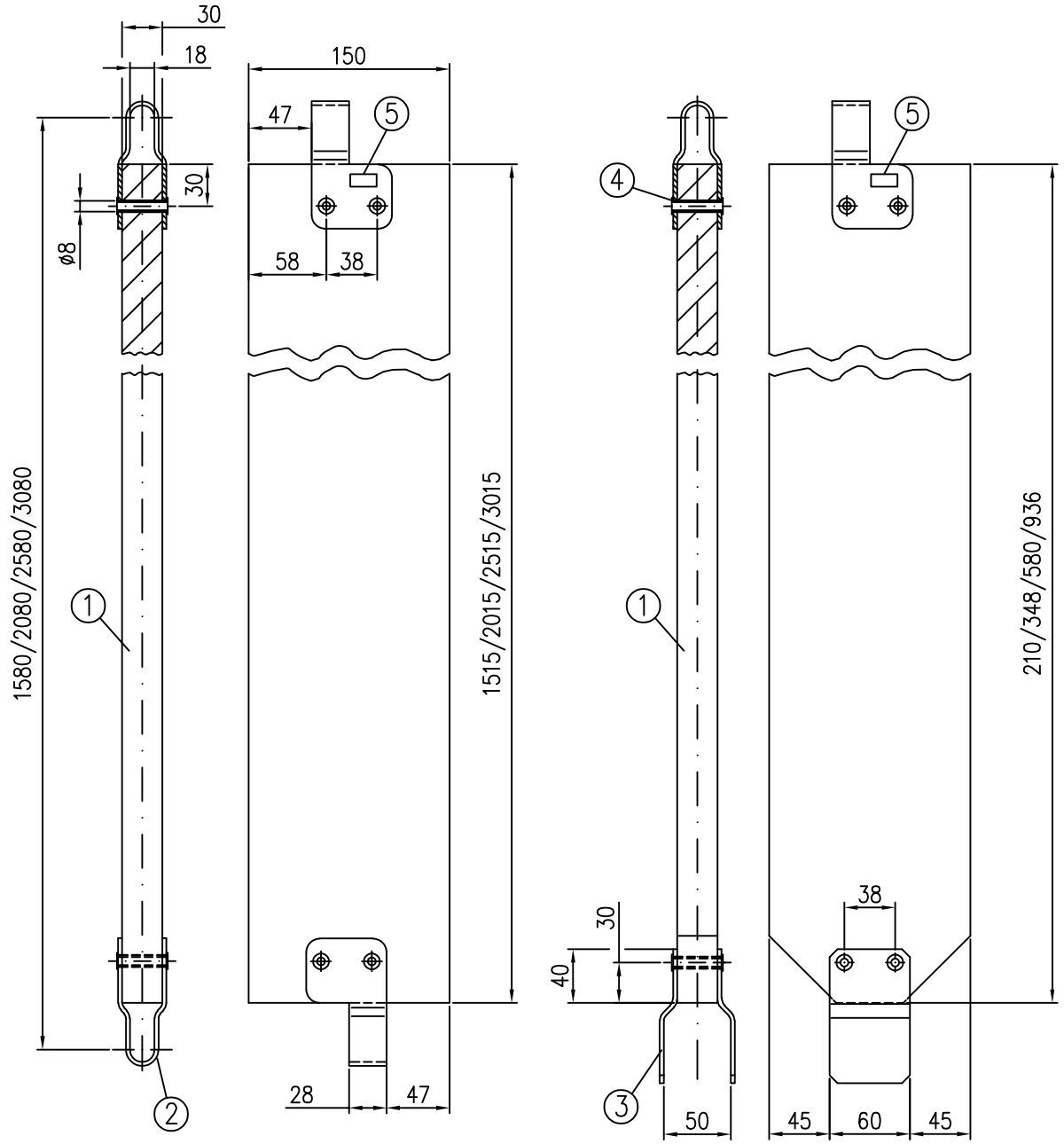
Dimension [m]	Weight [kg]
2.00–3.07	6.8

Frame scaffold ALFIX 70

Telescopic guardrail 2.00–3.07m

A709–A036 09.2020

Annex A,
page 45



① Pine wooden deck, visual strength grade S10

② Slit strip 60x3	DIN EN 10111–DD11	$R_{eH} \geq 240 N/mm^2$
alternatively:	DIN EN 10346–DX52D+Z275	$R_{eH} \geq 240 N/mm^2$; $R_m \geq 360 N/mm^2$
③ Slit strip 60x3	DIN EN 10111–DD11	$R_{eH} \geq 240 N/mm^2$
alternatively:	DIN EN 10346–DX52D+Z275	$R_{eH} \geq 240 N/mm^2$; $R_m \geq 360 N/mm^2$
④ Tubular rivet	DIN 7340–A8x0.75x39–steel–electrogalvanized	
⑤ Marking		

all components made of galvanised steel

Component no longer manufactured
–only approved for continued use–

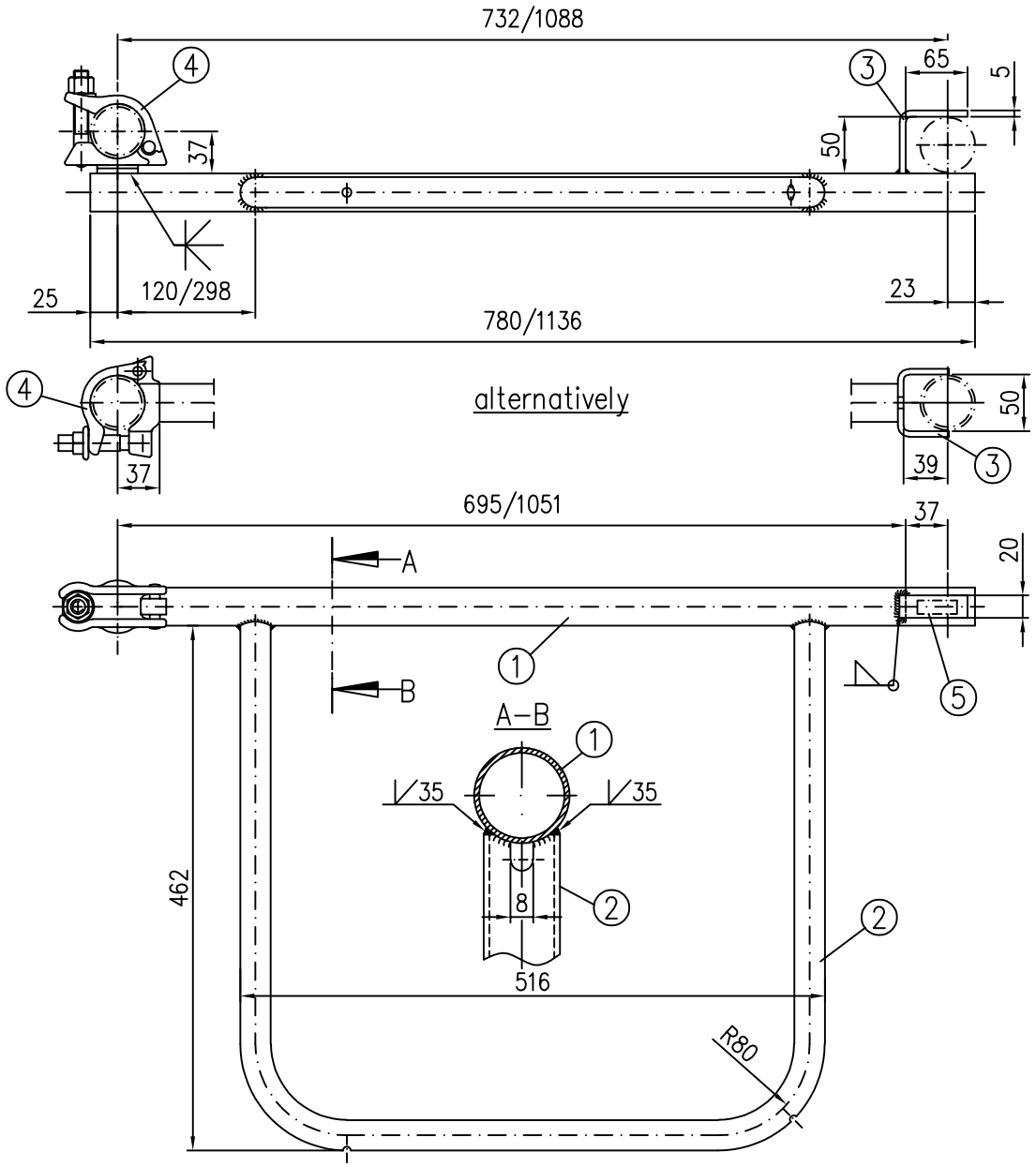
Dimens. [m]	Weight [kg]
Toeboard	
1.57	4.0
2.07	5.0
2.57	6.5
3.07	7.5
End toeboard	
0.36	0.9
0.50	1.3
0.73	1.5
1.09	2.0

Frame scaffold ALFIX 70

Toeboard; End toeboard

Annex A,
page 46

A709–A137 09.2020



① Circular hollow section ø33.7x1.8	DIN EN 10219–S235JRH	R_{eH} ≥320N/mm²
alternatively: Circular hollow section ø33.7x2.0	DIN EN 10219–S235JRH	
② Circular hollow section ø26.9x2	DIN EN 10219–S235JRH	
③ Flat 20x5	DIN EN 10025–S235JR	
alternatively: Steel plate 50x5	DIN EN 10025–S235JR	
④ Halfcoupler, class B	DIN EN 74–2	
alternatively: Wedge coupler	see Annex A, page 95	
⑤ Marking		
⑥ Single end guardrail without pos. ②		
galvanised; all welding seams a=2mm		

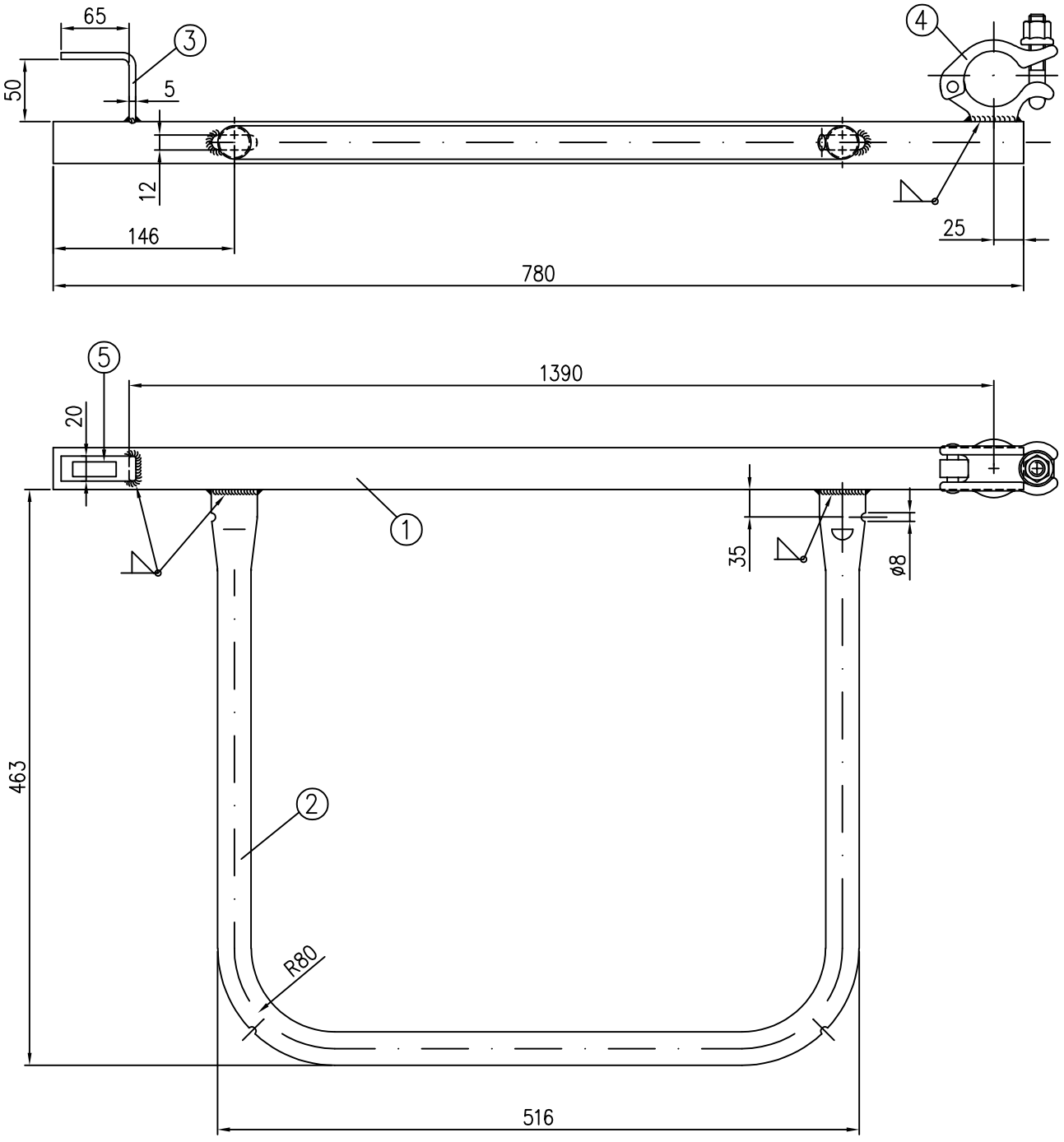
	Dimens. [m]	Weight [kg]
Double end guardrail (	0.73	3.8
	1.09	4.5
Single end guardrail (	0.73	1.9
	1.09	2.4

Frame scaffold ALFIX 70

Double end guardrail AF, Single end guardrail

Annex A,
page 47

A709–A138 06.2020



① Tube 33.7x2.6	S235JRH	
② Tube 26.9x2	S235JRH	
③ Flat 20x5	S235JRG2	
④ Approved halfcoupler		
⑤ Marking		
galvanised; all welding seams a=2.5mm		

Component no longer manufactured
–only approved for continued use–

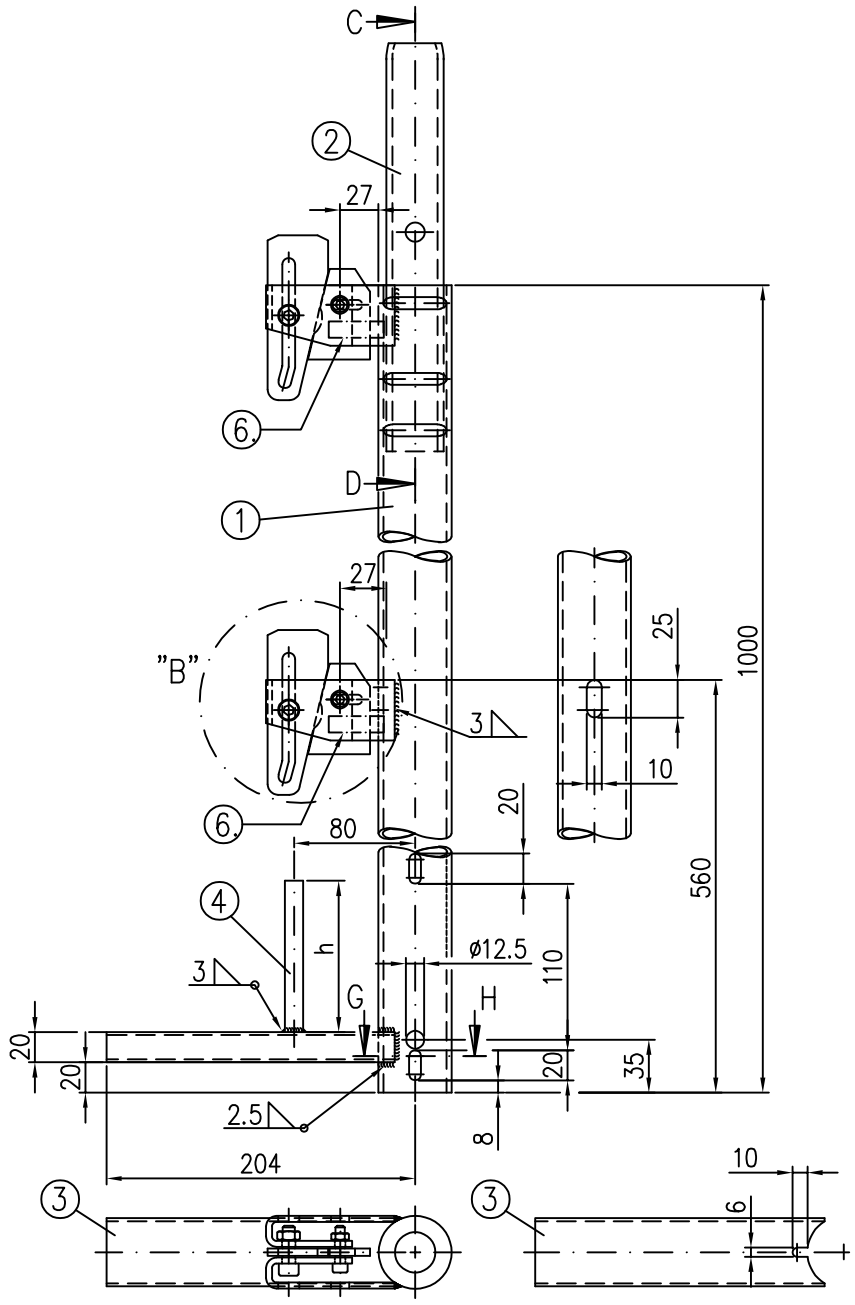
Dimens. [m]	Weight [kg]
0.73	3.0

Frame scaffold ALFIX 70

Double end guardrail

A705–A038 09.2020

Annex A,
page 48



h
[mm]
100
110

①	Circular hollow section ø48.3x2.7	DIN EN 10219–S235JRH $R_{eH} \geq 320 N/mm^2$
	alternatively: Circular hollow section ø48.3x2.7 without ②	DIN EN 10219–S460MH
②	Circular hollow section ø38x3.6	DIN EN 10219–S235JRH
③	Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH $R_{eH} \geq 320 N/mm^2$
④	Round ø12xh	DIN EN 10025–S235JR
⑤	Linear pressed connection; alternatively: 4 point–joint pressed connections	
⑥	Marking	

galvanised

Sectional views see annex A, page 1; for details see annex A, page 3

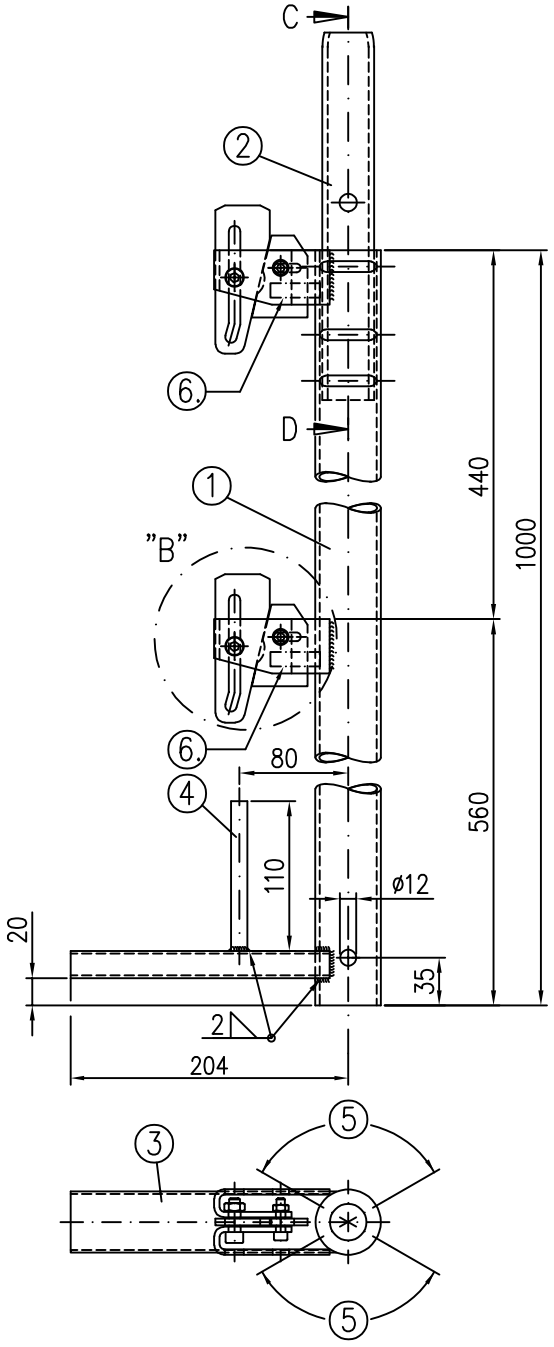
Dimens. [m]	Weight [kg]
1.00	5.4

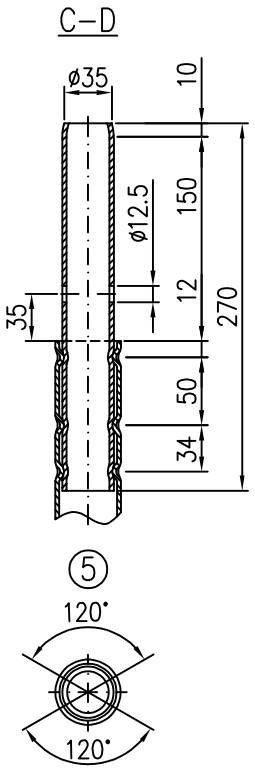
Frame scaffold ALFIX 70

Guardrail post AF, single

A709–A139 10.2020

Annex A,
page 49





① Tube 48.3x3.2 $R_{eH} \geq 320 N/mm^2$
② Tube 38x4 $R_{eH} \geq 320 N/mm^2$
③ Tube 45x20x2
④ Round ø12x110
⑤ Pressed connection 120°
⑥ Marking

S235JRG2; galvanised

For details see annex A, page 6

Component no longer manufactured
–only approved for continued use–

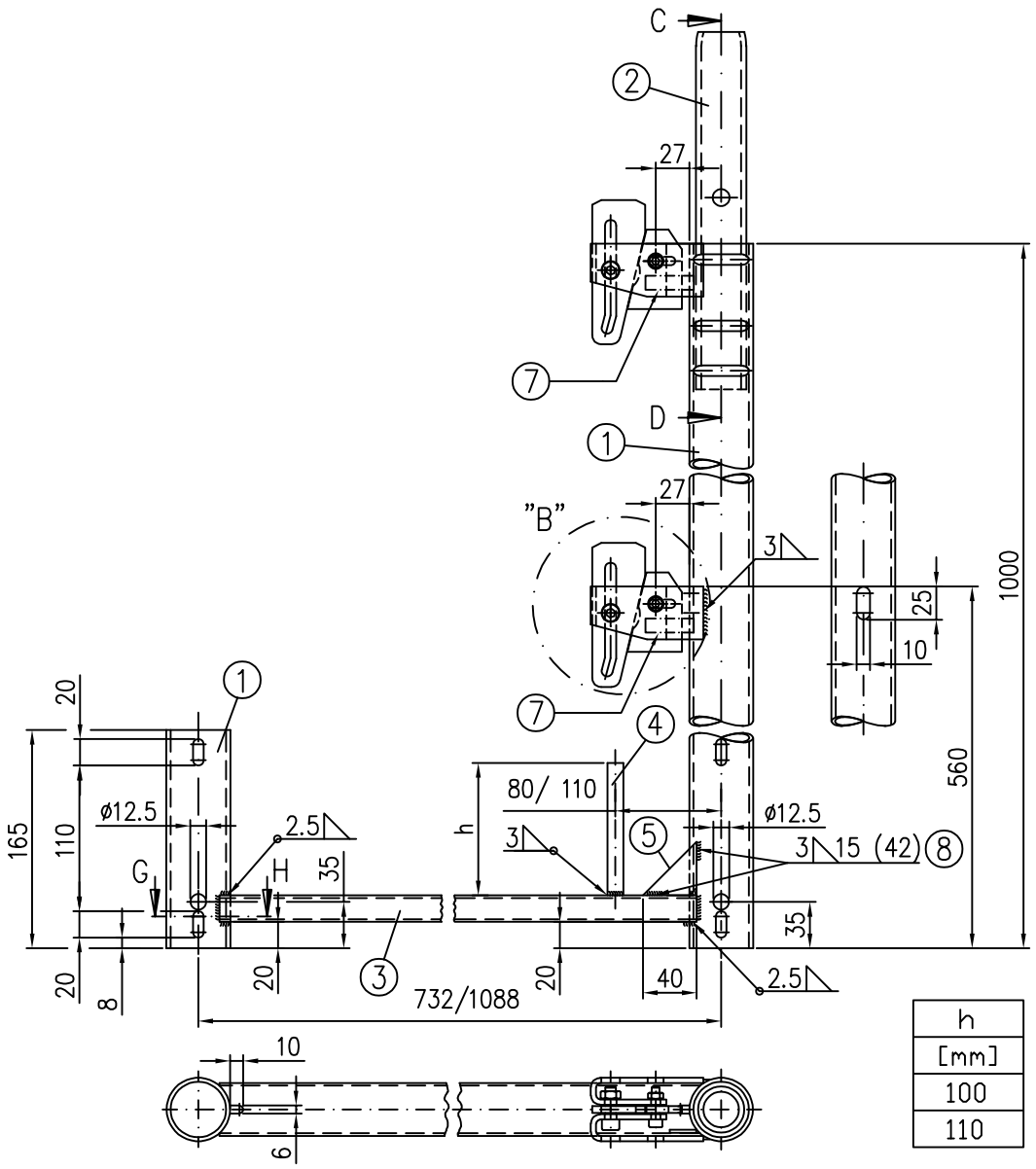
Dimens. [m]	Weight [kg]
1.00	5.0

Frame scaffold ALFIX 70

Guardrail post, single

A705–A040 09.2020

Annex A,
page 50



h
[mm]
100
110

① Circular hollow section ø48.3x2.7 DIN EN 10219–S235JRH $R_{eH} \geq 320 N/mm^2$
alternatively: Circular hollow section ø48.3x2.7 without ② DIN EN 10219–S460MH
② Circular hollow section ø38x3.6 DIN EN 10219–S235JRH $R_{eH} \geq 320 N/mm^2$
③ Rectangular hollow section 40x20x2 DIN EN 10219–S235JRH $R_{eH} \geq 320 N/mm^2$
④ Round ø12xh DIN EN 10025–S235JR
⑤ Flat 30x6; alternatively: without ⑤ DIN EN 10025–S235JR
⑥ Linear pressed connection; alternatively: 4 point–joint pressed connections
⑦ Marking
⑧ alternatively continuous weld seam
galvanised Sectional views see annex A, page 1; for details see annex A, page 3

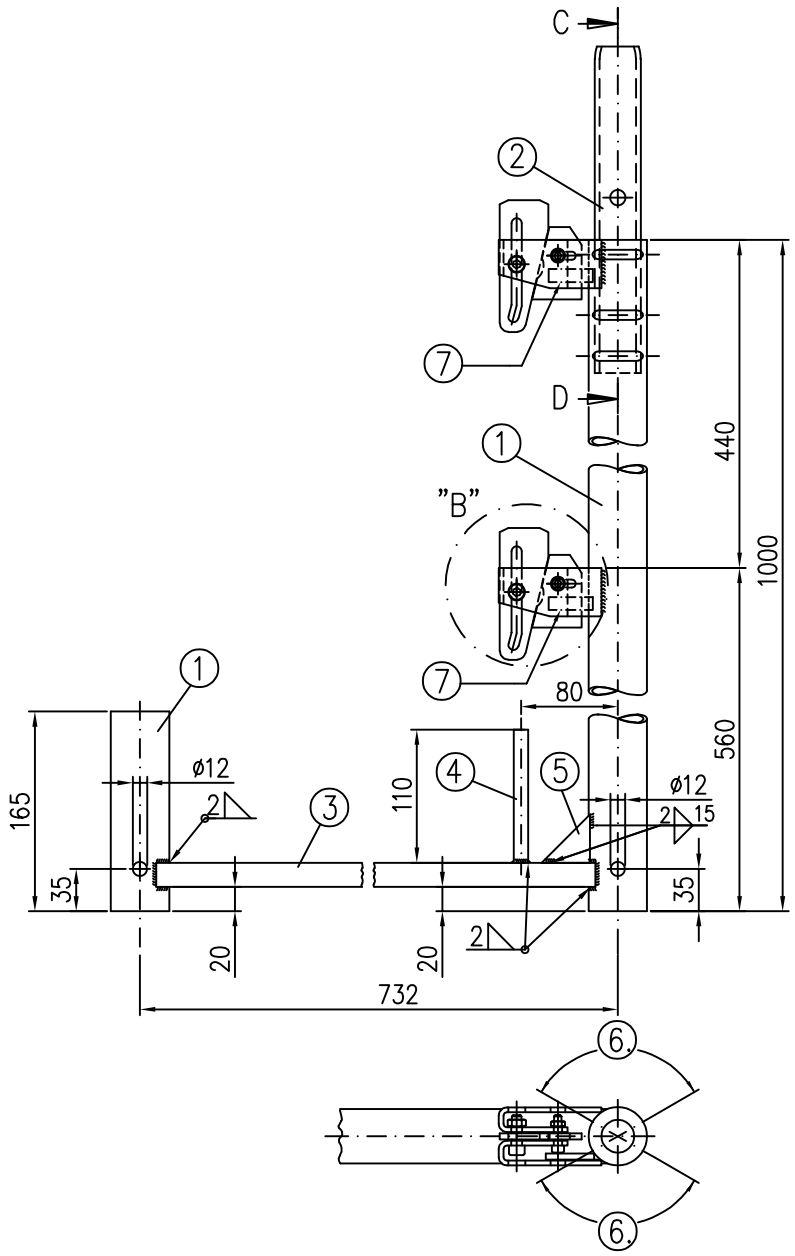
Dimension [m]	Weight [kg]
1.00x0.73	7.0
1.00x1.09	8.5

Frame scaffold ALFIX 70

Guardrail post AF

A709–A141 10.2020

Annex A,
page 51



① Tube 48.3x3.2 $R_{eH} \geq 320 N/mm^2$
② Tube 38x4 $R_{eH} \geq 320 N/mm^2$
③ Tube 45x20x2
④ Round ø12x110
⑤ Steel metal t=5mm
⑥ Pressed connection 120°
⑦ Marking

S235JRG2; galvanised

For details see annex A, page 6

Component no longer manufactured
–only approved for continued use–

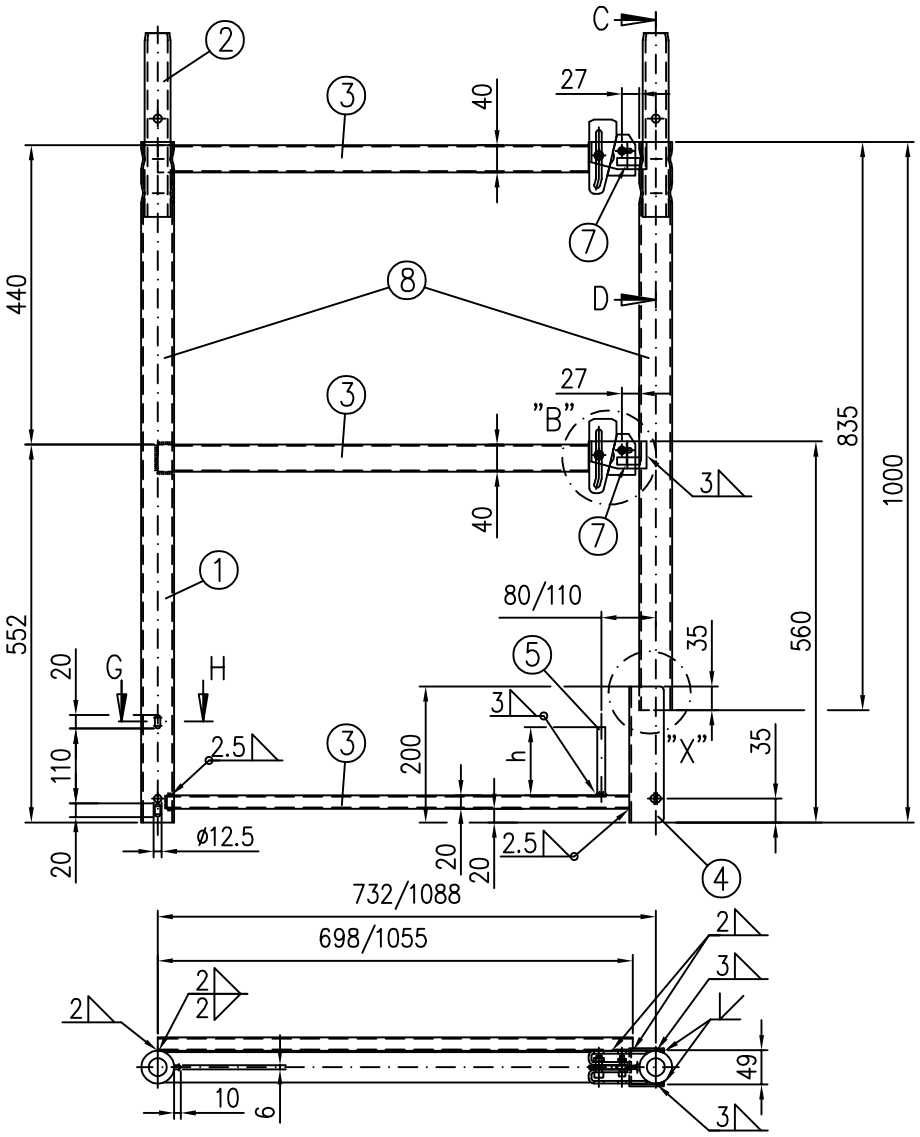
Dimens. [m]	Weight [kg]
1.00	7.0

Frame scaffold ALFIX 70

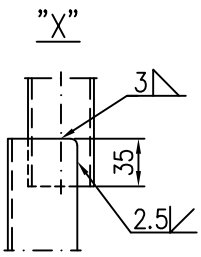
Guardrail post

A705–A042 09.2020

Annex A,
page 52



h
[mm]
100
110



① Circular hollow section ø48.3x2.7	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
② Circular hollow section ø38x3.6	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
③ Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH	
④ Steel metal 3	DIN EN 10025–S235JR	
⑤ Round ø12xh	DIN EN 10025–S235JR	
⑥ Linear pressed connection; alternatively: 4 point–joint pressed connections		
⑦ Marking		
⑧ alternatively: Circular hollow section 48.3x2.7 without ② galvanised	DIN EN 10219–S460MH	

Sectional views see annex A, page 1; for details see annex A, page 3

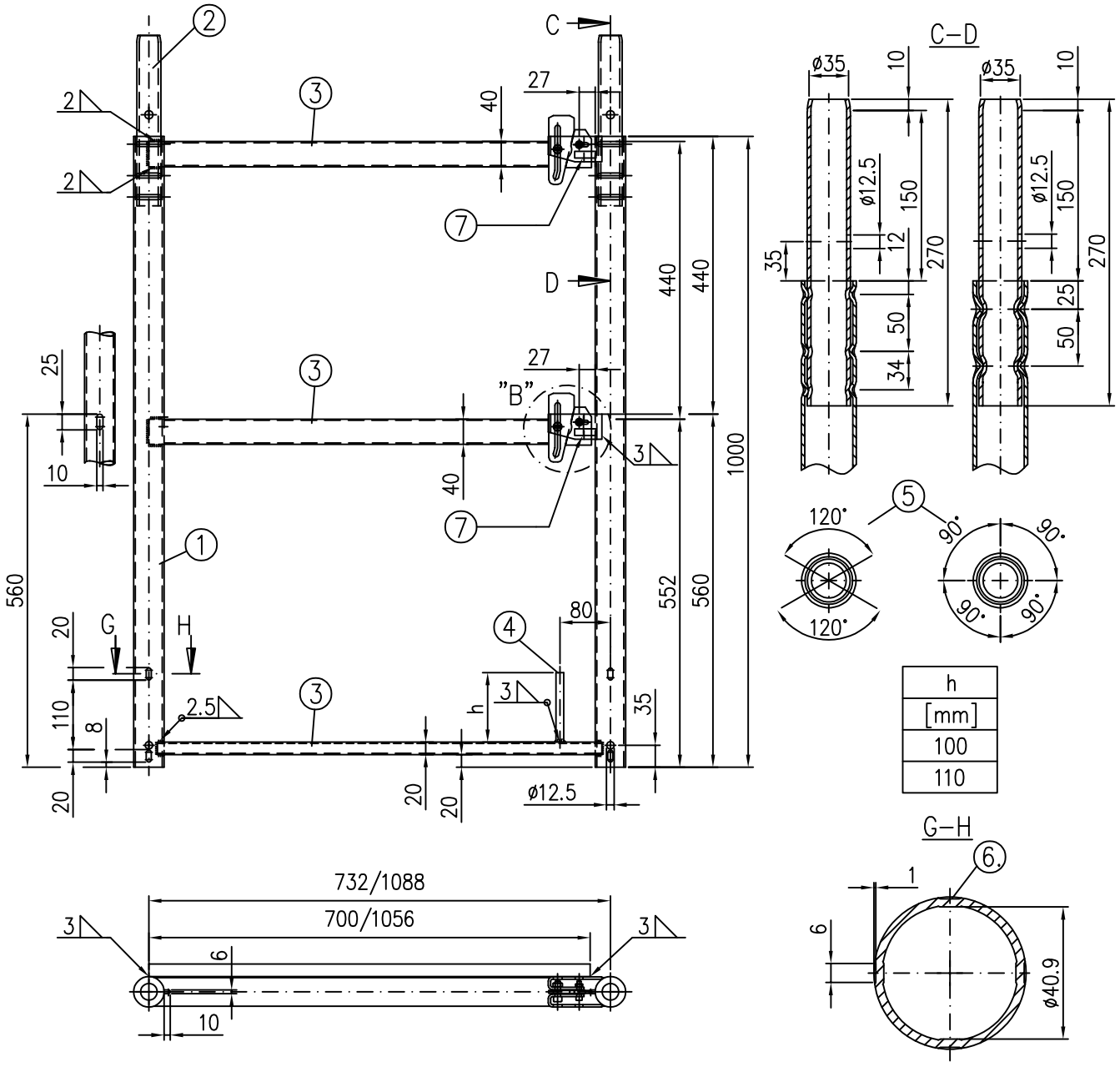
Dimens. [m]	Weight [kg]
0.73	13.0
1.09	16.2

Frame scaffold ALFIX 70

End guardrail frame

A709–A143 10.2020

Annex A,
page 53



① Circular hollow section ø48.3x2.7 DIN EN 10219–S235JRH $R_{eH} \geq 320 N/mm^2$
② Circular hollow section ø38x3.6 DIN EN 10219–S235JRH $R_{eH} \geq 320 N/mm^2$
③ Rectangular hollow section 40x20x2 DIN EN 10219–S235JRH
④ Round ø12xh DIN EN 10025–S235JRG2
⑤ Linear pressed connection alternatively: 4 point–joint pressed connections
⑥ 4 recesses 20x6; t=1
⑦ Marking
galvanised

Component no longer manufactured
–only approved for continued use–

Dimension [m]	Weight [kg]
1.00x0.73	13.1
1.00x1.09	16.3

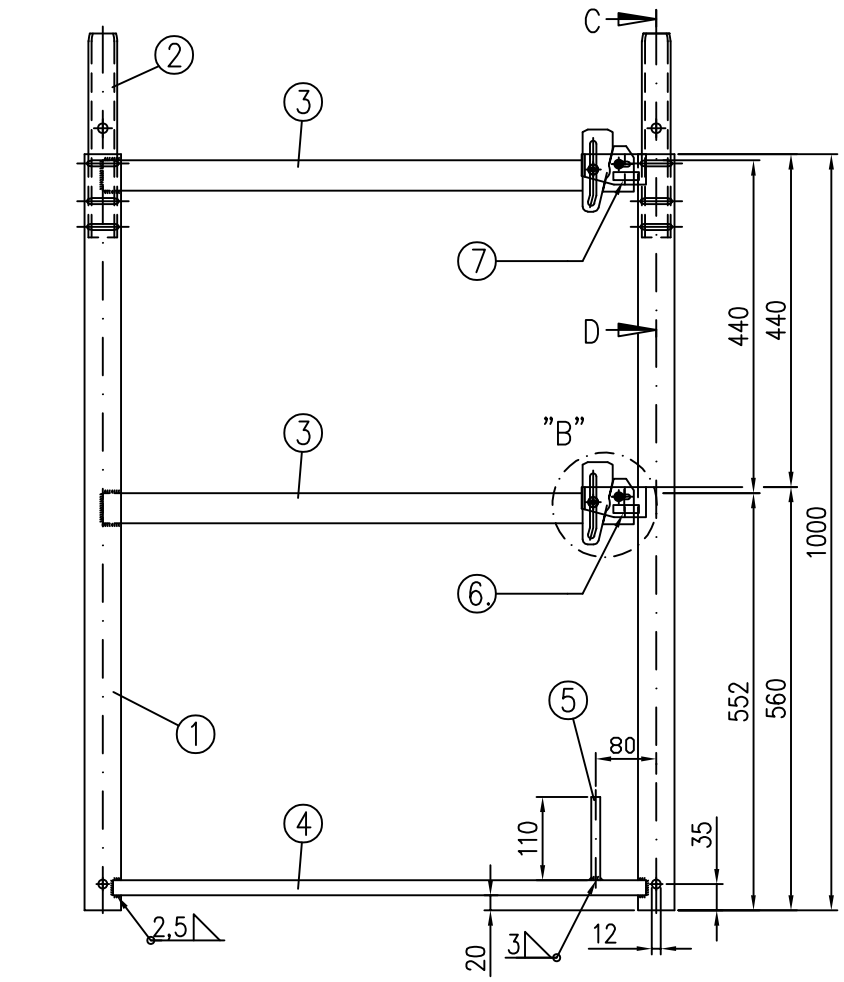
For details see annex A, page 3

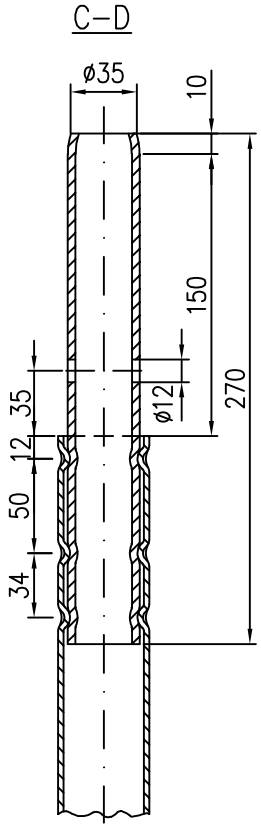
Frame scaffold ALFIX 70

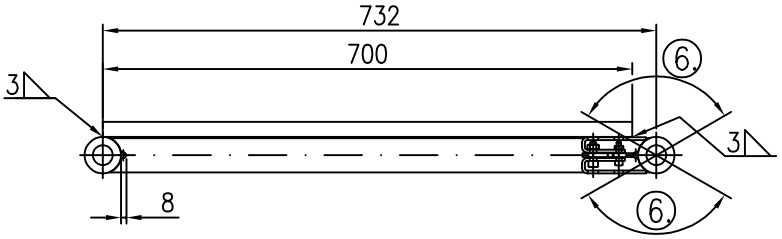
End guardrail post AF

A709–A043 09.2020

Annex A,
page 54







① Tube 48.3x3.2 $R_{eH} \geq 320 N/mm^2$
② Tube 38x4 $R_{eH} \geq 320 N/mm^2$
③ Tube 40x20x2
④ Tube 45x20x2
⑤ Round ø12x110
⑥ Pressed connection 120°
⑦ Marking

S235JRG2; galvanised

For details see annex A, page 6

Component no longer manufactured
–only approved for continued use–

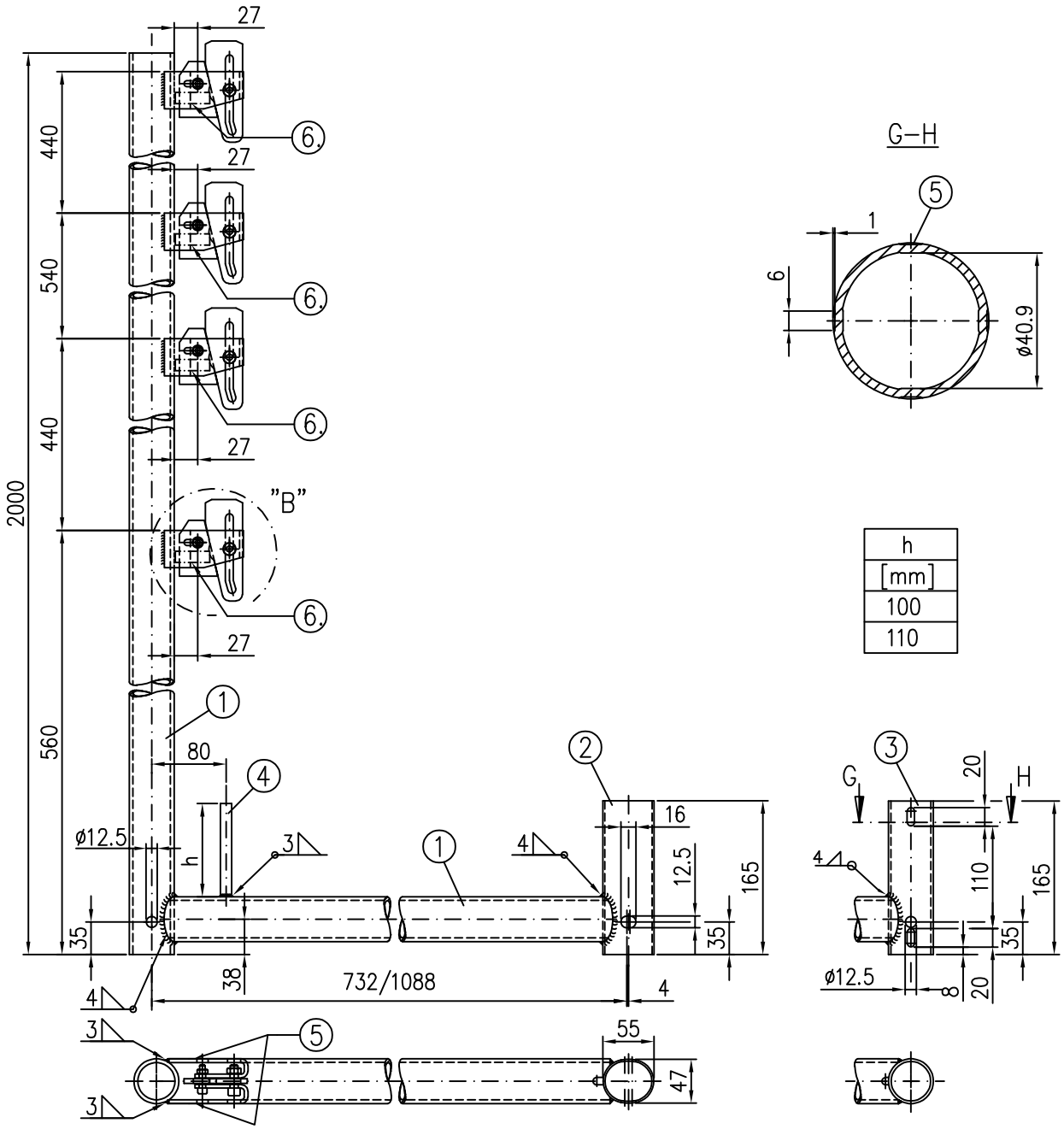
Dimension [m]	Weight [kg]
1.00x0.73	13.5

Frame scaffold ALFIX 70

End guardrail post

A705–A044 09.2020

Annex A,
page 55



① Circular hollow section ø48.3x4.05	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
② Oval tube made of circular hollow section 51x2.6	DIN EN 10219–S235JRH	
③ alternatively:		
Circular hollow section ø48.3x2.7	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
④ Round ø12xh	DIN EN 10025–S235JR	
⑤ 4 recesses 20x6; t=1		
⑥ Marking		
galvanised	For details see annex A, page 3	

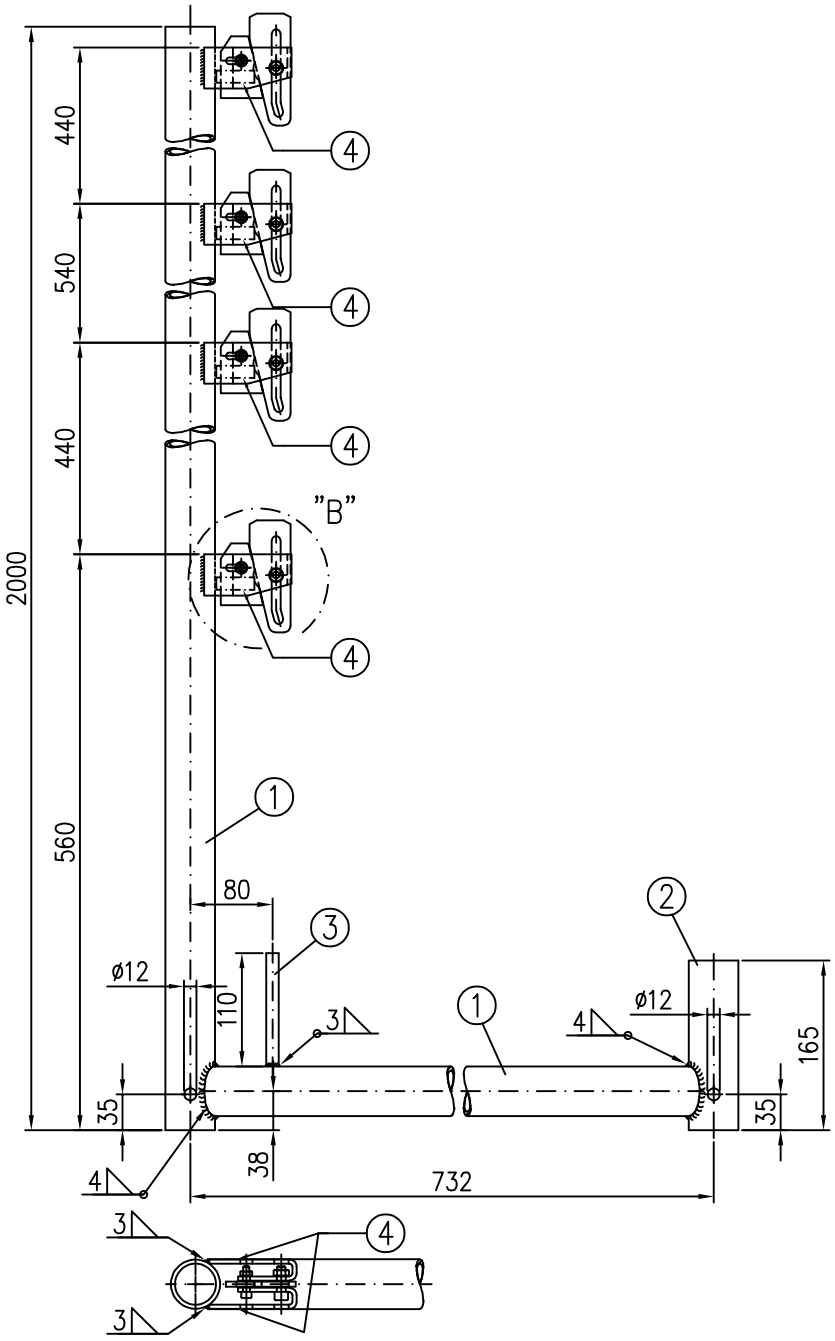
Dimens. [m]	Weight [kg]
0.73	14.6
1.09	16.3

Frame scaffold ALFIX 70

Protective wall post AF

A709–A145 06.2020

Annex A,
page 56



① Tube ø48.3x4.05 $R_{eH} \geq 320 N/mm^2$
② Tube ø48.3x3.2
③ Round ø12x110
④ Marking

S235JRG2; galvanised

For details see annex A, page 6

Component no longer manufactured
–only approved for continued use–

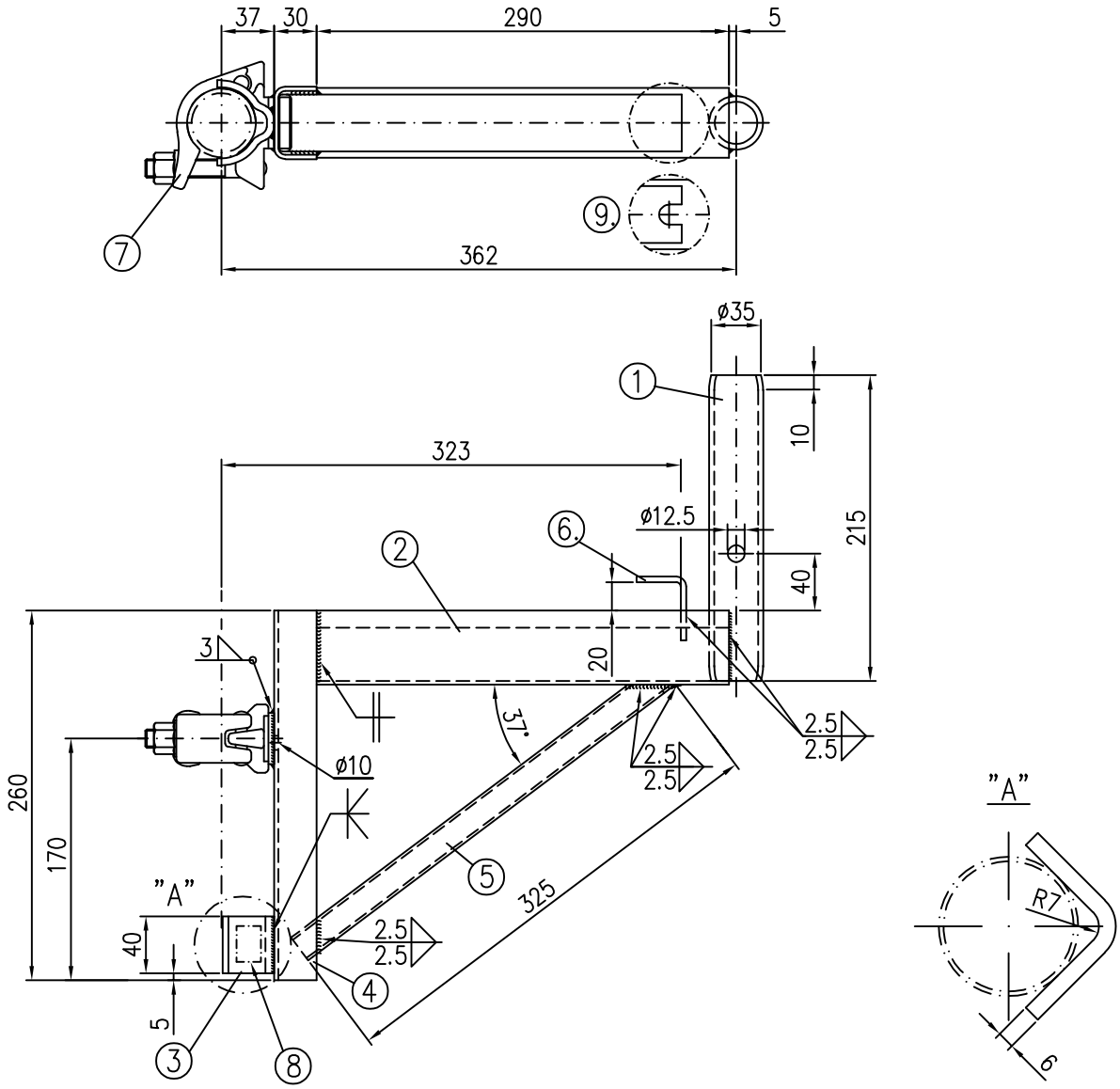
Dimension [m]	Weight [kg]
2.00x0.73	11.0

Frame scaffold ALFIX 70

Protective wall post

A705–A046 09.2020

Annex A,
page 57



① Circular hollow section ø38x3.6	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
② U–profile 48x52x2.5 made of steel metal 169x2.5	DIN EN 10025–S235JR	see Annex A, page 3
③ Steel plate 40x6	DIN EN 10025–S235JR	
④ U–profile 47x30x3	DIN EN 10025–S235JR	
⑤ Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH	
⑥ Steel plate 35x4	DIN EN 10025–S235JR	
⑦ Halfcoupler, class B	DIN EN 74–2	
⑧ Marking		
⑨ alternatively		
galvanised		

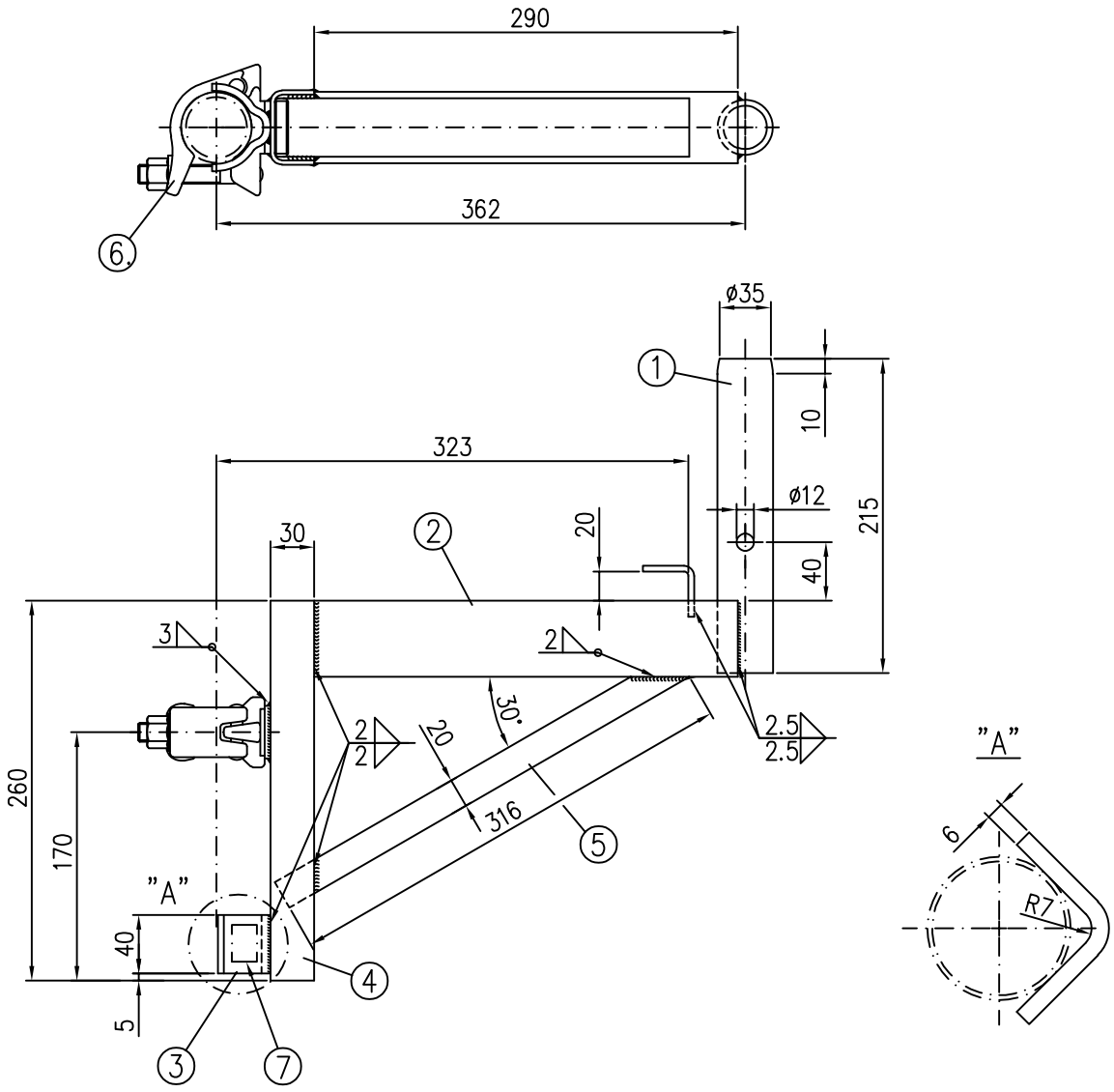
Dimens. [m]	Weight [kg]
0.36	3.7

Frame scaffold ALFIX 70

Bracket AF 0.36m

A709–A047 06.2020

Annex A,
page 58



① Circular hollow section ø38x4	S235JRH	$R_{eH} \geq 320 N/mm^2$
② U–profile 48x52x2.5	S235JR	
③ Flat 40x6	S235JRG2	
④ U 50x30x3	S235JRG2	
⑤ Tube 40x20x2	S235JRH	
⑥ Halfcoupler with DIN EN 74 approval approved for use in connection with aluminium tubes		
⑦ Marking		
galvanised		

Component no longer manufactured
–only approved for continued use–

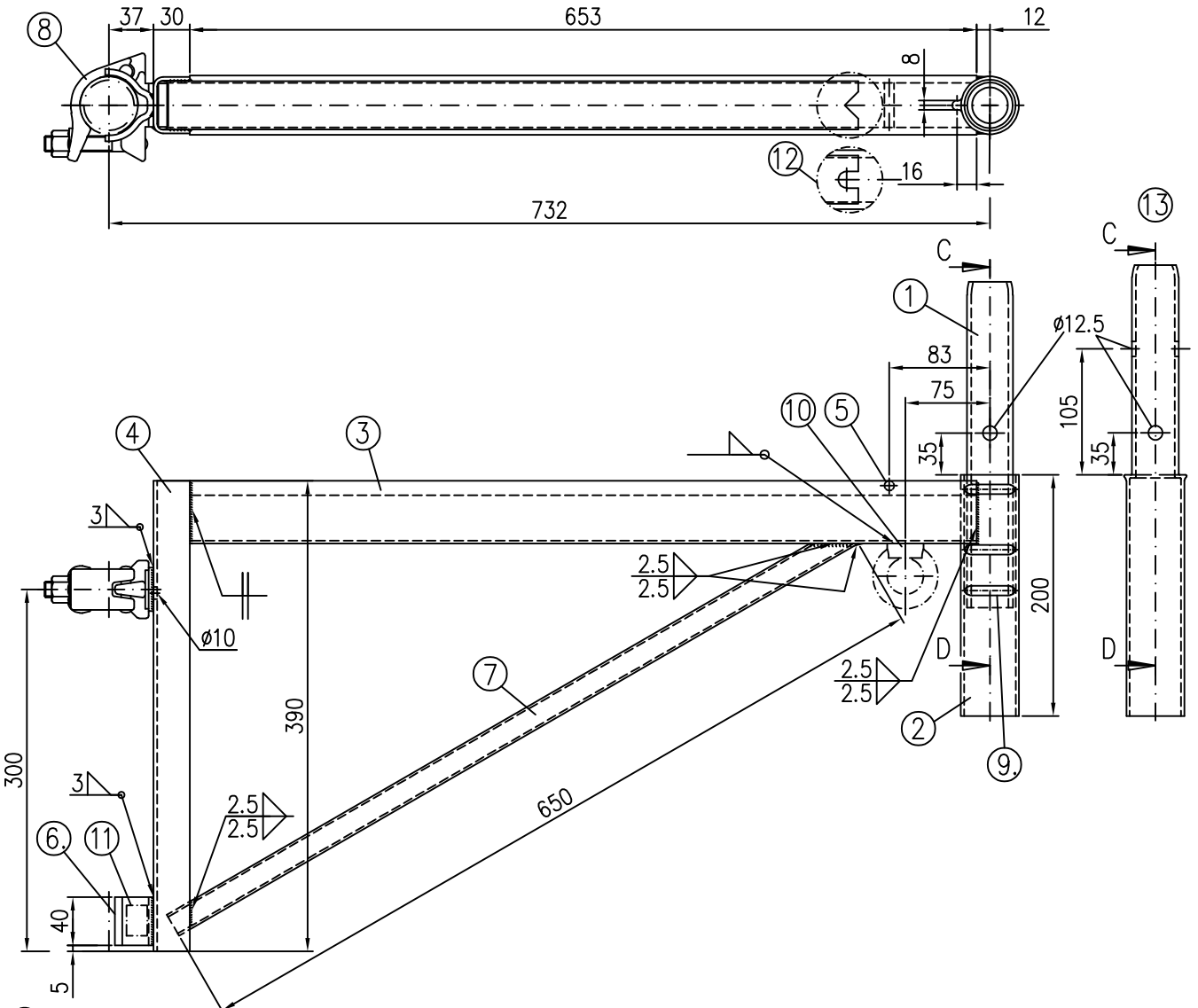
Dimens. [m]	Weight [kg]
0.36	3.5

Frame scaffold ALFIX 70

Bracket 0.36m

A705–A048 09.2020

Annex A,
page 59



① Circular hollow section ø38x3.6	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
② Circular hollow section ø48.3x2.7	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
③ U–profile 48x52x2.5 made of steel metal 169x2.5	DIN EN 10025–S235JR	see Annex A, page 3
④ U–profile 47x30x3	DIN EN 10025–S235JR	
⑤ Round ø8	DIN EN 10277–2–S235JRC+C–S235JR	
⑥ Steel plate 40x6	DIN EN 10025–S235JR	
⑦ Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH	
⑧ Halfcoupler, class B	DIN EN 74–2	
⑨ Linear pressed connection; alternatively: 4 point–joint pressed connections		
⑩ alternatively: with ring nut	DIN 582–M12–C15	
⑪ Marking		
⑫ alternatively		
⑬ alternatively circular hollow section 48.3x2.7 without galvanised	① DIN EN 10219–S460MH	

Sectional view C–D see annex A, page 1

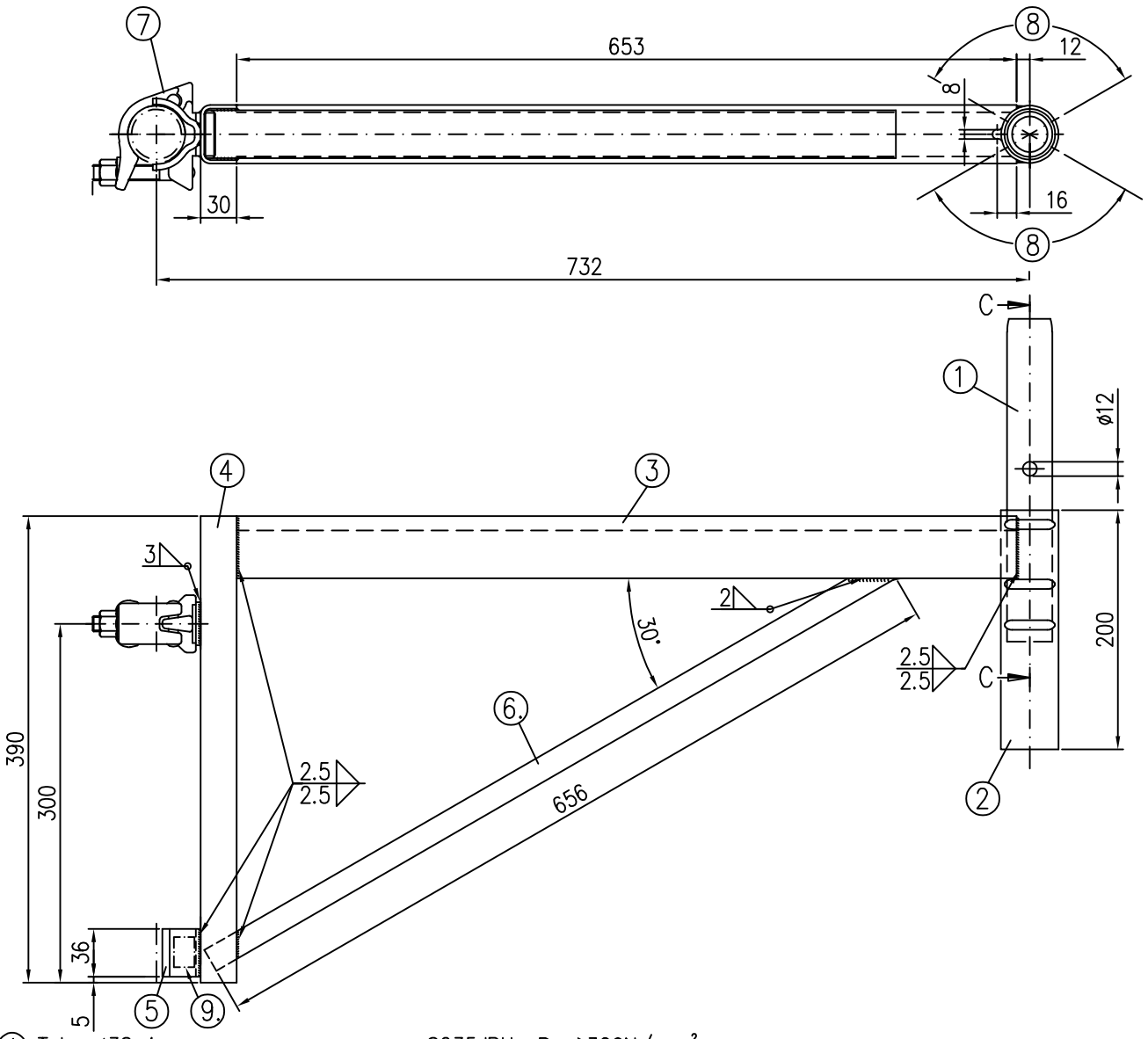
Dimens. [m]	Weight [kg]
0.73	6.7

Frame scaffold ALFIX 70

Bracket AF 0.73m

A709–A149 06.2020

Annex A,
page 60



①	Tube ø38x4	S235JRH $R_{eH} \geq 320 N/mm^2$
②	Tube ø48.3x3.2	S235JRH
③	U–profile 48x52x2.5	S235JR
④	U 50x30x3	S235JRG2
⑤	Flat 40x6	S235JRG2
⑥	Tube 40x20x2	S235JRH
⑦	Part of a swivel coupler according to DIN EN 74 approved for use in connection with aluminium tubes	
⑧	Pressed connection 120°	
⑨	Marking	

galvanised

Sectional view C–D see annex A, page 4;
detailed view pos. 3 see annex A, page 6

Component no longer manufactured
–only approved for continued use–

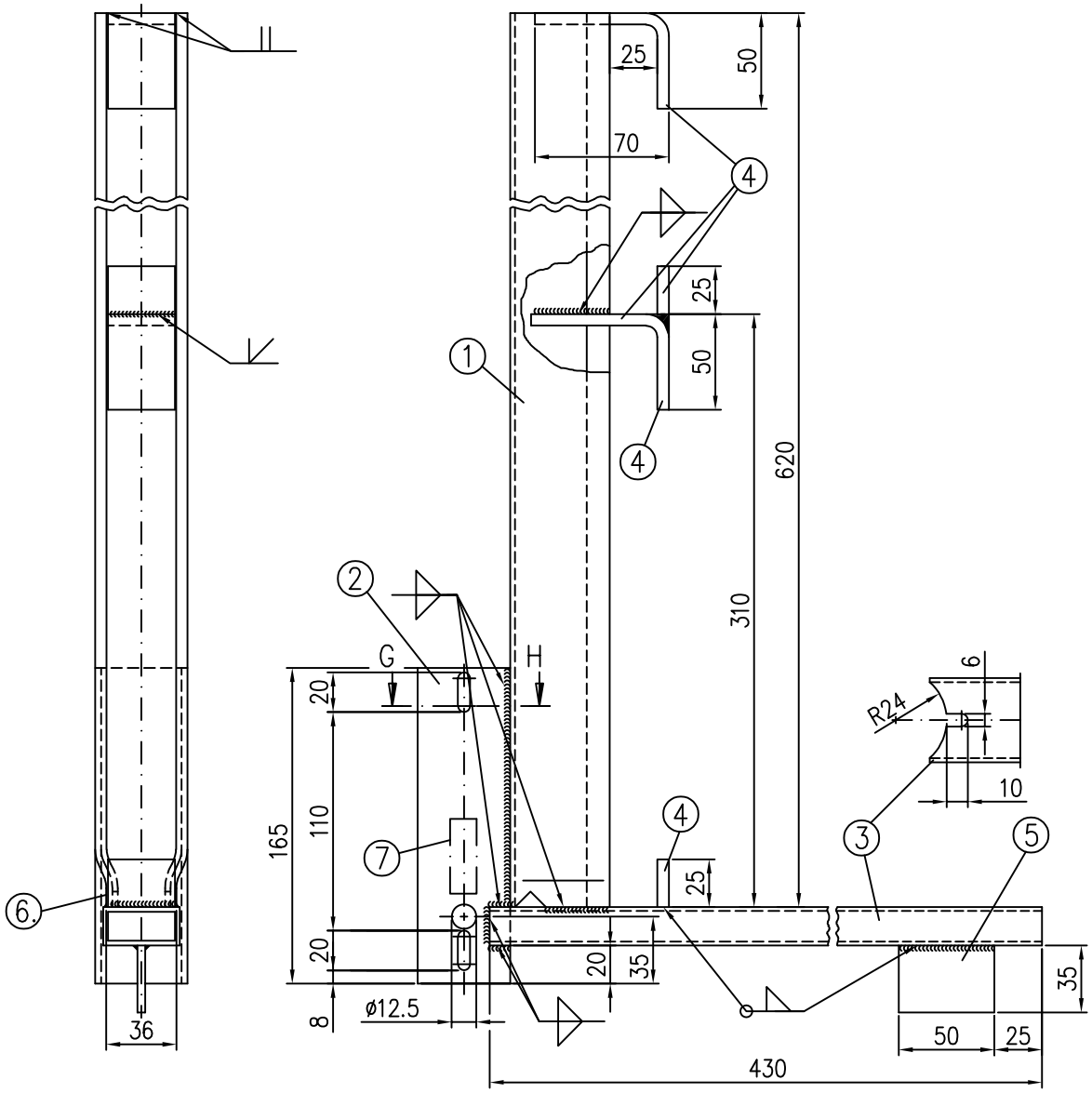
Dimens. [m]	Weight [kg]
0.73	6.5

Frame scaffold ALFIX 70

Bracket 0.73m

A705–A050 09.2020

Annex A,
page 61



①	U-profile 48x52x2.5 made of steel metal 169x2.5	DIN EN 10025-S235JR	
②	Circular hollow section ø48.3x2.7	DIN EN 10219-S235JRH	$R_{eH} \geq 320 N/mm^2$
	alternatively: Circular hollow section ø48.3x3.2	DIN EN 10219-S235JRH	$R_{eH} \geq 320 N/mm^2$ without recess 20x6
③	Rectangular hollow section 40x20x2	DIN EN 10219-S235JRH	
④	Flat 35x6	DIN EN 10025-S235JR	
⑤	Flat 35x4	DIN EN 10025-S235JR	
⑥	Calibration		
⑦	Marking		

galvanised; all welding seams a=2.5mm

For details see annex A, pages 1 and 3

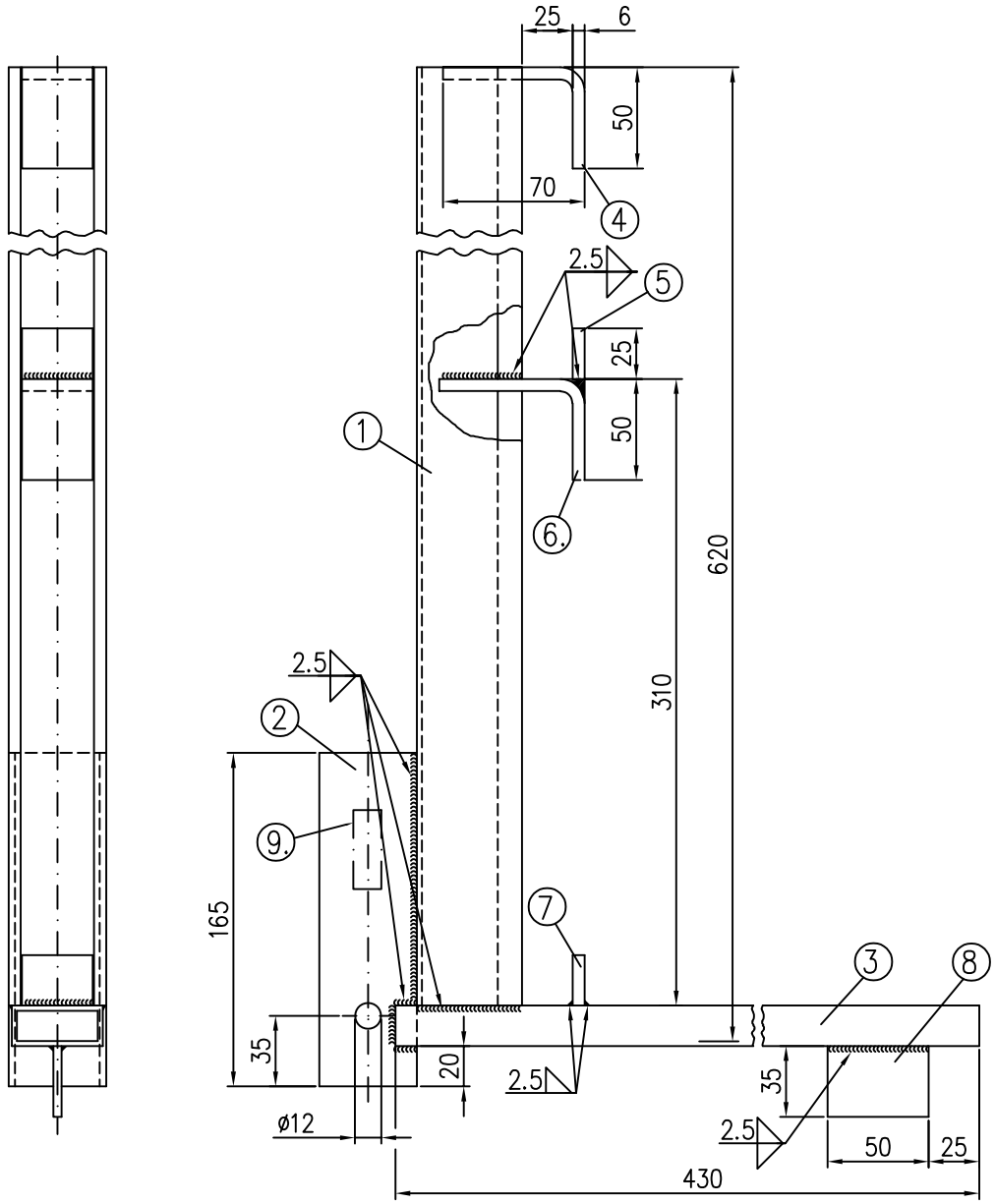
Dimension [m]	Weight [kg]
0.46 x 0.66	4.1

Frame scaffold ALFIX 70

Protective roof extension AF 0.46 x 0.66m

Annex A,
page 62

A705-A051 06.2020



① U–profile 48x52x2.5
② Tube 48.3x3.2
③ Tube 45x20x2
④ L–profile 70x50x6
⑤ Flat 35x6
⑥ L–profile 70x50x6
⑦ Flat 35x6
⑧ Flat 35x4
⑨ Marking

S235JR; galvanised

Component no longer manufactured
–only approved for continued use–

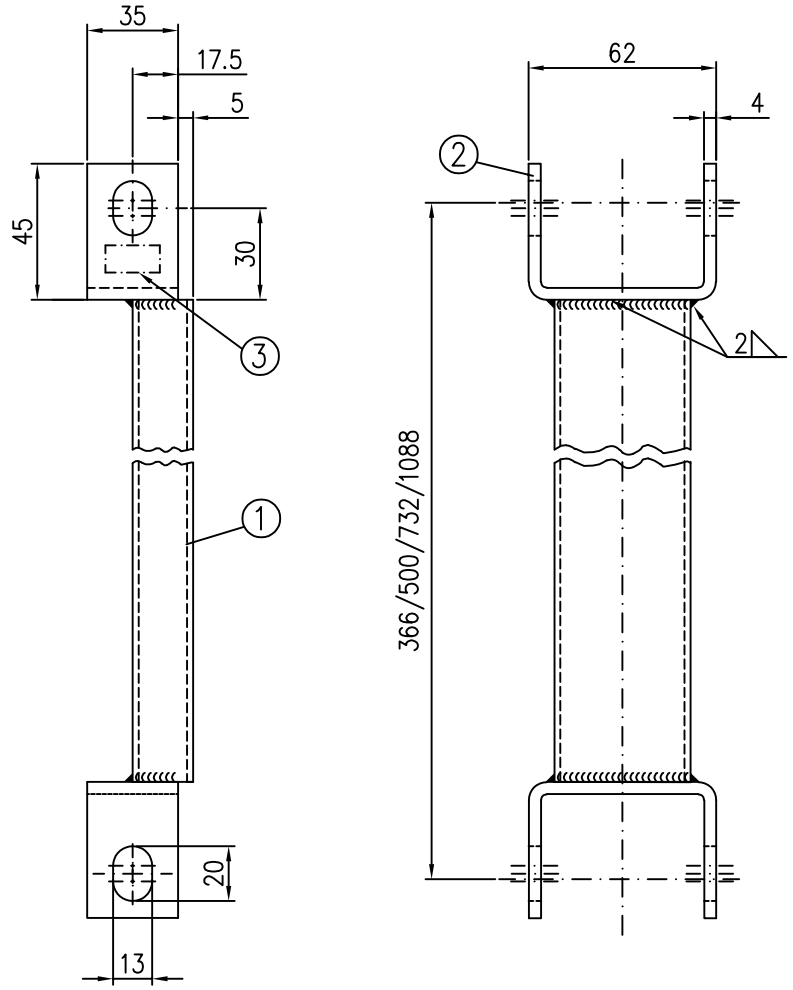
Dimension [m]	Weight [kg]
0.46 x 0.66	4.3

Frame scaffold ALFIX 70

Protective roof extension

A705–A052 09.2020

Annex A,
page 63



① Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH	
② Flat 35x4	DIN EN 10025–S235JR	
③ Marking	DIN EN 10025–S235JR	
galvanised		

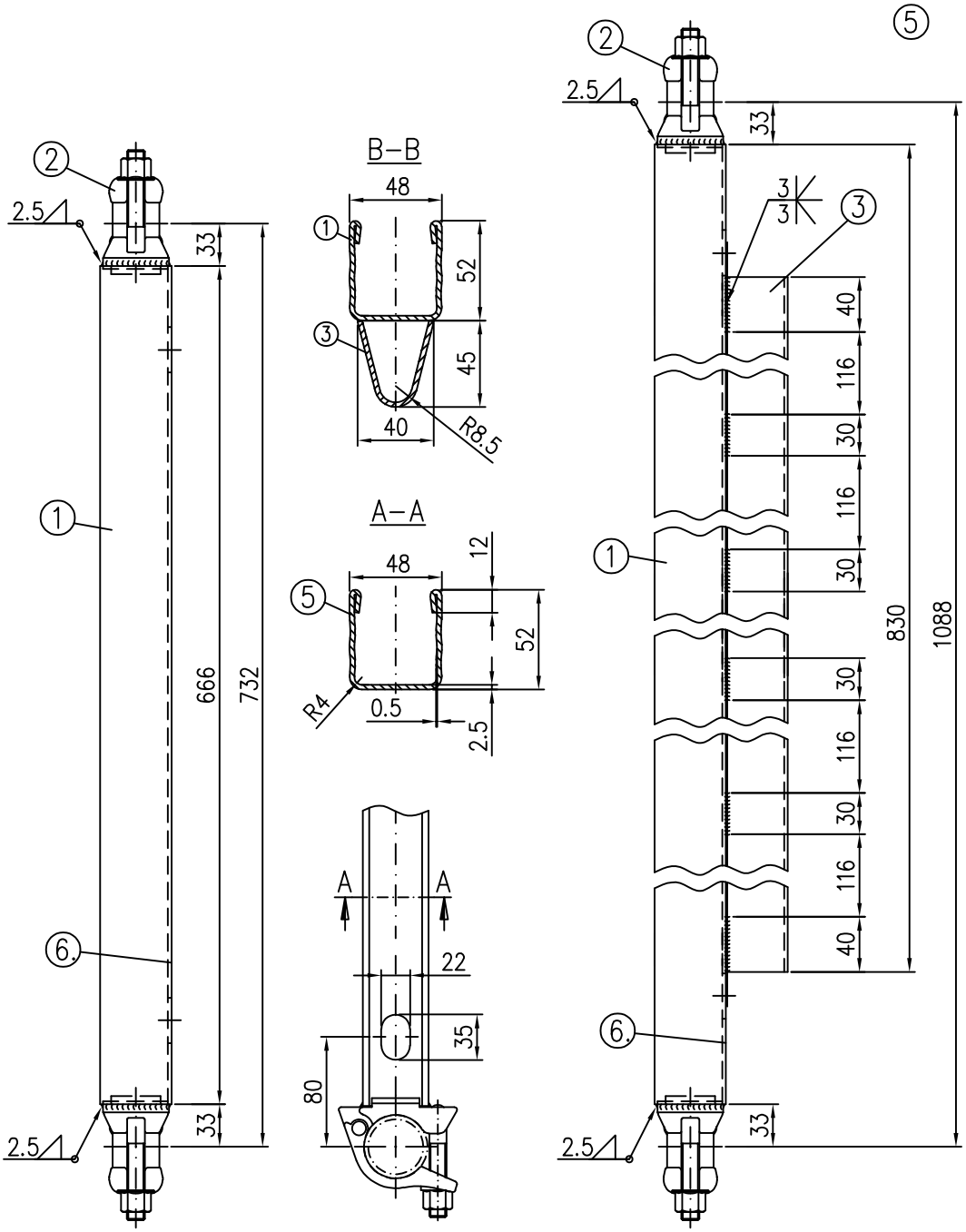
Dimens. [m]	Weight [kg]
0.36	0.9
0.50	1.2
0.73	1.5
1.09	2.3

Frame scaffold ALFIX 70

Lift–off preventer

A709–A153 06.2020

Annex A,
page 64



①	U–profile 48x52x2.5 made of steel metal 169x2.5	DIN EN 10025–S235JR see Annex A, page 3
②	Halfcoupler, class B	DIN EN 74–2
③	Steel metal 3	DIN EN 10025–S235JR
④	U–profile 48x52x2.5	DIN EN 10025–S460MC
⑤	alternatively: at 1.09m U–profile 48x52x2.5 without ③	DIN EN 10149–2–S460MC
⑥	Marking	
	galvanised	

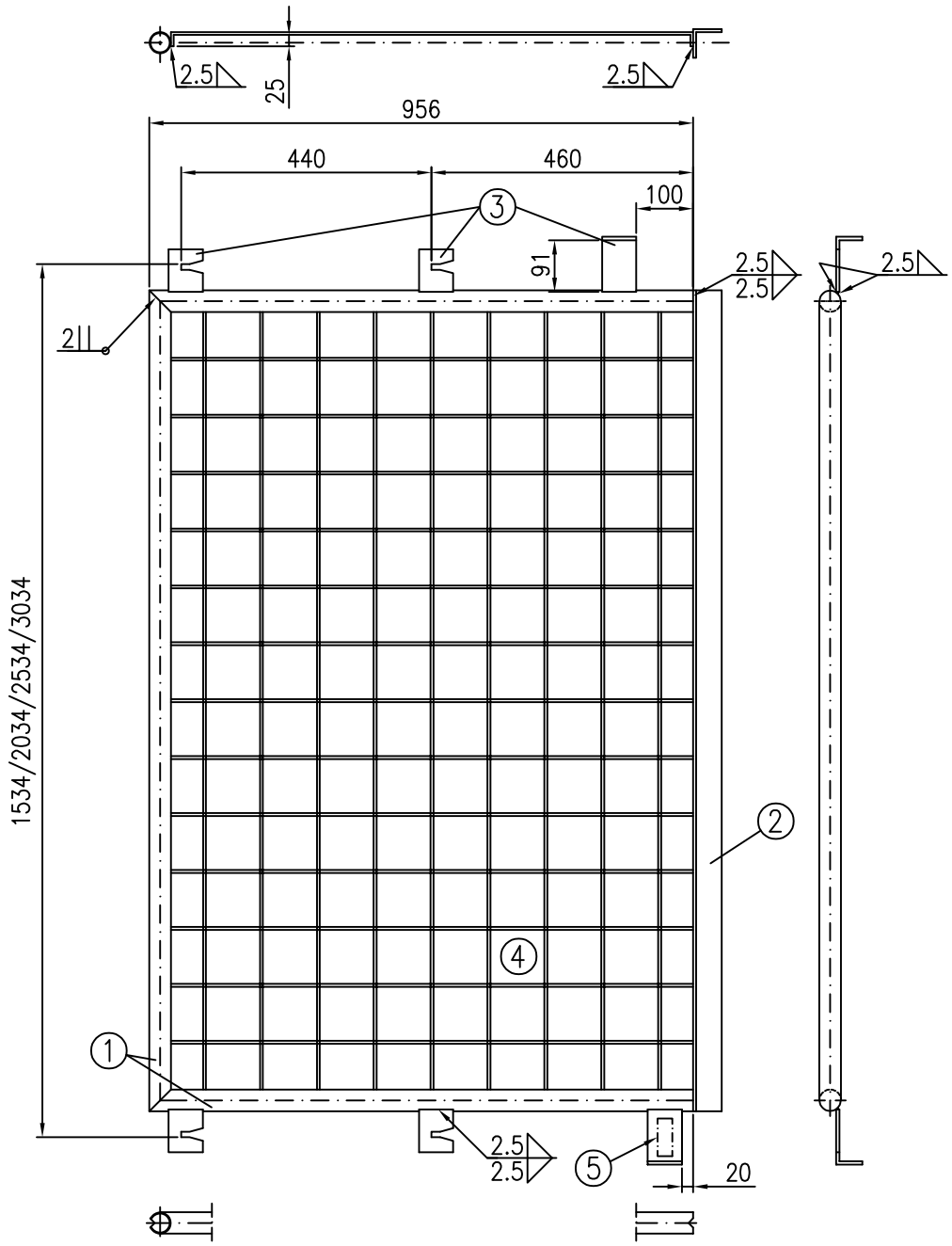
Dimens. [m]	Weight [kg]
0.73	2.8
1.09	5.4

Frame scaffold ALFIX 70

Transom 0.73m; 1.09m

A713–A154 09.2020

Annex A,
page 65



①	Circular hollow section ø38x2	DIN EN 10219–S235JRH
	alternatively: Circular hollow section ø38x2.3	DIN EN 10219–S235JRH
②	L–profile 50x50x5	DIN EN 10025–2–S235JR
③	Flat 60x6	DIN EN 10025–S235JR
④	Wire mesh ø5x100 all nodes welded	DIN EN 10025–S235JR
⑤	Marking galvanised	

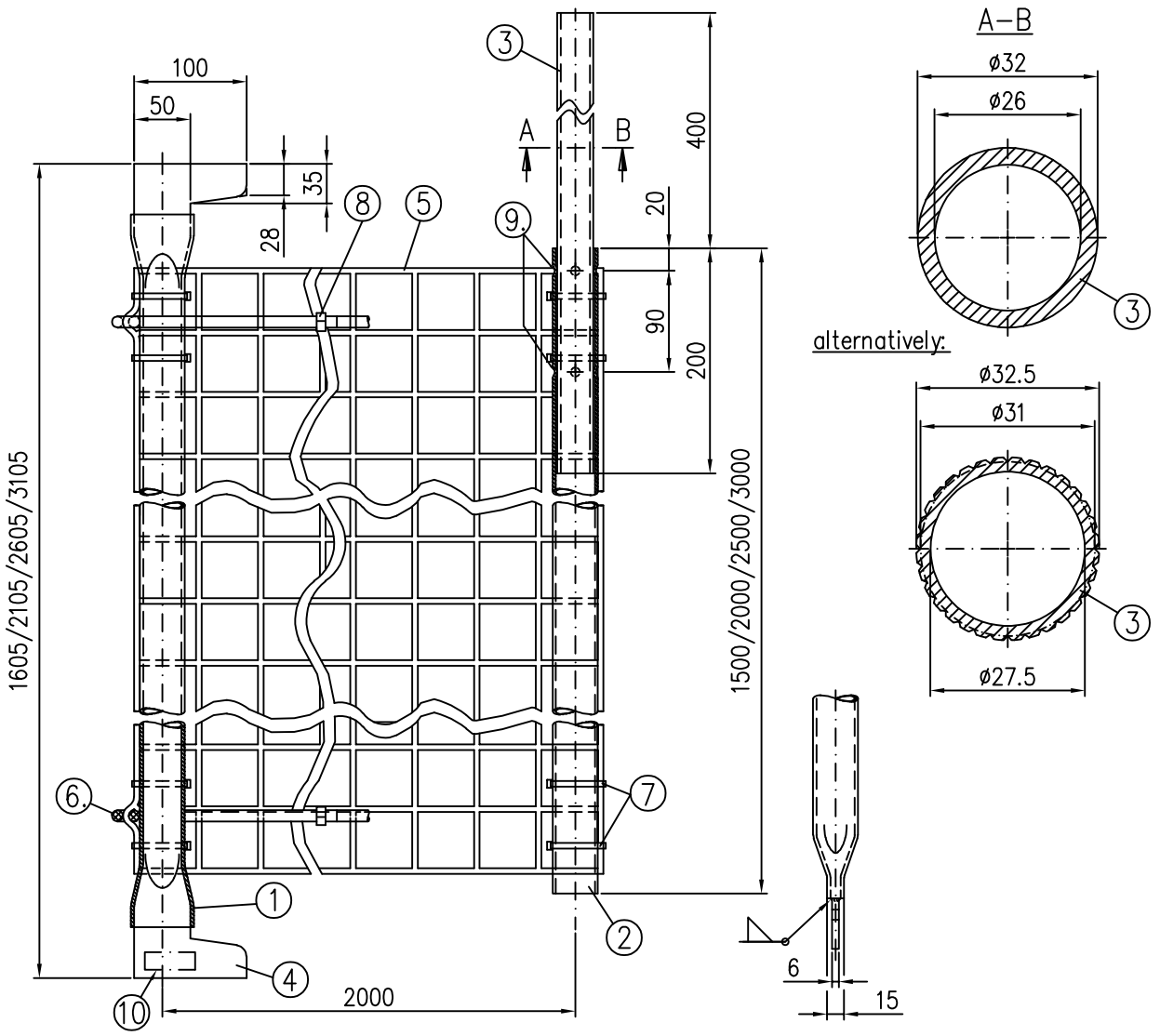
Dimension [m]	Weight [kg]
1.57x1.00	14.2
2.07x1.00	17.2
2.57x1.00	20.2
3.07x1.00	23.2

Frame scaffold ALFIX 70

Side–protection meshguard

A705–A055 06.2020

Annex A,
page 66



① Circular hollow section ø40x3	DIN EN 755–2	EN AW–6082–T5
② Circular hollow section ø40x2.5	DIN EN 755–2	EN AW–6060–T66
③ Circular hollow section ø32x3	DIN EN 755–2	EN AW–6060–T66
alternatively: Star section 32.5	DIN EN 755–2	EN AW–6063–T66
④ Flat 60x6	DIN EN 755–2	EN AW–6060–T66
⑤ Protection net	DIN EN 1263–1–U–A2–M100–Q	
⑥ Rope ø10x3500	Polyamide	
⑦ Cable tie 4.9x300		

Component no longer manufactured
–only approved for continued use–

⑧ Quick–strap fastener with clamping lock Length 550mm; breaking load 750daN

⑨ 4 pressed connections on exterior tube surface

⑩ Marking

all welding seams a=3mm

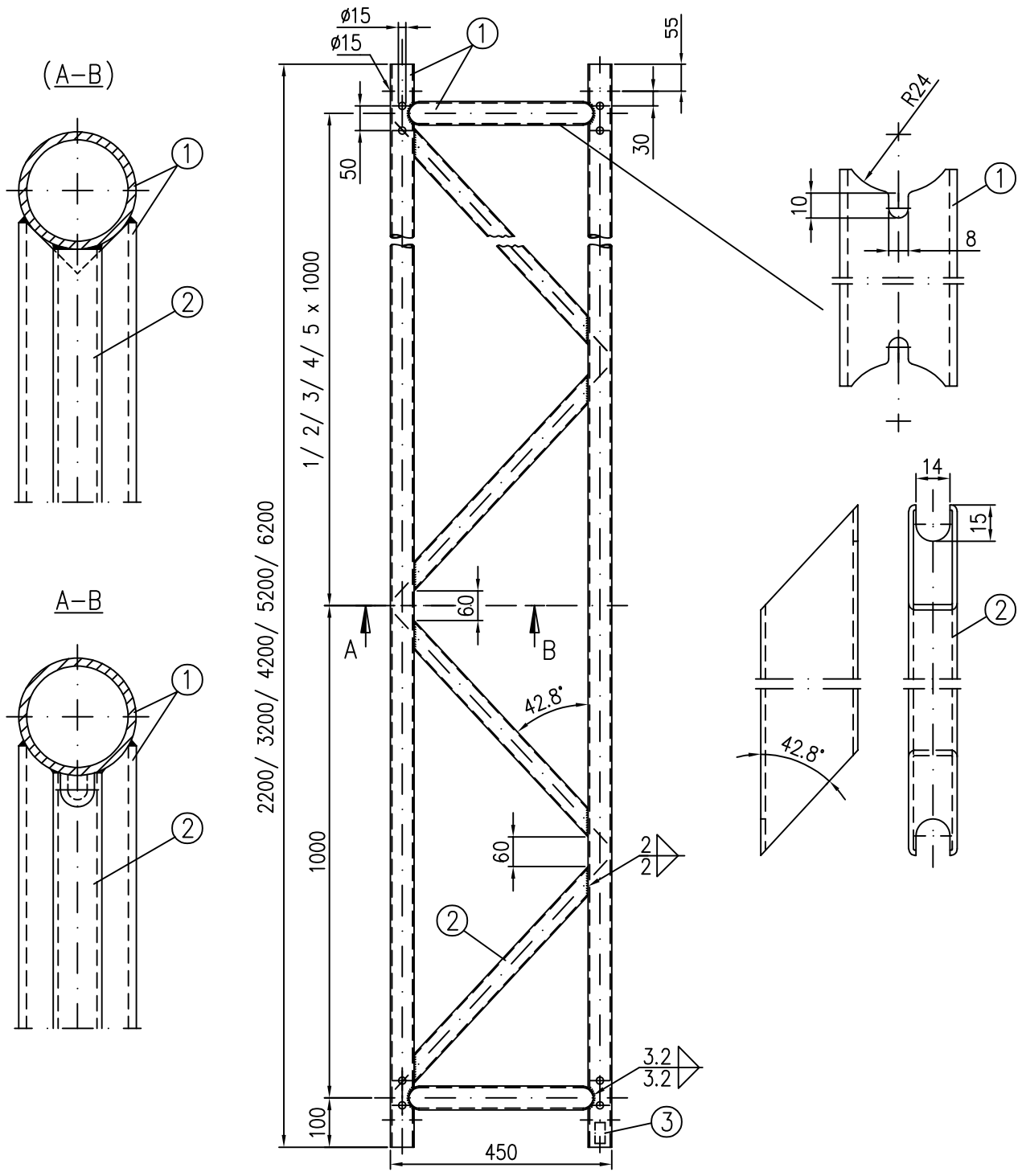
Dimension [m]	Weight [kg]
1.57x2.00	12.0
2.07x2.00	13.0
2.57x2.00	14.0
3.07x2.00	15.0

Frame scaffold ALFIX 70

Protection net

A709–A156 09.2020

Annex A,
page 67



① Circular hollow section ø48.3x3.2 DIN EN 10219–S235JRH $R_{eH} \geq 320 N/mm^2$
② Rectangular hollow section 40x20x2 DIN EN 10219–S235JRH $R_{eH} \geq 320 N/mm^2$
③ Marking

galvanised ( ) discontinued design

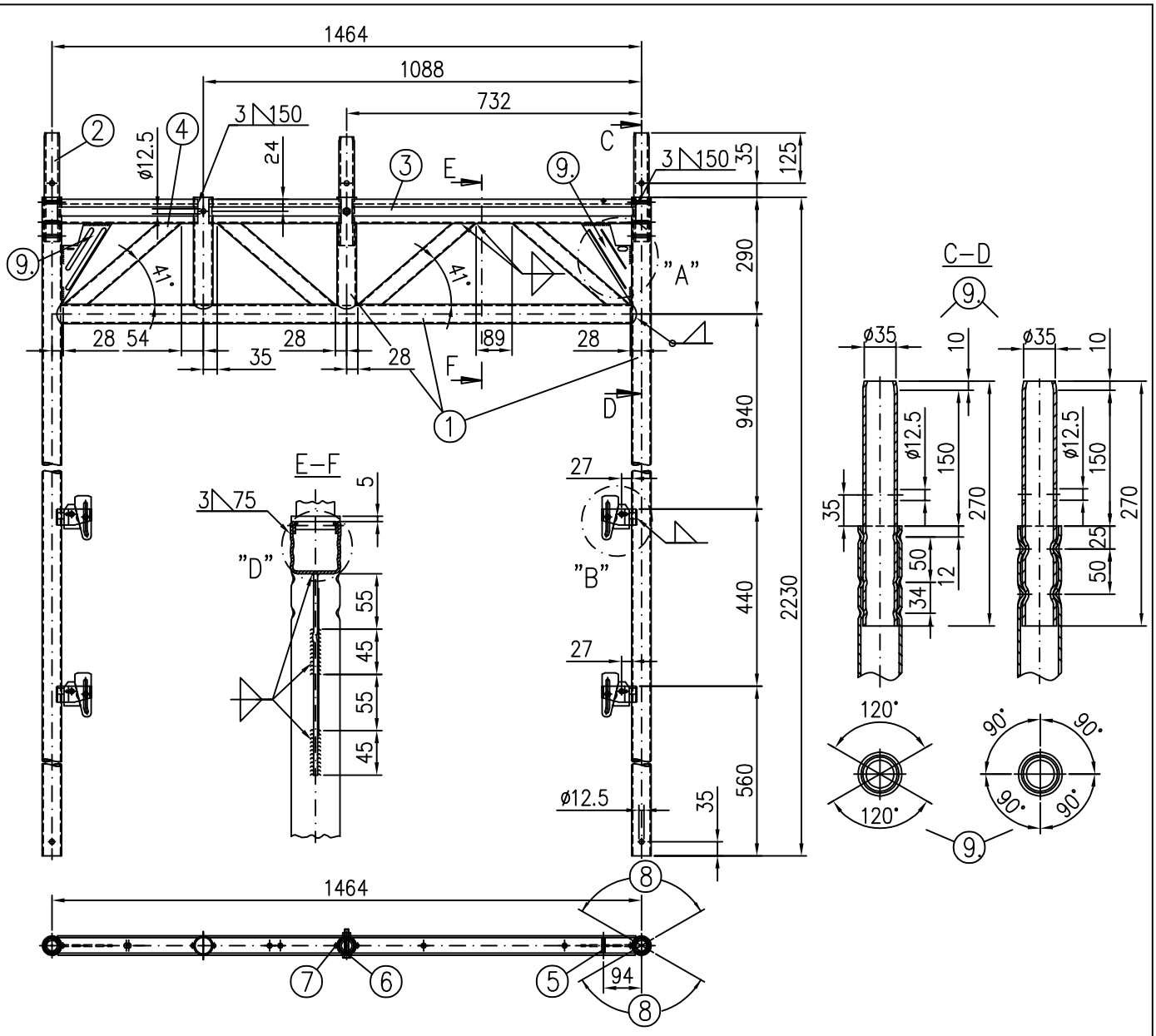
Dimension [m]	Weight [kg]
2.20x0.45	21.5
3.20x0.45	31.9
4.20x0.45	41.1
5.20x0.45	50.3
6.20x0.45	59.6

Frame scaffold ALFIX 70

Lattice girder, steel

A709–A057 09.2020

Annex A,
page 68



① Circular hollow section ø48.3x3.2	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
② Circular hollow section ø38x3.6	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
③ U–profile 48x60x3	DIN EN 10025–S235JR	
④ Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH	
⑤ Round ø8	DIN EN 10277–2–S235JRC+C	
⑥ Hexagon screw	DIN EN ISO 4014–M10x60–8.8–galvanised	
⑦ Hexagon nut, self–locking	DIN EN ISO 10511 M10–8–galvanised	

Component no longer manufactured
–only approved for continued use–

⑧ Linear pressed connection; alternatively: 4 point–joint pressed connections

⑨ Marking

galvanised; all welding seams a=3mm

For details see annex A, page 6

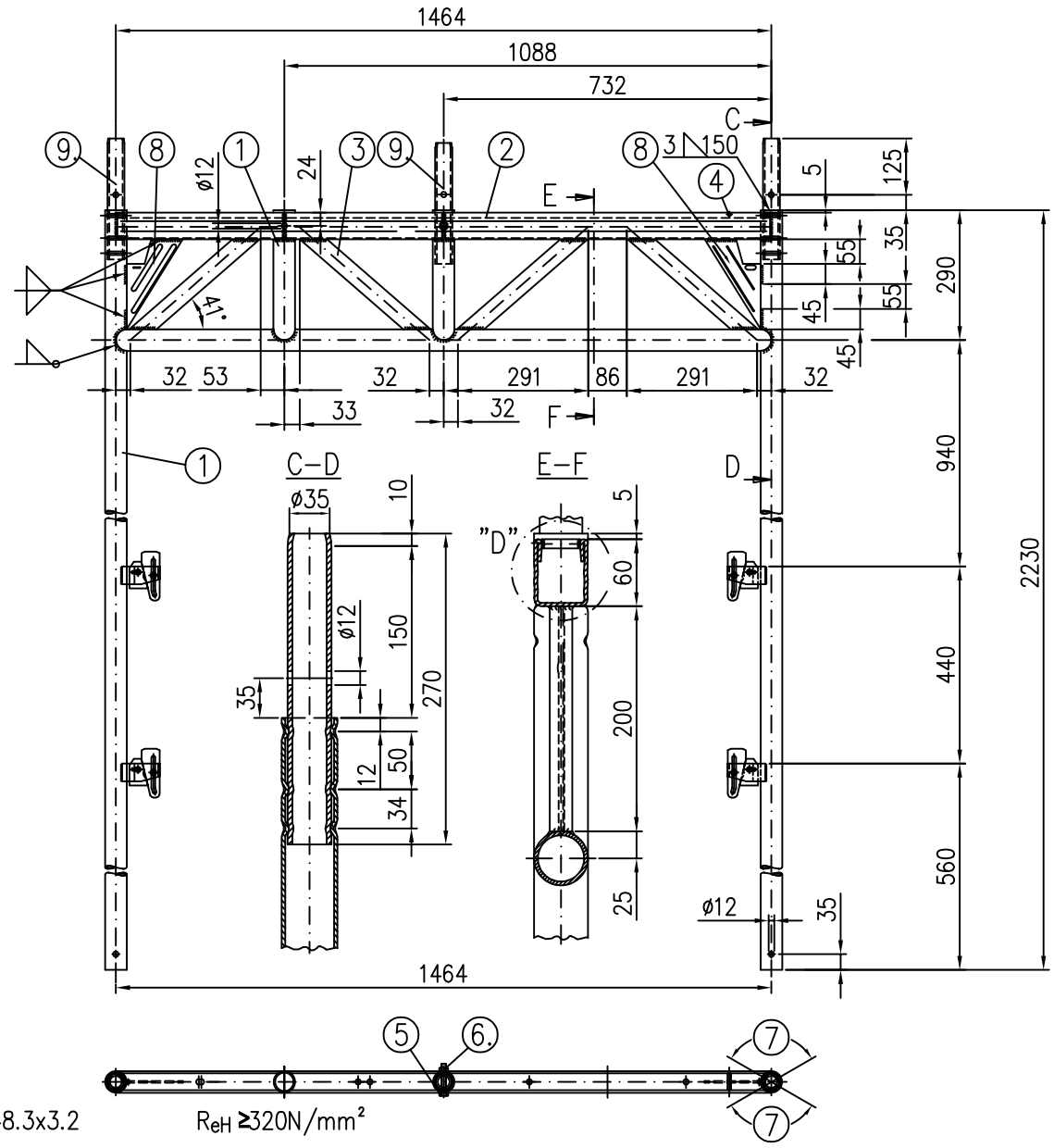
Dimension [m]	Weight [kg]
2.20x1.50	31.2

Frame scaffold ALFIX 70

Passage frame AF

A705–A058 09.2020

Annex A,
page 69



① Tube 48.3x3.2 $R_{eH} \geq 320 N/mm^2$
② U–profile 48x60x3
③ Tube 40x20x2
④ Round ø8
⑤ Screw M10x65 DIN 931
⑥ Nut M10, self–locking DIN 980
⑦ Pressed connection 120°
⑧ Marking
⑨ Tube 38x4 $R_{eH} \geq 320 N/mm^2$

all welding seams a=3mm
S235JRG2; galvanised

For details see annex A, page 6

Component no longer manufactured
–only approved for continued use–

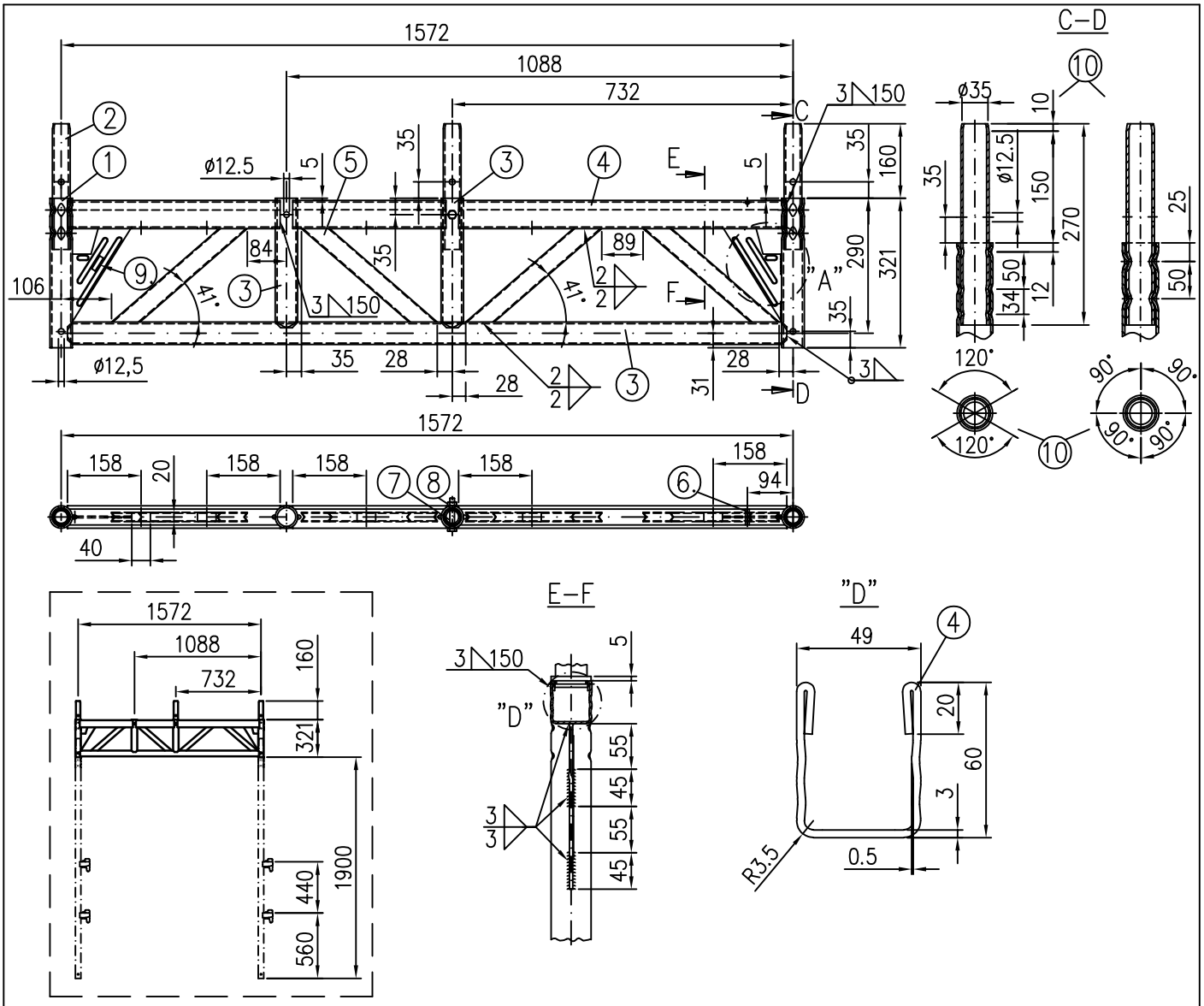
Dimension [m]	Weight [kg]
2.20x1.50	31.5

Frame scaffold ALFIX 70

Passage frame

A705–A059 09.2020

Annex A,
page 70



① Circular hollow section ø48.3x4.05	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
② Circular hollow section ø38x3.6	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
③ Circular hollow section ø48x3.2	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
alternatively: Circular hollow section ø48.3x4.05	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
④ U–profile 49x60x3 made of steel metal 197x3	DIN EN 10025–S235JR	
⑤ Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
⑥ Round ø8	DIN EN 10277–2–S235JRC+C	
⑦ Hexagon screw	DIN EN ISO 4014–M10x60–8.8–galvanised	
⑧ Hexagon nut, self–locking	DIN EN ISO 10511–M10–8–galvanised	
⑨ Marking		
⑩ Linear pressed connection; alternatively: 4 point–joint pressed connections galvanised	For details see annex A, page 3	

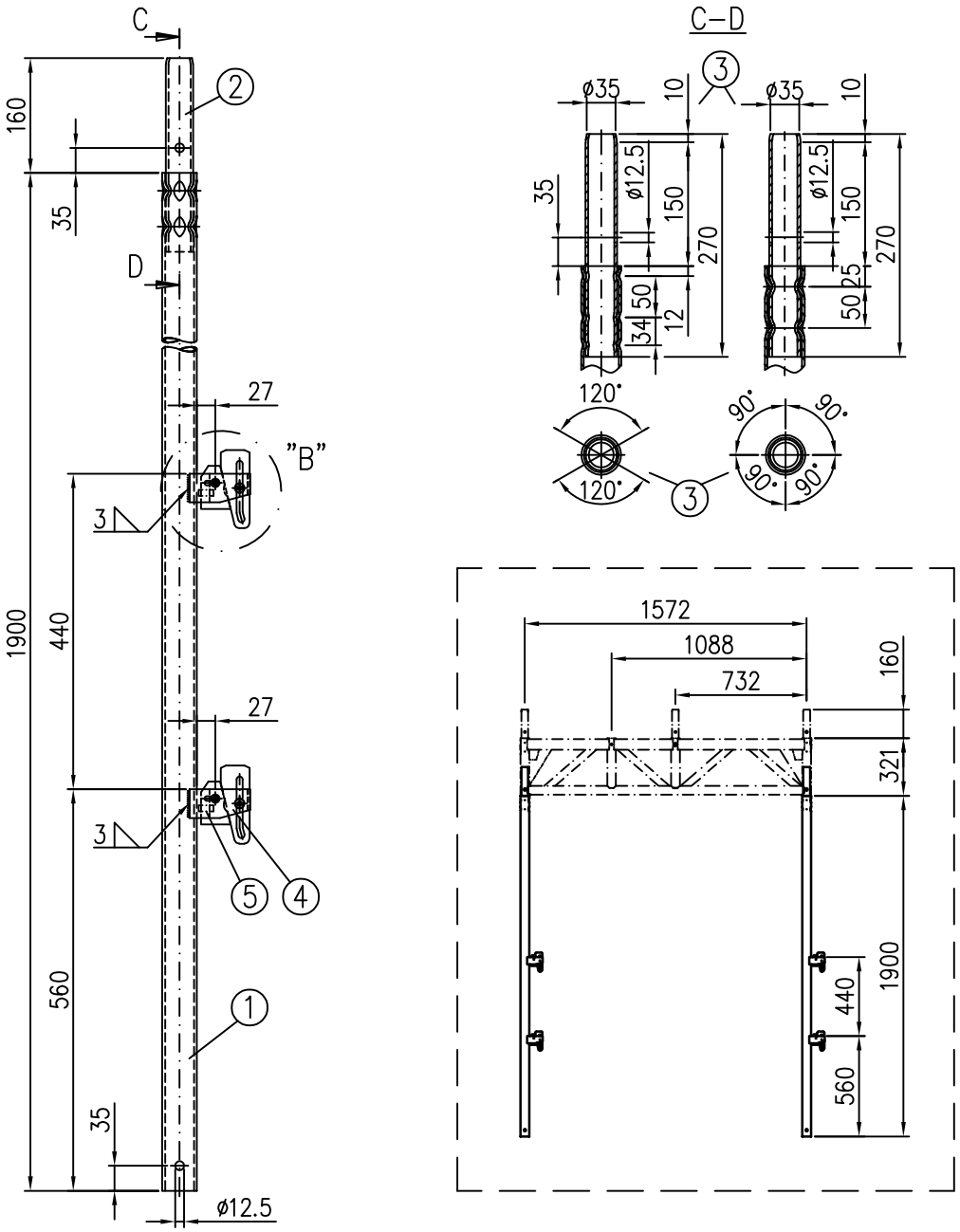
Dimens. [m]	Weight [kg]
1.57	23.2

Frame scaffold ALFIX 70

Passage frame, in sections, 1.57m, upper part

A709–A158 06.2020

Annex A,
page 71



① Circular hollow section ø48.3x4.05 DIN EN 10219–S235JRH $R_{eH} \geq 320 N/mm^2$
② Circular hollow section ø38x3.6 DIN EN 10219–S235JRH $R_{eH} \geq 320 N/mm^2$
③ Linear pressed connection; alternatively: 4 point–joint pressed connections
④ Guardrail wedge housing DIN EN 10025–S235JR
⑤ Marking

galvanised

For detail see annex A, page 3

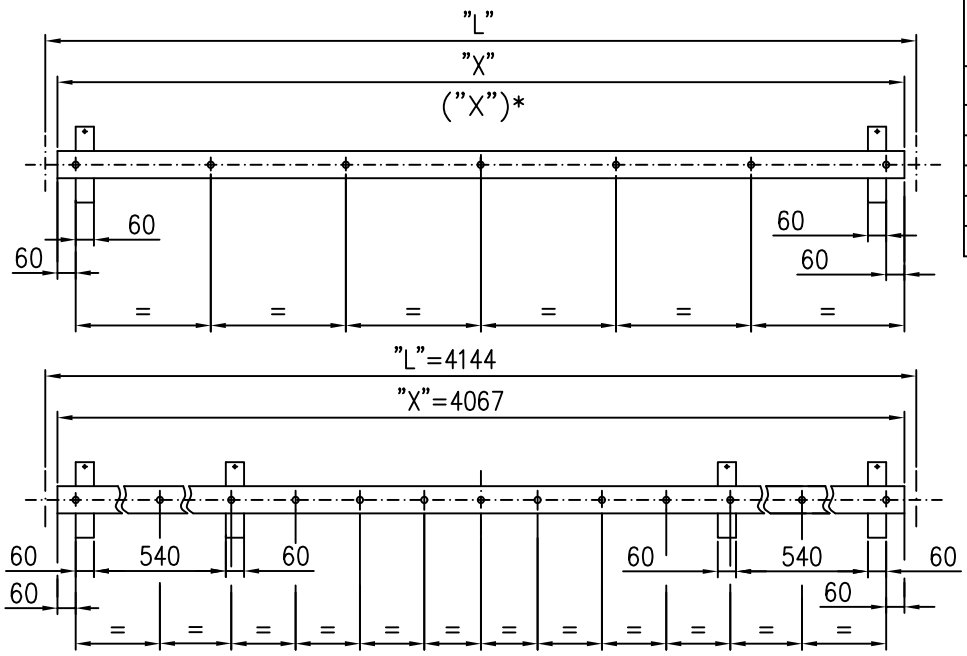
Dimens. [m]	Weight [kg]
1.90	8.4

Frame scaffold ALFIX 70

Passage frame, in sections, tubular post, 1.90m

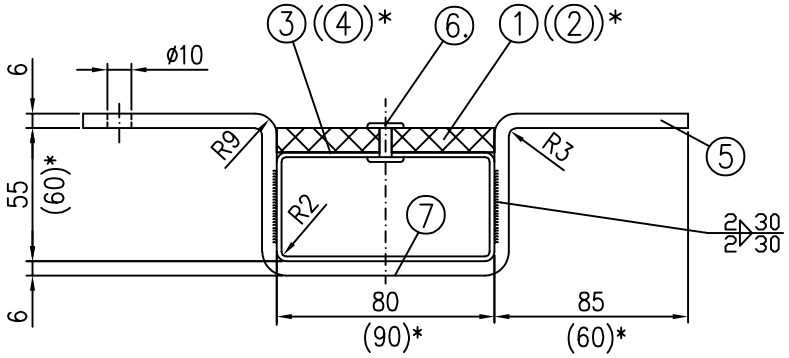
A709–A159 06.2020

Annex A,
page 72



⑧ "L"	⑨ "X"	⑩ ("X")*	⑪	⑫	(⑬)*
[mm]	[mm]	[mm]			
1572	1495	1500	6	7	7
2072	1995	2000	6	7	7
2572	2495	2500	5	7	7
3072	2995	3000	4	9	7
4144	4067	–	3	13	7

Cross section



① Plywood 10x80 — Plywood for use in scaffolding with national technical approval
(② Film-coated plywood 10x90 BFU 100G-10 DIN 68705 sheet 3)*
③ Rectangular hollow section 80x40x2 DIN EN 10219-S235JRH
(④ Rectangular hollow section 90x45x2 DIN 59411-S235JRH)*
⑤ Flat 60x6 DIN EN 10025-S235JR
⑥ Blind rivet ø5x20 DIN EN ISO 15979 EN AW-5754 H112
⑦ Marking
⑧ Bay length "L"
⑨ Length "X"
⑩ Length ("X")*
⑪ Load class
⑫ and (⑬)* Number of rivets

all components made of galvanised steel

( )* alternative design

Dimens. [m]	Weight [kg]
1.57	9.0
2.07	11.2
2.57	13.5
3.07	15.8
4.14	19.8

Frame scaffold ALFIX 70

Gap cover

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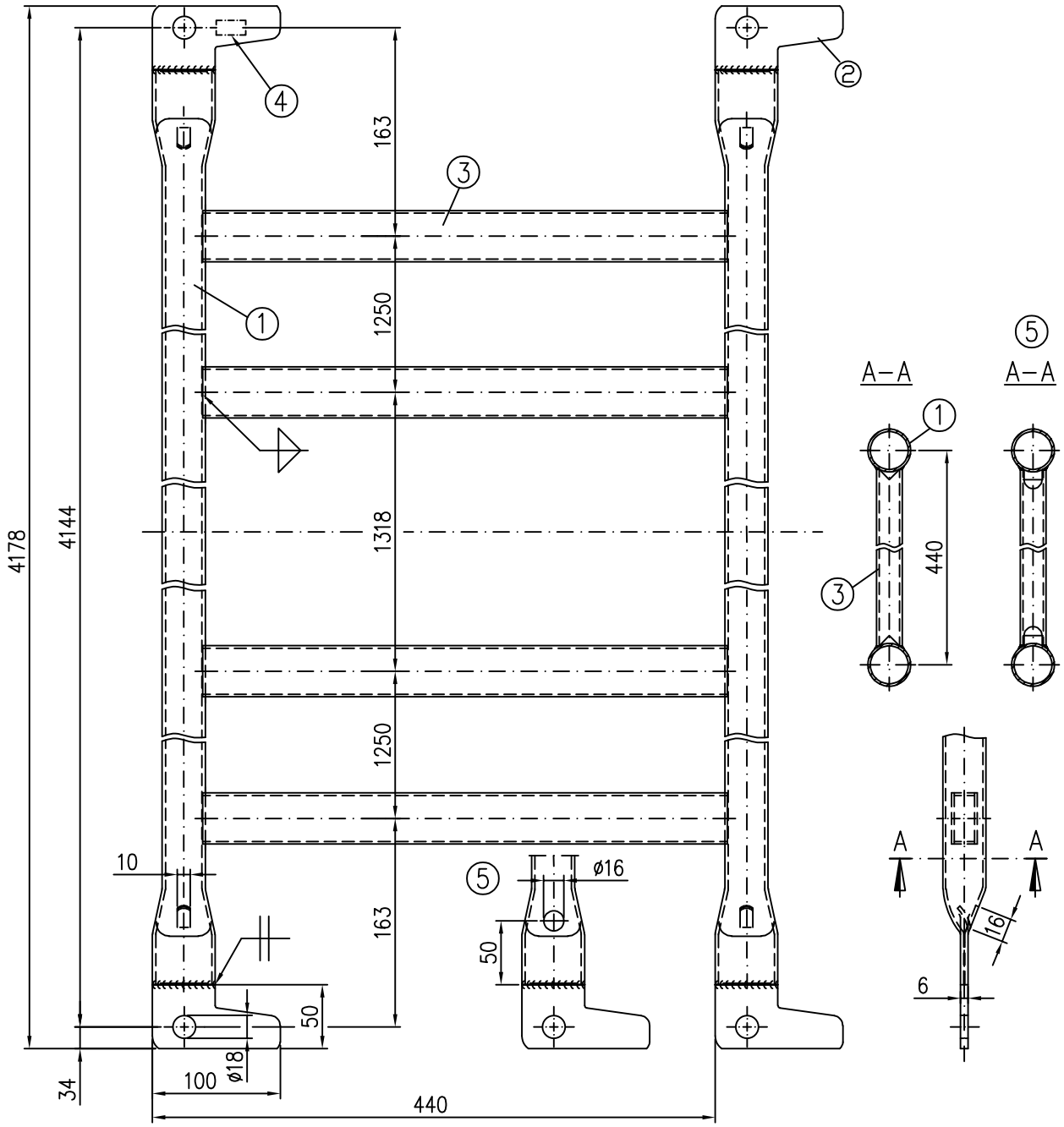
page 73



① Circular hollow section ø33.7x2.6	DIN EN 10219–S235JRH	
alternatively: Circular hollow section ø33.7x2.3	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
alternatively: Circular hollow section ø38x2.3	DIN EN 10025–S235JR	
② Flat 50x6	DIN EN 10025–S235JR	
③ Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH	
④ Marking		
⑤ alternatively galvanised; all welding seams a=2.5mm		

Dimens. [m]	Weight [kg]
4.14	21.5

Frame scaffold ALFIX 70

Double guardrail AF 4.14m

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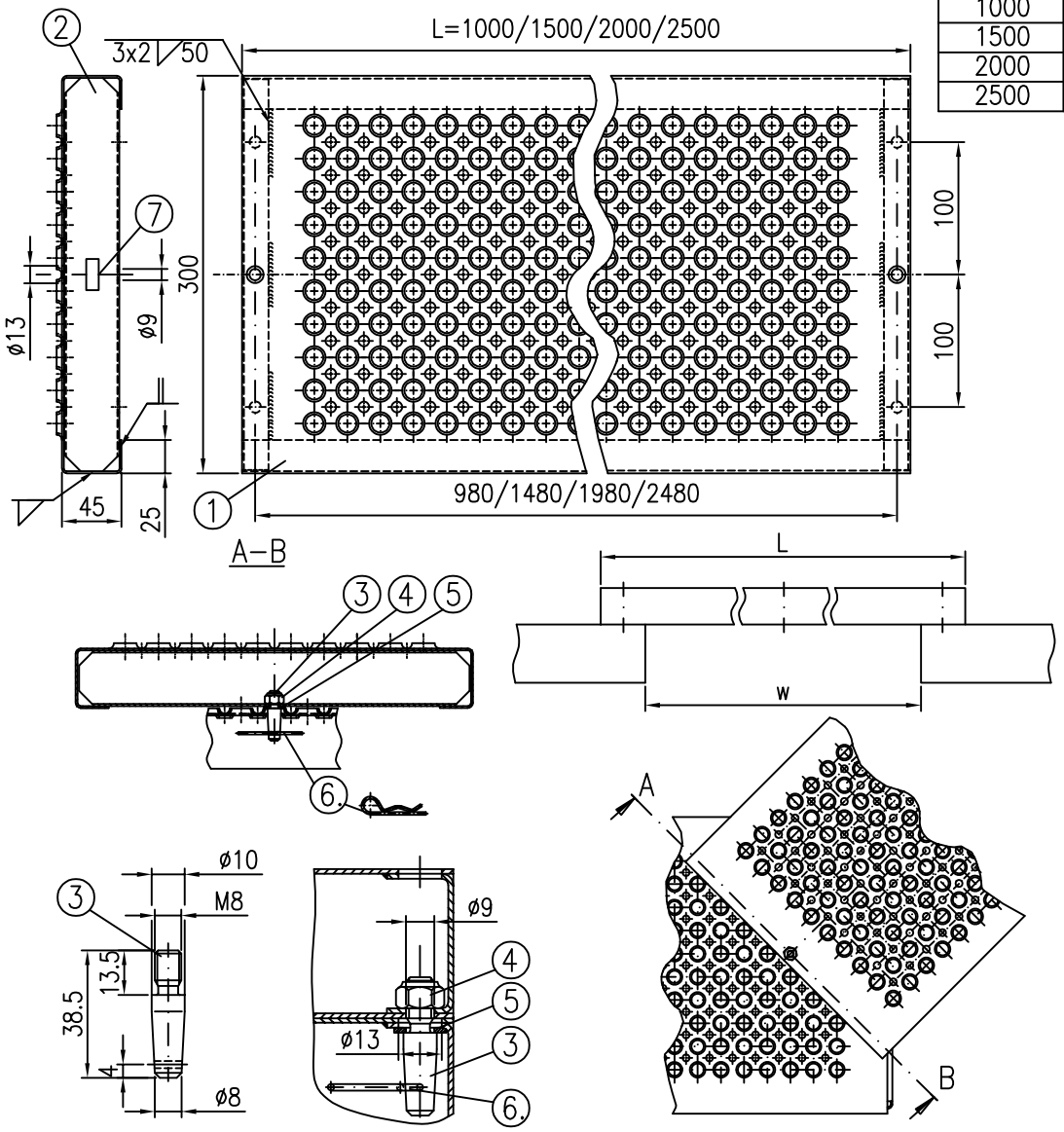
page 74

Length L [mm]	w	Load class
1000	900	4
1500	1450	4
2000	1850	3
2500	1850	3



① Steel plate 1.5mm	DIN EN 10111–DD11	R_{eH} ≥280N/mm²	R_m ≥360N/mm²	
alternatively:	DIN EN 10025–S235JR	R_{eH} ≥280N/mm²	R_m ≥360N/mm²	
② Steel plate 1.5mm	DIN EN 10111–DD11	R_{eH} ≥280N/mm²	R_m ≥360N/mm²	
③ Lift–off preventer	DIN EN 10025–S235JR			
④ Hexagon nut, self–locking	DIN EN ISO 10511–M8–8–galvanised			
⑤ Disc	DIN EN ISO 7089–A8.4–steel–galvanised			
⑥ Locking clip	DIN 11024–2x42–steel–galvanised			
alternatively:	DIN 11024–2x50–steel–galvanised			
⑦ Marking				
galvanised; all welding seams a=2mm				

Dimens. [m]	Weight [kg]
1.00	5.5
1.50	8.0
2.00	10.5
2.50	12.8

Frame scaffold ALFIX 70

Steel plank 0.30m

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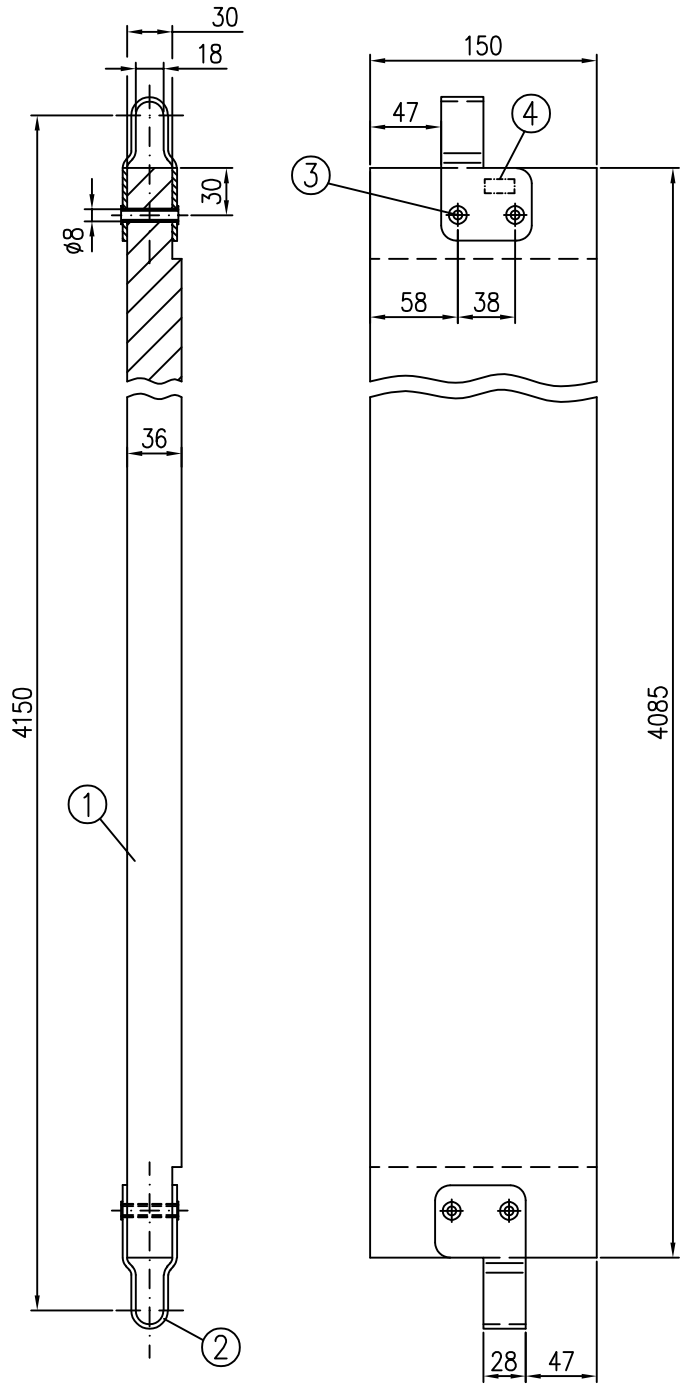
page 75



① Pine wooden deck, visual strength grade S10

② Slit strip 60x3 DIN EN 10111–DD11 $R_{eH} \geq 240 N/mm^2$

alternatively: DIN EN 10346–DX52D+Z275 $R_{eH} \geq 240 N/mm^2$; $R_m \geq 360 N/mm^2$

③ Tubular rivet DIN 7340–A8x0.75x39–steel–electrogalvanized

④ Marking

all components made of galvanised steel

Component no longer manufactured
–only approved for continued use–

Dimens. [m]	Weight [kg]
4.14	9.0

Frame scaffold ALFIX 70

Toeboard 4.14m

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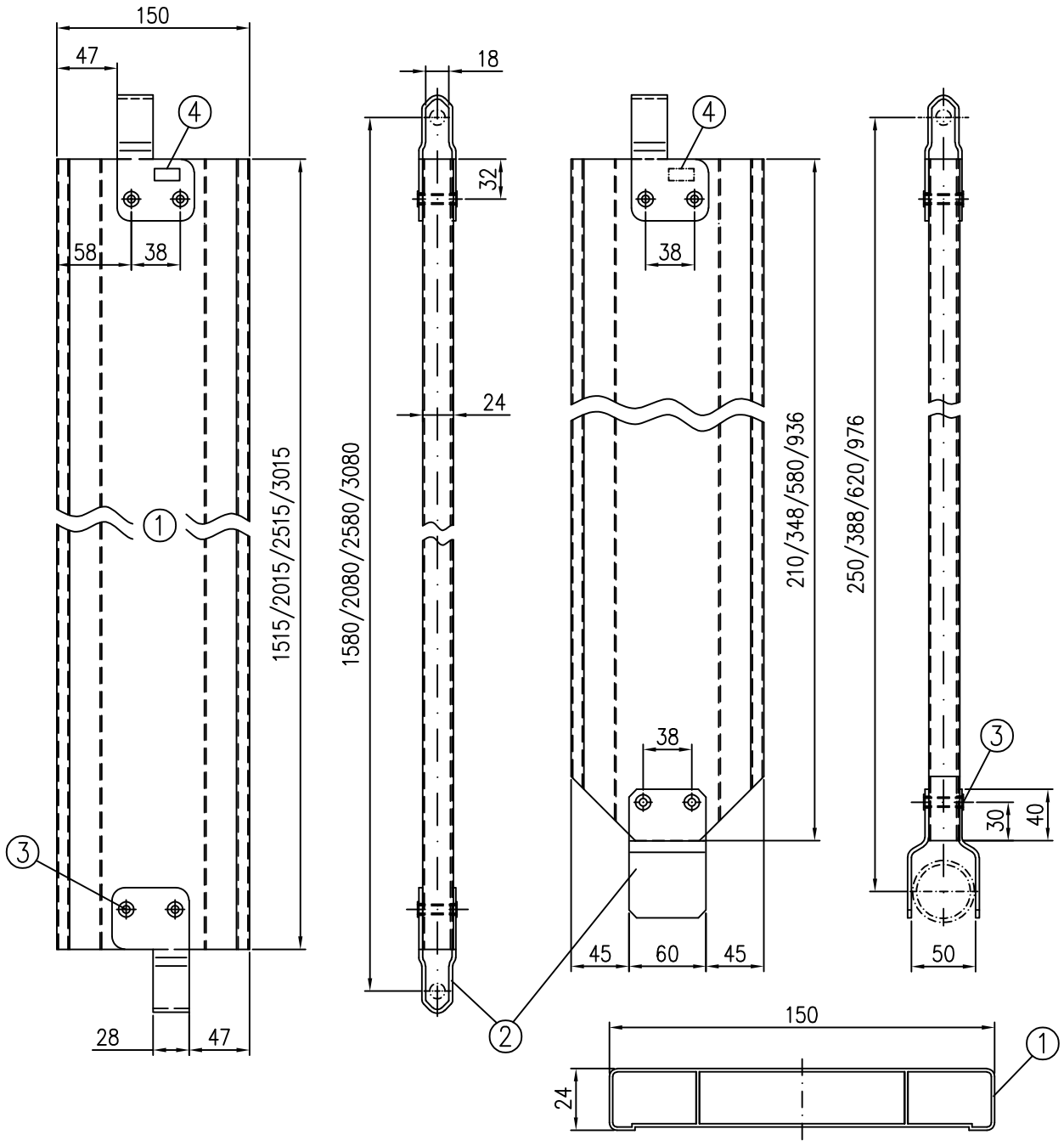
page 76



① Sectional view aluminium toeboard; s=1.25mm	DIN EN 755-2	EN AW-6063-T66
② Slit strip 60x3	DIN EN 10111-DD11	$R_{eH} \geq 240 N/mm^2$
alternatively:	DIN EN 10346-DX52D+Z275	
	$R_{eH} \geq 240 N/mm^2$; $R_m \geq 360 N/mm^2$	
③ Tubular rivet	DIN 7340-A8x0.75x33-steel-electrogalvanized	
④ Marking		
	Component no longer manufactured	
all components made of galvanised steel	-only approved for continued use-	

Dimens. [m]	Weight [kg]
Toeboard	
1.57	2.3
2.07	3.0
2.57	3.6
3.07	4.3
End-toeboard	
0.36	0.7
0.50	0.8
0.73	1.2
1.09	1.7

Frame scaffold ALFIX 70

Aluminium Toeboard; Aluminium end-toeboard

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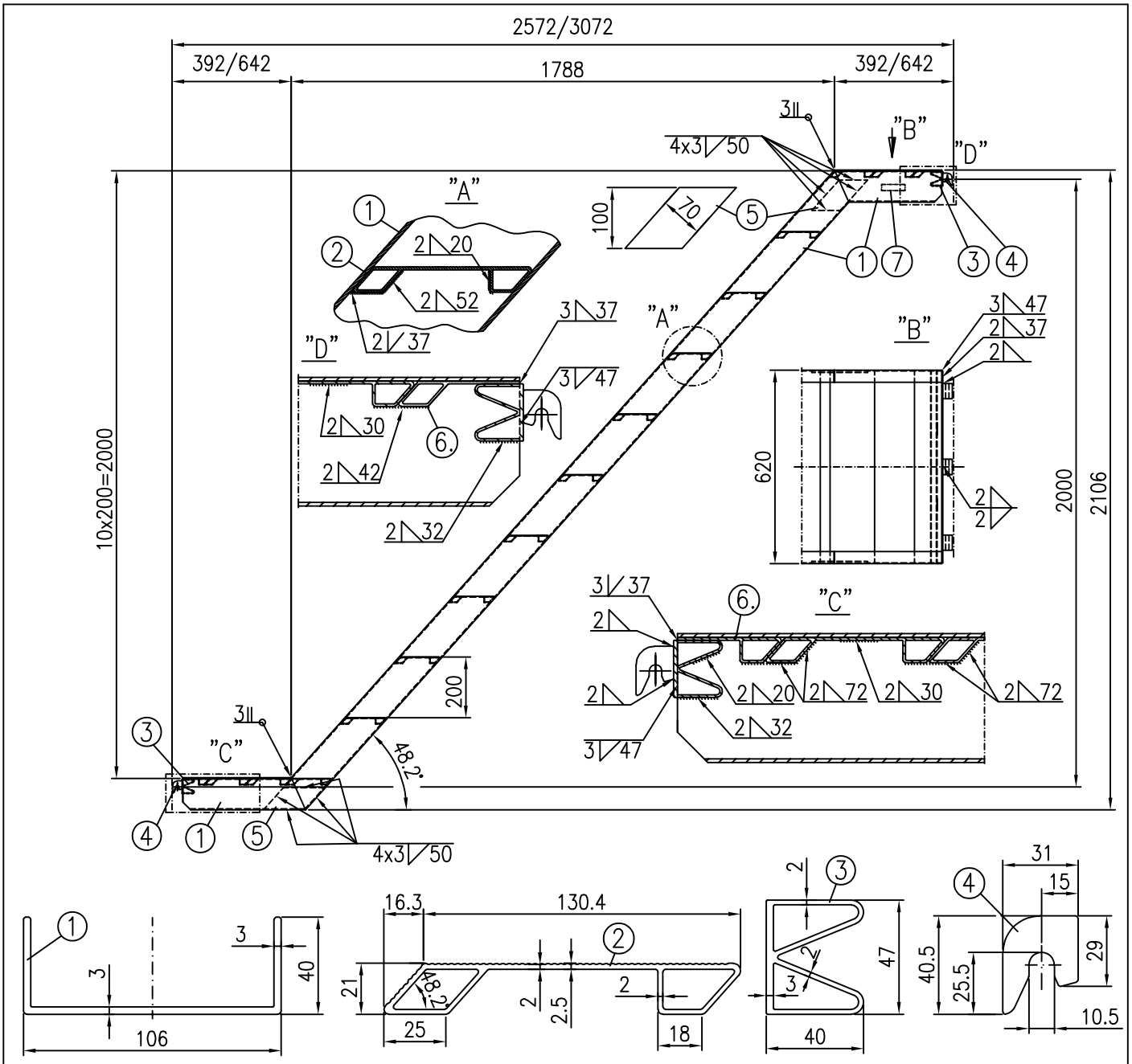
A709-A170 09.2020



①	U–profile 40x106x40x3	DIN EN 755–2 EN AW–6063–T66
②	Stair tread section	DIN EN 755–2 EN AW–6063–T66
③	Grip profile; bridging deck thickness 2mm	DIN EN 755–2 EN AW–6063–T66
④	Suspension hook	DIN EN 755–2 EN AW–6063–T66
⑤	Flat 100x5	DIN EN 485–2 EN AW–5754 H24/H34
	alternatively:	DIN EN 755–2 EN AW–6063–T66
⑥	Stair tread section, reduced	DIN EN 755–2 EN AW–6063–T66
⑦	Marking	131–MIG: Type 5 filler material (EC9)

Dimension [m]	Weight [kg]
2.57x2.00	26.0
3.07x2.00	32.0

Frame scaffold ALFIX 70

Aluminium stairway AF–0.62m 2.57m; 3.07m

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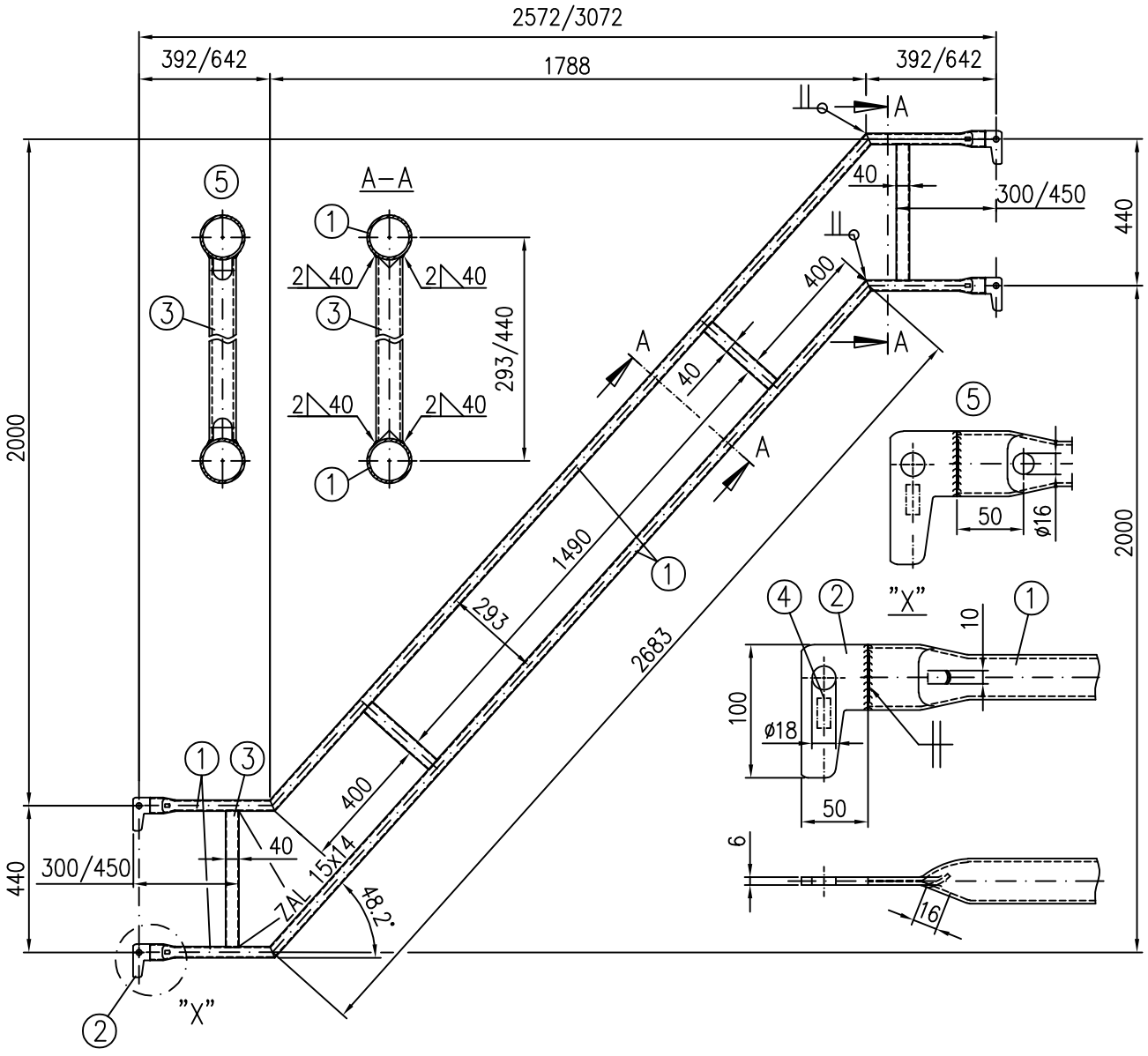
page 78

A709–A172 06.2020



① Circular hollow section ø33.7x2.3	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
alternatively: Circular hollow section ø38x2	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
alternatively: Circular hollow section ø38x2.3	DIN EN 10219–S235JRH	
② Flat 50x6	DIN EN 10025–S235JR	
③ Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH	
④ Marking		
⑤ alternatively		

galvanised; all welding seams a=2mm

Dimension [m]	Weight [kg]
2.57x2.00	15.0
3.07x2.00	19.0

Frame scaffold ALFIX 70

Stair guardrail AF 2.57m; 3.07m

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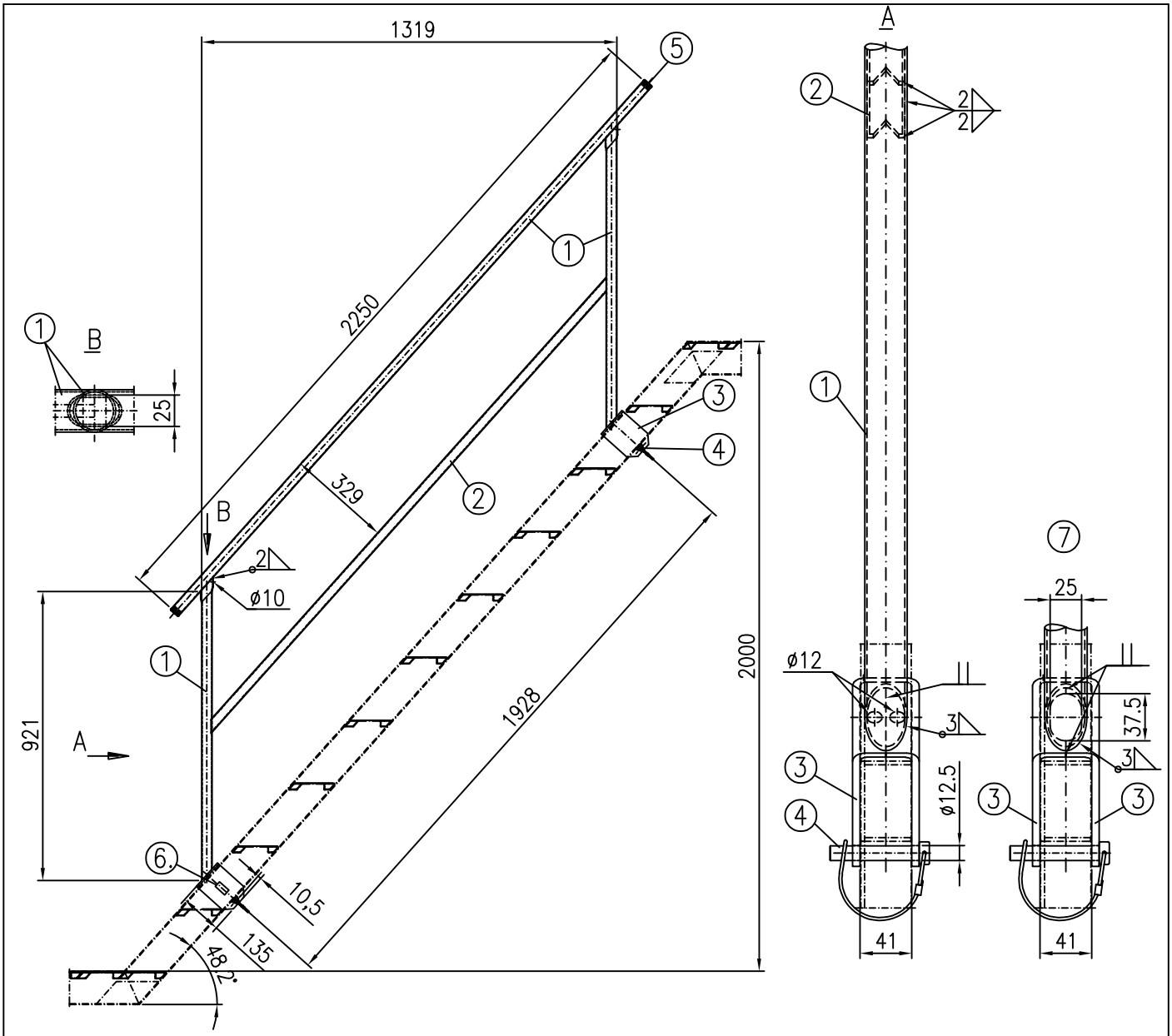
page 79



①	Circular hollow section ø33.7x1.8	DIN EN 10219–S235JRH $R_{eH} \geq 320 N/mm^2$
	alternatively: Circular hollow section ø33.7x2.0	DIN EN 10219–S235JRH
②	Rectangular hollow section 30x30x2	DIN EN 10219–S235JRH
③	Flat 100x6	DIN EN 10025–S235JR
④	Tube linchpin 112 12x70 with snap–on lock	
	Pin	DIN EN 10025–S355J2
	Ring	DIN 17223 B spring steel wire
⑤	Tube end cap GL 34 S–Poly.	
⑥	Marking	
⑦	alternatively	
	galvanised	

Dimens. [m]	Weight [kg]
2.00	13.3

Frame scaffold ALFIX 70

Inner guardrail for aluminium stairway 2.00m

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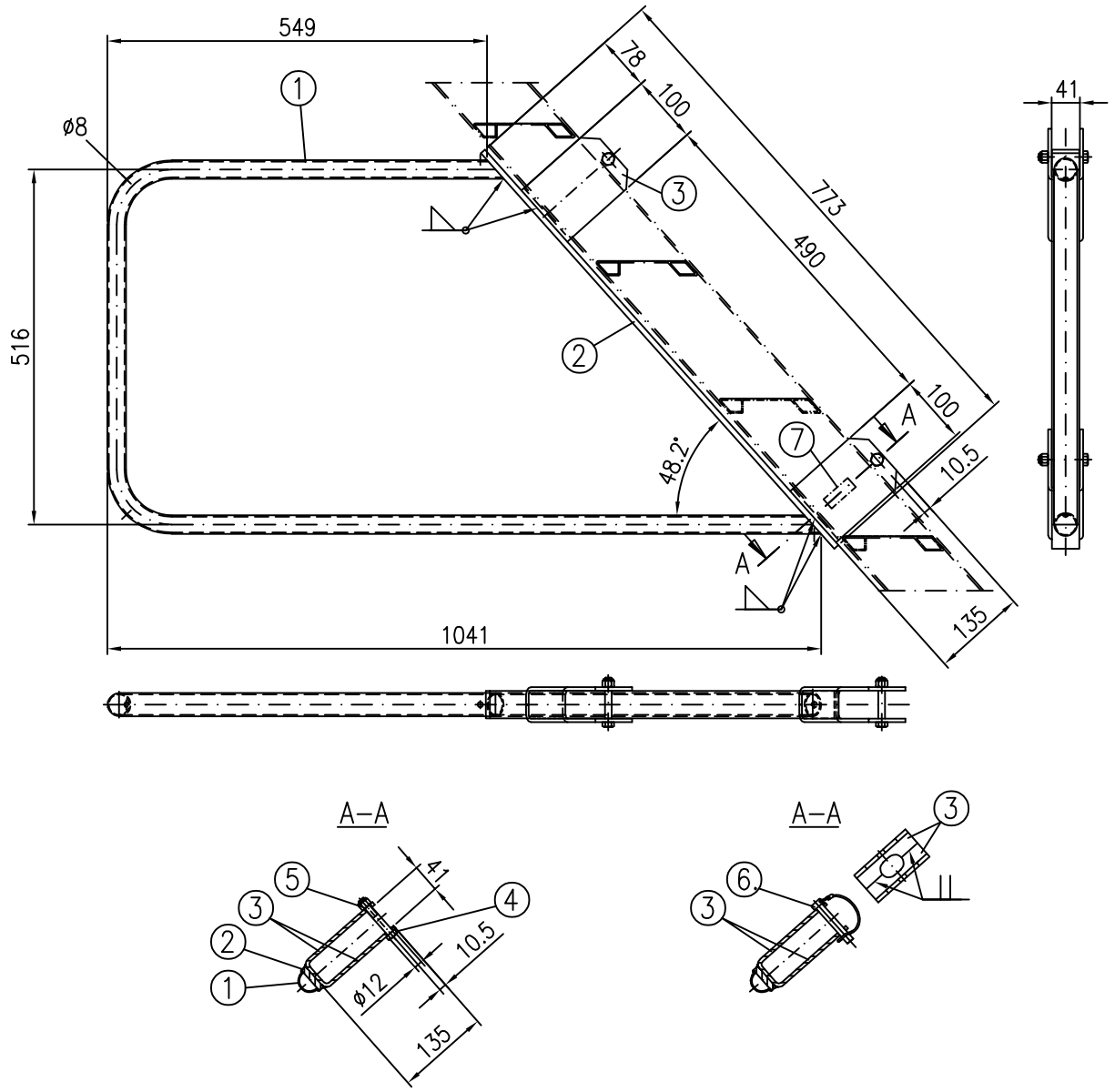
Annex A,
page 80



①	Circular hollow section ø33.7x1.8	DIN EN 10219–S235JRH $R_{eH} \geq 320 N/mm^2$
	alternatively: Circular hollow section ø33.7x2.0	DIN EN 10219–S235JRH
②	Flat 40x8	DIN EN 10025–S235JR
③	Flat 100x6	DIN EN 10025–S235JR
④	Hexagon screw	DIN EN ISO 4014–M10x65–8.8–galvanised
⑤	Hexagon nut, self–locking	DIN EN ISO 10511–M10–8–galvanised
⑥	alternatively: Tube linchpin 112 12x70 with snap–on lock	
	Pin	DIN EN 10025–S355J2
	Ring	DIN 17223 B spring steel wire
⑦	Marking	
	galvanised; all welding seams a=3mm	

Dimension [m]	Weight [kg]
1.00 x 0.50	8.8

Frame scaffold ALFIX 70

Stair stringer fall protection 1.00x0.50m

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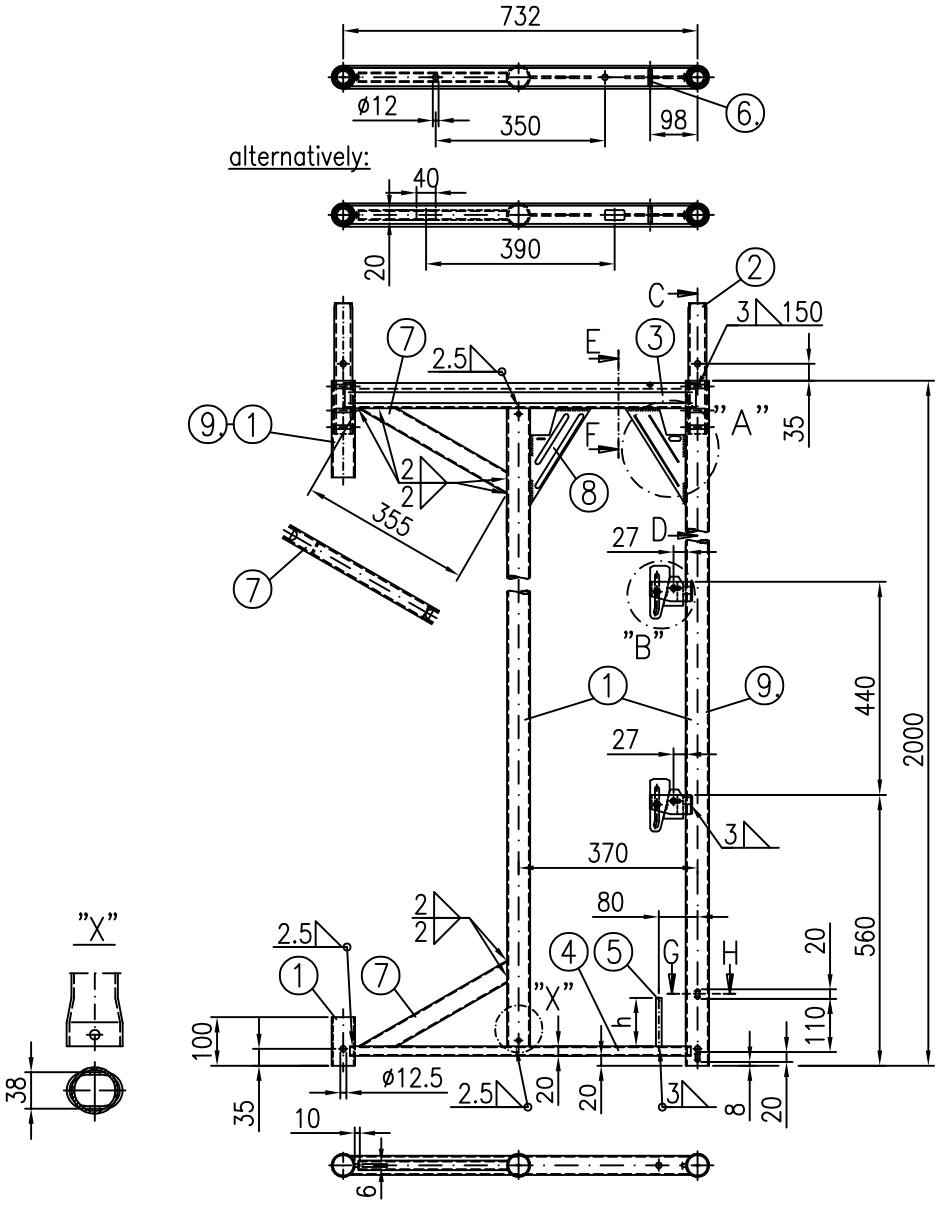
page 81



h
[mm]
100
110

①	Circular hollow section ø48.3x2.7	DIN EN 10219–S235JRH $R_{eH} \geq 320 N/mm^2$
	alternatively: Circular hollow section ø48.3x2.7	DIN EN 10219–S460MH
②	Circular hollow section ø38x3.6	DIN EN 10219–S235JRH $R_{eH} \geq 320 N/mm^2$
③	U–profile 48x52x2.5 made of steel metal 169x2.5	DIN EN 10025–S235JR
④	Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH $R_{eH} \geq 320 N/mm^2$
⑤	Round ø12xh	DIN EN 10025–S235JR
⑥	Round ø8	DIN EN 10277–2–S235JRC+C
⑦	Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH
⑧	Marking	
⑨	alternatively: Circular hollow section ø48.3x2.7 without galvanised	② DIN EN 10219–S460MH

Sectional views see annex A, page 1; for details see annex A, page 3

Dimension [m]	Weight [kg]
2.00x0.37	21.7

Frame scaffold ALFIX 70

Cantilever frame 2.00x0.37m

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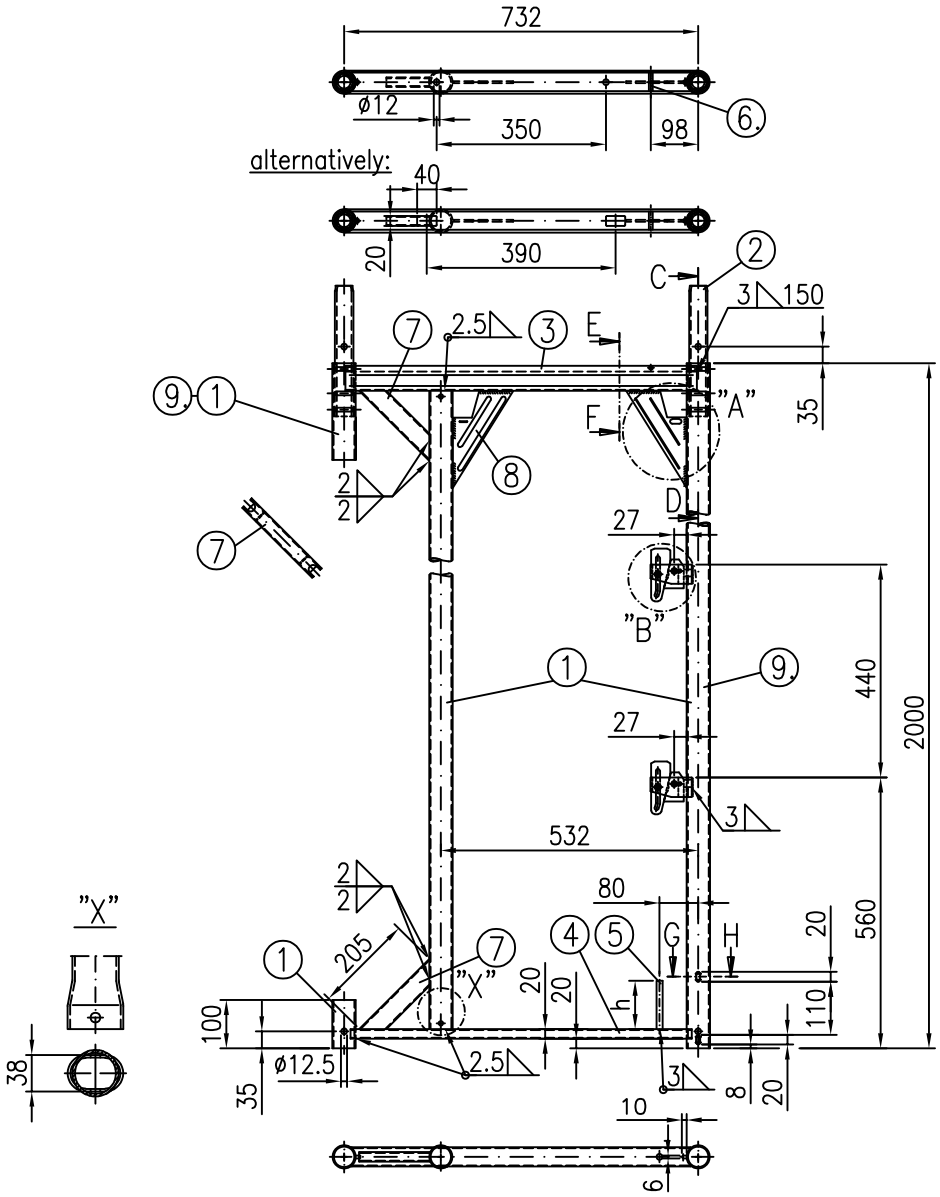

h
[mm]
100
110

①	Circular hollow section ø48.3x2.7	DIN EN 10219–S235JRH $R_{eH} \geq 320 N/mm^2$
	alternatively: Circular hollow section ø48.3x2.7	DIN EN 10219–S460MH
②	Circular hollow section ø38x3.6	DIN EN 10219–S235JRH $R_{eH} \geq 320 N/mm^2$
③	U–profile 48x52x2.5 made of steel metal 169x2.5	DIN EN 10025–S235JR
④	Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH $R_{eH} \geq 320 N/mm^2$
⑤	Round ø12xh	DIN EN 10025–S235JR
⑥	Round ø8	DIN EN 10277–2–S235JRC+C
⑦	Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH
⑧	Marking	
⑨	alternatively: Circular hollow section ø48.3x2.7 without ②	DIN EN 10219–S460MH
	galvanised	

Sectional views see annex A, page 1; for details see annex A, page 3

Dimension [m]	Weight [kg]
2.00x0.53	21.1

Frame scaffold ALFIX 70

Cantilever frame 2.00x0.53m

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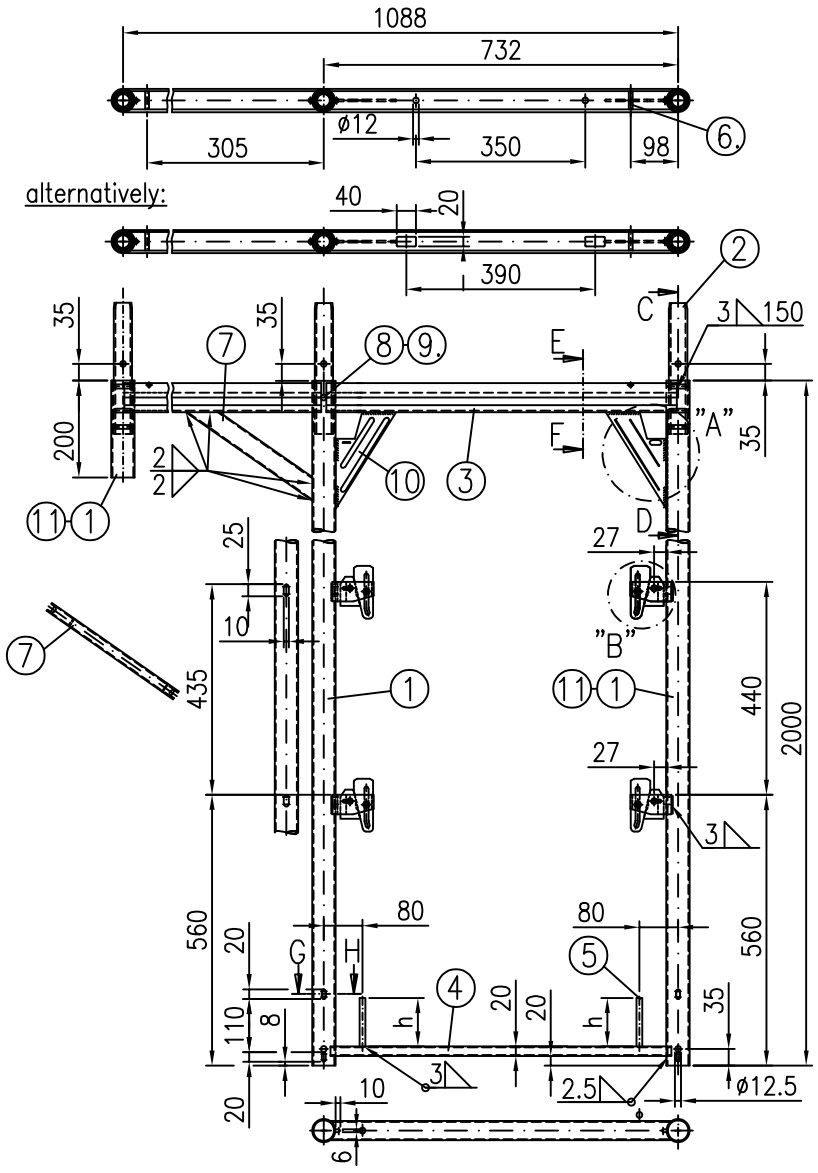
Annex A,
page 83



h
[mm]
100
110

①	Circular hollow section ø48.3x2.7	DIN EN 10219–S235JRH R_{eH}≥320N/mm²
	alternatively: Circular hollow section ø48.3x2.7	DIN EN 10219–S460MH
②	Circular hollow section ø38x3.6	DIN EN 10219–S235JRH R_{eH}≥320N/mm²
③	U–profile 48x52x2.5 made of steel metal 169x2.5	DIN EN 10025–S235JR
④	Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH R_{eH}≥320N/mm²
⑤	Round ø12xh	DIN EN 10025–S235JR
⑥,	Round ø8	DIN EN 10277–2–S235JRC+C
⑦	Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH
⑧	Hexagon screw	DIN EN ISO 4014–M10x60–8.8–galvanised
⑨,	Hexagon nut, self–locking	DIN EN ISO 10511–M10–8–galvanised
⑩	Marking	
⑪	alternatively: Circular hollow section ø48.3x2.7 without ②	DIN EN 10219–S460MH

galvanised

Sectional views see annex A, page 1; for details see annex A, page 3

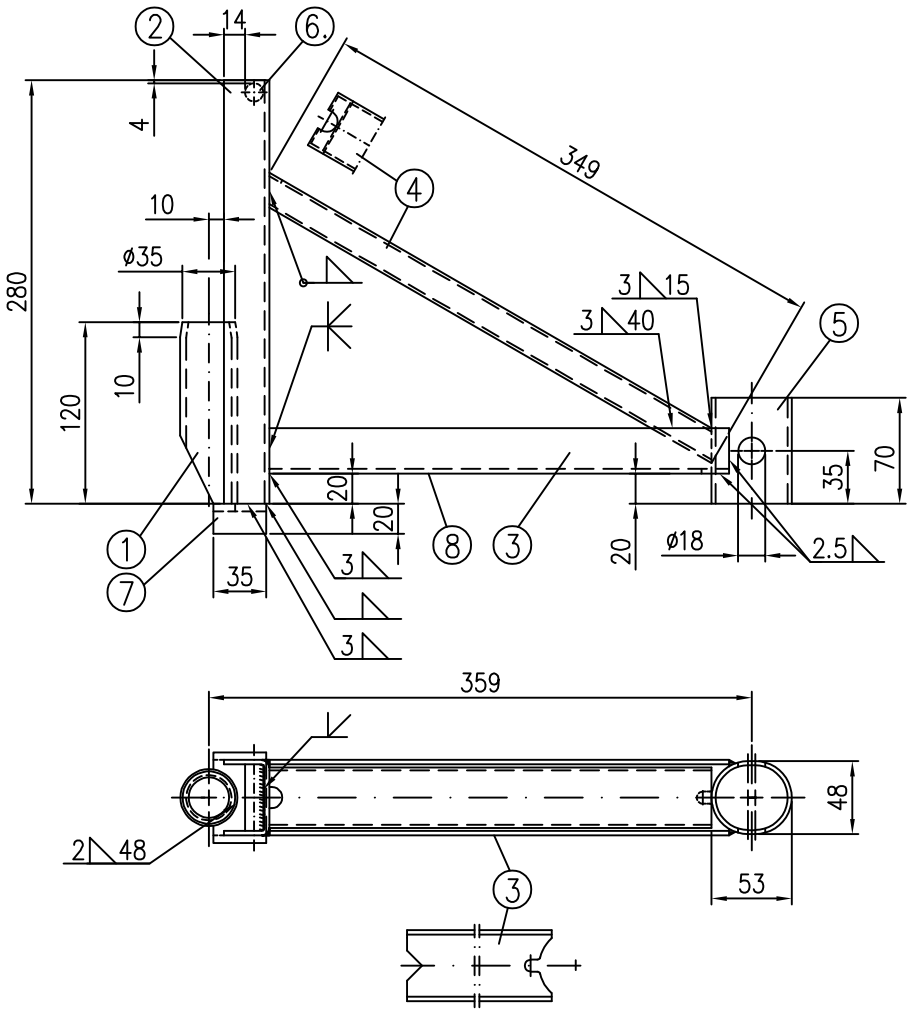
Dimension [m]	Weight [kg]
2.00x0.73 to 1.09	24.2

Frame scaffold ALFIX 70

Roof guard extension frame 2.00x0.73m to 1.09m

A709–A178 10.2020

Annex A, page 84



① Circular hollow section ø38x3.6	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
② U–profile 50x30x3	DIN EN 10025–S235JR	
alternatively: U–profile 47x30x3	DIN EN 10025–S235JR	
③ U–profile 50x30x3	DIN EN 10025–S235JR	
alternatively: U–profile 47x30x3	DIN EN 10025–S235JR	
④ Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH	
⑤ Oval tube made of circular hollow section 51x2.6	DIN EN 10219–S235JR	
⑥ Round ø12	DIN EN 10025–S235JR	
⑦ Steel metal 5	DIN EN 10025–S235JR	
⑧ Marking		
galvanised; all welding seams a=2mm		

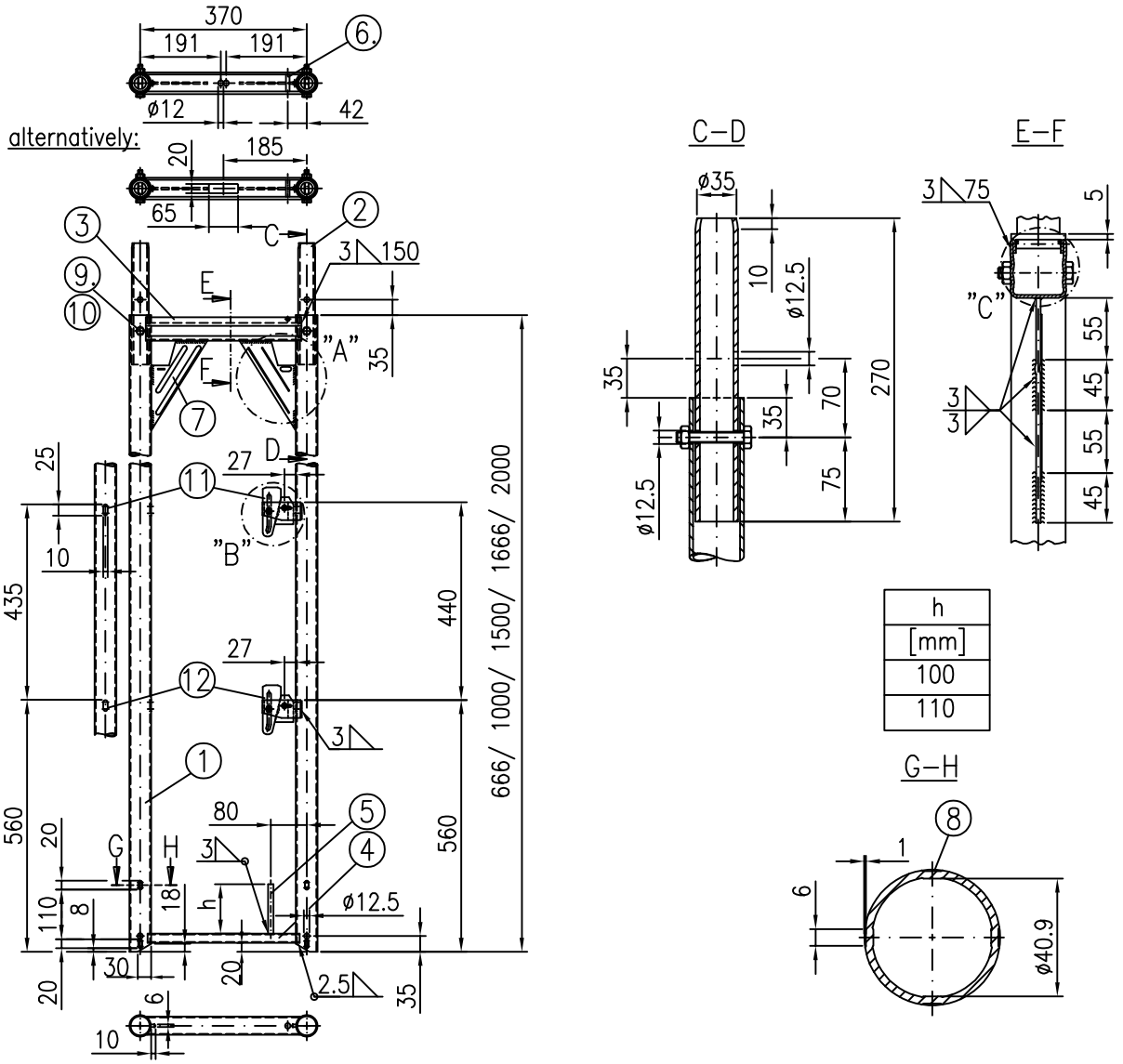
Dimens. [m]	Weight [kg]
0.36	2.9

Frame scaffold ALFIX 70

Bracket 0.36m, special design

A709–A179 06.2020

Annex A,
page 85



①	Circular hollow section ø48.3x2.7	DIN EN 10219–S235JRH R_{eH}≥320N/mm²
	alternatively: Circular hollow section ø48.3x3.2 without recess	DIN EN 10219–S235JRH R_{eH}≥320N/mm²
②	Circular hollow section ø38x3.6	DIN EN 10219–S235JRH R_{eH}≥320N/mm²
③	U–profile 48x52x2.5 made of steel metal 169x2.5	DIN EN 10025–S235JR see Annex A, page 3
④	Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH R_{eH}≥320N/mm²
⑤	Round ø12xh	DIN EN 10025–S235JR
⑥	Round ø8	DIN EN 10277–2–S235JRC+C
⑦	Marking	
⑧	4 recesses 20x6; T=1	
⑨	Hexagon screw	DIN EN ISO 4014–M10x60–8.8–galvanised
⑩	Hexagon nut, self–locking	DIN EN ISO 10511–M10–8–galvanised
⑪	not applicable for 1.00m	
⑫	not applicable for 0.67m	
	galvanised	For details see annex A, page 3

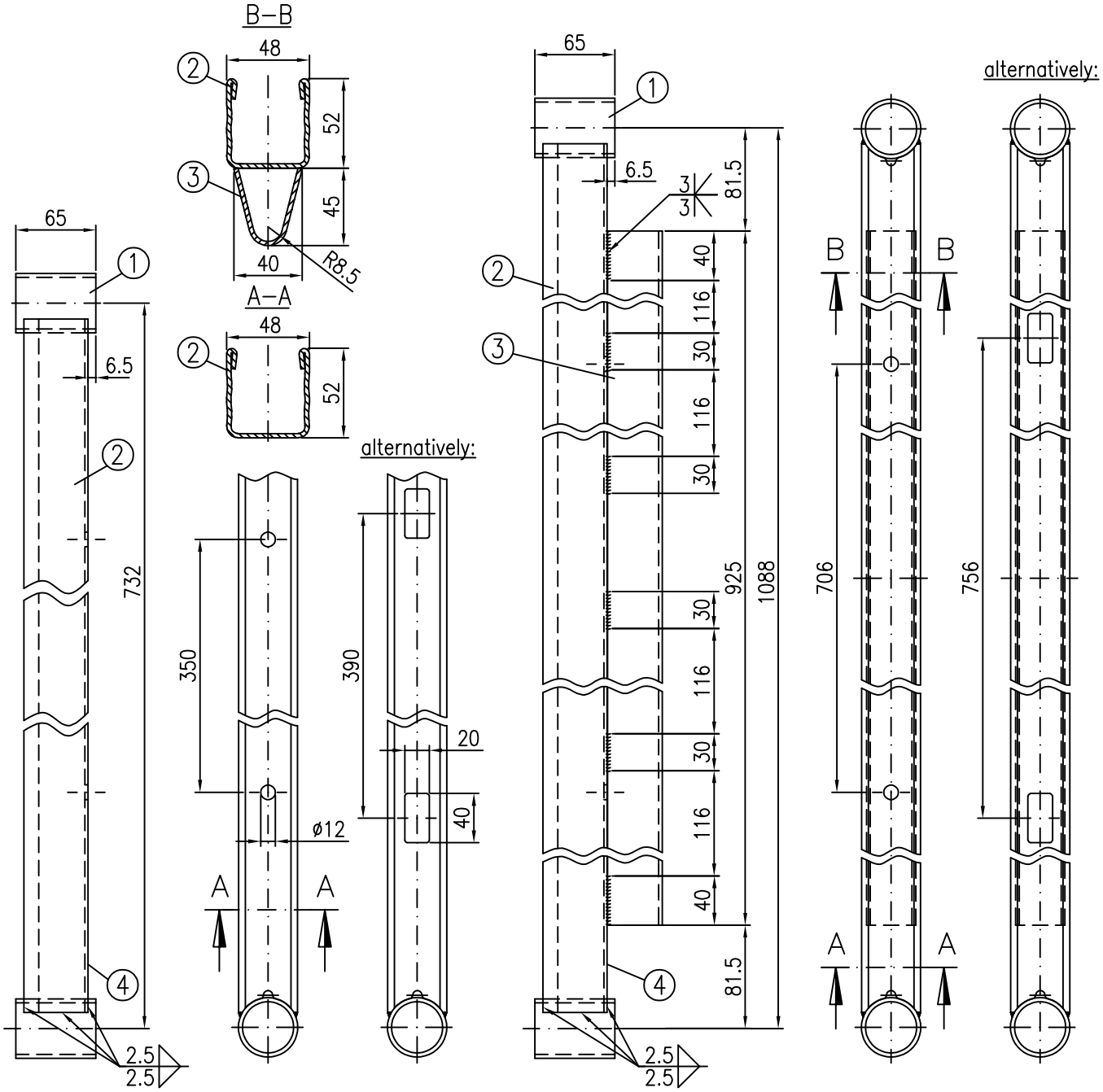
Dimension [m]	Weight [kg]
0.67x0.37	7.8
1.00x0.37	10.3
1.50x0.37	13.7
1.67x0.37	14.7
2.00x0.37	16.6

Frame scaffold ALFIX 70

Assembly frame 0.37m 0.67 – 2.00m

A709–A180 06.2020

Annex A,
Seite 86



①	Circular hollow section ø48.3x3.2	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
②	U–profile 48x52x2.5 made of steel metal 169x2.5	DIN EN 10025–S235JR	see Annex A, page 3
③	Steel metal 3	DIN EN 10025–S235JR	
	alternatively:	DIN EN 10111–DD11	
	alternatively at 1.09m U–profile 48x52x2.5 made of steel metal 169x2.5 without ③	DIN EN 10149–2–S460MC	see Annex A, page 65
④	Marking		
	galvanised		

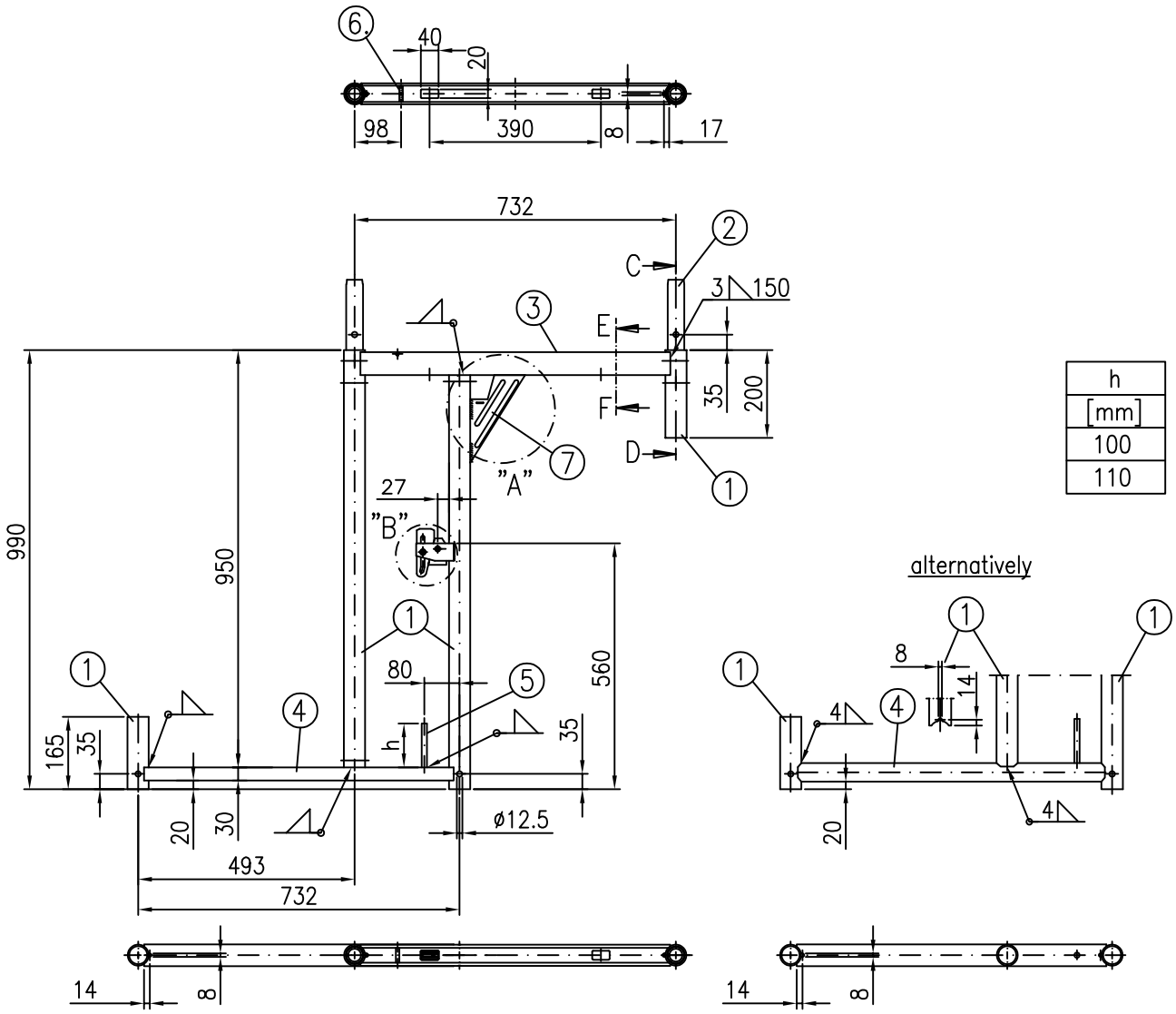
Dimens. [m]	Weight [kg]
0.73	2.8
1.09	5.4

Frame scaffold ALFIX 70

Starter transom 0.73m; 1.09m

A713–A182 09.2020

Annex A,
page 87



h
[mm]
100
110

① Circular hollow section ø48.3x3.2 — DIN EN 10219-S235JRH $R_{eH} \geq 320 N/mm^2$
alternatively: Circular hollow section ø48.3x2.7 without ② — DIN EN 10219-S460MH
② Circular hollow section ø38x3.6 — DIN EN 10219-S235JRH $R_{eH} \geq 320 N/mm^2$
③ U-profile 48x52x2.5 made of steel metal 169x2.5 — DIN EN 10025-S235JR
④ Rectangular hollow section 50x30x2 — DIN EN 10219-S355J2H
alternatively: Rectangular hollow section 50x30x3 — DIN EN 10219-S235JRH $R_{eH} \geq 320 N/mm^2$
alternatively: Circular hollow section 48.3x4.05 — DIN EN 10219-S235JRH $R_{eH} \geq 320 N/mm^2$
⑤ Round ø12xh — DIN EN 10025-S235JR
⑥ Round ø8 — DIN EN 10277-2-S235JRC+C
⑦ Marking
⑧ Point-joint pressed connections
galvanised, all welding seams a=3mm

Dimension [m]	Weight [kg]
0.99x0.73	16.0

Sectional views see annex A, page 1;
for details see annex A, page 3

Frame scaffold ALFIX 70

DS bracket frame 0.99x0.73m

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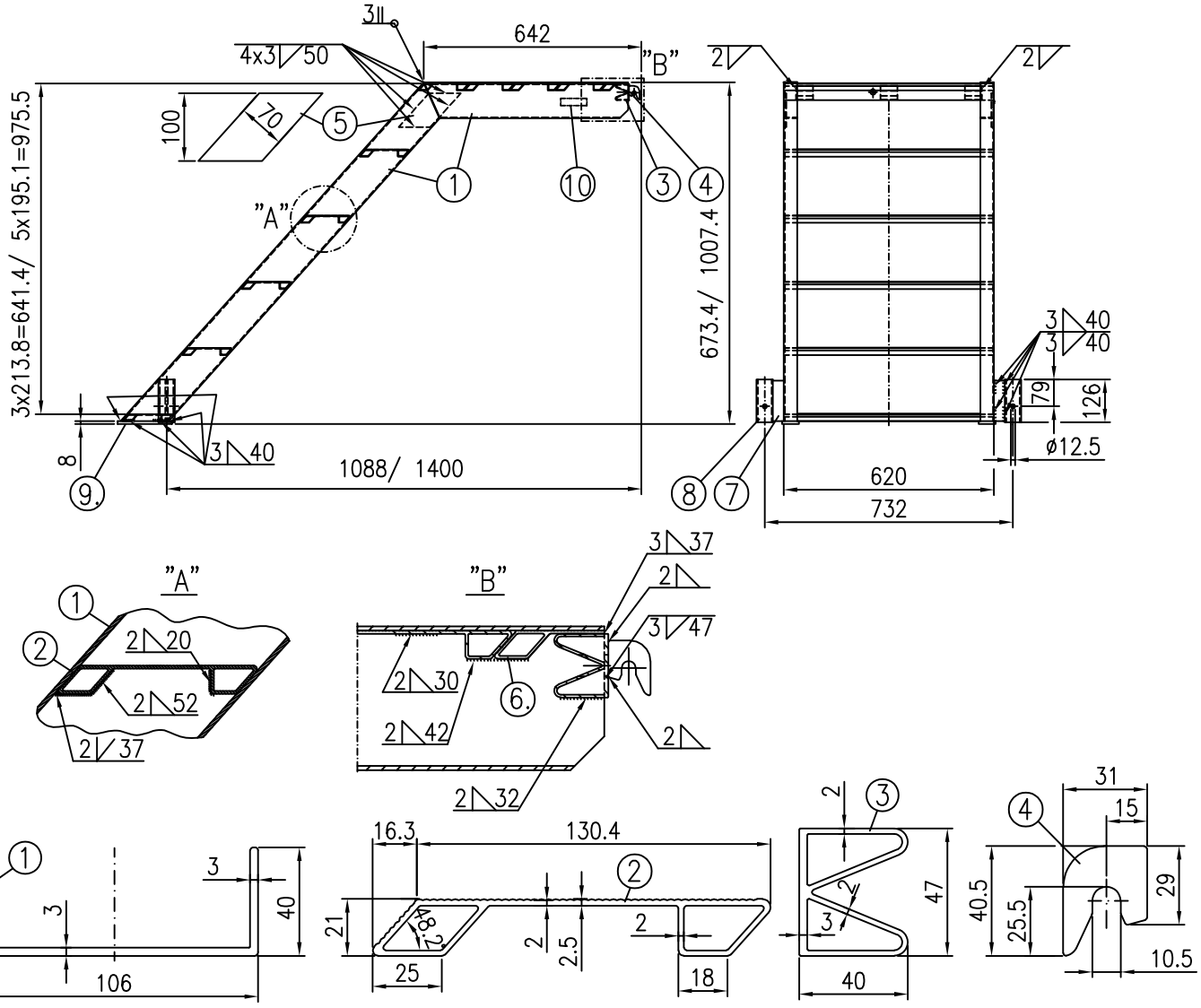
page 88

A715-A239 09.2020



①	U-profile 40x106x40x3	DIN EN 755-2 EN AW-6063-T66
②	Stair tread section	DIN EN 755-2 EN AW-6063-T66
③	Grip profile; bridging deck thickness 2mm	DIN EN 755-2 EN AW-6063-T66
④	Suspension hook	DIN EN 755-2 EN AW-6063-T66
⑤	Flat 100x5	DIN EN 485-2 EN AW-5754 H24/H34
	alternatively:	DIN EN 755-2 EN AW-6063-T66
⑥	Stair tread section, reduced	DIN EN 755-2 EN AW-6063-T66
⑦	Steel metal t=8mm	DIN EN 755-2 EN AW-6060-T66
⑧	Circular hollow section ø48.3x4.05	DIN EN 755-2 EN AW-6082-T5
⑨	Flat 50x8	DIN EN 755-2 EN AW-6060-T66
⑩	Marking	131-MIG: Type 5 filler material (EC9)

Dimension [m]	Weight [kg]
1.09x0.67	14.3
1.40x1.00	17.7

Frame scaffold ALFIX 70

Aluminium stairway AF-0.62m 1.09m; 1.40m

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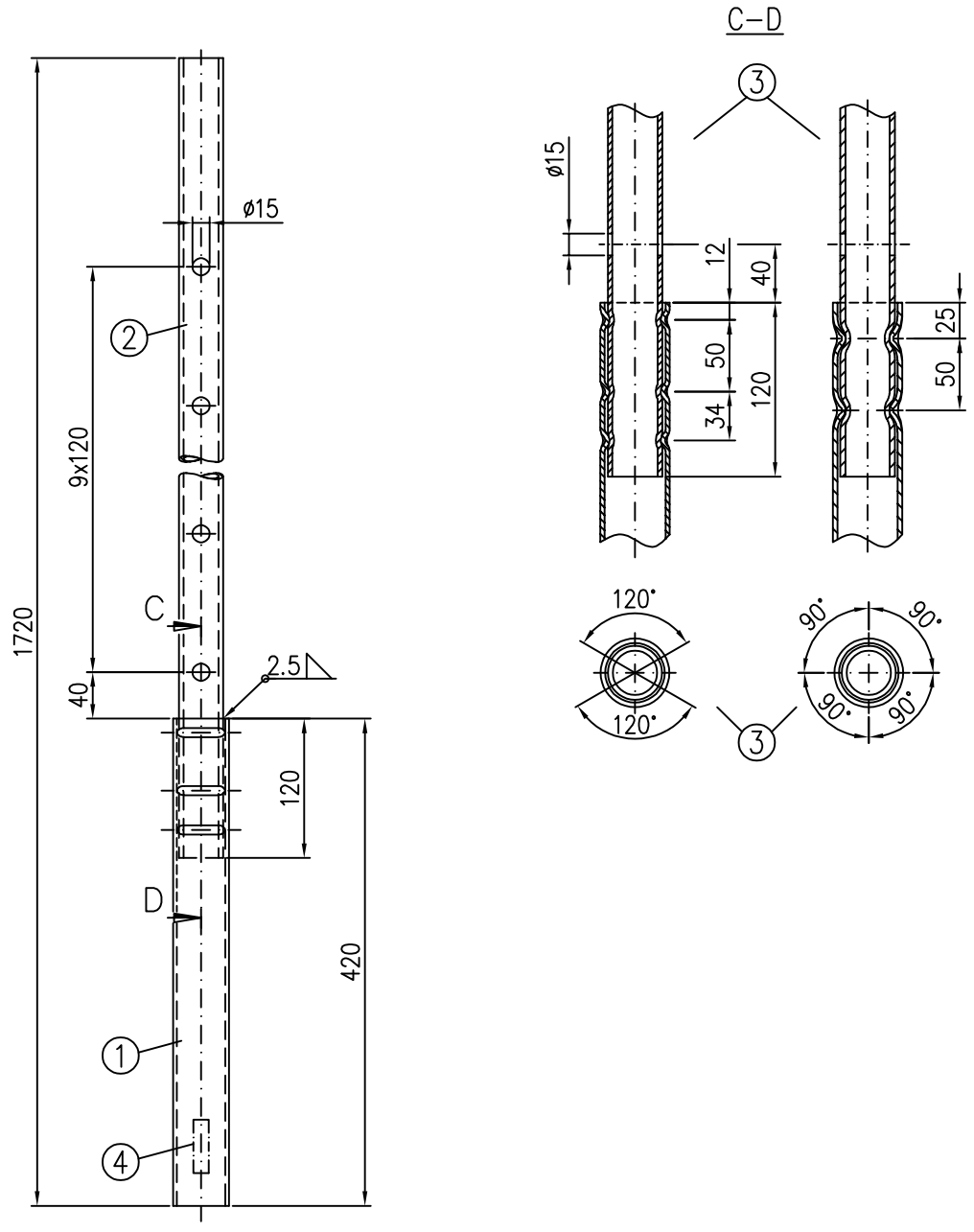
page 89

A715-A244 06.2020



① Circular hollow section ø48.3x3.2	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
② Circular hollow section ø38x4	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
③ Linear pressed connection alternatively:	4 point–joint pressed connections	
④ Marking		
galvanised		

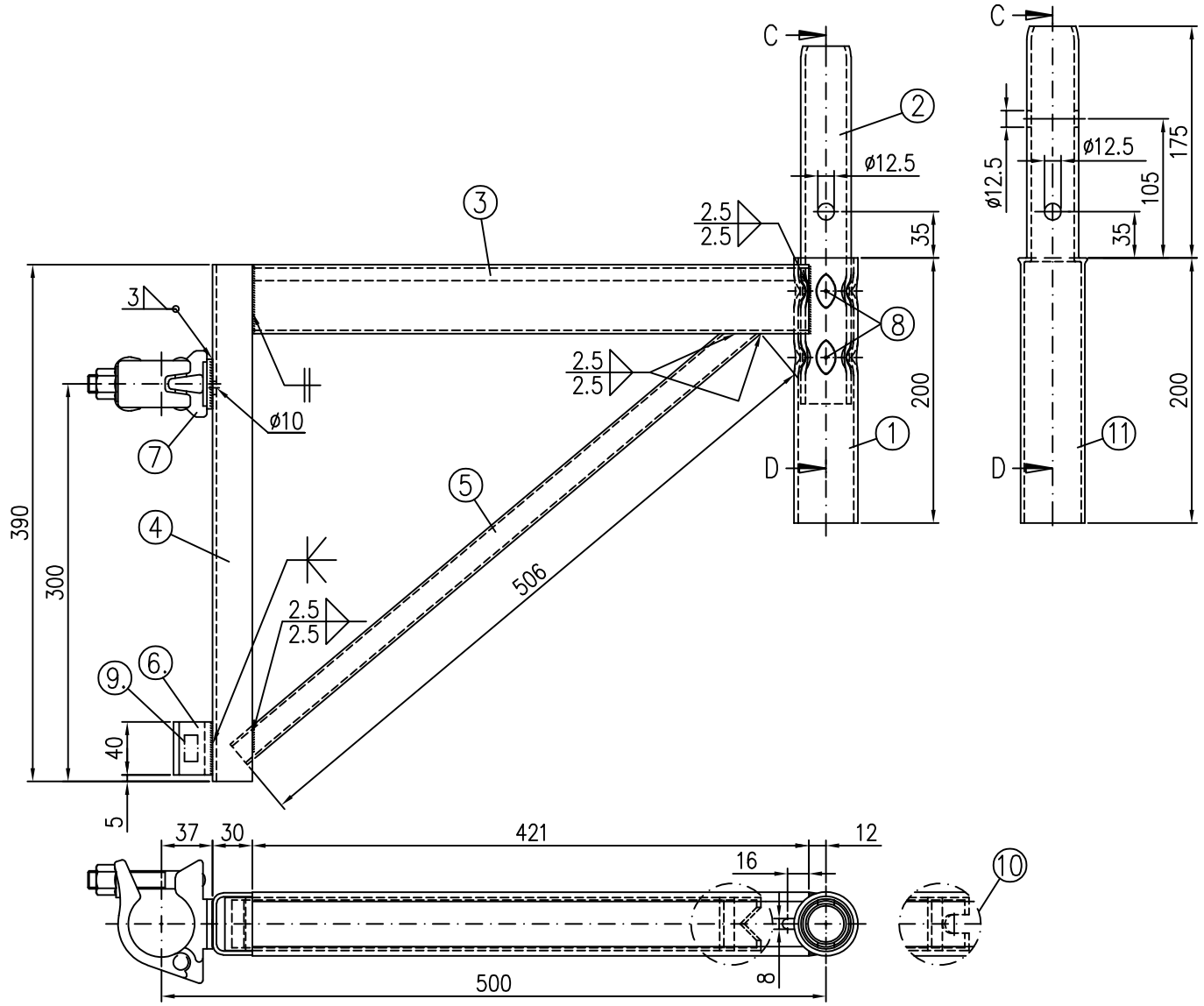
Dimens. [m]	Weight [kg]
1.80	6.4

Frame scaffold ALFIX 70

Spacer tube

A709–A185 06.2020

Annex A,
page 90



① Circular hollow section ø48.3x3.2	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
② Circular hollow section ø38x3.6	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
③ U–profile 48x52x2.5 made of steel metal 169x2.5	DIN EN 10025–S235JR	
④ U 47x30x3	DIN EN 10025–S235JR	
⑤ Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH	
⑥ Steel plate 40x6	DIN EN 10025–S235JR	
⑦ Halfcoupler, class B	DIN EN 74–2	

⑧ Linear pressed connection; alternatively 4 point–joint pressed connections

⑨ Marking

⑩ alternatively

⑪ alternatively: Circular hollow section ø48.3x2.7 without ② DIN EN 10219–S460MH galvanised

For details see Annex A, pages 1 and 3

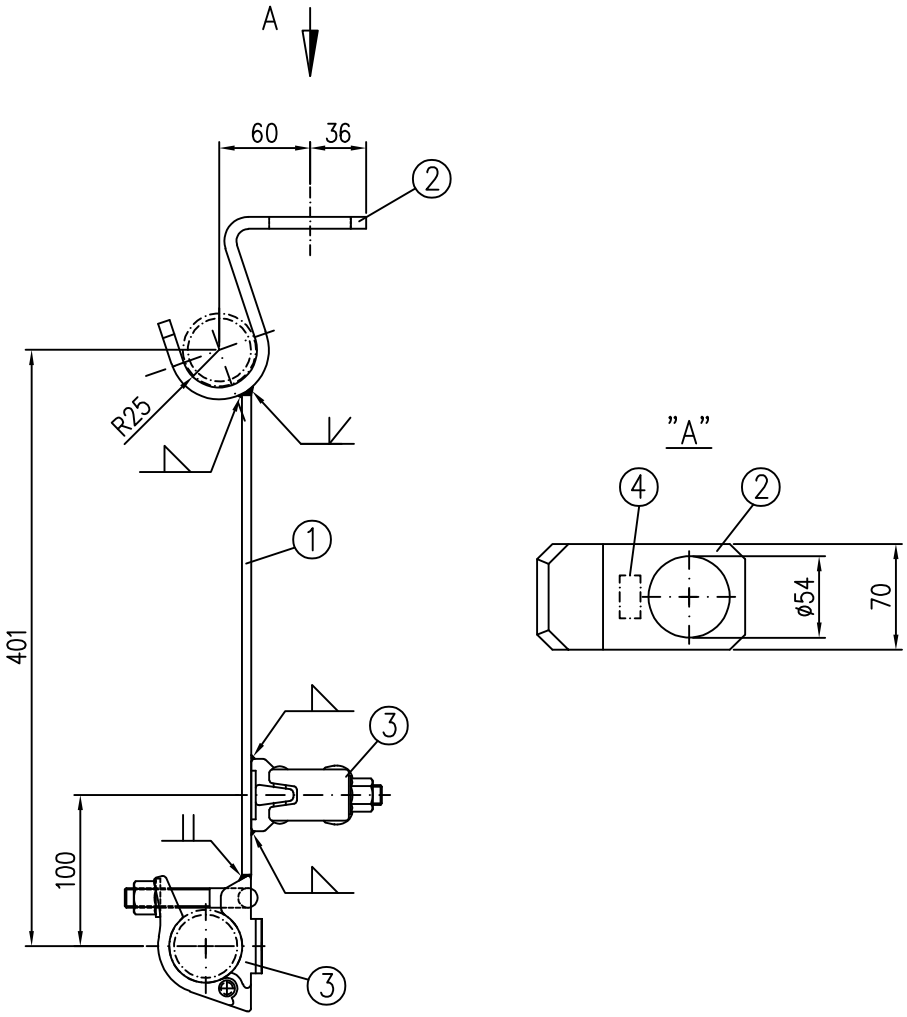
Dimens. [m]	Weight [kg]
0.50	4.5

Frame scaffold ALFIX 70

Bracket AF 0.50m

A709–A186 06.2020

Annex A, page 91



① Flat 60x6	DIN EN 10025–S235JR	
② Flat 70x8	DIN EN 10025–S235JR	
③ Halfcoupler, class B	DIN EN 74–2	
④ Marking		

galvanised; all welding seams a=3mm

Dimens. [m]	Weight [kg]
0.53	3.2

Frame scaffold ALFIX 70

Lattice girder suspension

A709–A187 06.2020

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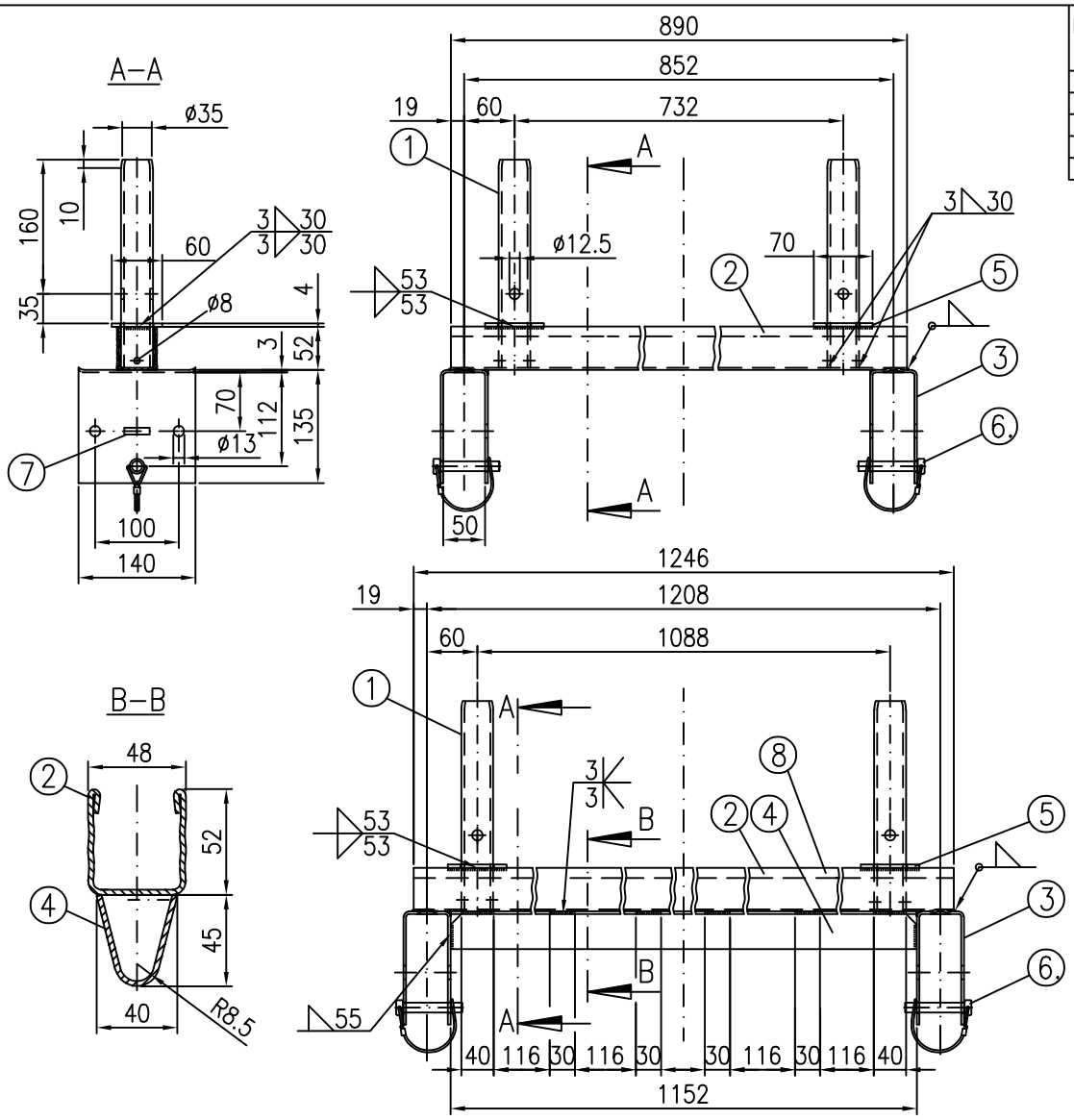
page 92

Dimens. [m]	Weight [kg]
0.73	7.0
1.09	8.2



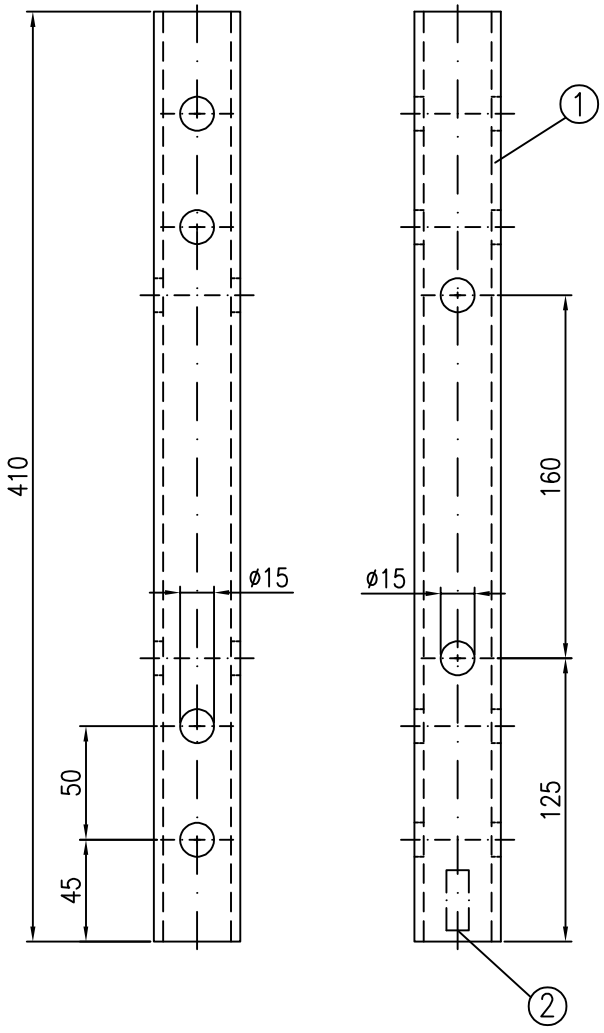
①	Circular hollow section ø38x3.6	DIN EN 10219–S235JRH $R_{eH} \geq 320 N/mm^2$
②	U–profile 48x52x2.5 made of steel metal 169x2.5	DIN EN 10025–S235JR see annex A, page 3
③	Steel metal 3	DIN EN 10025–S235JR
④	Steel metal 3	DIN EN 10025–S235JR
⑤	Steel metal 4	DIN EN 10025–S235JR
	alternatively: Washer	DIN EN 28738–40–steel
⑥	Tube linchpin 112 12x70 with snap–on lock	
	Pin	DIN EN 10025–S355J2
	Ring	DIN 17223 B spring steel wire
⑦	Marking	
⑧	alternatively: U–profile 48x52x2.5 made of steel metal 169x2.5 without galvanised; all welding seams a=2.5mm	④ DIN EN 10149–2–S460MC see Annex A, page 87

Frame scaffold ALFIX 70

Lattice girder cross brace 0.73m; 1.09m

A713–A188 09.2020

Annex A, page 93



① Circular hollow section ø38x4 DIN EN 10219-S235JRH $R_{eH} \geq 320 N/mm^2$

② Marking

hot-dip galvanised

Dimens. [m]	Weight [kg]
0.41	1.5

Frame scaffold ALFIX 70

Tube connector for lattice girder

A709-A189 06.2020

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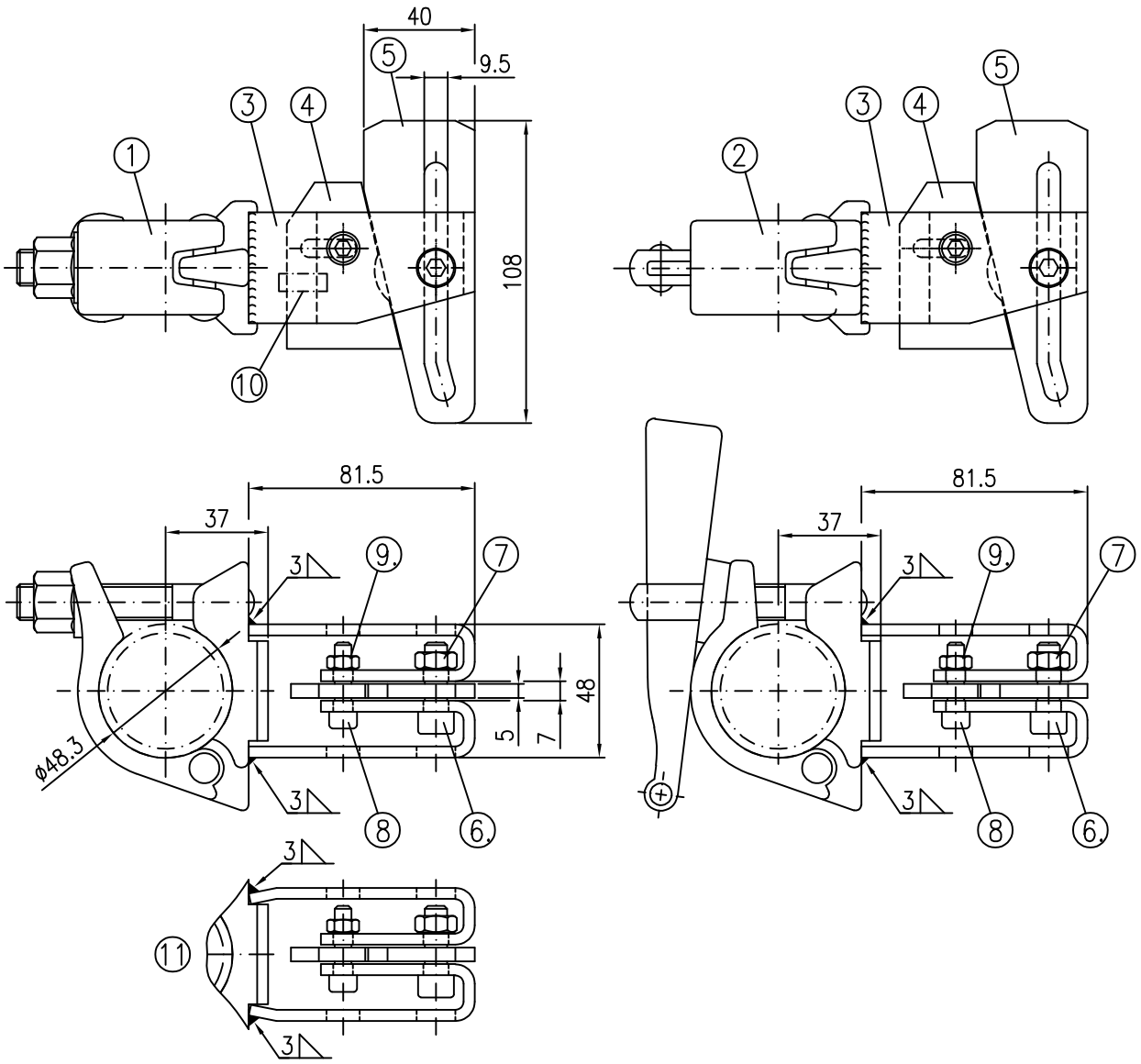
page 94



①	Halfcoupler, class B	DIN EN 74–2
②	alternatively: Wedge coupler	DIN EN 74–2
③	Steel plate 320x4	DIN EN 10111–DD13
④	Steel plate 70x5	DIN EN 10025–S235JR
⑤	Steel plate 80x5	DIN EN 10025–S235JR
⑥	Cylinder head screw with hexagon socket	DIN EN ISO 4762–M8x25–8.8–galvanised
⑦	Hexagon nut, self–locking	DIN EN ISO 10511–M8–8–galvanised
⑧	Cylinder head screw with hexagon socket	DIN EN ISO 4762–M6x25–8.8–galvanised
⑨	Hexagon nut, self–locking	DIN EN ISO 10511–M6–8–galvanised
⑩	Marking	
⑪	alternatively	
	galvanised	

Dimens. [m]	Weight [kg]
–	1.3

Frame scaffold ALFIX 70

Guardrail coupler AF

A709–A190 06.2020

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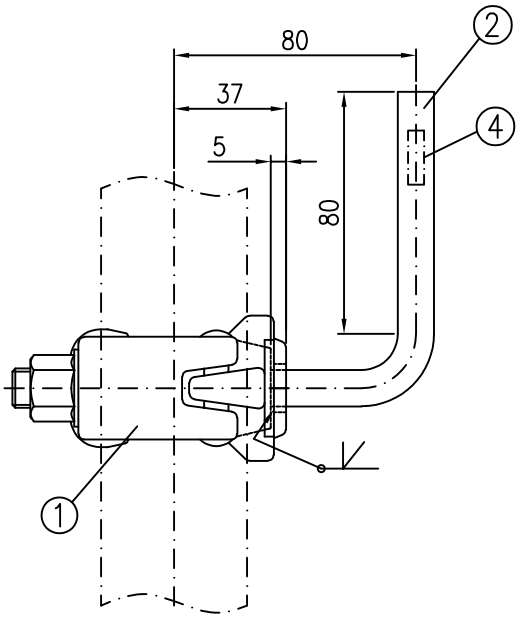
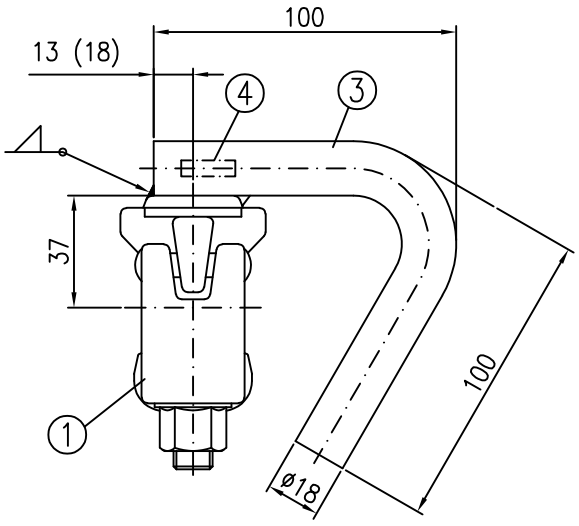
page 95

Toeboard coupler



Halfcoupler with hook



① Halfcoupler, class B DIN EN 74-2
② Round ø12 DIN EN 10025-S235JR
③ Round ø18 DIN EN 10025-S355J2
④ Marking

galvanised; all welding seams a=3mm ( ) = discontinued design

Designation	Weight [kg]
Toeboard coupler	0.6
Halfcoupler with hook	0.9

Frame scaffold ALFIX 70

Toeboard coupler; Halfcoupler with hook

A709-A191 06.2020

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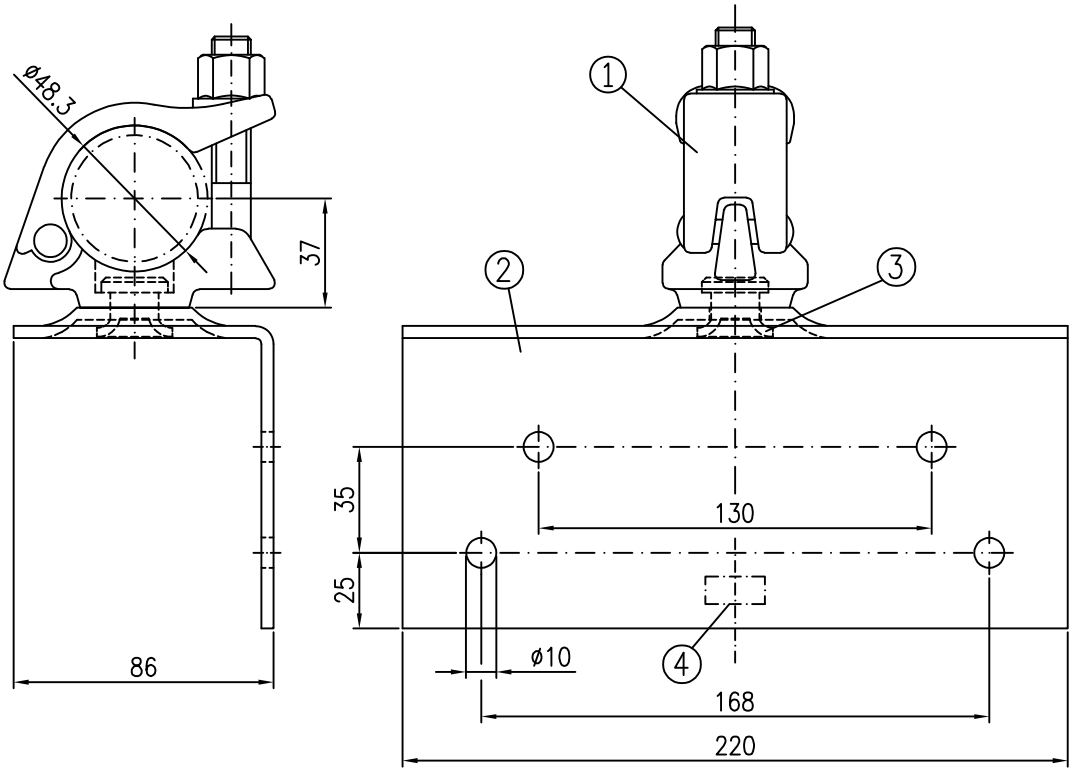
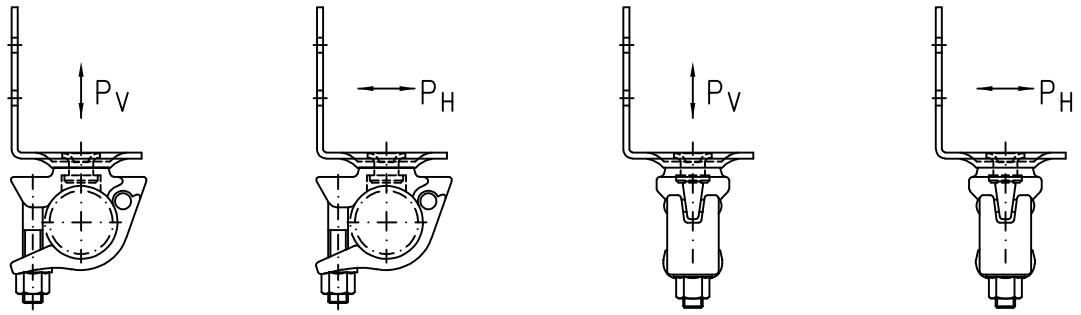
page 96





Maximum allowable P_V = 2kN
Maximum allowable P_H = 1kN

①	Halfcoupler, class B	DIN EN 74–2
②	Steel metal 4	DIN EN 10025–S235JR
③	Rivet squared timber coupler ø16	DIN EN 10263–1/2–C10C+C
	alternatively:	DIN EN 10263–3–C10E2C
④	Marking	
	galvanised	

Dimens. [m]	Weight [kg]
–	1.8

Frame scaffold ALFIX 70

Squared timber coupler

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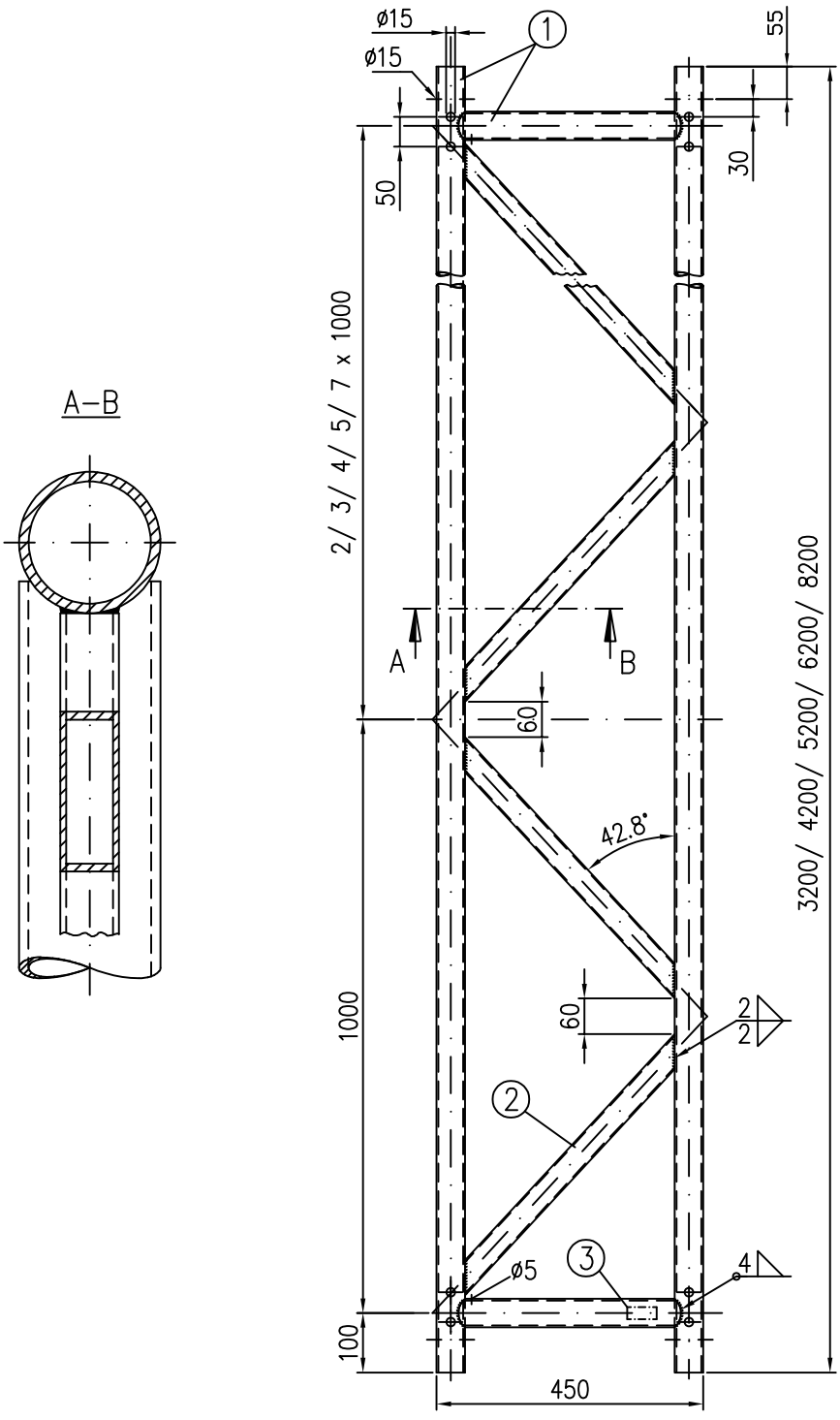
page 97

A709–A192 06.2020



①	Circular hollow section ø48.3x4.05	DIN EN 755–2 EN AW–6082–T5
②	Rectangular hollow section 40x20x2	DIN EN 755–2 EN AW–6060–T66
③	Marking	131–MIG: Type 4 filler material (EC9)

Dimension [m]	Weight [kg]
3.20x0.45	12.8
4.20x0.45	16.5
5.20x0.45	20.2
6.20x0.45	23.8
8.20x0.45	31.2

Frame scaffold ALFIX 70

Lattice girder, aluminium

A709–A193 06.2020

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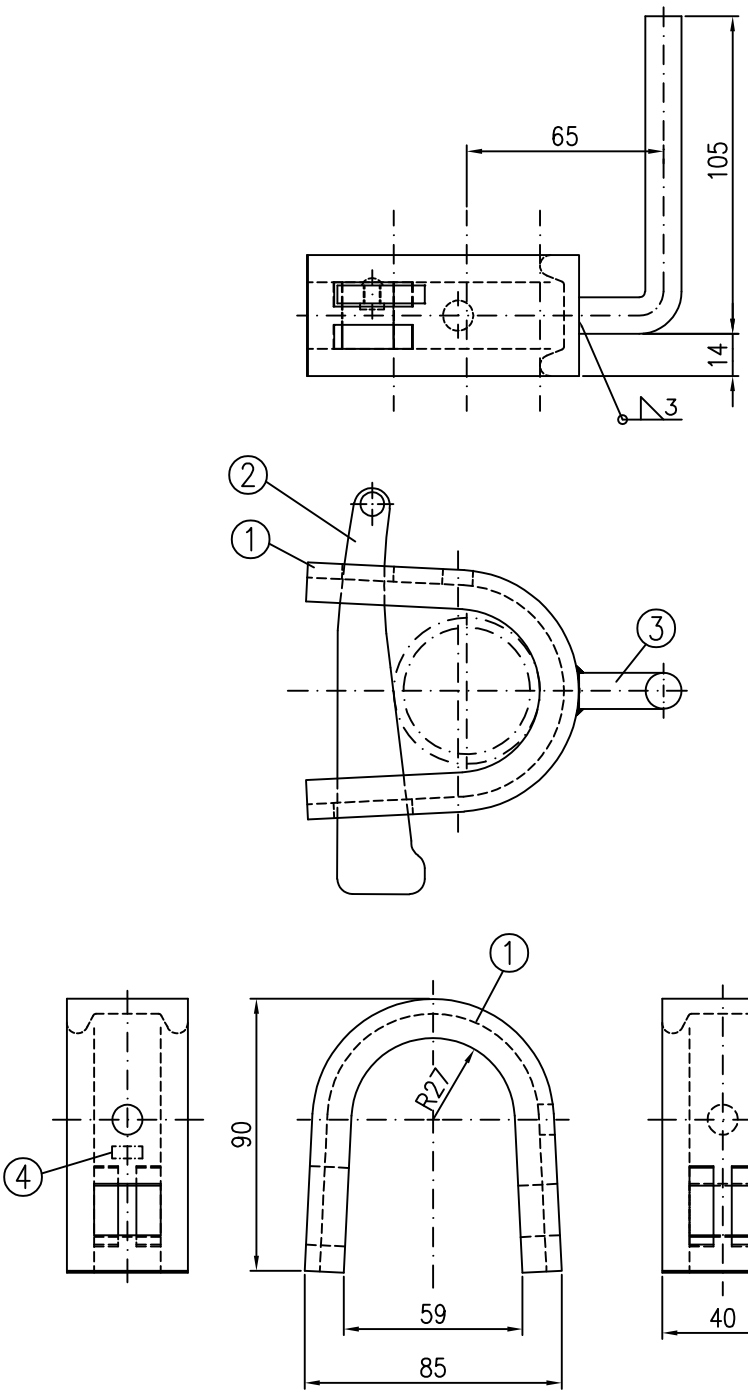
page 98



① Bended profile section 40x13x5x6.5	DIN EN 10025-S235JR	
② Wedge 6mm	in accordance with approval Z-8.22-906	
③ Round ø12	DIN EN 10025-S235JR	
④ Marking		
galvanised		

Dimens. [m]	Weight [kg]
–	0.8

Frame scaffold ALFIX 70

Toeboard support

A709-A194 06.2020

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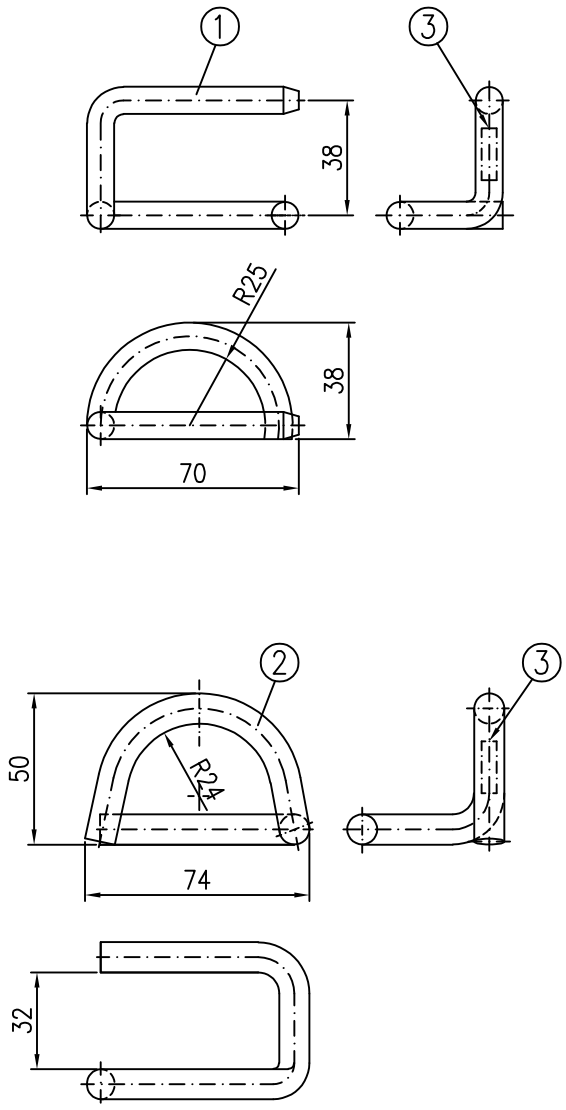
page 99



① Round ø9 DIN EN 10025–S235JR
② alternative design: Round ø10 DIN EN 10025–S235JR
③ Marking

galvanised

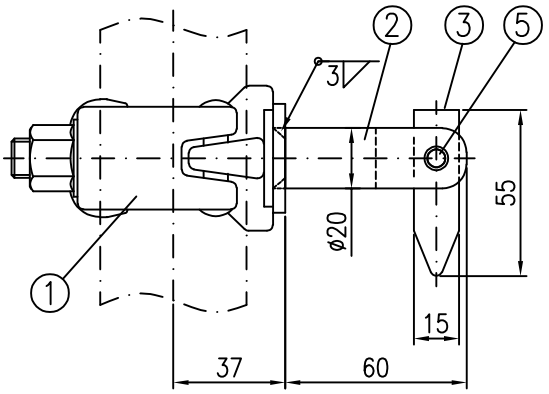
Dimens. [m]	Weight [kg]
–	0.13

Frame scaffold ALFIX 70

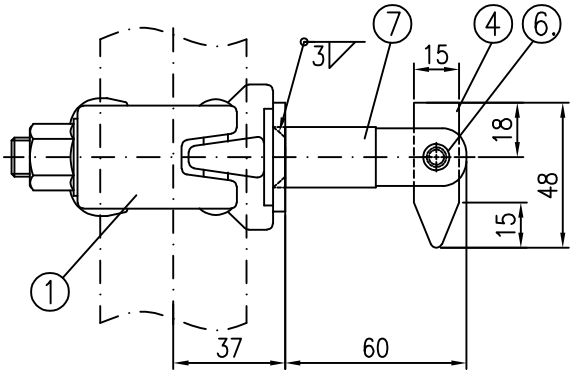
Locking pin

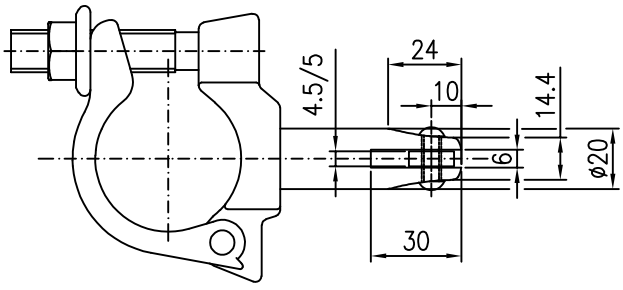
A709–A195 06.2020

Annex A,
page 100



alternatively





① Halfcoupler, class B	DIN EN 74-2	
② Tilting pin ø20x60 alternatively: changed design ⑦	DIN EN 10025-S235JR	
③④ Locking lug; s=4mm; hot-dip galvanised alternatively: s=4.5mm/5mm	DIN EN 10025-S235JR	
⑤ Clamping sleeve	DIN EN ISO 8752-6x18-steel-galvanised	
⑥ Blind rivet 6x18 aluminium/steel galvanised	ISO 15983	
Only for accommodating side protection components		

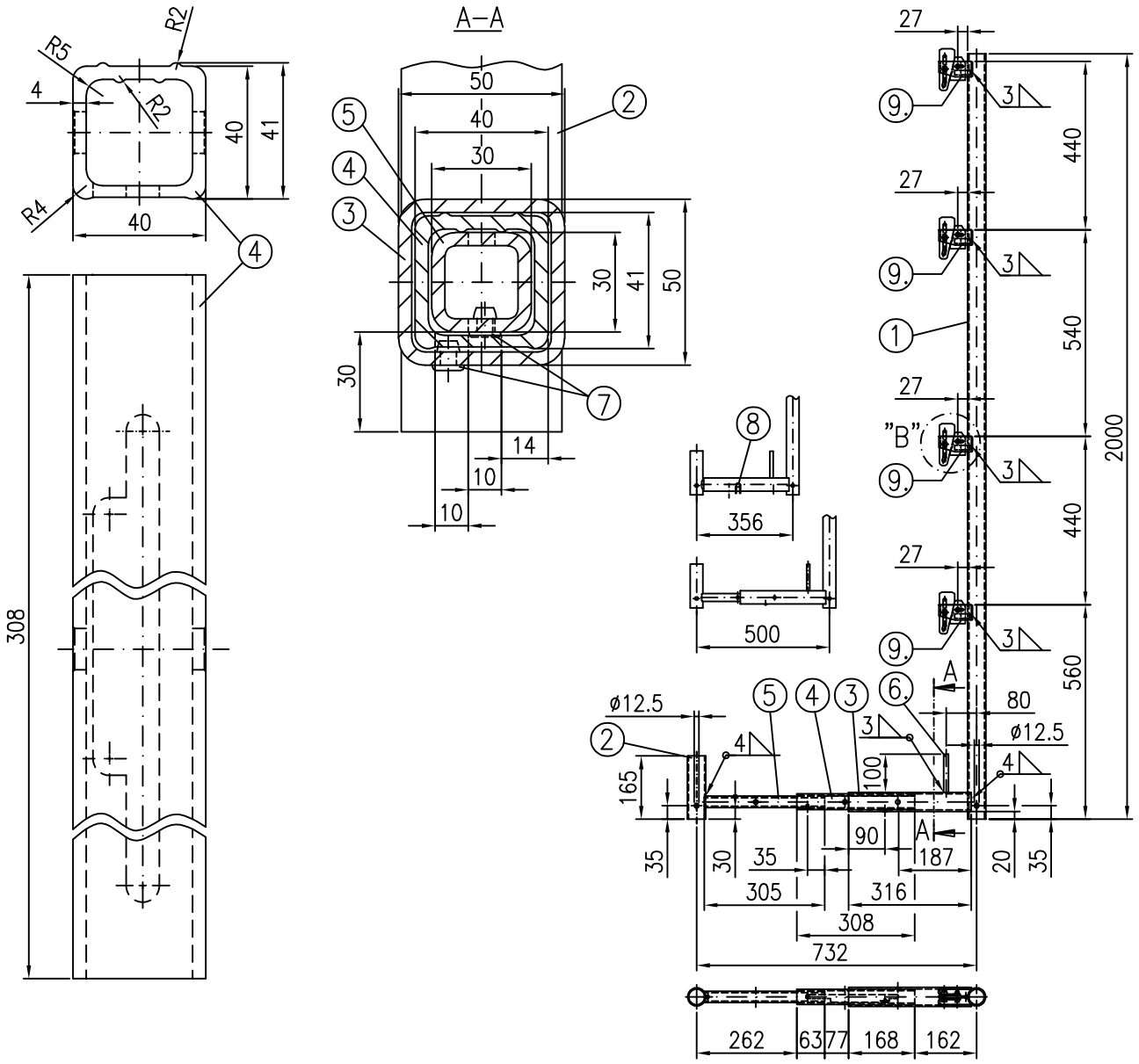
Dimens. [m]	Weight [kg]
–	0.6

Frame scaffold ALFIX 70

Putlog coupler

A709-A196 09.2020

Annex A,
page 101



①	Circular hollow section ø48.3x4.05	DIN EN 10219–S235JRH $R_{eH} \geq 320 N/mm^2$
②	Circular hollow section ø48.3x3.2	DIN EN 10219–S235JRH $R_{eH} \geq 320 N/mm^2$
③	Rectangular hollow section 50x50x4	DIN EN 10219–S235JRH
④	Special section	DIN EN 755–2 EN AW–6063–T66
⑤	Rectangular hollow section 30x30x4	DIN EN 10219–S235JRH
⑥	Round ø12	DIN EN 10025–S235JR
⑦	Monobolt dummy pin ø4.8x10.3	CrNi–steel A2 high strength
⑧	Tube linchpin (transport security)	12–10x60x32–electrogalvanized
⑨	Marking	

galvanised

For details see annex A, page 3

Component no longer manufactured
–only approved for continued use–

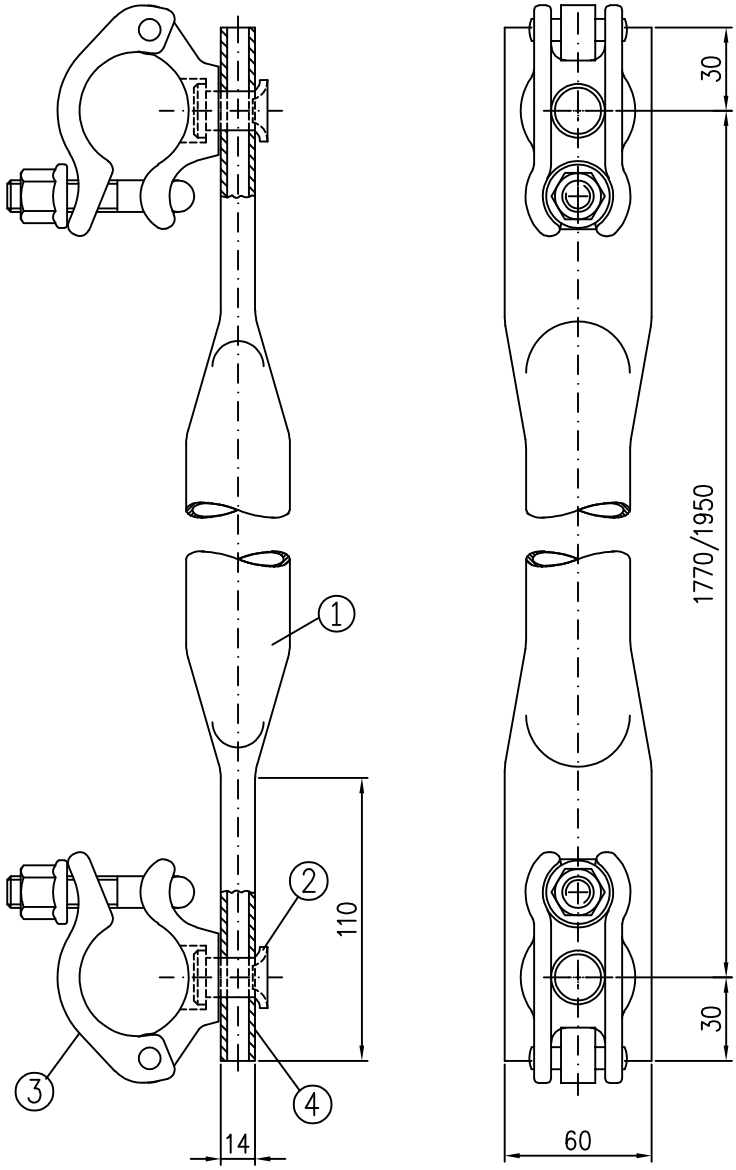
Dimension [m]	Weight [kg]
2.00x0.36/0.50/0.73	15.1

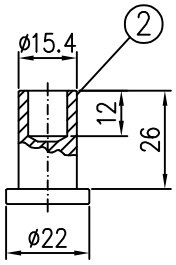
Frame scaffold ALFIX 70

Protective wall post, telescopic 0.36m–0.73m

A709–A197 09.2020

Annex A,
page 102





①	Circular hollow section ø42.4x2	DIN EN 10219–S235JRH
②	Rivet for diagonal brace	DIN EN 10263–1/2–C10C+C
	alternatively:	DIN EN 10263–3–C10E2C
③	Halfcoupler, class B	DIN EN 74–2
④	Marking	
	galvanised	

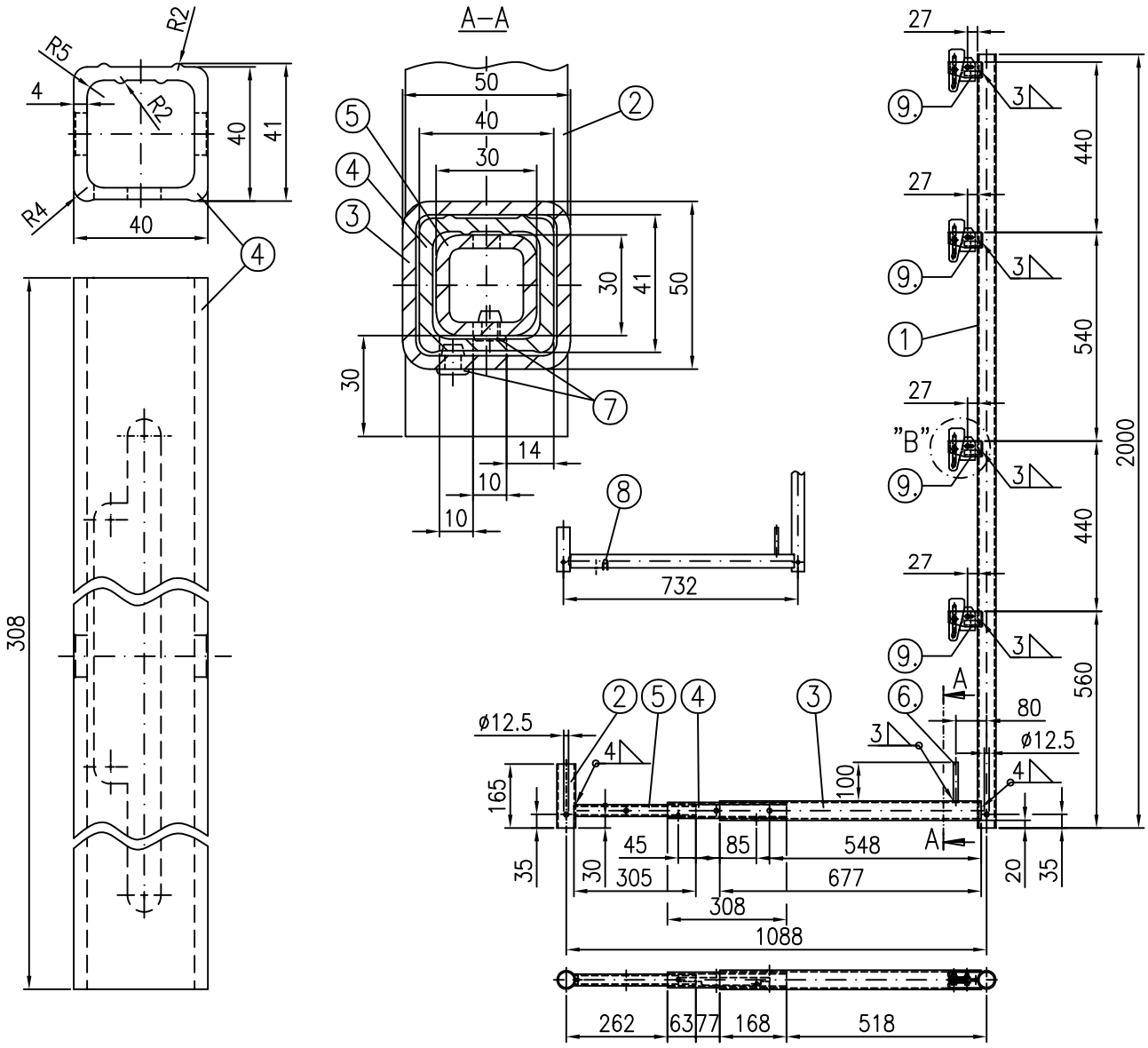
Dimens. [m]	Weight [kg]
1.77	4.8
1.95	5.2

Frame scaffold ALFIX 70

Diagonal cross brace

A709–A198 10.2020

Annex A,
page 103



① Circular hollow section ø48.3x4.05	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
② Circular hollow section ø48.3x3.2	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
③ Rectangular hollow section 50x50x4	DIN EN 10219–S235JRH	
④ Special section	DIN EN 755–2 EN AW–6063–T66	
⑤ Rectangular hollow section 30x30x4	DIN EN 10219–S235JRH	
⑥ Round ø12	DIN EN 10025–S235JR	
⑦ Monobolt dummy pin ø4.8x10.3	CrNi–steel A2 high strength	
⑧ Tube linchpin (transport security)	12–10x60x32–electrogalvanized	
⑨ Kennzeichnung		
galvanised		

Component no longer manufactured
–only approved for continued use–

Dimension [m]	Weight [kg]
2.00x0.73/1.09	17.2

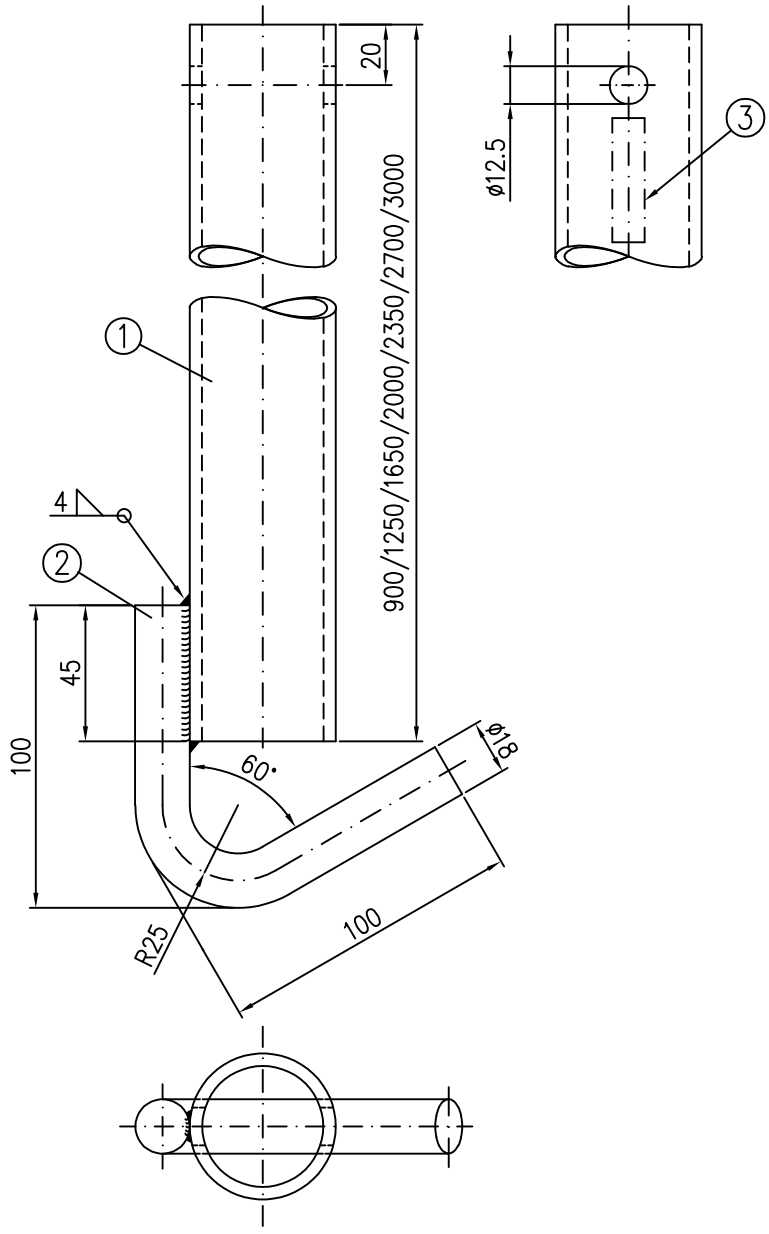
For details see annex A, page 3

Frame scaffold ALFIX 70

Protective wall post, telescopic 0.73m–1.09m

A709–A199 09.2020

Annex A,
page 104



① Circular hollow section ø48.3x4.05 DIN EN 10219-S235JRH $R_{eH} \geq 320 N/mm^2$
② Round ø18 DIN EN 10025-S355J2
③ Marking

galvanised

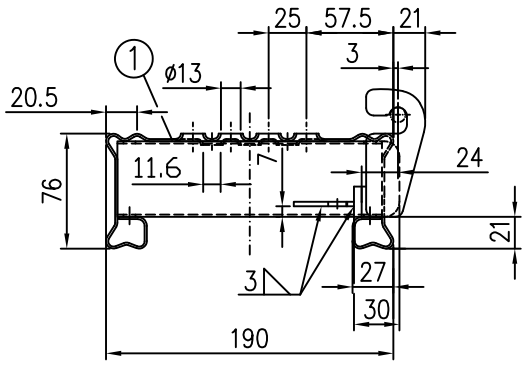
Dimens. [m]	Weight [kg]
0.90	4.2
1.25	5.7
1.65	7.4
2.00	8.9
2.35	10.4
2.70	11.9
3.00	13.2

Frame scaffold ALFIX 70

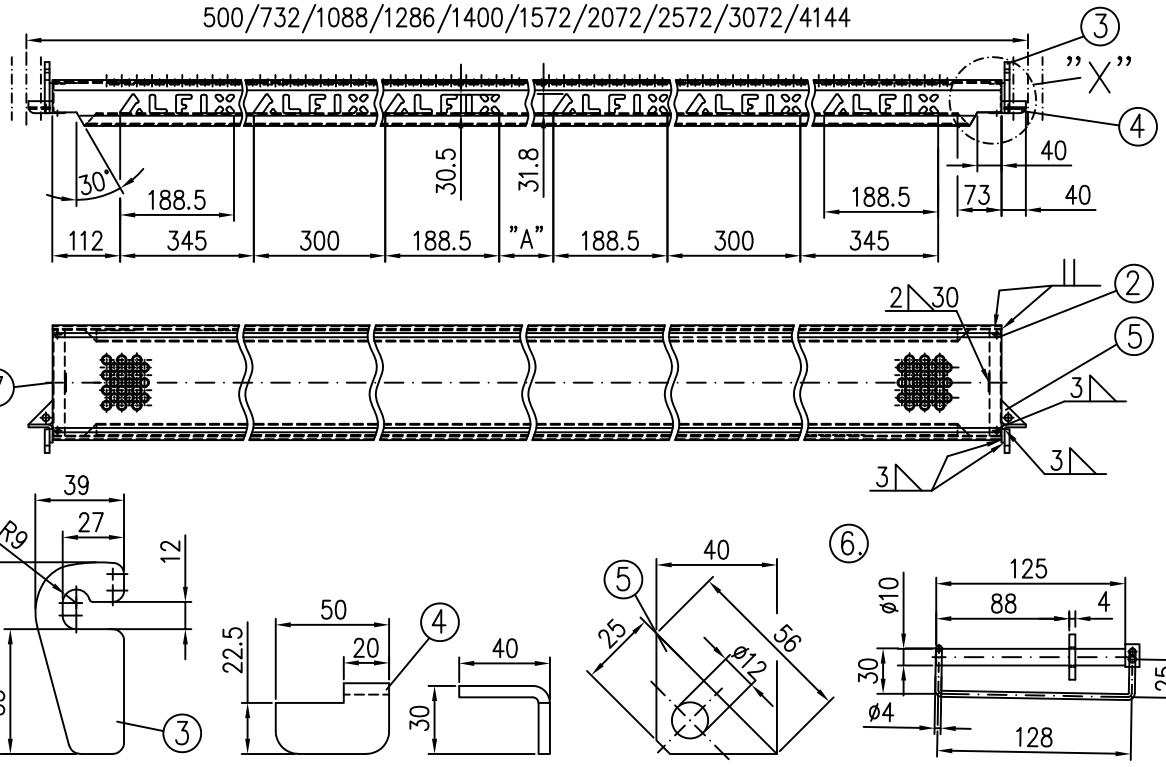
Scaffold tie EIFS

A709-A210 06.2020

Annex A,
page 105



Bay length	Number of logos	Dimension "A"	Load class	Weight
[mm]	[left/right]	[mm]		[kg]
500	1/–	–	3	3.3
732	1/1	51	3	4.4
1088	1/1	407	3	6.2
1286	1/1	605	3	7.2
1400	1/1	719	3	7.7
1572	1/1	891	3	8.6
2072	2/2	701	3	11.2
2572	2/2	1201	3	14.0
3072	3/3	1101	3	16.6
4144	3/3	2218	3	22.1



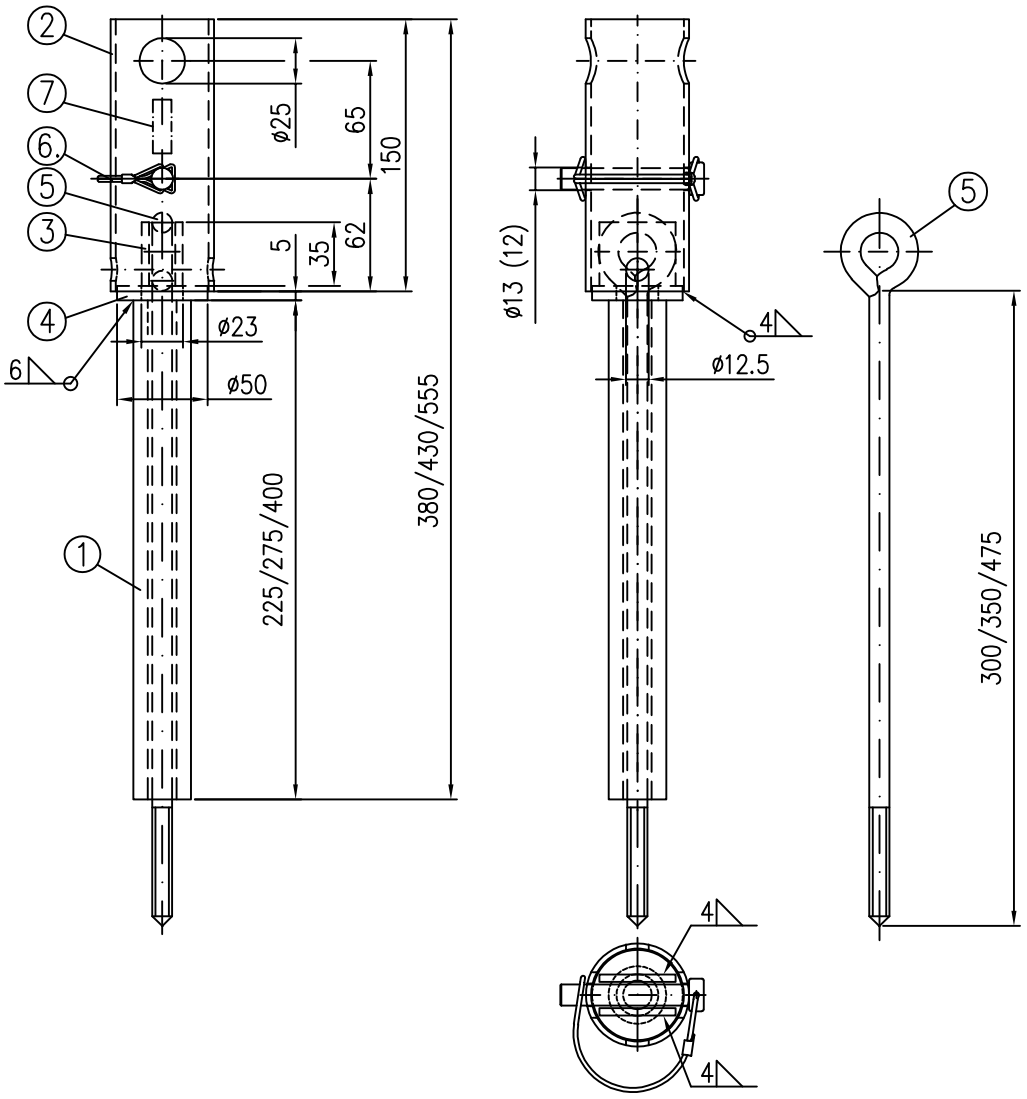
① Steel plate 1.5mm	DIN EN 10111–DD11 (DD12)	R_{eH} ≥280N/mm²	R_m ≥360N/mm²
alternatively:	DIN EN 10025–2 S235JR	R_{eH} ≥280N/mm²	R_m ≥360N/mm²
② U–profile 50x20x1.5	DIN EN 10025–S235JR		
alternatively: U–profile 47x30x3	DIN EN 10025–S235JR		
③ Steel plate 50x8	DIN EN 10025–S355JR		
④ Steel plate 50x5	DIN EN 10025–S235JR		
⑤ Flat 25x3	DIN EN 10025–S235JR		
⑥ Tube linchpin ø10x125	8.8		
⑦ Marking			
galvanised			

Frame scaffold ALFIX 70

EIFS deck AF 190; Tube linchpin

Annex A,
page 106

A712–A211 06.2020



①	Circular hollow section ø31.8x8	DIN EN 10219–S355J2H
	alternatively: Circular hollow section ø30x8	DIN EN 10219–S355J2H
②	Circular hollow section ø57x2.0	DIN EN 10219–S235JRH
	alternatively: Circular hollow section ø57x2.9	DIN EN 10219–S235JRH
③	Flat 35x4	DIN EN 10025–S235JR
④	Disc ø50x(23)x8	DIN EN 10025–S235JR
	alternatively: Washer	DIN 7349–23–steel
⑤	Scaffold eyelet 12x300/350/475	DIN EN 10025–S235JR
⑥	Tube linchpin 112 12x70 with snap–on lock	
	Pin	DIN EN 10025–S355J2
	Ring	DIN 17223 B spring steel wire
⑦	Marking	
	galvanised	

( ) = discontinued design

Dimens. [mm]	Weight [kg]
300	2.2
350	2.5
475	3.5

Frame scaffold ALFIX 70

EIFS anchor 300/350/475

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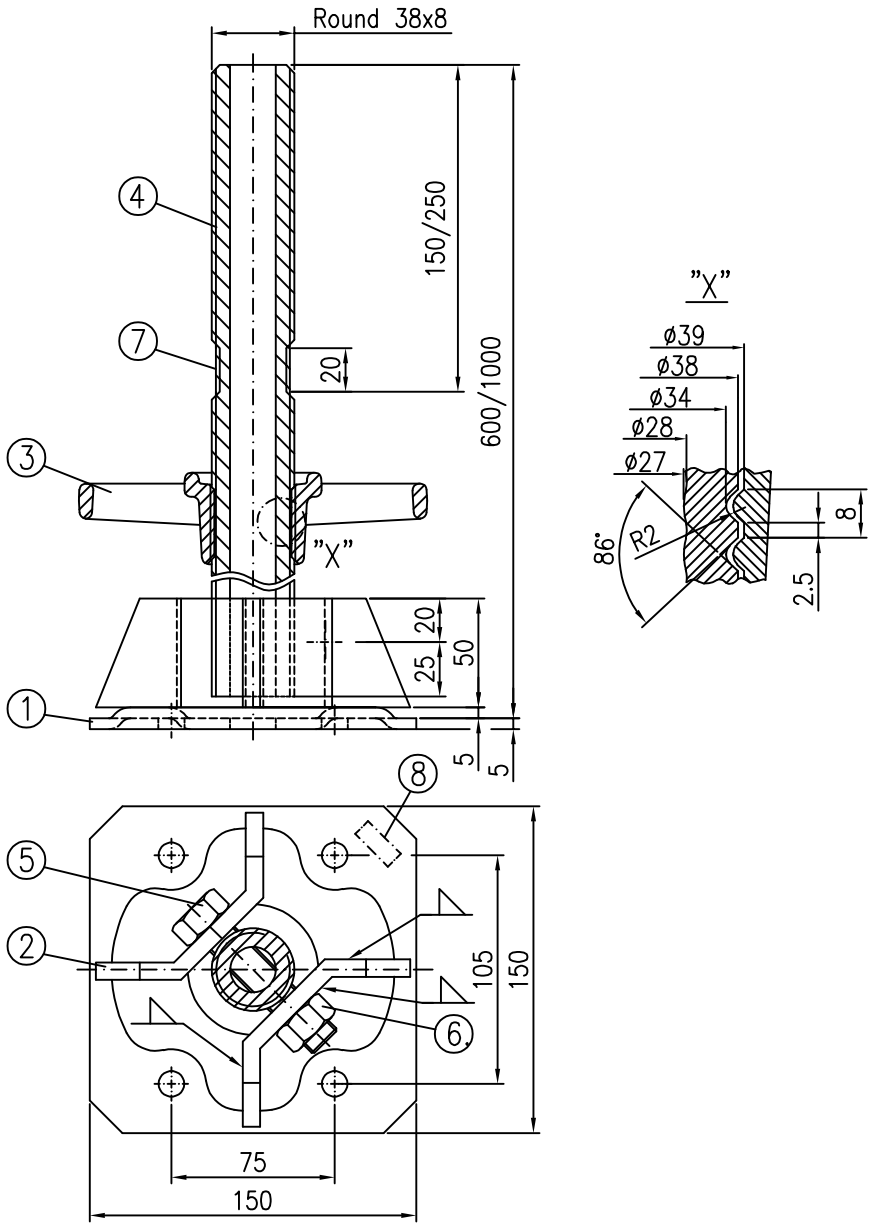
page 107

A712–A212 06.2020



①	Steel metal t=5mm	DIN EN 10025-S235JR
②	Flat 50x8	DIN EN 10025-S235JR
③	Adjusting nut, electrogalvanized	G20Mn5 DIN EN 10293
④	Thread rolled onto circular hollow section ø38x4.5	S355J2H
⑤	Hexagon screw	DIN EN ISO 4014-M16x75-8.8-galvanised
⑥	Hexagon nut, self-locking	DIN EN ISO 10511-M16-8-galvanised
⑦	Thread ruined due to 2 indentations	
⑧	Marking	

galvanised; all welding seams a=3mm

Component no longer manufactured
-only approved for continued use-

Dimens. [m]	Weight [kg]
0.60	6.0
1.00	7.0

Frame scaffold ALFIX 70

Base jack with swivel base
in accordance with Z-8.22-906

M710-B141_AF 09.2020

Annex A,
page 108

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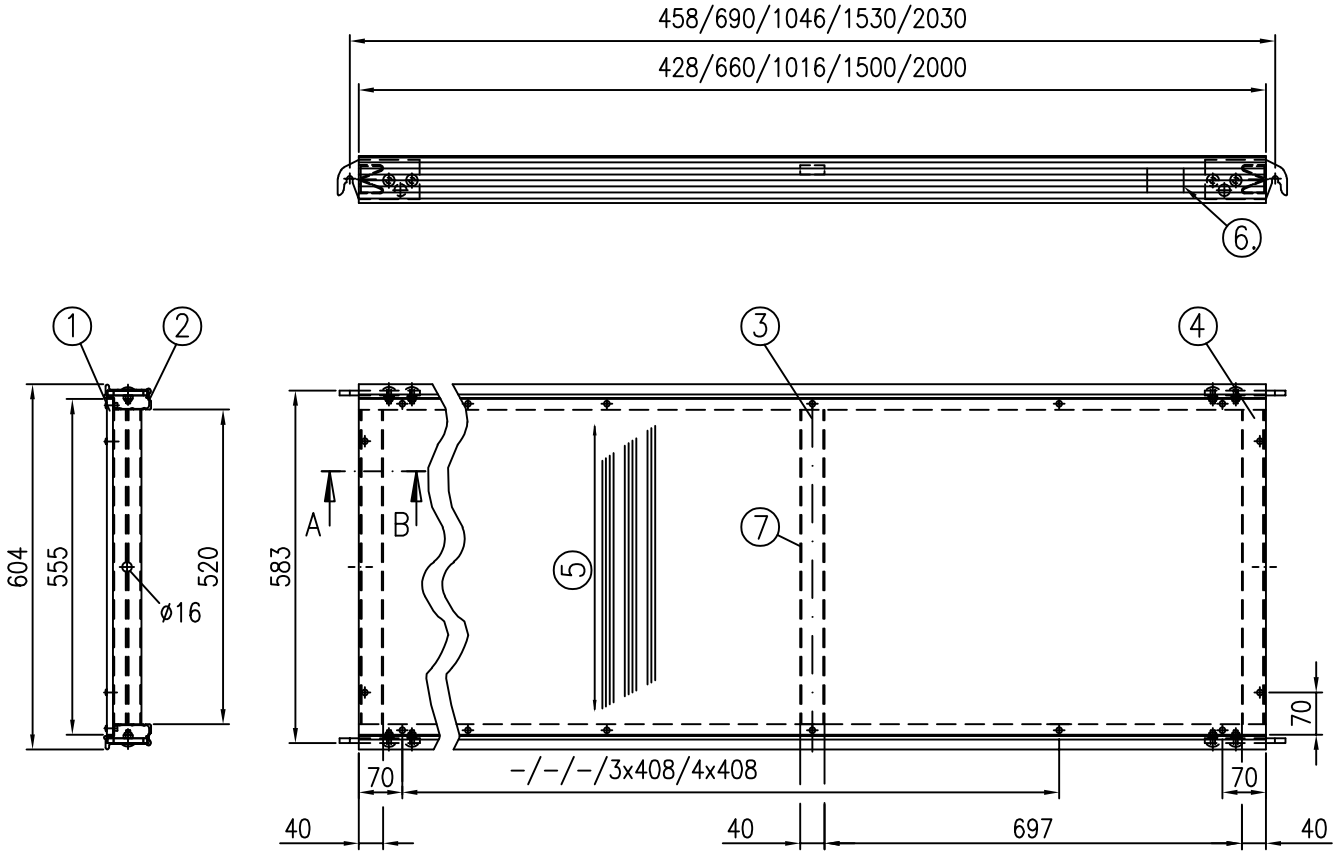


①	Plywood 10x555	Plywood for use in scaffolding with national technical approval
②	Rail profile 78x42	DIN EN 755-2 EN AW-6063-T66
③	Rectangular hollow section 40x15x2	DIN EN 755-2 EN AW-6063-T66
④	Grip profile; bridging deck thickness 2mm	DIN EN 755-2 EN AW-6063-T66
⑤	Grain direction	
⑥	Marking	
⑦	not applicable for 0.50m – 1.09m for 0.73m and 1.09m blind rivet in centre	

131-MIG: Type 4 filler material (EC9)

For details see annex A, page 112 Load class 3

Dimens. [m]	Weight [kg]
0.50	4.8
0.73	6.8
1.09	9.5
1.57	11.5
2.07	14.5

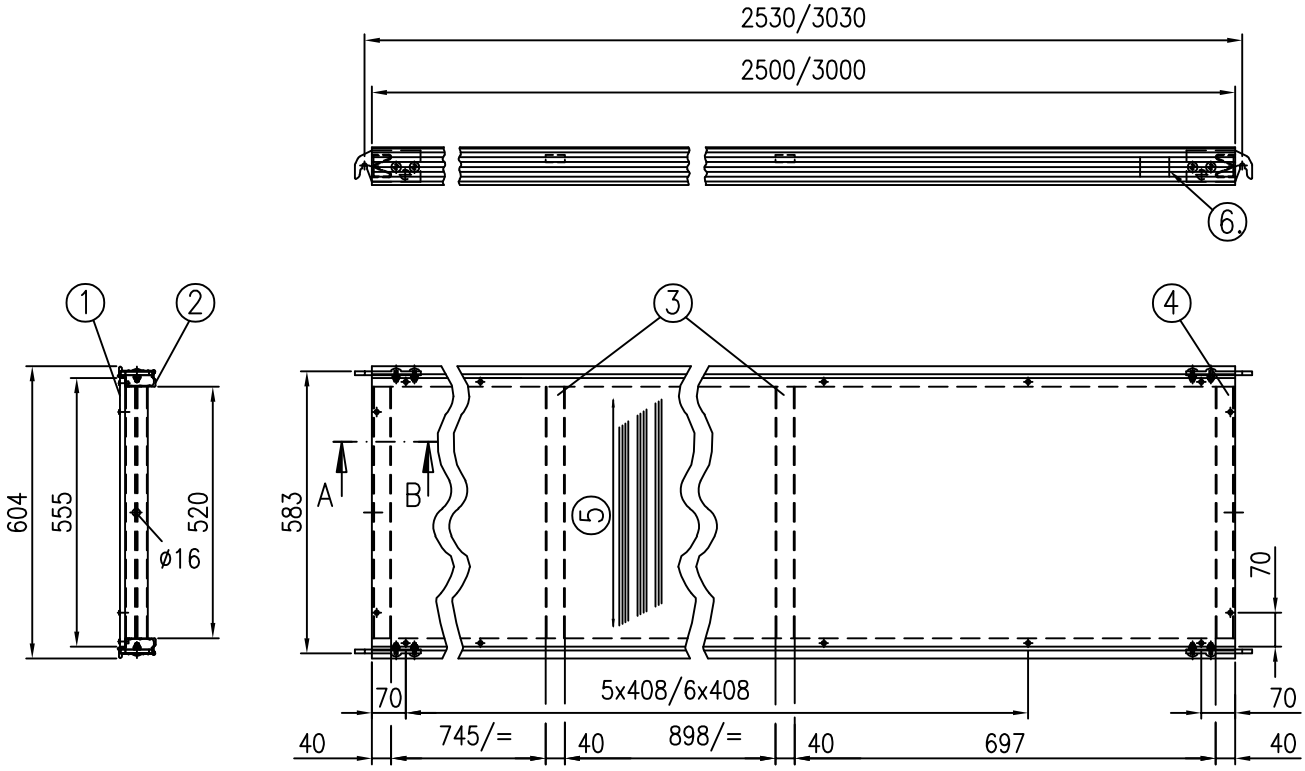
Frame scaffold ALFIX 70

Aluminium frame platform with plywood 0.50m – 2.07m
in accordance with Z-8.22-906

A713-A230 06.2020

Annex A,
page 110

[Seal Deutsches Institut für Bautechnik]



①	Plywood 10x555	Plywood for use in scaffolding with national technical approval
②	Rail profile 78x42	DIN EN 755–2 EN AW–6063–T66
③	Rectangular hollow section 40x15x2	DIN EN 755–2 EN AW–6063–T66
④	Grip profile; bridging deck thickness 2mm	DIN EN 755–2 EN AW–6063–T66
⑤	Grain direction	
⑥	Marking	131–MIG: Type 4 filler material (EC9)

Dimens. [m]	Weight [kg]
2.57	17.6
3.07	20.7

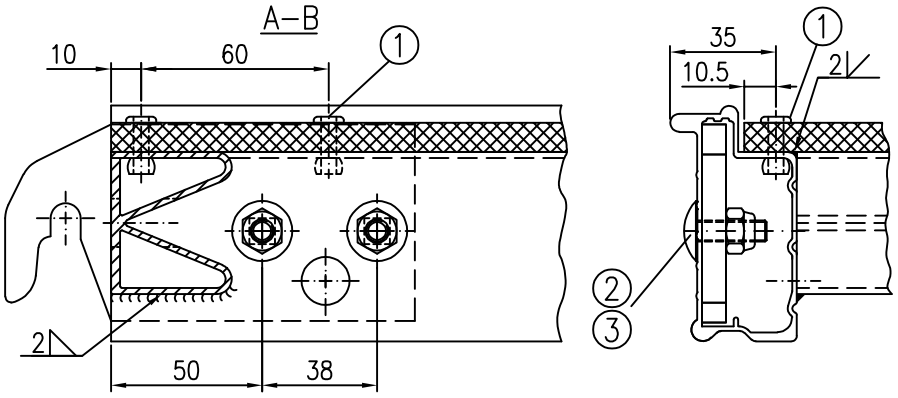
For details see annex A, page 112 Load class 3

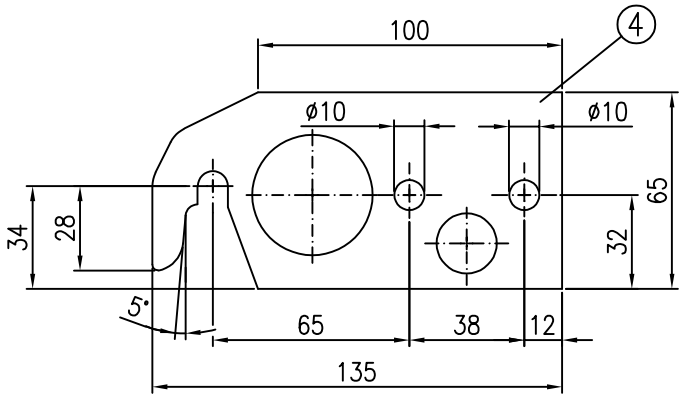
Frame scaffold ALFIX 70

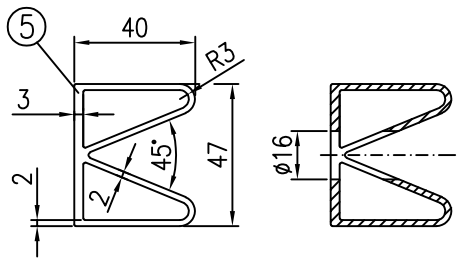
Aluminium frame platform with plywood 2.57m; 3.07m
in accordance with Z–8.22–906

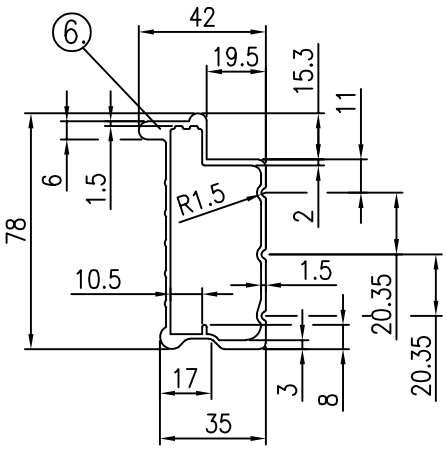
A713–A231 06.2020

Annex A,
page 111









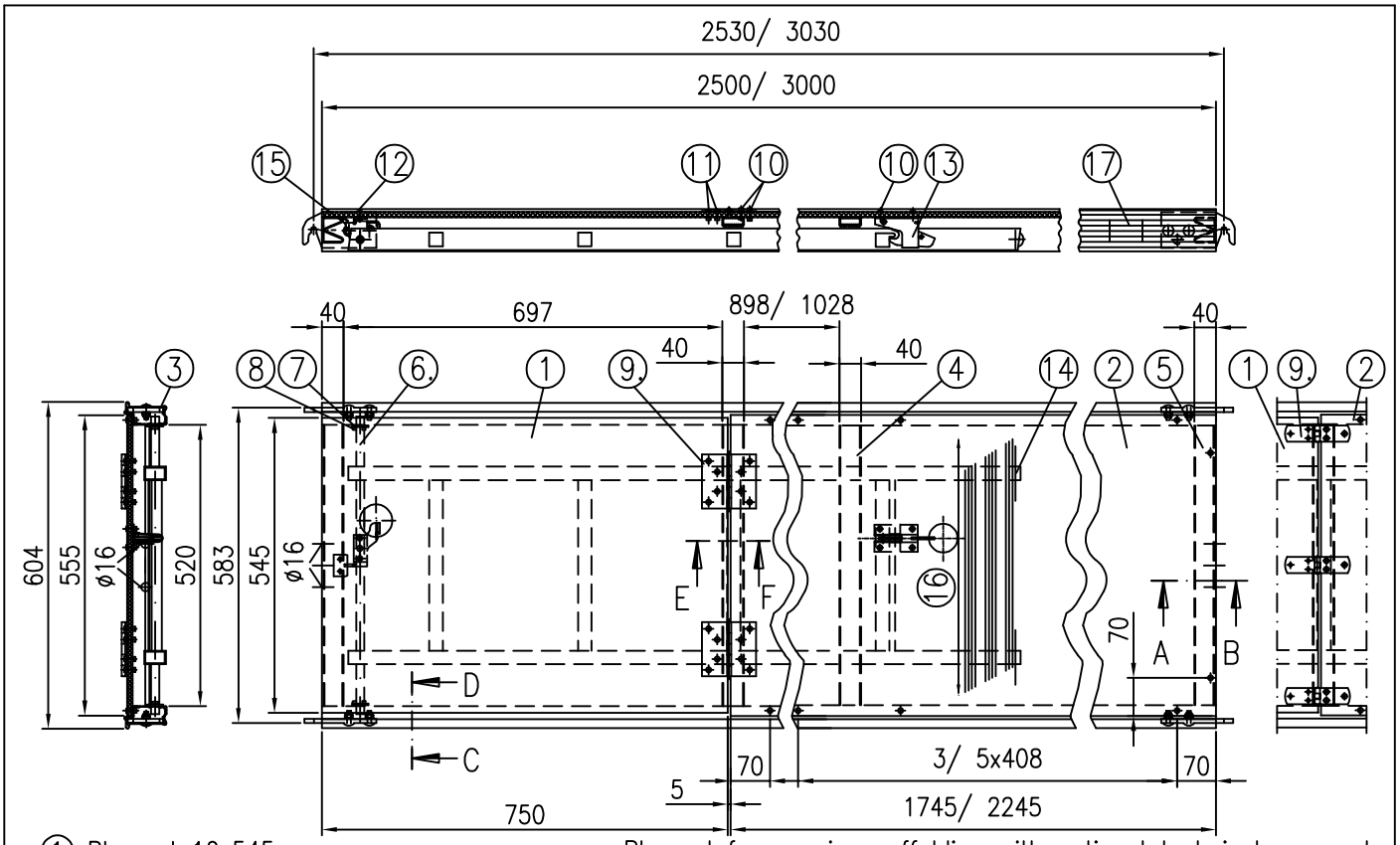
① Blind rivet ø5x20	DIN EN ISO 15979	EN AW–5754 H112
② Round–head screw	DIN 603–M8x20–8.8–galvanised	
③ Nut, self–locking	DIN EN ISO 7042–M8–8–galvanised	
④ Suspension claw, steel metal t=8mm	DIN EN 10025	S235JR hot–dip galvanised
⑤ Grip profile; bridging deck thickness 2mm	DIN EN 755–2	EN AW–6063–T66
⑥ Aluminium rail profile	DIN EN 755–2	EN AW–6063–T66

Frame scaffold ALFIX 70

Detailed view of aluminium frame platform
in accordance with Z–8.22–906

A713–A232 06.2020

Annex A,
page 112



①	Plywood 10x545	Plywood for use in scaffolding with national technical approval
②	Plywood 10x555	Plywood for use in scaffolding with national technical approval
③	Rail profile 78x42	DIN EN 755-2 EN AW-6063-T66
④	Rectangular hollow section 40x15x2	DIN EN 755-2 EN AW-6063-T66
⑤	Grip profile; bridging deck thickness 2mm	DIN EN 755-2 EN AW-6063-T66
⑥	Circular hollow section 15x2	DIN EN 10219 S235JRH
	alternatively:	DIN EN 10296-2 1.4301
⑦	Disc	DIN EN ISO 7089-A 17-steel-galvanised
⑧	Split pin	DIN EN ISO 1234-4x25-steel-galvanised
⑨	Hinge 100x100x1.6	DIN EN 10025-S235JR; electrogalvanized
	alternatively: Hinge 120x30x1.6	DIN EN 10025-S235JR; electrogalvanized
⑩	Blind rivet ø5x20	DIN EN ISO 15979 EN AW-5754 H112
⑪	Blind rivet ø5x18	DIN EN ISO 15979 EN AW-5754 H112
⑫	Blind rivet ø4.8x16 alternatively: ø5x18	DIN EN ISO 15979 EN AW-5754 H112
⑬	Ladder bracket	DIN EN 10025-S235JR; electrogalvanized
⑭	Ladder	see Annex A, page 18
⑮	Ledger	DIN EN 10025-S235JR; electrogalvanized
⑯	Grain direction	
⑰	Marking	131-MIG: Type 4 filler material (EC9)

For details see annex A, pages 112 and 115 Load class 3

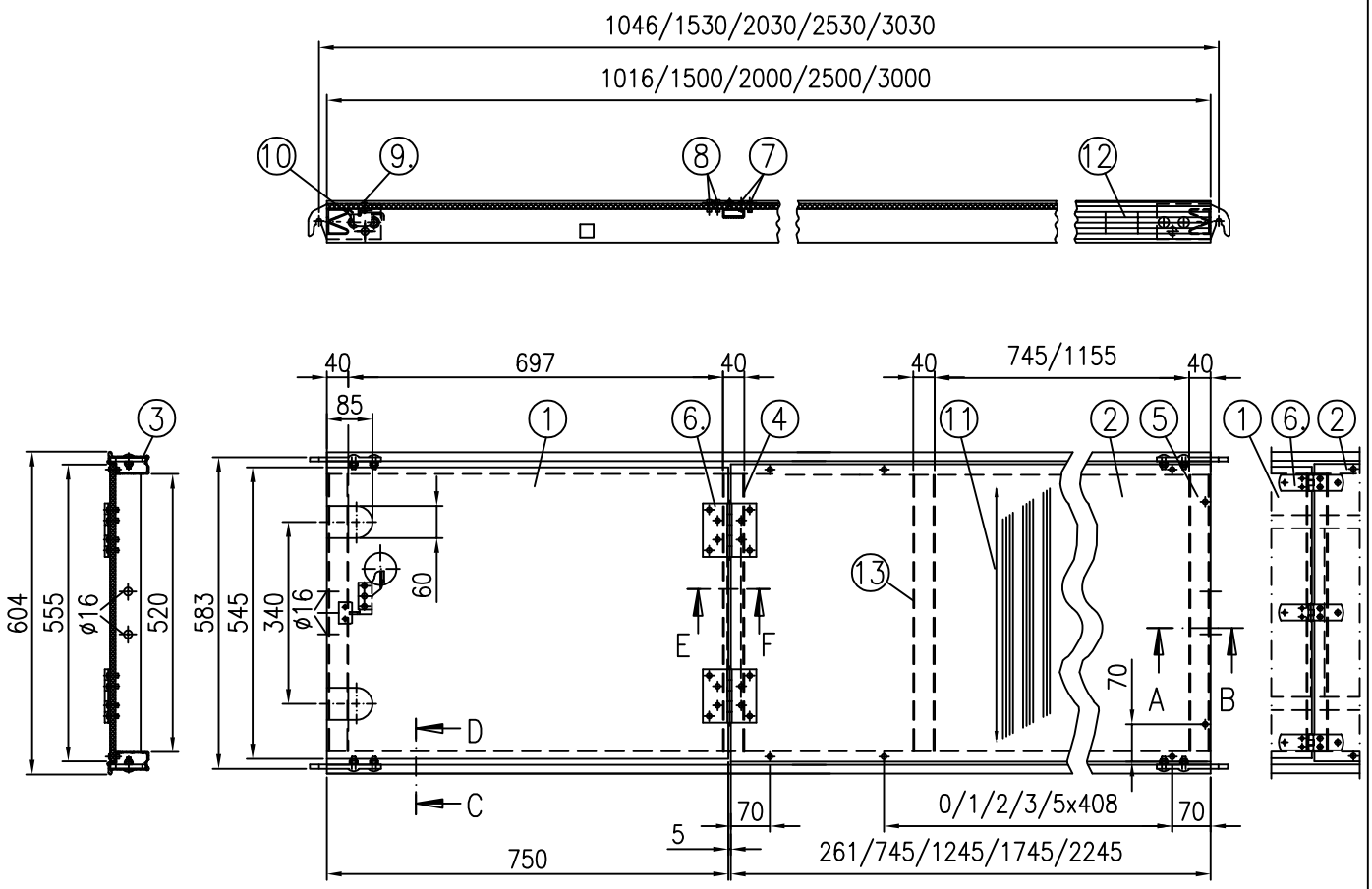
Dimens. [m]	Weight [kg]
2.57	24.0
3.07	27.0

Frame scaffold ALFIX 70

Aluminium frame platform with internal hatch 2.57m; 3.07m
in accordance with Z-8.22-906

A713-A233 06.2020

Annex A,
page 113



①	Plywood 10x545	Plywood for use in scaffolding with national technical approval
②	Plywood 10x555	Plywood for use in scaffolding with national technical approval
③	Rail profile 78x42	DIN EN 755-2 EN AW-6063-T66
④	Rectangular hollow section 40x15x2	DIN EN 755-2 EN AW-6063-T66
⑤	Grip profile; bridging deck thickness 2mm	DIN EN 755-2 EN AW-6063-T66
⑥	Hinge 100x100x1.6	DIN EN 10025-S235JR; electrogalvanized
	alternatively: Hinge 120x30x1.6	DIN EN 10025-S235JR; electrogalvanized
⑦	Blind rivet ø5x20	DIN EN ISO 15979 EN AW-5754 H112
⑧	Blind rivet ø5x18	DIN EN ISO 15979 EN AW-5754 H112
⑨	Blind rivet ø4.8x16 alternatively: ø5x18	DIN EN ISO 15979 EN AW-5754 H112
⑩	Ledger	DIN EN 10025-S235JR; electrogalvanized
⑪	Grain direction	
⑫	Marking	
⑬	not applicable for 1.09m to 2.07m	131-MIG: Type 4 filler material (EC9)

Dimens. [m]	Weight [kg]
1.09	10.5
1.57	13.0
2.07	17.0
2.57	22.0
3.07	25.5

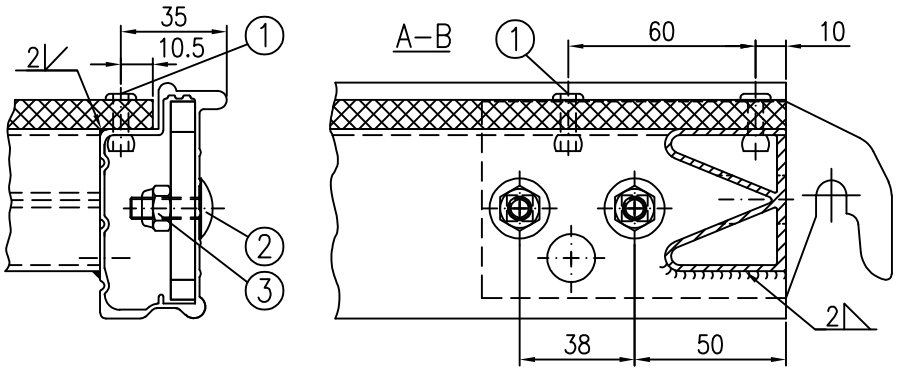
For details see annex A, pages 112 and 115 Load class 3

Frame scaffold ALFIX 70

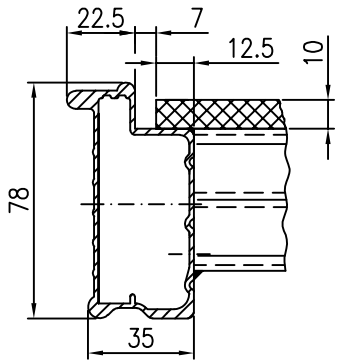
Aluminium frame platform with internal hatch 1.09m – 3.07m without ladder

Annex A, page 114

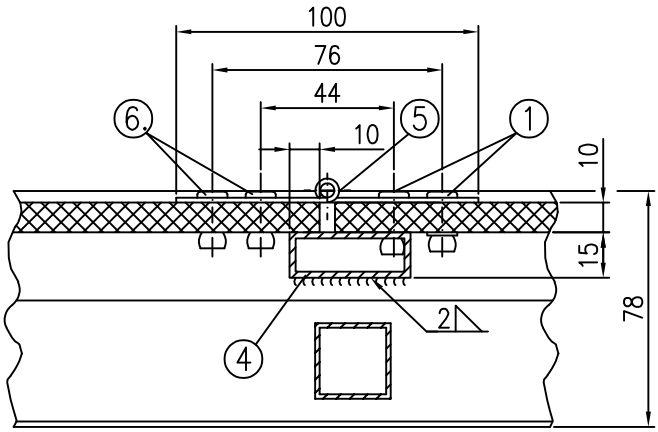
A713-A236 06.2020



C–D



E–F



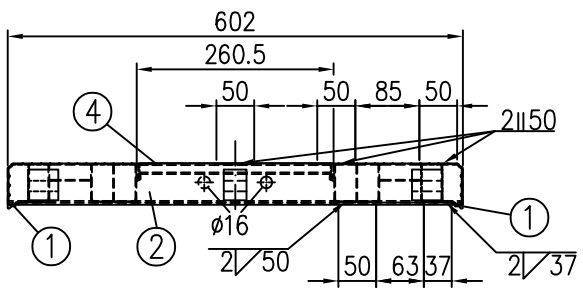
①	Blind rivet ø5x20	DIN EN ISO 15979 EN AW–5754 H112
②	Round–head screw	DIN 603–M8x20–8.8–galvanised
③	Nut, self–locking	DIN EN ISO 7042–M8–8–galvanised
④	Rectangular hollow section 40x15x2	DIN EN 755–2 EN AW–6063–T66
⑤	Hinge 100x100x1.6	DIN EN 10025–S235JR; electrogalvanized
	alternatively: Hinge 120x30x1.6	DIN EN 10025–S235JR; electrogalvanized
⑥	Blind rivet ø5x18	DIN EN ISO 15979 EN AW–5754 H112

Frame scaffold ALFIX 70

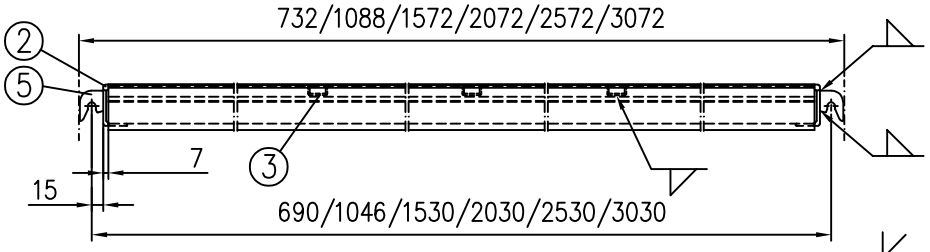
Sectional views of aluminium frame platform with internal hatch in accordance with Z–8.22–906

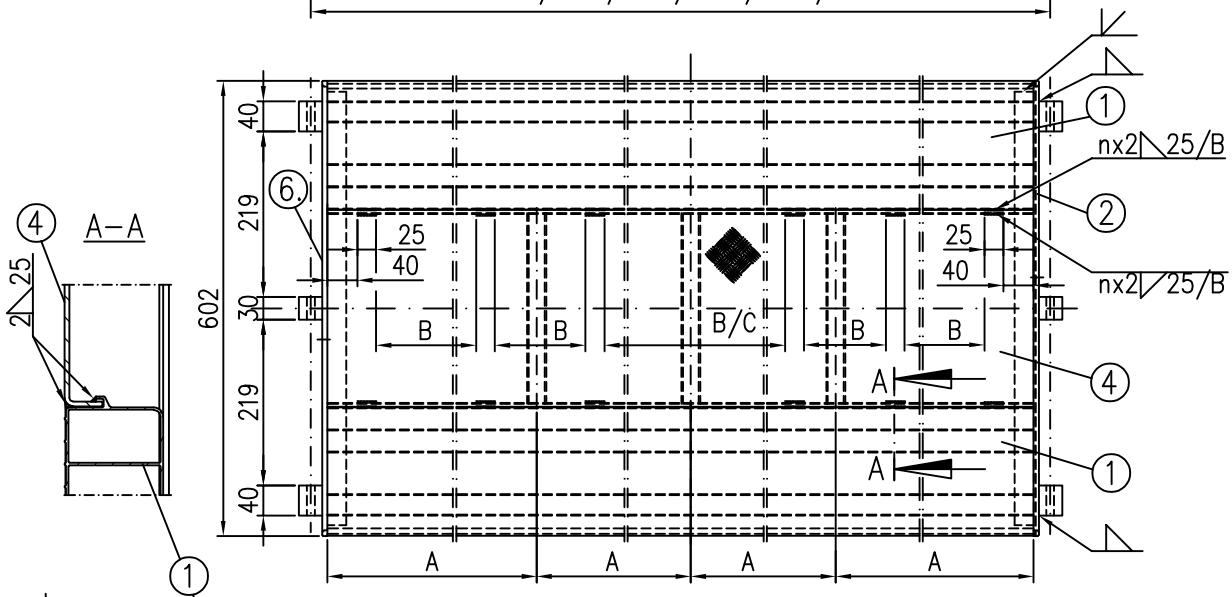
A713–A235 06.2020

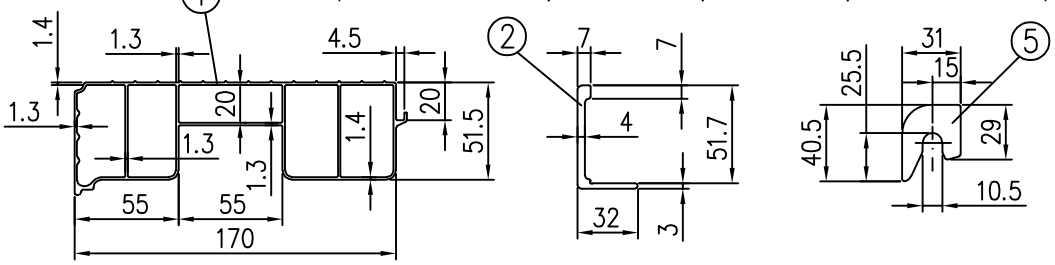
Annex A, page 115



Bay length	Number of ③	Dimension "A"	Dimension "B"	Dimension "C"	n	Load class	Weight
[mm]		[mm]	[mm]	[mm]			[kg]
732	–	–	155	–	4	4	6.0
1088	–	–	274	–	4	4	8.6
1572	1	743	435	–	4	4	11.5
2072	2	662	351	–	6	4	16.7
2572	2	829	414	600	6	4	18.2
3072	3	746	551	–	6	3	21.6







①	Edge section	DIN EN 755–2 EN AW–6063–T66
②	Headpiece profile	DIN EN 755–2 EN AW–6063–T66
③	U–profile 12x25x12x2	DIN EN 755–2 EN AW–6063–T66
④	Chequer plate with 5 bar pattern 2/3.5	DIN EN 1386 EN AW–5083 H114
⑤	Suspension hook	DIN EN 755–2 EN AW–6063–T66
⑥	Marking	all welding seams a=2 mm 131–MIG: Type 5 filler material (EC9)

Frame scaffold ALFIX 70

Aluminium deck 0.60m, lightweight

A712–A213 06.2020

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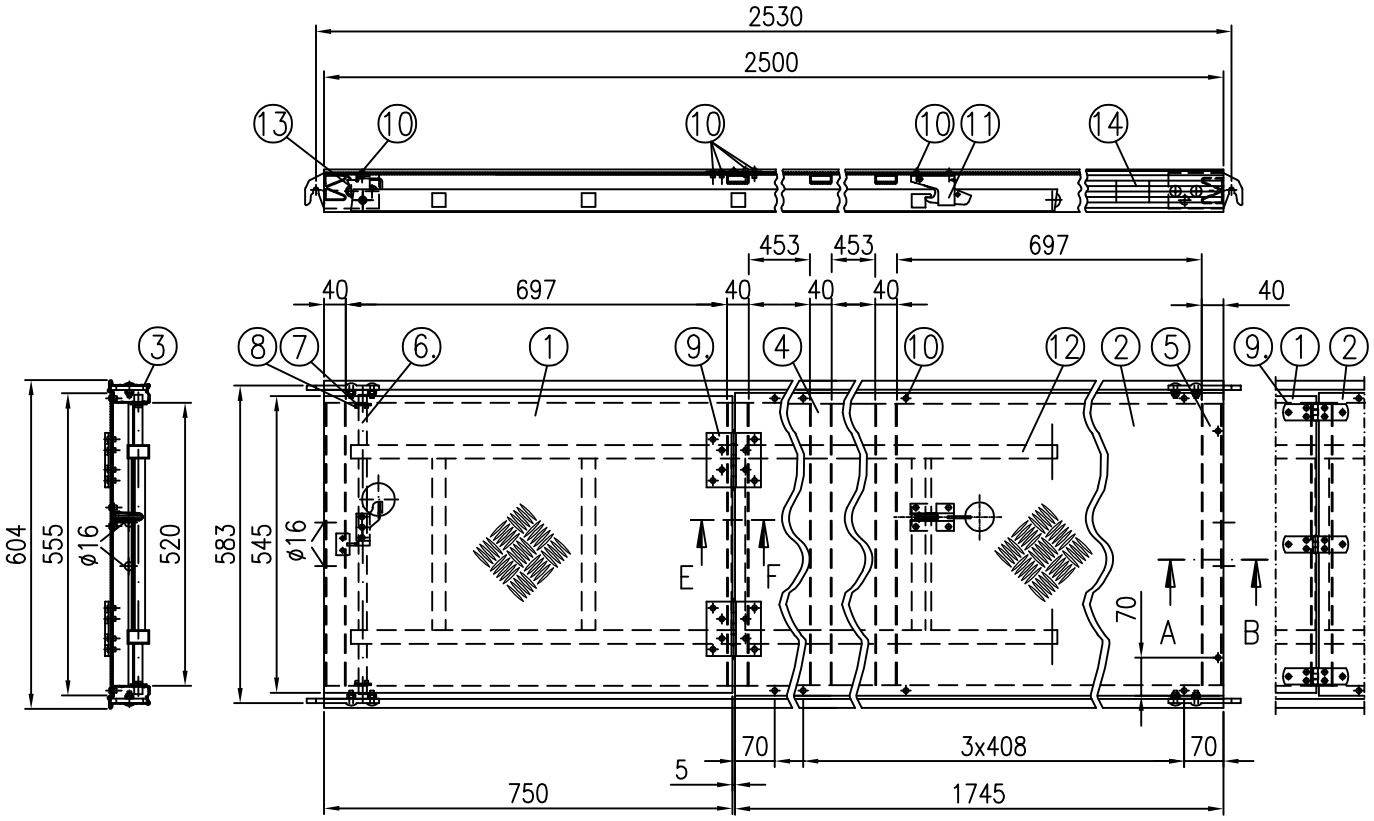
page 116



①	Chequer plate with 5 bar pattern t=3/4.5	DIN EN 1386	EN AW–5083 H114
	alternatively:	DIN EN 1386	EN AW–5083 H224
②	Chequer plate with 5 bar pattern t=3/4.5	DIN EN 1386	EN AW–5083 H114
	alternatively:	DIN EN 1386	EN AW–5083 H224
③	Rail profile 78x42	DIN EN 755–2	EN AW–6063–T66
④	Rectangular hollow section 40x15x2	DIN EN 755–2	EN AW–6063–T66
⑤	Grip profile; bridging deck thickness 2mm	DIN EN 755–2	EN AW–6063–T66
⑥	Circular hollow section 15x2	DIN EN 10219	S235JRH
	alternatively:	DIN EN 10296–2	1.4301
⑦	Disc	DIN EN ISO 7089–A 17–steel–galvanised	
⑧	Split pin	DIN EN ISO 1234–4x25–steel–galvanised	
⑨	Hinge 100x100x1.6	DIN EN 10025–S235JR; electrogalvanized	
	alternatively: Hinge 120x30x1.6	DIN EN 10025–S235JR; electrogalvanized	
⑩	Blind rivet ø5x12	DIN EN ISO 15979 EN AW–5754 H112	
⑪	Ladder bracket	DIN EN 10025–S235JR; electrogalvanized	
⑫	Ladder	see Annex A, page 18	
⑬	Ledger	DIN EN 10025–S235JR; electrogalvanized	
⑭	Marking	131–MIG: Type 4 filler material (EC9)	

For details see annex A, page 119 Load class 3

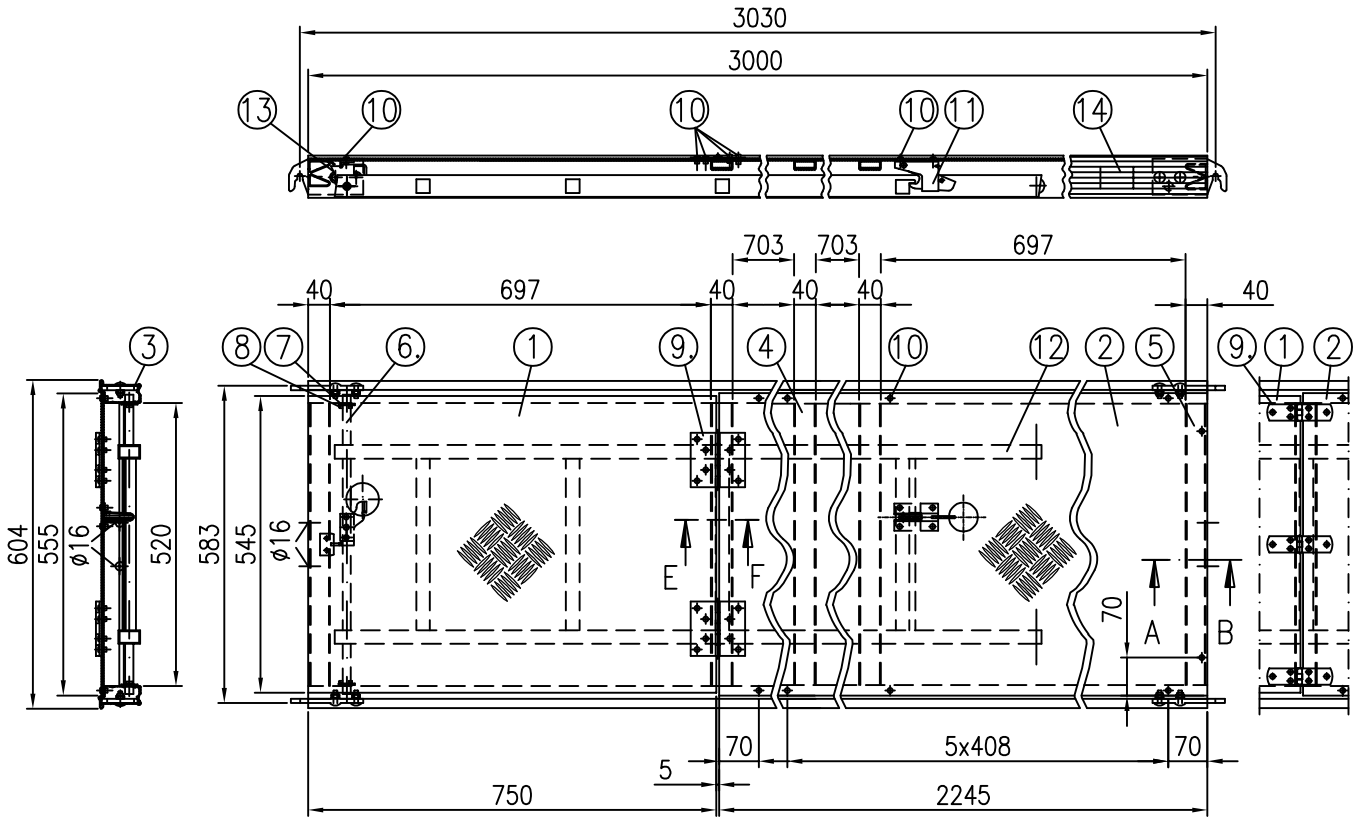
Dimens. [m]	Weight [kg]
2.57	25.5

Frame scaffold ALFIX 70

Aluminium trapdoor deck with aluminium chequer plate 2.57m

Annex A,
page 117

A713–A217 06.2020



①	Chequer plate with 5 bar pattern t=3/4.5	DIN EN 1386	EN AW-5083 H114
	alternatively:	DIN EN 1386	EN AW-5083 H224
②	Chequer plate with 5 bar pattern t=3/4.5	DIN EN 1386	EN AW-5083 H114
	alternatively:	DIN EN 1386	EN AW-5083 H224
③	Rail profile 78x42	DIN EN 755-2	EN AW-6063-T66
④	Rectangular hollow section 40x15x2	DIN EN 755-2	EN AW-6063-T66
⑤	Grip profile; bridging deck thickness 2mm	DIN EN 755-2	EN AW-6063-T66
⑥	Circular hollow section 15x2	DIN EN 10219	S235JRH
	alternatively:	DIN EN 10296-2	1.4301
⑦	Disc	DIN EN ISO 7089-A 17-steel-galvanised	
⑧	Split pin	DIN EN ISO 1234-4x25-steel-galvanised	
⑨	Hinge 100x100x1.6	DIN EN 10025-S235JR; electrogalvanized	
	alternatively: Hinge 120x30x1.6	DIN EN 10025-S235JR; electrogalvanized	
⑩	Blind rivet ø5x12	DIN EN ISO 15979 EN AW-5754 H112	
⑪	Ladder bracket	DIN EN 10025-S235JR; electrogalvanized	
⑫	Ladder	see Annex A, page 18	
⑬	Ledger	DIN EN 10025-S235JR; electrogalvanized	
⑭	Marking	131-MIG: Type 4 filler material (EC9)	

For details see annex A, page 119 Load class 3

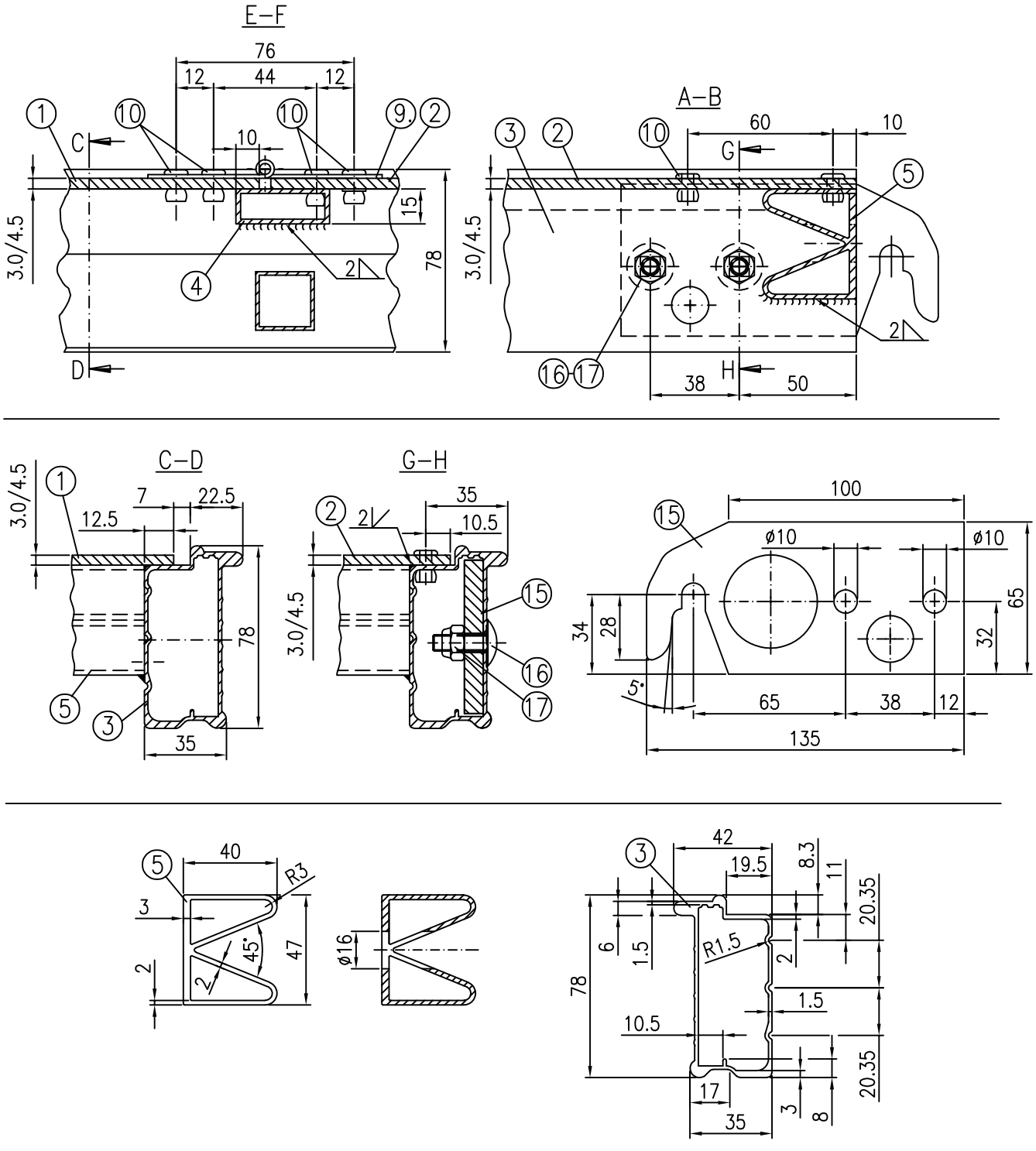
Dimens. [m]	Weight [kg]
3.07	29.5

Frame scaffold ALFIX 70

Aluminium trapdoor deck with aluminium chequer plate 3.07m

Annex A,
page 118

A713-A218 06.2020



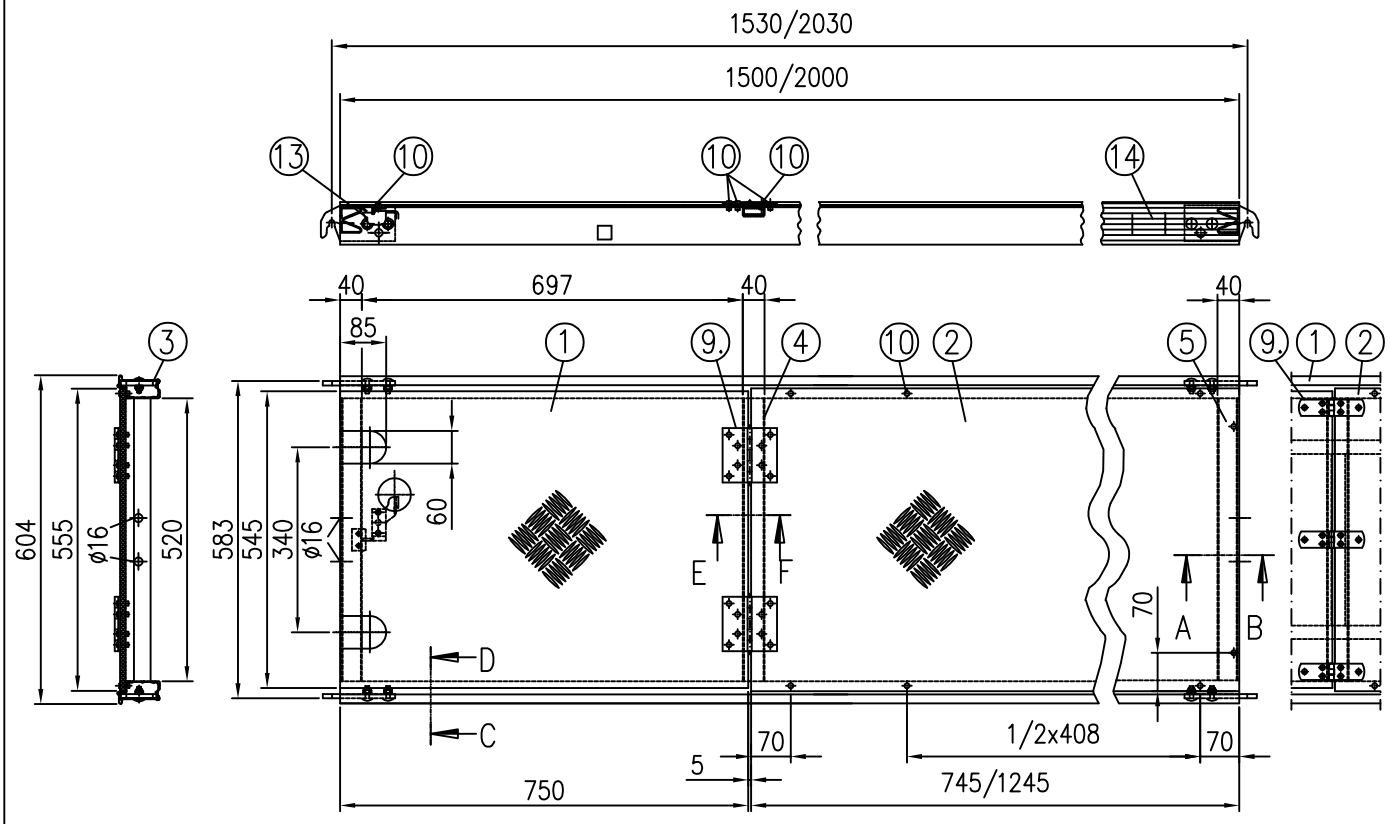
⑮	Steel metal s=8mm	DIN EN 10025–S235JR; hot–dip galvanised
⑯	Round–head screw	DIN 603–M8x20–8.8–galvanised
⑰	Nut, self–locking	DIN EN ISO 7042–M8–8–galvanised

Frame scaffold ALFIX 70

Sectional and detailed views of aluminium trapdoor deck with aluminium chequer plate

Annex A, page 119

A713–A219 06.2020



①	Chequer plate with 5 bar pattern t=3/4.5	DIN EN 1386	EN AW-5083 H114
	alternatively:	DIN EN 1386	EN AW-5083 H224
②	Chequer plate with 5 bar pattern t=3/4.5	DIN EN 1386	EN AW-5083 H114
	alternatively:	DIN EN 1386	EN AW-5083 H224
③	Rail profile 78x42	DIN EN 755-2	EN AW-6063-T66
④	Rectangular hollow section 40x15x2	DIN EN 755-2	EN AW-6063-T66
⑤	Grip profile; bridging deck thickness 2mm	DIN EN 755-2	EN AW-6063-T66
⑥	not applicable		
⑦	not applicable		
⑧	not applicable		
⑨	Hinge 100x100x1.6	DIN EN 10025-S235JR; electrogalvanized	
	alternatively: Hinge 120x30x1.6	DIN EN 10025-S235JR; electrogalvanized	
⑩	Blind rivet ø5x12	DIN EN ISO 15979	EN AW-5754 H112
⑪	not applicable		
⑫	not applicable		
⑬	Ledger	DIN EN 10025-S235JR; electrogalvanized	
⑭	Marking	131-MIG: Type 4 filler material (EC9)	

For details see annex A, page 119 Load class 3

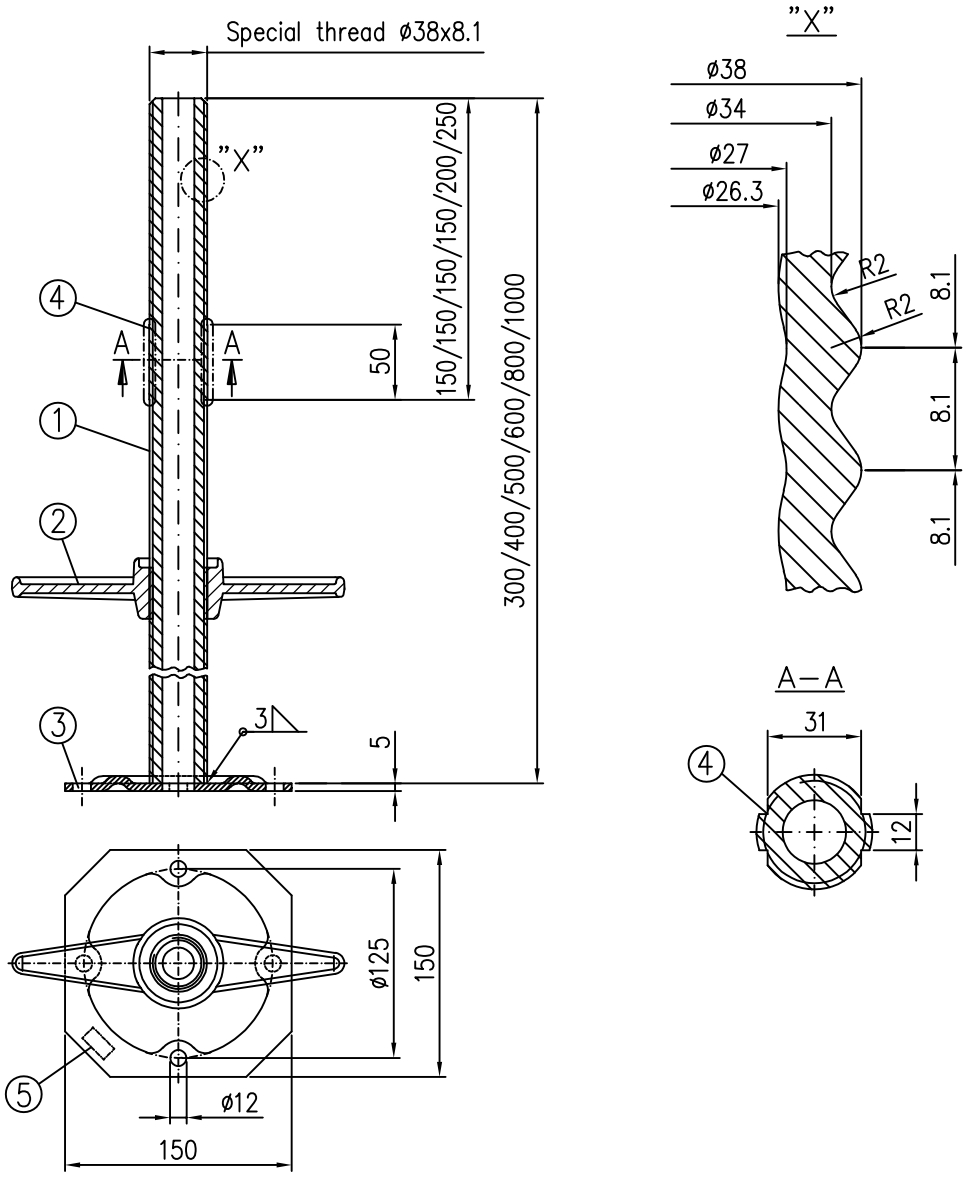
Dimens. [m]	Weight [kg]
1.57	14.8
2.07	18.0

Frame scaffold ALFIX 70

Aluminium trapdoor deck with aluminium chequer plate 1.57m; 2.07m without ladder

A713-A220 10.2020

Annex A,
page 120



①	Thread rolled onto circular hollow section ø38x4.5	DIN EN 10219–S235JRH
②	Wing nut	EN 1562–EN GJMW–400–S EN 1562–EN–GJMB–450–6 EN 1563–EN–GJS–400–15 EN 10293–GE240+N EN 1562–EN–GJMW–360–12
		DIN EN 10025–S235JR
③	Steel metal t=5mm	DIN EN 10025–S235JR
④	Thread with notches to limit collar nut travel	
⑤	Marking	

galvanised

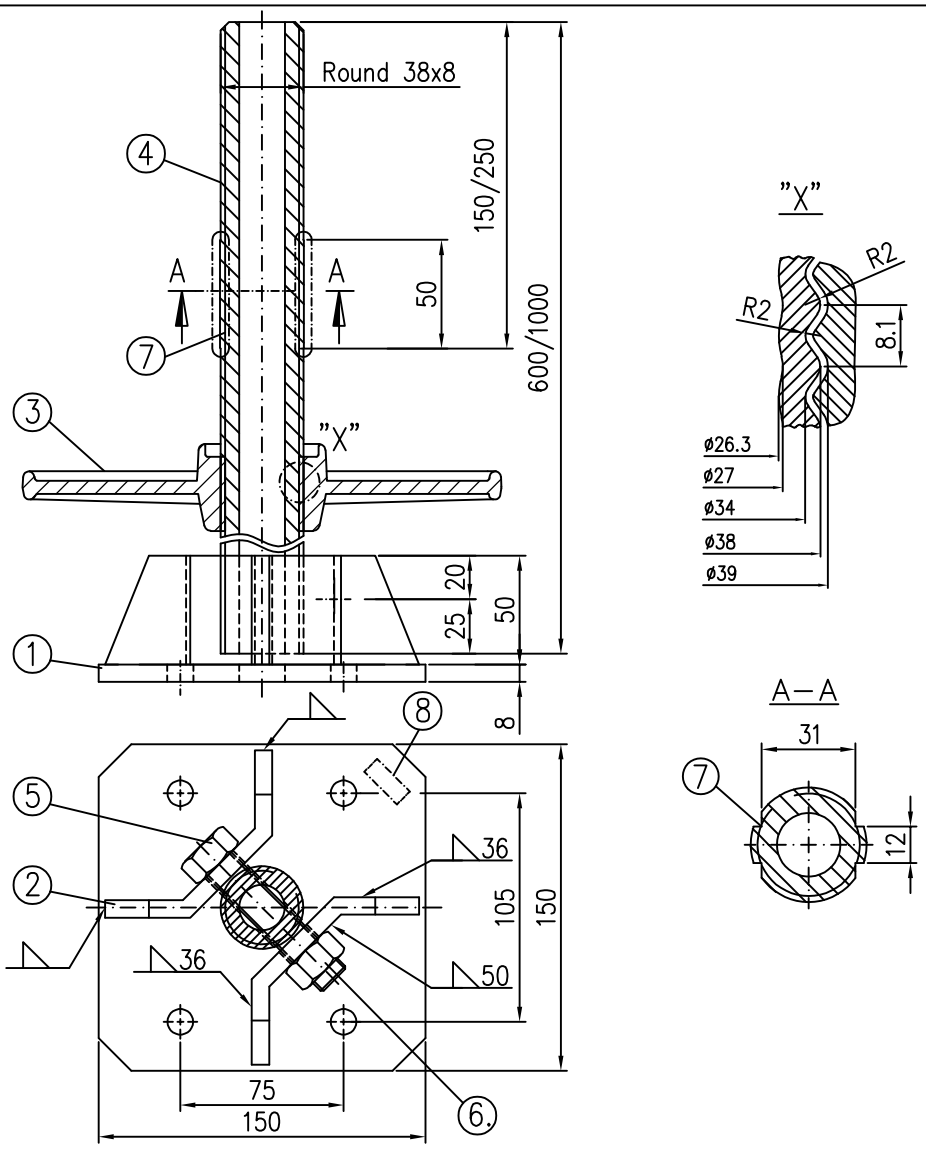
Dimens. [m]	Weight [kg]
0.30	2.6
0.40	3.0
0.50	3.4
0.60	3.6
0.80	4.4
1.00	5.2

Frame scaffold ALFIX 70

AB Base jack

A713–A221 06.2020

Annex A,
page 121



①	Steel metal t=8mm	DIN EN 10025–S235JR
②	Flat 50x8	DIN EN 10025–S235JR
③	Wing nut	EN 1562–EN GJMW–400–S EN 1562–EN–GJMB–450–6 EN 1563–EN–GJS–400–15 EN 10293–GE240+N EN 1562–EN–GJMW–360–12 EN 10025–S235JR
④	Thread rolled onto circular hollow section ø38x4.5	DIN EN 10219–S235JRH
⑤	Hexagon screw	DIN EN ISO 4014–M16x75–8.8–galvanised
⑥	Hexagon nut, self–locking	DIN EN ISO 10511–M16–8–galvanised
⑦	Thread ruined due to 2 indentations	
⑧	Marking	
	galvanised; all welding seams a=3mm	

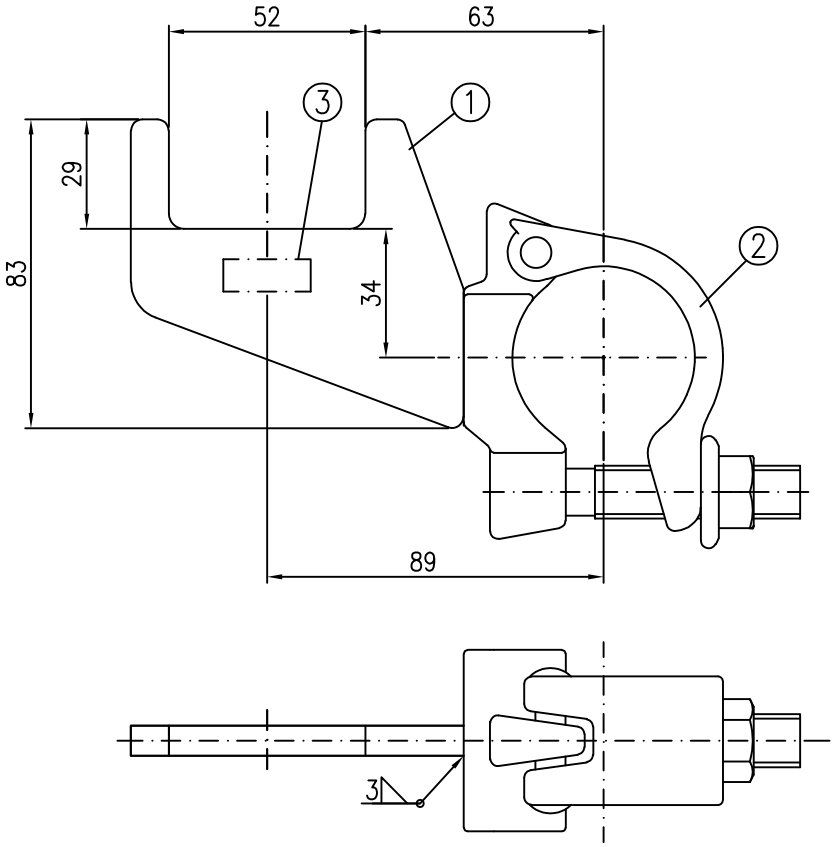
Dimens. [m]	Weight [kg]
0.60	4.5
1.00	6.6

Frame scaffold ALFIX 70

Base jack, with swivel base

A713–A222 06.2020

Annex A,
page 122



① Steel metal s=8mm	DIN EN 10025–S235JR
② Halfcoupler, class B	DIN EN 74–2
③ Marking	
galvanised	

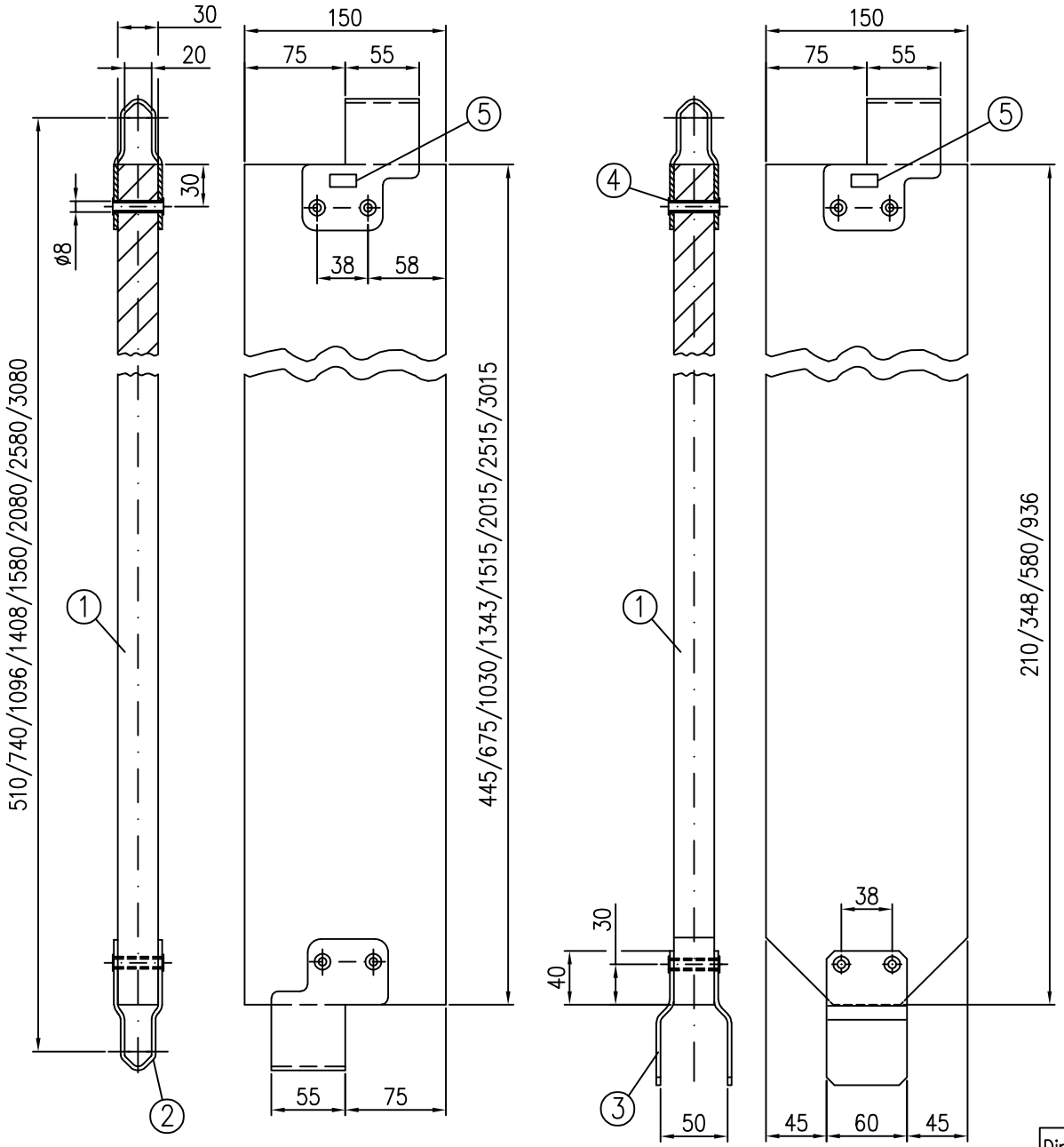
Dimens. [m]	Weight [kg]
–	0.9

Frame scaffold ALFIX 70

Anchor coupler

A713–A223 06.2020

Annex A,
page 123



① Pine wooden deck, visual strength grade S10		DIN 4074-1
② Slit strip 90x3	DIN EN 10111-DD11	$R_{eH} \geq 240 N/mm^2$
alternatively:	DIN EN 10346-DX52D+Z275	$R_{eH} \geq 240 N/mm^2$; $R_m \geq 360 N/mm^2$
③ Slit strip 60x3	DIN EN 10111-DD11	$R_{eH} \geq 240 N/mm^2$
alternatively:	DIN EN 10346-DX52D+Z275	$R_{eH} \geq 240 N/mm^2$; $R_m \geq 360 N/mm^2$
④ Tubular rivet	DIN 7340-A8x0,75x39-steel-electrogalvanized	
⑤ Marking		

all components made of galvanised steel

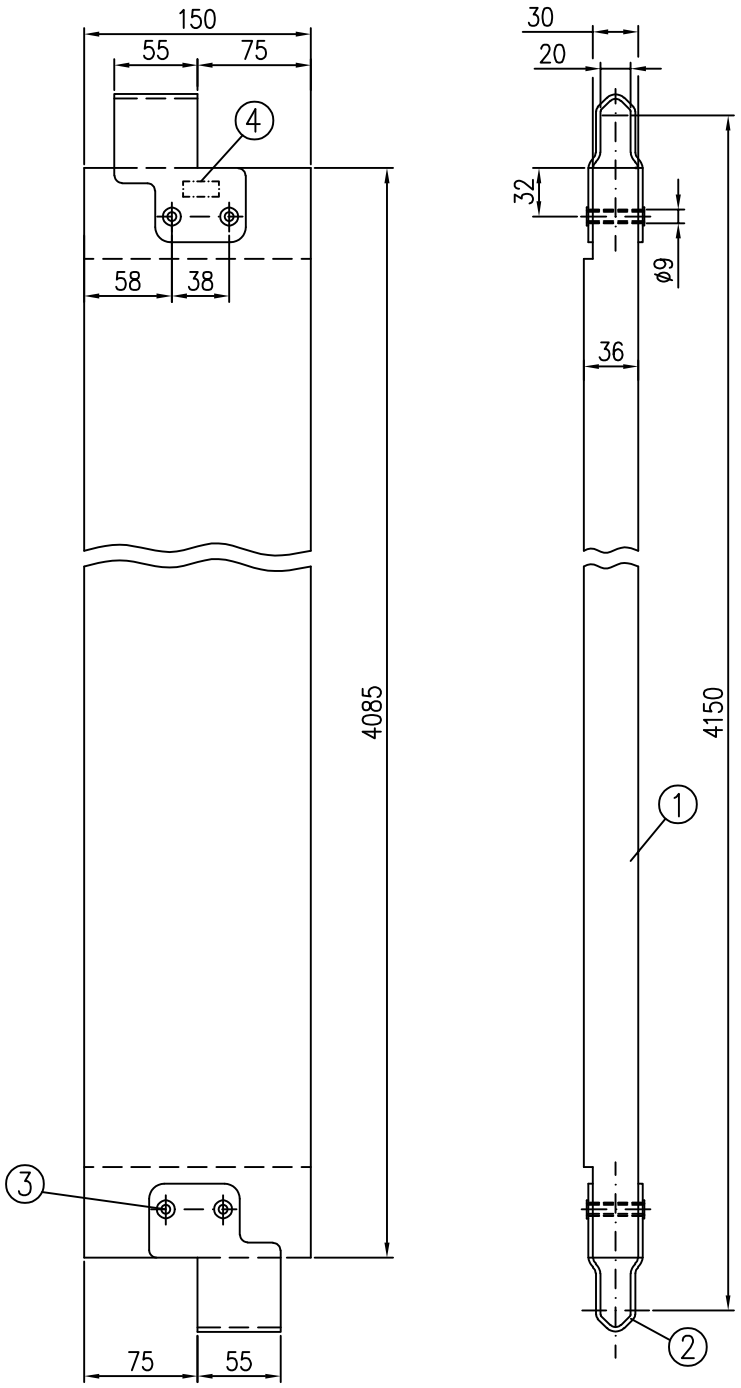
Dimens. [m]	Weight [kg]
Toeboard	
0.50	1.5
0.73	2.0
1.09	2.7
1.40	3.3
1.57	4.0
2.07	5.0
2.57	6.5
3.07	7.5
End toeboard	
0.36	1.0
0.50	1.5
0.73	1.7
1.09	2.4

Frame scaffold ALFIX 70

Toeboard; End toeboard AF

A714-A224 06.2020

Annex A,
page 124



① Pine wooden deck, visual strength grade S10		DIN 4074-1
② Slit strip 90x3	DIN EN 10111-DD11	$R_{eH} \geq 240 N/mm^2$
alternatively:	DIN EN 10346-DX52D+Z275	$R_{eH} \geq 240 N/mm^2$; $R_m \geq 360 N/mm^2$
③ Tubular rivet	DIN 7340-A8x0.75x39-steel-electrogalvanized	
④ Marking		

all components made of galvanised steel

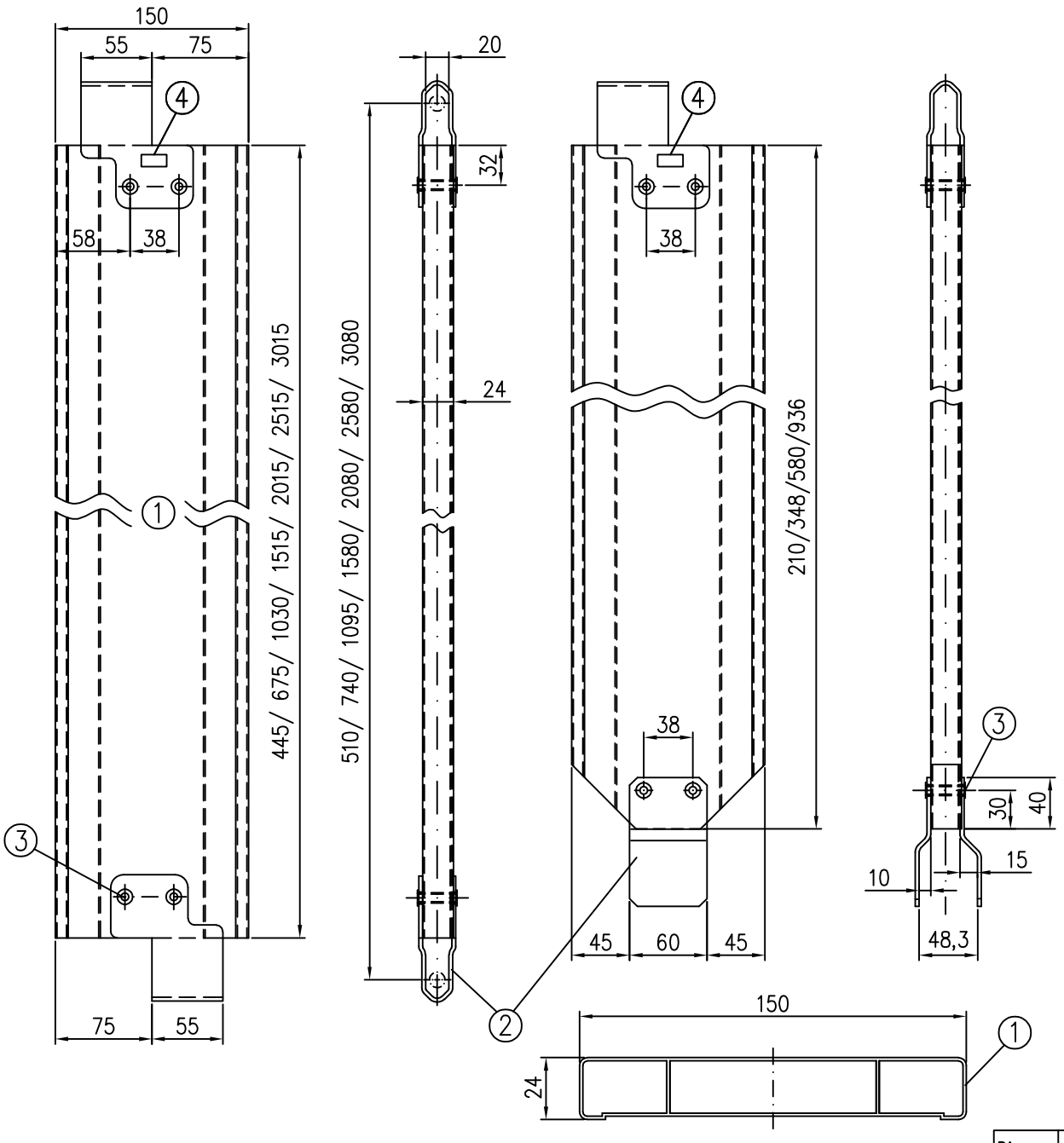
Dimens. [m]	Weight [kg]
4.14	9.0

Frame scaffold ALFIX 70

Toeboard 4.14m AF

A714-A225 06.2020

Annex A,
page 125



Dimens. [m]	Weight [kg]
Toeboard	
0.50	1.1
0.73	1.4
1.09	1,9
1.57	2.5
2.07	3.2
2.57	3.8
3.07	4.5
End toeboard	
0.36	0.8
0.50	0.9
0.73	1.3
1.09	1.8

① Sectional view aluminium toeboard DIN EN 755-2 EN AW-6063-T66
s=1.25mm

② Slit strip 60x3 DIN EN 10111-DD11 $R_{eH} \geq 240 N/mm^2$
alternatively: DIN EN 10346-DX52D+Z275 $R_{eH} \geq 240 N/mm^2$; $R_m \geq 360 N/mm^2$

③ Tubular rivet DIN 7340-A8x0,75x33-steel-electrogalvanized

④ Marking

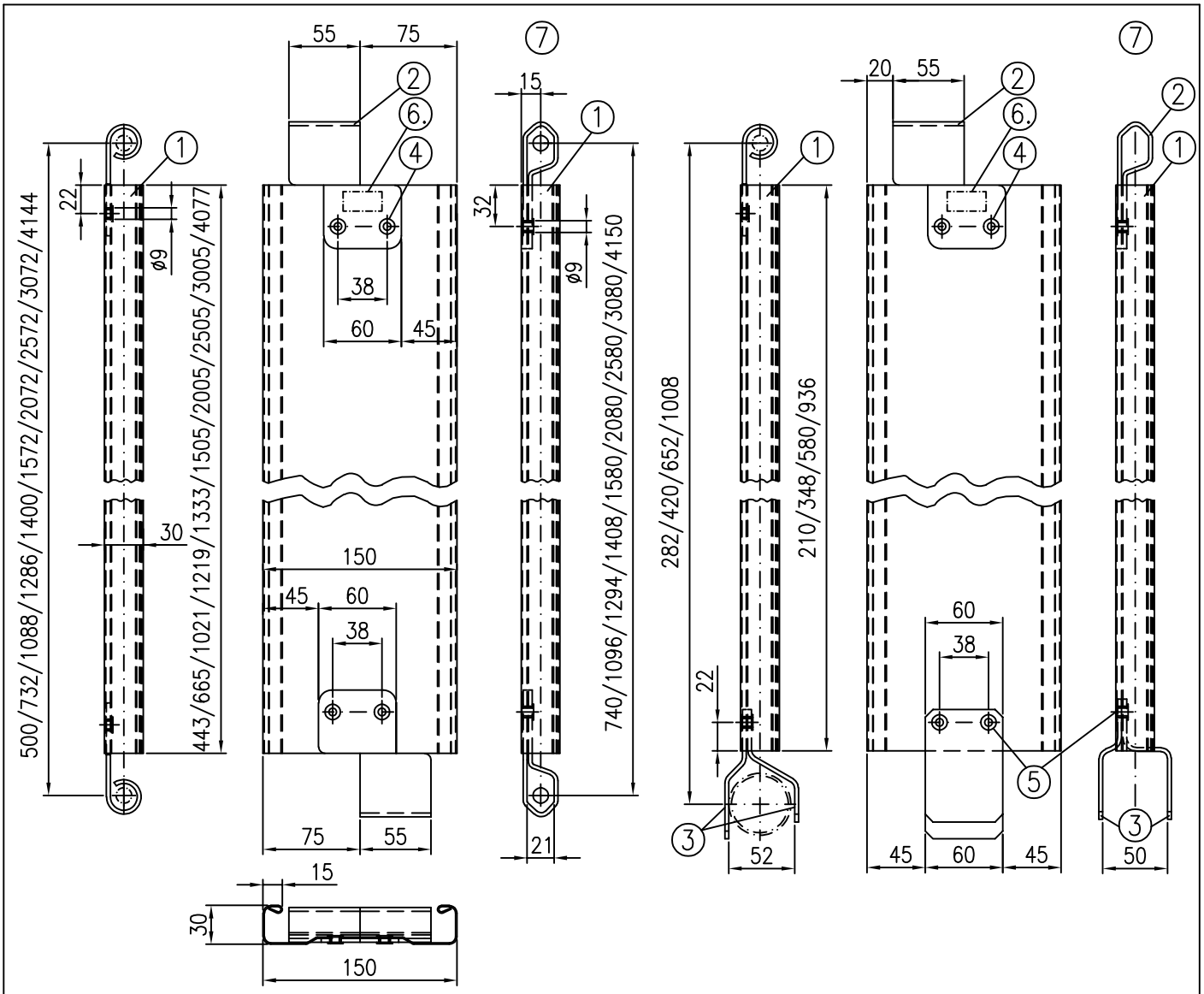
all components made of galvanised steel

Frame scaffold ALFIX 70

Aluminium toeboard; Aluminium end toeboard AF

A714-A226 06.2020

Annex A,
page 126



① Steel metal s=1mm DIN EN 10346-S250GD+Z275

② Steel metal s=3mm DIN EN 10111-DD11 $R_{eH} \geq 240 N/mm^2$; $R_m \geq 360 N/mm^2$

alternatively: DIN EN 10346-DX52D+Z275 $R_{eH} \geq 240 N/mm^2$; $R_m \geq 360 N/mm^2$

③ Steel metal s=3mm DIN EN 10111-DD11 $R_{eH} \geq 240 N/mm^2$; $R_m \geq 360 N/mm^2$

alternatively: DIN EN 10346-DX52D+Z275 $R_{eH} \geq 240 N/mm^2$; $R_m \geq 360 N/mm^2$

④ Tubular rivet DIN 7340-A8x1x13-steel-electrogalvanized

alternatively: DIN 7340-A8x0,75x13-steel-electrogalvanized

⑤ Tubular rivet DIN 7340-A8x1x16-steel-electrogalvanized

alternatively: DIN 7340-A8x0,75x16-steel-electrogalvanized

⑥ Marking

⑦ Component no longer manufactured – only approved for continued use

all components made of galvanised steel

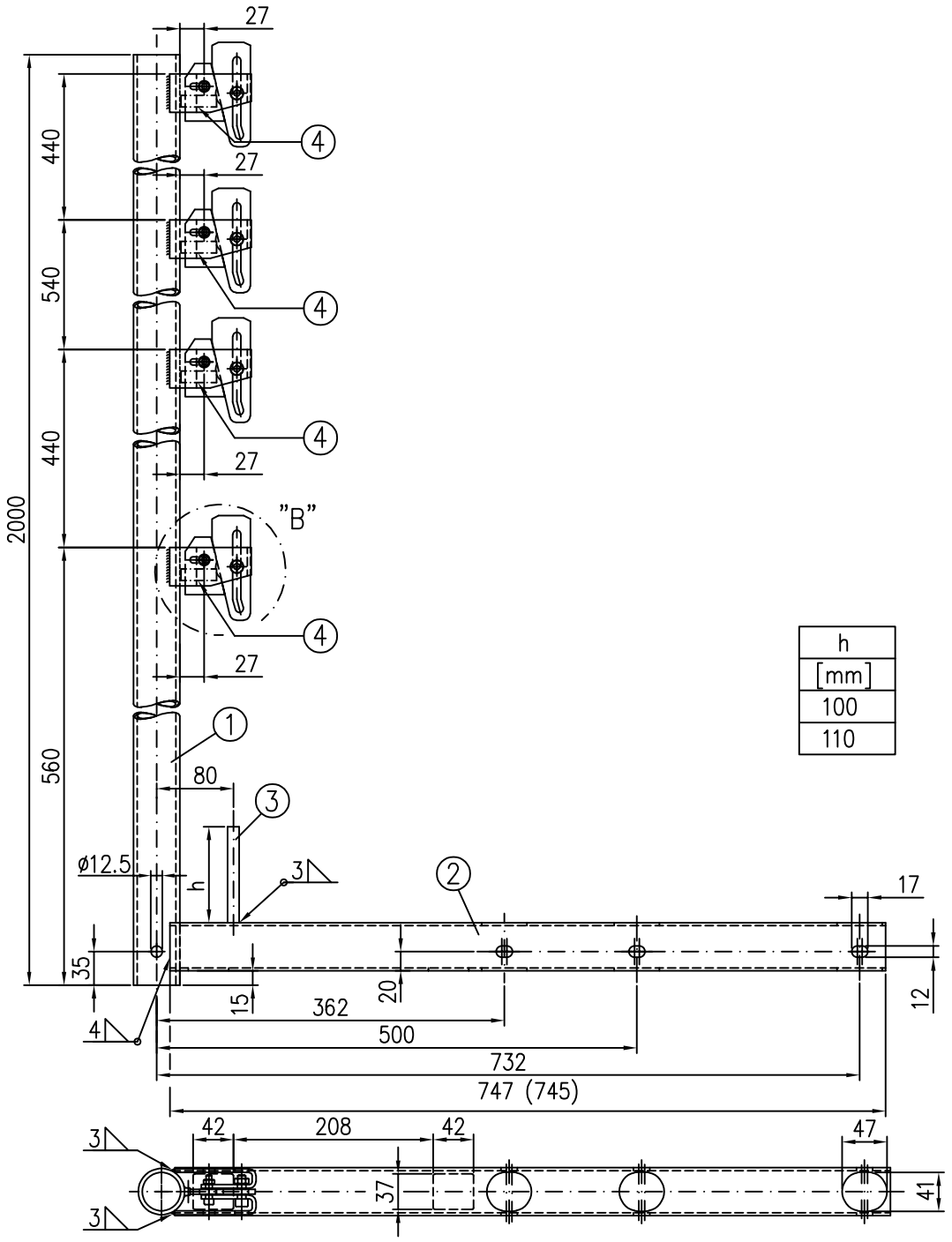
Dimens. [m]	Weight [kg]
Toeboard	
0.50	1.3
0.73	1.7
1.09	2.4
1.29	2.8
1.40	3.0
1.57	3.4
2.07	4.4
2.57	5.4
3.07	6.4
4,14	8.5
End toeboard	
0.36	0.8
0.50	1.3
0.73	1.7
1.09	2.4

Frame scaffold ALFIX 70

Steel toeboard; Steel end toeboard AF

A715-A237 06.2020

Annex A,
page 127



h [mm]
100
110

① Circular hollow section ø48.3x4.05 DIN EN 10219–S235JRH $R_{eH} \geq 320 N/mm^2$
② Rectangular hollow section 50x50x3 DIN EN 10219–S235JRH
③ Round ø12xh DIN EN 10025–S235JR
④ Marking

galvanised

For details see annex A, page 3a ( ) discontinued design

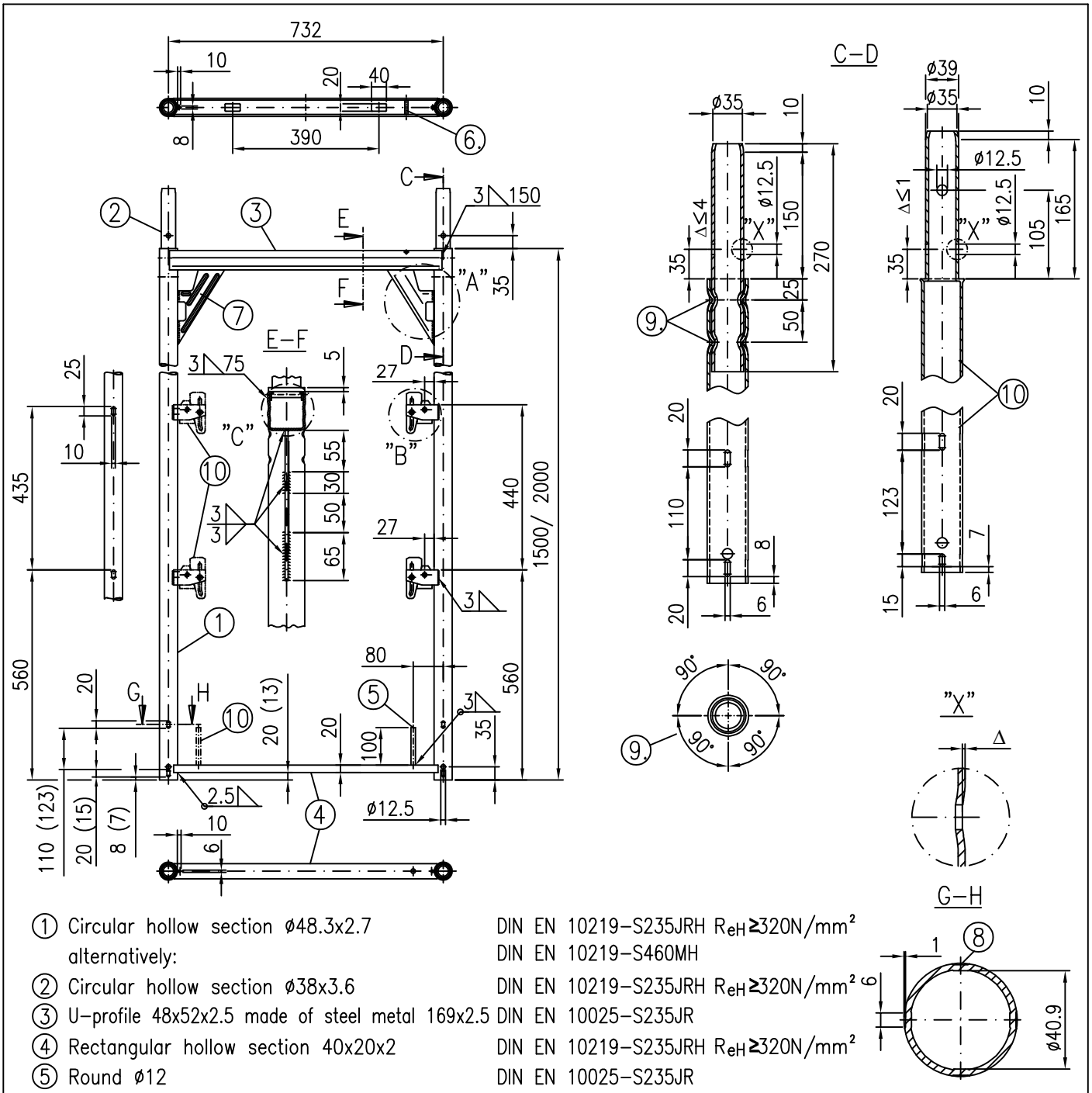
Dimension [m]	Weight [kg]
2.00x0.73	13.5

Frame scaffold ALFIX 70

Protective net post AF 2.00 x 0.36/ 0.50/ 0.73m

A715–A238 06.2020

Annex A,
page 128



①	Circular hollow section ø48.3x2.7	DIN EN 10219–S235JRH R_{eH}≥320N/mm²
	alternatively:	DIN EN 10219–S460MH
②	Circular hollow section ø38x3.6	DIN EN 10219–S235JRH R_{eH}≥320N/mm²
③	U–profile 48x52x2.5 made of steel metal 169x2.5	DIN EN 10025–S235JR
④	Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH R_{eH}≥320N/mm²
⑤	Round ø12	DIN EN 10025–S235JR
⑥	Round ø8	DIN EN 10277–2–S235JRC+C
⑦	Marking	
⑧	4 recesses 20(15)x6; t=1	
⑨	4 point–joint pressed connections	
⑩	alternatively: every 2.00m with 4 guardrail wedge housings and 2 toeboard pins	
⑪	alternatively: Circular hollow section ø48.3x2.7 without ②	DIN EN 10219–S460MH

galvanised

( ) Dimensions as for design ⑪

For details see annex A, page 3

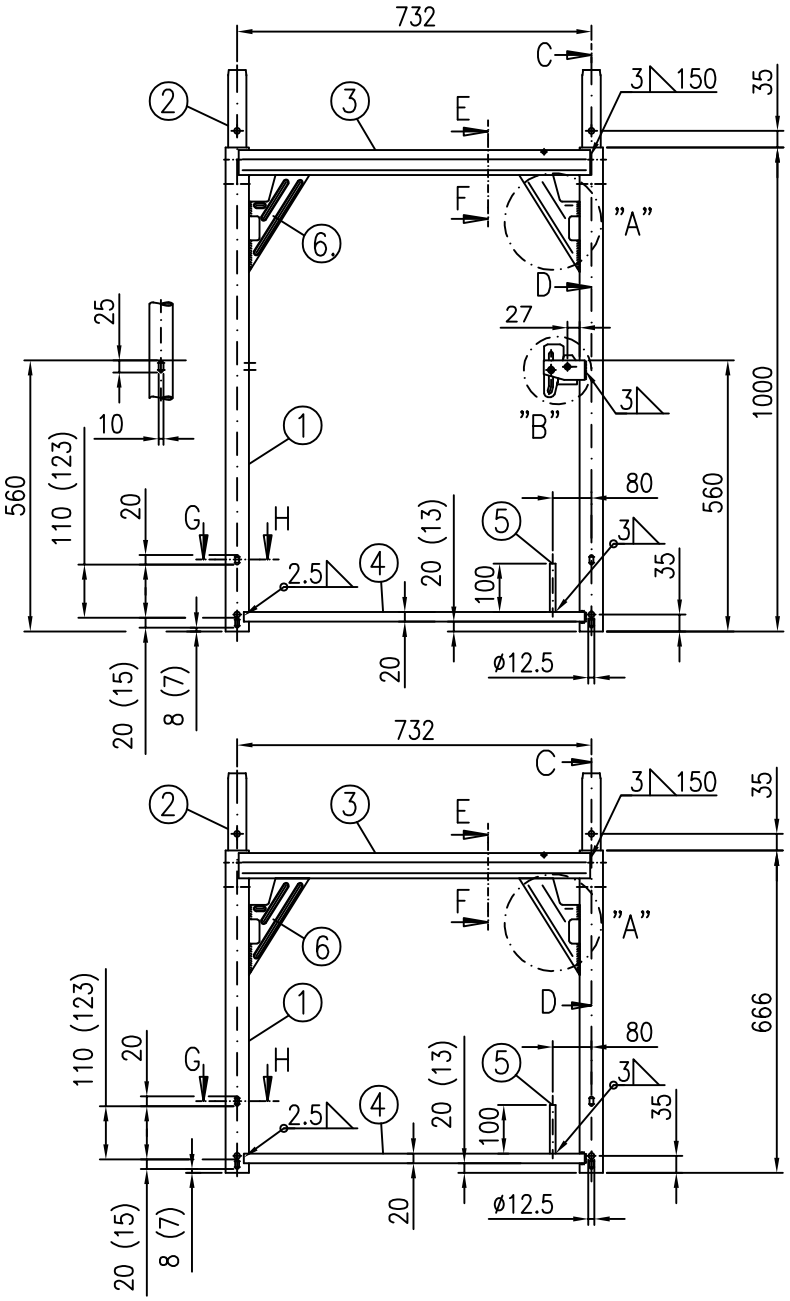
	Dimens. [m]	Weight [kg]
	1.50	16.5
	2.00	18.6
⑩	2.00	19.6

Frame scaffold ALFIX 70

Vertical frame AF 1.50m and 2.00m, steel

Annex A,
page 129

A715–A245 10.2020



①	Circular hollow section ø48.3x2.7	DIN EN 10219-S235JRH $R_{eH} \geq 320 N/mm^2$
	alternatively:	DIN EN 10219-S460MH
②	Circular hollow section ø38x3.6	DIN EN 10219-S235JRH $R_{eH} \geq 320 N/mm^2$
③	U-profile 48x52x2.5 made of steel metal 169x2.5	DIN EN 10025-S235JR
④	Rectangular hollow section 40x20x2	DIN EN 10219-S235JRH $R_{eH} \geq 320 N/mm^2$
⑤	Round ø12xh	DIN EN 10025-S235JR
⑥	Marking	
	( ) Dimensions as for design ⑪	see Annex A, page 129
	galvanised	Sectional views see annex A, page 129; for details see annex A, page 3

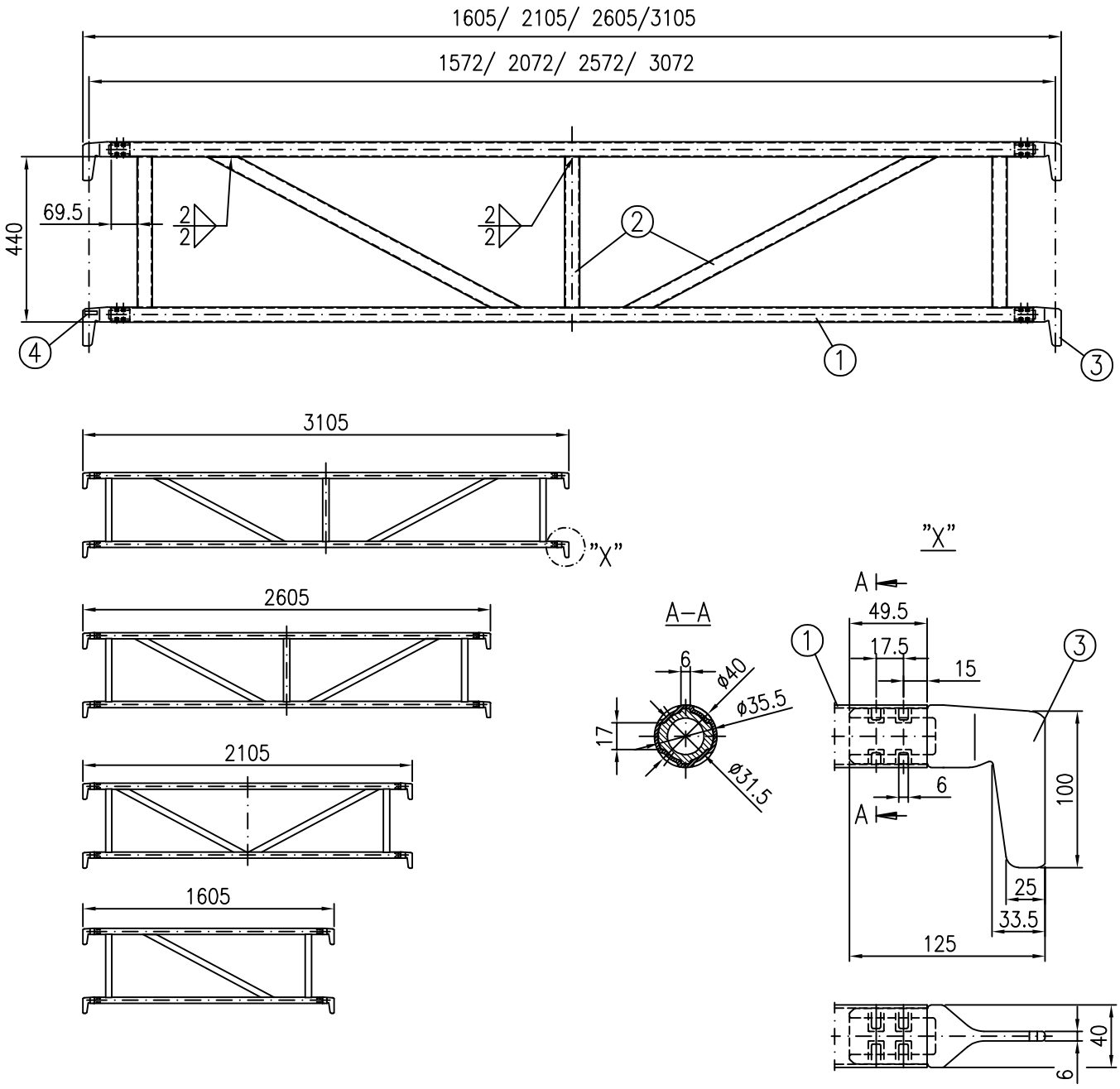
Dimens. [m]	Weight [kg]
0.67	10.4
1.00	12.9

Frame scaffold ALFIX 70

Vertical frame AF 1.0m and 0.67m, steel

A715-A246 06.2020

Annex A,
page 130



①	Circular hollow section ø40x2	DIN EN 755 EN AW–6082–T5
②	Rectangular hollow section 40x20x2	DIN EN 755 EN AW–6063–T66
③	Insertion hook	EN–AC–42200
④	Marking	131–MIG: Type 4 filler material (EC9)

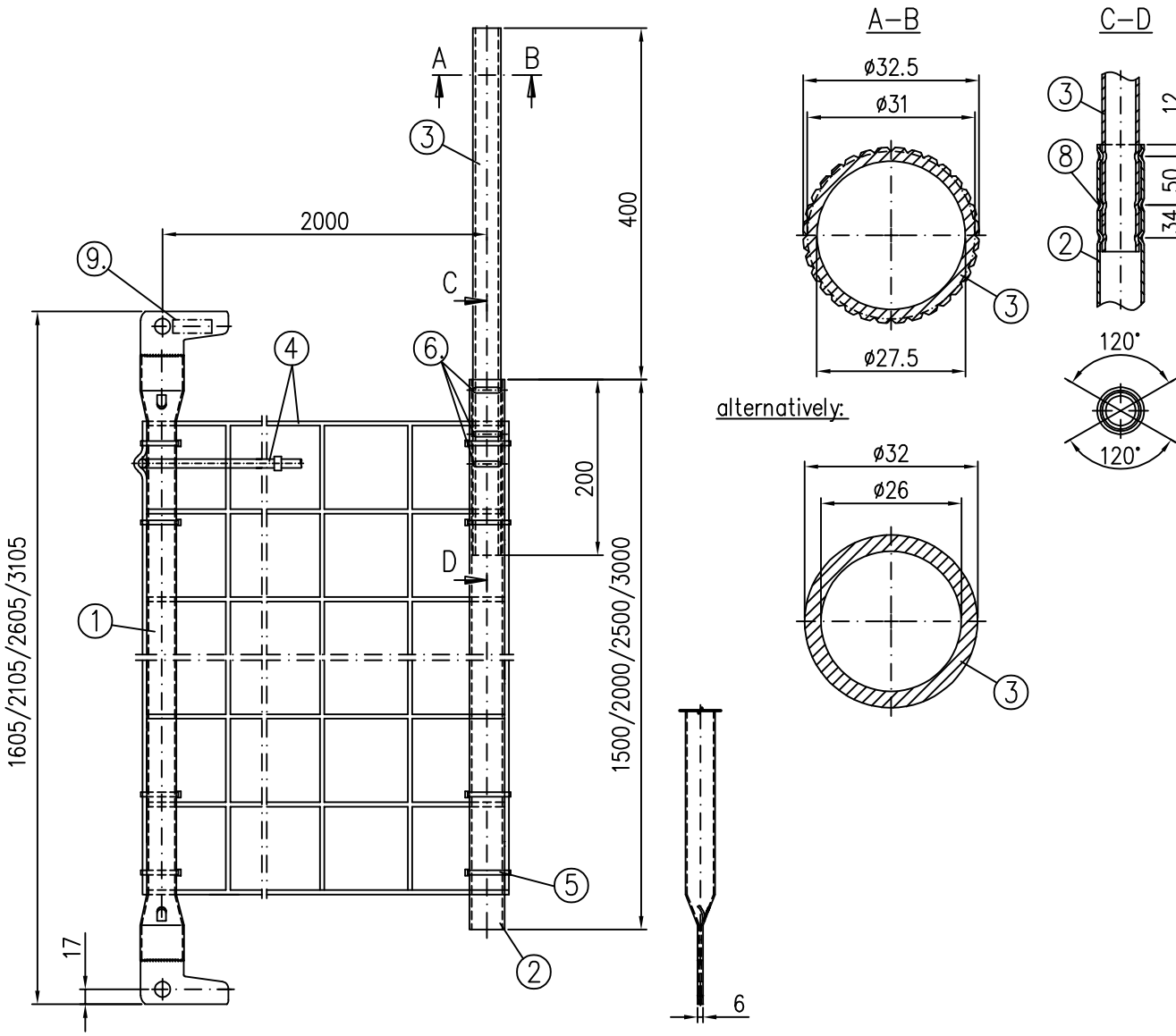
Dimens. [m]	Weight [kg]
1.57	3.3
2.07	4.5
2.57	5.4
3.07	6.0

Frame scaffold ALFIX 70

Aluminium double guardrail AF 1.57m; 2.07m; 2.57m; 3.07m

A715–A254 06.2020

Annex A,
page 131



①	Guardrail AF	see Annex A, page 36
②	Circular hollow section ø40x2.5	DIN EN 755–2 EN AW–6063–T66
	alternatively: Circular hollow section ø40x3	DIN EN 755–2 EN AW–6060–T66
③	Star section 32.5	DIN EN 755–2 EN AW–6063–T66
	alternatively: Circular hollow section ø32x3	DIN EN 755–2 EN AW–6060–T66
	alternatively: Circular hollow section ø33x3	DIN EN 755–2 EN AW–6060–T66
④	Protective net with pressed polyamide rope 8x3500	DIN EN 1263–1–U–A2–M100–Q
⑤	Cable tie 300x4.8	
⑥	Linear pressed connection	
⑦	Marking	

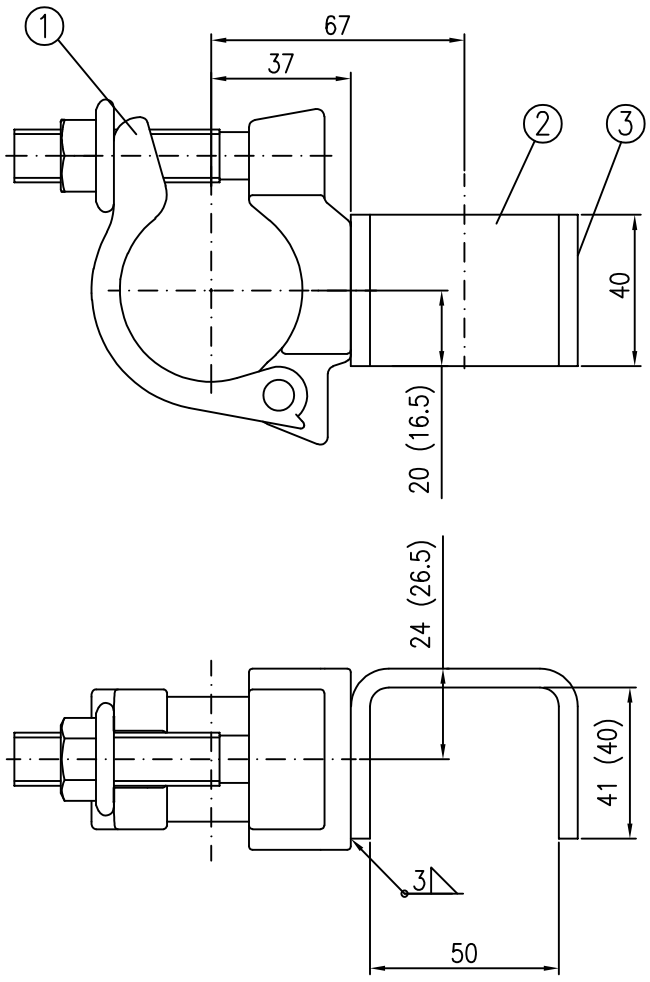
Dimension [m]	Weight [kg]
1.57x2.00	5.6
2.07x2.00	7.0
2.57x2.00	8.6
3.07x2.00	10.0

Frame scaffold ALFIX 70

Guard net system

A715–A255 06.2020

Annex A,
page 132



① Halfcoupler, class B — DIN EN 74–2
② Steel plate 45x5 — DIN EN 10025–S235JR
③ Marking
( ) discontinued design

galvanised

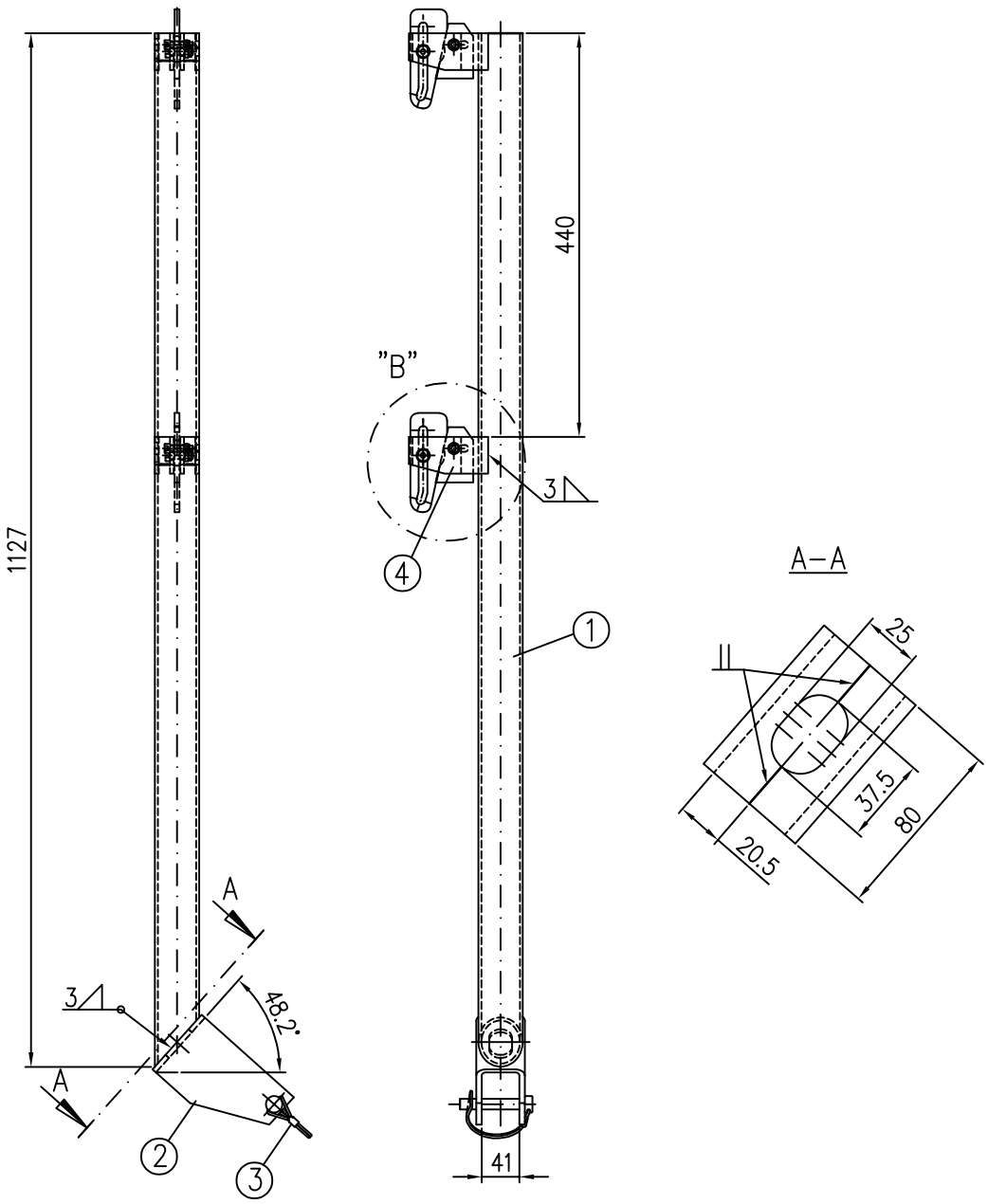
Dimens. [m]	Weight [kg]
–	0.8

Frame scaffold ALFIX 70

Gusset coupler

A715–A256 06.2020

Annex A,
page 133



①	Circular hollow section ø48.3x3.2	DIN EN 10219–S235JRH $R_{eH} \geq 320 N/mm^2$
②	Flat 80x6	DIN EN 10025–S235JR
③	Tube linchpin 112 12x70 with snap–on lock	
	Pin	DIN EN 10025–S355J2
	Ring	DIN 17223 B spring steel wire
④	Marking	
	galvanised	Detailed view B see annex A, page 3

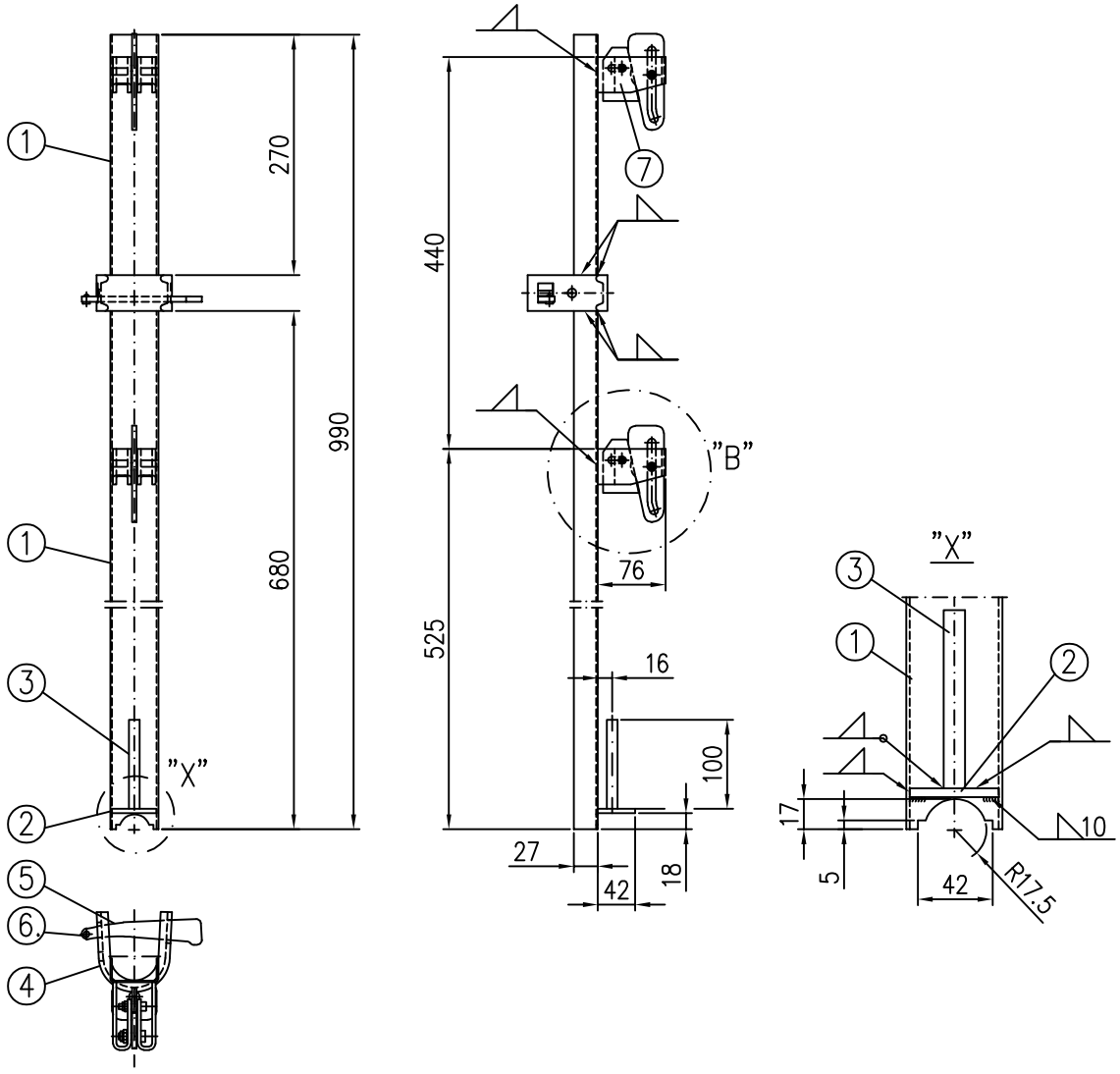
Dimens. [m]	Weight [kg]
1.10	7.3

Frame scaffold ALFIX 70

ALBLITZ stair guardrail post 1.10m

A718–A258 06.2020

Annex A,
page 134



①	U–profile 54x27x2 made of steel metal 102x2	DIN EN 10111–DD11
	alternatively:	DIN EN 10130–DC01
②	Steel plate 50x5	DIN EN 10025–S235JR
③	Round 12	DIN EN 10025–S235JR
④	Bended profile section 40x12x5x7	DIN EN 10025–S235JR
⑤	Wedge 6mm hot–dip galvanised	in accordance with Z–8.22–906
⑥	Round head rivet ø5x10 with rivet head of rivet ø4	DIN 660 QSt 32–2 electrogalvanized
⑦	Marking	

galvanised; all welding seams a=3mm

Detailed view B see annex A, page 3

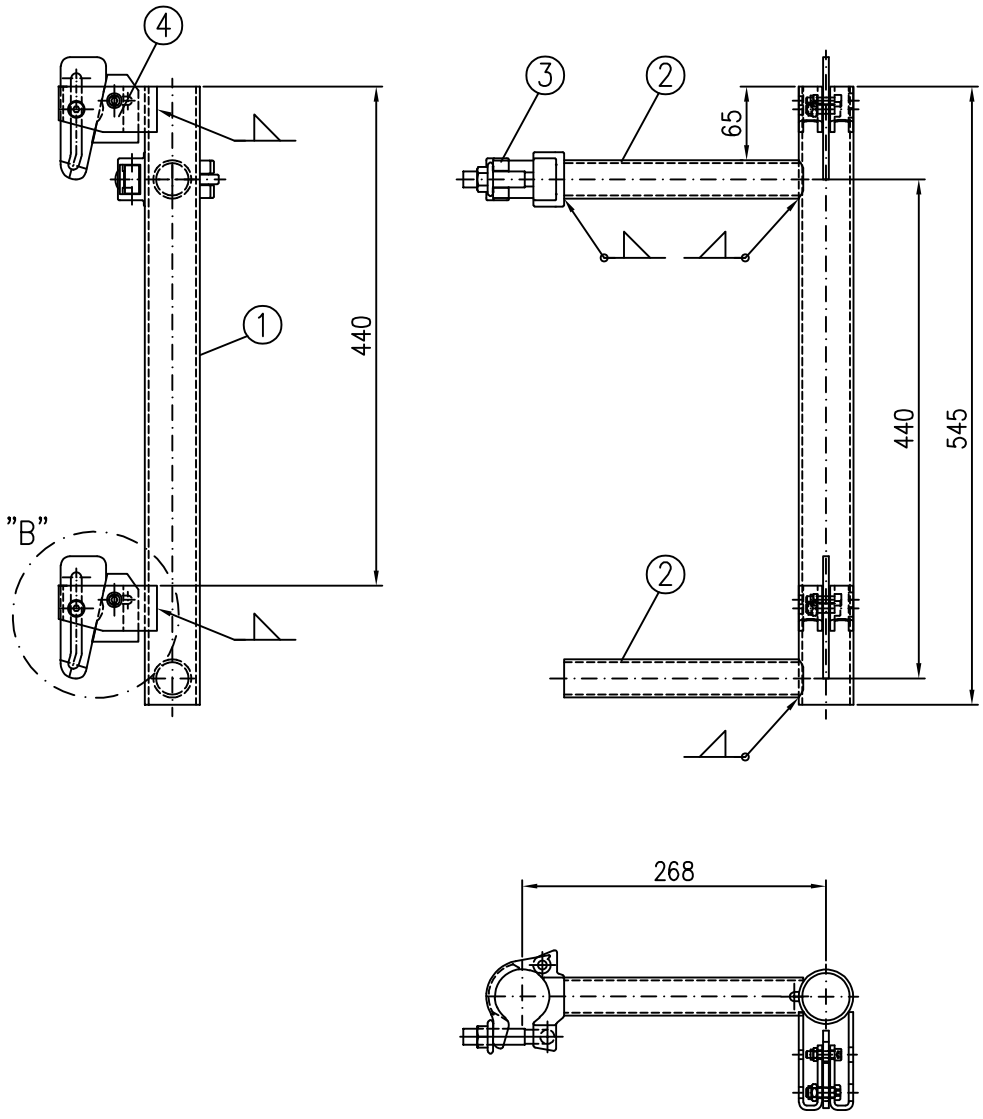
Dimens. [m]	Weight [kg]
1.00	3.6

Frame scaffold ALFIX 70

Inner guardrail post 1.00m

A718–A259 06.2020

Annex A,
page 135



① Circular hollow section ø48.3x3.2	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
② Circular hollow section ø33.7x2.3 (2.6)	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
③ Halfcoupler, class B	DIN EN 74–2	
④ Marking		

galvanised; all welding seams a=3mm

Detailed view B see annex A, page 3

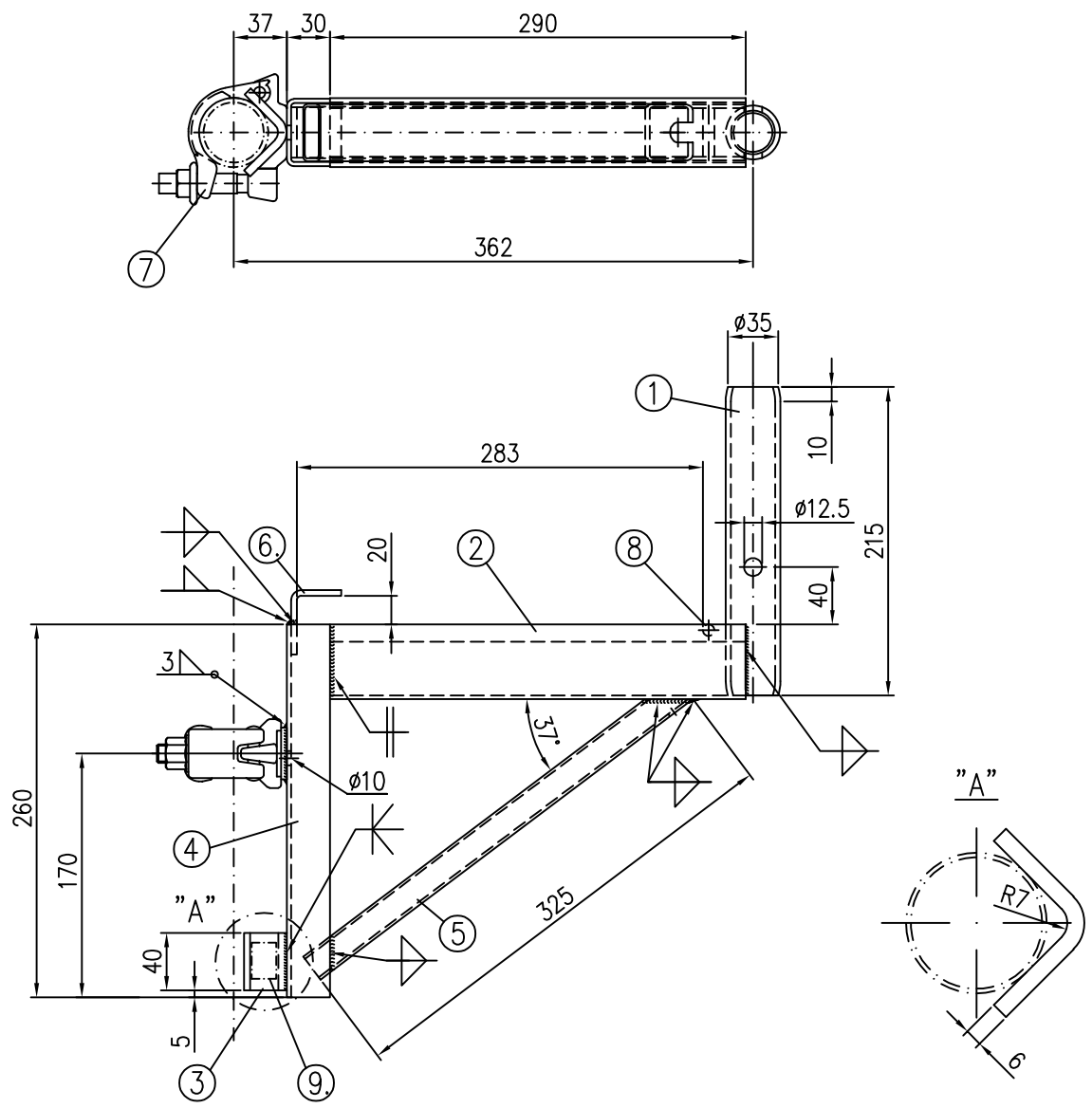
Dimens. [m]	Weight [kg]
–	4.4

Frame scaffold ALFIX 70

Guardrail holder for internal corner

A718–A260 06.2020

Annex A,
page 136



① Circular hollow section ø38x3.6	DIN EN 10219-S235JRH	$R_{eH} \geq 320 N/mm^2$
② U-profile 48x52x2.5 made of steel metal 169x2.5	DIN EN 10025-S235JR	see Annex A, page 3
③ Steel plate 40x6	DIN EN 10025-S235JR	
④ U-profile 47x30x3	DIN EN 10025-S235JR	
⑤ Rectangular hollow section 40x20x2	DIN EN 10219-S235JRH	
⑥ Steel plate 35x4	DIN EN 10025-S235JR	
⑦ Halfcoupler, class B	DIN EN 74-2	
⑧ Round ø8	DIN EN 10277-2-S235JRC+C	
⑨ Marking		

galvanised; all welding seams a=2.5mm

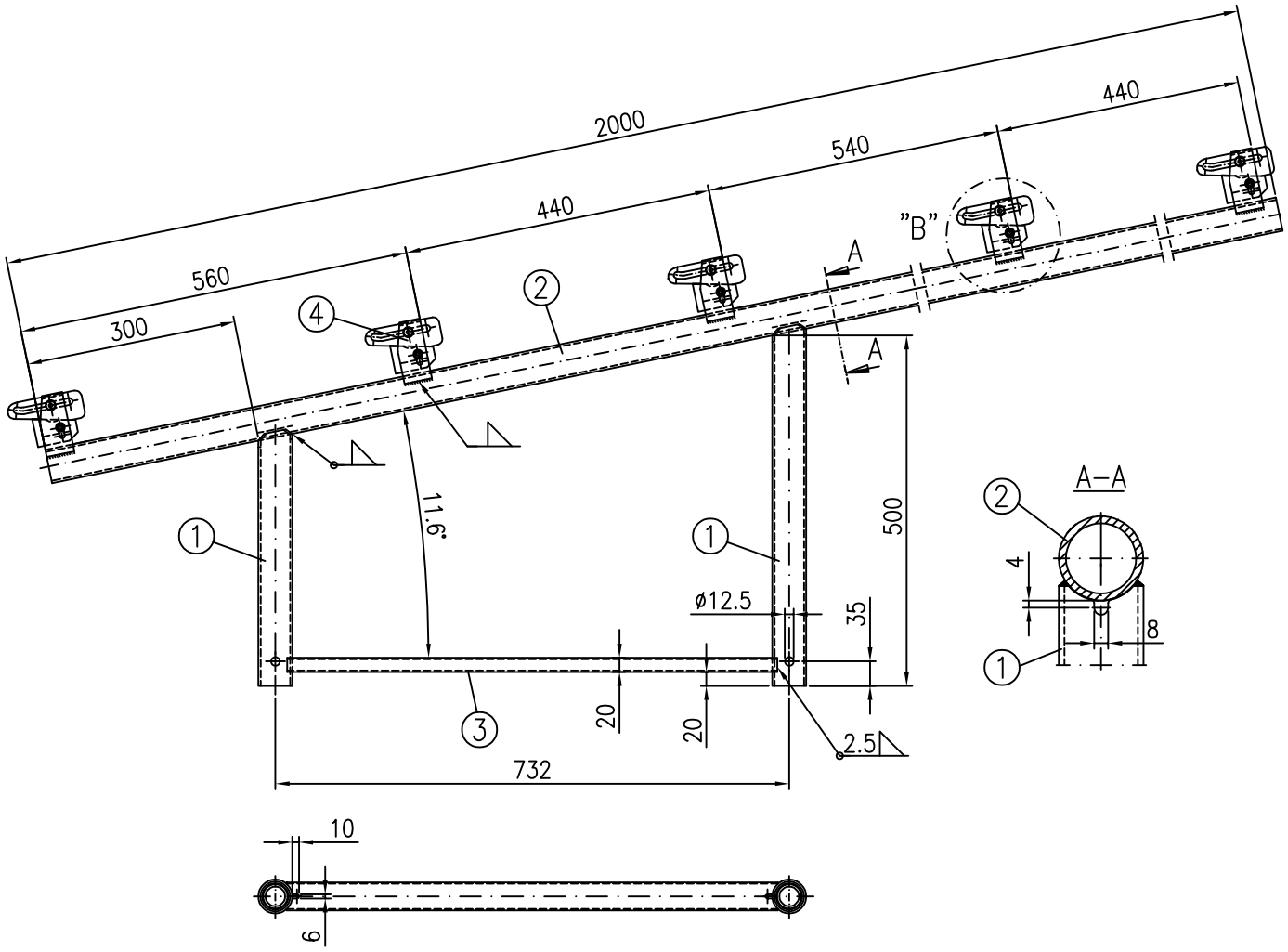
Dimens. [m]	Weight [kg]
0.36	3.7

Frame scaffold ALFIX 70

Bracket AF 0.36m, lift-off preventer for inner face

A718-A261 06.2020

Annex A,
page 137



Secure tube joints with gravity pins (see Annex A, page 100) on the inner and outer face!

① Circular hollow section ø48.3x3.2 DIN EN 10219–S235JRH $R_{eH} \geq 320 N/mm^2$
② Circular hollow section ø48.3x4.05 DIN EN 10219–S235JRH $R_{eH} \geq 320 N/mm^2$
③ Rectangular hollow section 40x20x2 DIN EN 10219–S235JRH $R_{eH} \geq 320 N/mm^2$
④ Marking

galvanised; all welding seams a=3mm For details see annex A, page 3

Dimens. [m]	Weight [kg]
0.73	18.0

Frame scaffold ALFIX 70

Weather protection add–on unit 2.00x0.73m

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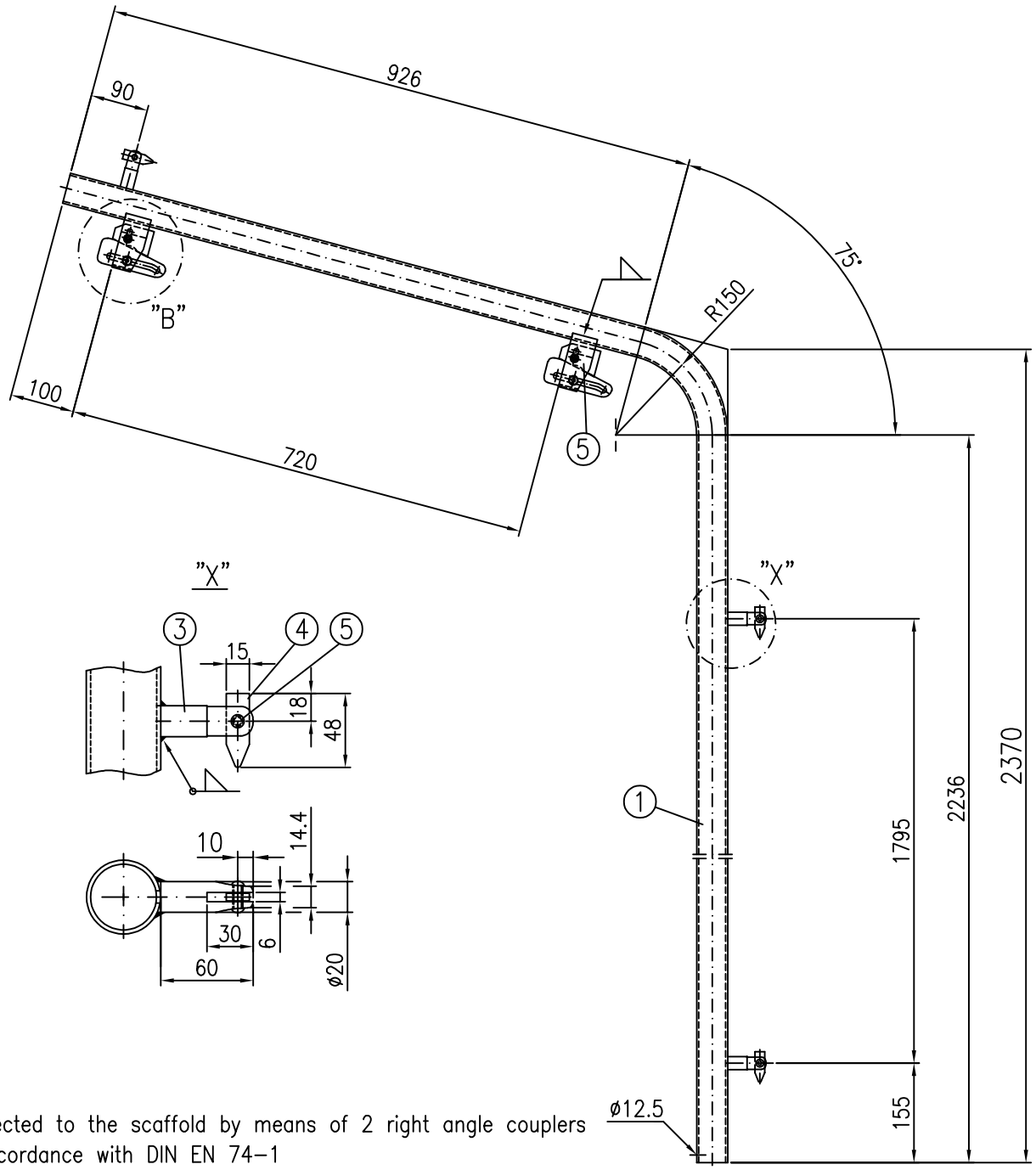
Annex A,
page 138



Connected to the scaffold by means of 2 right angle couplers in accordance with DIN EN 74-1

①	Circular hollow section ø48.3x3.2	DIN EN 10219-S235JRH $R_{eH} \geq 320 N/mm^2$
②	Tilting pin ø20x60	DIN EN 10025-S235JR
③	Locking lug; s=4mm; hot-dip galvanised	DIN EN 10025-S235JR
④	Blind rivet A 6x18 aluminium/steel	DIN EN ISO 15983
⑤	Marking	

galvanised; all welding seams a=3mm

Detailed view B see annex A, page 3

Dimens. [m]	Weight [kg]
2.00	14.3

Frame scaffold ALFIX 70

Weather protection sleeve 2.00m

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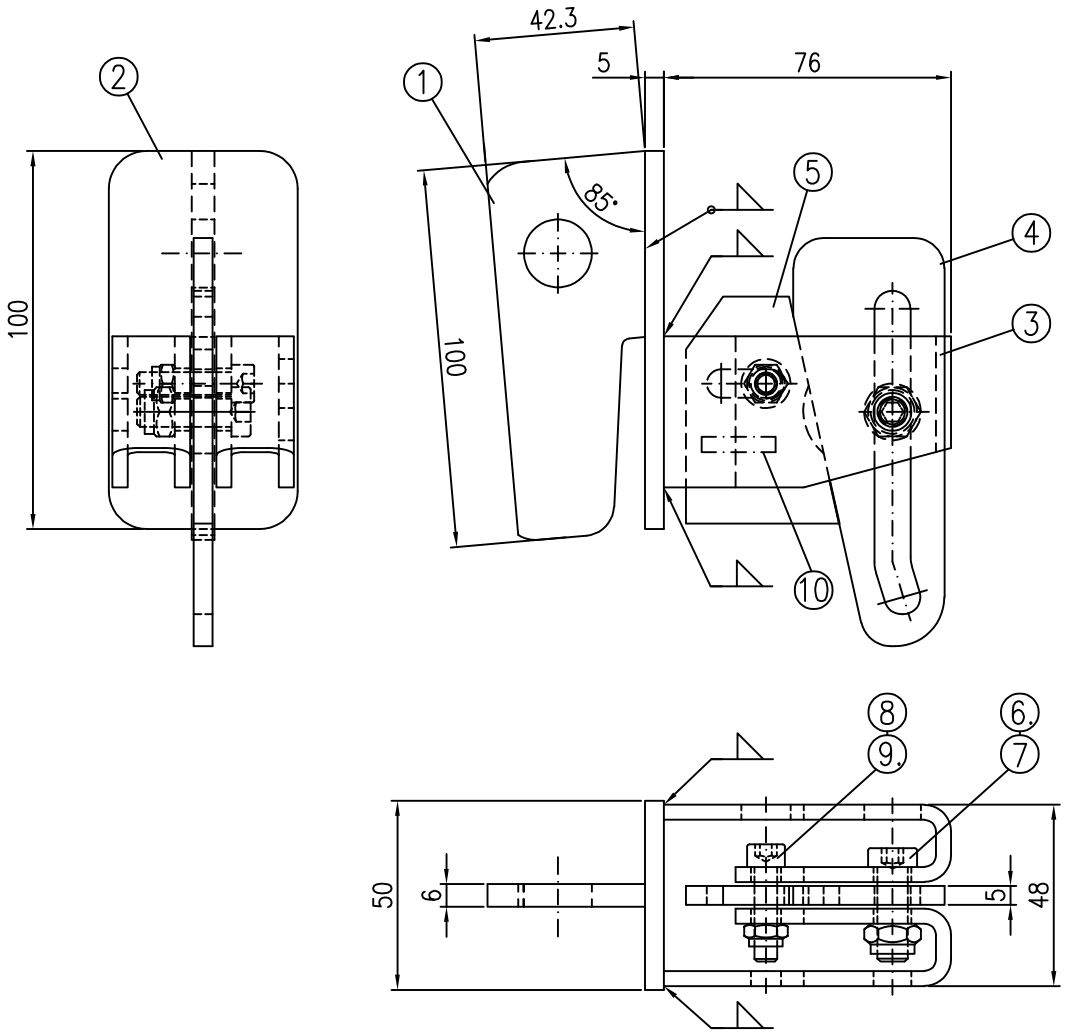
Annex A,
page 139



①	Steel plate 50x6	DIN EN 10025-S235JR
②	Steel plate 50x5	DIN EN 10025-S235JR
③	Steel plate 320x4	DIN EN 10111-DD13
④	Steel plate 80x5	DIN EN 10025-S235JR
⑤	Steel plate 70x5	DIN EN 10025-S235JRH
⑥	Cylinder head screw with hexagon socket	DIN EN ISO 4762-M8x25-8.8-galvanised
⑦	Hexagon nut, self-locking	DIN EN ISO 10511-M8-8-galvanised
⑧	Cylinder head screw with hexagon socket	DIN EN ISO 4762-M6x25-8.8-galvanised
⑨	Hexagon nut, self-locking	DIN EN ISO 10511-M6-8-galvanised
⑩	Marking	

galvanised; all welding seams a=3mm

Dimens. [m]	Weight [kg]
–	1.3

Frame scaffold ALFIX 70

Corner guardrail wedge housing

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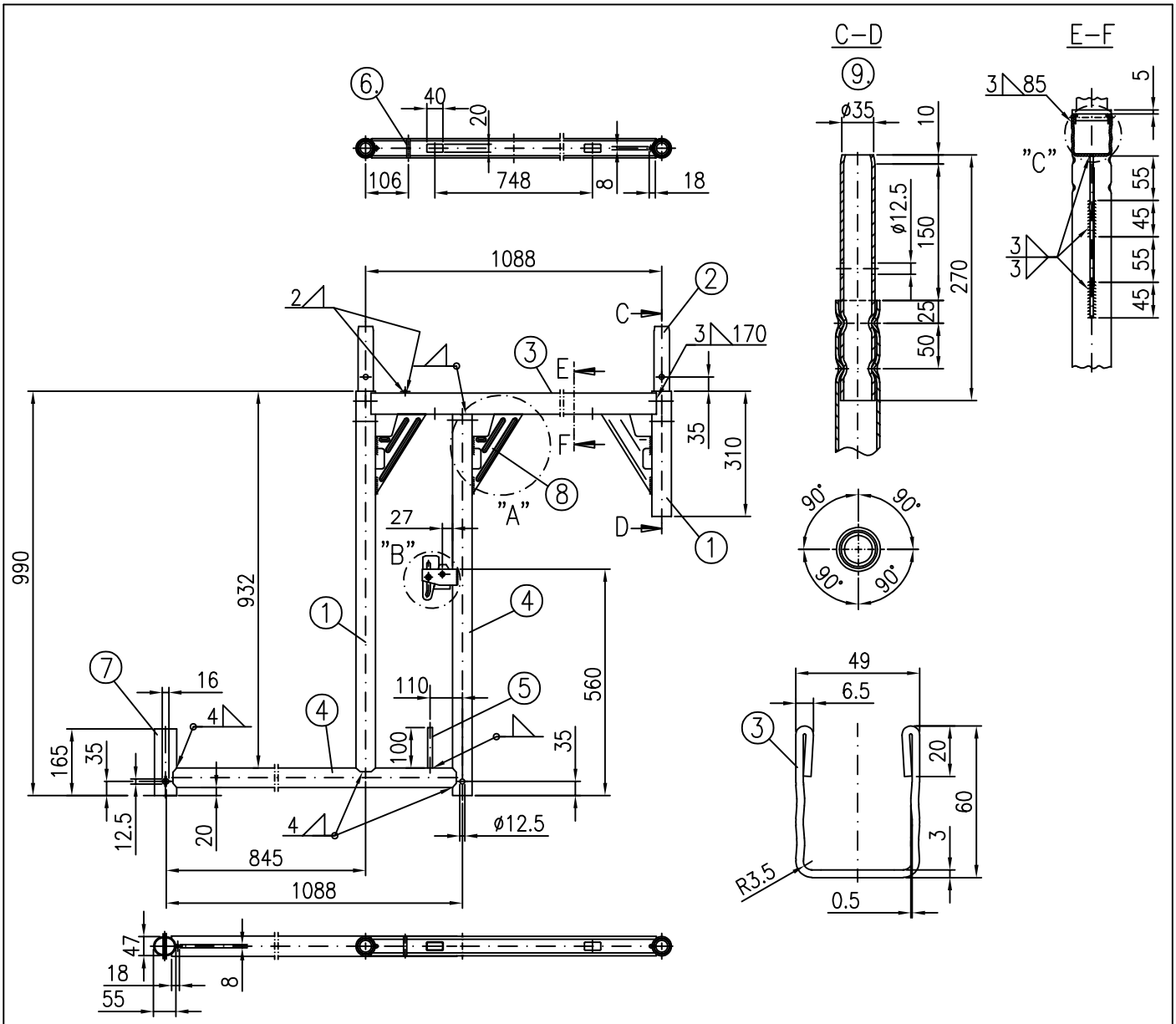
Annex A,
page 140



①	Circular hollow section ø48.3x3.2	DIN EN 10219–S235JRH $R_{eH} \geq 320 N/mm^2$
②	Circular hollow section ø38x4	DIN EN 10219–S235JRH $R_{eH} \geq 320 N/mm^2$
③	U–profile 49x60x3 made of steel metal 196x3	DIN EN 10025–S355J2
	alternatively:	DIN EN 10025–S235JR $R_{eH} \geq 320 N/mm^2$
④	Circular hollow section ø48.3x4.05	DIN EN 10219–S235JRH $R_{eH} \geq 320 N/mm^2$
⑤	Round ø12	DIN EN 10025–S235JR
⑥	Round ø5	DIN EN 10277–2–S355J2C+C
⑦	Circular hollow section 51x2.6 oval pressed	DIN EN 10219–S235JRH
⑧	Marking	
⑨	Point–joint pressed connections galvanised, all welding seams a=3mm	

For details see annex A, page 3

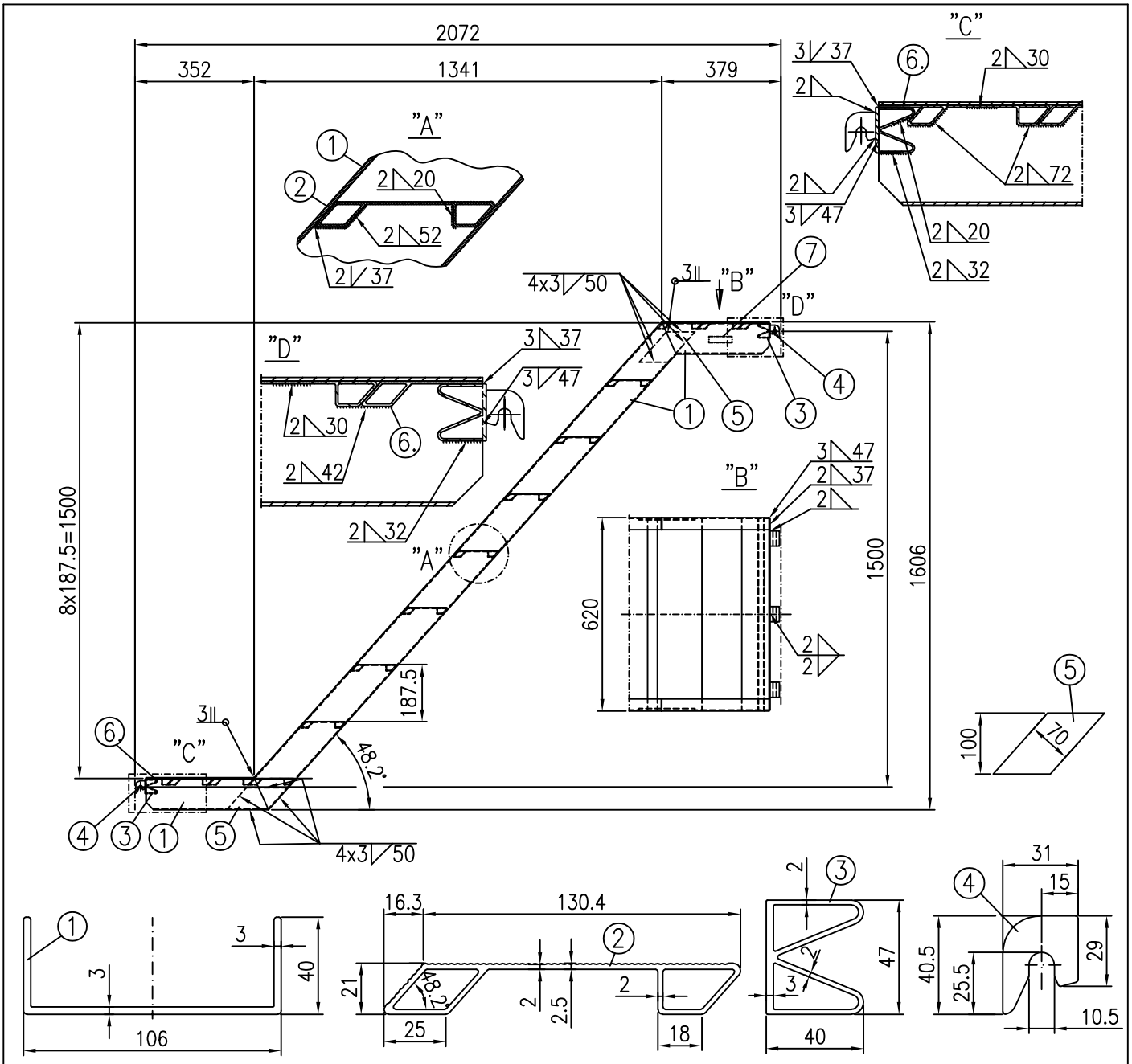
Dimension [m]	Weight [kg]
0.99x1.09	22.5

Frame scaffold ALFIX 70

DS bracket frame 0.99x1.09m

A719–A265 10.2020

Annex A,
page 141



①	U-profile 40x106x40x3	DIN EN 755-2 EN AW-6063-T66
②	Stair tread section	DIN EN 755-2 EN AW-6063-T66
③	Grip profile; bridging deck thickness 2mm	DIN EN 755-2 EN AW-6063-T66
④	Suspension claw	DIN EN 755-2 EN AW-6063-T66
⑤	Flat 100x5	DIN EN 485/ DIN EN 515/ DIN EN 573 EN AW-5754 H24/H34
⑥	Stair tread section, reduced	DIN EN 755-2 EN AW-6063-T66
⑦	Marking	131-MIG: Type 5 filler material (EC9)

Dimension [m]	Weight [kg]
2.07x1.50	23.2

Frame scaffold ALFIX 70

Aluminium stairway AF-0.62m 2.07m

Annex A,
page 142

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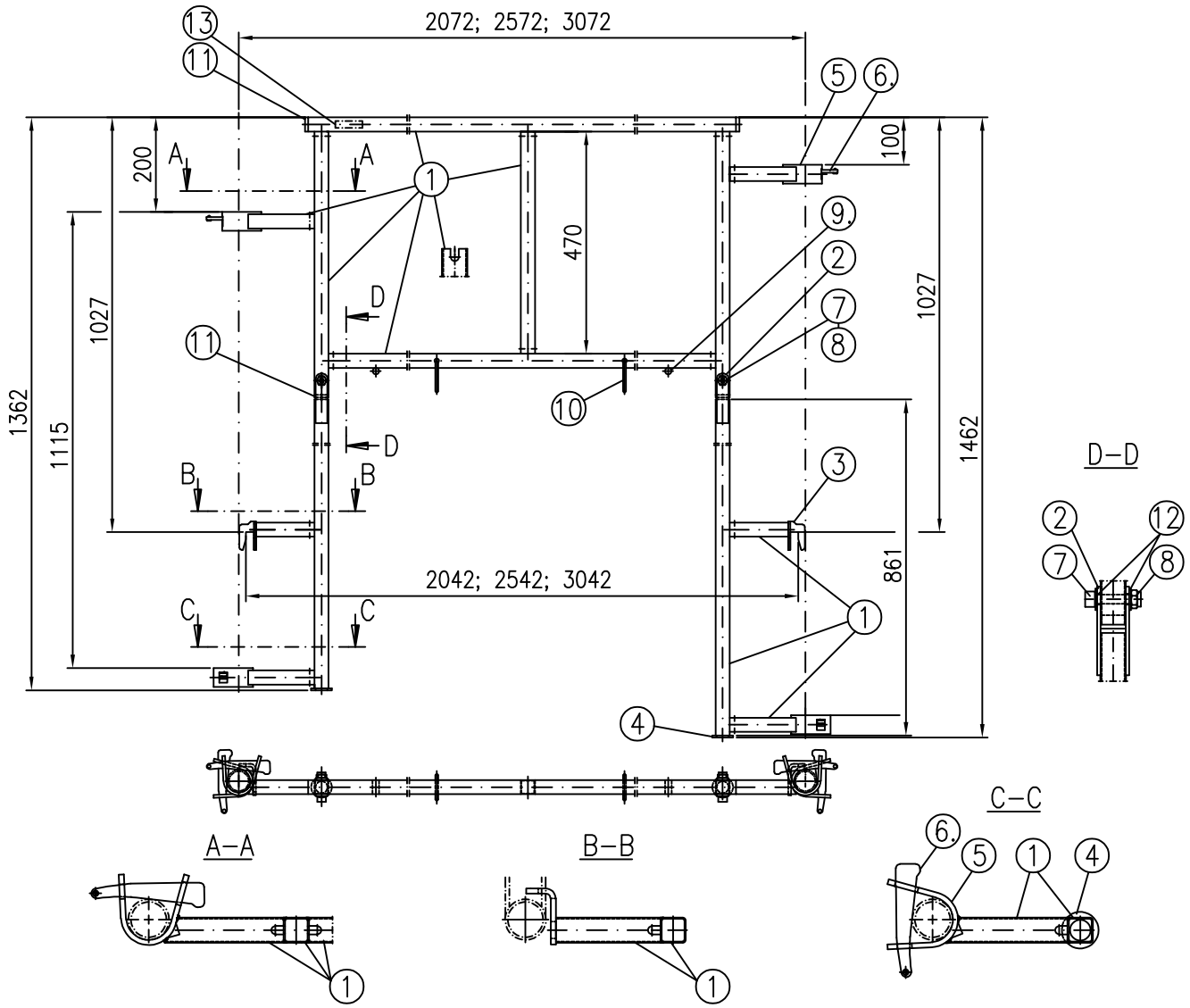

①	Rectangular hollow section 30x30x1.5	DIN EN 10219–S235JRH $R_{eH} \geq 280 N/mm^2$
②	Steel metal 4	DIN EN 10025–S235JR
③	Steel metal 4 alternatively: Steel metal 6	DIN EN 10025–S355JR DIN EN 10025–S235JR
④	Washer 25–steel–galvanised	DIN EN ISO 7089
⑤	Steel metal 6	DIN EN 10025–S235JR
⑥	Wedge 6mm	in accordance with Z–8.22–906
⑦	Cylinder head screw with hexalobular internal M12x60–8.8–galvanised	DIN EN ISO 14579
⑧	Hexagon nut, self–locking M12–8–galvanised	DIN EN ISO 10511
⑨	Round ø14	DIN EN 10025–S235JR
⑩	Round ø5	Spring steel
⑪	Lamellar plug	Plastic
⑫	Washer 13–steel–galvanised	DIN EN ISO 7089
⑬	Marking galvanised; all welding seams a=2mm	

Dimens. [m]	Weight [kg]
2.07	13.1
2.57	14.7
3.07	15.9

Frame scaffold ALFIX 70

TRBS guardrail (compliant with technical regulations for occupational safety) 2.07m; 2.57m; 3,07m, folding

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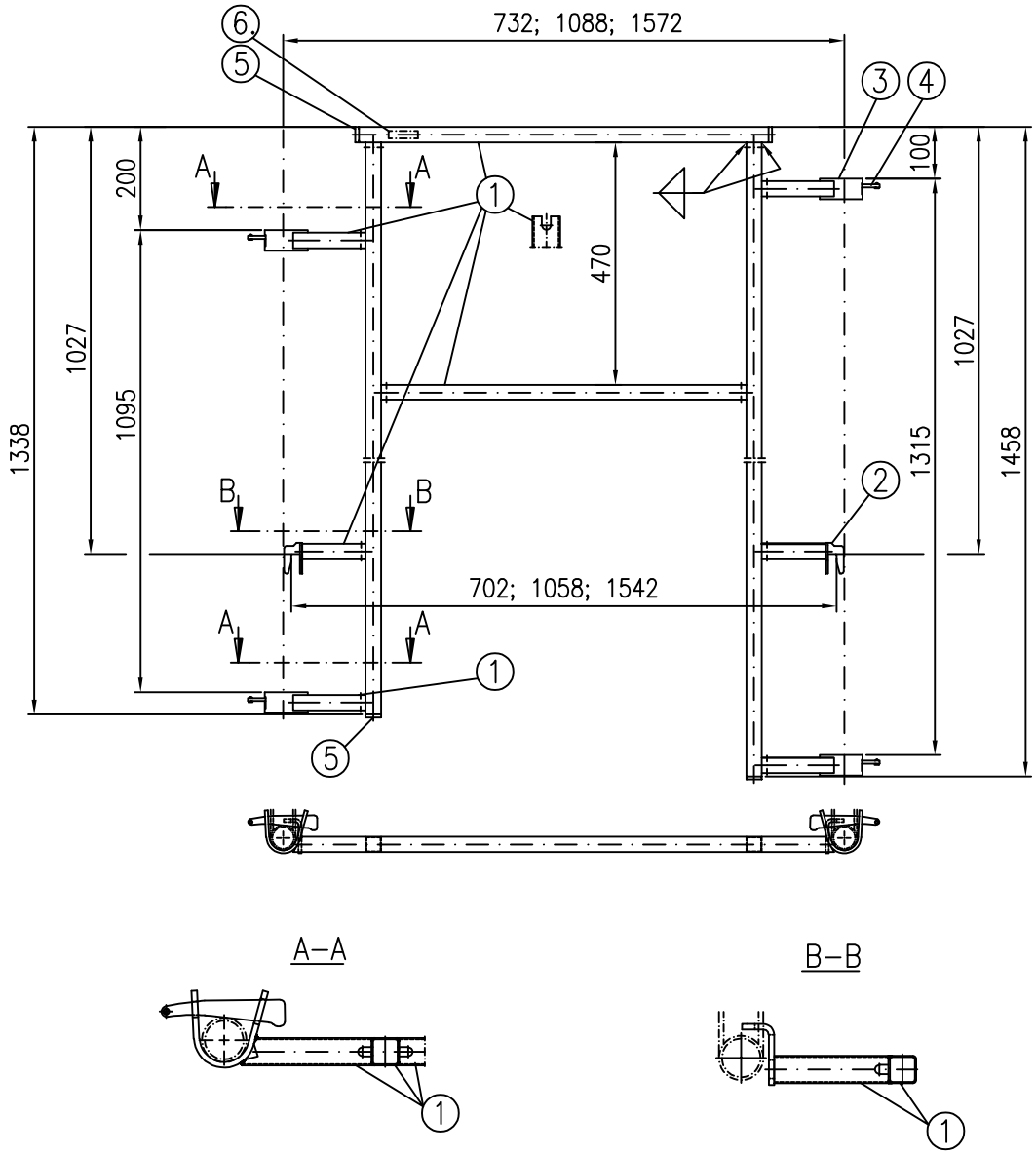
Annex A,
page 143



①	Rectangular hollow section 30x30x1.5	DIN EN 10219–S235JRH $R_{eH} \geq 280 N/mm^2$
②	Steel metal 4	DIN EN 10025–S355JR
	alternatively: Steel metal 6	DIN EN 10025–S235JR
③	Steel metal 6	DIN EN 10025–S235JR
④	Wedge 6mm	in accordance with Z–8.22–906
⑤	Lamellar plug	Plastic
⑥	Marking	
	galvanised; all welding seams a=2 mm	

Dimens. [m]	Weight [kg]
0.73	8.1
1.09	9.5
1.57	10.4

Frame scaffold ALFIX 70

TRBS guardrail (compliant with technical regulations for occupational safety) 0.73m; 1.09m; 1.57m, rigid

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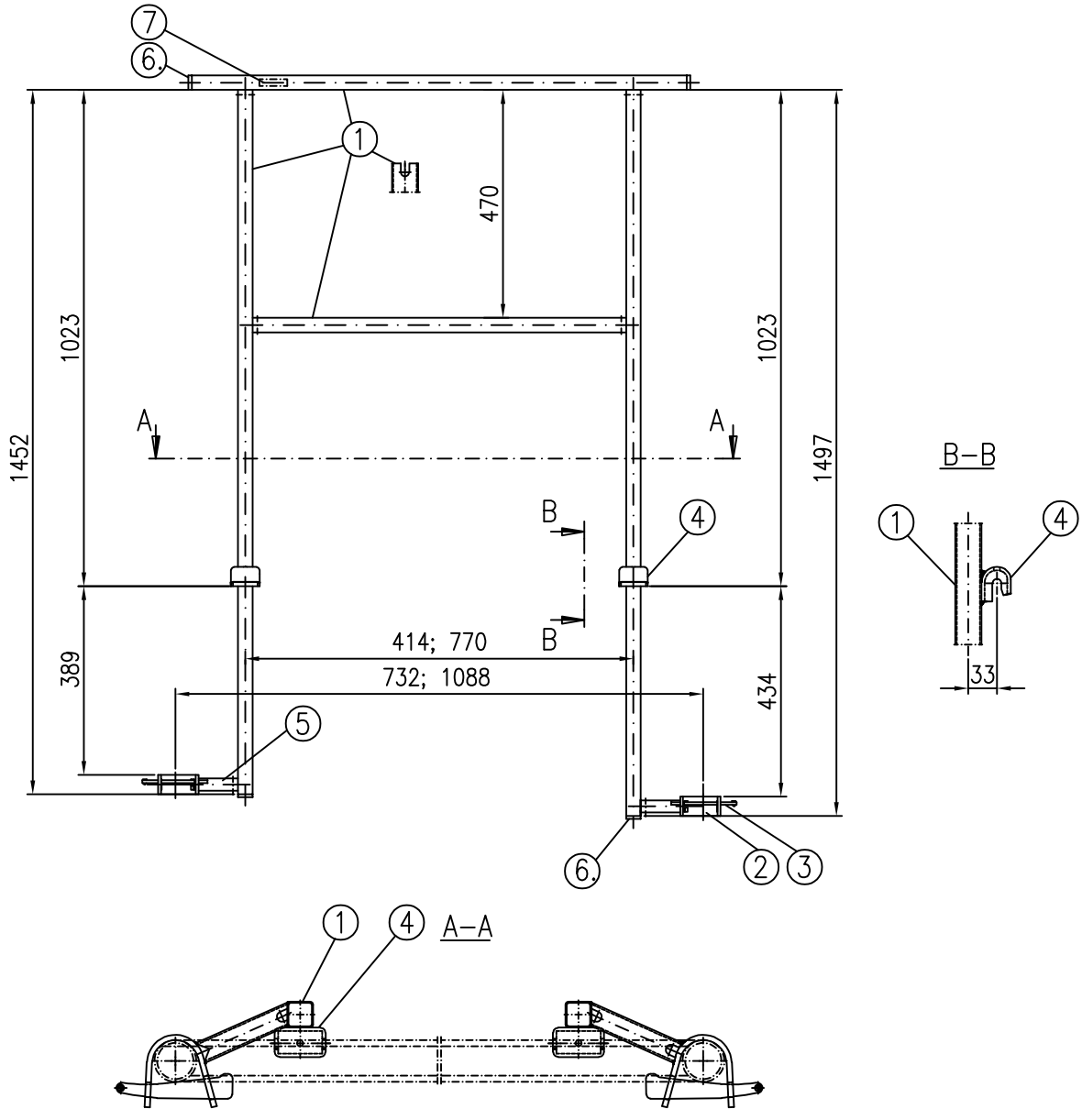
Annex A,
page 144



①	Rectangular hollow section 30x30x1.5	DIN EN 10219–S235JRH	$R_{eH} \geq 280 N/mm^2$
②	Steel metal 6	DIN EN 10025–S235JR	
③	Wedge 6mm	in accordance with Z–8.22–906	
④	Steel plate 4mm	DIN EN 10111–DD13	$R_{eH} \geq 240 N/mm^2$ $R_m \geq 360 N/mm^2$
⑤	Rectangular hollow section 25x25x2	DIN EN 10219–S235JRH	
⑥	Lamellar plug	Plastic	
⑦	Marking		

galvanised; all welding seams a=2mm

Dimens. [m]	Weight [kg]
0.73	7.3
1.09	8.3

Frame scaffold ALFIX 70

TRBS end guardrail (compliant with technical regulations for occupational safety) 0.73m; 1.09m

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Annex A,
page 145

Product marking code key

AF XX Ü 862 XX

AF = ALFIX manufacturer's logo

XX = Year of manufacture

Ü = Mark of conformity

862 = Abbreviated approval number

XX = Supplier number or supplier's company logo in case of third-party manufacturing

Year	XX
2015	15
2016	16
2017	17
2018	18
2019	19
2020	20
2021	21
2022	22
etc.	etc.

B.1 General provisions

In its standard system configuration, the scaffolding system may be used as a working scaffold of load classes ≤ 3 with bay lengths l ≤ 3.07m in accordance with DIN EN 12811-1:2004-03, and as a brickguard 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.7 has been verified in the standard system configuration.

The topmost horizontal level (working area) must not exceed 24m 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 working area 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. The standard system configuration for cladded scaffolds applies to cladding with nets with an aerodynamic force coefficient no greater than $c_{f\perp,total} = 0.6$ and $c_{f||,total} = 0.2$ and for cladding with tarpaulins. In case of cladded scaffold, the end sides of the scaffold must always be covered and the net or tarpaulin must be installed as close to the facade as possible. 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.

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 ALFIX 70 scaffolding system, the following designation in accordance with DIN EN 12810-1:2004-03 shall be used subject to the anchorage used:

- Short scaffold ties and V-type anchor

  Scaffold EN 12810 – 3D – SW06/307 – H2 – B – LS

- Long scaffold ties, compression-resistant bracing and half V-type scaffold tie

  Scaffold EN 12810 – 3D – SW06/307 – H1 – B – LS

The standard system configuration distinguishes between the following assembly variants (see table B.1):

- Basic assembly variant 0:

  Facade scaffold consisting only of basic components and side protection units.

- Basic assembly variant 1:

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

- Basic assembly variant 2:

  Facade scaffold consisting of basic components, side protection units, brackets 0.36m on the inner face of the scaffold on each working level, and brackets 0.73m 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 gravity pins as shown in Fig. 1a; on buildings with inner corners, the tension-resistant connection shall be carried out as shown in Fig. 1b.

Table B.1: Assembly variants of the standard system configuration

Designs in accordance with annex C, pages 19, 22, 23, 24, 25, 26, 27 and annex C, page ...		without brackets		with inner brackets on each working area		with outer bracket on the topmost working area		with inner brackets on each working area and outer bracket on the topmost working area		Detailed view in accordance with annex C, page...
Scaffold cladding	Supplementary components	State of the facade, in front of which the scaffold is erected: partially open	closed	partially open	closed	partially open	closed	partially open	closed	
unclad	no supplementary components	2, 5		3, 5	1, 5	5, 6		4, 5, 6		
	with bridging girder	7		8		7		8		20
	with passage frame	9		9		9		9		21
	with protective roof	2, 5, 6, 7		3, 5, 6, 8, 10	1, 5, 3, 6, 8, 10	2, 5, 6, 7		4, 5, 6, 8		18
	Protection scaffold and roof edge protection scaffold	2, 5, 6, 7, 9		3, 5, 6, 8, 9	1, 5, 3, 6, 8, 9	2, 5, 6, 7, 9		4, 5, 6, 8, 9		17
	Topmost working level not anchored	---		10		---		---		---
with nets	no supplementary components	---	2, 5, 6	---	5, 6, 11	---	2, 5, 6	12	4, 5, 6, 12	---
	with bridging girder	---	7	---	8	---	7	---	8	20
	with passage frame	---	9	---	9	---	9	---	9	21
	with protective roof	---	2, 5, 6, 7	---	3, 5, 6, 8, 10, 11	---	2, 5, 6, 7	12	4, 5, 6, 8, 12	18
	Protection scaffold and roof edge protection scaffold	---	2, 5, 6, 7, 9	---	3, 5, 6, 8, 9, 11	---	2, 5, 6, 7, 9	12	4, 5, 6, 8, 9, 12	17
	Topmost working level not anchored	---		---	10	---		---		---
with tarpaulins	no supplementary components	---		14	13	---		14	13	---
	with protective roof	---		14	13	---		14	13	18
	Protection scaffold and roof edge protection scaffold	---		14	13	---		14	13	17
Add-on ladder / stairway access		15, 16								---

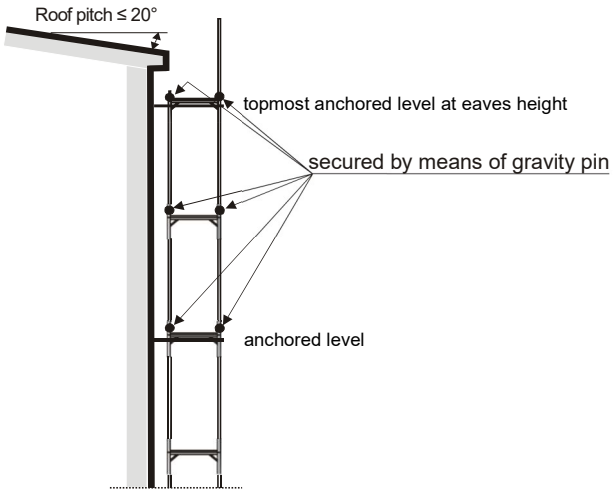


Figure 1a: Example of tension-resistant connection of the working areas in case of uplift wind forces

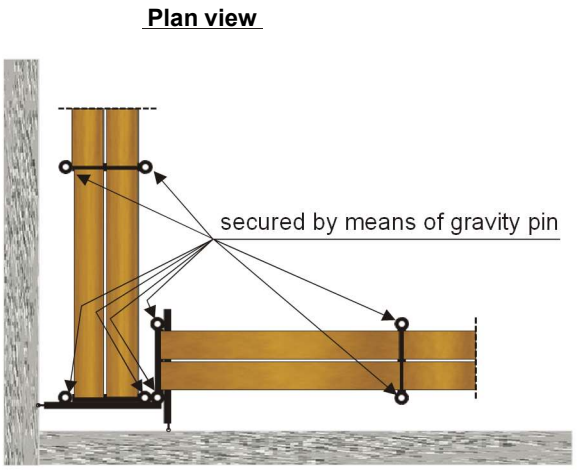


Figure 1b: Example of tension-resistant connection of the working areas in case of uplift wind forces acting on constructions with inner corners

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.

The structural design as a roof edge protection scaffold shall be carried out in accordance with annex C, page 17. 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.2. In addition to these components, steel tubes and couplers in accordance with DIN EN 12811-1:2004-03 may also be used in the exceptional cases below:

- Connection of the add-on access stairway to the facade scaffold in accordance with annex C, pages 15 - 16 (tubes and couplers),
- Bracing of the bridging girders in accordance with annex C, page 20 (tubes and couplers),
- Bracing of the passage frames in accordance with annex C, page 21 (tubes and couplers),
- Connection of the scaffold ties to the standards in accordance with annex C, pages 23 to 26 (couplers),
- Corner formation in accordance with annex C, page 28 (tubes and couplers) and
- End side protection above the inner brackets and on the topmost working area (tubes and couplers).

Apart from the base jacks listed in table B.2, other lightweight class B base jacks according to DIN 4425:2017-04 with an outer diameter of d = 38 mm may also be used.

Table B.2: Components of the standard system configuration

Designation	Annex A, page
Vertical frame 18/70; 1.5m and 2.0m, steel	1
Vertical frame 18/70; 1.0m and 0.67m, steel	2
Vertical frame 70; 2.0m, steel	4

Table B.2: (continued)

Designation	Annex A, page
Vertical frame 70; 1.0m and 0.66m, steel	5
Steel deck AF 0.32m	7
Steel deck	8
Intermediate deck AF 0.16m; 0.19m	10
Intermediate deck	11
Aluminium deck with plywood 2.57; 3.07m	12
Aluminium deck with plywood 1.57; 2.07m	13
Aluminium access deck 3.07m with ladder	15
Aluminium access deck 2.57m with ladder	16
Aluminium deck with plywood 3.07m	19
Aluminium deck with plywood 1.57m; 2.07m; 2.57m	20
Aluminium access deck 3.07m with ladder	22
Aluminium access deck 2.57m with ladder	23
Solid wood deck 45	26
Solid wood deck 48	27
Wooden deck	28
Diagonal brace 3.07m	29
Diagonal brace 2.57m	30
Diagonal brace 2.07m	31
Horizontal strut	32
Scaffold tie	33
Quick-release scaffold tie	34
Base jack	35
Guardrail AF	36
Handrail	37
Double guardrail AF	38
Double guardrail	39
Double guardrail AF, aluminium	40
Double guardrail, aluminium	41
Advanced guardrail post	42
Telescopic guardrail 2.0m – 3.07m	45
Toeboard; End toeboard	46
Double end guardrail AF, Single end guardrail	47
Double end guardrail	48
Guardrail post AF, single	49
Guardrail post, single	50
Guardrail post AF	51
Guardrail post	52
End guardrail frame	53
End guardrail post AF	54

Table B.2: (continued)

Designation	Annex A, page
End guardrail post	55
Protective wall post AF	56
Protective wall post	57
Bracket AF 0.36m	58
Bracket 0.36m	59
Bracket AF 0.73m	60
Bracket 0.73m	61
Protective roof extension AF 0.46 x 0.66m	62
Protective roof extension	63
Lift-off preventer	64
Transom 0.73m	65
Side-protection meshguard	66
Protection net	67
Lattice girder, steel	68
Passage frame AF	69
Passage frame	70
Passage frame, in sections, 1.57m, upper part	71
Passage frame, in sections, tubular post, 1.90m	72
Gap cover	73
Aluminium toeboard; Aluminium end toeboard	77
Aluminium stairway AF -0.62m 2.57m; 3.07m	78
Stair guardrail AF 2.57m; 3.07m	79
Inner guardrail for aluminium stairway	80
Stair stringer fall protection 1.00 x 0.50m	81
Roof guard extension frame 2.00 x 0.73m to 1.09m	84
Starter transom 0.73m	87
Lattice girder cross brace 0.73m	93
Tube connector for lattice girder	94
Guardrail coupler AF	95
Toeboard coupler; Halfcoupler with hook	96
Toeboard support	99
Locking pin	100
Protective wall post, telescopic 0.36m – 1.73m	102
Diagonal cross brace	103
Protective wall post, telescopic 0.73m – 1.09m	104
Scaffold tie EIFS	105
EIFS deck AF 190; Tube linchpin	106
Aluminium frame platform with plywood 1.57m; 2.07m	110
Aluminium frame platform with plywood 2.57m; 3.07m	111
Aluminium frame platform with internal hatch 2.57m; 3.07m	113

Table B.2: (continued)

Bezeichnung	Anlage A, Seite
Aluminium frame platform with internal hatch 1.57m; 2.07m	114
Aluminium deck 0.60m, lightweight	116
Aluminium trapdoor deck with aluminium chequer plate 2.57m	117
Aluminium trapdoor deck with aluminium chequer plate 3.07 m	118
Aluminium trapdoor deck with aluminium chequer plate 1.57m; 2.07m without ladder	120
AB Base jack	121
Anchor coupler	123
Toeboard, End toeboard AF	124
Aluminium toeboard; Aluminium end toeboard AF	126
Steel toeboard; Steel end toeboard AF	127
Protective net post AF 2.00 x 0.36 / 0.50 / 0.73m	128
Vertical frame AF 1.50m and 2.00m, steel	129
Vertical frame AF 1.0m and 0.67m, steel	130
Aluminium double guardrail AF 1.57m; 2.07m; 2.57m; 3.07m	131
Guard net system	132
Gusset coupler	133
ALBLITZ stair guardrail post 1.10m	134
Inner guardrail post 1.00m	135
Guardrail holder for internal corner	136
Bracket AF 0.36m, lift-off preventer for inner face	137
Corner guardrail wedge housing	140
Aluminium stairway AF-0.62m 2.07m	142
TRBS guardrail (compliant with technical regulations for occupational safety) 2.07m; 2.57m; 3.07m, folding	143
TRBS guardrail (compliant with technical regulations for occupational safety) 0.73m; 1.09m; 1.57m, rigid	144
TRBS end guardrail (compliant with technical regulations for occupational safety) 0.73m; 1.09m	145

B.4 Bracing

Scaffold decks listed in table B.3 shall be fitted continuously on all horizontal levels (working areas). All other decks may only be used as a non-bracing component in connection with brackets.

EIFS decks AF 190 in accordance with annex A, page 106 must not be used as a bracing component. Only use this deck on inner brackets.

Use the trapdoor decks listed in table B.6 in ladder access bays instead of the scaffolding decks mentioned above.

Decks and trapdoor decks shall be secured against accidental lift-off by means of guardrail posts, safety meshguard posts or lift-off preventers.

Install vertical diagonal braces (diagonals in accordance with annex A, pages 29 to 31) to brace the outer vertical plane, whereby at least one diagonal brace is required per 5 bays.

Table B.3: Scaffold decks in the main bay

Scaffold decks	Deck width [m]	Number per bay	in accordance with annex A, page
Steel deck AF	32	2	7
Steel deck	32	2	8
Aluminium deck with plywood	61	1	12, 13, 19, 20
Wooden deck *)	32	2	28
Solid wood deck 45	32	2	26
Solid wood deck 48	32	2	27
Aluminium frame platform with plywood	61	1	110, 111
Aluminium deck 0.60m, lightweight	61	1	116
*) Only use in connection with anchorage pattern ≤ 4m in accordance with annex C, page 5			

Depending on the configuration, additional vertical diagonal braces may have to be installed (e.g. annex C, page 1). Install a longitudinal ledger (horizontal strut according to annex A, page 32) in each lowermost working level, to which a diagonal brace is connected at the level of the lowermost transoms (see annex C).

Depending on the configuration, additional diagonal cross braces in accordance with annex A, page 103 may have to be installed in the lowermost vertical frames.

B.5 Anchoring

Depending on the configuration and the structural requirements, anchorage must be provided by means of scaffold ties in accordance with annex A, page 33 or by means of quick-release anchors in accordance with annex A, page 34. The quick-release anchors must additionally be locked to the transom of the vertical frame. Depending on the scaffold configuration, the scaffold ties are to be used as follows:

A) Scaffold without inner bracket (see annex C, page 23):
   a) Short scaffold tie, connected by means of right angle coupler to inner standard near the node.
   b) Quick-release anchor, connected with right angle coupler to the inner standard near the node and to the transom of the vertical frame.
   c) V-type scaffold tie: Scaffold tie 1, angularly connected with right angle coupler to the inner standard near the node; scaffold tie 2, connected with right angle coupler or class B swivel coupler to scaffold tie 1; spread angle ~90°.

B) Scaffold with inner bracket, without outer bracket (see annex C, page 24):
   d) Long scaffold tie, connected with right angle coupler to the outer standard near the node and additionally with an anchor coupler according to annex A, page 123 to the upper transom of the vertical frame near the node of the inner standard.
   e) Half V-type anchor: Scaffold tie 1 as with d); Scaffold tie 2, connected with class B swivel coupler to scaffold tie 1; spread angle: ~45°.
   f) Compression-resistant bracing: Long scaffold tie without anchorage to the building structure; free tube end in pressure contact with the building structure, connected with right angle coupler to the outer standard near the node and additionally with an anchor coupler according to Annex A, page 123 to the upper transom of the vertical frame near the node of the inner standard.
   g) Long scaffold tie, connected to the outer standard with right angle coupler and additionally with gusset coupler in accordance with annex A, page 134 in the gusset cut-out on the inner standard

C) Scaffold with inner bracket and outer bracket (see annex C, page 25 and 26):

h) V-type scaffold tie: Scaffold tie 1, angularly connected with right angle coupler to the inner standard directly below the gusset plate; scaffold tie 2 connected with right angle coupler or class B swivel coupler to scaffold tie 1; spread angle ~90°.

i) Short scaffold tie, connected with right angle coupler to inner standard, directly below the gusset plate

j) Half V-type scaffold tie: Scaffold tie 1 connected with right angle coupler in the gusset-plate cut-out to the outer standard; Scaffold tie 2, connected with class B swivel coupler to scaffold tie 1; spread angle: ~45°.

The scaffold ties must be attached in the immediate vicinity of the node points formed by the vertical frames and scaffold decks. Deviating from this, the scaffold ties may be fitted on an anchor level up to 0.30m below the node points (see annex C, pages 23 to 25). V-type scaffold ties and half V-type scaffold ties may not be fitted to the end sides of the scaffold.

If V-type scaffold ties and half V-type scaffold ties must be fitted adjoining an internal ladder access bay, horizontal struts according to annex A, page 32 must be installed in this access bay or the adjoining inner standards must be connected to one another by means of additional coupler tubes (scaffold tubes) with two right angle couplers directly below the V-type or half V-type scaffold ties.
The anchor forces listed in table B.4 were determined with the characteristic values of the actions. For the design analysis of the anchorage and the load transfer, the values given must be multiplied by the respective partial safety factor γ_F (generally $\gamma_F = 1.5$).

The following anchorage patterns are allowed depending on the configuration in accordance with section B.1 and table B.4:

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. Die Vertical frame sections at the edge of a scaffold and for internal ladder access bays must be anchored at vertical intervals of 4 m.

b) 4 m anchorage pattern, continuous:

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

d) 2 m anchorage pattern:

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

Additional anchorage may be required when using e.g. outer brackets, protective walls or bridging girders and for some design variations. Ladder accesses have to be anchored in accordance with the configuration at vertical intervals of maximum 2.0m or 4.0m.

The use of wooden decks in accordance with annex A, page 28 is only possible with an anchorage pattern of ≤ 4 m according to annex C, page 5.

For the intermediate state “topmost working level not anchored”, the notes in section B.13 must be observed.

Table B.4: Characteristic anchor forces

Anchor forces				Scaffolding in front of a partially open facade[1)]			Scaffolding in front of a closed facade		
Anchorage pattern	Bay length	Cladding	Fittings	$A_{\perp}$-	$A_{\perp}$+	$A_{\parallel}$	$A_{\perp}$-	$A_{\perp}$+	$A_{\parallel}$
	[m]			[kN]	[kN]	[kN]	[kN]	[kN]	[kN]
8m offset	3.07	no supplementary components	without inner bracket	4.46	4.46	5.87	1.49	1.49	5.87
	2.57			3.96	3.96	5.87	1.32	1.32	5.87
	3.07		with inner bracket	4.50	4.50	3.53	1.50	1.50	3.53
	2.57			3.99	3.99	3.53	1.33	1.33	3.53
8m offset	3.07	net	without inner bracket	not permitted			2.98	2.98	4.52
	2.57						2.49	2.49	4.12
	3.07		with inner bracket				2.98	2.98	5.30
	2.57						2.49	2.49	4.89
4m offset	3.07	net	without inner bracket	4.57	4.57	4.83	1.52	1.52	2.31
	2.57			3.83	3.83	4.21	1.28	1.28	2.11
	3.07		with inner bracket	4.57	4.57	5.19	1.52	1.52	2.71
	2.57			3.83	3.83	4.57	1.28	1.28	2.50
4m offset with DFA (every free node)	3.07	tarpaulin	without inner bracket	not permitted			6.61	3.30	4.76
	2.57						5.53	2.77	4.34
	3.07		with inner bracket				6.61	3.30	5.53
	2.57						5.53	2.77	5.12
2m	3.07	tarpaulin	without inner bracket	6.61	5.95	4.76	6.46	1.65	4.76
	2.57			5.53	4.98	4.34	5.38	1.38	4.34
	3.07		with inner bracket	6.61	5.95	5.53	6.46	1.65	5.53
	2.57			5.53	4.98	5.12	5.38	1.38	5.12

[1)] Scaffolding in front of a partially open facade An/Ag = 0.4

DFA = compression-resistant bracing

$A_{\perp}$- = anchor compression forces

$A_{\perp}$+ = anchor tensile forces

Conversion of the anchor forces according to annex A, pages 23 to 26

B.6 Foundation loads

Depending on the design variant, the foundation loads listed in table B.5 and in annex C, page 22 must be absorbed and transferred in the supporting surface. The characteristic values given therein must be multiplied by the partial safety factor γ_F (generally γ_F = 1.5) to analyse the transfer of the loads to the supporting surface.

Table B.5: Characteristic bearing reactions

Standard force [kN] for	Fittings	Bay length [m]	Structural height 24m	16m	8m
Inner standard F_{IS}	without	3.07	9.1	7.3	5.5
		2.57	7.7	6.2	4.7
	with short inner bracket (bracket 36)	3.07	17.3	14.1	10.8
		2.57	14.5	11.8	9.1
Outer standard stairway access $F_{AS,T}$	without	3.07	10.6	9.3	8.1
		2.57	8.9	7.8	6.8
Outer standard F_{AS}	without	3.07	12.7	9.5	6.3
		2.57	11.2	8.3	5.5
			additionally		
	Protective wall	3.07	0.5		
		2.57	0.4		
	Outer bracket	3.07	5.7		
		2.57	4.9		
	Protective roof	3.07	1.2		
		2.57	1.1		
	Add-on stairway access	3.07	4.2	2.9	1.6
		2.57	3.5	2.4	1.3

Special configuration 1	Bridging construction $F_{Ü}$	Inner standard $1.5 \cdot F_{IS}$	Outer standard $1.5 \cdot F_{AS}$
Special configuration 2	Passage frame F_D	Inner standard $F_{IS} + 0.54 \cdot F_{A}S$	Outer standard $0.46 \cdot F_{AS}$

B.7 Protective roof

The protective roof may only be used on the outer face of a scaffold up to a working area of ≤ 8 m. The structural design as protective roof shall be carried out in accordance with annex C, pages 6 and 18. Additional scaffold anchoring and bracing measures must be observed.

Decks are to be installed up to the face of the building.

B.8 Passage frame

When using the passage frames, additional bracing in accordance with annex C, page 9 is required in accordance with the scaffold design.

The structural design as passage frame shall be carried out in accordance with annex C, pages 9 and 21.

When constructing pedestrian passageways/underpasses, the clearance must be designed in accordance with DIN EN 12810-1:2004-03, section 7.3.6.3.

B.9 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 structural design of the bridging construction and the assembly variants shall be carried out in accordance with annex C, pages 7, 8 and 20. Depending on the configuration, additional bracing is required. Additional scaffold anchoring measures must be observed.

B.10 Inner ladder access / single flight stairway / add-on (external) ladder access

The use of a single flight stairway access in accordance with annex C, pages 15 and 16 is recommended. Additional scaffold anchoring and bracing measures must be observed.

Alternatively, an inner ladder access or an external ladder access may be used.

The decks listed in table B.6 must be used for both the inner and external ladder access.

Table B.6: Access decks

Access decks	Deck width [m]	Number per bay	in accordance with annex A, page
Aluminium access deck with ladder	61	1	15, 16, 22, 23
Aluminium frame platform with internal hatch	61	1	113, 114
Aluminium trapdoor deck with aluminium chequer plate	61	1	117, 118, 120

B.11 Corner formation

Outer corners are to be designed in accordance with annex C, page 27.

Observe the regulations for securing against uplifting wind forces in section B.1 for inner corners.

B.12 Widening bracket

The structural design using brackets 0.36 m in accordance with annex A, pages 58 and 59 and using brackets 0.73m in accordance with annex A, pages 60 and 61 must be carried out in accordance with annex C, page 19.

On the inner face of the scaffold, brackets 0.36m may be used on all working levels; on the outer face of the scaffold, brackets 0.36m or 0.73m may be fitted on the topmost working level only (see annex C, page 19). Bracket 0.73m must be supported by means of diagonal braces in accordance with annex A, page 103.

B.13 Topmost working level not anchored

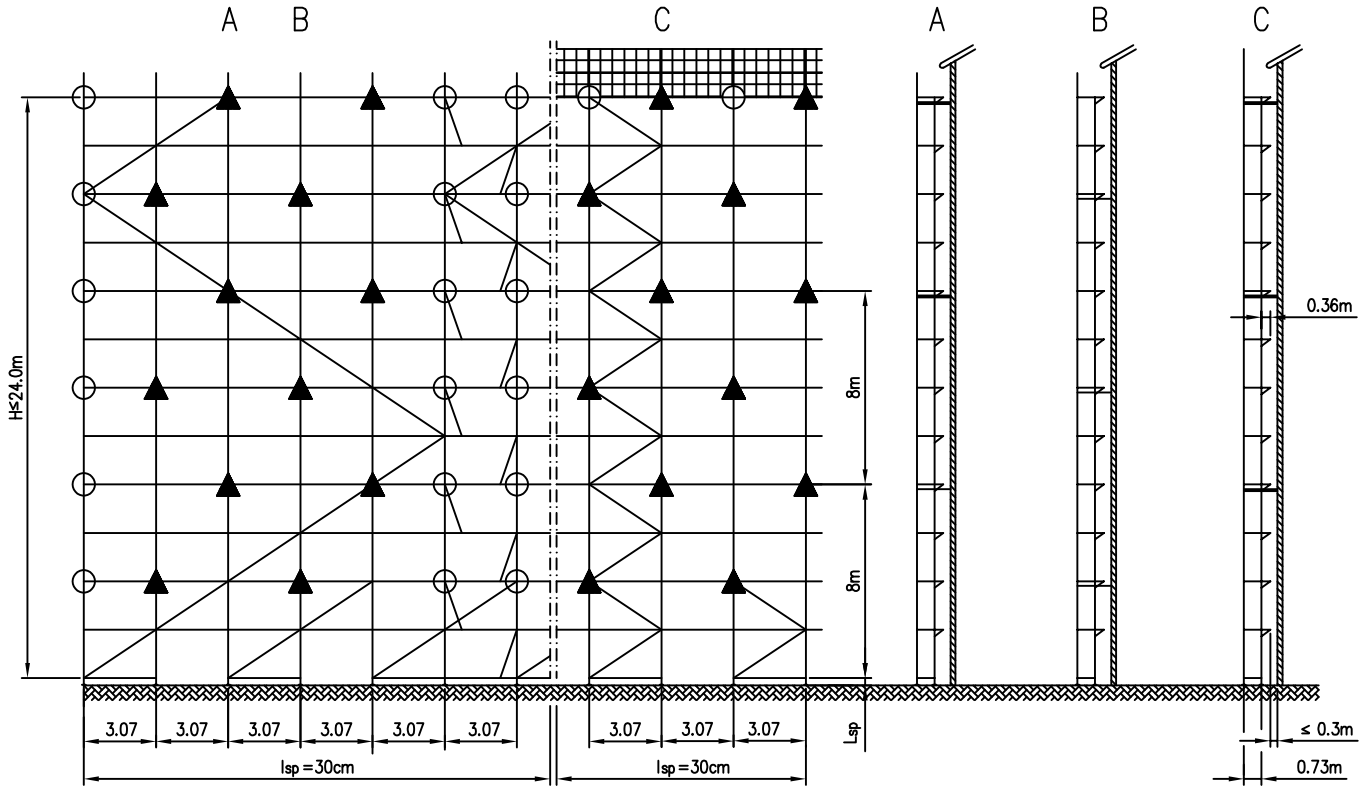
When constructing buildings, the height of the topmost working level may exceed the height of the topmost anchored level by 2 m (topmost working level not anchored), in accordance with annex C, page 10. In this intermediate state, the topmost working level must not be higher than H = 22 m (plus spindle extension length) within the scope of the verified standard system configuration. Furthermore, all joints of the standards on the three topmost levels must be secured by means of gravity pins. Additional scaffold anchoring and bracing measures must be observed.

Cladding must not exceed the topmost anchoring level.

[Seal Deutsches Institut für Bautechnik]

Standard system configuration: Minimum anchor requirements – scaffold in front of a closed facade

① uncladded scaffold in front of a closed facade



Anchorage pattern:
- 8m offset 1*)
- at least 2 V-type wall ties per 5 bays

Load class 3
- all decks 1*)
- Scaffold with inner brackets, protective wall and protective roof
- max. spindle extension length lsp = 30.0cm
- Bracing with vertical diagonal braces every 5th bay outer face
- additional bracing with vertical diagonal braces every 2nd bay up to H = 4.0m outer face
- Bracing by means of longitudinal ledgers (horizontal struts) in the lowermost diagonal bays on the level of the lowermost transom

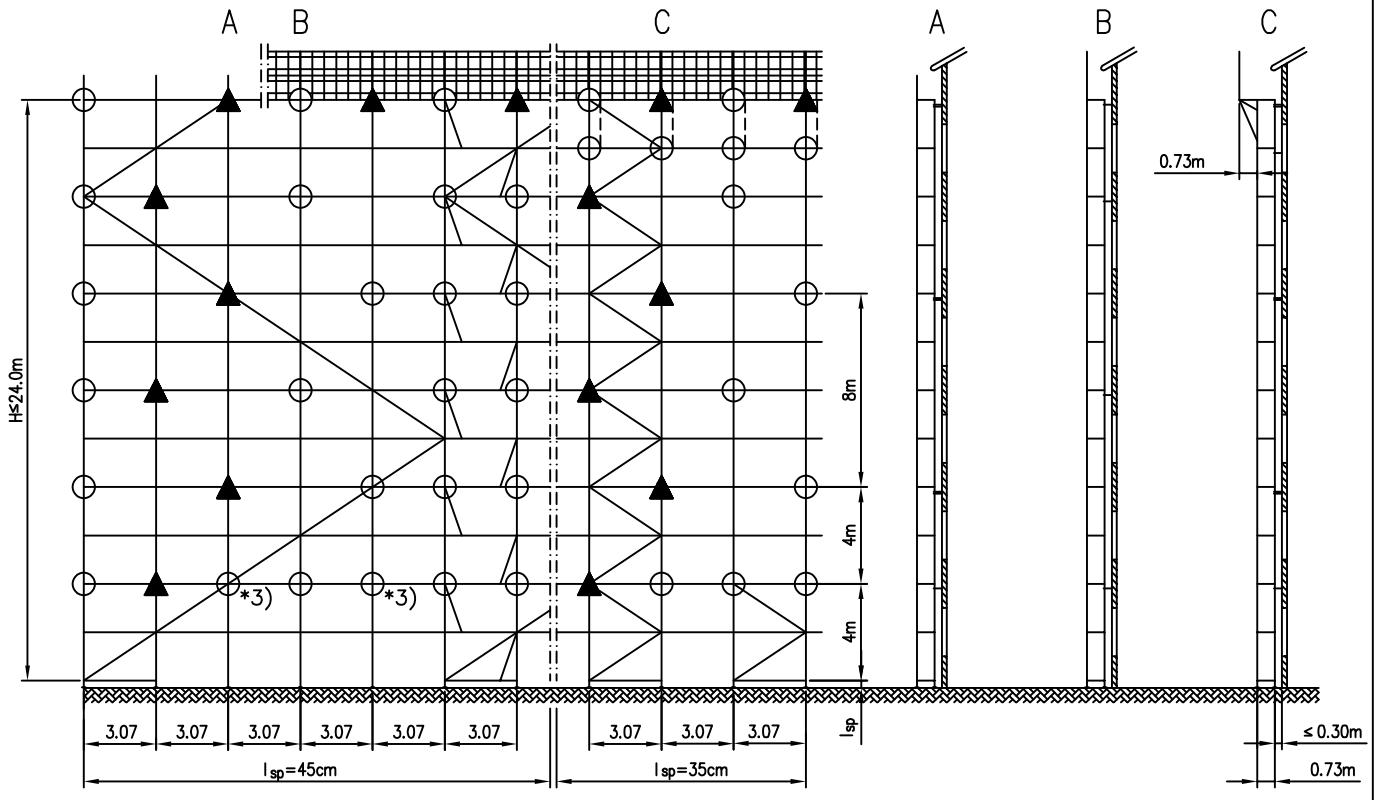
1*) Restriction – 4m anchorage pattern with wooden planks L = 3.07m (does not apply for solid wood decks)

General provisions:
- Protective wall with additional anchorage is shown
- Protective roof with additional anchorage is not shown
- Side protection only partially shown

Frame scaffold ALFIX 70	
Standard system configuration: Minimum anchor requirements – scaffold in front of a closed facade	Annex C, page 1
A713–C001 11.2016	

Standard system configuration: Basic configuration 0 – scaffold without inner bracket

① uncladded scaffold in front of a closed facade
② uncladded scaffold in front of a partially open facade
③ Scaffold with net cladding in front of a closed facade



Anchorage pattern: – 8m offset 1*), continuous anchorage at H = 4.0m
– at least 1 V–type scaffold tie per 5 bays

Load class 3
– all decks 1*)
– Scaffold with protective wall and protective roof
– max. spindle extension length lsp = 45.0cm
– Bracing with vertical diagonal braces in every 5th bay on the outer face
  – with outer bracket with protective wall and protective roof and
    – max. spindle extension length lsp = 35.0cm and
    – additional bracing with vertical diagonal braces every 2nd bay up to H = 4.0m outer face
– Bracing by means of longitudinal ledgers (horizontal struts) in the lowermost diagonal bays on the level of the lowermost transom

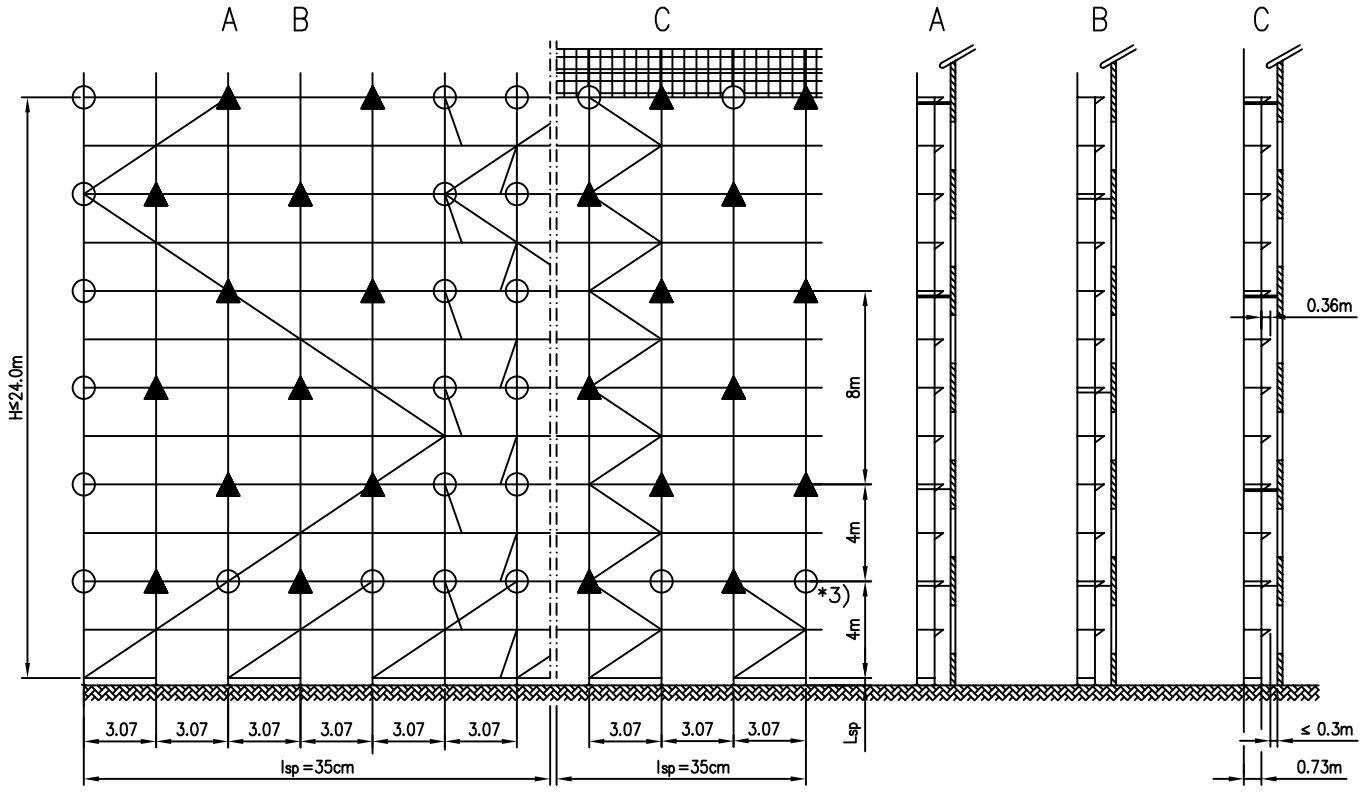
1*) Restriction – 4m anchorage pattern with wooden planks L = 3.07m (does not apply for solid wood decks)
3*) May be omitted for ① and spindle extension length = 30cm and for ③ and spindle extension length = 20cm with aluminium frame platform or aluminium deck with plywood

General provisions:
– Protective wall with additional anchorage is shown
– Outer bracket with protective wall is shown with additional anchorage
– Protective roof with additional anchorage is not shown
– Side protection is only partially shown

Frame scaffold ALFIX 70	
Standard system configuration: Basic configuration 0 – scaffold without inner bracket	Annex C, page 2
A713–C002 11.2016	

Standard system configuration: Basic configuration 1 – scaffold with inner bracket

② uncladded scaffold in front of a partially open facade



Anchorage pattern: – 8m offset 1*), continuous anchorage at H = 4.0m
– at least 2 V–type scaffold ties per 5 bays

Load class 3

- all decks 1*)
- with inner brackets, with protective wall, protective roof
- max. spindle extension length lsp = 35.0cm
- Bracing with vertical diagonal braces in every 5th bay on the outer face
- additional bracing with vertical diagonal braces every 2nd bay up to H = 4.0m outer face
- Bracing by means of longitudinal ledgers (horizontal struts) in the lowermost diagonal bays on the level of the lowermost transom

1*) Restriction – 4m anchorage pattern with wooden planks L = 3.07m (does not apply for solid wood decks)

General provisions:

- Protective wall with additional anchorage is shown
- Protective roof with additional anchorage is not shown
- Side protection is only partially shown

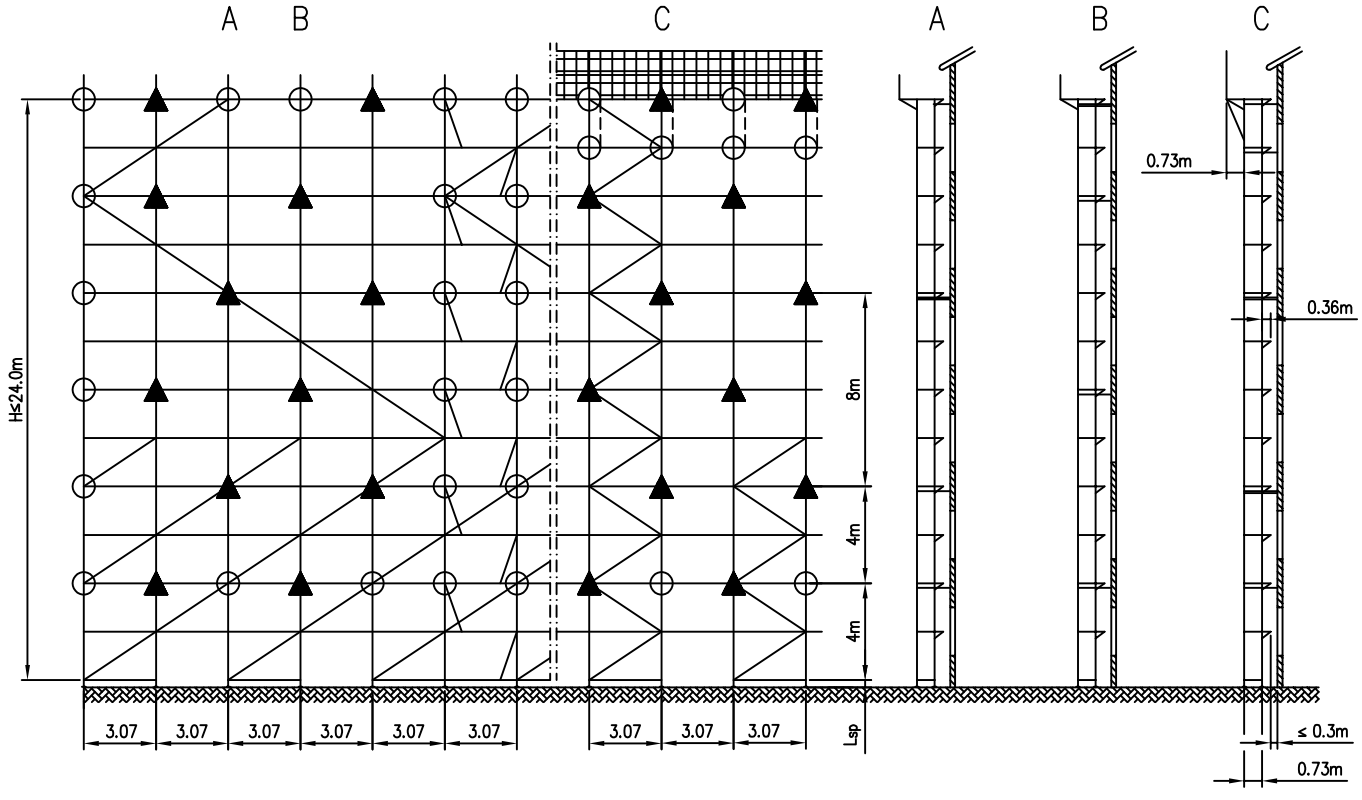
Frame scaffold ALFIX 70	
Standard system configuration: Basic configuration 1 – scaffold with inner bracket	Annex C, page 3
A713–C003 11.2016	

Standard system configuration: Basic configuration 2 – scaffold with inner bracket and outer bracket

① uncladded scaffold in front of a closed facade

② uncladded scaffold in front of a partially open facade

③ Scaffold with net cladding in front of a closed facade



Anchorage pattern: – 8m offset 1*), continuous anchorage at H = 4.0m
– at least 2 V–type scaffold ties per 5 bays

Load class 3

- all decks 1*)
- Scaffold with outer bracket, inner bracket, protective wall and protective roof
- max. spindle extension length lsp = 30.0cm
- Bracing with vertical diagonal braces in every 5th bay on the outer face
- additional bracing with vertical diagonal braces every 2nd bay up to H = 10.0m outer face
- Bracing by means of longitudinal ledgers (horizontal struts) in the lowermost diagonal bays on the level of the lowermost transom

1*) Restriction – 4m anchorage pattern with wooden planks L = 3.07m (does not apply for solid wood decks)

General provisions:

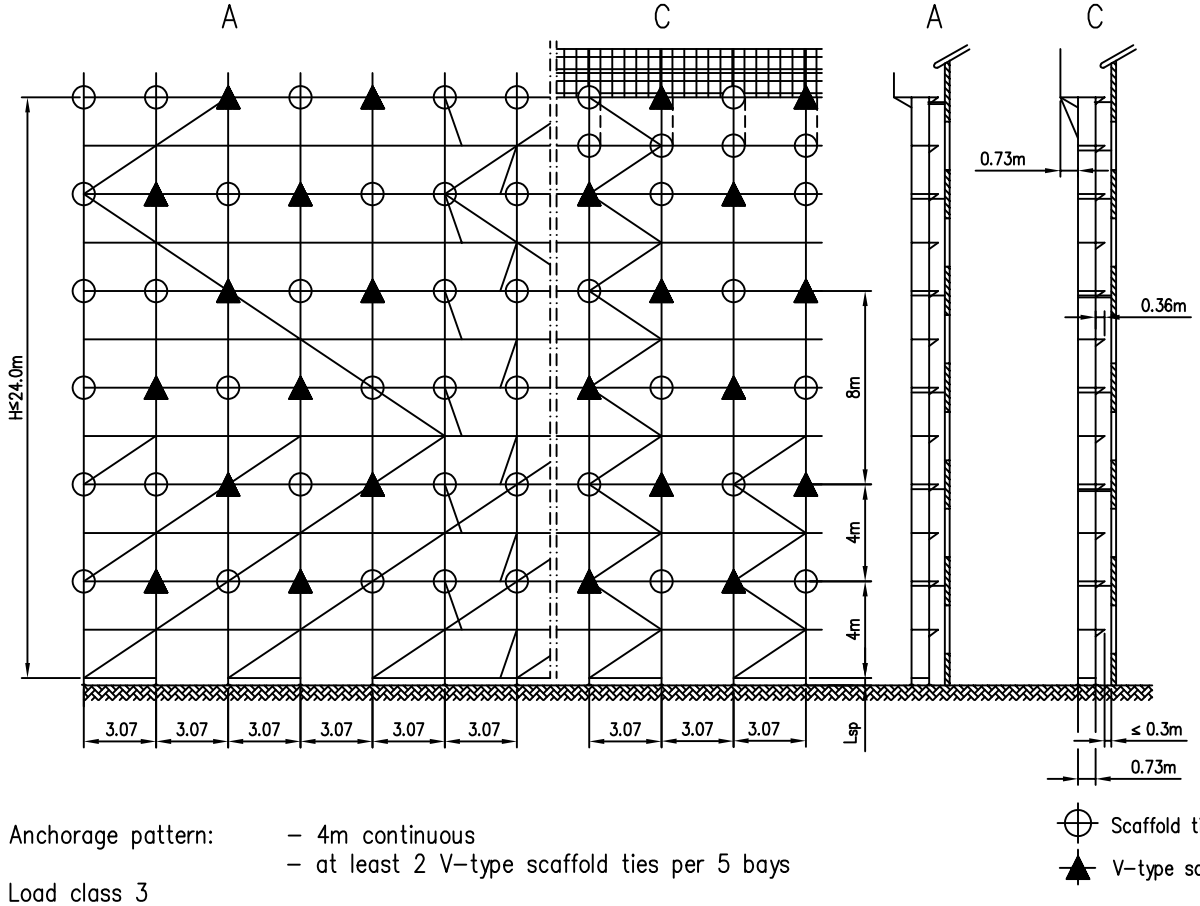
- Outer bracket with additional anchorage is shown
- Outer bracket with protective wall is shown with additional anchorage
- Protective roof with additional anchorage is not shown
- Side protection is only partially shown

Frame scaffold ALFIX 70	
Standard system configuration: Basic configuration 2 – scaffold with inner bracket and outer bracket	Annex C, page 4
A713–C004 11.2016	

[Seal Deutsches Institut für Bautechnik]

Standard system configuration: Special configuration 0 – scaffold with wooden deck L=3.072m

① uncladded scaffold in front of a closed facade
② uncladded scaffold in front of a partially open facade
③ Scaffold with net cladding in front of a closed facade



Anchorage pattern:
- 4m continuous
- at least 2 V–type scaffold ties per 5 bays

Load class 3
- all decks
- Scaffold with outer bracket, inner bracket, protective wall, and protective roof
- max. spindle extension length lsp = 30.0cm
- Bracing with vertical diagonal braces in every 5th bay on the outer face
- additional bracing with vertical diagonal braces every 2nd bay up to H = 10.0m outer face
- Bracing by means of longitudinal ledgers (horizontal struts) in the lowermost diagonal bays on the level of the lowermost transom

General provisions:
- Protective wall with additional anchorage is shown
- Outer bracket with protective wall is shown with additional anchorage
- Protective roof with additional anchorage is not shown
- Side protection is only partially shown

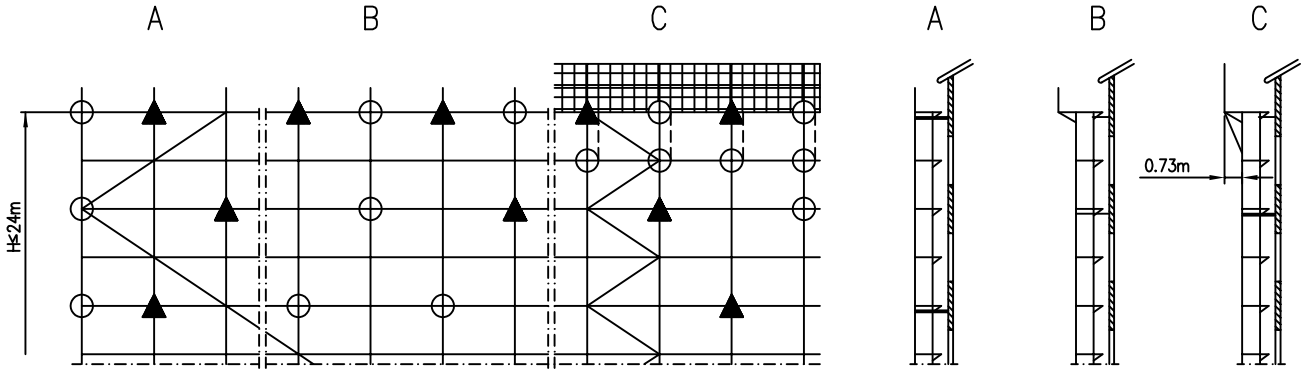
Frame scaffold ALFIX 70	
Standard system configuration: Special configuration 0 – scaffold with wooden deck L=3.072m	Annex C, page 5
A713–C005 11.2016	

Standard system configuration: Special configuration 1 – additional anchorage of the add-on units

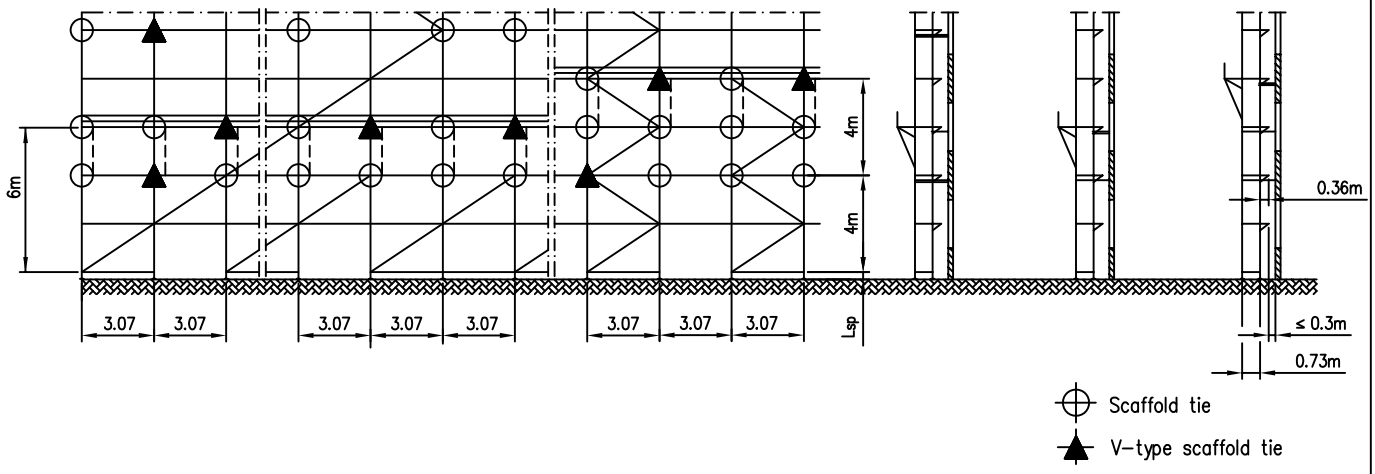
① uncladded scaffold in front of a closed facade

② uncladded scaffold in front of a partially open facade

③ Scaffold with net cladding in front of a closed facade



– Protective wall: max. lsp = 45.0cm (without inner bracket); max. lsp = 35.0cm (with inner bracket)
  – each frame section at protective wall level must be anchored, at least 2 V-type anchors per 5 bays
– Outer bracket: max. lsp = 35.0cm (without inner bracket); max. lsp = 30.0cm (with inner bracket)
  – each frame section at outer bracket level must be anchored, at least 1 V-type scaffold tie in every second frame section
– Outer bracket on protective wall: max. lsp = 35.0cm (without inner bracket); max. lsp = 30.0cm (with inner bracket)
  – each frame section at outer bracket level must be anchored, at least 1 V-type scaffold tie in every second frame section
  – each bracket must be braced by means of a diagonal cross brace
  – each frame section of working levels below must be anchored



– Protective roof (on outer bracket) max. lsp = 45.0cm (without inner bracket);
max. lsp = 35.0cm (with inner bracket)
  – each frame section at protective wall level must be anchored, at least 2 V-type anchors per 5 bays
  – each protective roof bracket must be braced by means of a diagonal cross brace
  – each frame section of working levels below must be anchored

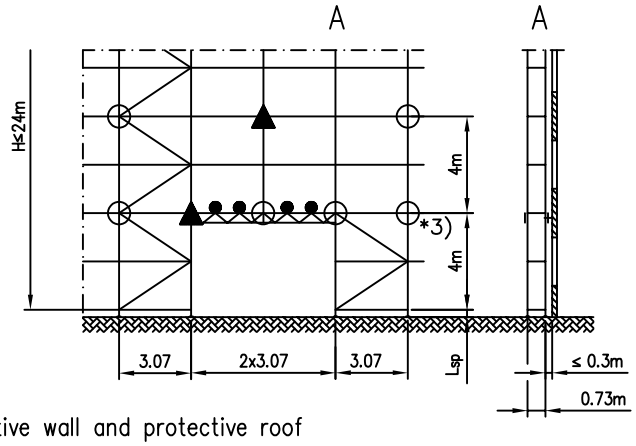
General provisions:
– Side protection is only partially shown

For details see annex C, page 18

Frame scaffold ALFIX 70	Annex C, page 6
Standard system configuration: Special configuration 1 – additional anchorage of the add-on units	
A713-C006 11.2016	

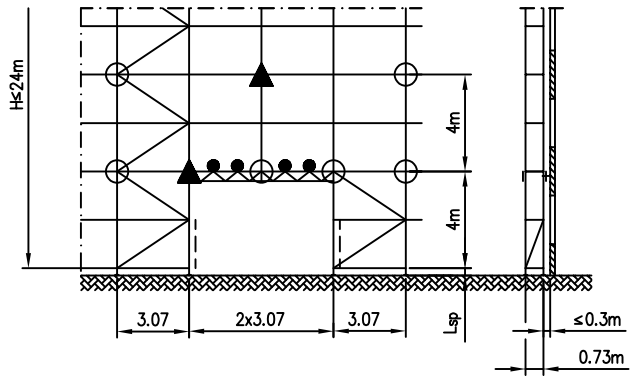
Standard system configuration: Special configuration 2 – bridging construction without inner bracket

① uncladded scaffold in front of a closed facade
② uncladded scaffold in front of a partially open facade
③ Scaffold with net cladding in front of a closed facade

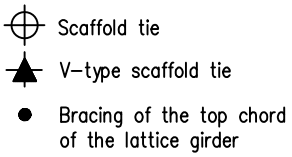


- with protective wall and protective roof
- max. spindle extension length lsp = 35.0cm
- Anchorage of all three bridging construction frame sections at H = 4.0m, bracing of the top chord of the lattice girder
- Bracing with vertical diagonal braces in every 5th bay on the outer face
- additional bracing with vertical diagonal braces in adjacent bay up to H = 4.0m outer face
- Bracing by means of longitudinal ledgers (horizontal struts) in the lowermost diagonal bays on the level of the lowermost transom

3*) may be omitted for ① and lsp = 30cm and for ③ and spindle extension length = 20cm with aluminium frame platform or aluminium deck with plywood



- with outer bracket, protective wall, and protective roof
- max. spindle extension length lsp = 35.0cm
- Anchorage of all three bridging construction frame sections at H = 4.0m, bracing of the top chord of the lattice girder
- Diagonal cross brace on first working level at adjacent frame section
- Bracing with vertical diagonal braces every 5th bay outer face
- additional bracing with vertical diagonal brace in adjacent bay up to H = 4.0m outer face
- Bracing by means of longitudinal ledgers (horizontal struts) in the lowermost diagonal bays on the level of the lowermost transom



General provisions:
- Side protection is only partially shown

For details see annex C, page 20

Frame scaffold ALFIX 70

Standard system configuration: Special configuration 2 – bridging construction without inner bracket

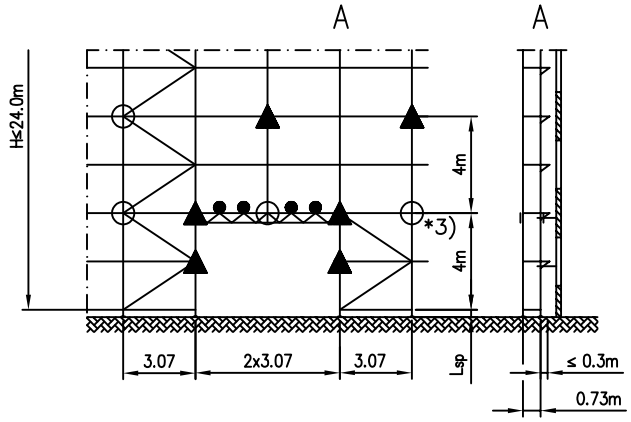
Annex C, page 7

A713–C007 11.2016

[Seal Deutsches Institut für Bautechnik]

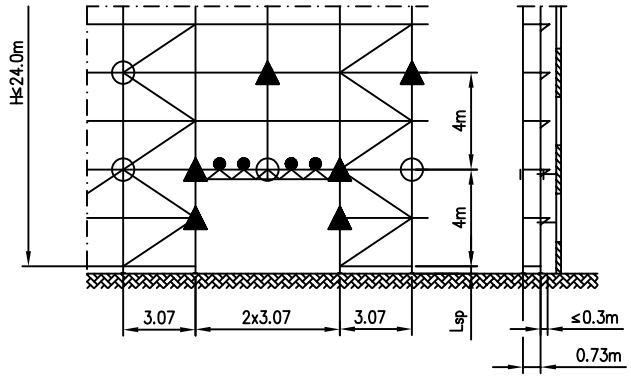
Standard system configuration: Special configuration 3 – bridging construction with inner bracket

① uncladded scaffold in front of a closed facade
② uncladded scaffold in front of a partially open facade
③ Scaffold with net cladding in front of a closed facade



- with protective wall and protective roof
- max. spindle extension length lsp = 35.0cm
- Anchorage of all three bridging construction frame sections at H = 4.0m, bracing of the top chord of the lattice girder
- Bracing with vertical diagonal braces in every 5th bay on the outer face
- additional bracing with vertical diagonal braces in adjacent bay up to H = 4.0m outer face
- Bracing by means of longitudinal ledgers (horizontal struts) in the lowermost diagonal bays on the level of the lowermost transom

3*) may be omitted for ① and lsp = 30cm and for ③ and spindle extension length = 20cm with aluminium frame platform or aluminium deck with plywood



- with outer bracket, protective wall, and protective roof
- max. spindle extension length lsp = 30.0cm
- Anchorage with V–Type anchors for bridging construction frame sections at H = 2.30m
- Bracing with vertical diagonal braces every 5th bay outer face
- additional bracing with vertical diagonal braces every 2nd bay up to H = 10.0m outer face
- additional bracing with vertical diagonal brace in adjacent bay up to H = 4.0m outer face
- Bracing by means of longitudinal ledgers (horizontal struts) in the lowermost diagonal bays on the level of the lowermost transom

Scaffold tie
V–type scaffold tie
Bracing of the top chord of the lattice girder

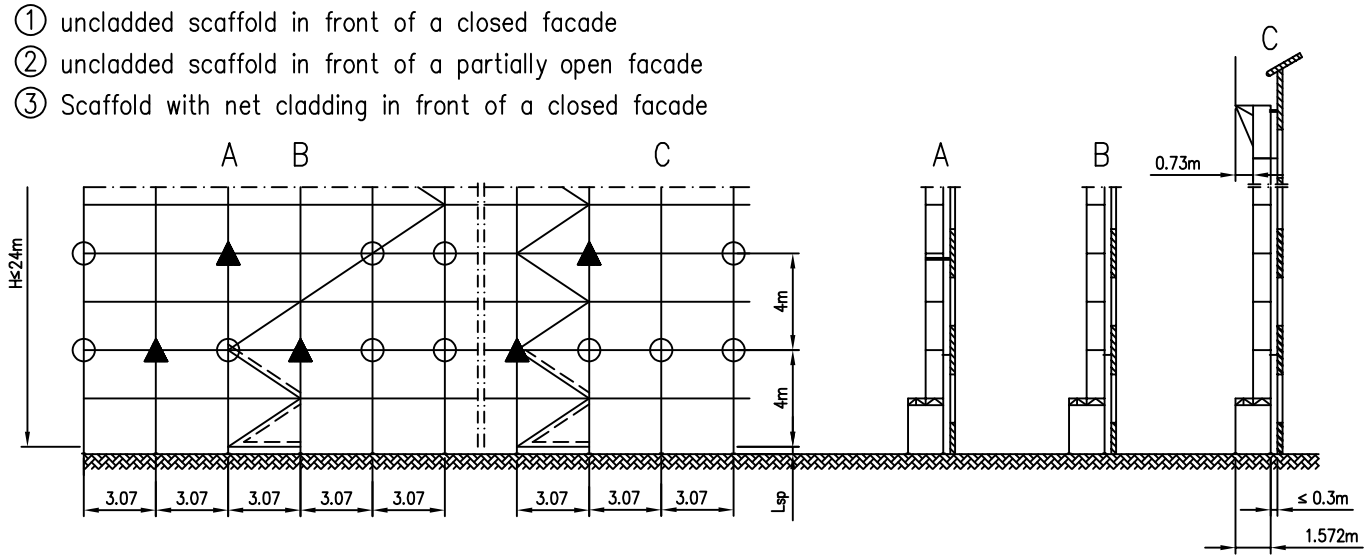
General provisions:
- Side protection is only partially shown

For details see annex C, page 20

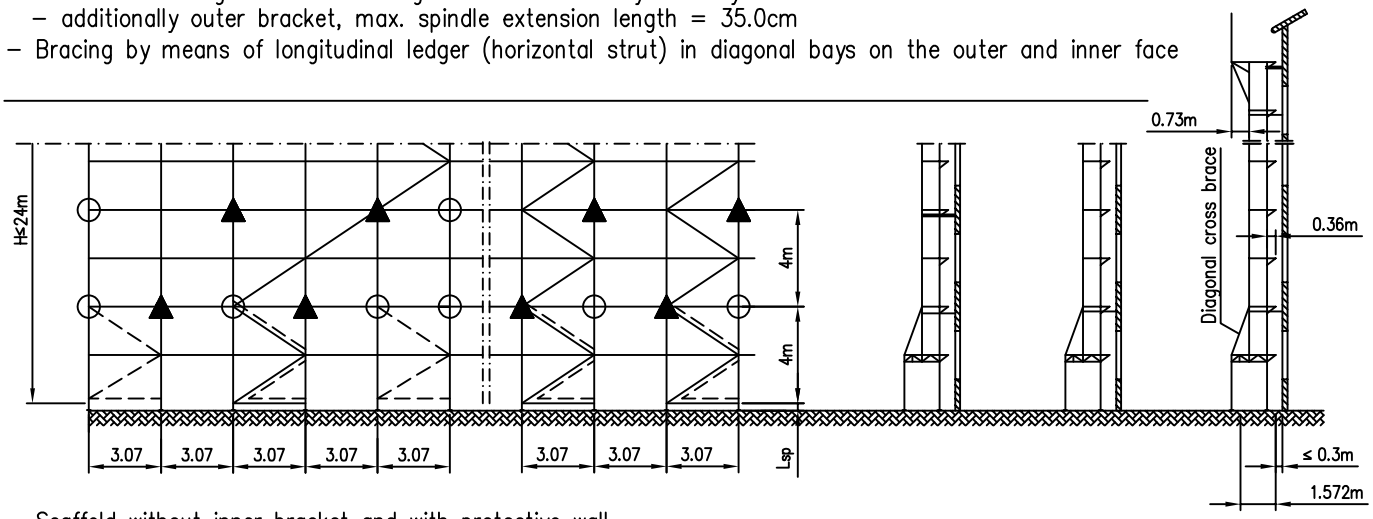
Frame scaffold ALFIX 70	
Standard system configuration: Special configuration 3 – bridging construction with inner bracket	Annex C, page 8
A713–C008 11.2016	

Standard system configuration: Special configuration 4 – passage frame without/with inner bracket

① uncladded scaffold in front of a closed facade
② uncladded scaffold in front of a partially open facade
③ Scaffold with net cladding in front of a closed facade



- Scaffold without inner bracket and without protective wall
- max. spindle extension length lsp = 45.0cm
- Anchorage of all frame sections at H = 4.0m with two V-type anchors per 5 bays
- Bracing with vertical diagonal braces every 5th bay outer face
- additional bracing with vertical diagonal braces in every 5th bay on the inner face
  - additionally outer bracket, max. spindle extension length = 35.0cm
- Bracing by means of longitudinal ledger (horizontal strut) in diagonal bays on the outer and inner face



- Scaffold without inner bracket and with protective wall
- max. spindle extension length lsp = 35.0cm
- Anchorage of all frame sections at H = 4.0 m with two V-type anchors per 5 bays
- Diagonal cross brace on first working level
- Bracing with vertical diagonal braces every 5th bay outer face
- additional bracing with vertical diagonal braces every 2nd bay up to H = 4.0m outer face
  - additionally outer bracket: Bracing with vertical diagonal brace in every 2nd bay up to H = 10.0m on the outer face
- Bracing by means of longitudinal ledger (horizontal strut) in diagonal bays on the outer and inner face

Scaffold tie
V-type scaffold tie

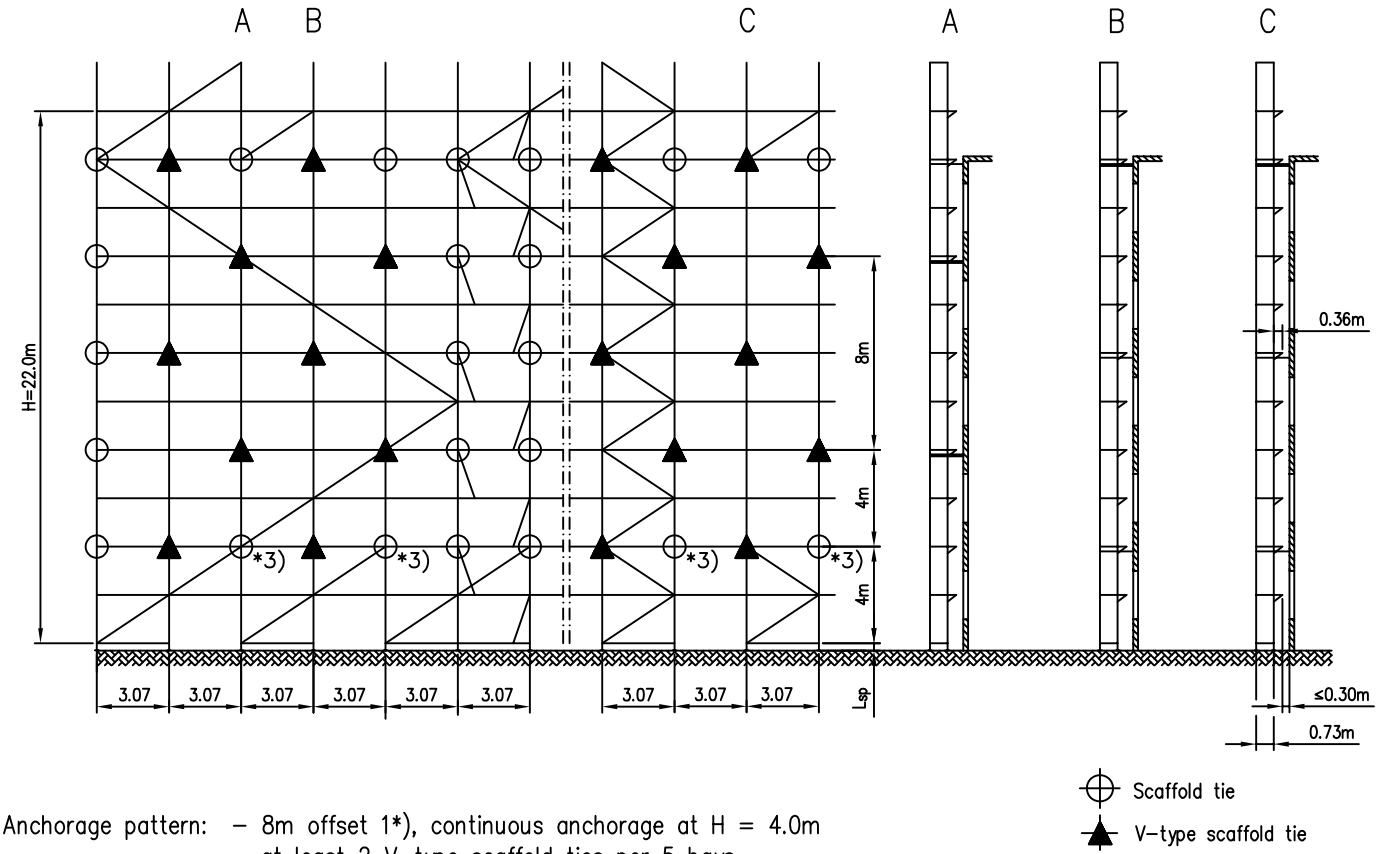
General provisions:
- Side protection is only partially shown

For details see annex C, page 21

Frame scaffold ALFIX 70	
Standard system configuration: Special configuration 4 – passage frame without/with inner bracket	Annex C, page 9
A713-C009 11.2016	

Standard system configuration: Special configuration 5 – topmost working level not anchored

① uncladded scaffold in front of a closed facade
② uncladded scaffold in front of a partially open facade
③ Scaffold with net cladding in front of a closed facade



Anchorage pattern: – 8m offset 1*), continuous anchorage at H = 4.0m
– at least 2 V-type scaffold ties per 5 bays

Load class 3
– all decks 1*)
– with inner bracket
– max. spindle extension length lsp = 35.0cm
– Bracing with vertical diagonal braces every 5th bay outer face
– additional bracing with vertical diagonal braces every 2nd bay up to H = 4.0m outer face
– Bracing by means of longitudinal ledgers (horizontal struts) in the lowermost diagonal bays on the level of the lowermost transom

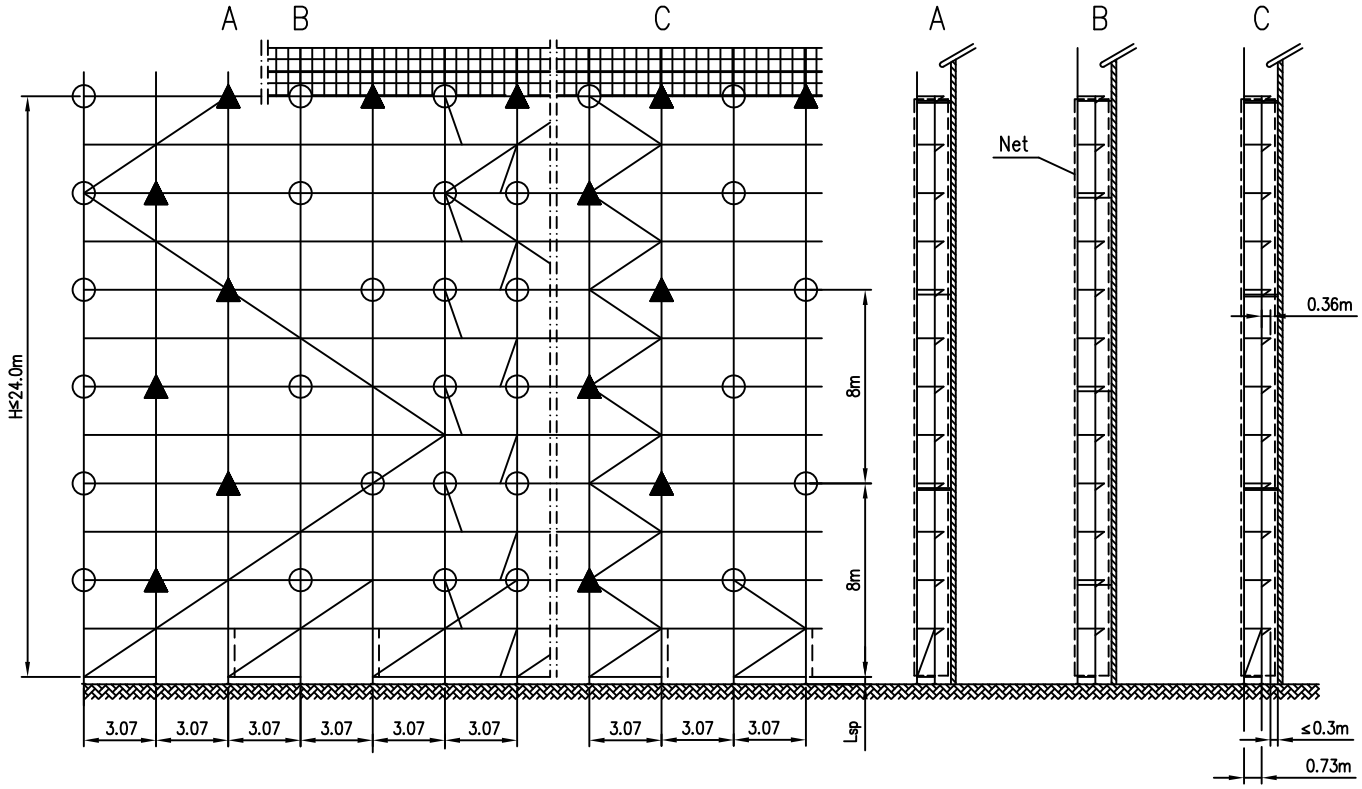
1*) Restriction – 4m anchorage pattern with wooden planks L = 3.07m (does not apply for solid wood decks)
3*) may be omitted for ① and lsp = 30cm and for ③ and spindle extension length = 20cm with aluminium frame platform or aluminium deck with plywood

General provisions:
– Protective roof with additional anchorage is not shown
– Side protection is only partially shown

Frame scaffold ALFIX 70: Scaffold EN 12810 3D-SW06/307-H2-B-LS	
Standard system configuration: Special configuration 5 – topmost working level not anchored	Annex C, page 10
A713-C010 11.2016	

Standard system configuration: Scaffold with net cladding in front of a closed facade

③ Scaffold with net cladding in front of a closed facade



Anchorage pattern: – 8m offset 1*)
– at least 1 V–type scaffold tie per 5 bay

Scaffold tie

V–type scaffold tie

Load class 3

- all decks 1*)
- Scaffold with inner bracket, protective wall, and protective roof
- max. spindle extension length lsp = 35.0cm
- Diagonal cross brace on first working level with frame section anchored at 8.0m
  - without diagonal brace but
    - with aluminium frame platform and
    - max. spindle extension length = 20.0cm
- Bracing with vertical diagonal braces every 5th bay outer face
- additional bracing with vertical diagonal braces every 2nd bay up to H = 4.0m outer face
- Bracing by means of longitudinal ledgers (horizontal struts) in the lowermost diagonal bays on the level of the lowermost transom

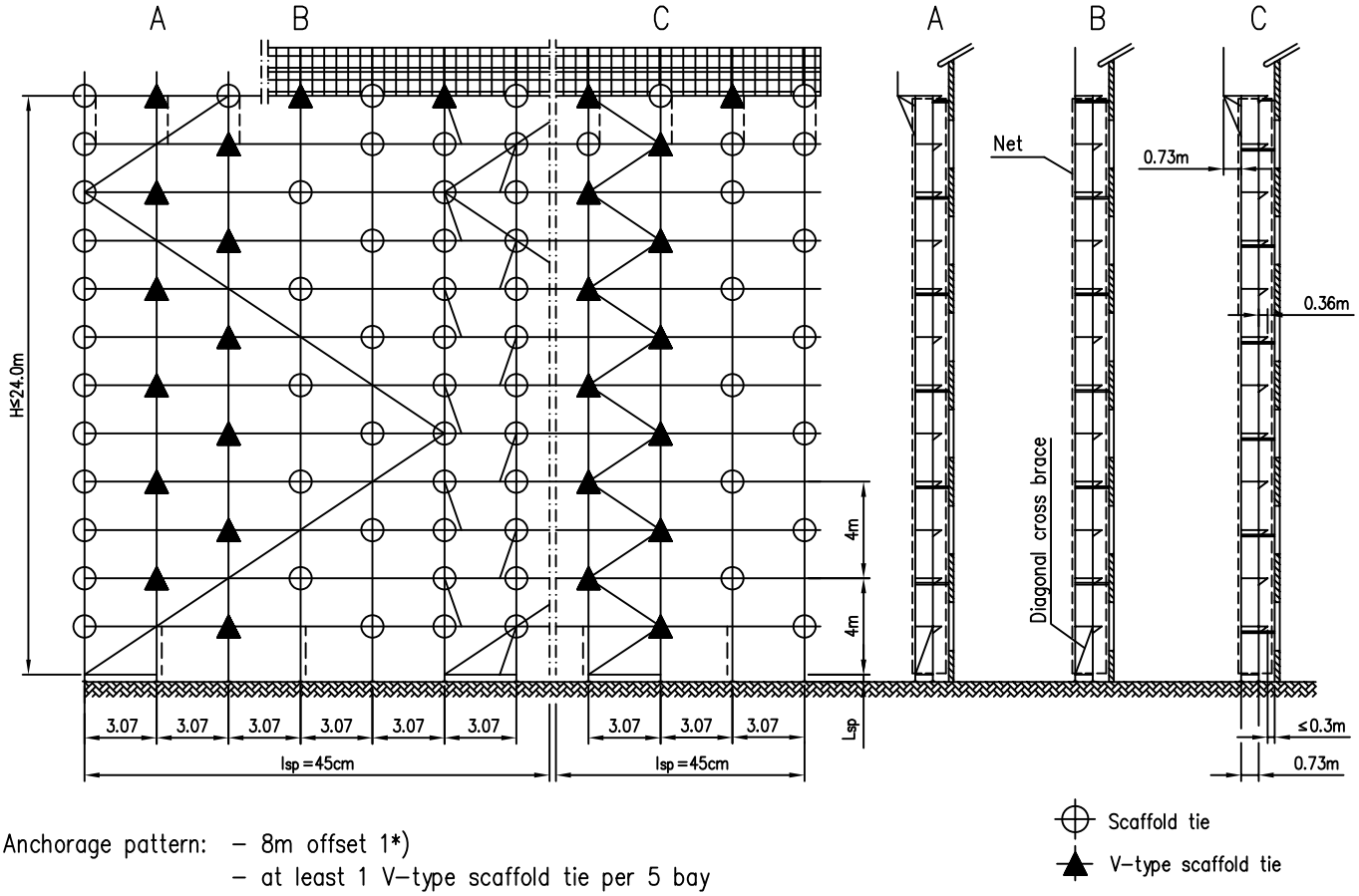
1*) Restriction – 4m anchorage pattern with wooden planks L = 3.07m (does not apply for solid wood decks)

General provisions:
- Protective wall with additional anchorage is shown
- Protective roof with additional anchorage is not shown
- Side protection is only partially shown

Frame scaffold ALFIX 70	
Standard system configuration: Scaffold with net cladding in front of a closed facade	Annex C, page 11
A713–C011 11.2016	

Standard system configuration: Scaffold with net cladding in front of a partially open facade

④ Scaffold with net cladding in front of a closed facade



Anchorage pattern: – 8m offset 1*)
– at least 1 V-type scaffold tie per 5 bay

Load class 3

- all decks 1*)
- Scaffold with inner bracket, outer bracket, protective wall, and protective roof
- max. spindle extension length lsp = 45.0cm
- Diagonal cross brace on first working level with frame section anchored at 4.0m
  - without diagonal brace but
    - without outer bracket and
    - with aluminium frame platform and
    - max. spindle extension length lsp = 30.0cm
- Bracing with vertical diagonal braces every 5th bay outer face
- Bracing by means of longitudinal ledgers (horizontal struts) in the lowermost diagonal bays on the level of the lowermost transom

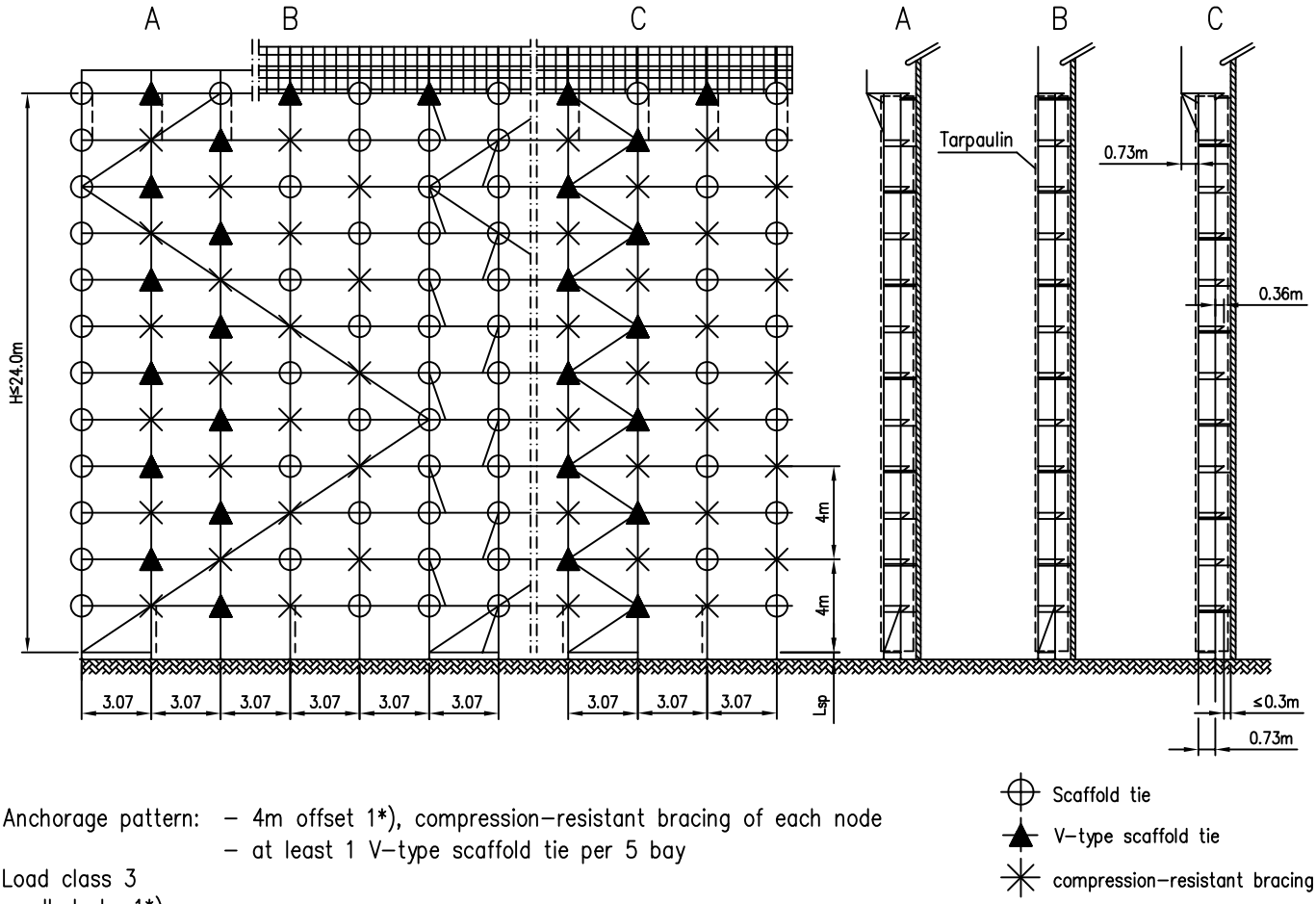
1*) Restriction – 2m anchorage pattern with wooden planks L = 3.07m (does not apply for solid wood decks)

General provisions:
- Protective wall with additional anchorage is shown
- Outer bracket with protective wall/bracing is shown
- Protective roof with additional anchorage/bracing is not shown
- Side protection is only partially shown

Frame scaffold ALFIX 70	
Standard system configuration: Scaffold with net cladding in front of a partially open facade	Annex C, page 12
A713–C012 11.2016	

Standard system configuration: Scaffold with tarpaulin cladding in front of a closed facade

⑤ Scaffold with tarpaulin cladding in front of a closed facade



Anchorage pattern: – 4m offset 1*), compression-resistant bracing of each node
– at least 1 V-type scaffold tie per 5 bay

Load class 3

- all decks 1*)
- Scaffold with inner bracket, outer bracket, protective wall, and protective roof
- max. spindle extension length lsp = 30.0cm
- Diagonal cross brace on first working level with frame section anchored at 4.0m
  - without diagonal brace but
    - without outer bracket and
    - with aluminium frame platform
- Bracing with vertical diagonal braces every 5th bay outer face
- Bracing by means of longitudinal ledgers (horizontal struts) in the lowermost diagonal bays on the level of the lowermost transom

1*) Restriction – 2m anchorage pattern with wooden planks L = 3.07m (does not apply for solid wood decks)

General provisions:

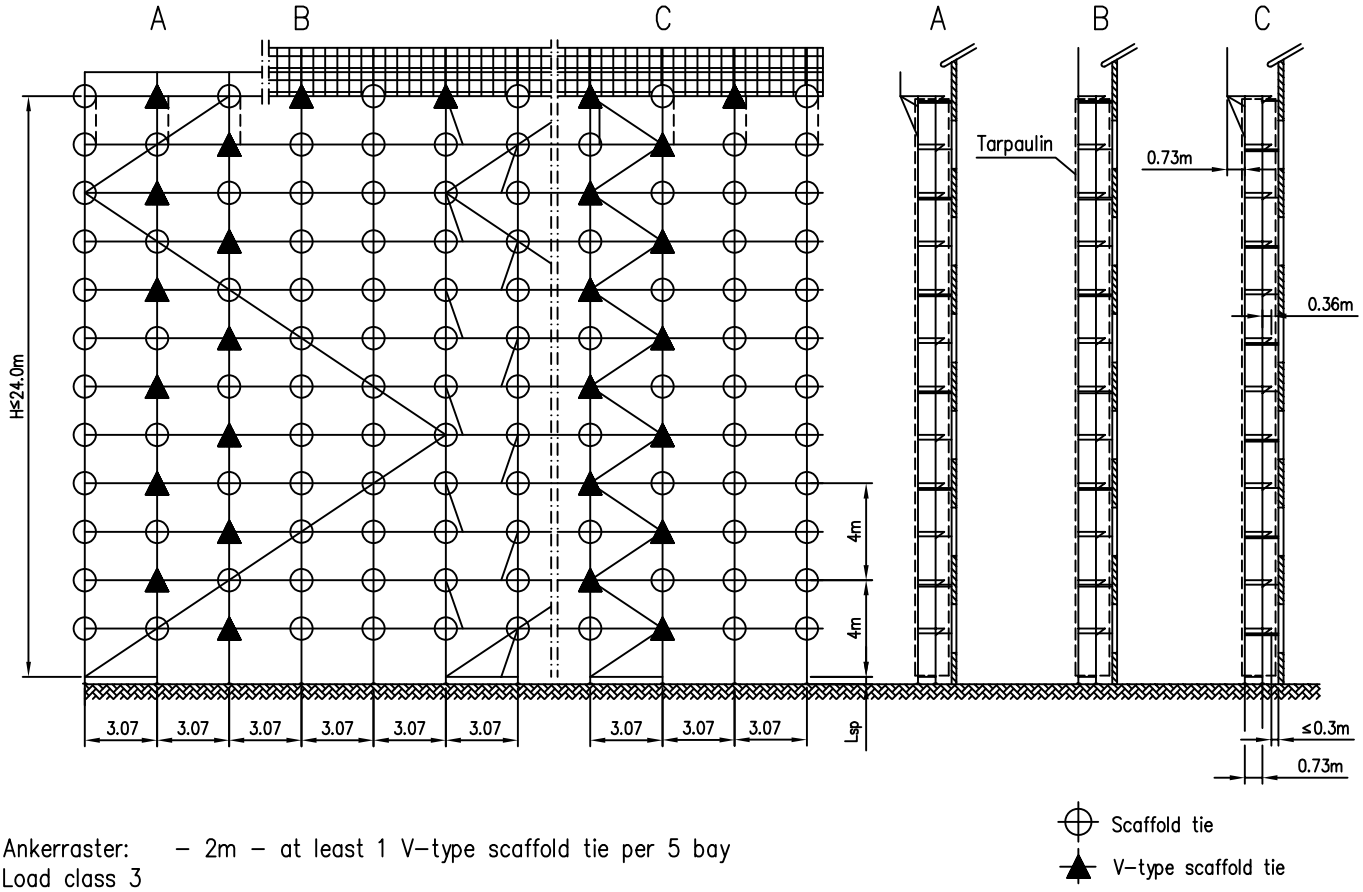
- Protective wall with additional anchorage is shown
- Outer bracket with protective wall/bracing is shown
- Protective roof with additional anchorage/bracing is not shown
- Side protection is only partially shown

Frame scaffold ALFIX 70	Annex C, page 13
Standard system configuration: Scaffold with tarpaulin cladding in front of a closed facade	
A713-C013 11.2016	

[Seal Deutsches Institut für Bautechnik]

Standard system configuration: Scaffold with tarpaulin cladding in front of a partially open facade

⑥ Scaffold with tarpaulin cladding in front of a partially open facade



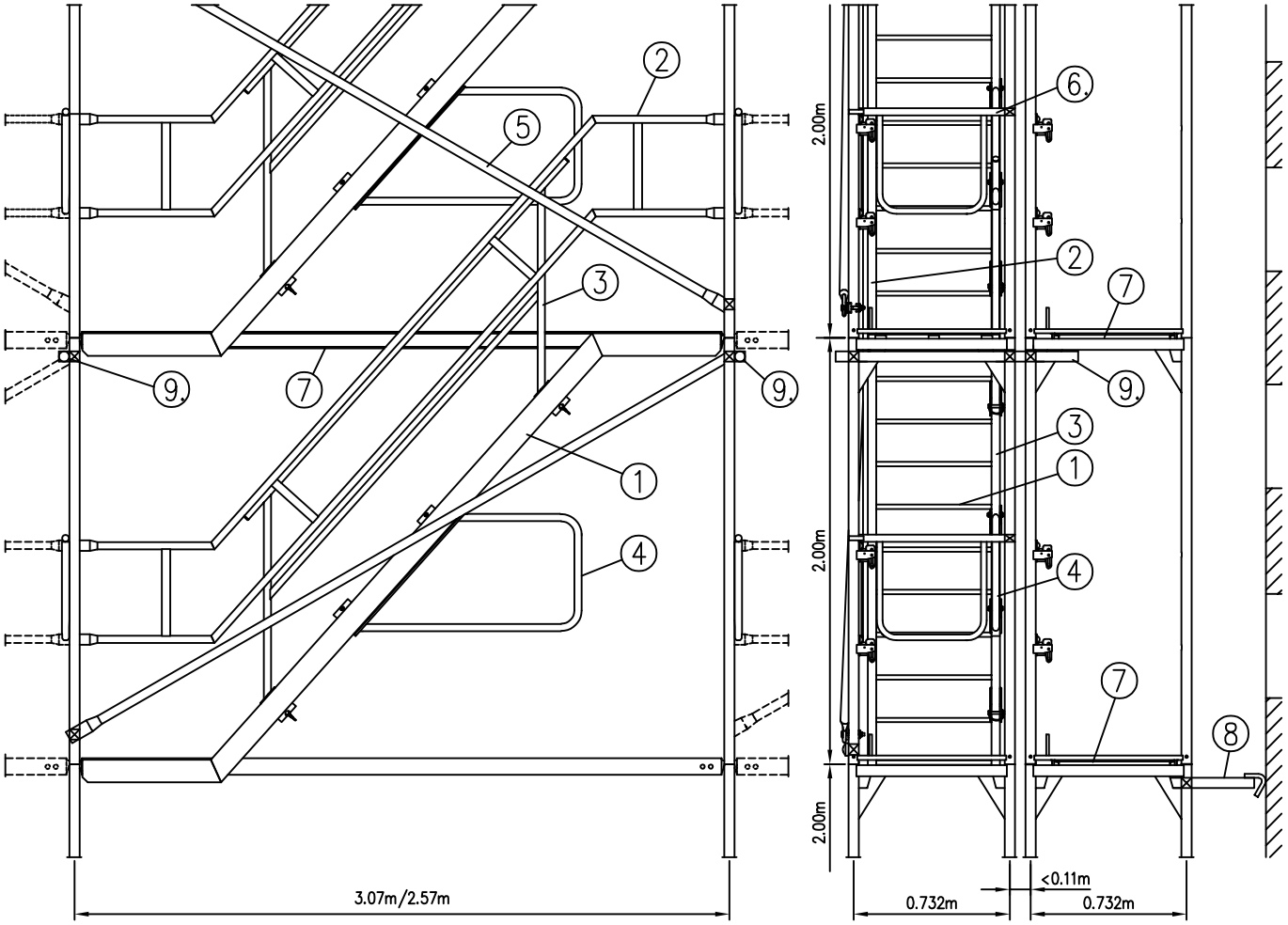
Ankerraster: – 2m – at least 1 V-type scaffold tie per 5 bay
Load class 3
- all decks
- Scaffold with inner bracket, outer bracket, protective wall, and protective roof
- max. spindle extension length lsp = 30.0cm
- Bracing with vertical diagonal braces every 5th bay outer face
- Bracing by means of longitudinal ledgers (horizontal struts) in the lowermost diagonal bays on the level of the lowermost transom

General provisions:
- Outer bracket with protective wall/bracing is shown
- Protective roof with additional anchorage/bracing is not shown
- Side protection is only partially shown

Frame scaffold ALFIX 70	Annex C, page 14
Standard system configuration: Scaffold with tarpaulin cladding in front of a partially open facade	
A713–C014 11.2016	

[Seal Deutsches Institut für Bautechnik]

Standard system configuration: Detailed view – scaffold stairway – components



① Aluminium stairway AF 0.62m	see Annex A, page 78			see Annex A, page 117
② Stair guardrail AF	see Annex A, page 79	alternatively:	Trapdoor decks with	see Annex A, page 118
③ Inner guardrail for aluminium stairway	see Annex A, page 80		side protection	see Annex A, page 113
④ Stair stringer fall protection	see Annex A, page 81		(not shown)	see Annex A, page 114
⑤ Vertical diagonal brace	see Annex A, pages 29 and 30			
⑥ Double end guardrail AF	see Annex A, page 47			
⑦ Deck in scaffold bay				
⑧ Scaffold tie	see Annex A, page 33			
⑨ Continuous installation of scaffold tie/scaffold tube				

Frame scaffold ALFIX 70

Standard system configuration: Detailed view – scaffold stairway – components

A713–C015 07.2016

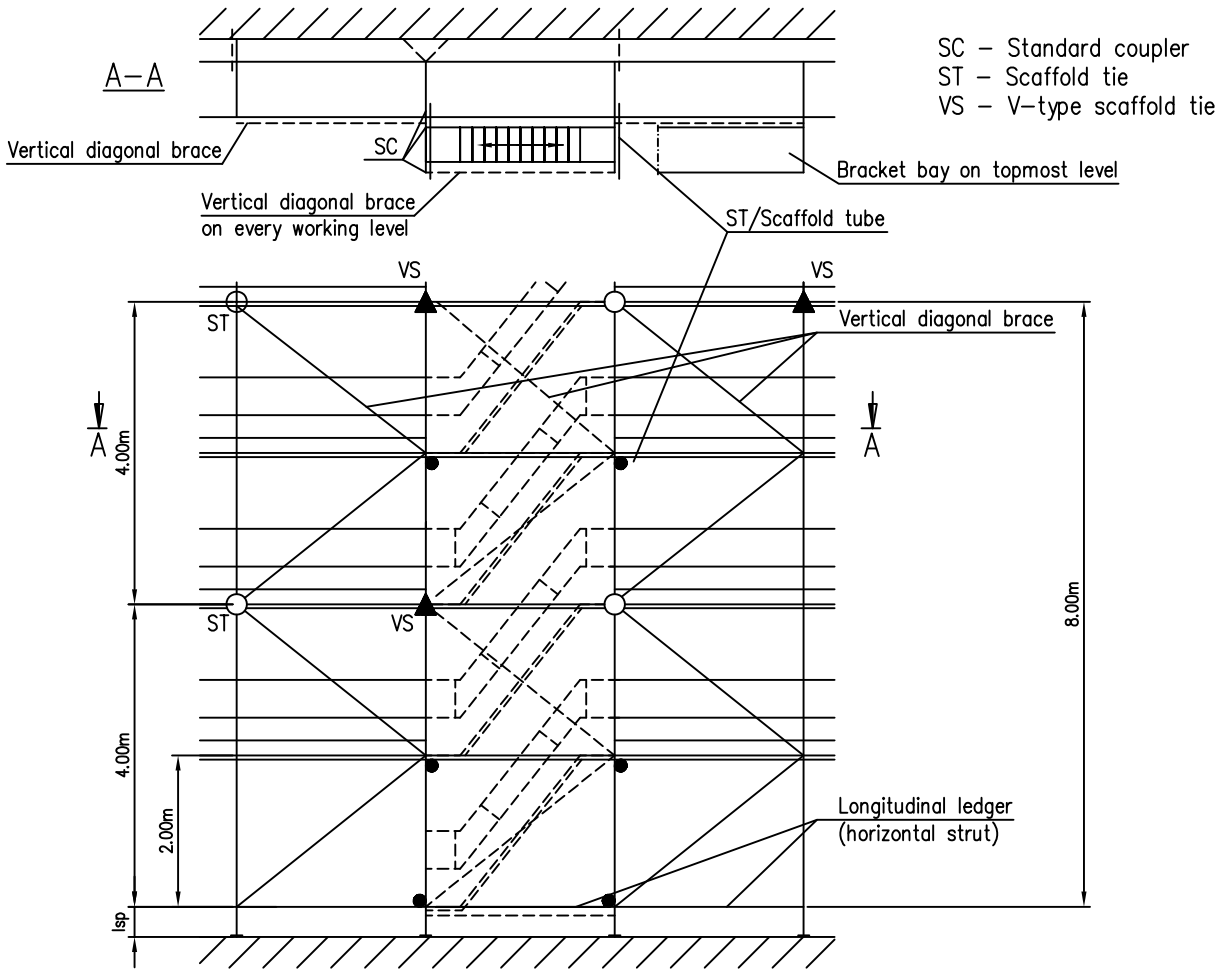
Annex C,
page 15

Standard system configuration: Detailed view – anchorage – external access bay

The stairway access (single flight) or ladder access is installed in front of the ALFIX 70 facade scaffold (external access bay).
The frames of the facade scaffold to which the access bay is connected are to be anchored at a height of 4 m, independent of any other settled anchorage pattern (see annex C, page 11 – 14).
In the facade scaffold, an additional V–type anchor is required on every anchor level.

Access bay:

- Distance between inner and outer standards of the facade scaffold <0.11m (axial distance)
- The base jacks may be omitted at the inner standards of the access bay.
- The access bay is connected to the facade scaffold by means of a scaffold tie / scaffold tube Ø48.3x3.2 l ≥1.0m with standard couplers to both standards of the access bay and to the outer standard of the facade scaffold below the U–ledger at a height interval of 4m starting at H = 2m and at the base above the base ledger.
- max. spindle extension length $l_{Sp} \leq$ 35cm
- The outer plane of the access bay must be braced with vertical diagonal braces; at the base a longitudinal ledger must be used.
- Topmost level: exit on bracket bay



*1) The figure shows: main levels with an 8m offset anchorage pattern

Frame scaffold ALFIX 70	
Standard system configuration: Detailed view – anchorage – external access bay	Annex C, page 16
A713–C016 07.2016	

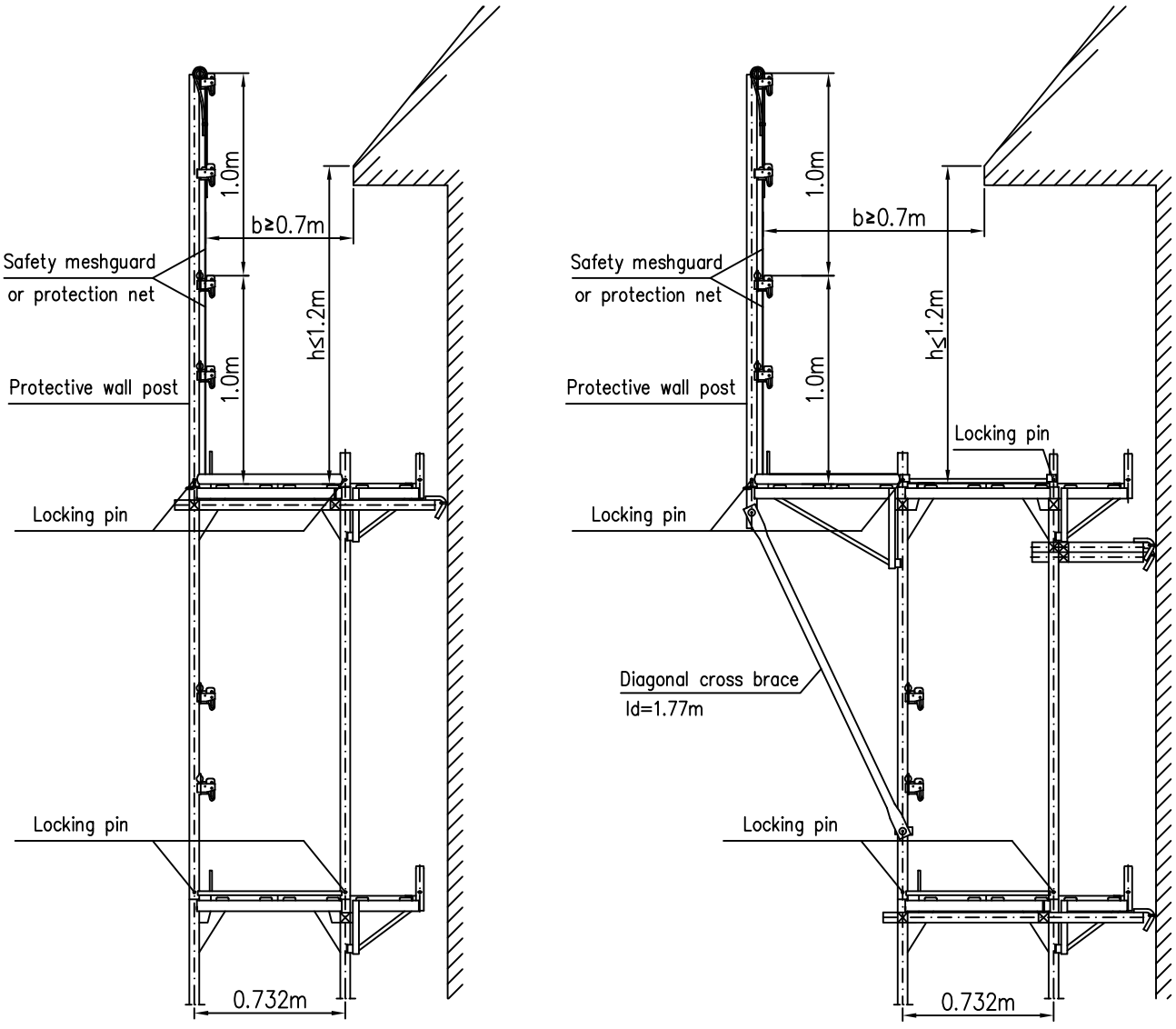
Standard system configuration: Detailed view – protective wall

The protective wall for the roof edge protection scaffold must be installed on the topmost level.
Observe the dimensions in the figure below.
Each frame section must be anchored at the topmost level; V-type scaffold ties must be used for every second frame section.
Always provide lift-off prevention for the main deck to prevent unintentional lift-off.

Protective wall posts with safety meshguards or protection nets (secured against unintentional lift-off by means of locking pins) must be used.
The protective wall may also be fitted with a bracket 0.73m.
In this case, the bracket 0.73m must be braced by means of a diagonal brace ld = 1.77m in every frame section.

Always install a gap cover or an intermediate deck between the main deck and the deck of the outer bracket.

Additional bracing and anchorage must be observed.



Frame scaffold ALFIX 70

Standard system configuration: Detailed view – protective wall

Annex C,
page 17

A713-C017 07.2016

Standard system configuration: Detailed view – protective roof

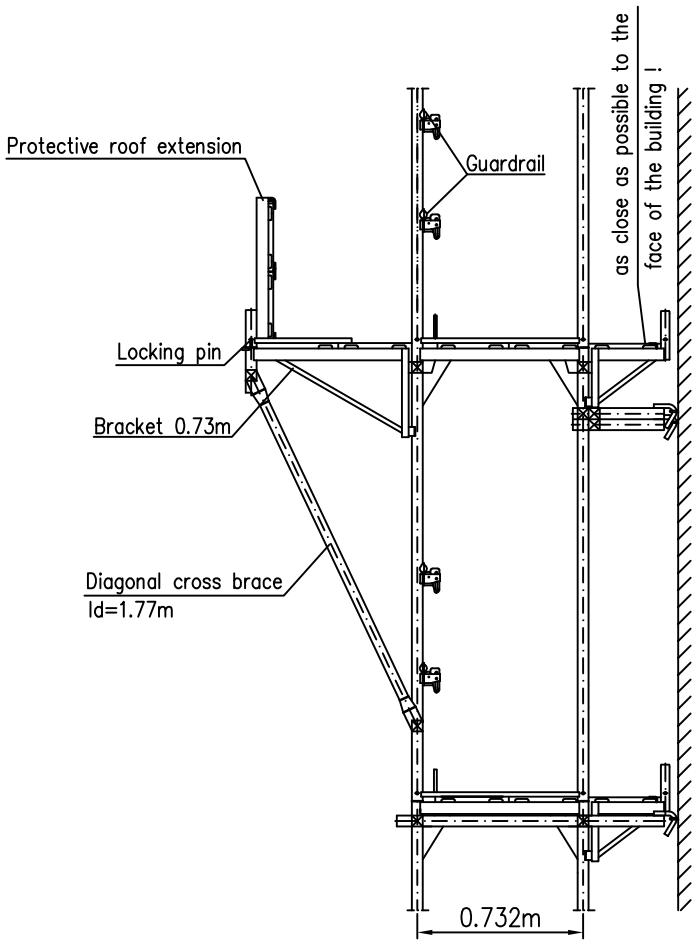
The protective roof consists of a bracket 0.73m, supported by means of a diagonal cross brace, protective roof extension and decks.
The bracket 0.73m must be assembled on the outer face of the vertical frame.

The protective roof extension is assembled on the bracket 0.73m with 2 decks (width 0.32m).

The gap between the scaffold deck and the platform of the protective roof must be covered with a gap cover. Scaffolding decks are to be installed up to the face of the building.

The main scaffold decking must be separated from the platform of the protective roof by means of guardrails. On the protective roof level and the working level below all frame sections must be anchored.

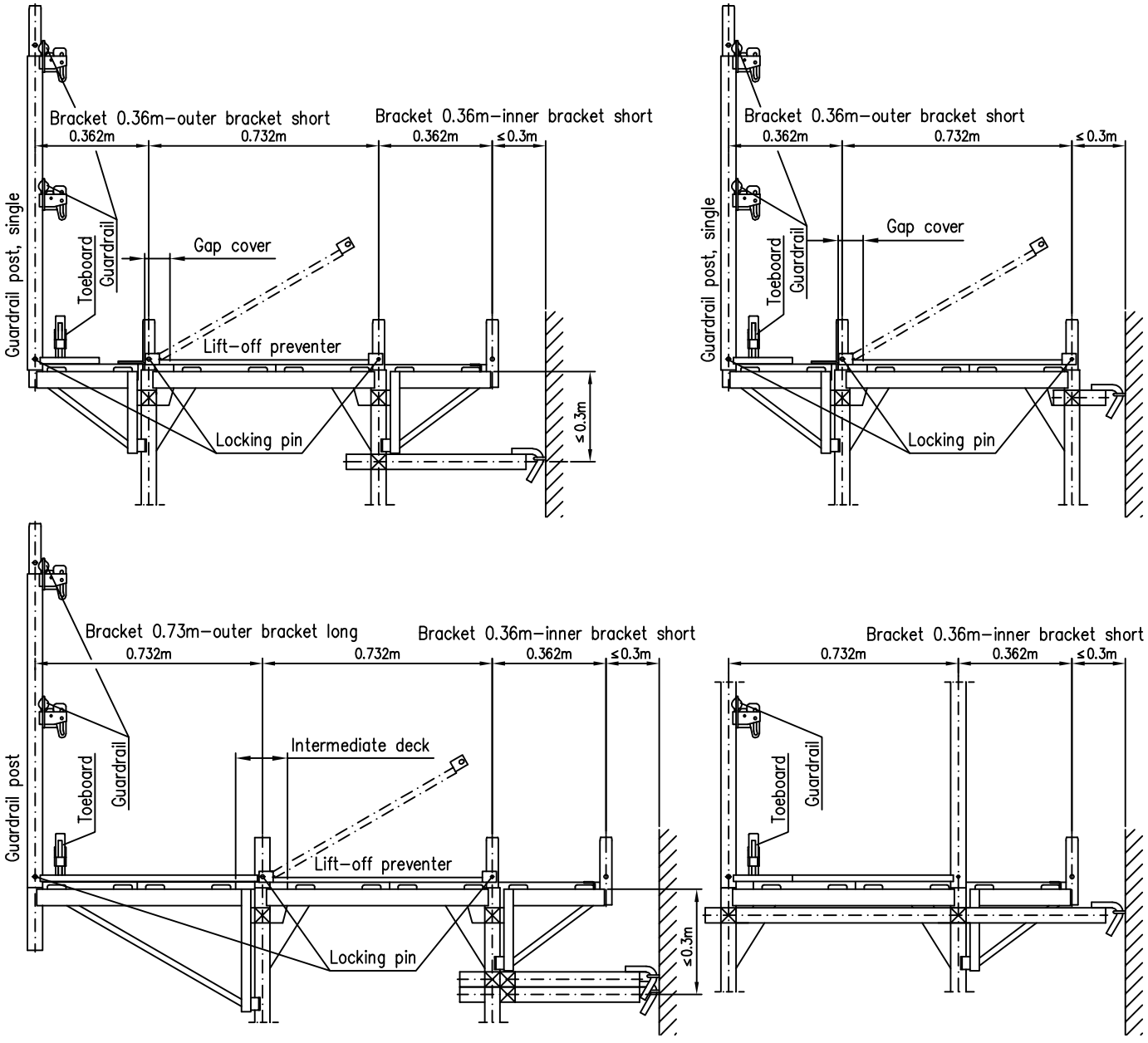
On the protective roof level, every second frame section must be anchored with a V–type scaffold tie.



[Seal Deutsches Institut für Bautechnik]

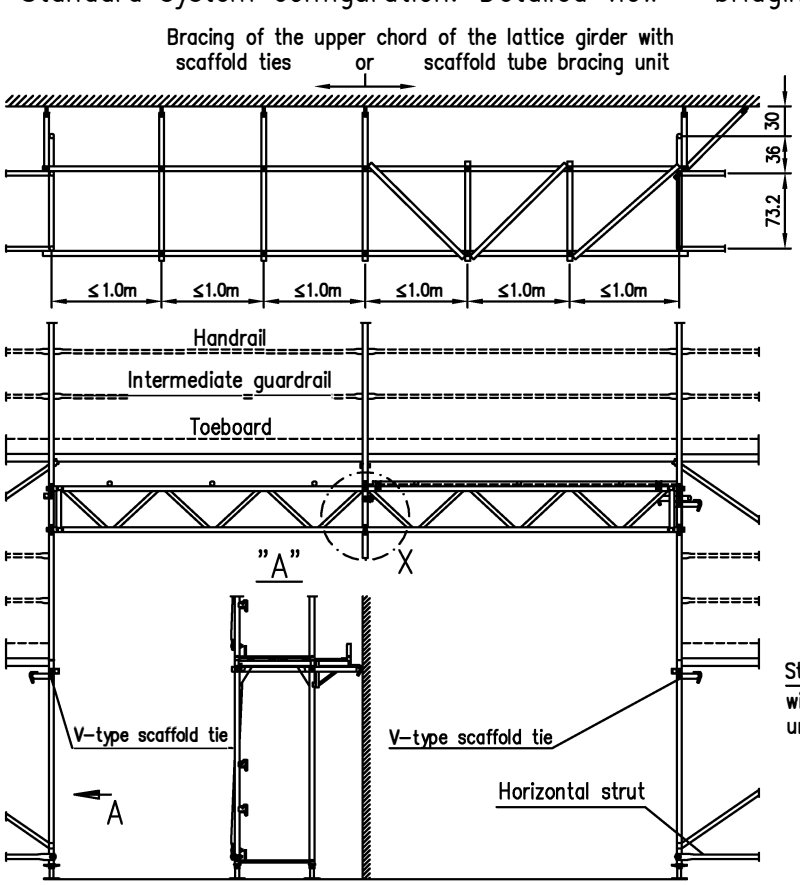
Standard system configuration: Detailed view – widening brackets

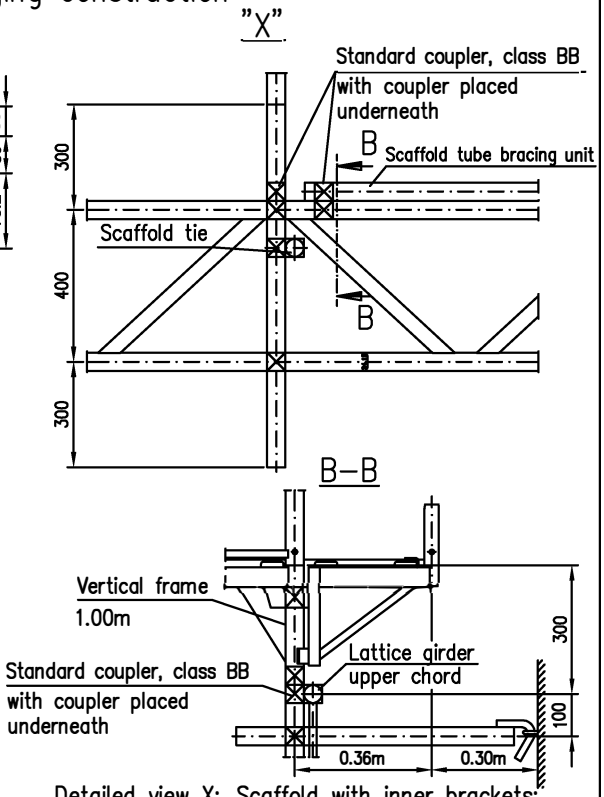
On the inner face of the scaffold (facing the facade), inner brackets (inner bracket short – bracket 0.36m) can be fitted on all working levels. On the outer face of the scaffold, an outer bracket (outer bracket short or outer bracket long, i.e. bracket 0.36m or bracket 0.73m) may only be installed on one working level.
On the outer bracket, the three-part side protection must be fully installed additionally to the decks.
This working level must be anchored at each frame section.
When using a bracket 0.73m (outer bracket long), additional bracing measures or anchorage must be observed.
Always install a gap cover or intermediate deck between the main deck and the outer bracket.
Do not assemble any trapdoor decks on bracket 0.73m (outer bracket long).
Always secure the main deck against unintentional lift-off by means of a lift-off preventer.



Frame scaffold ALFIX 70	
Standard system configuration: Detailed view – widening brackets	Annex C, page 19
A713–C019 07.2016	

Standard system configuration: Detailed view – bridging construction





Detailed view X: Scaffold with inner brackets: Vertical frame 1.0 m installed between lattice girder using 4 standard couplers and anchored using scaffold ties.

Two bridging girders (steel lattice girders 620) can be used for accommodating a vertical frame.
Fix the upper chords of the lattice girder at intervals of a=1.0m. This can either be done by anchoring them to the facade using scaffold ties or by means of a tube and coupler bracing unit between both lattice girders. All three frame sections must be anchored at a height of approximately H=4.0m. Use at least one V–type scaffold tie within the structure of the bridging girder.

This allows the steel lattice girder 620 to transfer a central single load F_E=18.6kN (service load) in the case of 2x3.07m or F_E=22.6kN in the case of 2x2.57m bridging (this also applies to steel lattice girder 520). Other non–system lattice girders – also aluminium lattice girders – may be used as bridging girders, provided they have the required load–bearing capacity. Please refer to the tables listing the bearing reactions for the load–bearing capacity of the lattice girders in accordance with the different assembly configurations. When using outer brackets, the fame must be connected to the outer lattice girder using standard couplers, class BB, with a coupler placed underneath.

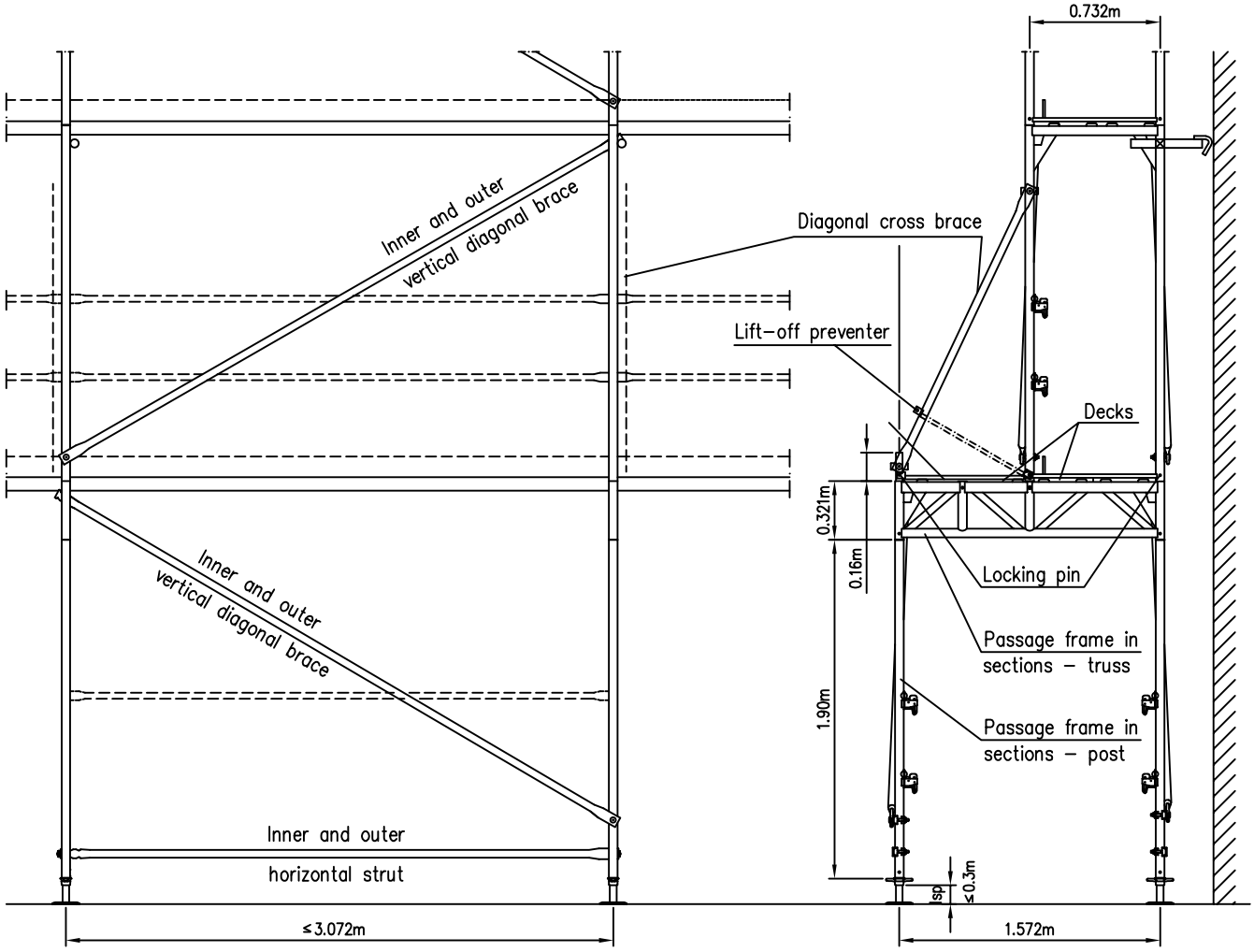
For scaffolds with inner brackets (shown here) the upper chords of the lattice girders are connected to the vertical frames approximately 30cm below the frame joints using standard couplers. class BB, with a coupler placed underneath. In this case, vertical frames 1.0m must be used below the frame section that needs to be accommodated. The inner standards of the lateral frame sections must be anchored using V–type scaffold ties below the bridging construction at H=2.0m.

For scaffolds without inner brackets the upper chords of the lattice girders are connected to the vertical frame at the gusset plate using standard couplers, class BB, (couplers fitted underneath are not required in this case). In this case, vertical frames 1.00m or 0.66m must be used below the frame section that needs to be accommodated. Here, V–type scaffold ties at the lateral frame sections below the bridging construction at H=2m are not mandatory. When using outer brackets, however, both frame sections on the first working level must be braced with diagonal cross braces.

Do not use passage frames at the bridging section!

Standard system configuration: Detailed view – passage frame

Anchorage must be provided at intervals of 4.0m.
The vertical frames above the passage frames are braced using a diagonal brace that is connected by means of a swivel coupler.
Alternatively, anchorage can be provided at a height of 2.0m.
The diagonal brace above the passage frame is not mandatory for scaffolds without inner widening brackets.
In the passage frame, the outer diagonal brace (vertical diagonal brace) must be assembled along with a longitudinal ledger (horizontal strut) in at least every 5th bay.Additionally, on the lowest two working levels, the inner diagonal brace (vertical diagonal brace) must be assembled along with a longitudinal ledger (horizontal strut)in at least every 5th bay.



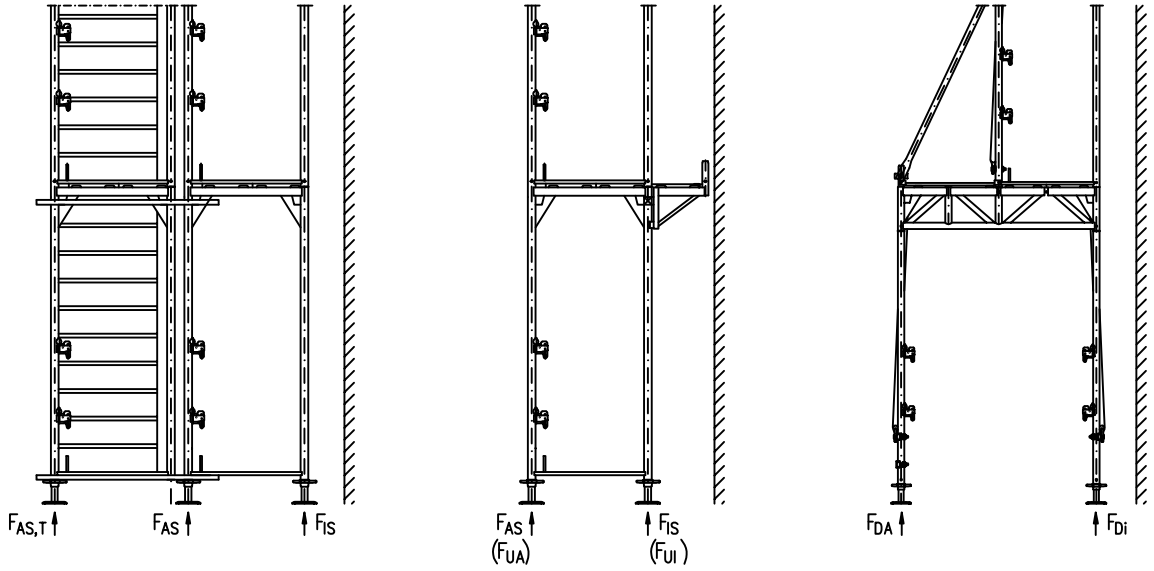
Working platform, consisting of 2 decks (b = 0.32m) or one deck (b = 0.60m).
Cover the remaining bay width with decks and fit lift-off preventers or brace using horizontal diagonal braces (scaffold tube with swivel coupler connected to framework standard by means of swivel couplers).

Do not use bridging girders at the passage frame.

Frame scaffold ALFIX 70	Annex C, page 21
Standard system configuration: Detailed view – passage frame	
A713-C021 07.2016	

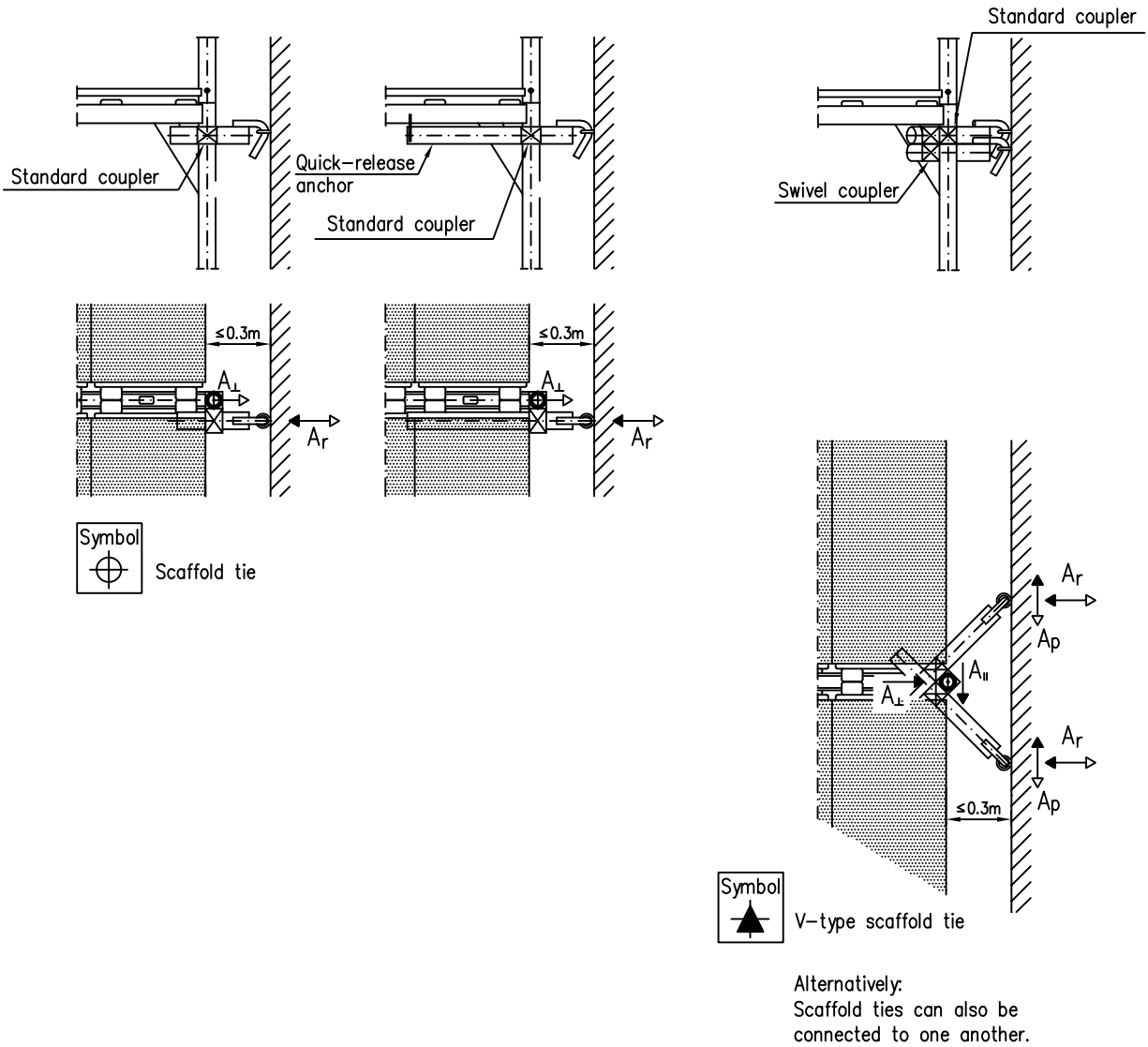
[Seal Deutsches Institut für Bautechnik]

Standard system configuration: Detailed view – bearing reactions



Frame scaffold ALFIX 70	
Standard system configuration: Detailed view – bearing reactions	Annex C, page 22
A713–C022 07.2016	

Standard system configuration: Detailed view – anchorage 1 – scaffold without inner bracket



Support reactions $A_\perp$ and $A_\parallel$ at the inner standard see annex B

Structure loads that have to be anchored at the building

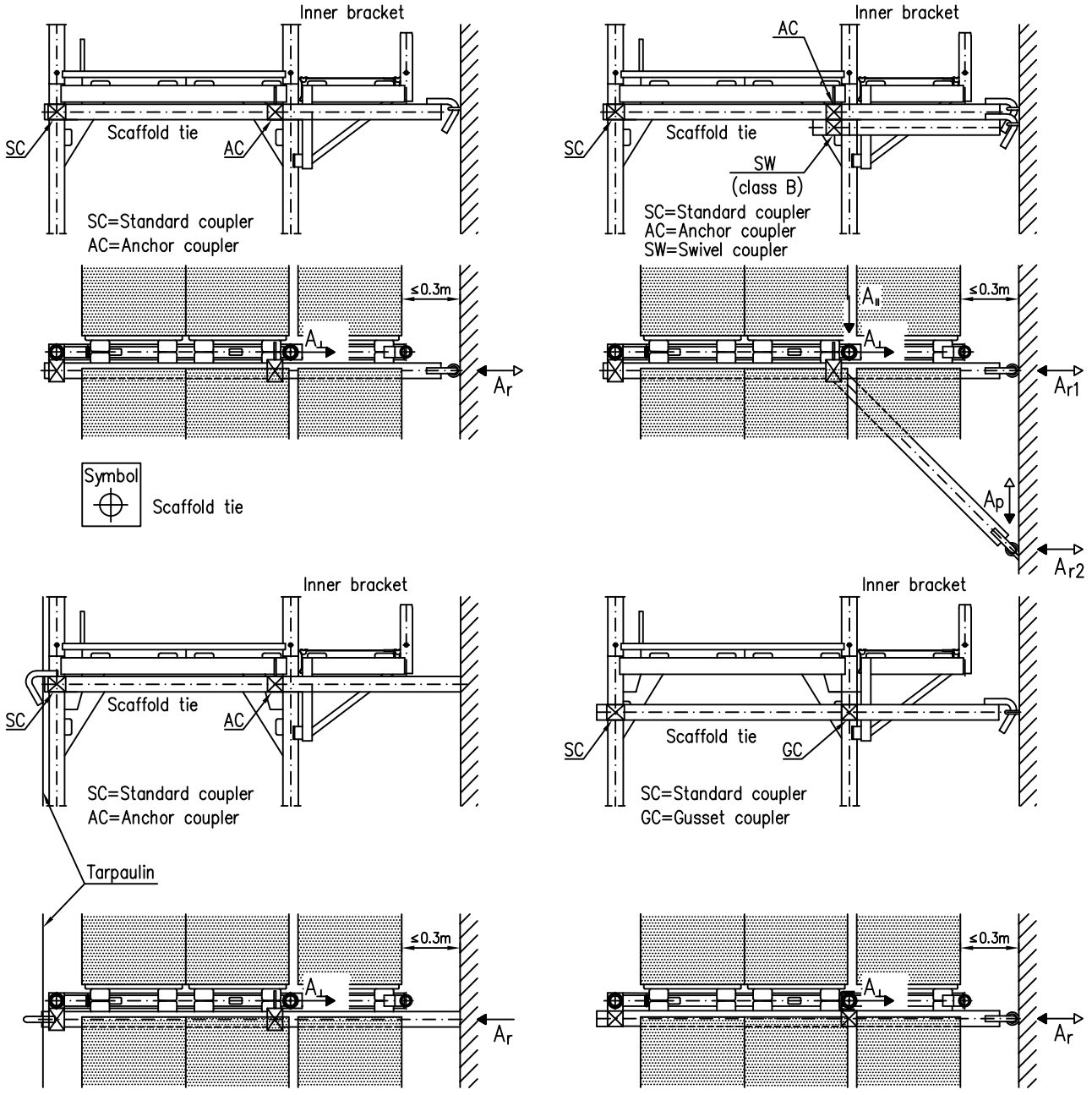
– Scaffold tie $A_r = A_\perp$

– V-type anchor A_r = maximum ($A_\perp/2$; $A_\parallel/2$)

A_p = maximum ($A_\perp/2$; $A_\parallel/2$)

Frame scaffold ALFIX 70: Scaffold EN 12810 3D-SW06/307-H2-B-LS	
Standard system configuration: Detailed view – anchorage 1 – scaffold without inner bracket	Annex C, page 23
A713-C023 11.2016	

Standard system configuration: Detailed view – anchorage 2 – scaffold with inner bracket, without outer bracket



Support reactions $A_\perp$ and $A_\parallel$ at the inner standard see annex B

Structure loads that have to be anchored at the building

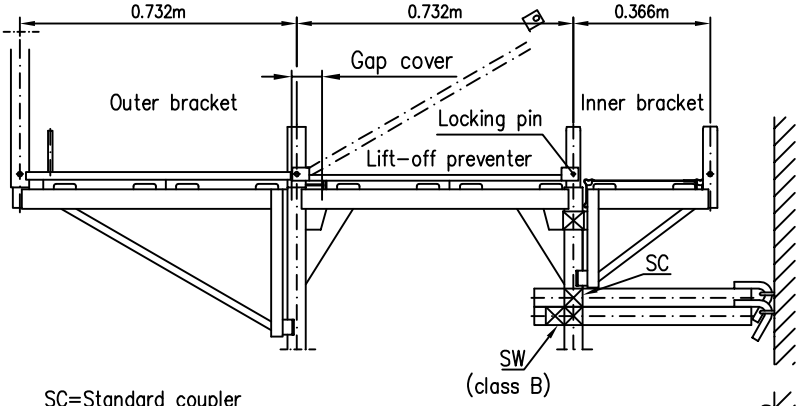
- Scaffold tie $A_r = A_\perp$
- Half V-type anchor A_{r1} = maximum ($A_\perp$; $A_\parallel$) $A_{r2} = A_\parallel$

$A_p = A_\parallel$

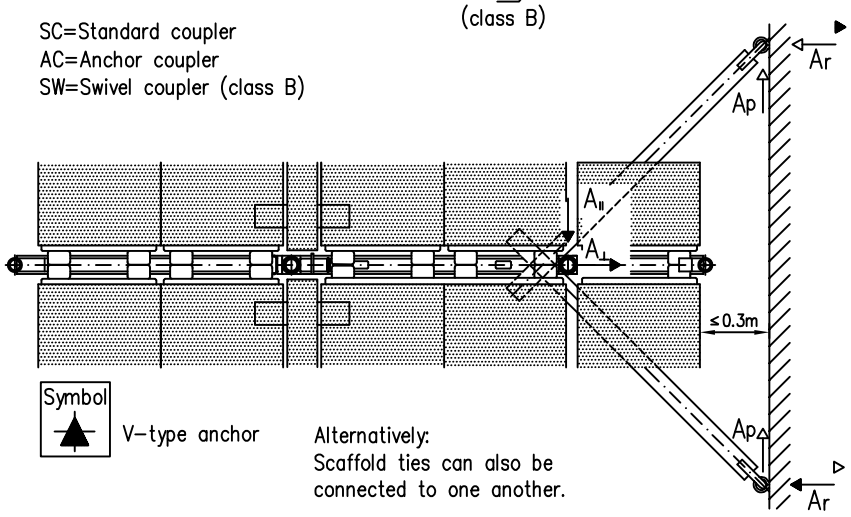
Frame scaffold ALFIX 70	
Standard system configuration: Detailed view – anchorage 2 – scaffold with inner bracket, without outer bracket	Annex C, page 24
A713-C024 12.2016	

[Seal Deutsches Institut für Bautechnik]

Standard system configuration: Detailed view – anchorage 3 – scaffold with inner bracket and outer bracket

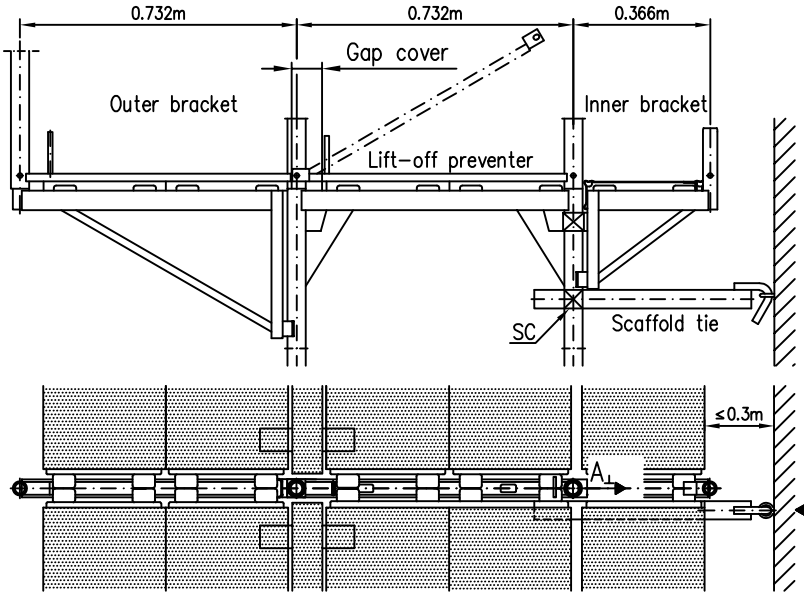


SC=Standard coupler
AC=Anchor coupler
SW=Swivel coupler (class B)



Symbol V-type anchor

Alternatively:
Scaffold ties can also be connected to one another.



Support reactions $A_\perp$ and $A_\parallel$ at the inner standard see annex B

Structure loads that have to be anchored at the building

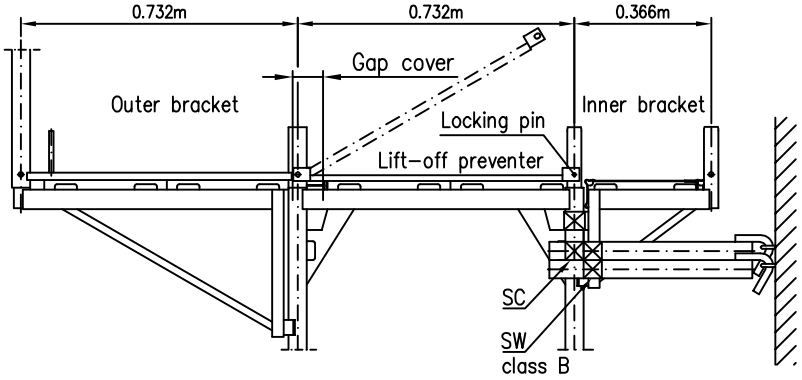
- Scaffold tie $A_r = A_\perp$
- V-type anchor A_r = maximum ($A_\perp/2$; $A_\parallel/2$)

A_p = maximum ($A_\perp/2$; $A_\parallel/2$)

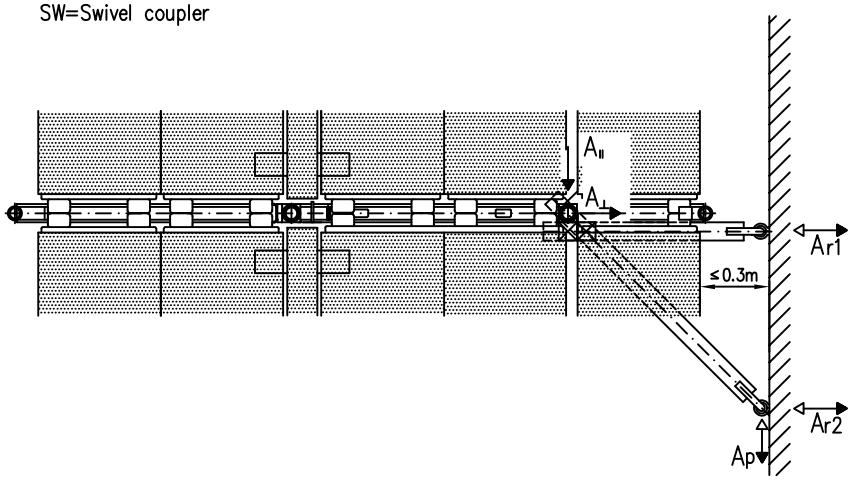
Symbol Scaffold tie

Frame scaffold ALFIX 70	
Standard system configuration: Detailed view – anchorage 3 – scaffold with inner bracket and outer bracket	Annex C, page 25
A713–C025 12.2016	

Standard system configuration: Detailed view – anchorage 4 – scaffold with inner bracket and outer bracket



SC=Standard coupler
SW=Swivel coupler



Support reactions $A_\perp$ and $A_\parallel$ at the inner standard see annex B

Structure loads that have to be anchored at the building

– Half V–type anchor: A_{r1} = maximum ($A_\perp$; $A_\parallel$)

$A_{r2} = A_\parallel$

$A_p = A_\parallel$

Frame scaffold ALFIX 70	
Standard system configuration: Detailed view – anchorage 4 – scaffold with inner bracket and outer bracket	Annex C, page 26
A713–C026 11.2016	

[Seal Deutsches Institut für Bautechnik]

Standard system configuration: Detailed view – corner design

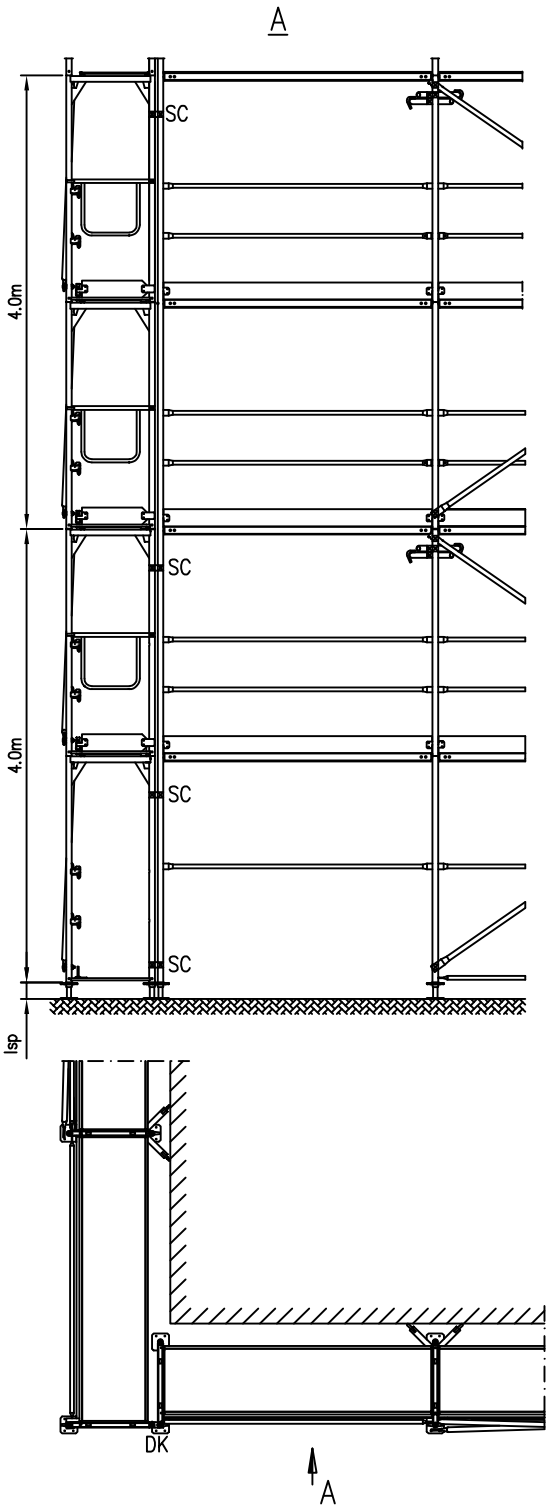
Vertical frames next to anchored working levels are connected to one another by means of tubes and couplers if both frame sections are assembled separately on the supporting surface.

Alternatively, an outer standard tube of an edge vertical frame can be supported using two swivel couplers in the lowermost vertical frame.
In this case, the base jack is not required.
The swivel couplers transfer the load into the outer standard tube of the adjacent edge vertical frame.

Connect the adjacent outer standards using another swivel coupler on the same level as the other anchored working level (H ≤ 4.0m).

Cover the gap between the scaffolding bays, e.g. by means of a steel deck.

Anchor the frame sections on each side at intervals of 4 m using V-type anchors.



Frame scaffold ALFIX 70

Standard system configuration: Detailed view – corner design

A713-C027 07.2016

Annex C,
page 27

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