

**INSTRUCTION  
FOR ERECTION  
AND USE**

**ALBLITZ 70 S**

# Instructions for Erection and Use

## ALBLITZ 70 S

Approval No. Z-8.1-864

**Standard Version**  
(as of 19.09.2005)



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**ALBLITZ 70 S**  
**Façade Scaffolding**

**Instructions for  
Erection and Use**

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## 1. General

The façade scaffolding, ALBLITZ 70 Steel, is a frame-type steel scaffolding of prefabricated components. The bay sizes are 1.57 m, 2.07 m, 2.57 m, 3.07 m and 4.14 m; the scaffolding width is 0.73 m.

The scaffold may be used as a working scaffold for the scaffolding groups 1 to 3 in compliance with DIN 4420-1 (effective load per unit area 200 kg/m<sup>2</sup> in scaffolding group 3) and as a safety and roof safety scaffold (falling height max. 2.0 m). Proof of standard version is furnished for an erection height of 24 m plus spindle extension length.

These instructions for Erection and Use shall only apply to scaffold uses as technological equipment for industrial purposes. These instructions describe how to erect, convert and dismantle the standard version of this scaffold. Scaffolds may only be erected, converted or dismantled under the supervision of a qualified person and by personnel specially instructed on how to carry out such work.

If the scaffolding system is used for scaffolds deviating from the standard version, these deviations must be evaluable according to both the Technical Building Regulations and the stipulations of the National Technical Approval Z-8.1-864 and are to be calculated on a case-to-case basis.

The decks used for the ALBLITZ 70 S façade scaffolding are verified for the live loads of scaffolding groups listed in Table 1 according to DIN 4420. All decks may be used in safety and roof safety scaffolds up to a falling height of max. 2.0 m.

Table 1: Use of decking

Designation	Z-8.1-864 Annex	Bay size l [m]	Use for safety and roof safety scaffold	Use in scaffold group
Steel deck 0.32 m	30	≤ 2,07	admissible	≤ 6
		2,57	admissible	≤ 5
		3,07	admissible	≤ 4
Steel deck 4.14x0.32 m	31	4,14	admissible	≤ 3
Steel deck 0.19 m	32	≤ 2,07	admissible	≤ 6
		2,57	admissible	≤ 5
		3,07	admissible	≤ 4
Steel hatch-type access deck 0.64 m	33	2,57	admissible	≤ 3
Aluminium deck / Aluminium chequer plate deck 0.32 m	34	1,57	admissible	≤ 3
		2,07	admissible	≤ 5
		2,57	admissible	≤ 4
		3,07	admissible	≤ 6
Aluminium box-type deck	35	≤ 2,57	admissible	≤ 6
		3,07	admissible	≤ 5
Aluminium profile deck 610	36	1,57	admissible	≤ 6
		2,07	admissible	≤ 5
		3,07	admissible	≤ 4
		2,57	admissible	≤ 3
EURO steel deck	37	≤ 2,07	admissible	≤ 5
		≤ 2,57	admissible	≤ 4
		≤ 3,07	admissible	≤ 3
Sturdy deck 0.61 m	38	≤ 3,07	admissible	≤ 3
Sturdy hatch-type access	39	≤ 3,07	admissible	≤ 3
Sturdy hatch-type access with integrated ladder	40	≤ 3,07	admissible	≤ 3
Sturdy deck 0.32 m	41	≤ 2,07	admissible	≤ 5
		2,57	admissible	≤ 4
		3,07	admissible	≤ 3
Combined atcking deck	42, 43	≤ 3,07	admissible	≤ 3
Hatch-type access combined deck	44	≤ 3,07	admissible	≤ 3
Hatch-type access combined deck w. ladder	45	≤ 3,07	admissible	≤ 3
Combined deck	47,48	≤ 3,07	admissible	≤ 3
Combined hatch-type deck	49	≤ 3,07	admissible	≤ 3
Solid wooden plank	50	≤ 3,07	admissible	≤ 3
Solid wooden frame deck 0.31 and 0.61 m	51, 52, 53	≤ 3,07	admissible	≤ 3
Steel deck	80	≤ 2,07	admissible	≤ 6
		2,57	admissible	≤ 5
		3,07	admissible	≤ 4
Solid wooden deck	88	3,07	admissible	≤ 3
		≤ 2,57	admissible	≤ 4
Aluminium deck with plywood	82	≤ 2,07	admissible	≤ 3
	82	2,57	admissible	≤ 3
	83	3,07	admissible	≤ 3
Alu hatch-type acc. deck with integrated ladder	86	3,07	admissible	≤ 3
	85	2,57	admissible	≤ 3

## 2. Erecting the scaffold

### 2.1 General requirements

Prior to erection check the scaffold components for any defects. Never use defective components. Erect the scaffold in the order described below.

### 2.2 Erecting the first bay

#### 2.2.1 Load-distributing bed

The scaffold must always be set up on a sufficiently strong base. If this is not the case use load-distributing beds in the form of timber planks to be provided under the two scaffold standards, see Fig. 1.

#### 2.2.2 Foot plates, foot spindles

Provide a foot plate or foot spindle under each scaffold standard. The foot spindles may be fully extended but no more than 41 cm, see Fig. 1. For this purpose observe the instructions for the individual standard version in Chapter 3.

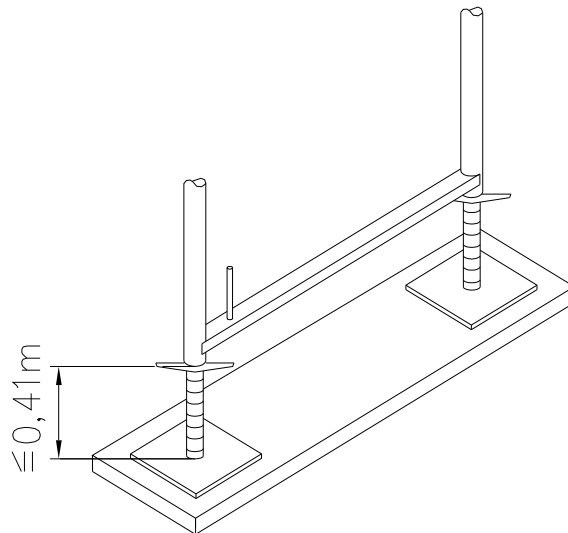


Fig. 1: Load-distributing beds with timber planks, spindle extension

### 2.2.3 Levelling frame

For slopes, sharp elevation differences and to specific certain scaffold layer heights levelling frames can be used at the foot of the scaffold, see Fig. 2.

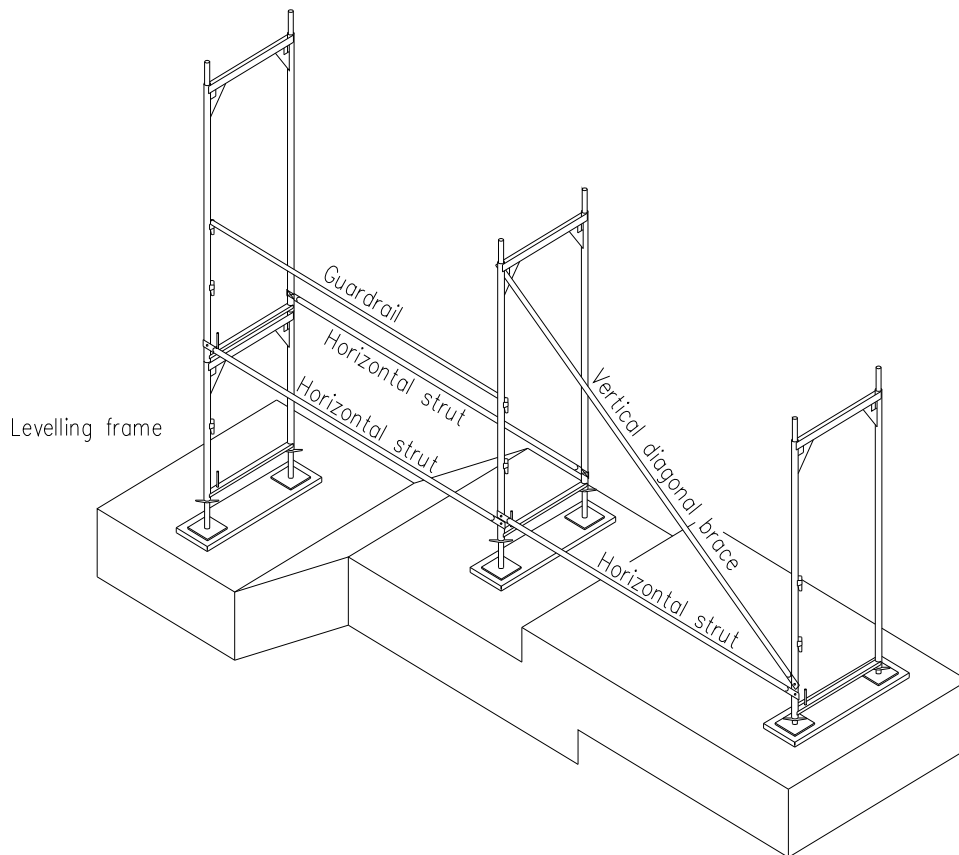


Fig. 2: Levelling frame

## 2.2.4 Frames

Position vertical or passageway frames vertically and at the given distance to the façade onto the foot plates or foot spindles and protect the same against falling by installing a guardrail brace.

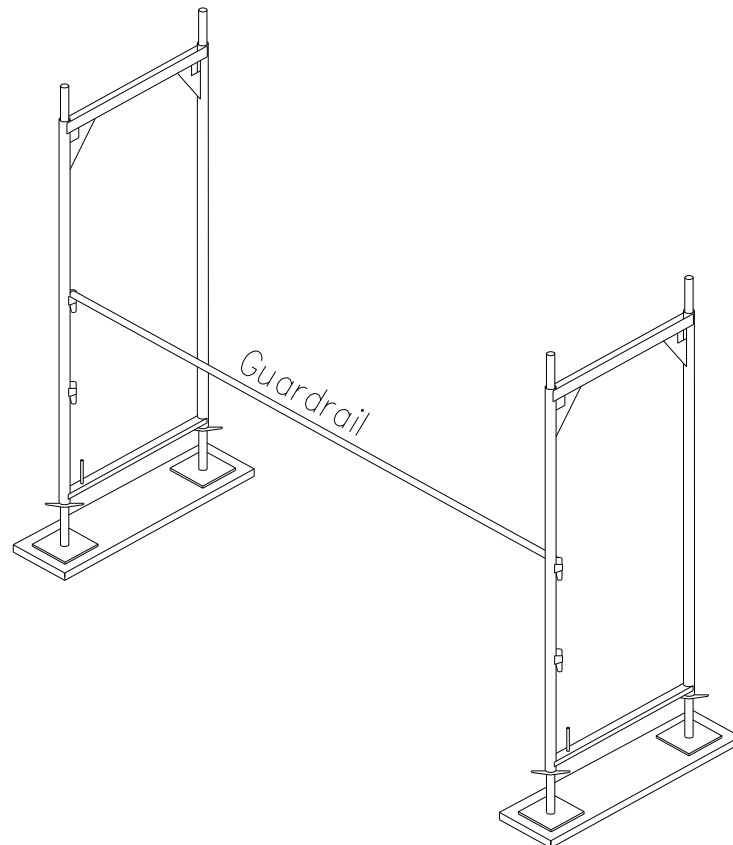


Fig. 3: Erecting the first scaffold bay

## 2.2.5 Decking

Suspend decks between the upper U-ledgers of the vertical frame. Use two narrow decks (32 cm in width) or one wide deck (60 cm in width) for the 0.73 m wide vertical frames. When using passageway frames provide decks over the entire width, i.e. four narrow or two wide decks. In scaffold group 3 all kinds of decks can be used.



## 2.2.6 Diagonal braces

Provide a diagonal brace as longitudinal bracing at the exterior of the bay, also see Fig. 4. For this purpose insert the shaped end of the diagonal brace into the opening of the gusset plate, swivel downwards until the halfcoupler can be closed at the opposite frame. Also install in this bay a horizontal strut at the exterior of the scaffold above the lower transoms. With some kinds of erection it will also be necessary to provide diagonal braces and horizontal struts on the inside of the scaffold.

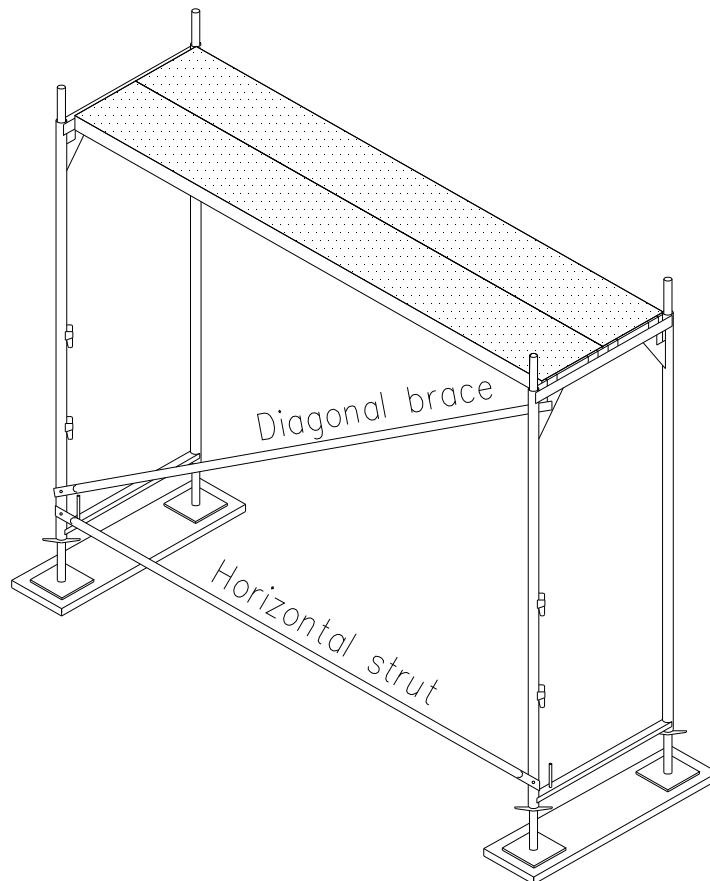


Fig. 4: Completed first bay

## 2.2.7 Aligning

Align the first bay vertically and horizontally. Check the wall distance.

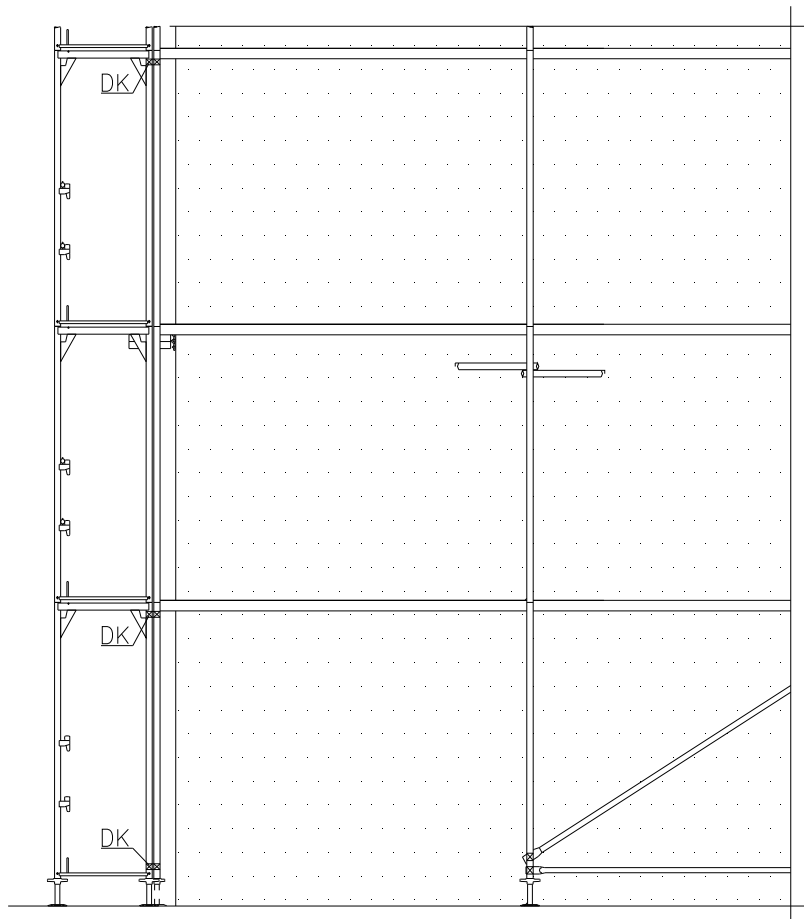
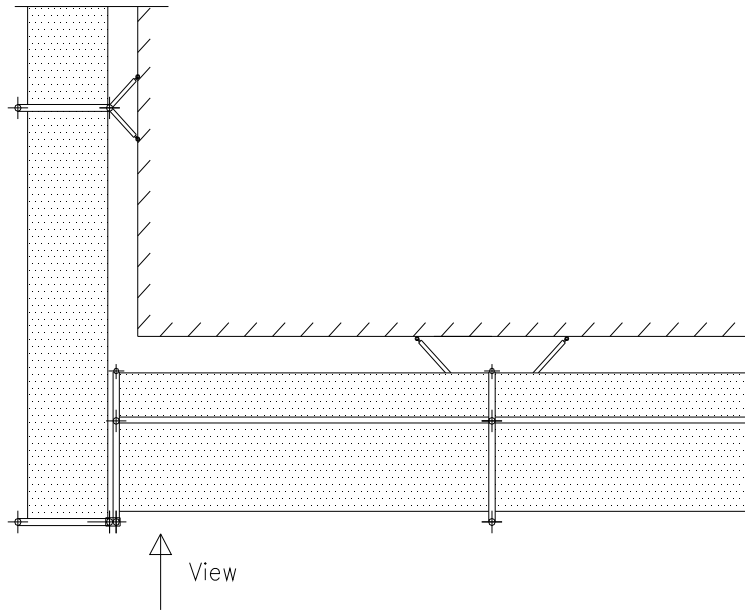
## **2.3 Erecting further bays**

### **2.3.1 Standard bay**

The other bays have to be erected as described above starting from the first bay. As a minimum provide each 5th bay again with a longitudinal brace that consists of a diagonal brace and a horizontal strut. The required number of diagonal and horizontal braces can be gathered from the standard version given in chapter 2. Several kinds of erection will also need cross diagonal braces to be provided in the lower vertical frames. For versions using brackets it is absolutely essential to provide aluminium double guardrails.

### **2.3.2 Corner figuration**

The scaffold for building corners has to be provided as shown in Fig. 5. Connect two vertical frames at an angle of 90° using two swivel couplers - one of them in the recess of the gusset plates. Now, provide a base jack only under these standards. In the course of further erection these standards have to be connected with a swivel coupler again at a height distance of 4 m. Also anchor the neighbouring standards at a height distance of maximum 4 m using triangular ties.



DK= Swivel coupler

Fig. 5: Corner figuration (side protection not shown)

### 2.3.3 Ladder access

Before you start working on the first scaffold layer provide an inner ladder for access to higher levels. For this purpose different hatch-type access decks are available. On the lowest level of the ladder area install two transoms or U-transoms into which a deck supporting the first ladder is to be placed.

Always keep the hatches of the access decks closed when not used for access.

Preferably arrange the passageways in a staggered manner.

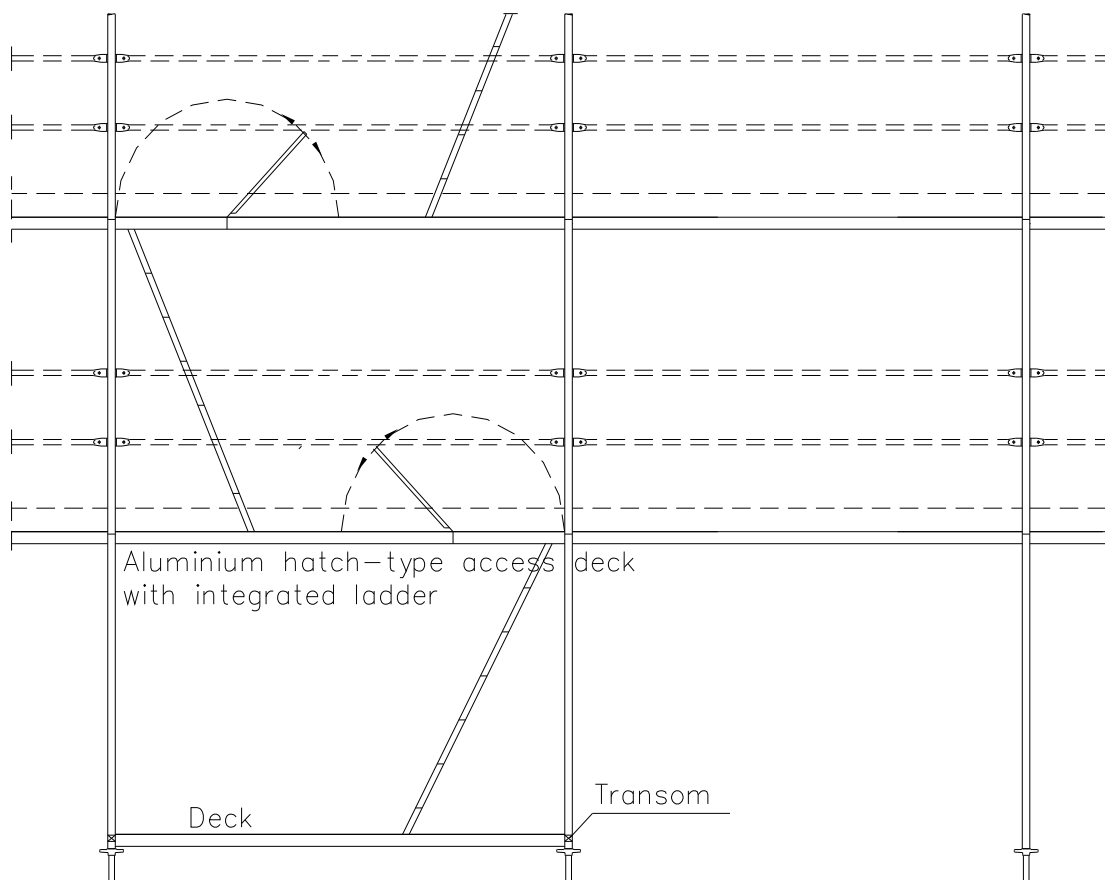


Fig. 6: Ladder access

## 2.4 Erecting further scaffold layers

### 2.4.1 Principles

Carry out all scaffolding so that falling is prevented or the risk of falling is kept at a minimum. Protective measures are:

- technological protective measures
- personal protective equipment to prevent falling
- specific instructions

As a technological protective measure ALFIX provides the advanced guardrail post with telescopic guardrail, see chapter 2.4.3.1. If the scaffold contractor concludes after risk assessment that another protective measure should be taken, this has to be documented in separate use instructions. If "Personal protective equipment to prevent falling" in compliance with BGR 198<sup>1)</sup> is to be used, it will be necessary to use the fastening points provided at the scaffold as shown in chapter 2.4.3.2. Risk assessment must also include any potential rescue of a person who has fallen down. Personal protective equipment may be life lines with integrated fall damper with the rope being max 4 m long. The self-securing one-hand spring hook must have an opening width of min. 50 mm.

<sup>1)</sup>BGR 198 (formerly ZH 1/709): Use of personal protective equipment against falling. Hauptverband der gewerblichen Berufsgenossenschaften; as amended in 2000. Regulations by employer's insurance association can be downloaded from [www.fa-bau.de](http://www.fa-bau.de).

### 2.4.2 Handling scaffold components

For scaffolds higher than 8 m (deck height over erection area) it is necessary to use builder's hoists. This also includes hand-operated pulley tackles. No such builder's hoists need to be used if the scaffold height does not exceed 14 m and the linear extension of the scaffold is maximum 10 m. In scaffold bays where vertical handling is done by hand, guardrail and intermediate braces must be in place. For such manual handling at least one person must be involved on each scaffold layer.

## **2.4.3 Assembling vertical frames and guardrail**

### **2.4.3.1 Advanced guardrails**

Advanced guardrail posts with telescopic guardrails provide a temporary side protection over the entire scaffold layer.

On the first layer (standing height 2 m) the components have to be assembled from the floor. On the other levels the advanced guardrail post and the two connected telescopic guardrails have to be relocated vertically only.

Erection shall start at the front face of the scaffold. Mount the advanced end guardrail on the guardrail post using the M10x60 bolt, see Fig. 7-1. Suspend a telescopic guardrail from the hook at the post and mount the post on the corner member of the scaffold, see Fig. 7-2:

- Put up the guardrail post on the outer side of the assembly frame with the lower fork located on the guardrail brace of the lower scaffold layer.
- The upper fork embraces the standard tube below the gusset plate and is secured by closing the wedge (hammer blow).

Now, mount a guardrail post on the inner member threading the end guardrail into the suspension hooks, see Fig. 7-3. Then, mount the guardrail along the façade. Suspend the other end of the telescopic guardrail in the next guardrail post, and also another telescopic guardrail, Fig. 7-4. Now, lift the guardrail post and the telescopic guardrail and install it in the next assembly frame as described before, see Fig. 7-5. Suspension of the telescopic guardrails and installation of the next guardrail post with guardrails being suspended is repeated over the entire length of the scaffold.

The advanced guardrail must have been provided on the entire scaffold layer before this level may be accessed and the assembly frames and the normal three-piece side protection erected, see Fig. 7-6. The following scaffold layer has to be protected to prevent falling by vertically relocating the advanced guardrail post with telescoping guardrails being connected on both sides, see Fig. 7-7.

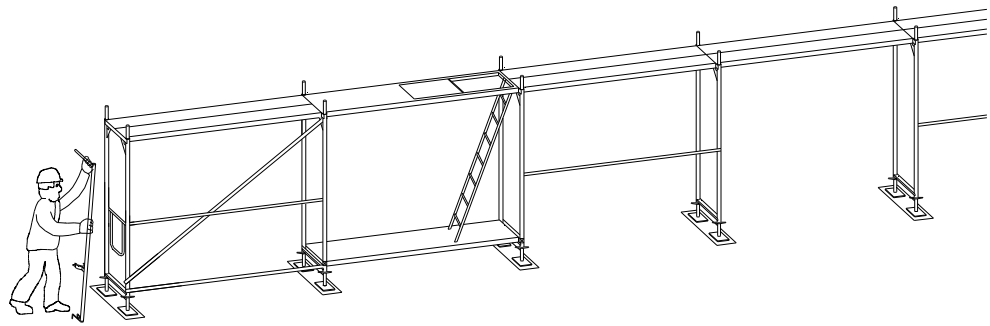


Fig. 7-1: Preparing the guardrail post with advanced end guardrail

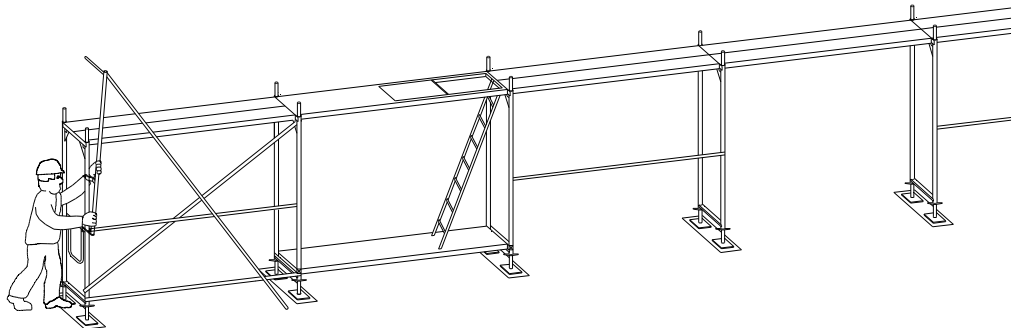


Fig. 7-2: Mounting an advanced guardrail post with end guardrail and telescopic guardrail

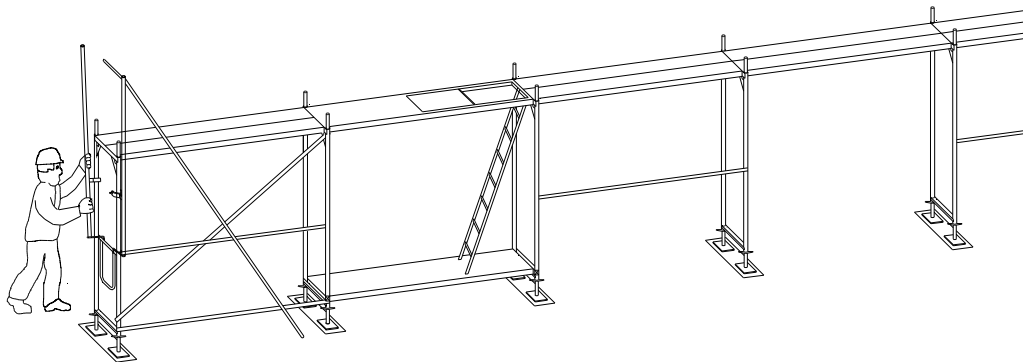


Fig. 7-3: Mounting the advanced guardrail post on inner member

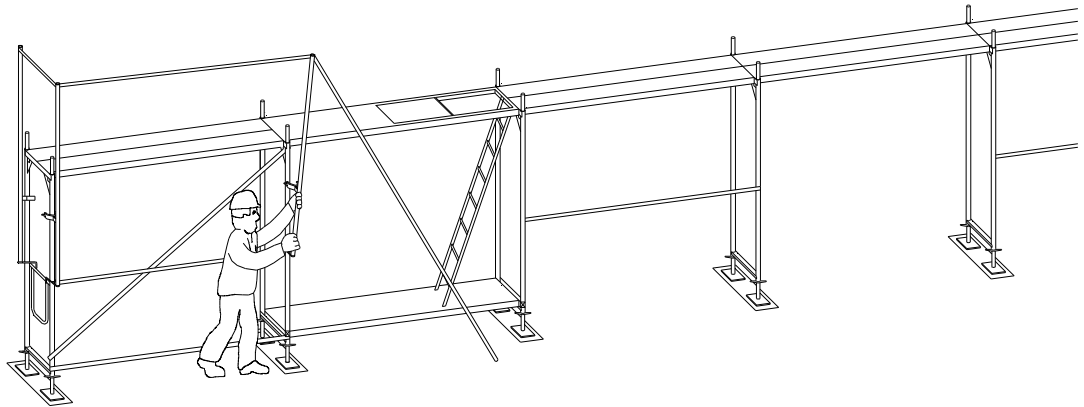


Fig. 7-4: Mounting the guardrail post with other end of telescopic guardrail and another telescopic guardrail

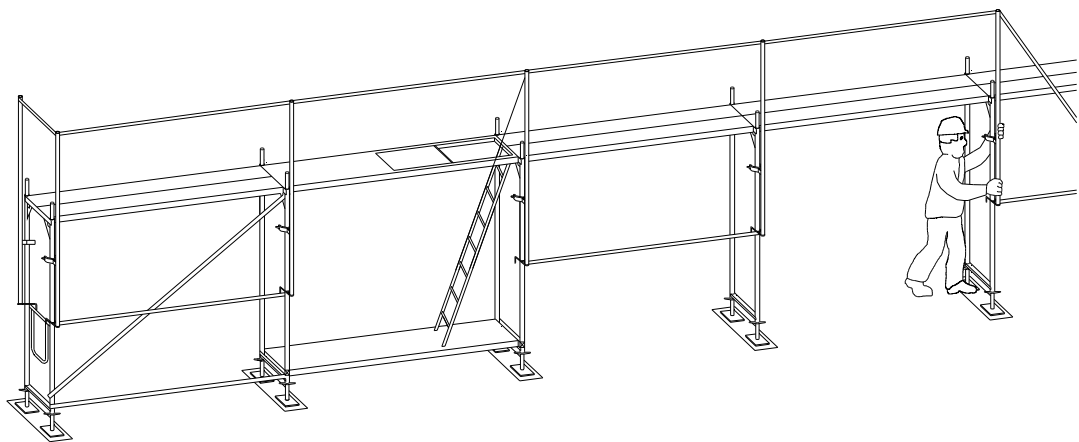


Fig. 7-5: Completing the advanced guardrail over entire scaffold layer



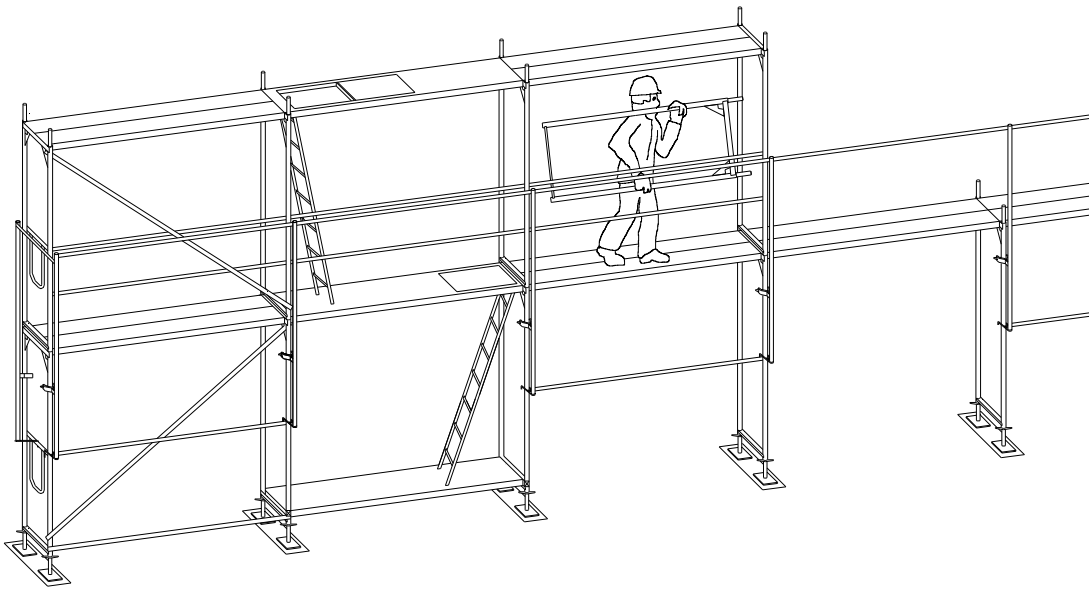


Fig. 7-6: Erecting the next scaffold layer (assembly frame, decks, stiffener, 3-piece side protection) protected by the advanced guardrail.

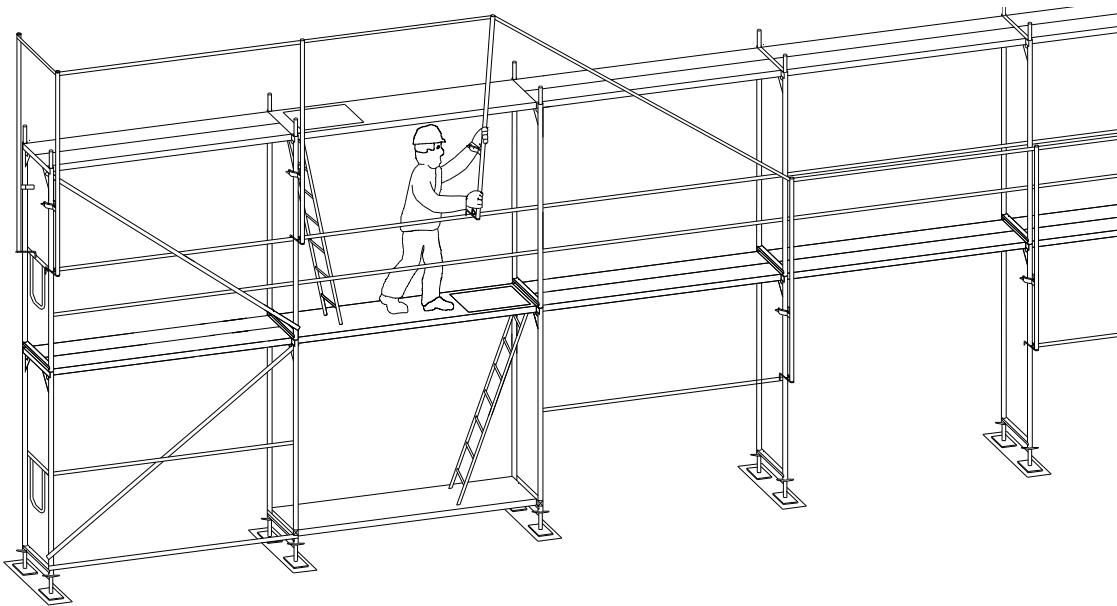


Fig. 7-7: Vertical relocation of advanced guardrail post and telescopic guardrail

### 2.4.3.2 Fixing points for personal protective equipment against falling

If personal protective equipment is to be worn, the following fixing points can be used:

- frame corner (in gusset plate or at standard tube in the corner) (Fig. 8-1)
- assembly frame above or directly within the scaffold box (Fig. 8-2)
- guardrail brace (Fig. 8-3)

Using spring hooks in accordance with DIN EN 362 with an opening width of  $\square$  50 mm as lifting tackle.

First access to scaffold layer: Fix the spring hook in the frame corner on the external side of scaffold. For this purpose hook the spring hook from above, while standing on the ladder, on the external side in the frame corner, see Fig. 8-4. A scaffold bay consisting of two assembly frames and a guardrail brace can be put up using this kind of protection.

For further erection work the a. m. fixing points may also be used at freestanding assembly frames.

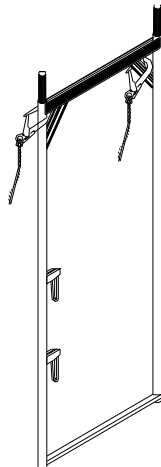


Fig. 8-1: Fixing point  
in frame corner  
(outside and inside  
of scaffold)

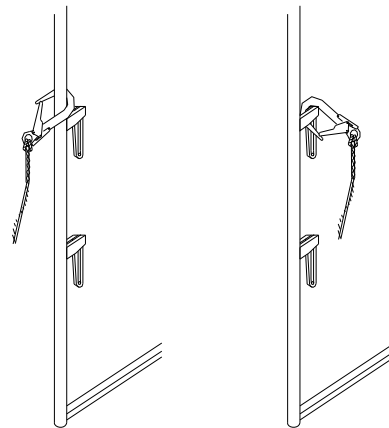


Fig. 8-2: Fixing point above or within the  
scaffold box

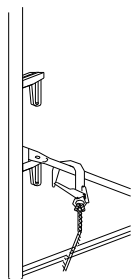


Fig. 8-3: Fixing point  
at guardrail brace

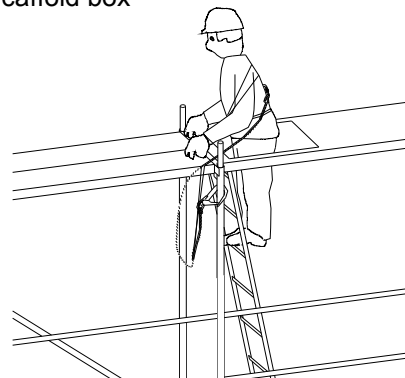


Fig. 8-4: Fixing in frame corner on the outside  
of scaffold for initial access of scaffold layer

#### **2.4.4 Decking**

Provide the decking as described in chapter 2.2.5. Always mount the decking starting from the lower secured scaffold layer. Protect the decks against accidental lift-out with the foot ledgers of the next scaffold layer, on the top scaffold layer with the guardrail post or guard system support. Always provide separate deck retainers if there is no protection against lift-out by components arranged above, see Fig. 13, for example. The bracket 36 has a lift-out protection for the bracket deck.

#### **2.4.5 Diagonal braces**

Mount diagonal braces continually as the scaffold erection progresses. They may be mounted either in a tower-like manner or continuously.

The necessary number of diagonal braces can be gathered from the standard versions in chapter 3.

#### **2.4.6 Completing the side protection**

Provide missing intermediate stringers and toeboards and the complete side protection at the end on all scaffold layers that are not exclusively used for scaffold erection.

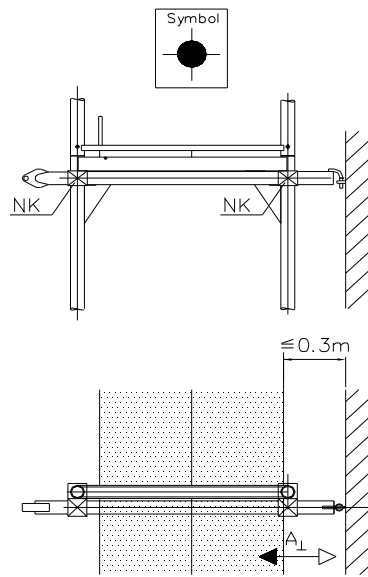
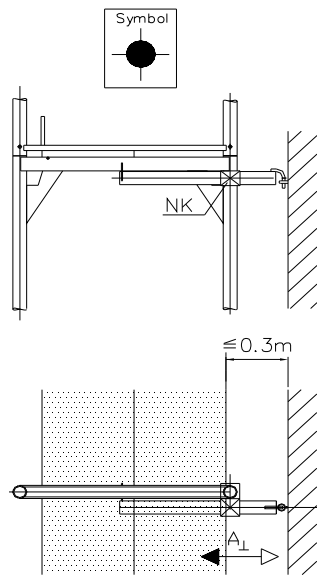
#### **2.4.7 Scaffold retainers**

To tie scaffolds to the façade, quick anchors provided with U-shaped anchor tabs, continuous scaffold retainers with and without anchor couplers are available. To this extent, no inner bracket has been provided in the opening of the gusset plate. The continuous retainer or quick anchor can be connected by use of standard couplers (see Figs. 9a and 9b). The tab of the quick anchor embraces the U-transom of the vertical frame. The continuous scaffold retainer is connected to a second standard coupler at the outer assembly frame.

If an inner bracket has been provided, the continuous scaffold retainer must be connected there using an anchor coupler (see Fig. 10 a). If an outer bracket has been connected, it will be necessary to provide scaffold retainers for tying. The scaffold retainer must be connected below the bracket brace to the inner assembly frame using a standard coupler (see Fig. 10b).

Triangular ties are required for the individual arrangements (Fig. 11). They are formed of V-shaped pairs of retainers that are connected to the inner assembly frame at an angle of 45° to the vertical frame.

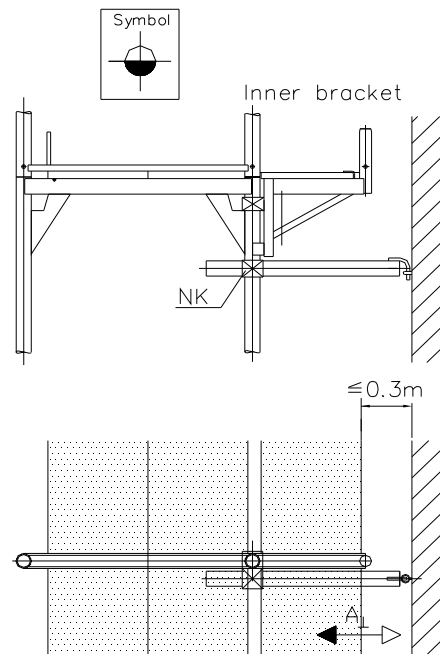
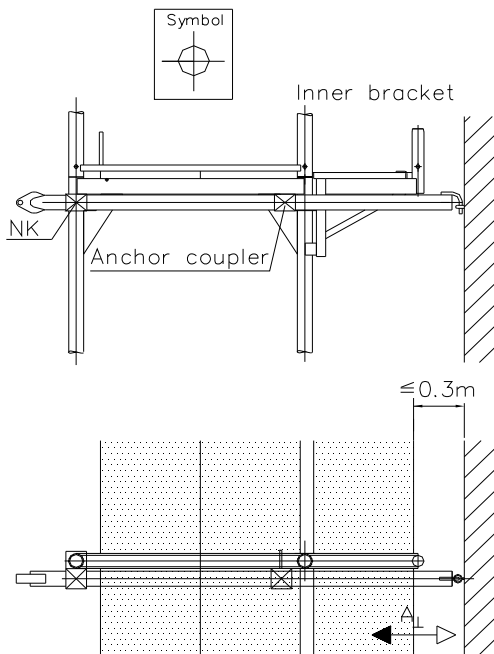
In individual cases connections up to 0.4 m below the transom are allowed.



NK= Standard coupler

Fig. 9a: Quick-release anchor

Fig. 9b: Continuous scaffold retainer



NK= Standard coupler

Fig.10: Continuous scaffold retainer

Fig. 10b: Scaffold retainer

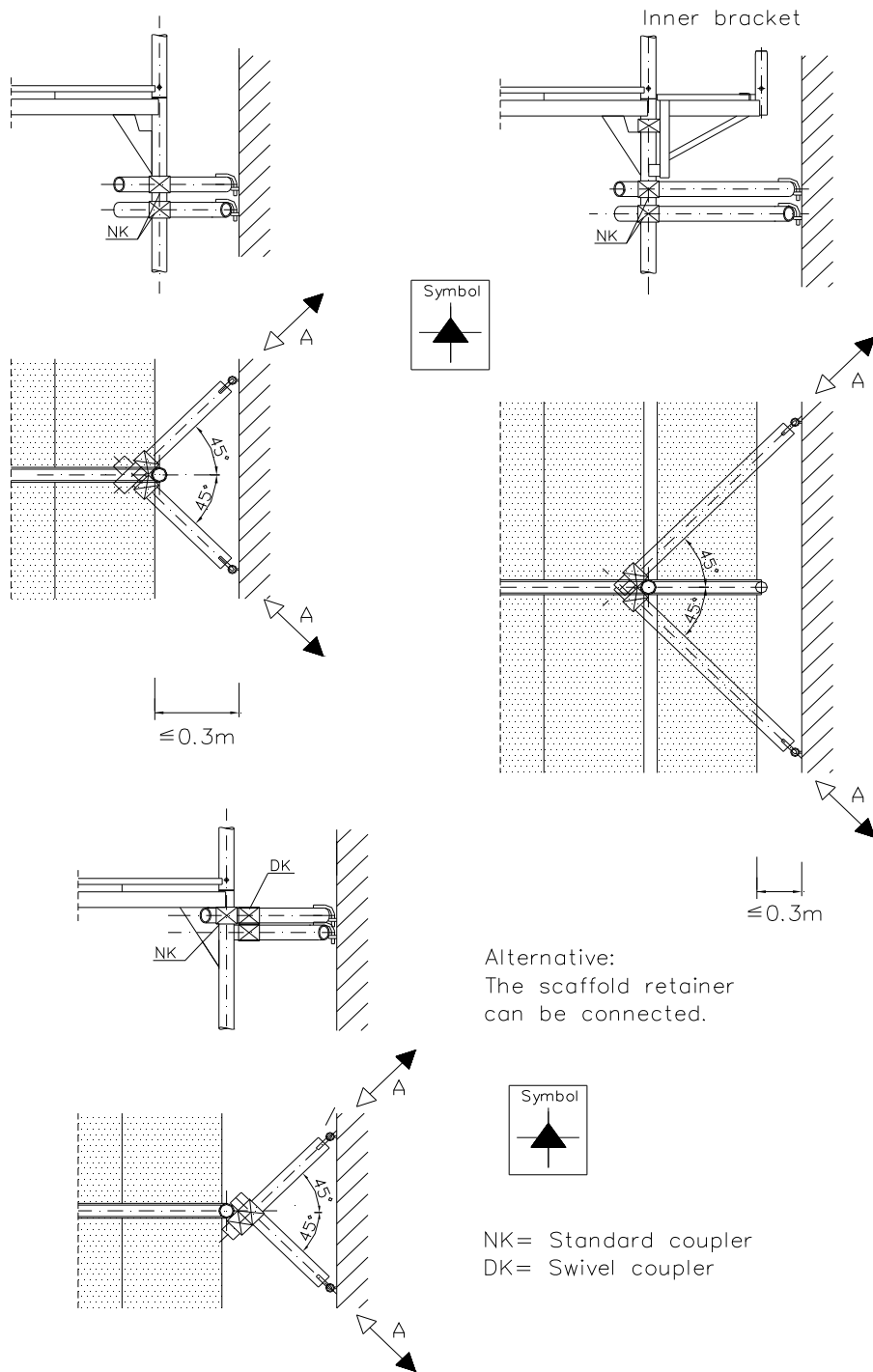


Fig. 11: Triangular ties



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## 2.4.8 Scaffold anchors

Provide the scaffold anchors in line with scaffold erection. For this also see chapter 7.6 "Anchoring" of BGR 166<sup>1)</sup>. As fasteners use eye bolts for scaffold erection that are minimum 12 mm in diameter and plastic expansion fasteners or similar depending on the load-carrying capacities required.

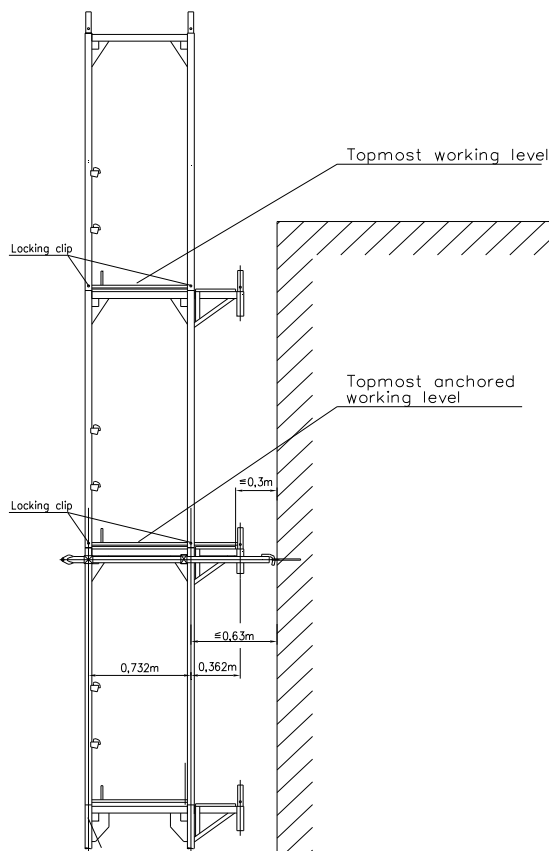
1) BGR 166: System scaffolds (frame and modular scaffolds)

When applying the content of BGR 166 also observe the operational safety regulations (BetrSichV).

## 2.4.9 Anchor grids and forces

The planned anchor grids can be gathered from the standard versions shown in Figs. 18 to 52. The relevant anchor forces are shown there. All kinds of erection and attachments are covered herein. The indicated forces are service loads.

## 2.4.10 Free standing top scaffold layer



While buildings are constructed temporary conditions may occur where a work level projects free-standingly over the top cantilevered level, see Fig. 12. So, it is necessary to secure the post joints by couplers in the area above the anchoring.

Fig. 12: Top unanchored scaffold layer

## 2.5 Installing supplementary components

### 2.5.1 Widening brackets

To widen the decks, two brackets are available. The brackets and - if possible - the decks may only be mounted from the secured lower scaffold layer. Otherwise safety measures have to be defined and applied after separate risk assessment.

#### Inner bracket (bracket 36 resp. bracket 0.36 m)

Use the inner bracket together with a narrow deck (32 cm wide) inside the scaffold, see Fig. 13. Connect the semicoupler welded to the bracket in the opening of gusset plate of the vertical frame. The decking has to be protected against accidental lift-out with the lift-out protection of the bracket. For the previous bracket type of 0.36 m which has no integrated lift-out protection, it is necessary to install such protection, see Fig. 14. The bracket may be installed on the inside on every scaffold layer.

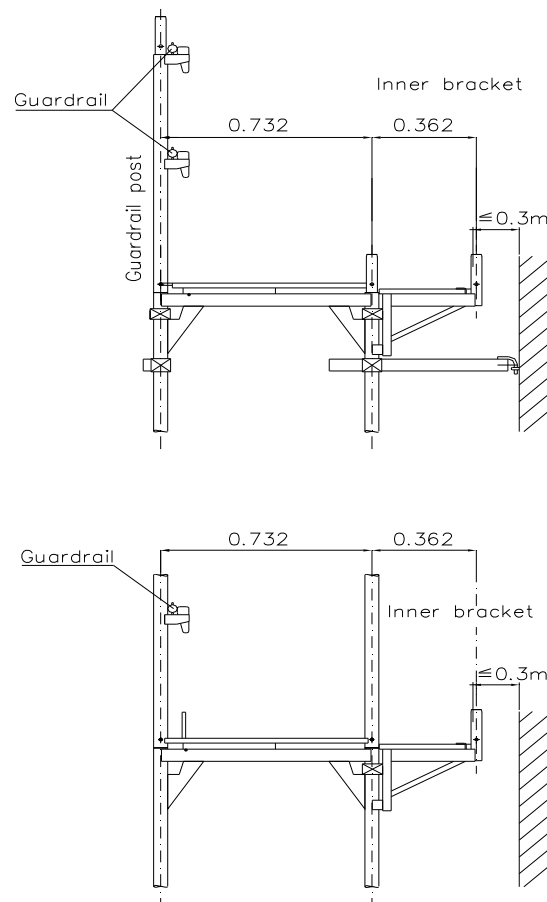


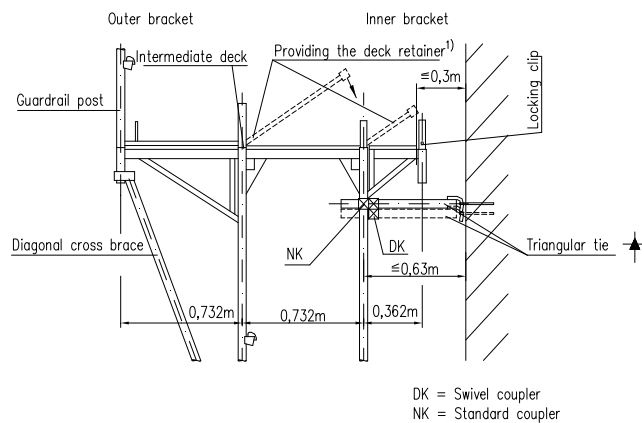
Fig. 13: Inner bracket (bracket 36cm resp. bracket 0.36 m)

## Outer bracket (bracket 73 resp. bracket 0.73 m or bracket 0,73m reinforced)

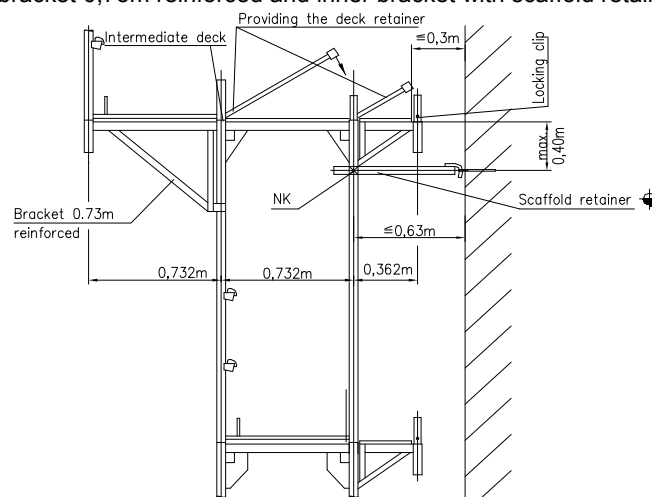
The outer bracket is used on the exterior of the scaffolding with a broad deck (60 cm wide) or two smaller decks (each 32 cm wide), see Fig. 14. The connection to the vertical frame is made the same way as with the inner bracket. The opening in the gusset plate allows the joint connection of both the bracket and the vertical diagonal brace. The outer bracket must be supported by a cross diagonal brace from the level below. In the case of the 0.73 m reinforced outer bracket, the cross diagonal brace is dispensable. The gap between the outer bracket deck and the bay deck is to be closed by a gap cover.

The placement of the guardrail post or the guard system support with integrated deck retainer protects the decks against accidental lifting.

Outer bracket 0,73m and inner bracket with triangular tie



Outer bracket 0,73m reinforced and inner bracket with scaffold retainer



- 1) Use of deck retainer for inner bracket 0,36m only necessary for Former design (without integrated deck retainer)

Fig. 14: Outer bracket (bracket 73cm resp. bracket 0.73 m and bracket 0,73m reinforced)



## 2.5.2 Protective shelter

The protective shelter is formed with the protective shelter bracket 1.30 m or 2.10 m or a bracket of 73 and 0.73 m respectively with attachment, see Fig. 15. Provide the deck as described in chapter 2.5.1 and additionally floor it up to the structure. Provide a wide deck or two narrow decks at the post of the protective shelter.

Separate the protective shelter from working area by guardrail braces. Never store material on the shelter. The shelter may only be installed on the level of the second scaffold layer

(H = 4 m). Anchor the vertical frame on the level of the protective shelter at each gusset.

Mount the protective shelter brackets and - if possible - the decks from the secured lower scaffold layer only. Otherwise protective measures have to be defined and applied after separate risk assessment.

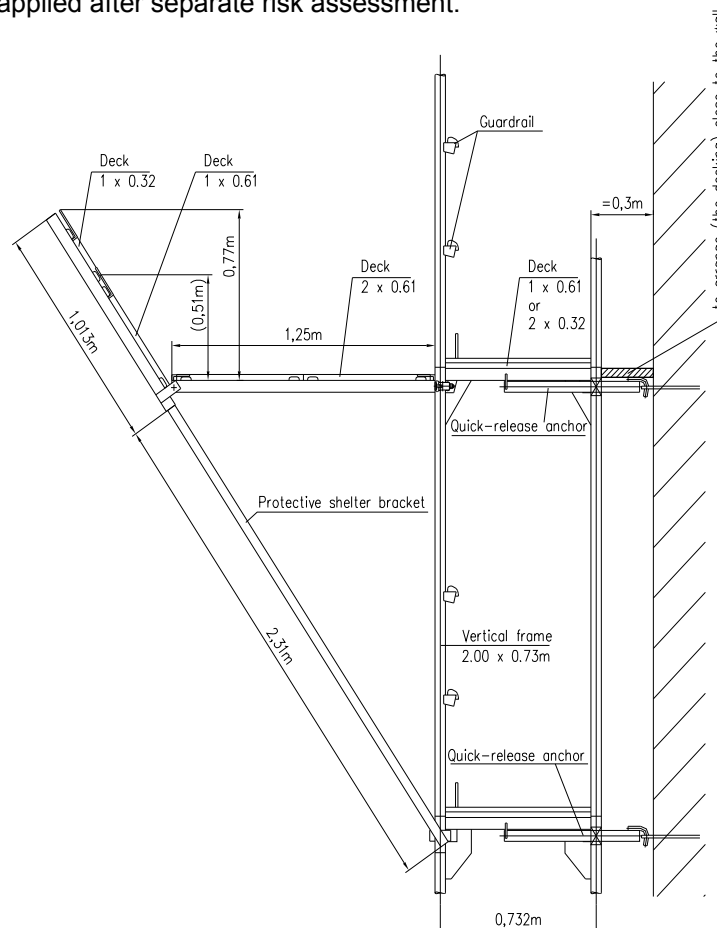
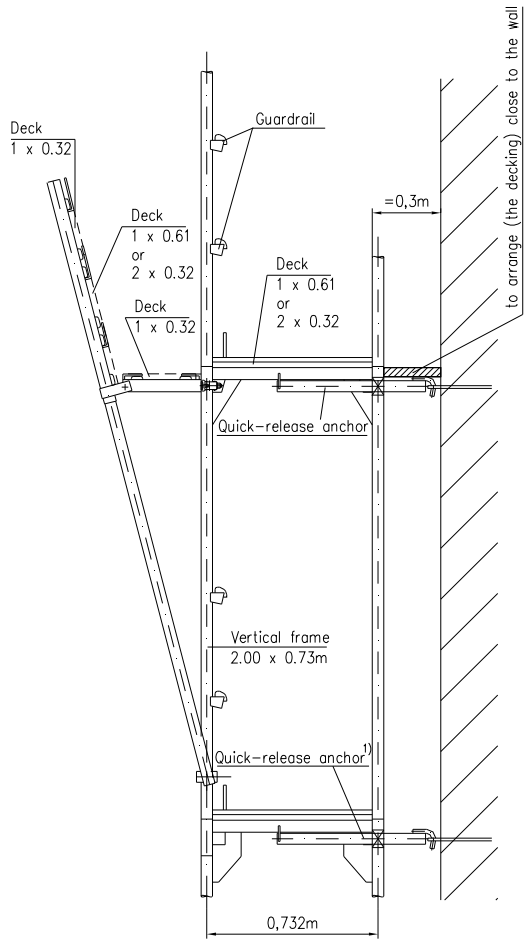
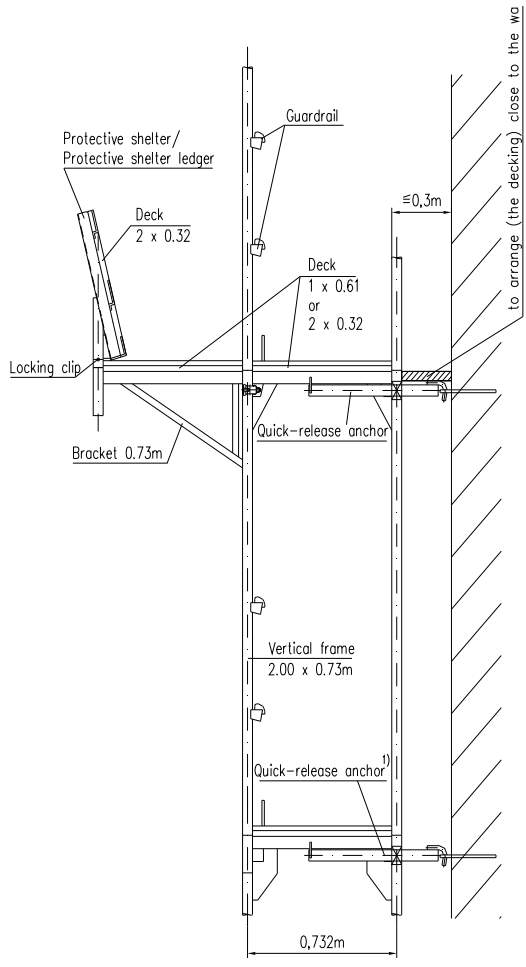


Fig. 15a: Protective shelter with protective shelter bracket



<sup>1)</sup> Alternative: Continuous scaffold retainer

Fig. 15b: Protective shelter with protective shelter bracket



<sup>1)</sup> Alternative: Continuous scaffold retainer

Fig. 15c: Protective shelter with weather protection top unit / cantilever

### 2.5.3 Roof safety scaffold

The roof safety scaffold consists of safety meshguards or safety nets and safety meshguard supports. For larger eaves the roof safety scaffold can be provided with the bracket 73 and diagonal cross brace placed underneath. The distance between the eave and the guard system must be at least 0.7 m. At a guard system height of 2.0 m the decking must not be lower than 1.2 m below the eave. Both versions are shown in Fig. 16.

Never provide a hatch-type access deck on the outer bracket!

Mount the brackets and - if possible - the decks from the secured lower scaffold layer only. Otherwise safety measures must be defined and taken after separate risk assessment.

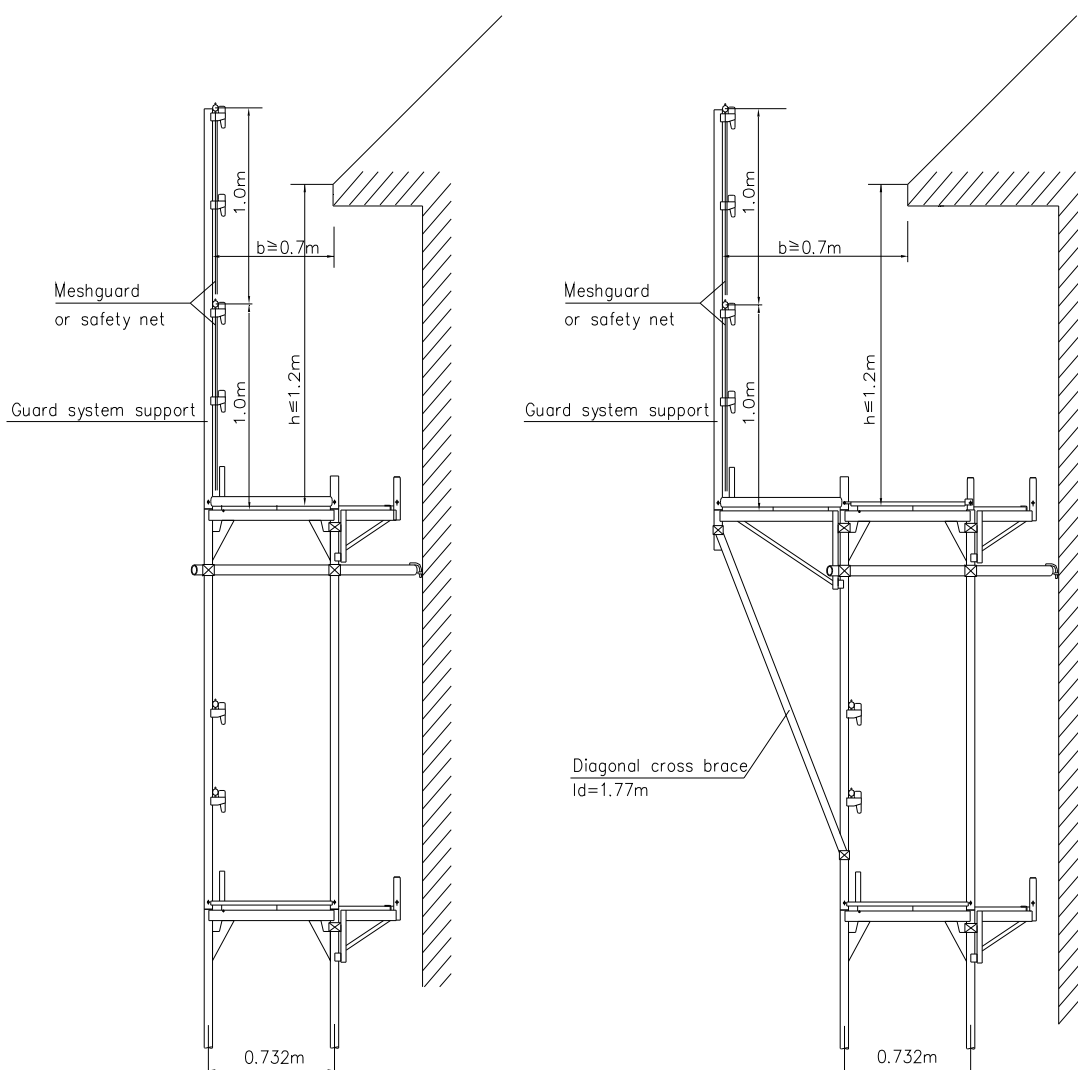


Fig. 16: Roof safety scaffold

## 2.5.4 Passageway frame

With passageway frames it is possible to erect façade scaffolds and keep the sidewalks open and safe. Such passageway frames have several connectors that can be relocated so that the vertical frames ALBLITZ 70 S (unit spacing 0.73 m) and ALBLITZ 100 S (unit spacing 1.09 m) can be set up on such passageway frames.

Each pair of passageway frames together is reinforced by horizontal struts and diagonal braces. For bay lengths of 3.07 m the diagonal braces have to be provided in the inner lift up to a level of 4 m. The decking needs to cover the entire width of the passageway frames.

The vertical frames need to be anchored continuously at a height of 4 m. Bay lengths of 3.07 m require a diagonal brace in the frame above the passageway frame if the decking is widened by an outer bracket. A  $\varnothing$  48.3x3.3mm scaffold tube with a swivel coupler shall be used as diagonal brace.

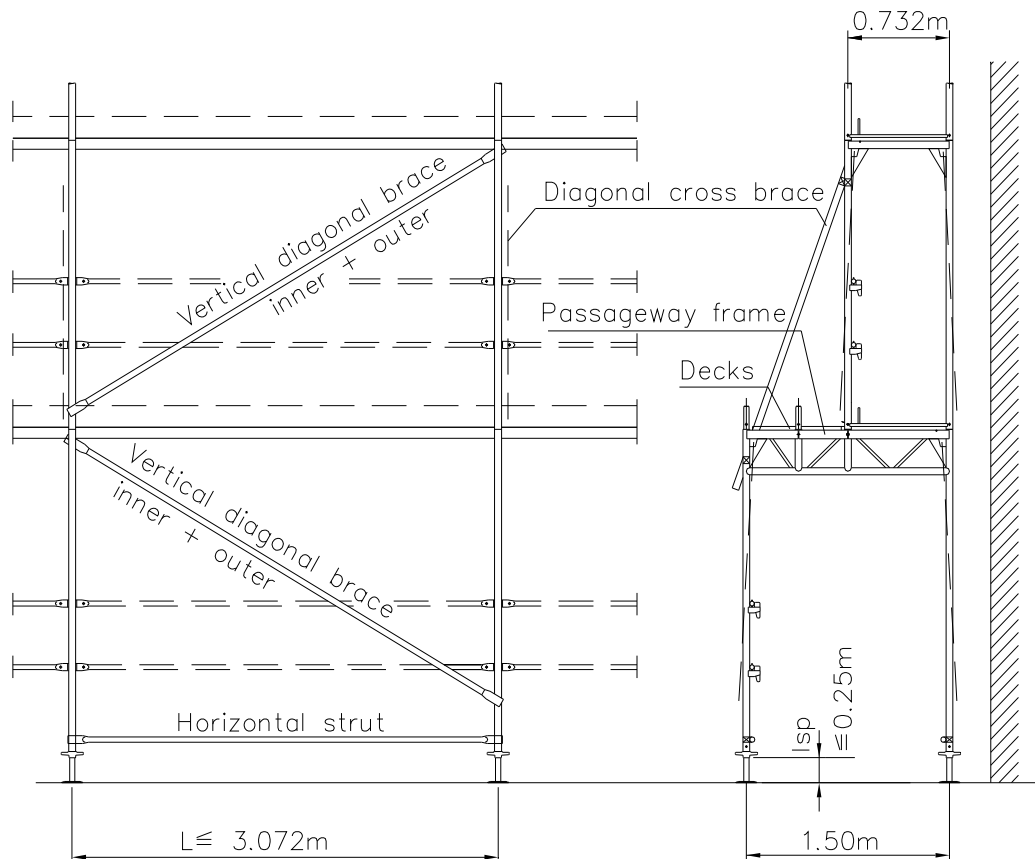


Fig. 17: Passageway frame

## 2.5.5 Bridging

For shorter distances to be bridged decks with a bay length of 4.14 m are available; for larger distances lattice girders are to be used:

Bay size 3.07 m with lattice girder 6.14 m

Bay size 2.57 m with lattice girder 5.14 m

Lattice girders are usually mounted on a level of 4 m. With their joint pieces they are suspended in the vertical frame and fastened with the bottom chords with lattice girder couplers to the standards. A lattice girder ledger receiving the decks is suspended in the tube coupling for lattice girders.

Safety measures for the mounting of lattice girders, decks and side protection have to be defined and applied after separate risk assessment.

It will be necessary to stabilize the lattice girders against lateral deflection by anchoring the two lattice girder top chords in the façade. The necessary anchoring, the provision with diagonal braces and horizontal struts for the different kinds of erection are shown in the Figures 49 through 52.

### 3. Variations and installation of supplementary components

#### 3.1 General

The following describes the different kinds of erection and anchor grids of the ALBLITZ 70 S façade scaffolds. They also depend on the wind permeability of the façade and the kind of covering that may be used. The following applies to all kinds of erection:

- Max. erection height 24 m plus spindle extension
- Max. spindle extension 41 cm
- Edge standards to be anchored at a distance of max. 4 m with corner figuration in accordance with chapter 2.3.2 using triangular ties.
- With standard versions a 'closed' façade has no openings. With 'open' façades the view face of the openings shall amount to max. 60 % of the façade.
- Nets and tarpaulins at the front face are to be drawn up to the façade.
- Nets used must meet the force coefficients  $C_{fx} \leq 0.6$  and  $C_{fy} \leq 0.2$  based on an aerodynamic expert opinion.
- According to the standard version shown below diagonal braces have to be provided in the outer lift, in connection with passageway frames and bridging in the inner lift, too.

For the individual versions measures are described that are to be taken when installing supplementary components (widening brackets, protective shelter, guard system bridging, passageway frame).

The erection height, the attachment of any supplementary components and the planned scaffold group will determine the support reaction forces in the load case 'service load' as given in Table 3. It takes into account the dead weight of the heaviest deck. The forces given are service values.

Any deviating versions with respect to erection heights, above 24 m, for example, have to be checked on a case-to-case basis by way of stress analysis, also see chapter 1.

Table 3: Support reaction forces [kN]

Support [kN] for	Design versions	Bay length	Erection height		
			24 m	16 m	8 m
Inner standard FIS <sub>I</sub>	Without	2.57 m	8,1	6,2	4,3
		3.07 m	9,1	7,1	5,0
	With inner bracket (bracket 36 resp. 0.36 m)	2.57 m	14,0	11,0	8,0
		3.07 m	16,2	12,7	9,3
Outer standard FAS A	Without (guard system on frame)	2.57 m	11,0	8,2	5,3
		3.07 m	12,6	9,4	6,2
	Outer bracket (73 resp.0.73m) with guard system		Additionally		
		2.57 m	4,3		
		3.07 m	5,1		
	Protective shelter	2.57 m	1,2		
		3.07 m	1,4		

Special cases:

Special case 1	Bridging F U	Inner standard 1,5 x FIS	Outer standard 1,5 x FAS
Special case 2	Passageway frame F D	Inner standard FIS + 0,5 x FAS	Outer standard 0,5 x FAS

### 3.2 Standard versions of uncovered scaffolds

Standard versions of uncovered scaffolds are shown by drawings for different façade configurations, layouts with brackets and other attachments according to the details given in Table 4. More design versions are listed in Table 5.

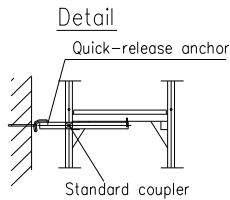
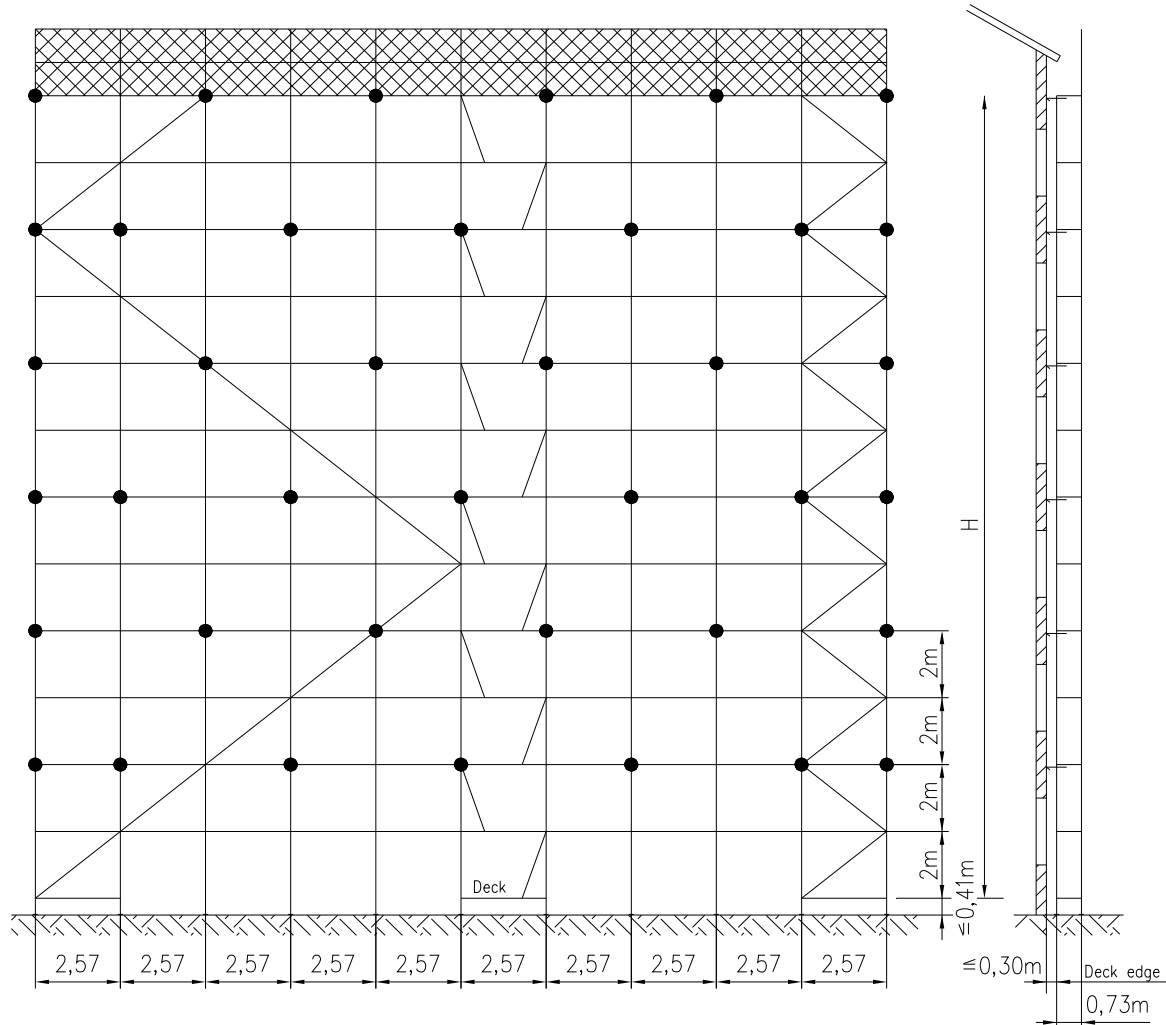
Table 4: Standard versions of uncovered scaffolds in front of open or closed façades

Bay length [m]	Scaffolds provided with	Open façade Fig.	Closed façade Fig.
≤2.57	Guard system	18	26
3.07		19	27
≤2.57	Guard system, inner brackets	20	28
3.07		21	29
≤2.57	Guard system, inner brackets, outer bracket	22	30
3.07		23	31
≤2.57	Guard system, inner brackets, outer bracket, protective shelter	24	32
3.07		25	33



**Fig. 18: Standard version  
uncovered scaffold, w/o attachments  
in front of open façade**

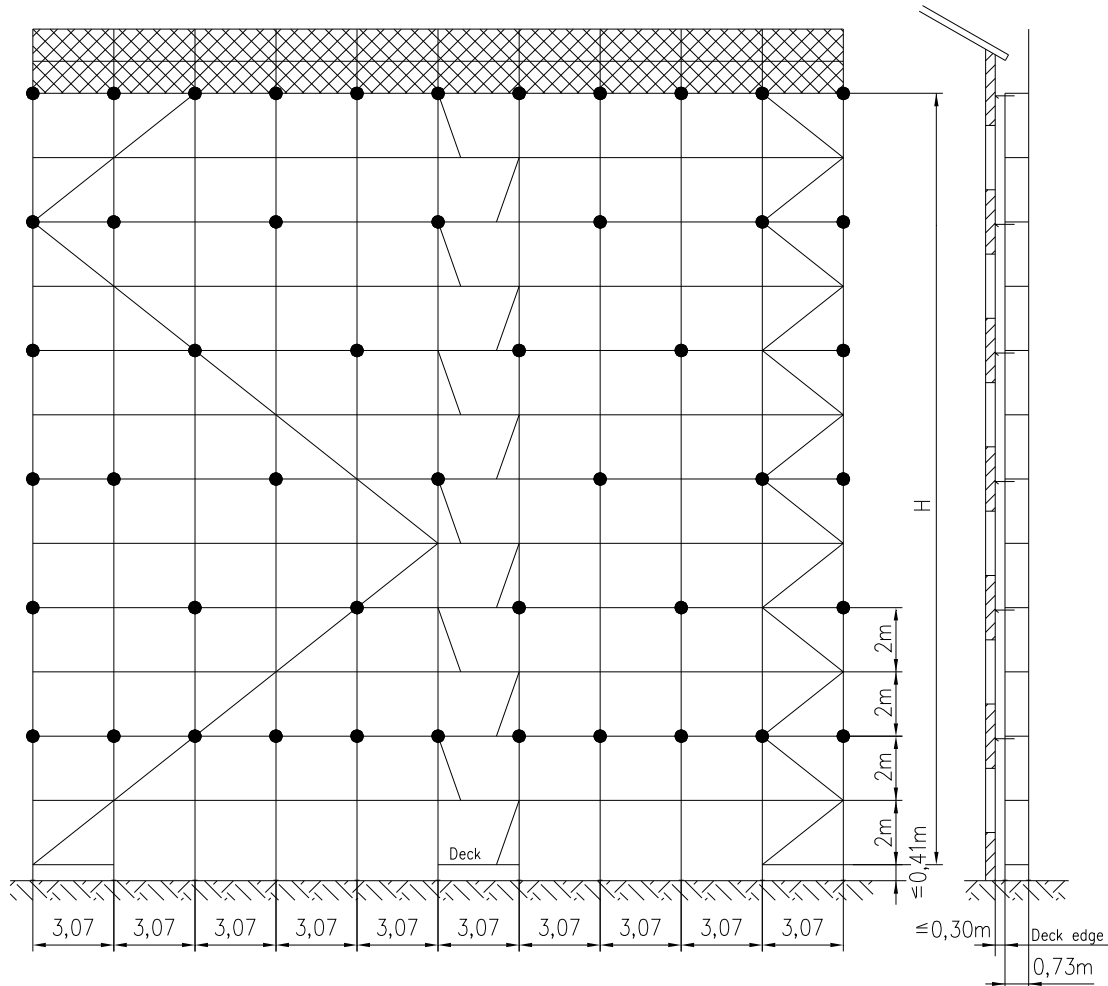
- uncovered scaffold
- all decks  $l \leq 2.57$  m
- w/o brackets
- w. / w/o guard system  
on frame



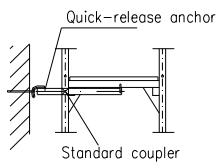
Anchor forces [kN]				
Height		8 m	16 m	24 m
Quick-release anchor/ Continuous scaffold retainer	$A_{\perp}$	4,3	4,3	4,3
	$A_{  }$	Standard type	1,8	1,8
Corner type		3,9	3,9	3,9
Triangular tie	A	-	-	-

**Fig. 19: Standard version  
uncovered scaffold, w/o attachments  
in front of open façade**

uncovered scaffold  
-all decks  $l \leq 3.07$  m  
-w/o brackets  
-w. / w/o guard system  
on frame



Detail

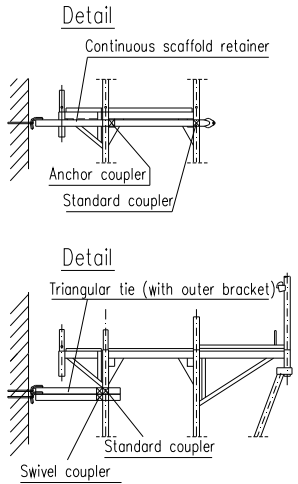
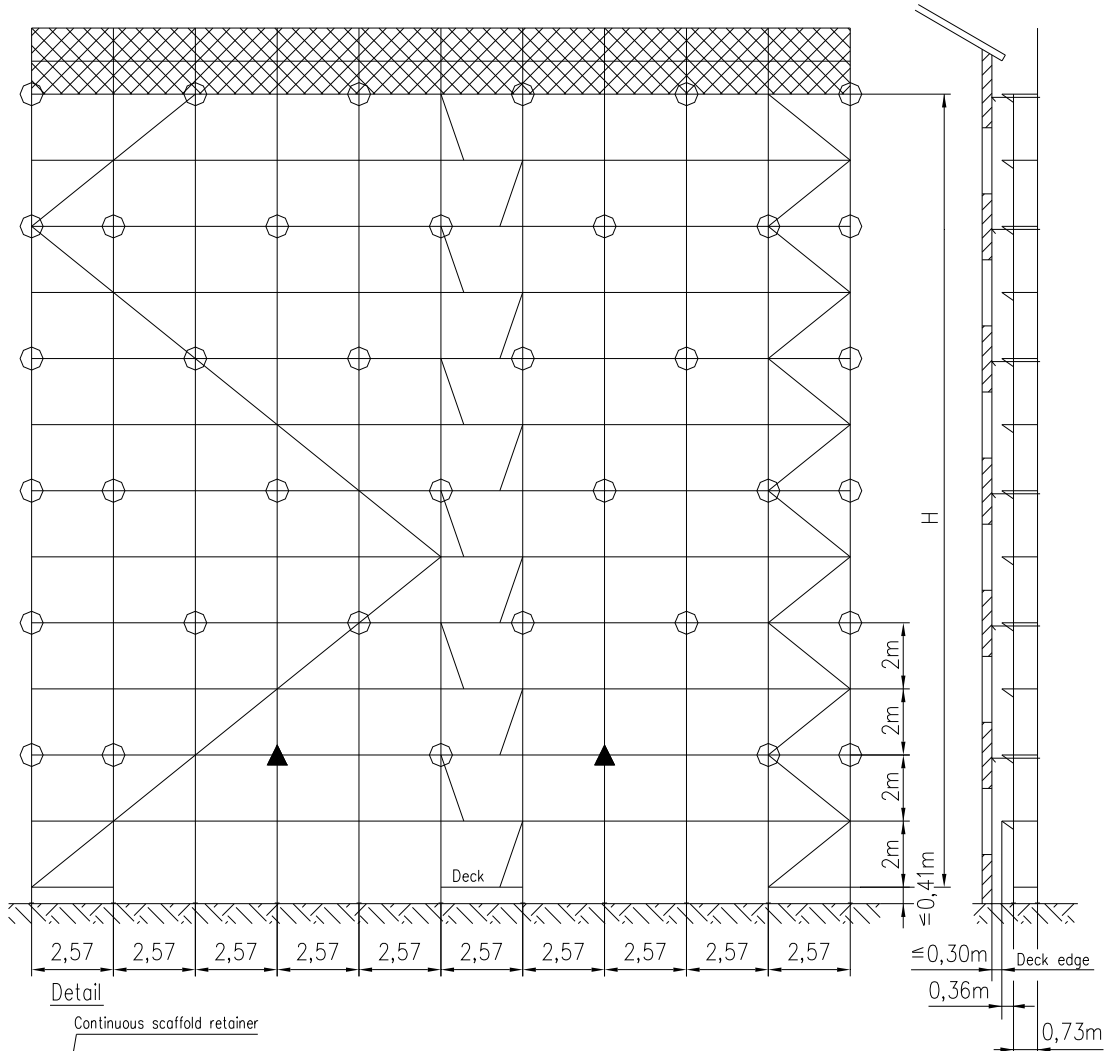


● Quick-release anchor or  
continuous scaffold retainer

Anchor forces [kN]				
Height		8 m	16 m	24 m
Quick-release anchor/ Continuous scaffold retainer	$A_{\perp}$	2,2	3,1	4,2
	$A_{\parallel}$	Standard type	1,8	1,8
Corner type		4,2	4,2	4,2
Triangular tie	A	-	-	-

**Fig. 20: Standard version  
uncovered scaffold, w. attachments  
in front of open façade**

- uncovered scaffold
- all decks  $l \leq 2.57$  m
- w. inner brackets 36cm
- w. / w/o guard system on frame

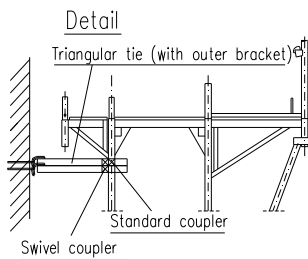
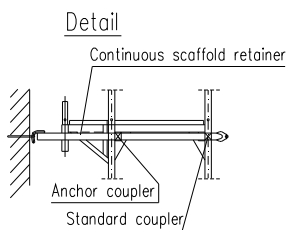
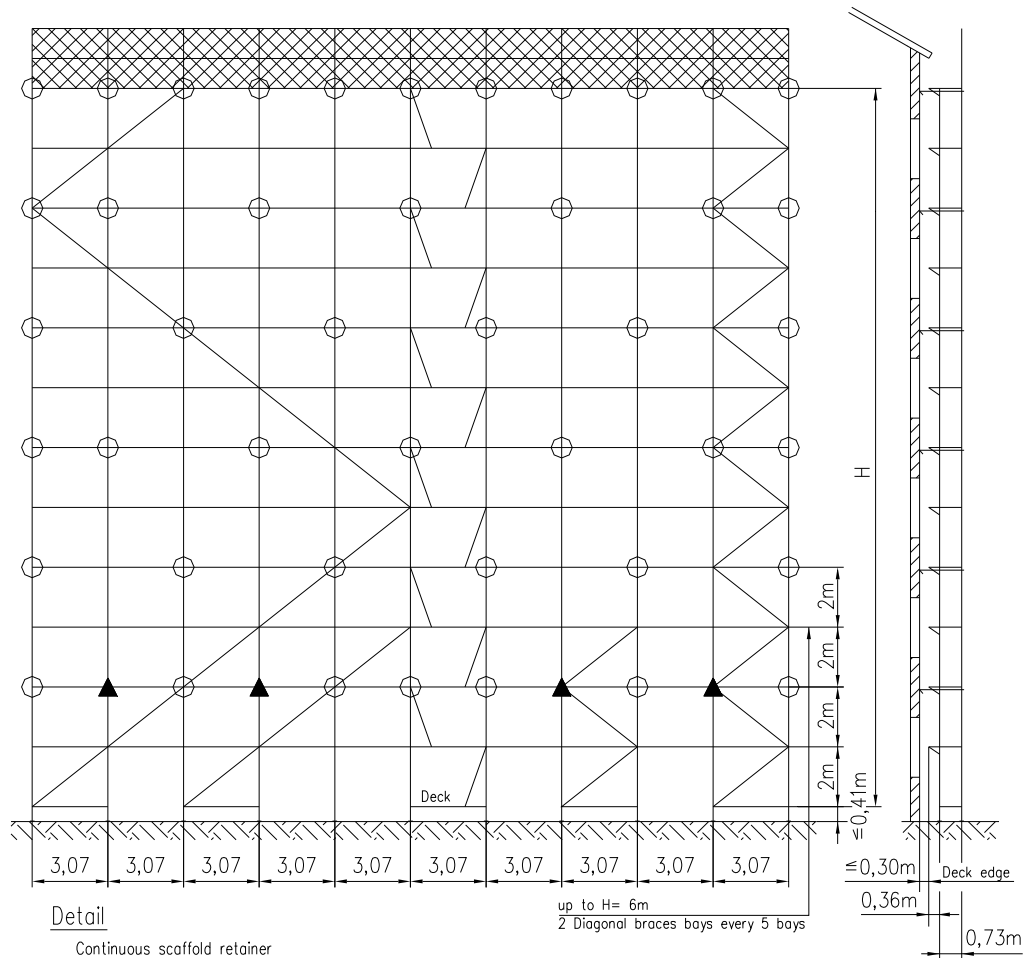


- ⊕ Continuous scaffold retainer or quick-release anchor (without inner bracket)
- ▲ Triangular tie

Anchor forces [kN]					
Height		8 m	16 m	24 m	
Continuous scaffold retainer	$A_{\perp}$	4,3	4,3	4,3	
	$A_{\parallel}$	Standard type	1,7	1,7	1,7
		Corner type	3,9	3,9	3,9
Triangular tie	A	4,6	4,6	4,6	

**Fig. 21: Standard version  
uncovered scaffold, w. attachments  
in front of closed façade**

- uncovered scaffold
- all decks  $l \leq 3.07$  m
- w. inner brackets 36cm
- w. / w/o guard system on frame

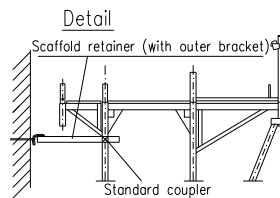
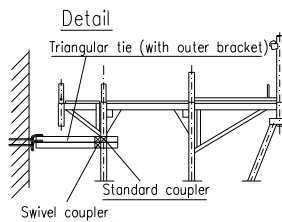
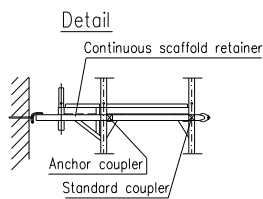
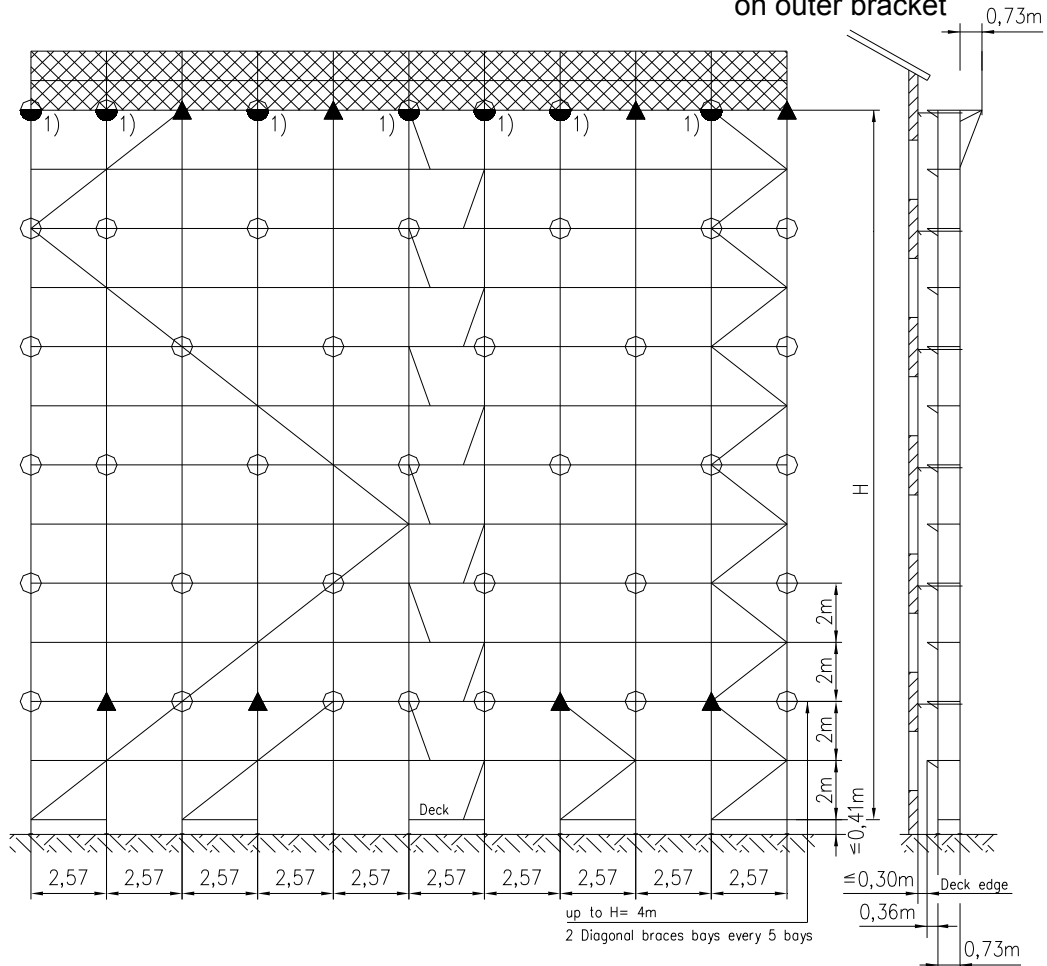


- ⊕ Continuous scaffold retainer or quick-release anchor (without inner bracket)
- ▲ Triangular tie

Anchor forces [kN]					
Height		8 m	16 m	24 m	
Continuous scaffold retainer	$A_{\perp}$	2,2	3,1	4,2	
	$A_{\parallel}$	Standard type	1,7	1,7	1,7
		Corner type	4,2	4,2	4,2
Triangular tie	A	2,6	2,6	2,6	

**Fig. 22: Standard version  
uncovered scaffold, w. attachments  
in front of open façade**

- uncovered scaffold
- all decks  $l \leq 2.57$  m
- w. inner brackets 36cm
- w. outer bracket 73cm
- w. / w/o guard system on outer bracket

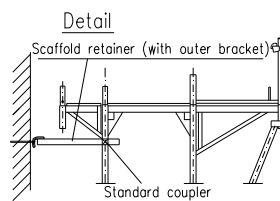
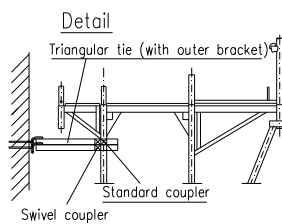
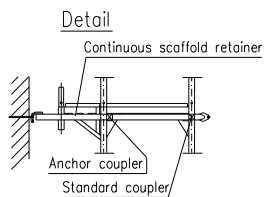
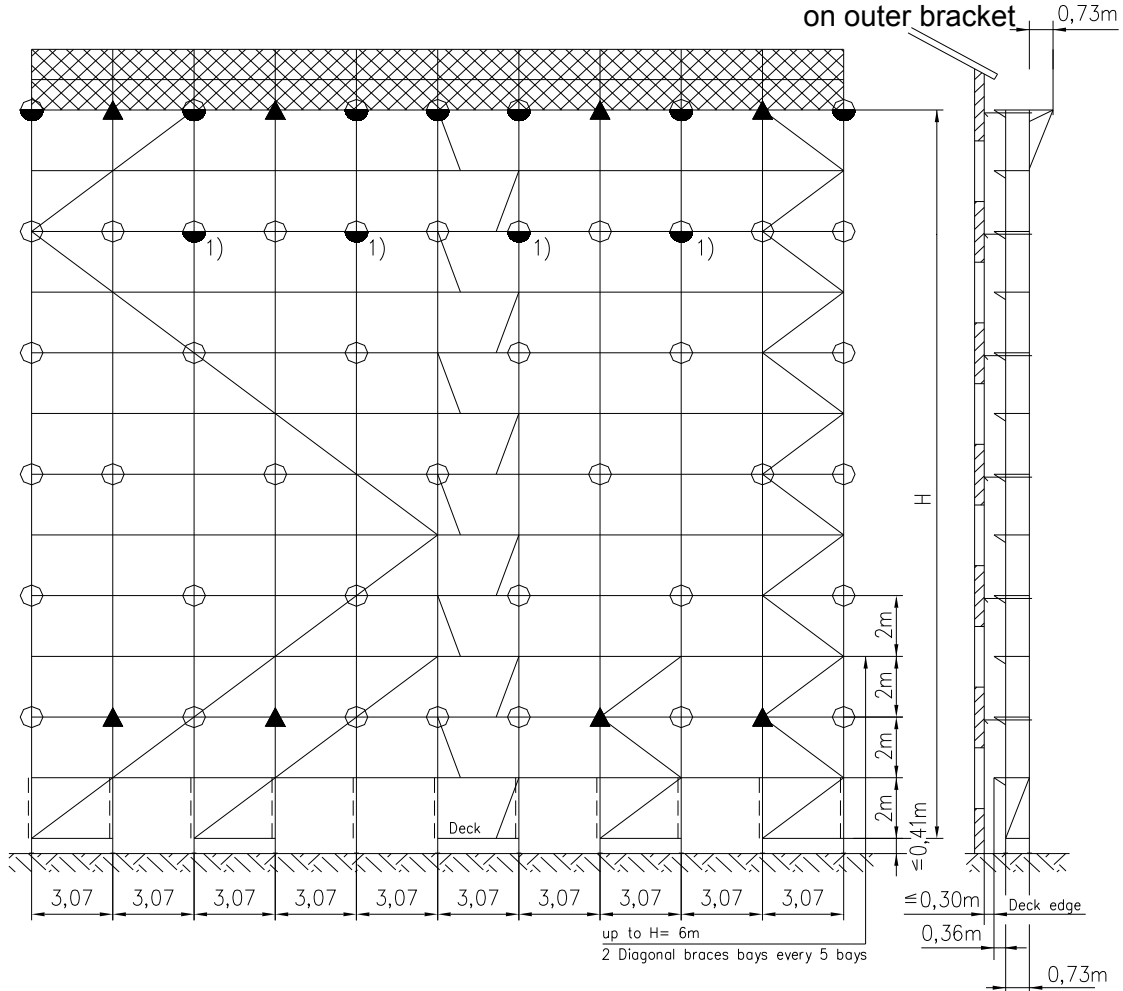


- Scaffold retainer  
1) only for outer bracket 0,73m reinforced
- Continuous scaffold retainer or quick-release anchor (without inner bracket)
- Triangular tie

Anchor forces [kN]				
		Height		
		8 m	16 m	24 m
Scaffold retainer/ Continuous scaffold retainer	$A_{\perp}$	4,3	4,3	4,3
	$A_{\parallel}$	Standard type	1,7	1,7
Corner type		3,9	3,9	3,9
Triangular tie	A	3,3	3,3	3,3

**Fig. 23: Standard version  
uncovered scaffold, w. attachments  
in front of open façade**

- uncovered scaffold
- all decks  $l \leq 3.07$  m
- w. inner brackets 36cm
- w. outer bracket 73cm
- w. / w/o guard system  
on outer bracket

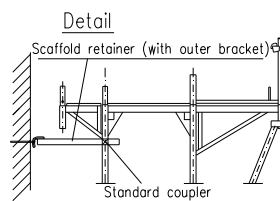
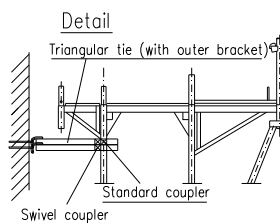
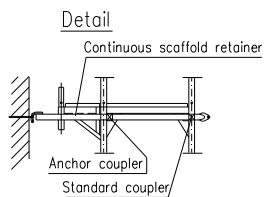
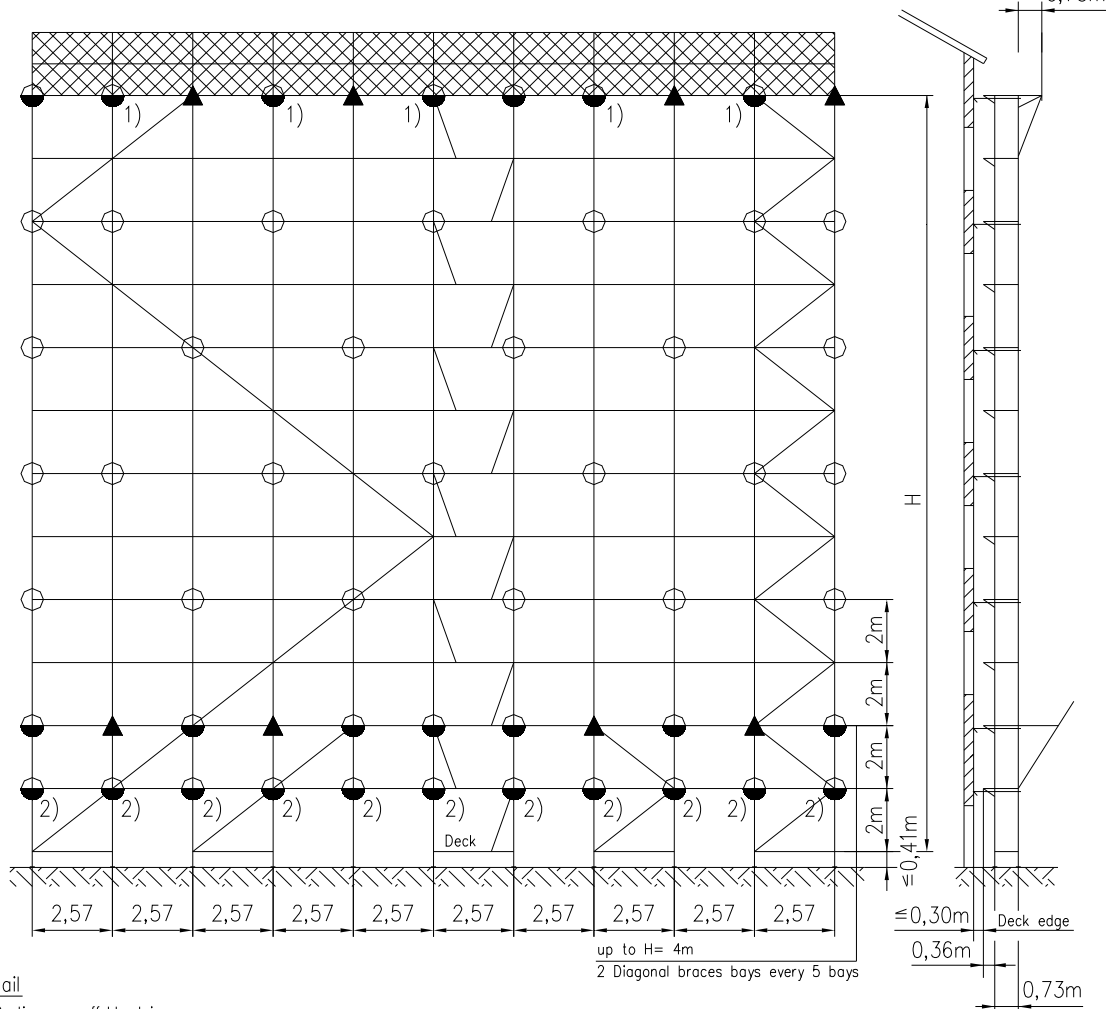


- Scaffold retainer  
1) only for outer bracket 0,73m reinforced
- ⊕ Continuous scaffold retainer or  
quick-release anchor (without inner bracket)
- ▲ Triangular tie

Anchor forces [kN]				
Height		8 m	16 m	24 m
Scaffold retainer/ Continuous scaffold retainer	$A_{\perp}$	2,2	3,1	4,2
	$A_{\parallel}$	Standard type	1,7	1,7
Corner type		4,2	4,2	4,2
Triangular tie	A	2,9	2,9	2,9

**Fig. 24: Standard version  
uncovered scaffold, w. attachments  
in front of open façade**

- uncovered scaffold
- all decks  $l \leq 2.57$  m
- w. inner brackets 36cm
- w. outer bracket 73cm
- w. / w/o guard system
- w. protective shelter

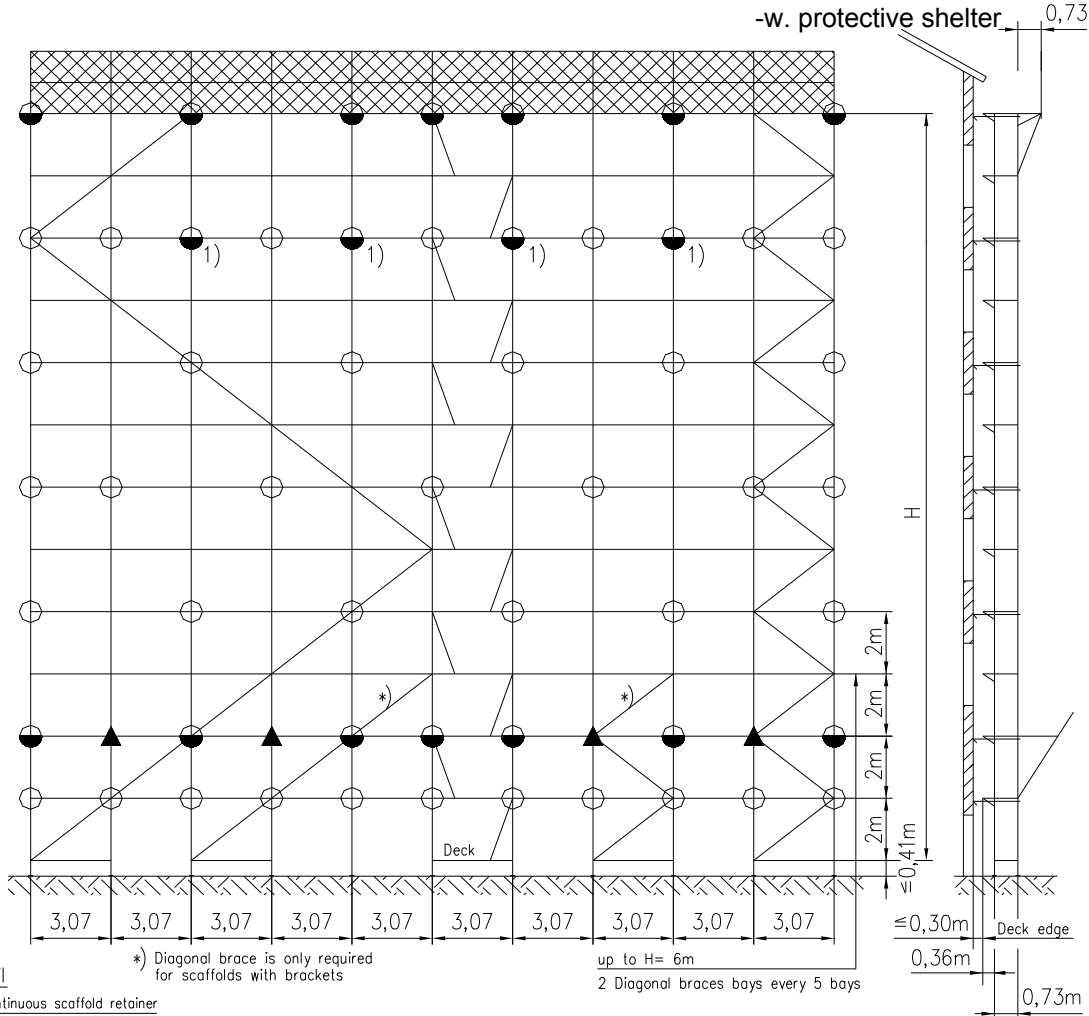


- Scaffold retainer  
1) only for outer bracket 0,73m reinforced  
2) only for protective shelter bracket 2,10m
- ⊕ Continuous scaffold retainer or  
quick-release anchor (without inner bracket)
- ▲ Triangular tie

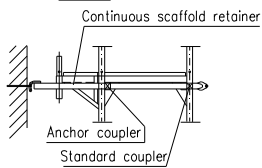
		Anchor forces [kN]		
		Height		
		8 m	16 m	24 m
Scaffold retainer/ Continuous scaffold retainer	$A_{\perp}$	4,1	4,1	4,3
	$A_{\parallel}$	Standard type	1,7	1,7
Corner type		3,9	3,9	3,9
Triangular tie	$A$	3,3	3,3	3,3

**Fig. 25: Standard version  
uncovered scaffold, w. attachments  
in front of open façade**

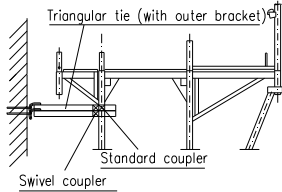
- uncovered scaffold
- all decks  $l \leq 3.07$  m
- w./ w/o inner brackets 36cm
- w./ w/o outer bracket 73cm
- w. / w/o guard system
- w. protective shelter



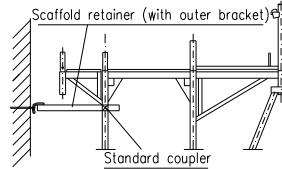
**Detail**



**Detail**



**Detail**



\*) Diagonal brace is only required for scaffolds with brackets

up to H= 6m  
2 Diagonal braces bays every 5 bays

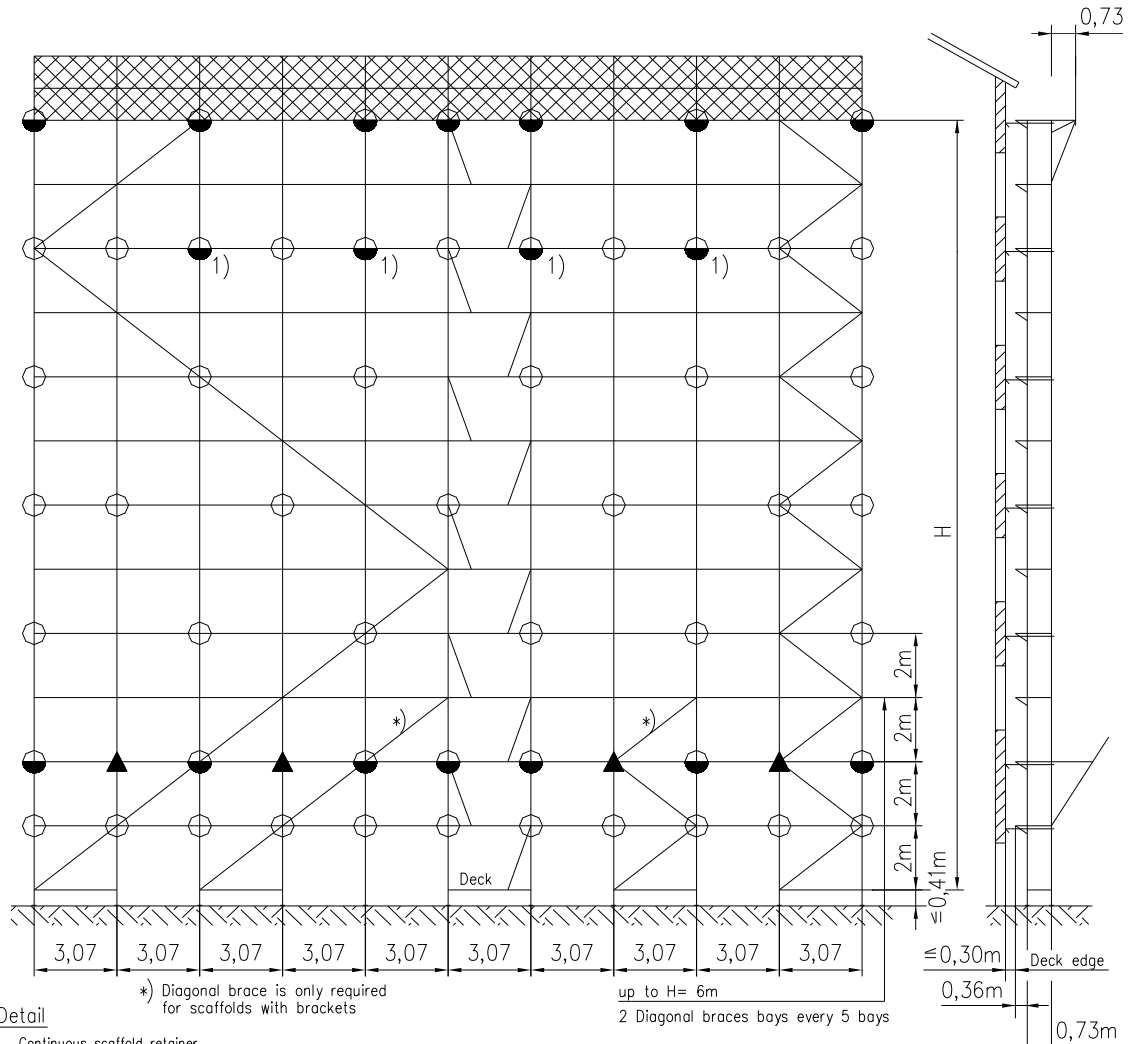
- Scaffold retainer  
1) only for outer bracket 0,73m reinforced
- ⊕ Continuous scaffold retainer or quick-release anchor (without inner bracket)
- ▲ Triangular tie

Anchor forces [kN]				
Height		8 m	16 m	24 m
Scaffold retainer/ Continuous scaffold retainer	A <sub>L</sub>	2,9	3,7	4,2
	A <sub>II</sub>	Standard type	1,7	1,7
Corner type		4,2	4,2	4,2
Triangular tie	A	2,9	2,9	2,9

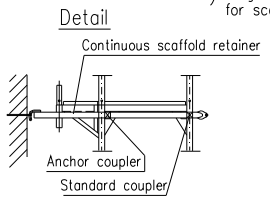


**Fig. 26: Standard version  
uncovered scaffold, w/o attachments  
in front of closed façade**

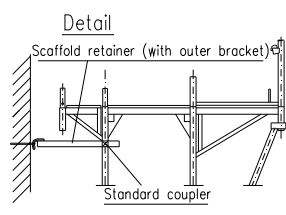
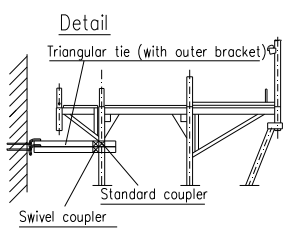
- uncovered scaffold
- all decks  $l \leq 2.57$  m
- w/o brackets
- w. / w/o guard system on frame



\*) Diagonal brace is only required for scaffolds with brackets up to H= 6m  
2 Diagonal braces bays every 5 bays



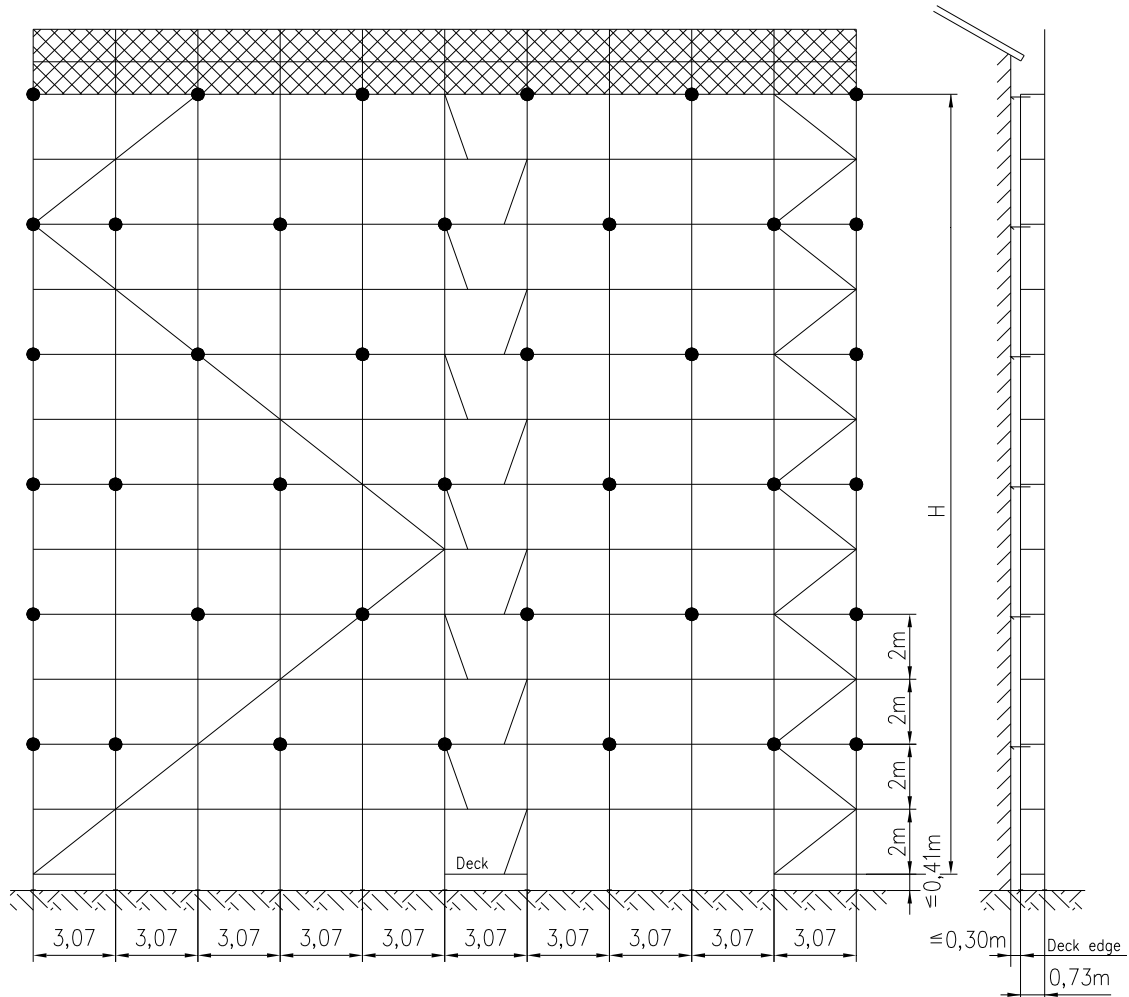
- Scaffold retainer  
1) only for outer bracket 0,73m reinforced
- ⊕ Continuous scaffold retainer or quick-release anchor (without inner bracket)
- ▲ Triangular tie



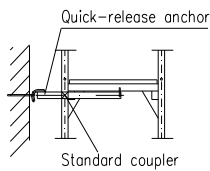
Anchor forces [kN]				
Height		8 m	16 m	24 m
Scaffold retainer/ Continuous scaffold retainer	A <sub>L</sub>	2,9	3,7	4,2
	A <sub>II</sub>	Standard type	1,7	1,7
Corner type		4,2	4,2	4,2
Triangular tie	A	2,9	2,9	2,9

**Fig. 27: Standard version  
uncovered scaffold, w/o attachments  
in front of closed façade**

- uncovered scaffold
- all decks  $l \leq 3.07$  m
- without brackets
- w./ w/o guard system on frame



Detail

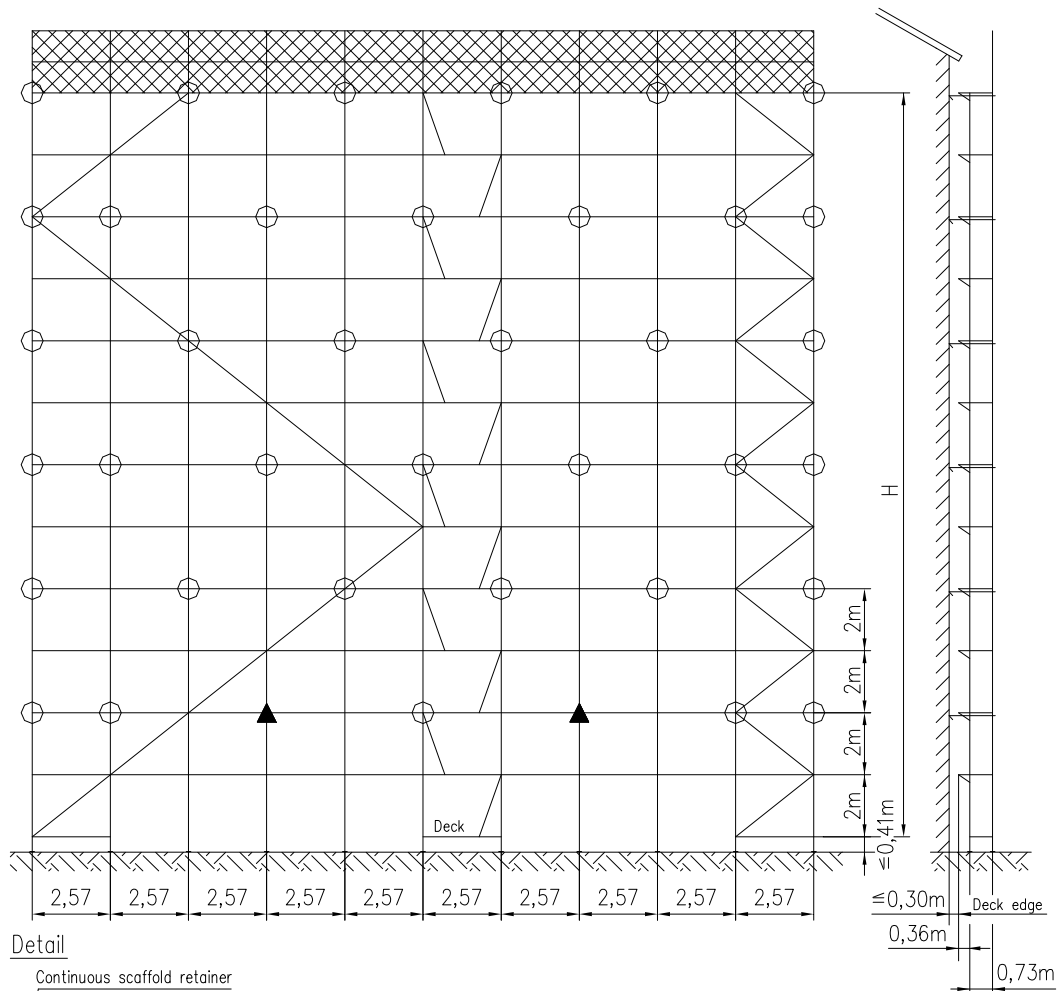


● Quick-release anchor or continuous scaffold retainer

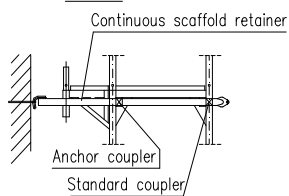
Anchor forces [kN]				
Height		8 m	16 m	24 m
Quick-release anchor/ Continuous scaffold retainer	$A_{\perp}$	1,7	1,8	2,2
	$A_{\parallel}$	Standard type	1,8	1,8
Corner type		3,5	3,5	3,5
Triangular tie	A	-	-	-

**Fig. 28: Standard version  
uncovered scaffold, w. attachments  
in front of closed façade**

- uncovered scaffold
- all decks  $l \leq 2.57$  m
- w. inner brackets 36cm
- w./ w/o guard system on frame

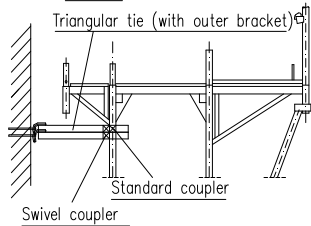


Detail



- ⊕ Continuous scaffold retainer or quick-release anchor (without inner bracket)
- ▲ Triangular tie

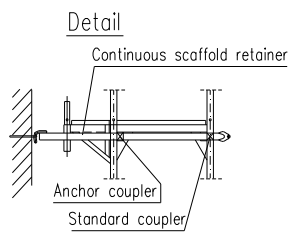
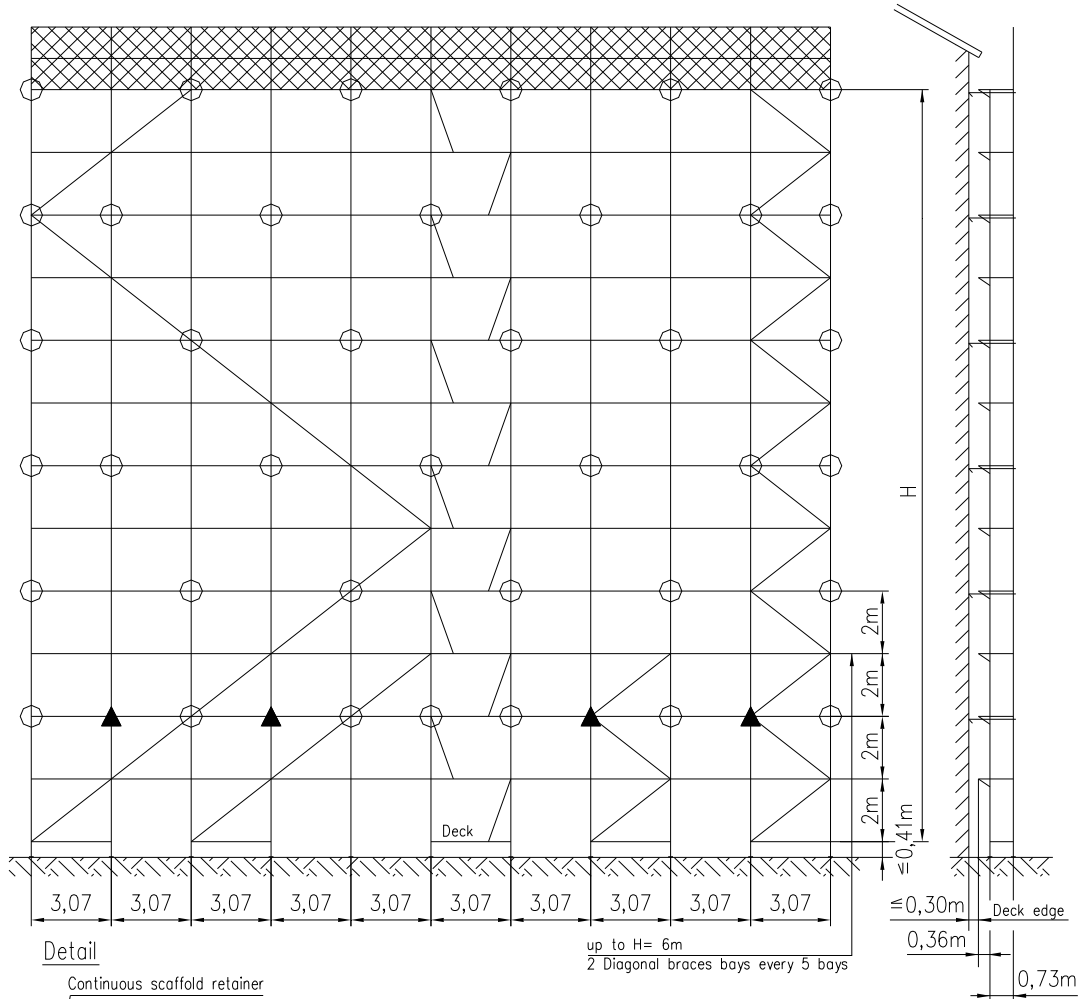
Detail



Anchor forces [kN]					
		Height			
		8 m	16 m	24 m	
Continuous scaffold retainer	$A_{\perp}$	1,6	1,6	1,7	
	$A_{\parallel}$	Standard type	1,7	1,7	1,7
		Corner type	3,3	3,3	3,3
Triangular tie	A	4,6	4,6	4,6	

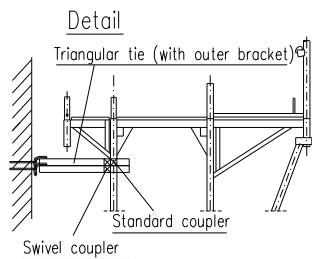
**Fig. 29: Standard version  
uncovered scaffold, w. attachments  
in front of closed façade**

- uncovered scaffold
- all decks  $l \leq 3.07$  m
- w. inner brackets 36cm
- w./ w/o guard system on frame



⊕ Continuous scaffold retainer or quick-release anchor (without inner bracket)

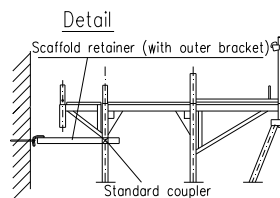
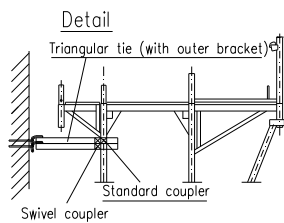
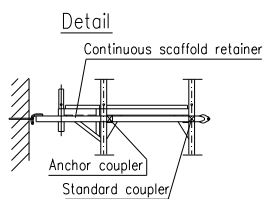
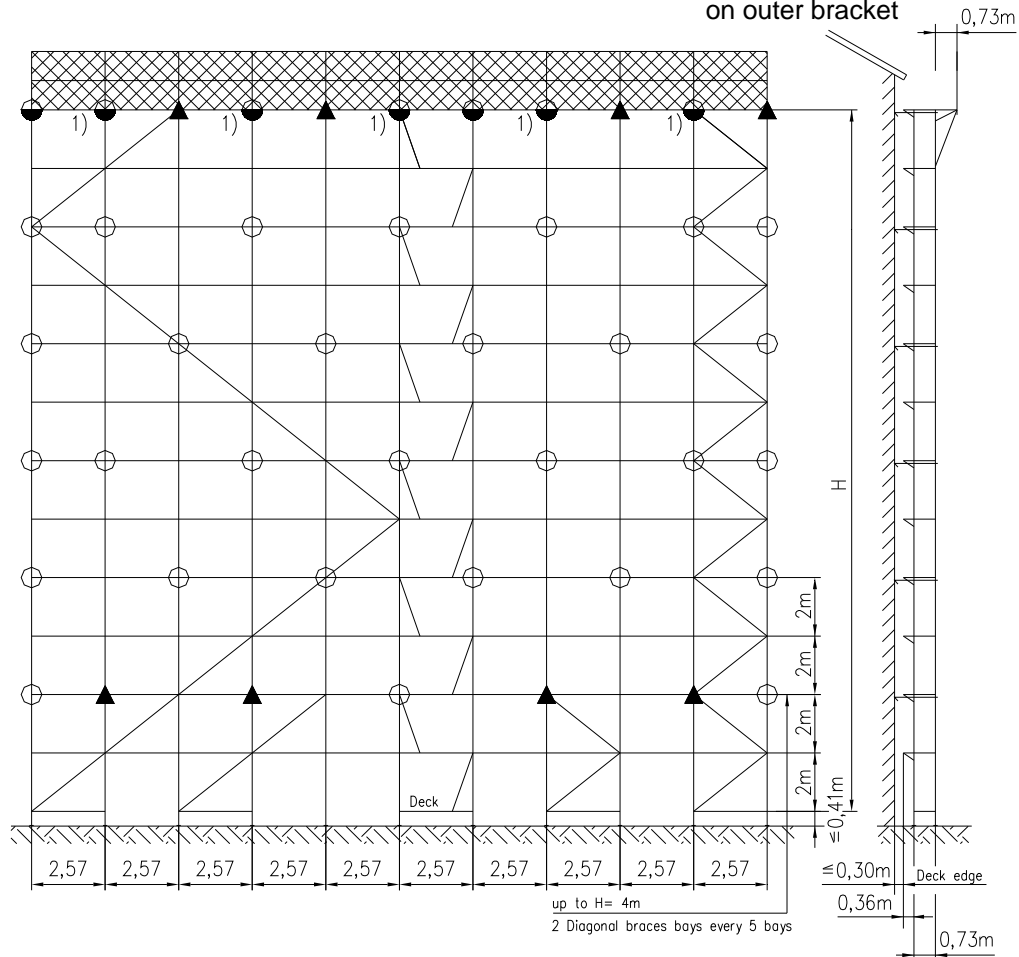
▲ Triangular tie



Anchor forces [kN]					
Height		8 m	16 m	24 m	
Continuous scaffold retainer	$A_{\perp}$	1,7	1,8	2,2	
	$A_{\parallel}$	Standard type	1,7	1,7	1,7
		Corner type	3,5	3,5	3,5
Triangular tie	A	2,6	2,6	2,6	

**Fig. 30: Standard version  
uncovered scaffold, w. attachments  
in front of closed façade**

- uncovered scaffold
- all decks  $l \leq 2.57$  m
- with inner brackets 36cm
- with outer bracket 73cm
- w. / w/o guard system  
on outer bracket



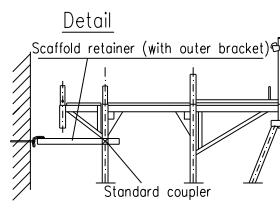
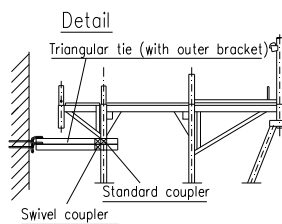
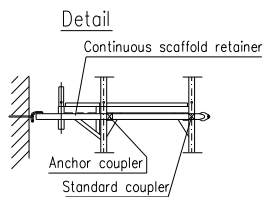
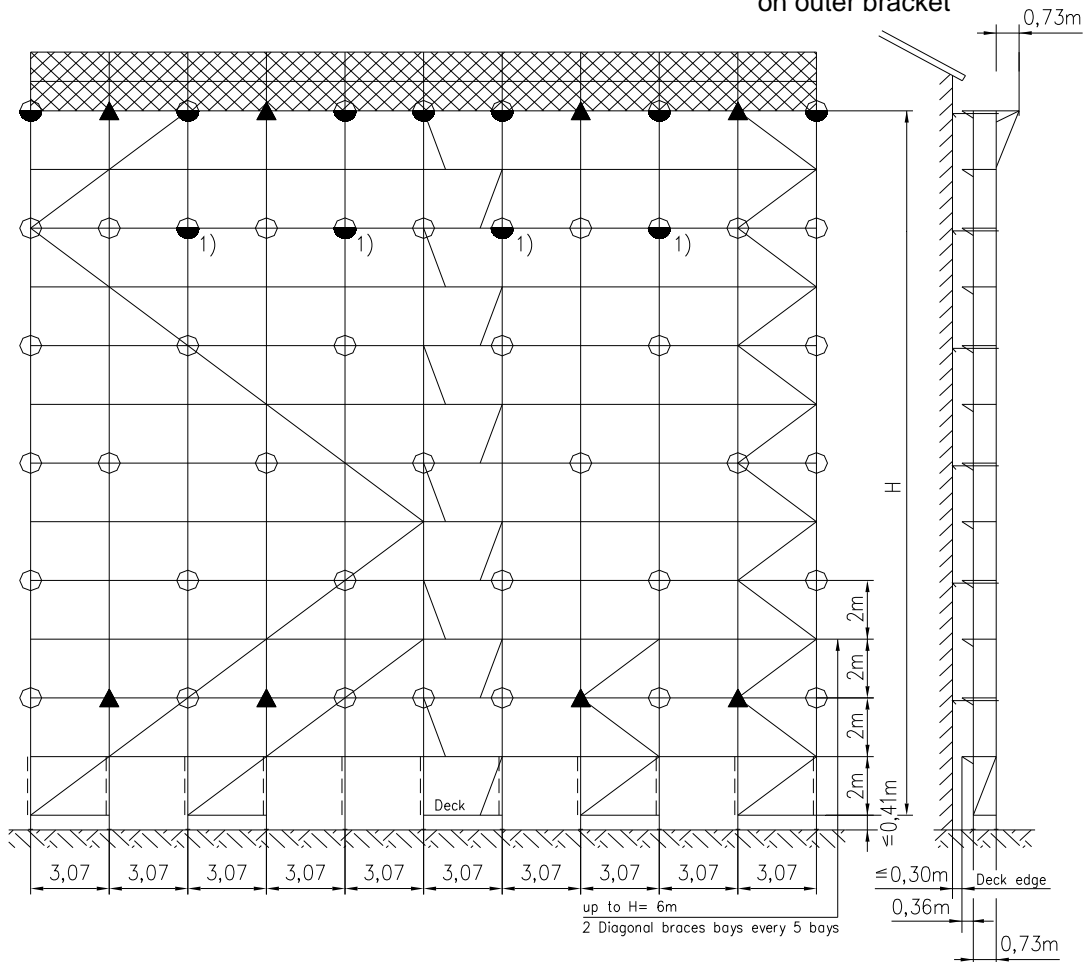
- Scaffold retainer  
1) only for outer bracket 0,73m reinforced
- ⊕ Continuous scaffold retainer or quick-release anchor (without inner bracket)
- ▲ Triangular tie

Anchor forces [kN]				
Height		8 m	16 m	24 m
Scaffold retainer/ Continuous scaffold retainer	A <sub>I</sub>	1,6	1,6	1,7 (2,1)
	A <sub>II</sub>	Standard type	1,7	1,7
Corner type		3,3	3,3	3,3
Triangular tie	A	2,9	2,9	2,9

( ) Value only applies to outer bracket without brace

**Fig. 31: Standard version  
uncovered scaffold, w. attachments  
in front of closed façade**

- uncovered scaffold
- all decks  $l \leq 3.07$  m
- with inner brackets 36cm
- with outer bracket 73cm
- w. / w/o guard system  
on outer bracket



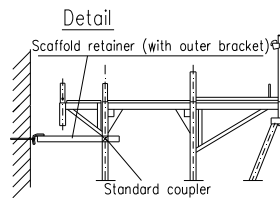
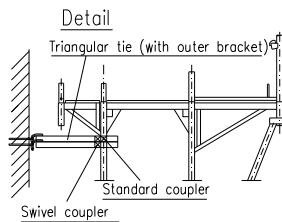
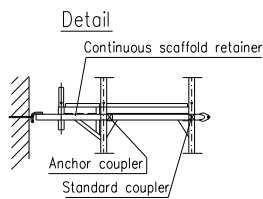
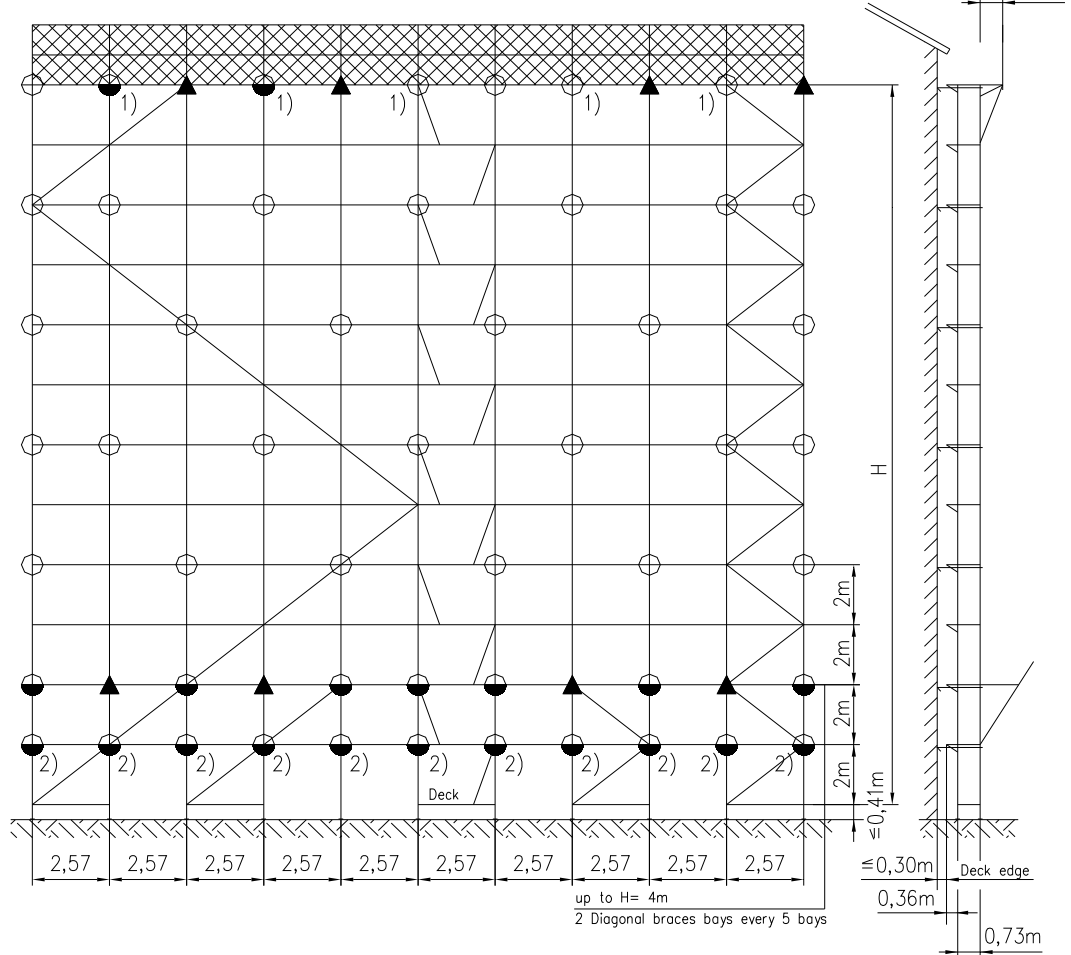
- Scaffold retainer  
1) only for outer bracket 0,73m reinforced
- Continuous scaffold retainer or  
quick-release anchor (without inner bracket)
- ▲ Triangular tie

Anchor forces [kN]				
Height		8 m	16 m	24 m
Scaffold retainer/ Continuous scaffold retainer	A <sub>I</sub>	0,9	1,2	1,5 (2,4)
	A <sub>II</sub>	Standard type	1,7	1,7
Corner type		3,5	3,5	3,5
Triangular tie	A	2,9	2,9	2,9

( ) Value only applies to outer bracket without brace

**Fig. 32: Standard version  
uncovered scaffold, w. attachments  
in front of closed façade**

- uncovered scaffold
- all decks  $l \leq 2.57$  m
- w. / w/o inner brackets 36cm
- w. / w/o outer bracket 73cm
- w. / w/o guard system  
with protective shelter



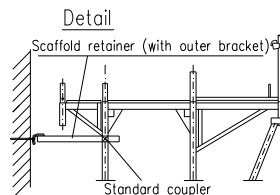
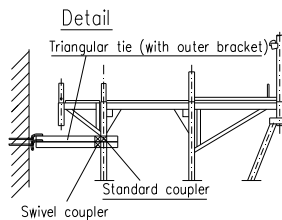
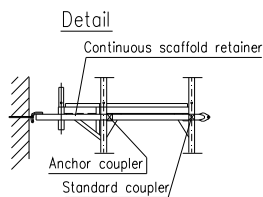
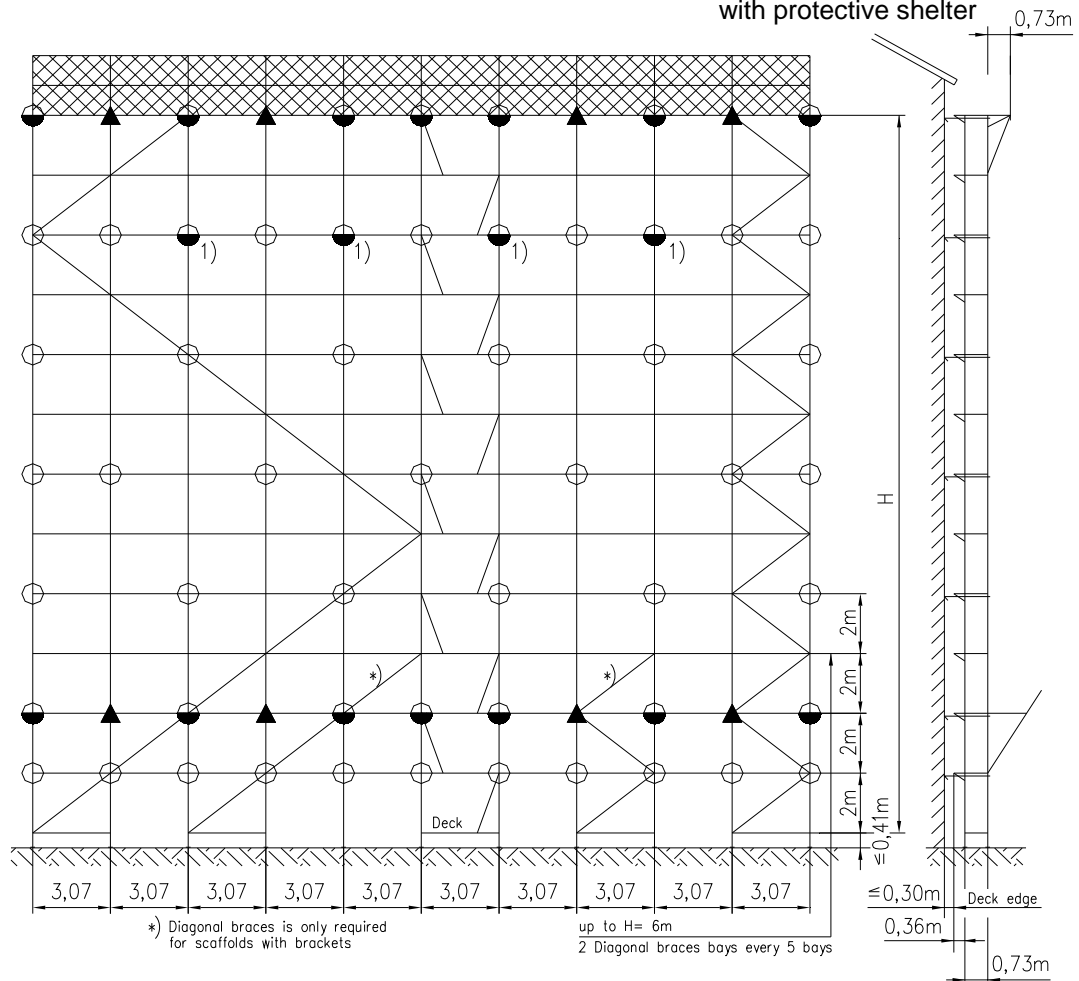
- Scaffold retainer  
1) only for outer bracket 0,73m reinforced  
2) only for protective shelter bracket 2,10m
- ⊕ Continuous scaffold retainer or quick-release anchor (without inner bracket)
- ▲ Triangular tie

Anchor forces [kN]				
Height		8 m	16 m	24 m
Scaffold retainer/	$A_{\perp}$	1,7	1,7	1,7 (2,1)
	Continuous scaffold retainer	Standard type	1,7	1,7
Corner type		3,3	3,3	3,3
Triangular tie	$A$	2,9	2,9	2,9

( ) Value only applies to outer bracket without brace

**Fig. 33: Standard version  
uncovered scaffold, w. attachments  
in front of closed façade**

- uncovered scaffold
- all decks  $l \leq 3.07$  m
- w. / w/o inner brackets 36cm
- w. / w/o outer bracket 73cm
- w. / w/o guard system  
with protective shelter



- Scaffold retainer  
1) only for outer bracket 0,73m reinforced
- ⊕ Continuous scaffold retainer or quick-release anchor (without inner bracket)
- ▲ Triangular tie

Anchor forces [kN]				
Height		8 m	16 m	24 m
Scaffold retainer/ Continuous scaffold retainer	$A_{\perp}$	1,4	1,5	1,5 (2,4)
	$A_{II}$	Standard type	1,7	1,7
Corner type		3,5	3,5	3,5
Triangular tie	A	2,9	2,9	2,9

( ) Value only applies to outer bracket without brace

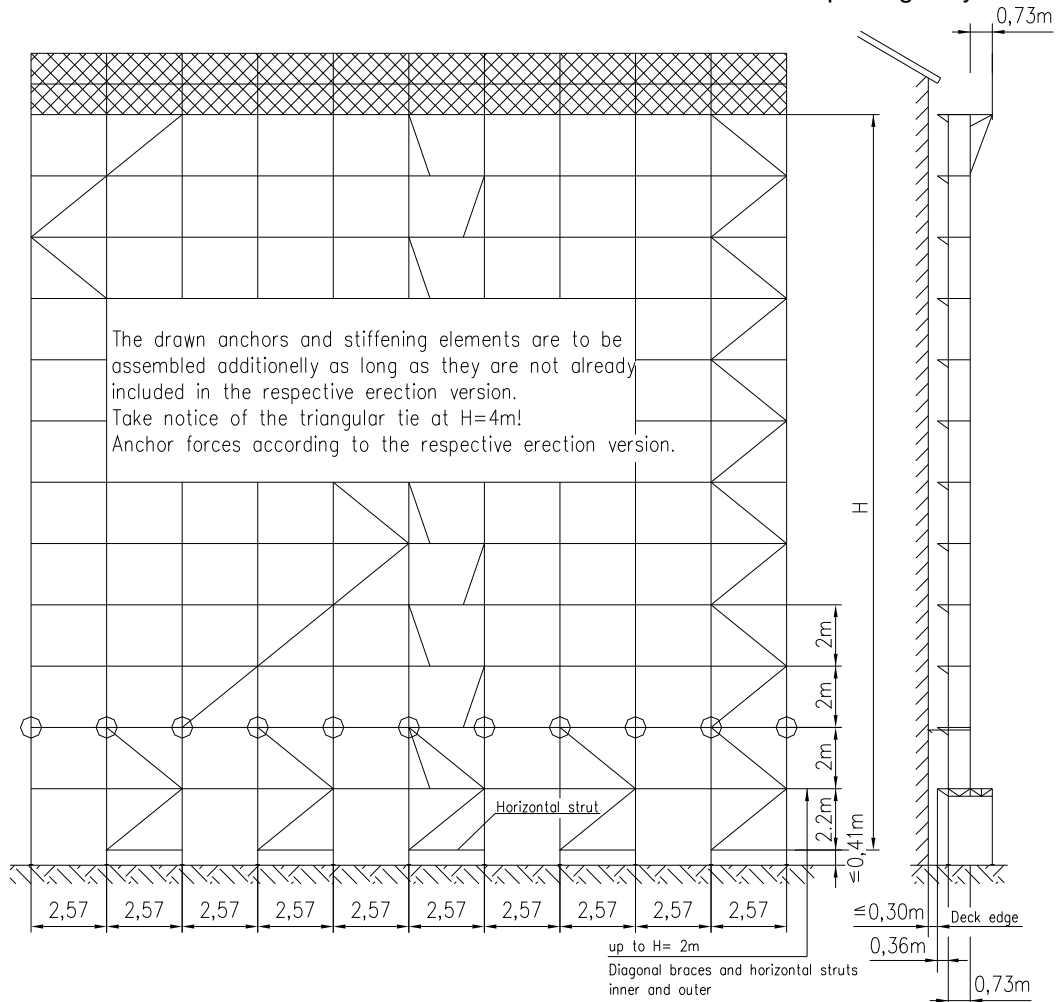


Table 5: Versions of uncovered scaffolds in front of open or closed façades

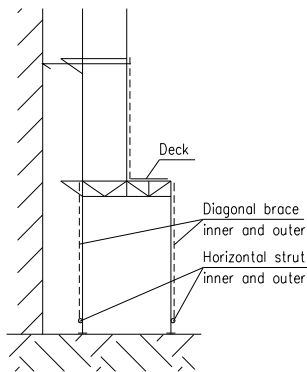
Bay length [m]	Scaffolds provided with	Passageway frame  Fig.	Bridging bay 4.14 m  Fig.	Bridging with lattice girders  Fig.
≤2.57	Guard system	34	36	37
3.07		35	36	38
≤2.57	Guard system, inner brackets, outer brackets, protective shelter	34	36	39
3.07		35	36	40

**Fig. 34: Standard version  
uncovered scaffold, w. attachments  
in front of open or closed façade**

- uncovered scaffold
- all decks  $l \leq 2.57$  m
- w. / w/o inner brackets 36cm
- w. / w/o outer bracket 73cm
- w. / w/o guard system  
with passageway frame



Detail

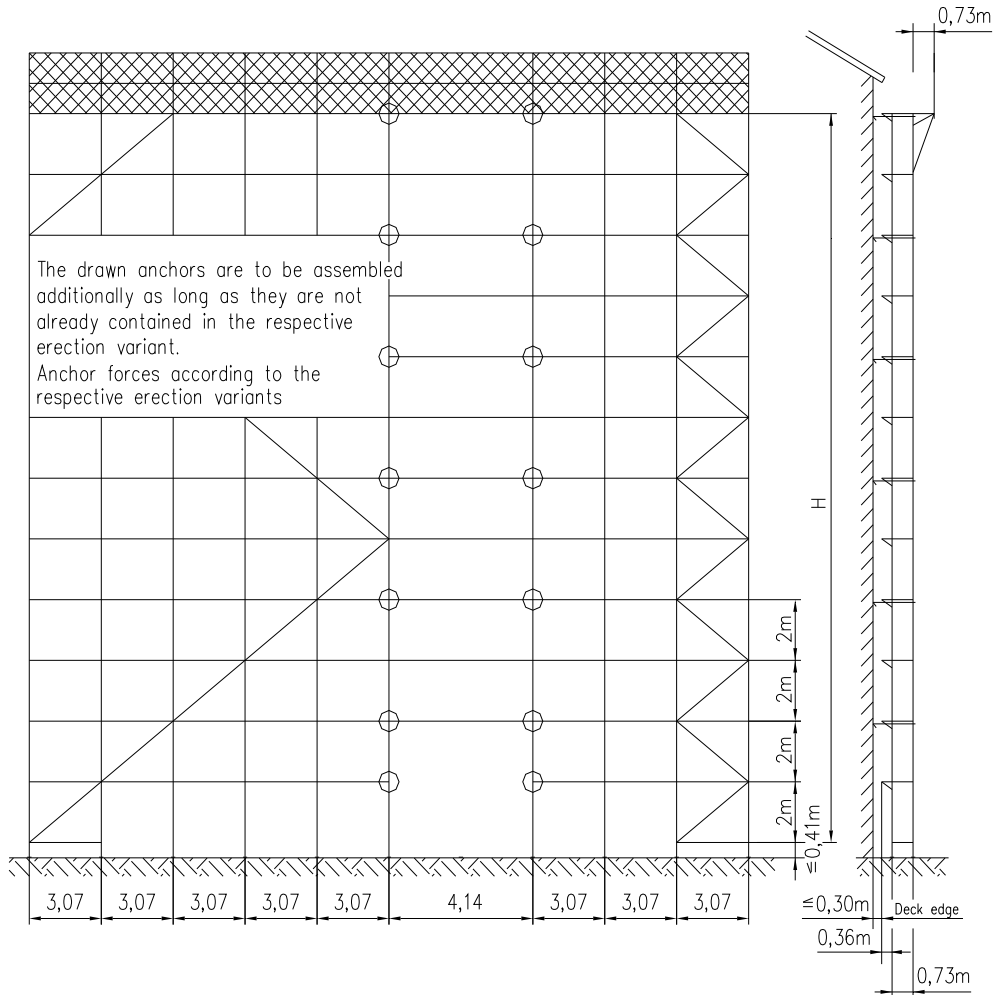


⊕ Continuous scaffold retainer or quick-release anchor (without inner brackets)



**Fig. 36: Standard version  
uncovered scaffold, w. attachments  
in front of open or closed façade**

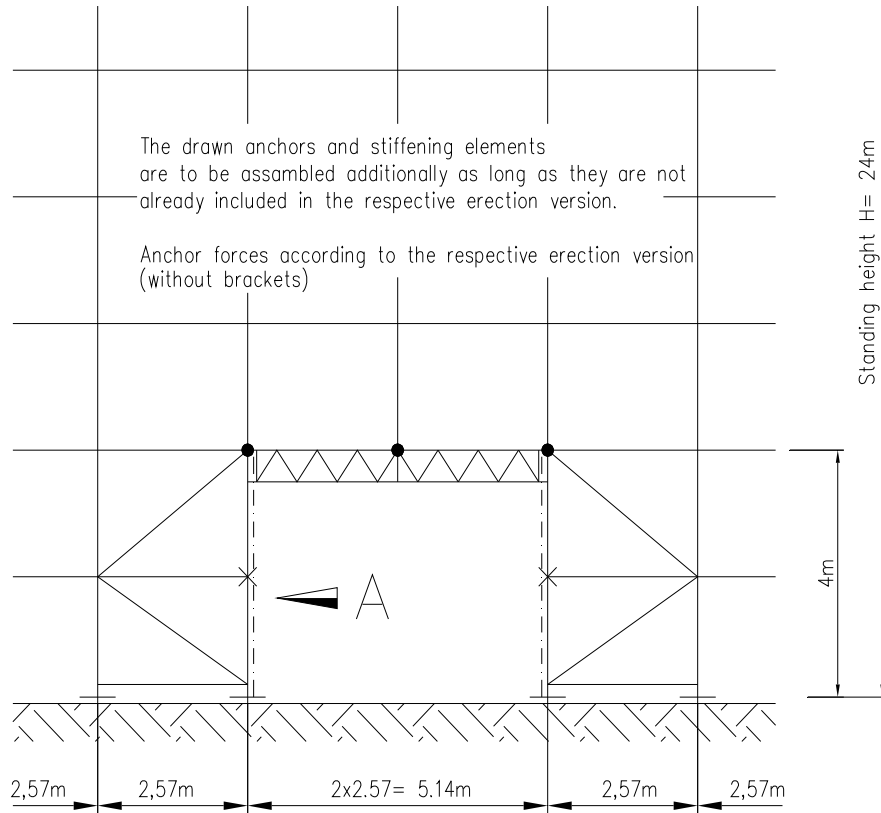
- uncovered scaffold
- all decks  $l \leq 3.07$  m
- w. / w/o inner brackets 36cm
- w. / w/o outer bracket 73cm
- w. / w/o guard system  
with bridging bay 4.14m



⊕ Continuous scaffold retainer or  
quick-release anchor (without inner bracket)

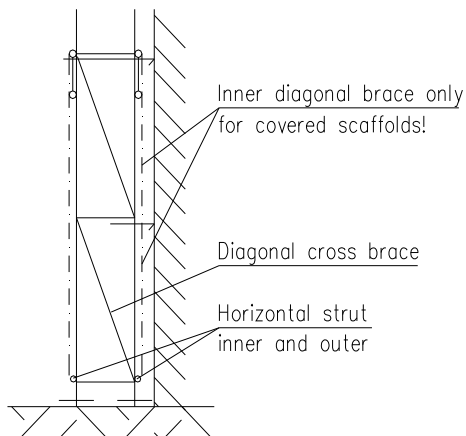
**Fig. 37: Standard version  
bridging, without attachments  
in front of open or closed façade**

- bridging
- all decks  $l \leq 2.57$  m
- without brackets



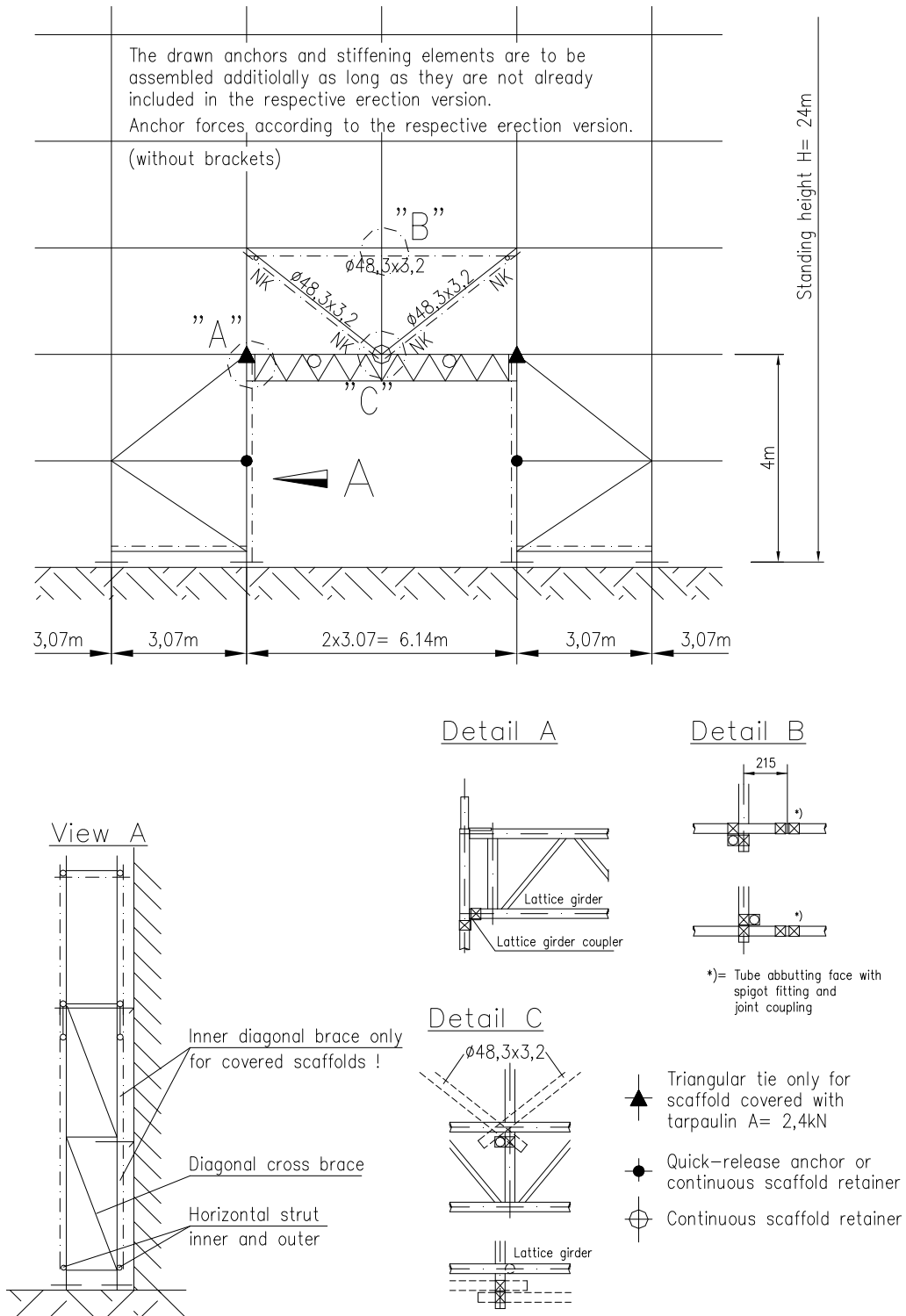
- Quick-release anchor or continuous scaffold retainer
- × Additional anchor for tarpaulin covering

Ansicht A



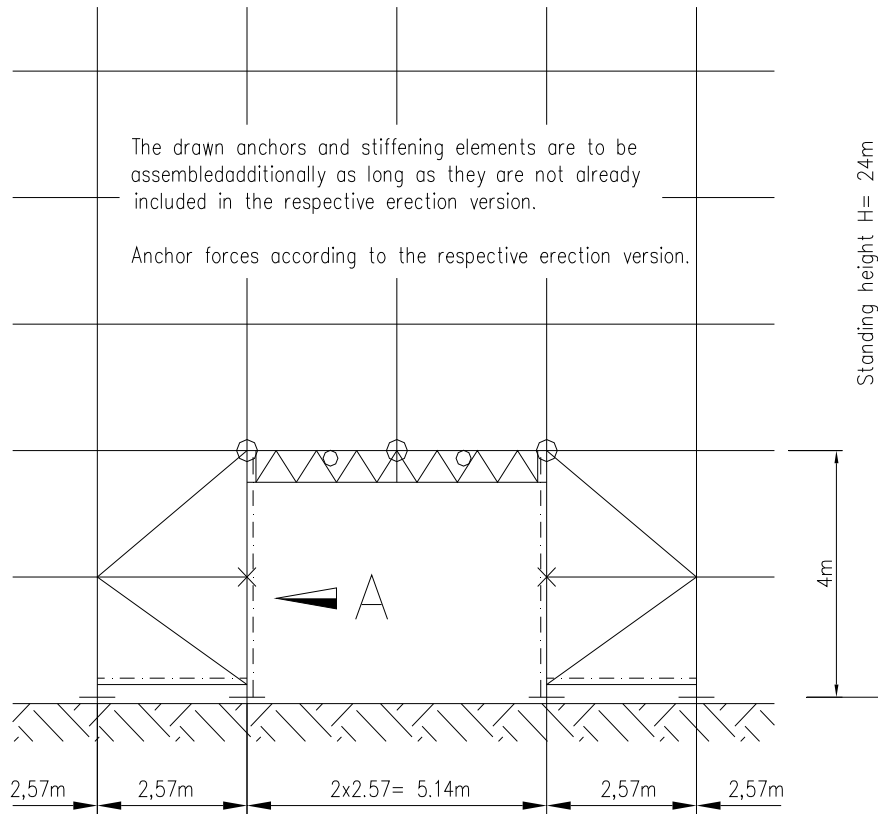
**Fig. 38: Standard version  
bridging, without attachments  
in front of open or closed façade**

- bridging
- all decks  $l \leq 3.07 \text{ m}$
- without brackets

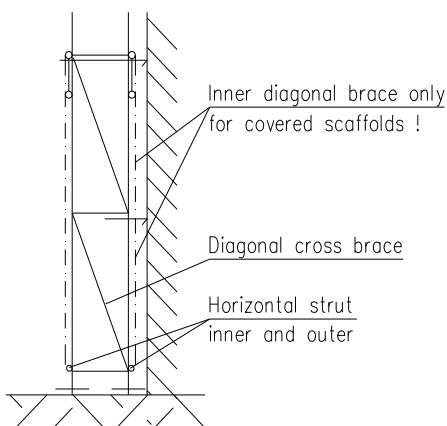


**Fig. 39: Standard version  
bridging, with attachments  
in front of open or closed façade**

- bridging
- all decks  $l \leq 2.57$  m
- w. / w/o inner brackets 36 cm
- w. / w/o outer bracket 73 cm



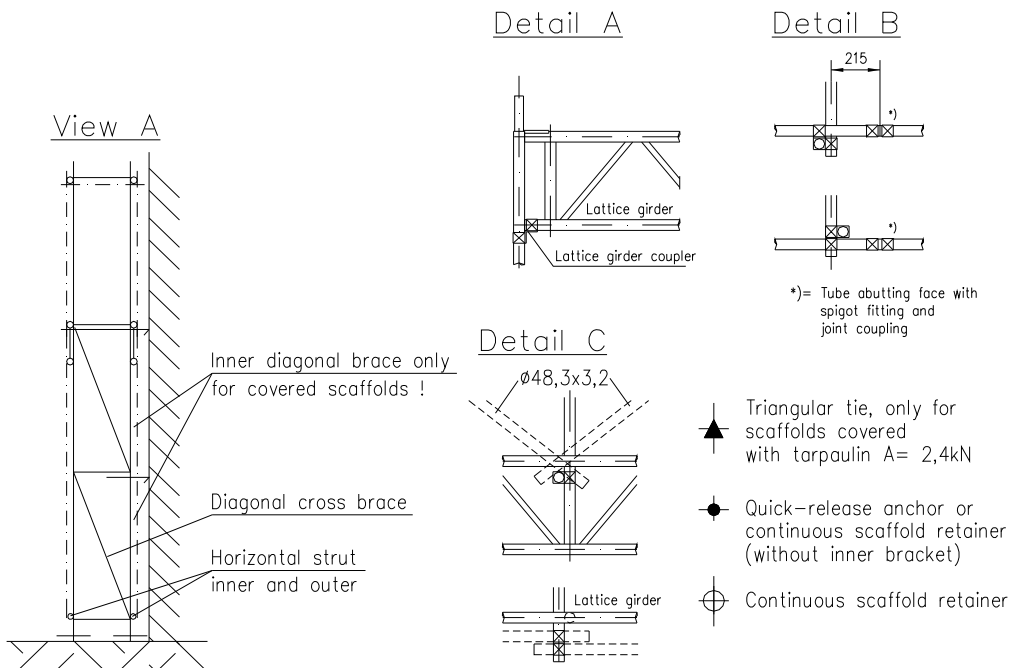
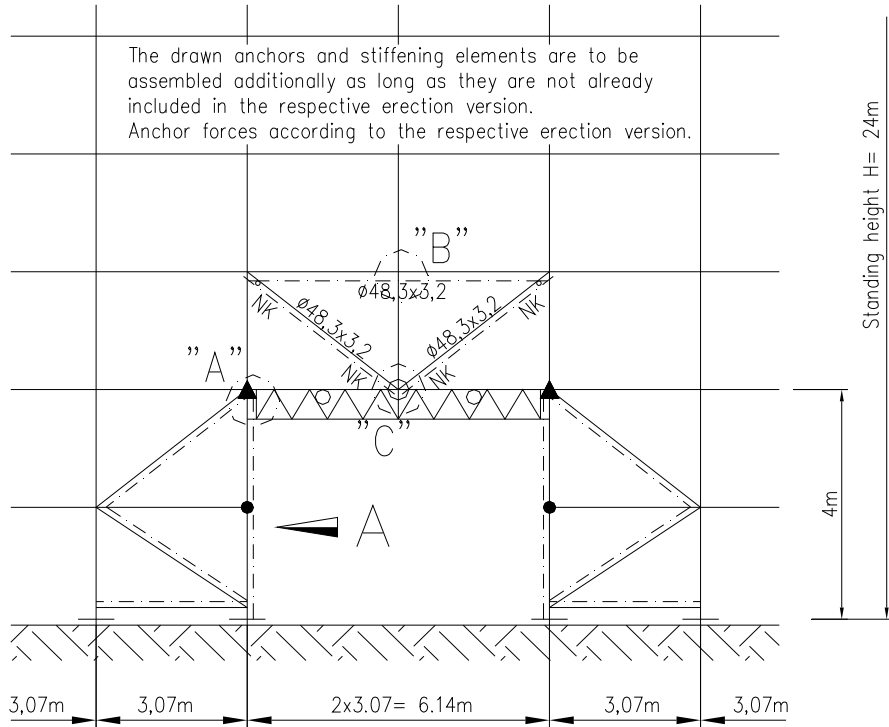
View A



- ⊕ Continuous scaffold retainer or quick-release anchor (without inner bracket)
- × Additional anchor for tarpaulin covering

**Fig. 40: Standard version  
bridgig, with attachments  
in front of open or closed façade**

- bridging
- all decks  $l \leq 3.07 \text{ m}$
- w. / w/o inner brackets 36cm
- w. / w/o outer bracket 73cm





### 3.3

### Standard versions of net or tarpaulin-covered scaffoldings

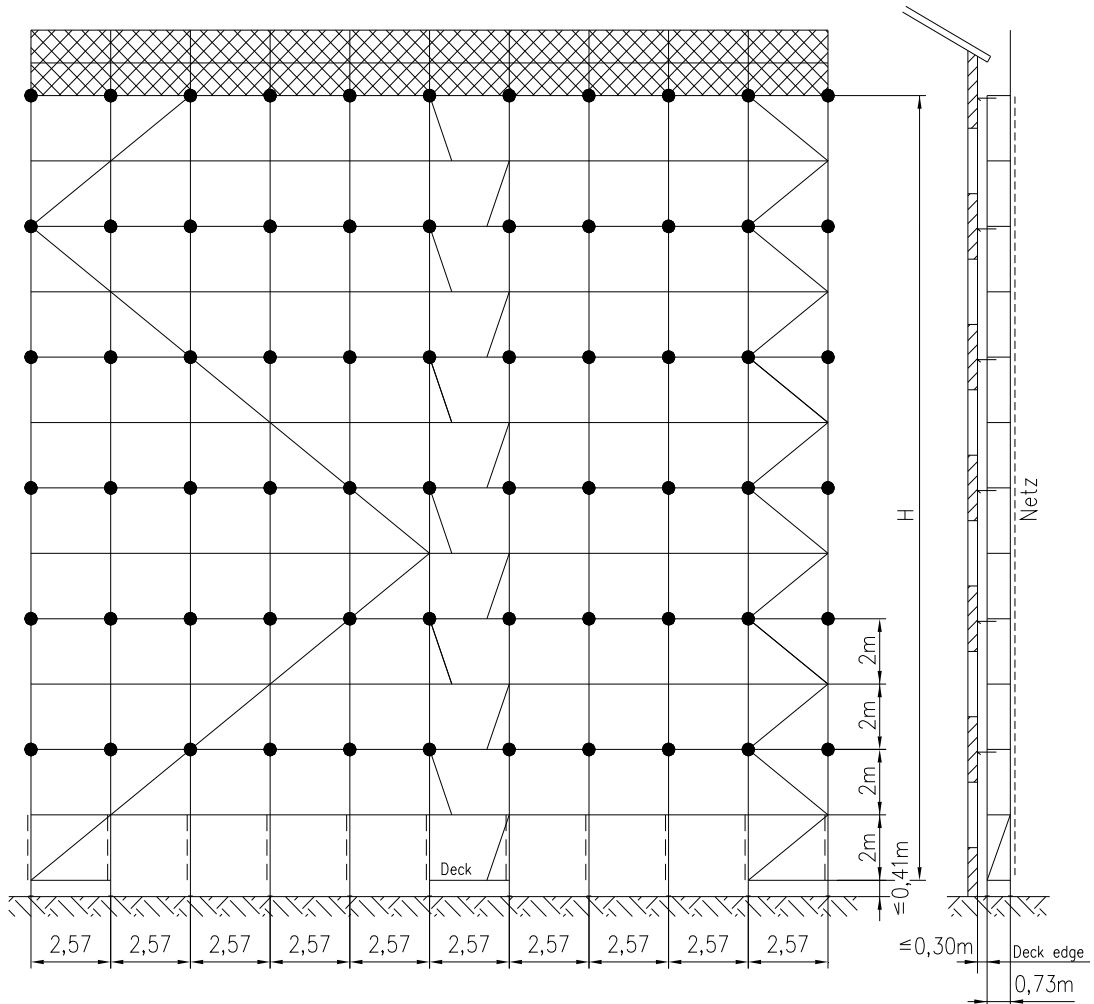
Standard versions covered by nets or tarpaulins are shown with different openings of the façade, use of different decking, provision of brackets and other attachments as given in the Tables 6 through 8.

Table 6: Standard versions of net-covered scaffolds in front of open or closed façades

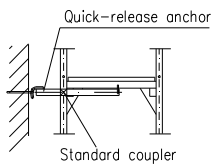
Bay length [m]	Scaffolds provided with	Open façade Fig.	Closed façade Fig.
≤2.57	Guard system	41	44
3.07		42	45
≤2.57	Guard system, inner brackets, outer bracket	43	46
3.07		42	47

**Fig. 41: Standard version  
net-covered scaffold  
without attachments  
in front of open façade**

- net-covered scaffold
- all decks  $l \leq 2.57$  m
- without brackets
- w. / w/o guard system on frame



Detail

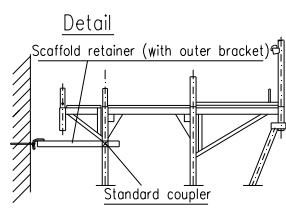
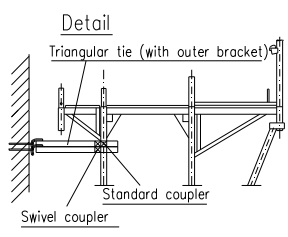
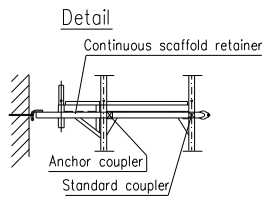
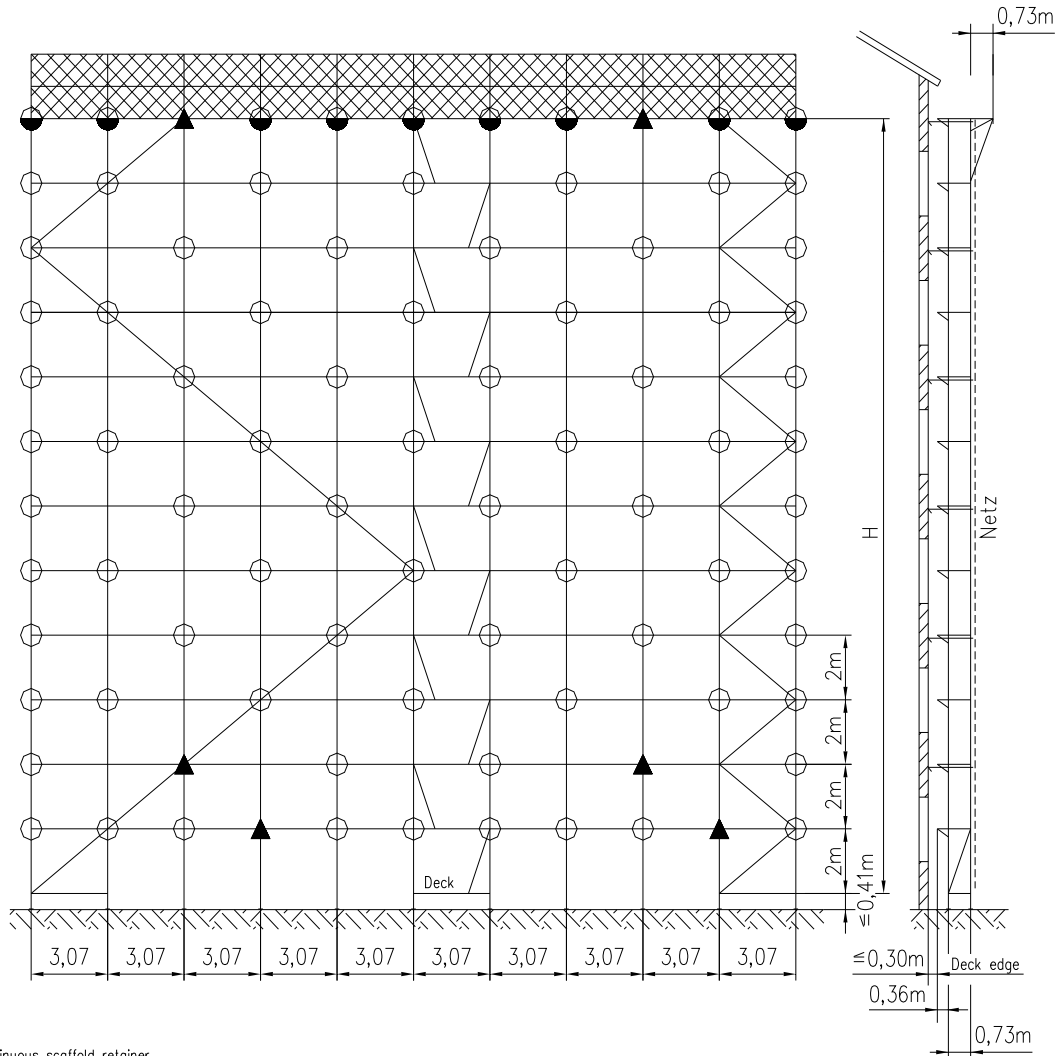


Quick-release anchor or scaffold retainer

Anchor forces [kN]				
Height		8 m	16 m	24 m
Quick-release anchor/ Continuous scaffold retainer	$A_{\perp}$	3,5	3,5	3,7
	$A_{\parallel}$	Standard type	1,4	1,4
Corner type		5,4	5,4	5,4
Triangular tie	A	-	-	-

**Fig. 42: Standard version  
net-covered scaffold  
with attachments  
in front of open façade**

- net-covered scaffold
- all decks  $l \leq 3.07$  m
- w. / w/o inner brackets 36 cm
- w. / w/o outer bracket 73 cm
- w. / w/o guard system

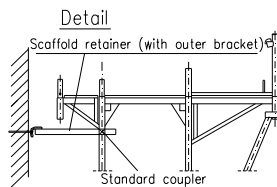
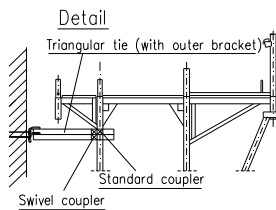
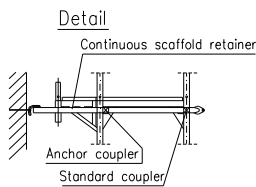
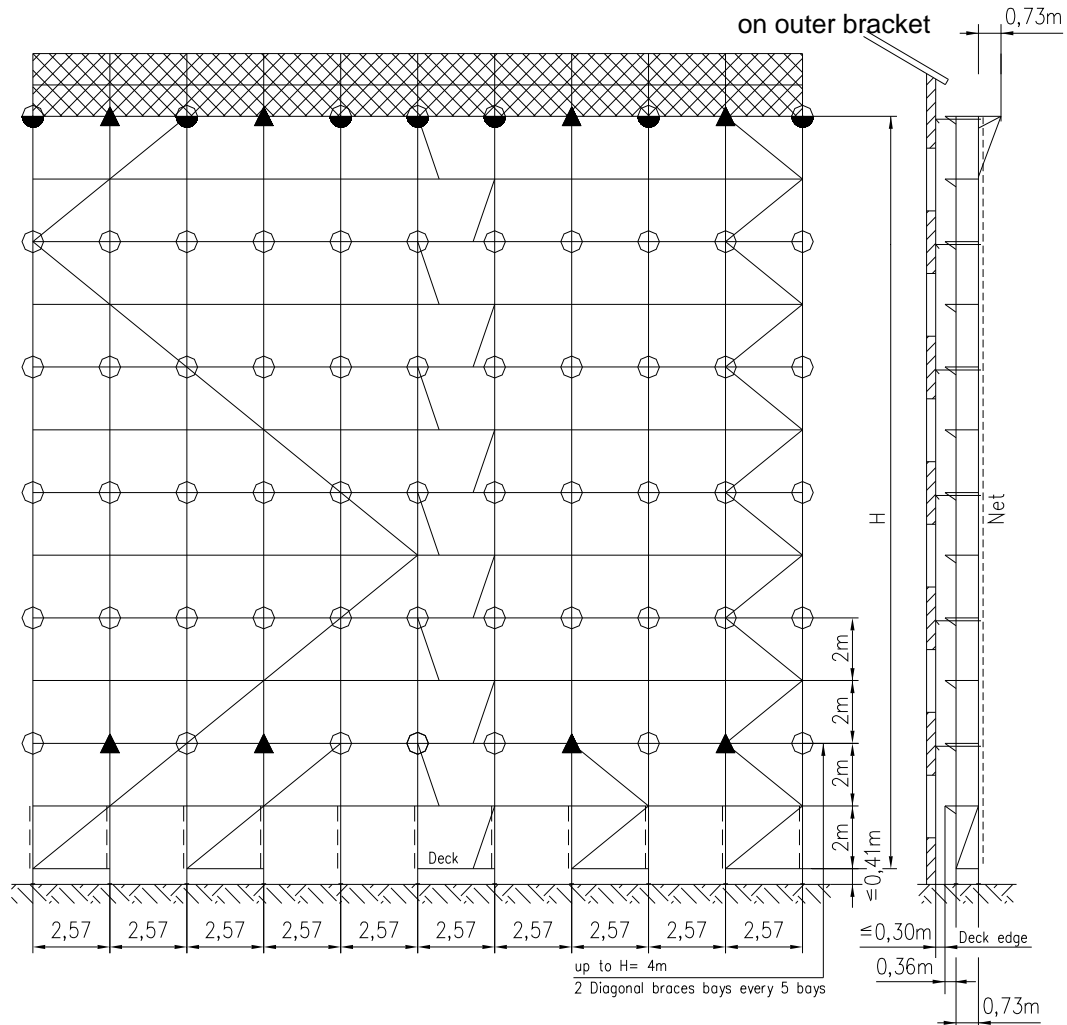


- Scaffold retainer
- ⊕ Continuous scaffold retainer or quick-release anchor (without inner bracket)
- ▲ Triangular tie

Anchor forces [kN]				
Height		8 m	16 m	24 m
Scaffold retainer/ Continuous scaffold retainer	A <sub>L</sub>	4,3	4,3	4,3
	A <sub>II</sub>	Standard type	1,6	1,6
Corner type		5,4	5,4	5,4
Triangular tie	A	4,2	4,2	4,2

**Fig. 43: Standard version net-covered scaffold with attachments in front of open façade**

- net-covered scaffold
- all decks  $l \leq 2.57$  m
- with inner brackets 36 cm
- with outer bracket 73 cm
- w. / w/o guard system on outer bracket

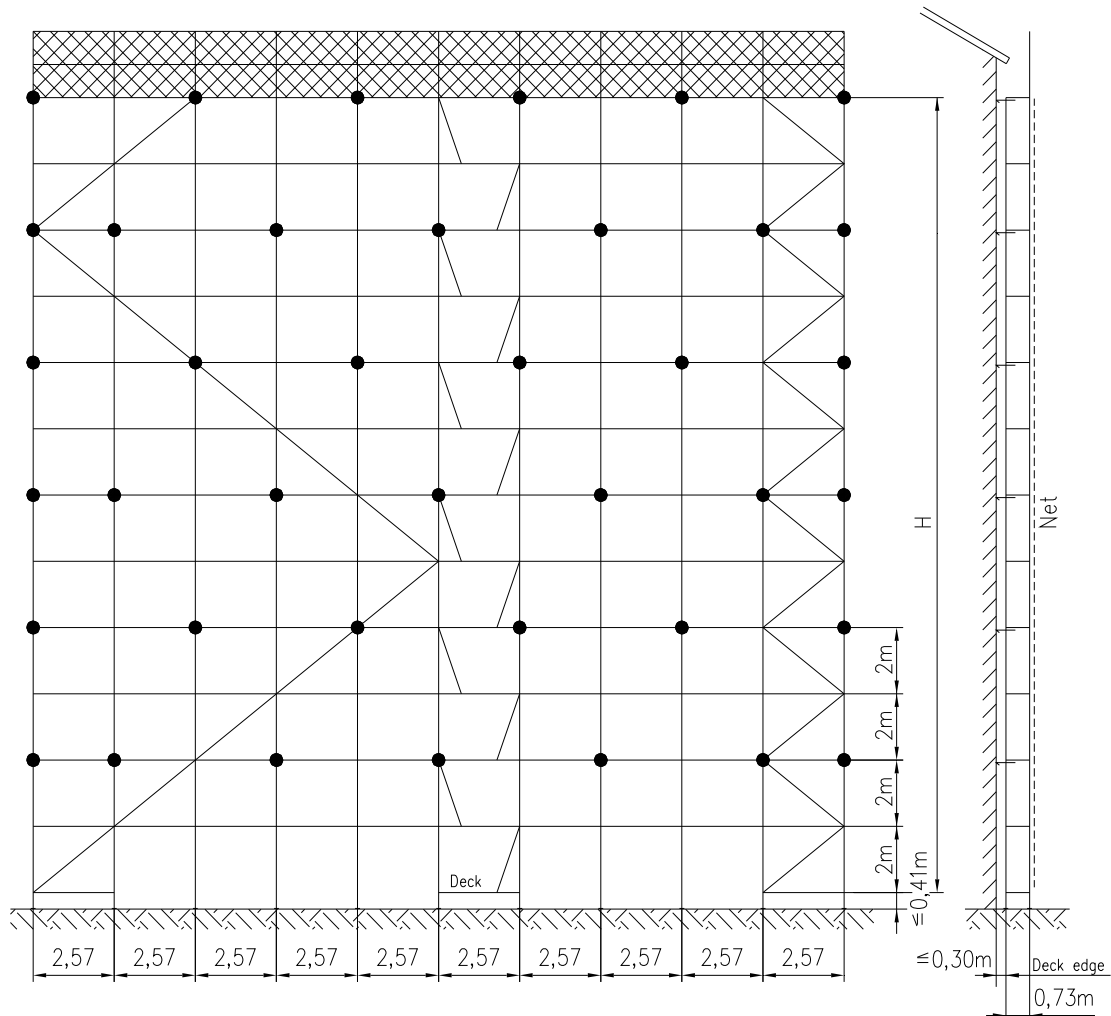


- Scaffold retainer
- Continuous scaffold retainer or quick-release anchor (without inner bracket)
- Triangular tie

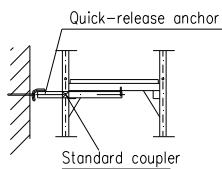
Anchor forces [kN]				
Height		8 m	16 m	24 m
Scaffold retainer/ Continuous scaffold retainer	A <sub>⊥</sub>	3,5	3,5	3,7
	A <sub>  </sub>	Standard type	1,3	1,3
Corner type		5,4	5,4	5,4
Triangular tie	A	3,5	3,5	3,5

**Fig. 44: Standard version  
net-covered scaffold  
without attachments  
in front of closed façade**

- net-covered scaffold
- all decks  $l \leq 2.57$  m
- without brackets
- w. / w/o guard system



Detail

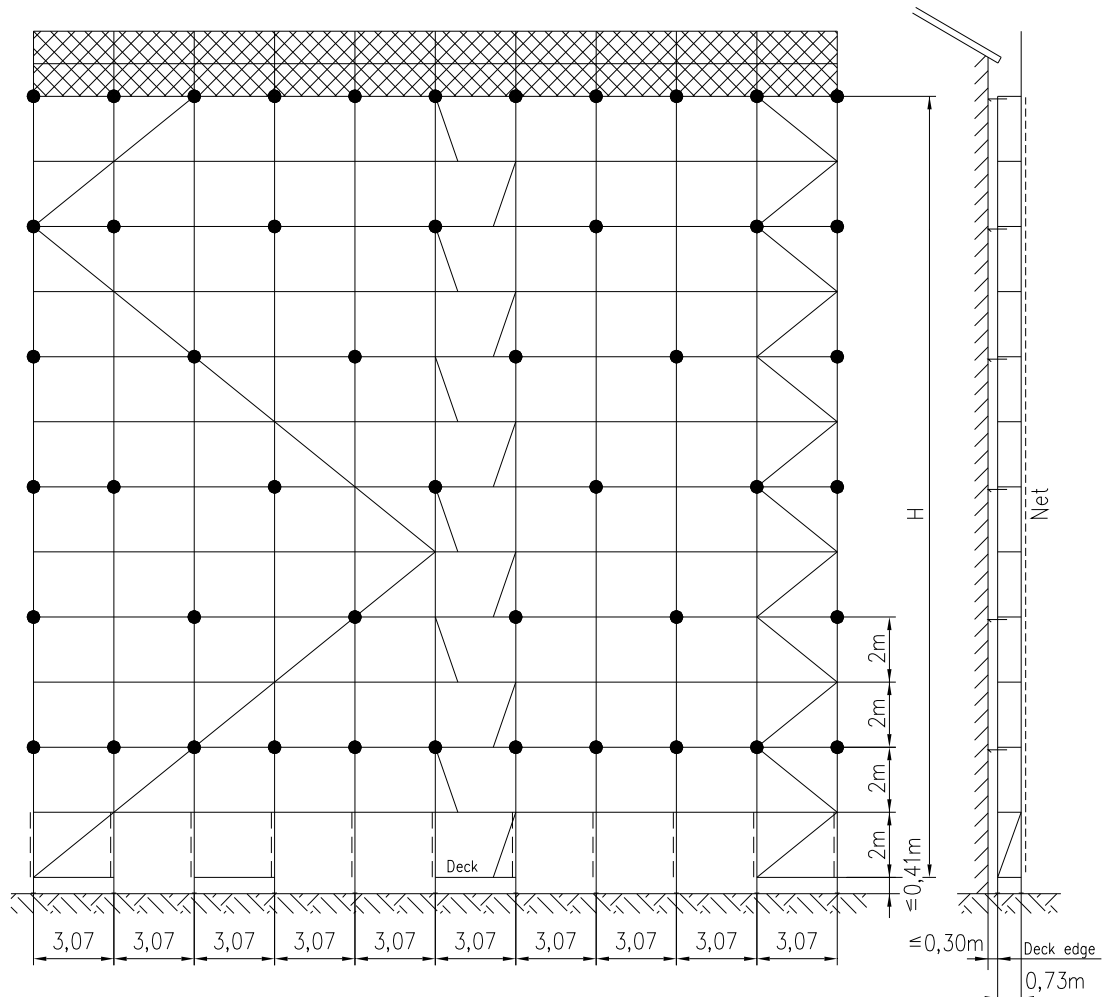


● Quick-release anchor or scaffold retainer

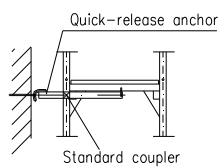
Anchor forces [kN]					
Height		8 m	16 m	24 m	
Quick-release anchor/ Continuous scaffold retainer	$A_{\perp}$	3,0	3,0	3,0	
	$A_{\parallel}$	Standard type	1,7	1,7	1,7
		Corner type	4,2	4,2	4,2
Triangular tie	A	-	-	3,5	

**Fig. 45: Standard version  
net-covered scaffold  
without attachments  
in front of closed façade**

- net-covered scaffold
- all decks  $l \leq 3.07$  m
- without brackets
- w. / w/o guard system on frame



Detail

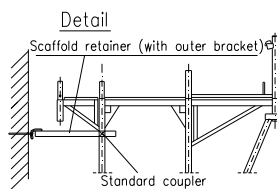
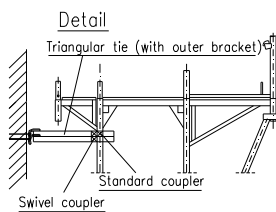
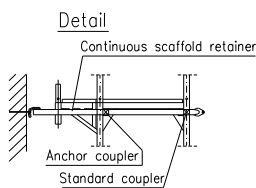
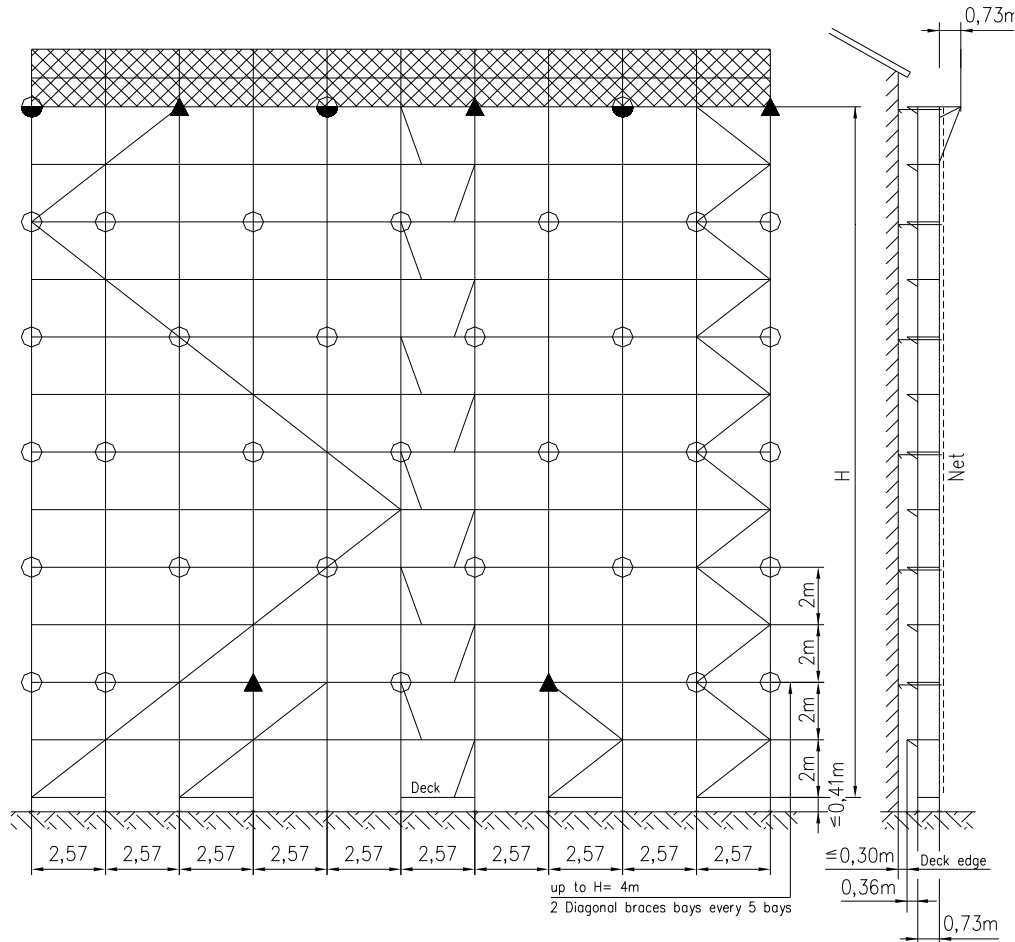


● Quick-release anchor or scaffold retainer

Anchor forces [kN]				
Height		8 m	16 m	24 m
Quick-release anchor/ Continuous scaffold retainer	$A_{\perp}$	1,6	2,3	2,9
	$A_{\parallel}$	Standard type	1,7	1,7
Corner type		5,1	5,1	5,1
Triangular tie	A	-	-	-

**Fig. 46: Standard version net-covered scaffold with attachments in front of closed façade**

- net-covered scaffold
- all decks  $l \leq 2.57$  m
- with inner brackets 36cm
- with outer bracket 73cm
- w. / w/o guard system on outer bracket



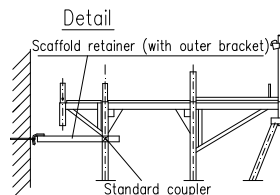
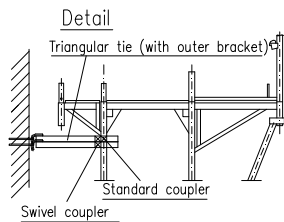
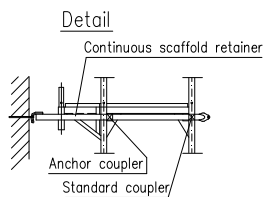
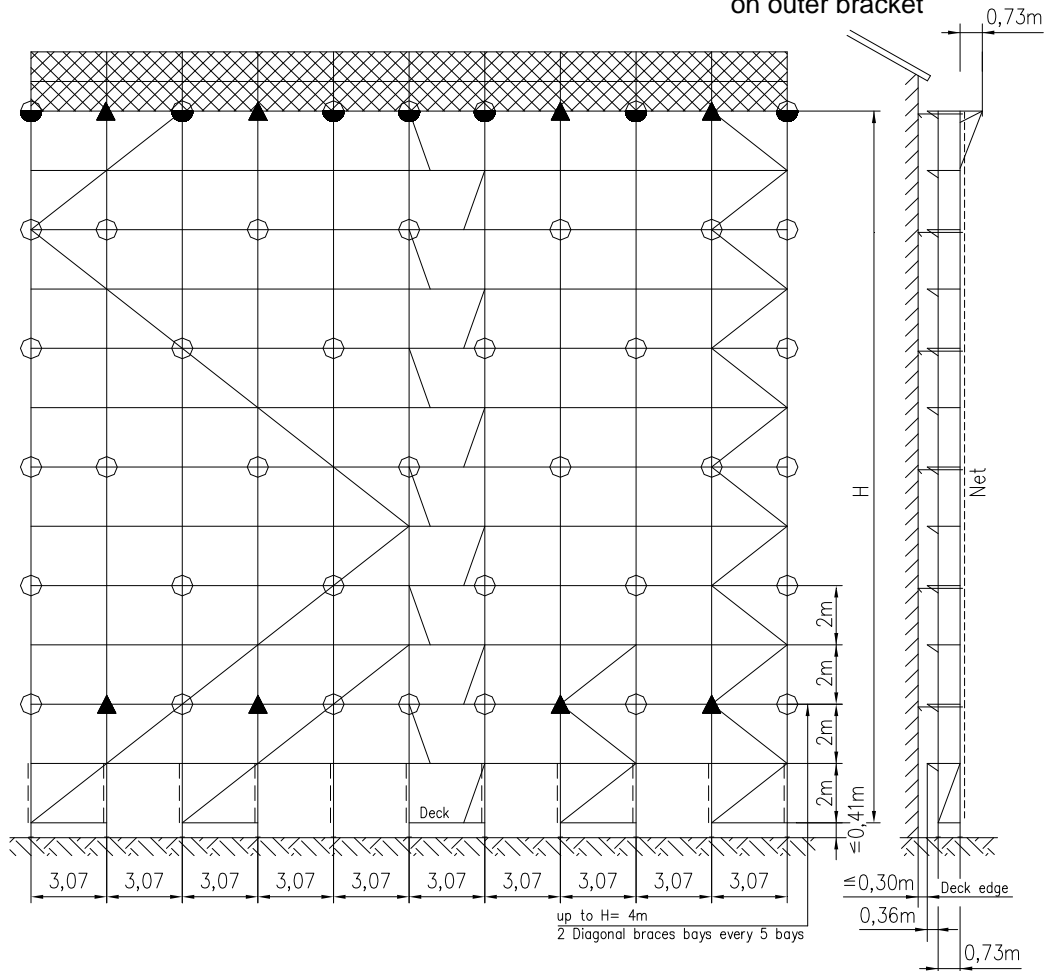
- Scaffold retainer
- Continuous scaffold retainer or quick-release anchor (without inner bracket)
- Triangular tie

Anchor forces [kN]					
Height		8 m	16 m	24 m	
Scaffold retainer/	A <sub>I</sub>	3,0	3,0	3,0 (4,5)	
		Standard type	1,3	1,3	1,3
Continuous scaffold retainer	A <sub>II</sub>	Corner type	4,2	4,2	4,2
		Triangular tie	A	3,7	3,7

( ) Value only applies to outer bracket without brace

**Fig. 47: Standard version  
net-covered scaffold  
with attachments  
in front of closed façade**

- net-covered scaffold
- all decks  $l \leq 3.07$  m
- with inner brackets 36cm
- with outer bracket 73cm
- w. / w/o guard system  
on outer bracket



- Scaffold retainer
- Continuous scaffold retainer or quick-release anchor (without inner bracket)
- Triangular tie

Anchor forces [kN]				
Height		8 m	16 m	24 m
Scaffold retainer	A <sub>I</sub>	1,6	2,3	2,9
	Continuous scaffold retainer/ A <sub>II</sub>	Standard type	1,5	1,5
Corner type		5,1	5,1	5,1
Triangular tie	A	2,4	2,4	2,4

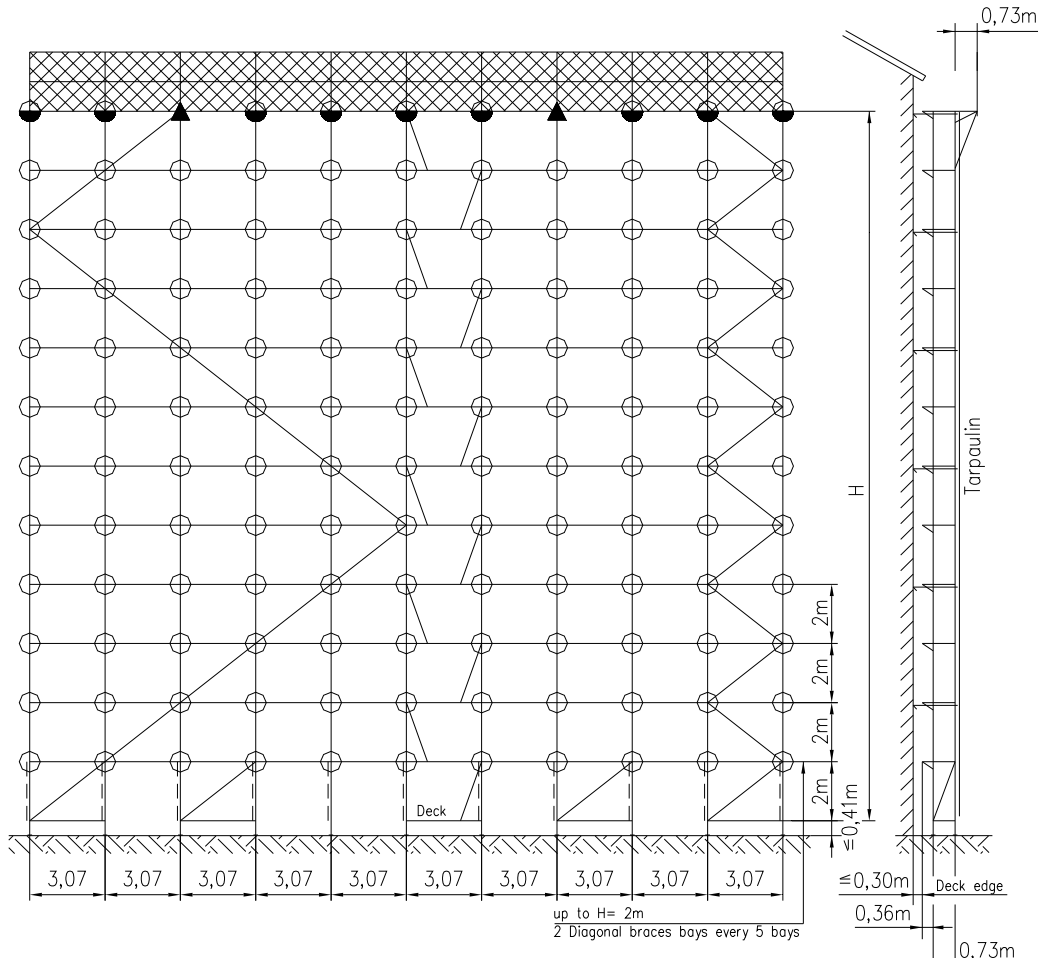


Table 7: Standard version of tarpaulin-covered scaffolds in front of open or closed façade

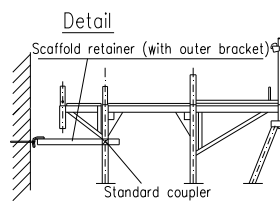
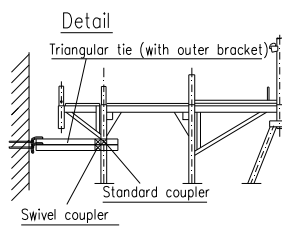
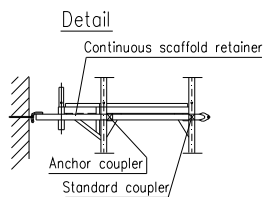
Bay length [m]	Scaffolds provided with	Open façade Fig.	Closed façade Fig.
≤3.07	Guard system	48	48

**Fig. 48: Standard version of tarpaulin-covered scaffold with attachments in front of open or closed façade**

- tarpaulin-covered scaffold
- all decks  $l \leq 3.07$  m
- w. /w/o inner brackets 36cm
- w. /w/o outer bracket 73cm
- w. / w/o guard system



- Scaffold retainer
- Continuous scaffold retainer or quick-release anchor (without inner bracket)
- Triangular tie



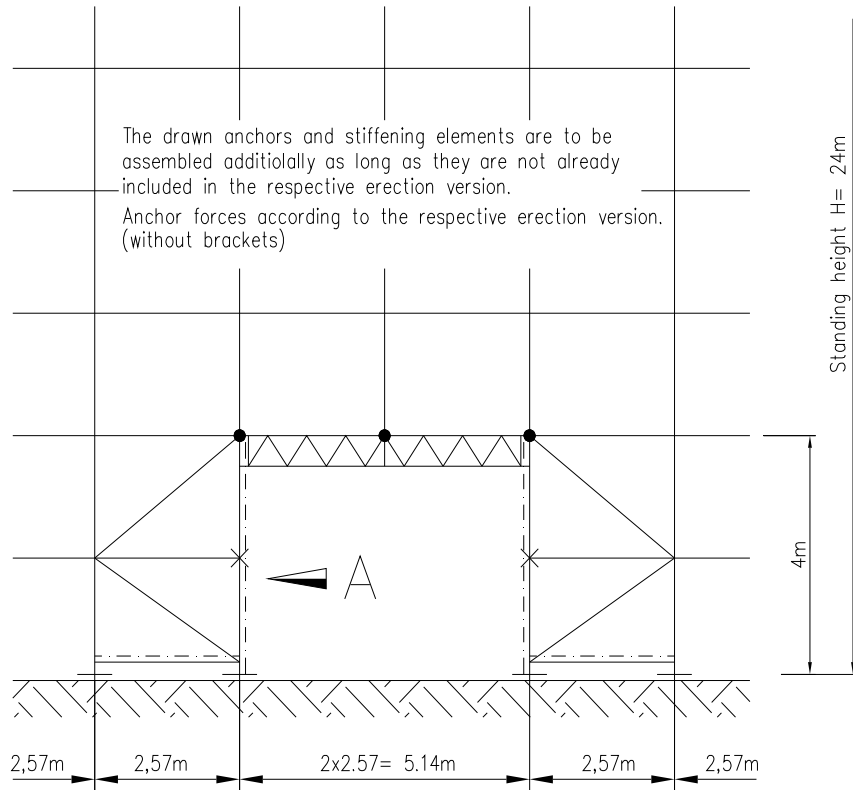
Anchor forces [kN]						
		Closed façade		Open façade		
		2,57m	3,07m	2,57m	3,07m	
Height		≤24m		≤24m		
Scaffold retainer/	A <sub>I</sub>	4,2	5,6	6,1	7,3	
	Continuous scaffold retainer	Standard type	0,8	0,9	0,8	0,9
Corner type		2,7	3,2	2,7	3,2	
Triangular tie		A	4,0	4,5	4,0	4,5

Table 8: Versions of net or tarpaulin-covered scaffolds in front of open or closed façade

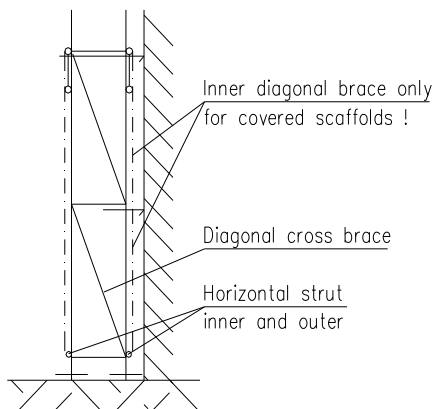
Bay length [m]	Scaffolds provided with	Bridging with lattice girders  Fig.
≤2.57	Guard system	49
3.07		50
≤2.57	Guard system, inner brackets, outer bracket, protective shelter	51
3.07		52

**Fig. 49: Standard version  
bridging, without attachments  
in front of open or closed façade**

- bridging
- all decks  $l \leq 2.57$  m
- without brackets
- Safety net-covered scaffold
- Tarpaulin-covered scaffold



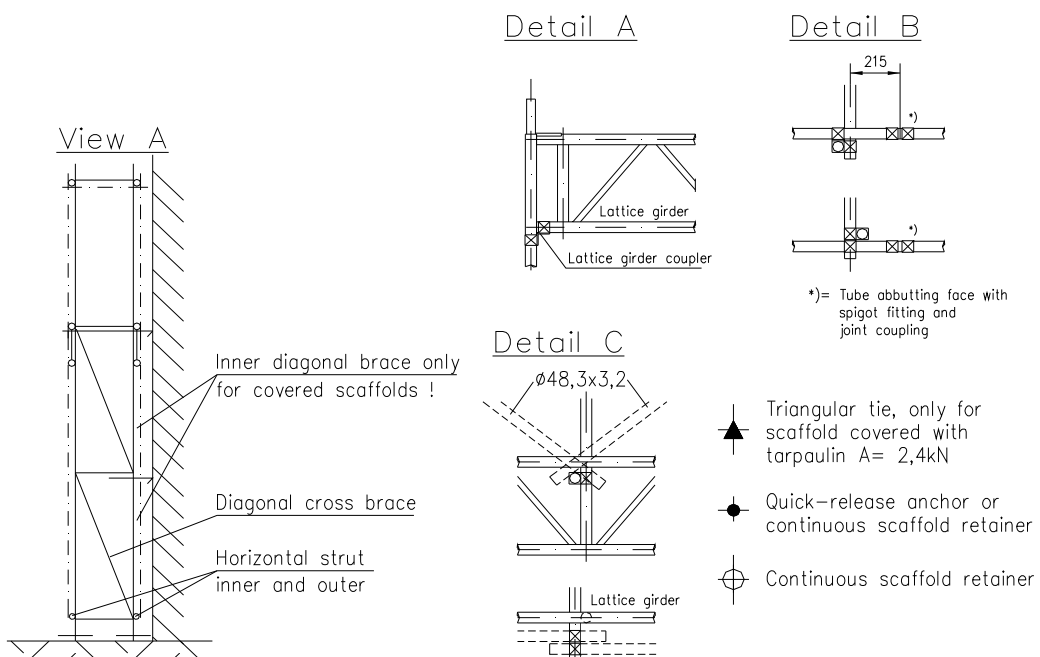
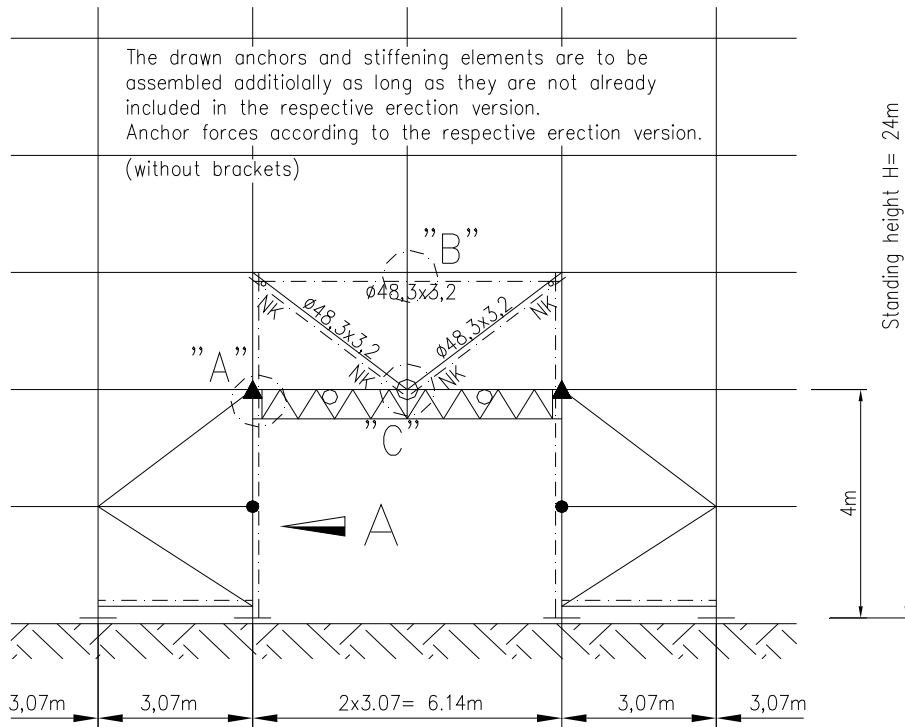
View A



- Quick-release anchor or continuous scaffold retainer
- × Additional anchor for tarpaulin covering

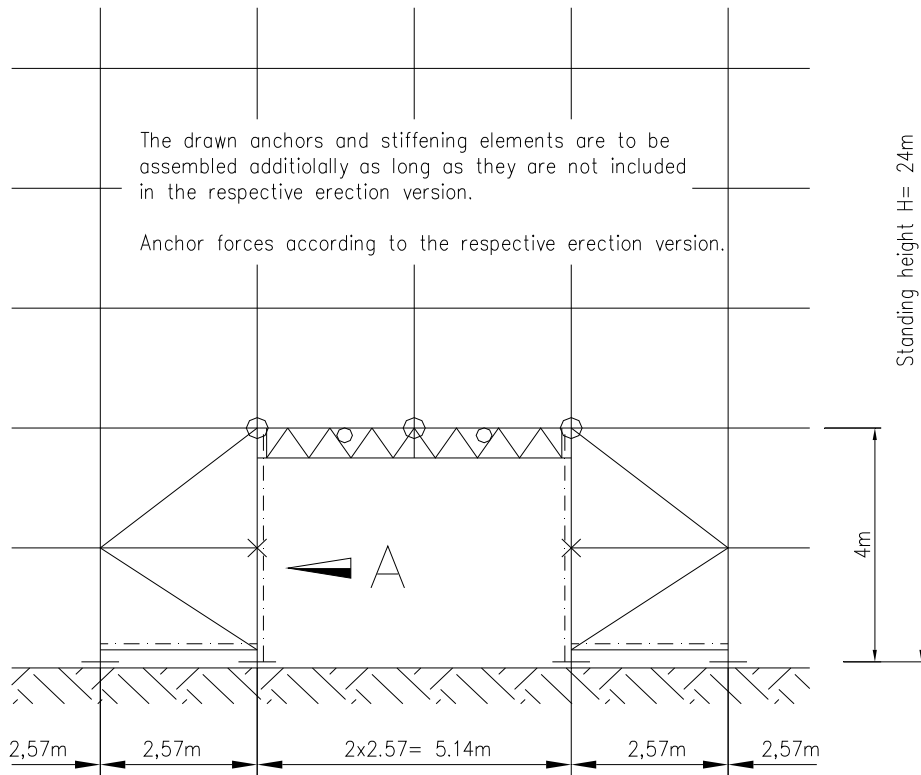
**Fig. 50: Standard version  
bridging, without attachments  
in front of open or closed façade**

- bridging
- all decks  $l \leq 3.07$  m
- without brackets
- Safety net-covered scaffold
- Tarpaulin-covered scaffold

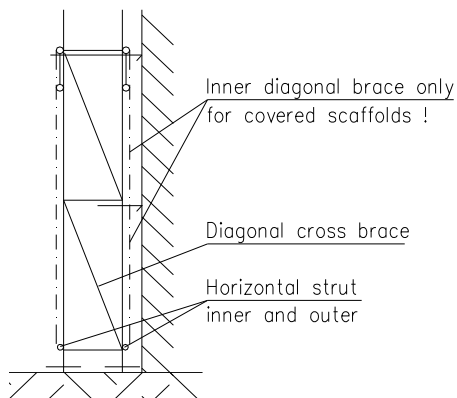


**Fig. 51: Standard version  
bridging, with attachments  
in front of open or closed façade**

- bridging
- all decks  $l \leq 2.57 \text{ m}$
- w. / w/o inner brackets 36 cm
- w. / w/o outer bracket 73 cm
- Safety net-covered scaffold
- Tarpaulin- covered scaffold



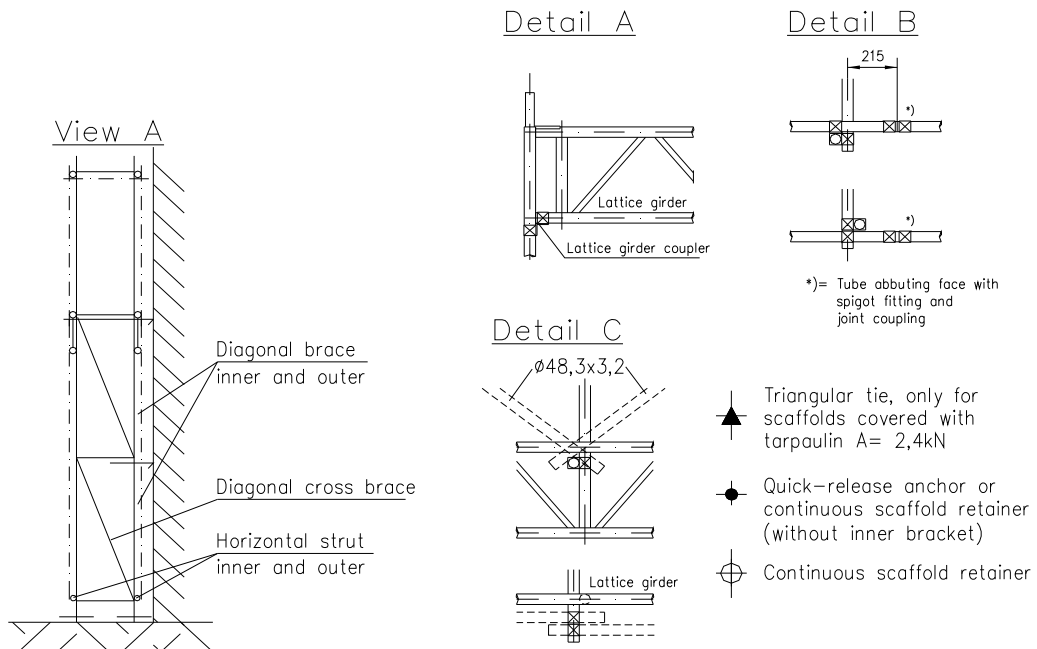
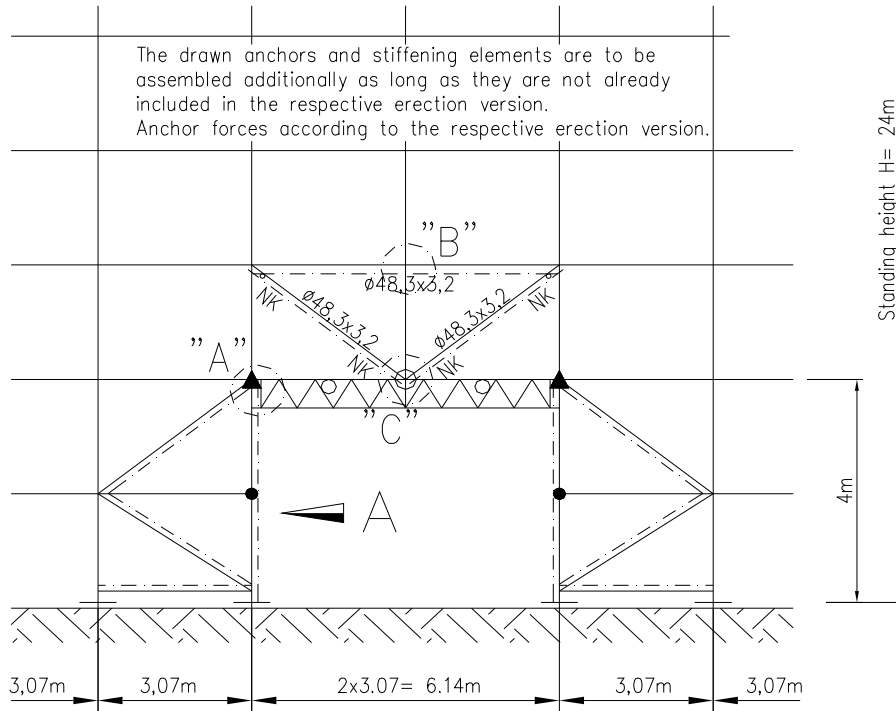
View A



- ⊕ Continuous scaffold retainer or quick-release anchor (without inner bracket)
- × Additional anchor for tarpaulin covering

**Fig. 52: Standard version  
bridging, with attachments  
in front of open or closed façade**

- bridging
- all decks  $l \leq 3.07$  m
- w. / w/o inner brackets 36 cm
- w. / w/o outer bracket 73 cm
- Safety net-covered scaffold
- Tarpaulin-covered scaffold



#### **4. Use**

The scaffold may be used in accordance with scaffolding group 3 and the provisions of the operational safety regulations (BetrSichV). The scaffold constructor has to inspect the scaffold after completion. Any unfinished scaffolds or scaffold sections have to be barred from service, cordoned off and the prohibitory sign "No Access" put up.

#### **5. Dismantling scaffolds**

Dismantle the scaffold in reverse order to that described in chapter 2.



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**ALBLITZ 70 S**  
**Façade Scaffolding**

**Instructions for**  
**Erection and Use**

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## 6. System components

The overview below lists the components used in standard versions.

Component		Weight [kg]	Z-8.1-864 Annex A, page
Steel assembly frame	2.00 x 0.73 m	21,3	1
	1.50 x 0.73 m	17,7	
	1.00 x 0.73 m	12,8	
	0.66 x 0.73 m	10,4	
Vertical steel frame 70	2.00 x 0.73 m	20,0	57
	1.00 x 0.73 m	12,0	58
	0.66 x 0.73 m	10,0	58
Passageway frame	2.20 x 1.50 m	34,9	2
Standard spindle	0.40 m	2,9	3
	0.60 m	3,6	
Heavy-duty spindle	0.80 m	4,9	4
Base jack	1.50 m	10,0	5
Base jack	0.50 m	3,5	61
	0.30 m	2,5	
Scaffold retainer	0.47 m	1,8	7
	1.00 m	3,8	
	1.50 m	5,9	
	2.00 m	7,4	
Quick-release anchor	0.65 m	3,0	7
Anchor coupler		1,3	7
Diagonal braces	2.07 x 2.00 m	7,0	8, 61
	257 x 2.00 m	7,8	8, 62
	3.07 x 2.00 m	8,8	8, 63
Diagonal cross brace	1.77 m	6,0	8, 64
Horizontal strut	1.57 m	6,3	9
	2.07 m	8,0	
	2.57 m	10,0	
	3.07 m	12,0	
Guardrail post, single		5,5	10, 65
Guardrail post	0.73 m	7,9	10, 66
End guardrail post	0.73 m	13,3	67

Component		Weight [kg]	Z-8.1-864 Annex A, page
End guardrail post	0.73 m	13,3	10, 67
End guardrail	0.73 m	2,8	11
Double end guardrail	0.73 m	4,4	11
Guardrail	0.73 m	1,4	12
	1.09 m	2,0	
	1.57 m	3,3	
	2.07 m	4,4	
	2.57 m	5,6	
	3.07 m	6,2	
Guardrail brace	1.57 m	3,0	68
	2.07 m	4,0	
	2.57 m	5,0	
	3.07 m	6,0	
Double guardrail	1.57 m	7,9	12, 69
	2.07 m	9,8	12, 69
	2.57 m	11,7	12, 69
	3.07 m	14,1	12, 69
	4.14 m	21,0	14
Aluminium double guardrail	1.57 m	3,5	15, 70
	2.07 m	4,6	
	2.57 m	5,8	
	3.07 m	6,7	
Safety side meshguard	1.57 m	15,5	16
	2.07 m	17,7	16
	2.57 m	21,1	16
	3.07 m	24,4	16
	4.14 m	38,0	17
Safety meshguard	1.57 m	15,0	71
	2.07 m	18,0	
	2.57 m	21,0	
	3.07 m	24,0	
Safety net	2.07 m	13,0	72
	2.57 m	14,0	
	3.07 m	15,0	

Component		Weight [kg]	Z-8.1-864 Annex A, page
Toeboard	1.57 m	3,1	18, 73
	2.07 m	4,7	18, 73
	2.57 m	6,1	18, 73
	3.07 m	6,8	18, 73
	4.14 m	10,3	18
End toeboard	0.73 m	2,1	18, 73
Bracket 0.36 m	0.36 m	3,7	19
Bracket 36 cm	0.36 m	3,5	74
Bracket 0.73 m	0.73 m	6,4	19
Bracket 73 cm	0.73 m	6,5	75
Protective shelter bracket 1.30 m		14,4	20
Protective shelter support 2.10 m		18,9	22
Protective shelter ledger	0.65 m	4,9	23
Protective shelter		4,0	76
Safety meshguard support 0.73 m	0.73 m	14,0	24
Guard system support	0.73 m	11,0	77
Deck retainer	0.36 m	0,9	26, 78
	0.73 m	1,5	
Locking clip		0,1	26, 78
Lattice girder ledger	0.73 m	3,1	27
U-starter ledger	0.73 m	3,8	27
Transom	0.73 m	4,0	28, 79
Lattice girder	5.14 m	52,3	29
	6.14 m	60,9	
Lattice girder coupling		1,6	29
Steel deck 0.32 m	0.73 m	6,1	30
	1.09 m	8,6	30
	1.57 m	11,9	30, 80
	2.07 m	15,4	30, 80
	2.57 m	18,7	30, 80
	3.07 m	22,2	30, 80
	4.14 m	32,0	31

Component		Weight [kg]	Z-8.1-864 Annex A, page
Steel deck 0.19 m	0.73 m	4,5	32
	1.09 m	6,0	
	1.57 m	8,5	
	2.07 m	10,2	
	2.57 m	13,2	
	3.07 m	15,3	
Intermediate deck	1.57 m	8,5	81
	2.07 m	11,0	
	2.57 m	12,5	
	3.07 m	16,0	
Steel hatch-type access deck 0.64 m	2.57 m	28,9	33
	3.07 m	38,0	
Aluminium deck 0.32 m Aluminium chequer plate deck 0.32 m	0.73 m	3,1	34
	1.09 m	4,4	
	1.57 m	6,5	
	2.07 m	8,0	
	2.57 m	10,0	
Aluminium box-type deck 0.32 m	0.73 m	4,4	35
	1.09 m	6,9	
	1.57 m	9,3	
	2.07 m	11,8	
	2.57 m	14,3	
Aluminium profile deck 0.61 m	1.57 m	11,4	36
	2.07 m	13,6	
	2.57 m	17,3	
	3.07 m	20,2	
EURO steel deck 0.32 m	2.07 m	11,7	37
	2.57 m	14,5	
	3.07 m	17,3	

Component		Weight [kg]	Z-8.1-864 Annex A, page
Sturdy deck 0.61 m	0.73 m	7,2	38
	1.09 m	9,7	
	1.57 m	13,1	
	2.07 m	16,4	
	2.57 m	20,4	
	3.07 m	25,0	
Sturdy hatch-type access 0.61 m	2.07 m	17,2	39
	2.57 m	20,5	
	3.07 m	24,6	
Sturdy hatch-type access 0.61 m with integrated ladder	2.57 m	25,2	40
	3.07 m	29,0	
Sturdy deck 0.32 m	0.73 m	6,4	41
	1.09 m	8,4	
	1.57 m	9,9	
	2.07 m	11,5	
	2.57 m	14,7	
	3.07 m	16,0	
Combined stacking deck 0.61 m	1.57 m	11,8	43
	2.07 m	14,5	43
	2.57 m	17,9	43
	3.07 m	22,0	42
Hatch-type access combined stacking deck 0.61 m	2.07 m	15,8	44
	2.57 m	18,8	
	3.07 m	22,7	
Hatch-type access combined stacking deck 0.61 m with ladder	2.07 m	22,1	45
	2.57 m	25,9	
	3.07 m	29,0	
Aluminium decking for combination stack-type decks 0,61m	1.57 m	11,2	46
	2.07 m	14,8	
	2.57 m	18,4	
	3.07 m	22,4	

Component		Weight [kg]	Z-8.1-864 Annex A, page
Aluminium deck with plywood	1.57 m	11,0	82, 84, 90
	2.07 m	14,5	82, 84, 90
	2.57 m	17,5	82, 84, 89
	3.07 m	21,0	83, 84, 89
Alu hatch-type access deck with integrated ladder	2.57 m	22,5	85, 87, 93
	3.07 m	26,5	85, 87, 92
Solid wooden plank 0.32 m	1.57 m	10,5	50
	2.07 m	13,5	
	2.57 m	19,5	
	3.07 m	25,5	
Solid wooden deck 0.32	1.57 m	13,0	88
	2.07 m	16,0	
	2.57 m	19,0	
	3.07 m	22,0	
Gap cover	1.09 m	4,9	56
	1.57 m	6,5	
	2.07 m	8,6	
	2.57 m	10,6	
	3.07 m	12,7	
Access ladder		8,7	57
Advanced guardrail post		5,4	-
Advanced end guardrail		1,4	-
Telescopic guardrail	2.00 - 3.07 m	7,0	-

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