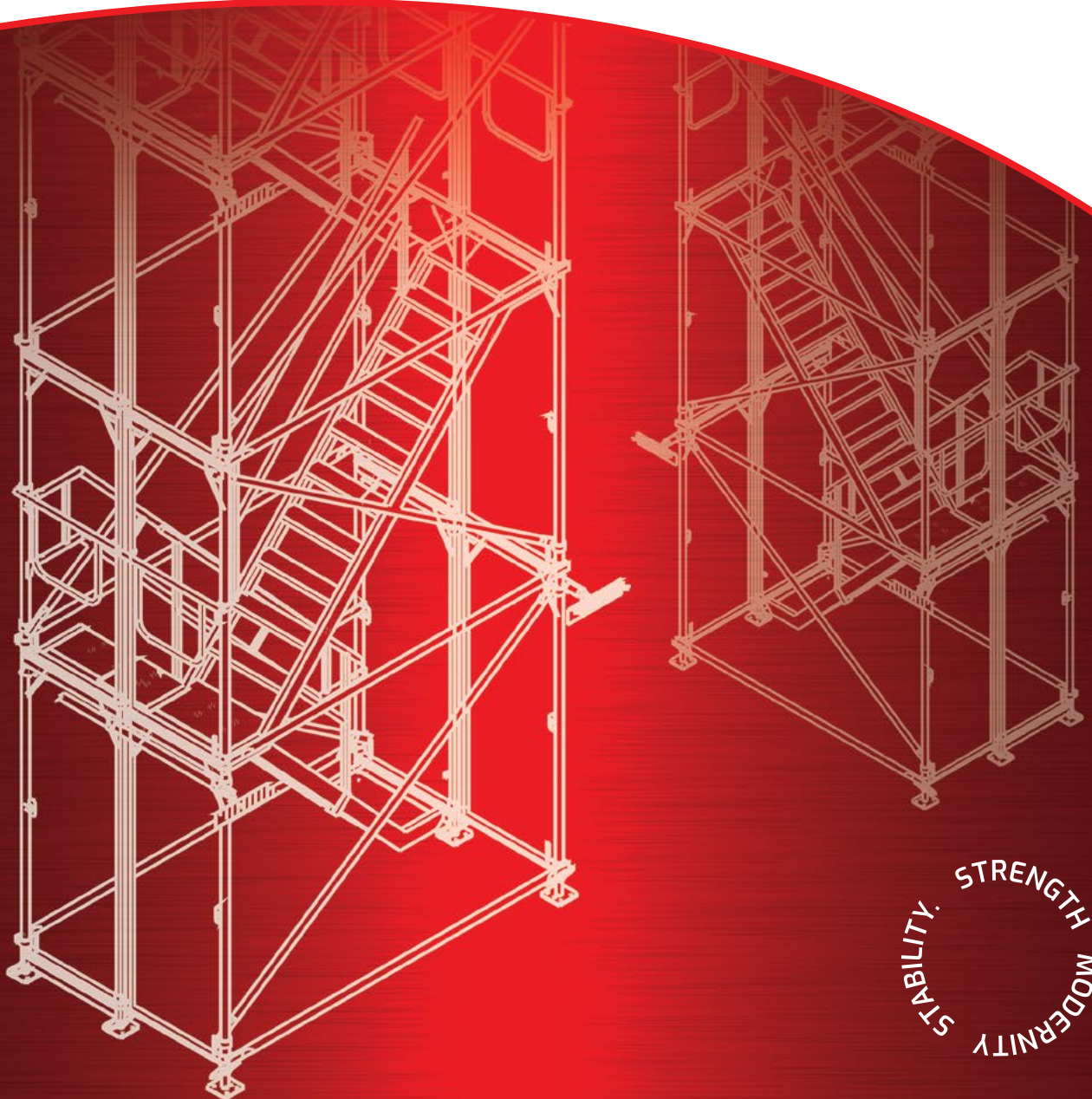




MOSTOSTAL
SCAFFOLDING
FORMWORK

MOSTOSTAL PLUS FRAME SCAFFOLDINGS

CATALOGUE



STABILITY. STRENGTH. MODERNITY.



MOSTOSTAL
SCAFFOLDING
FORMWORK

MOSTOSTAL PLUS FRAME SCAFFOLDINGS

CATALOGUE



www.altrad-mostostal.pl

STABILITY. STRENGTH
MODERNITY

TABLE OF CONTENTS

1. Scaffolding characteristics	5
2. Standards and rules concerning the scaffoldings	6
3. MOSTOSTAL Plus scaffoldings – components	7
4. Footways (passage frames)	31
5. Bypassing cornices (bypassing frames)	31
6. Gate entries (passages under scaffoldings – girders)	32
7. Mobile scaffoldings with MOSTOSTAL Plus	33
8. Anchored consoles	36
9. External staircases	37
10. Aluminium platforms	39
11. Pallets for the facade scaffolding storage and transport	41
12. List of components stored on the pallets	42
13. Tables – platform and base jack load	43
14. Scaffolding commission protocol	45
15. Localization of ALTRAD-Mostostal	46



1. SCAFFOLDING CHARACTERISTICS

ALTRAD-MOSTOSTAL manufactures steel and aluminium MOSTOSTAL Plus frame scaffoldings. The system includes such basic components as base jacks, frames, railings, braces, platforms and toe boards. Distance between the individual scaffolding levels is indicated by the frames 2.00 m high and 0.73 or 1.09 m wide. Bay working platform system length equals to 0.73 m, 1.09 m, 1.57 m, 2.07 m and 3.07 m respectively.



Construction of Quattro Business Park - Cracow



Sukiennice - Cracow

The scaffolding load capacity depends on its width and the length of the platforms used to install the given set and it can vary from 2 up to 6 kN/m² (load classes according to PN-EN 12811-1:2004). The scaffolding load capacity relies on the base jacks, frames and platforms. To make the scaffolding rigid it must be stiffened with braces. The safety components are: railings, double railings, front railings and toe boards. By using the above-mentioned components and other components present in the system (see p. 5 - components) you can develop the scaffolding while maintaining the safety rules.

MOSTOSTAL Plus scaffoldings are certified with the IMBiGS Safety Certificate and other certificates that confirm safety and quality of the equipment manufactured.



2. STANDARDS AND RULES CONCERNING THE SCAFFOLDINGS

When designing, installing, disassembling and using the scaffoldings you should observe the rules and requirements included in:

- this manual
- Regulation of the Minister of Infrastructure of 6 February 2003 on occupational health and safety during construction works (Journal of Laws No. 47/03 item 401)
- Announcement of the Minister of Economy, Labour and Social Policy of 28 August 2003 on publishing a unified text of the regulation of the Minister of Labour and Social Policy on the general occupational health and safety rules (Journal of Laws No. 169/03 item 1650)
- PM-M-47900-1:1996 "Steel, standing scaffoldings. Definitions, division and main parameters."
- PM-M-47900-2:1996 "Steel, standing scaffoldings. Pole scaffoldings made of pipes."
- PM-M-47900-3:1996 "Steel, standing scaffoldings. Frame scaffoldings."
- PN-EN 12811-1:2004 "Provisional structures used at a construction site. Scaffoldings. Conditions for the production and general design rules."
- PN-EN 12810-1:2004 "Facade scaffolding made of prefabricated elements. Products' technical specifications."
- PN-EN 12810-2:2004 "Facade scaffolding made of prefabricated elements. Particular design and construction methods."
- PN-EN 74:2002 "Couplings, centring plungers and foot sets used in working and load-bearing scaffoldings made of steel pipes. Requirements and examination procedures."
- PN-EN 39:2003 "Steel pipes for scaffolding construction - Technical regulations for the delivery process."

The above-specified documents should be available where the MOSTOSTAL scaffoldings are installed and used.

This catalogue will provide you with the basic components and supplementary parts of the ALTRAD-MOSTOSTAL scaffolding system.

3. MOSTOSTAL PLUS SCAFFOLDINGS – COMPONENTS

■ Steel frame

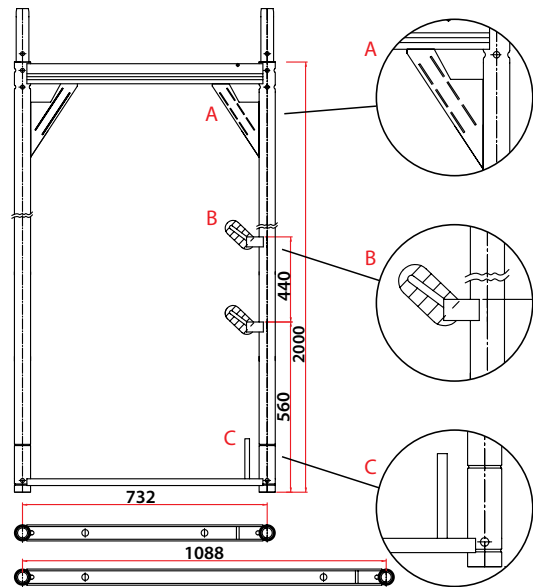
Frame stands are made of 48.3 mm diameter pipes. The upper U-section of the frame enables fast and safe installation of platforms. Railing couplings with wedges for installing safety railings. Frame rigidity is assured by gusset plates in both upper corners. Studs welded to the bottom frame section are used for fixing toe boards. Wide assortment of compensating frames the height of 0.66 m, 1.00 m and 1.5 m allows eliminating even large irregularities of terrain.

Index	Dimensions (m)	Weight (kg)
E281606	0.66x0.73	10.28
E281610	1.00x0.73	12.76
E281615	1.50x0.73	16.20
E281620	2.00x0.73	19.27
E281206	0.66x1.09	14.44
E281210	1.00x1.09	16.79
E281220	2.00x1.09	24.75

■ Aluminium frame 0.73

Approx. 50% lighter than steel frame – enables easier assembly and disassembly. Compensation frames allow setting up scaffolding on uneven (irregular) terrain and present an alternative for steel compensation frames.

Index	Dimensions (m)	Weight (kg)
E282206	0.66x0.73	5.12
E282210	1.00x0.73	6.43
E282215	1.50x0.73	8.23
E282220	2.00x0.73	9.73



■ PLUS steel frame

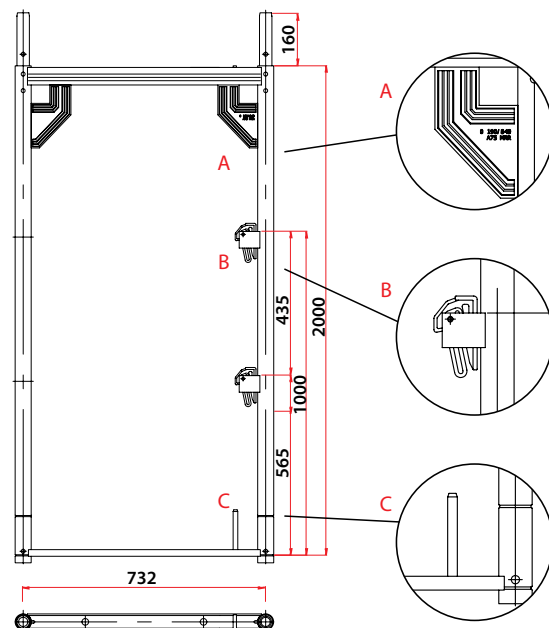
New steel frame version fully compatible with the other system frames.

Index	Dimensions (m)	Weight (kg)
E202029	0.66x0.73	10.36
E202028	1.00x0.73	13.17
E202027	1.50x0.73	16.20
E202026	2.00x0.73	19.80
E202018	2.00x0.36	17.94

■ PLUS aluminium frame

New aluminium frame version fully compatible with the other system frames.

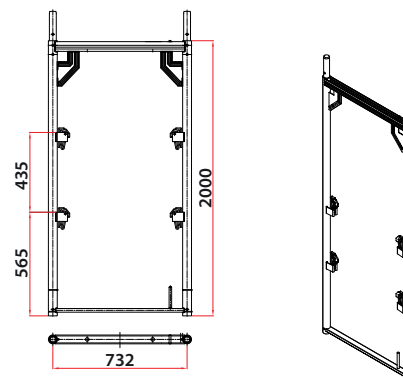
Index	Dimensions (m)	Weight (kg)
E203010	0.66x0.73	4.64
E203011	1.00x0.73	6.05
E203012	2.00x0.73	9.40



■ Steel Frame PLUS-double railing

Steel Frame enabling installation of double railing thanks to four wedge cassettes.

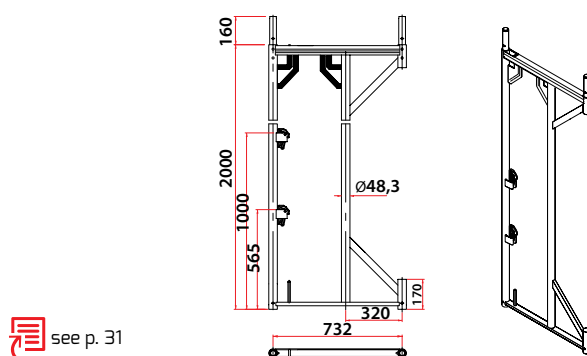
Index	Dimensions (m)	Weight (kg)
E202036	0.73x2.00	21.02



■ Bypass frame

Used for bypassing horizontal protrusion of a building, such as eaves, cornices, allowing to maintain constant platform width.

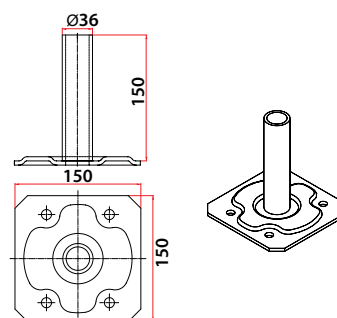
Index	Dimensions (m)	Weight (kg)
E202019	2.00x0.73	25.24
E280520	2.00x0.73	22.84



■ Standard base jack

150 x 150 mm stand with pipe stud of 36 mm diameter, for correct setting of scaffolding that does not require height adjustment.

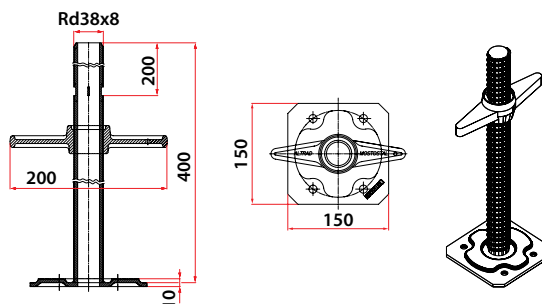
Index	Dimensions (m)	Weight (kg)
E511200	0.15	1.38



■ Base jack with nut

Stands of different height designed for compensating terrain irregularities. The stand base has the dimensions of 150 x 150 mm and is fitted with a threaded pipe connector and a nut with a socket for fixing the pipe. Flattened thread assures the nut will not become loose (at least 15 cm of stand's threaded pipe must remain inside the frame) or lost. Basic stand height and max. extension: height – 40 cm, max. extension length – 20 cm; height – 60 cm, max. extension length – 40 cm; height – 80 cm, max. extension length – 60 cm; Permissible stand load is 3 t.

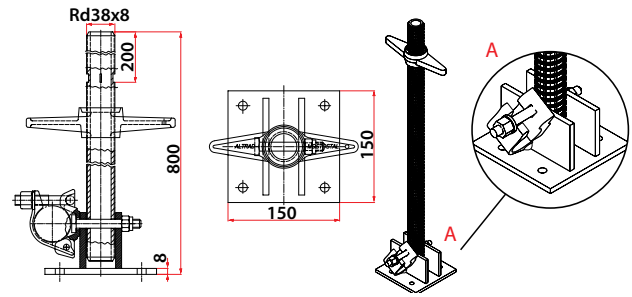
Index	Dimensions (m)	Weight (kg)
E511204	0.40	3.39
E511206	0.60	4.28
E511208	0.80	5.20
E511313	1.50	9.45



■ Tilt base jack

Tiltable threaded pipe connector on 150 x 150 mm base, fitted with a nut and a clamp for pipe of 48.3 mm diameter. Used for setting up the frame on inclined surfaces.

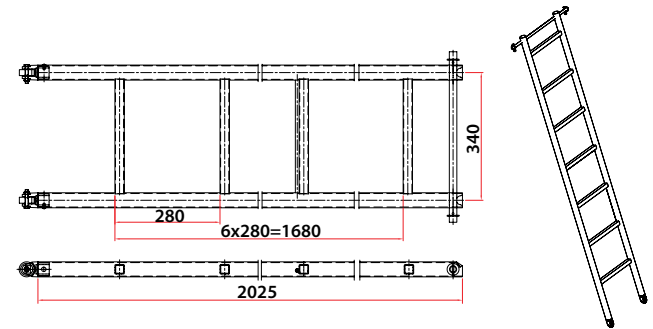
Index	Dimensions (m)	Weight (kg)
E511408	0.80	7.81



■ Platform ladder, spare part

Aluminium ladder for the aluminium platform with a trapdoor (E4923xx) – supplied as a spare part with a pin and a washer.

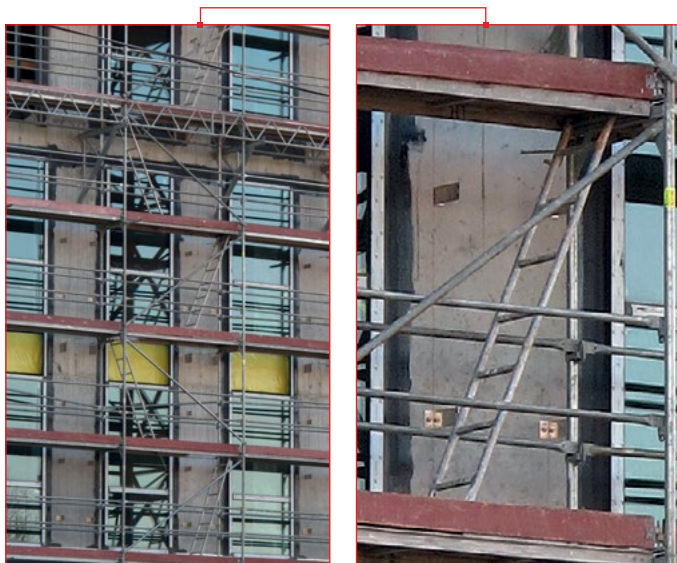
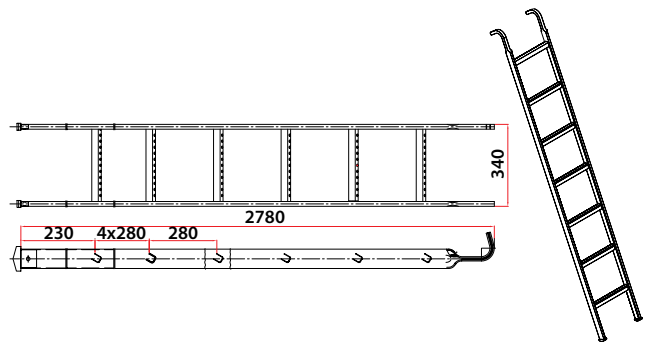
Index	Dimensions (m)	Weight (kg)
E492601	2.45x0.40	4.60



■ Inter-level steel ladder

Ladder with perforated, non-slip spokes, used together with E4925xx platforms.

Index	Dimensions (m)	Weight (kg)
E511600	2.14x0.34	11.68
E511601	2.78x0.34	14.06



Building Quattro Business Park - Kraków

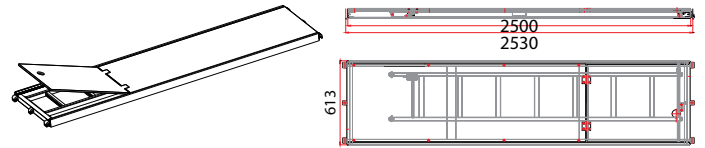


Facade tower's renovation – Szczecin

■ Aluminium-plywood access platform with a ladder

Used for assuring vertical traffic inside the scaffolding. Fitted with suspended platform ladders which, once installed, assure free traffic between scaffolding levels. The carrying structure and integrated ladder made of aluminium, filling made of waterproof non-slip plywood.

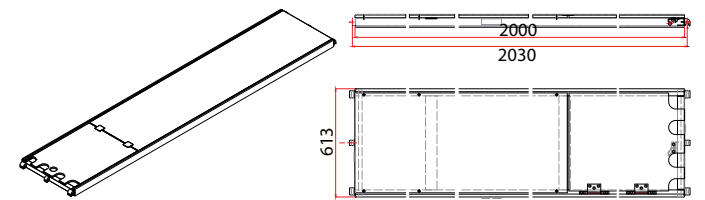
Index	Dimensions (m)	Weight (kg)
E492125	2.57x0.61	23.80
E492130	3.07x0.61	29.10



■ Passing Platform Plus without ladder

A light passing platform without the ladder (used with the inter-level ladder E511600).

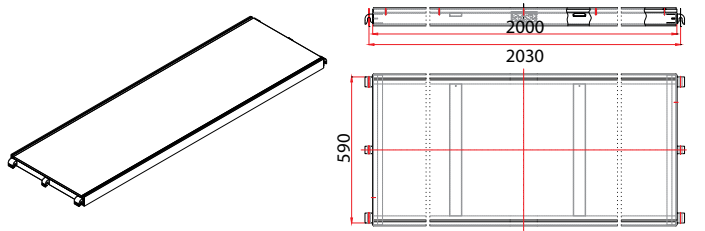
Index	Dimensions (m)	Weight (kg)
E492020	0.61x2.07	15.96
E492030	0.61x3.07	24.30



■ Complete aluminium and plywood Platform Plus

An aluminium and plywood platform with the anti-slip surface.

Index	Dimensions (m)	Weight (kg)
E491907	0.61x0.73	6.07
E491910	0.61x1.09	8.75
E491915	0.61x1.57	11.92
E491920	0.61x2.07	15.53
E491925	0.61x2.57	18.80
E491930	0.61x3.07	24.06

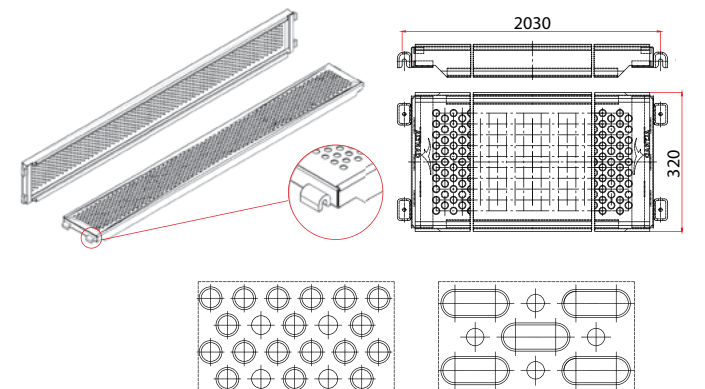


 see p. 43

■ Steel platform

Perforated, non-slip surface, and on both ends equipped with catches that allow fixing it to the frame's u-section. Platforms are used as working stations and carry the load of people, tools and materials necessary for performing the works. Perfect universal platform for scaffoldings of the frame width of 0.73 m (two 0.32 m wide platforms) or 1.09 m (three 0.32 m wide platforms) and as extension platform fixed on a bracket. Nominal load, depending on length, up to 6 kN/m².

Index	Dimensions (m)	Weight (kg)
E491307	0.32x0.73	6.09
E491310	0.32x1.09	8.54
E491314	0.32x1.40	10.31
E491315	0.32x1.57	11.84
E491320	0.32x2.07	15.34
E491325	0.32x2.57	18.70
E491330	0.32x3.07	22.13

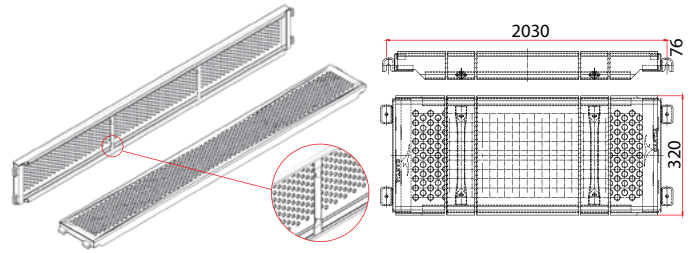


 see p. 43

■ Steel platform with crosspiece

A steel perforated platform with ergonomic crosspiece which are the additional handle for the fitter. Perfect when the scaffolding is often relocated.

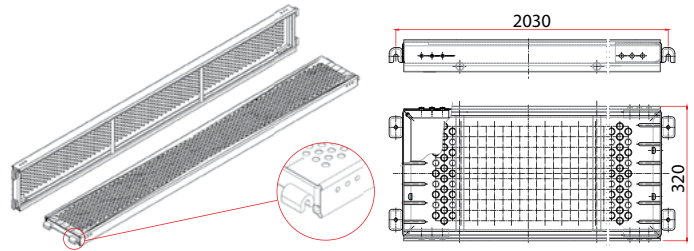
Index	Dimensions [m]	Weight [kg]
E491415	0.32x1.57	12.04
E491420	0.32x2.07	15.74
E491425	0.32x2.57	19.10
E491430	0.32x3.07	22.56



■ ECO platform with crosspiece

Clinched ECO platforms are lighter and less expensive while maintain the same strength parameters as welded platforms. Ergonomic crosspieces provide additional grip for the installer. Manufacturing includes an innovative solution for connecting the beam with catches with the main drawpiece by using the embossing and parent rivets.

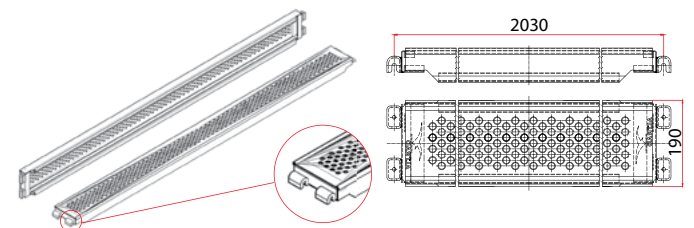
Index	Dimensions [m]	Weight [kg]
E491625	0.32x2.57	16.15
E491630	0.32x3.07	18.85



■ Steel intermediate U-platform

A platform with the U-section catch, perforated, anti-slip.

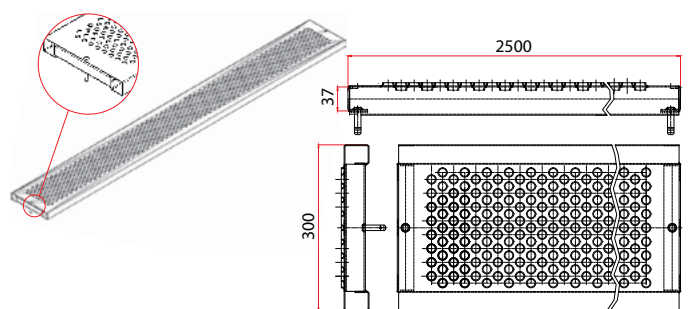
Index	Dimensions [m]	Weight [kg]
E491807	0.19x0.73	4.63
E491810	0.19x1.09	6.57
E491815	0.19x1.57	9.29
E491820	0.19x2.07	11.92
E491825	0.19x2.57	14.64
E 491830	0.19x3.07	17.37



■ Steel additional (moveable) platform

Used to fill space between two scaffolds (load capacity: 2 kN)

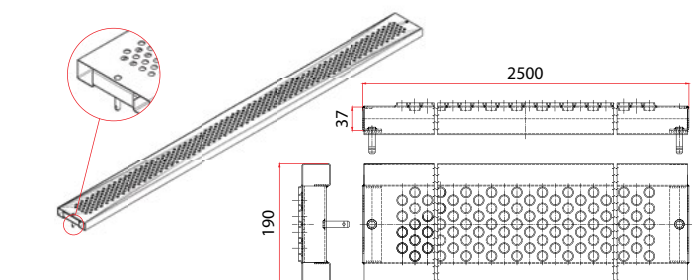
Index	Dimensions [m]	Weight [kg]
E494310	0.3x1.0	5.14
E494315	0.3x1.5	7.39
E494320	0.3x2.0	9.65
E494325	0.3x2.5	11.90



■ Additional Platform

Used to fill space between two scaffolds (load capacity: 2 kN)

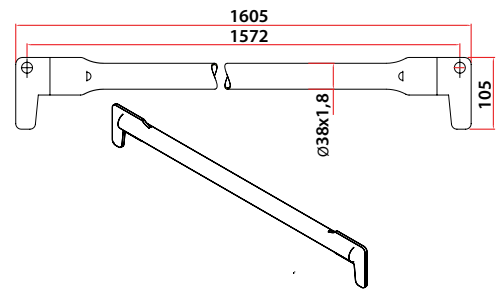
Index	Dimensions [m]	Weight [kg]
E494407	0.19x0.7	2.86
E494410	0.19x1.0	3.94
E494415	0.19x1.5	5.72
E494420	0.19x2.0	7.51
E494425	0.19x2.5	9.29
E494430	0.19x3.0	11.08



■ Single railing

Used for securing scaffolding bays. Pipe of the diameter of 38 mm with flat strips for fixing in the wedge casettes on both ends.

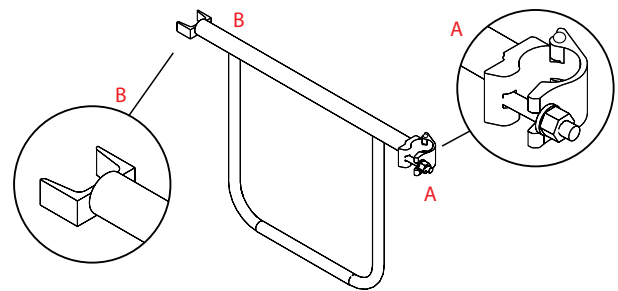
Index	Dimensions (m)	Weight (kg)
E283607	0.73	1.55
E283610	1.09	2.17
E283615	1.57	3.00
E283620	2.07	3.86
E 283625	2.57	4.70
E 283630	3.07	5.58



■ Front railing

Used for securing the front area of the working bay. Fixed to the frame using a half-coupling by tightening the nut. Pipe diameter of 33.7 mm and 26.9 mm.

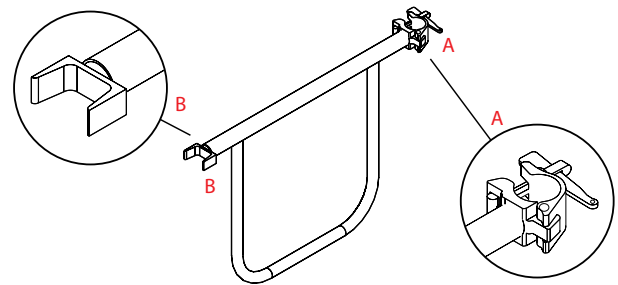
Index	Dimensions (m)	Weight (kg)
E283907	0.73	3.72
E283910	1.09	4.66



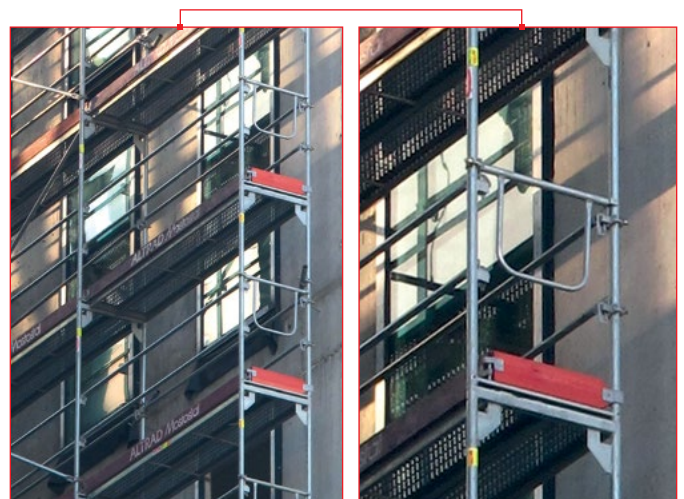
■ Front railing with wedge coupling

Fitted with a wedge coupling that assures easier and faster assembly and disassembly.

Index	Dimensions (m)	Weight (kg)
E283007	0.73	3.80
E283010	1.09	4.76



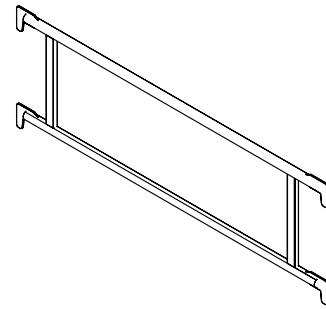
Exemplary front railing applications



■ Double railing

Double steel or aluminium railing replaces two single steel railing reducing the railing weight by half. It stiffens and stabilises scaffolding structure and makes the assembly faster and easy.

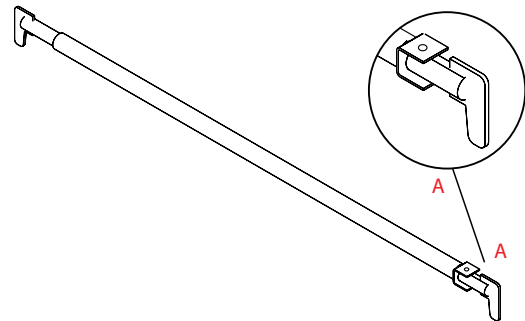
Index	Dimensions [m]	Weight [kg]
E284215 steel	0.50x1.57	7.40
E284220 steel	0.50x2.07	9.13
E284225 steel	0.50x2.57	11.51
E284230 steel	0.50x3.07	13.24
E284315 alu.	0.50x1.57	3.48
E284320 alu.	0.50x2.07	4.28
E284325 alu.	0.50x2.57	5.08
E284330 alu.	0.50x3.07	5.89



■ Steel telescopic railing

Replaces single railings and can be used as railing for bays with non-system dimensions (max. for 2.57 bay).

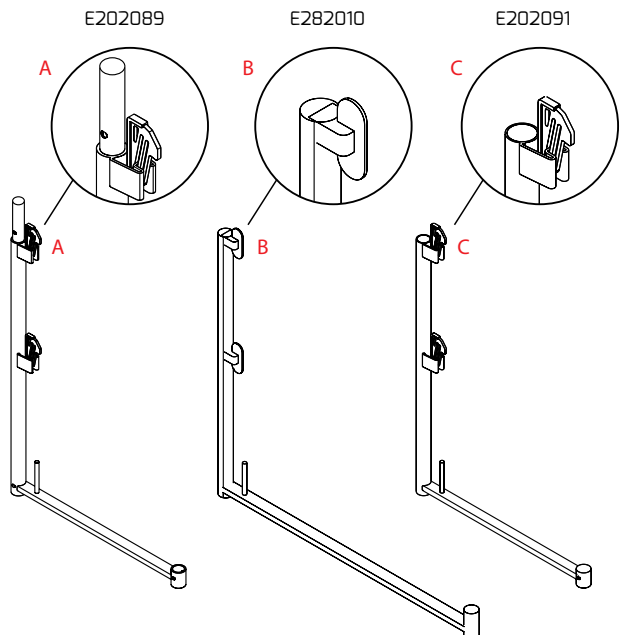
Index	Dimensions [m]	Weight [kg]
E283700	1.60-2.62	7.16



■ Steel railing post with platform protection

Ensures safety on the highest scaffolding level by acting as a railing support. It is made of the pipe of the diameter of 48 mm with wedge cassettes to install the typical side railings.

Index	Dimensions [m]	Weight [kg]
E202089	0.73x1.00	6.64
E202091	0.73x1.00	5.86
E202092	1.09x1.00	6.50
E282007	0.73x1.00	5.89
E282010	1.09x1.00	6.53



■ Aluminium railing post with platform protection

An alternative to the steel post, approx. 50% lighter.

Index	Dimensions [m]	Weight [kg]
E203083	0.73x1.00	2.97

■ **Steel front frame**

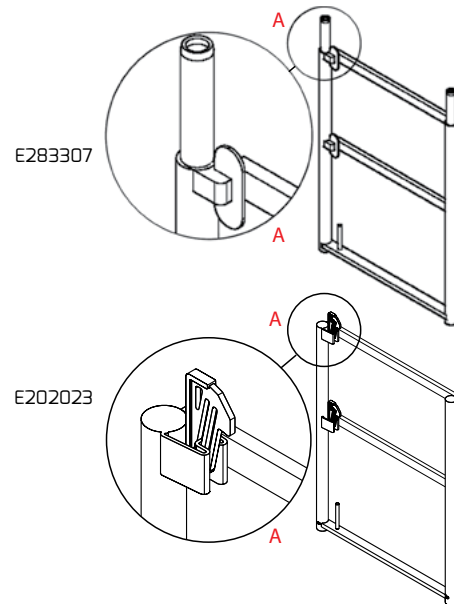
Assures work safety on the highest scaffolding level from the front side. It also serves as a longitudinal railing support.

Index	Dimensions [m]	Weight [kg]
E202023	0.73x1.00	11.34
E202024	1.09x1.00	13.20
E283307	0.73x1.00	12.53
E283310	1.09x1.00	14.43

■ **Aluminium front frame**

An alternative to the steel front frame, approx. 50% lighter.

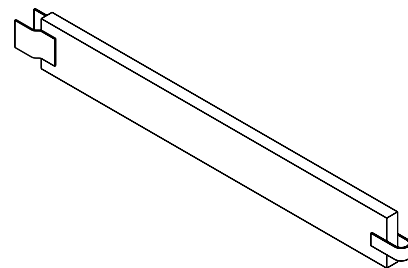
Index	Dimensions [m]	Weight [kg]
E203080	0.73x1.00	5.69



■ **Transverse toe board**

For protection from the front side of the scaffolding. Used in conjunction with the front railing and the front frame. The toe board is impregnated and fitted with steel fixtures on the ends.

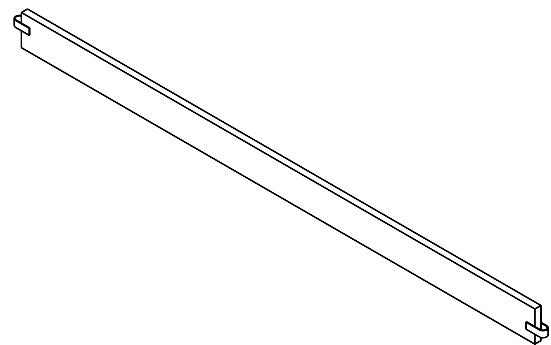
Index	Dimensions [m]	Weight [kg]
E286807	0.15x0.73	1.70
E286810	0.15x1.09	2.72



■ **Longitudinal toe board**

Protects against slipping of the worker's foot or tools from the working platform. The toe board completes the scaffolding's triple protection system (two single railings + toe board) as per the governing regulations. The toe board is impregnated and fitted with steel fixtures on the ends. The toe board is installed on the platform level on the studs welded to the lower section of frame.

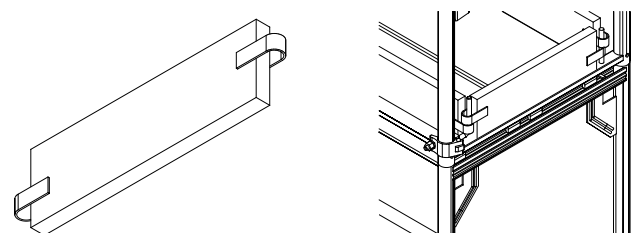
Index	Dimensions [m]	Weight [kg]
E286813	0.15x1.09	2.94
E286815	0.15x1.57	4.15
E286820	0.15x2.07	5.40
E286825	0.15x2.57	6.70
E286830	0.15x3.07	7.90



■ **Transverse curb**

Secures a scaffolding from the front. Assembly is possible thanks to the handle of the curb E286615.

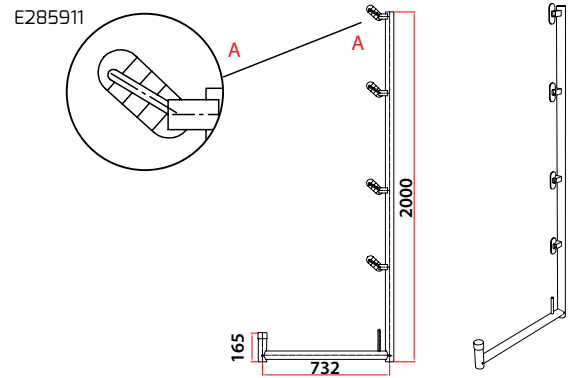
Index	Dimensions [m]	Weight [kg]
E286805	0.15x0.54	1.54



■ Net screen post

For installing the protective mesh in two rows (up to 2 meters over the highest scaffolding level).

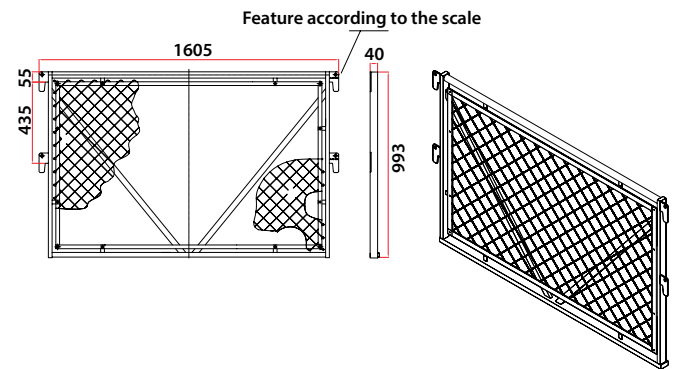
Index	Dimensions (m)	Weight (kg)
E285911	0.73x2.00	15.20
E285912	1.09x2.00	16.90



■ Net screen

Assures work safety on scaffoldings. Used for roof-works or other works connected with high risk. Protects people and various materials and tools from falling out. 60 mm mesh, fixed in a frame, installed instead of railings and toe boards on the last level of the scaffolding and used exclusively with the protective mesh post.

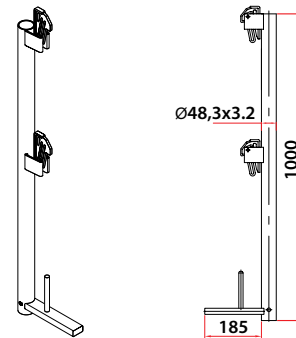
Index	Dimensions (m)	Weight (kg)
E285015	1.00x1.57	16.92
E285020	1.00x2.07	21.52
E285025	1.00x2.57	25.10
E285030	1.00x3.07	28.64



■ Steel railing post

Used for fixing the railings on last level of scaffolding. Use in conjunction with the platform protection (E2854xx).

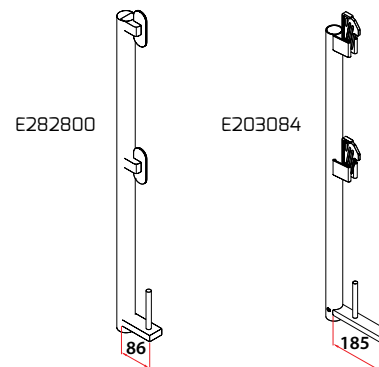
Index	Dimensions (m)	Weight (kg)
E202085	1.00	5.25
E282700	1.00	4.15



■ Aluminium railing post

An alternative to the steel post, approx. 50% lighter.

Index	Dimensions (m)	Weight (kg)
E282800	1.00	2.28
E203084	1.00	2.44

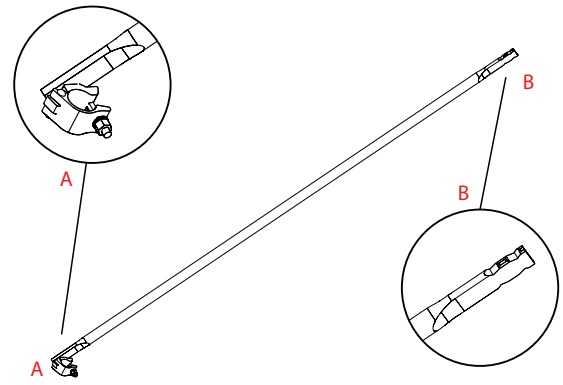


■ Diagonal

Used for stiffening the scaffolding. Made of pipe 42 mm in diameter fitted with a rotary clamp. Installed by sliding the upper end of the bracing into the gusset opening of the vertical frame and fixing the other end to the bottom of the opposite vertical frame using the clamp.

Index	For bay	Length (m)	Weight (kg)
E284715*	1.57 x 2.00	2.40	6.27
E284720	2.07 x 2.00	2.80	6.45
E284725	2.57 x 2.00	3.20	7.25
E284730	3.07 x 2.00	3.60	8.14

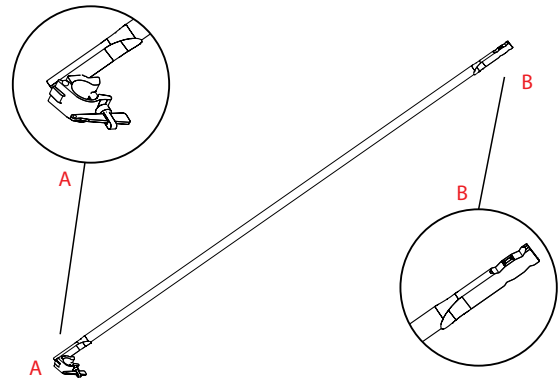
* Rotary clamps on the both endings.



■ Diagonal with wedge coupling

Alternative to the E2847xx diagonal. Instead of the rotary half-coupling with a nut and bolt this bracing is fitted with a wedge half-coupling which assures faster and easier bracing assembly and disassembly.

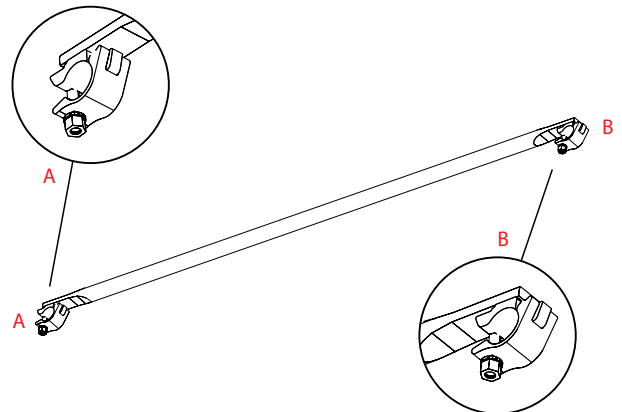
Index	For bay	Length (m)	Weight (kg)
E284815	1.57 x 2.00	2.40	6.65
E284820	2.07 x 2.00	2.80	6.63
E284825	2.57 x 2.00	3.20	7.43
E284830	3.07 x 2.00	3.60	8.33



■ Steel horizontal brace

Used for stiffening the scaffolding. Installed in columns (vertical sections) braced on the bottom of the first frame or when assembling the mobile scaffoldings based on the frame scaffoldings.

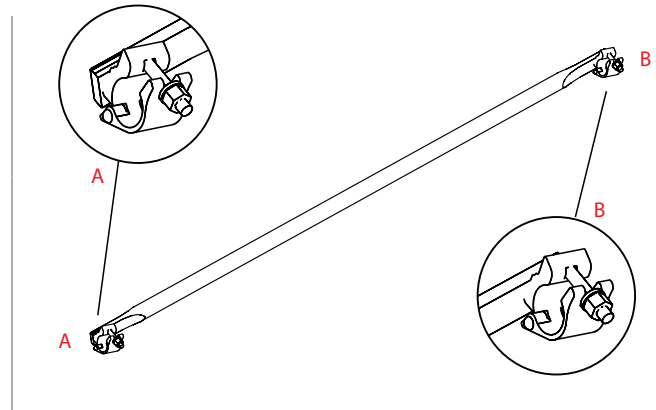
Index	Dimensions (m)	Weight (kg)
E283820	2.07	8.13
E283825	2.57	9.77
E283830	3.07	11.40



■ Angle brace

Used for supporting the steel bracket of the width of 0.73 m (E285179) or 1.09 m (E285519). Fitted with a rotary coupling.

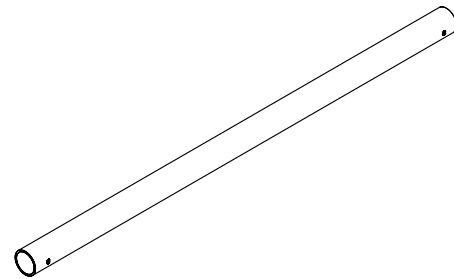
Index	Dimensions [m]	Weight [kg]
E285179	1.75	4.99
E285119	1.95	5.52



■ Universal steel pipe

Universal component used for non-standard structures and different bay lengths. Pipe diameter of 48.3 mm.

Index	Dimensions [m]	Weight [kg]
E440510	0.048x1.00	3.58
E440520	0.048x2.00	7.16
E440530	0.048x3.00	10.70
E440540	0.048x4.00	14.30
E440550	0.048x5.00	17.90
E440560	0.048x6.00	21.50



Bre Bank - Łódź



Sukiennice - Cracow



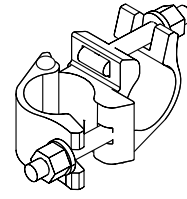
NMP Łaskawa Church - Warsaw

■ Normal coupling

Used for connecting two pipes of the diameter of 48 mm at the angle of 90°. Can be used for anchoring the scaffolding to the building. Fixed in the area of the gusset plates of the vertical frame together with the anchoring coupling. Permissible load of the standard coupling is 9.1 kN.

Index	Dimensions (m)	Weight (kg)
E581119	-	1.25

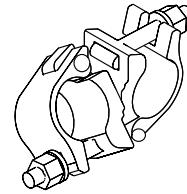
 see p. 43



■ Rotary coupling

With flange nuts, used for connecting two pipes of the diameter of 48 mm at any angle. Permissible load of the rotary coupling is 5.9 kN.

Index	Dimensions (m)	Weight (kg)
E581319	0.40x2.45	1.20

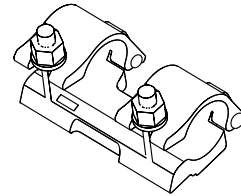


■ In-line coupling

Used for connecting two pipes of the diameter of 48 mm in the longitudinal direction while maintaining coaxiality. The longitudinal coupling must be used exclusively with the centring stud fixed on the connection of both pipes. Permissible load of the longitudinal coupling is 6 kN.

Index	Dimensions (m)	Weight (kg)
E581419	-	1.50

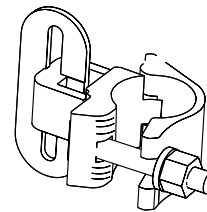
 see p. 43



■ Railing coupling with wedge

Half-coupling with an integrated wedge cassette, enables fixing the railing to the frame from facade side or at any frame height.

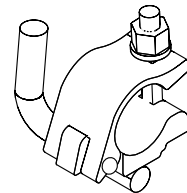
Index	Dimensions (m)	Weight (kg)
E284600	-	0.90



■ Anchor coupling

Used for anchoring the scaffolding with the standard 48 mm diameter pipes and standard couplings. Used instead the anchoring connector.

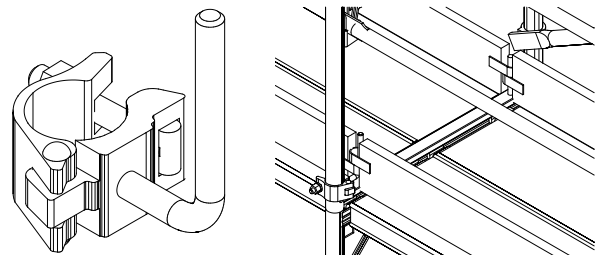
Index	Dimensions (m)	Weight (kg)
E284610	-	0.99



■ Handle of a curb

An element used when the curb needs to be installed from the inside of a scaffolding. Installed at the bottom of the frame to pipe Ø48.

Index	Dimensions (m)	Weight (kg)
E284615	-	0.85

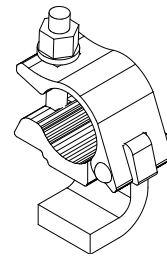


■ Anchor coupler

The element used to connect the $\varnothing 48.3$ pipe with steel elements of the construction of the building (double tee). Always use two anchor couplers.

Index	Dimensions [m]	Weight [kg]
E284620	-	1.06


 see p. 43

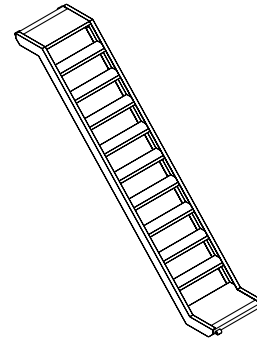


■ Aluminium stairs

Assure convenient access to the scaffolding and transportation of materials.

Index	Dimensions [m]	Weight [kg]
E286225	0.64x2.57	25,23
E286230	0.64x3.07	30.00


 see p. 37-39

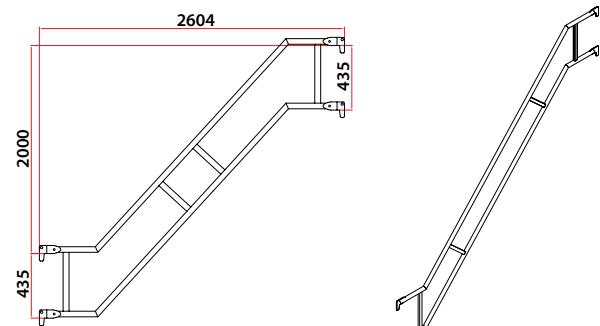


■ External railing for stairs

Assures safety when entering or exiting the frame scaffolding staircase.

Index	Dimensions [m]	Weight [kg]
E286325	2.57	16.00
E286330	3.07	17.80


 see p. 37-39

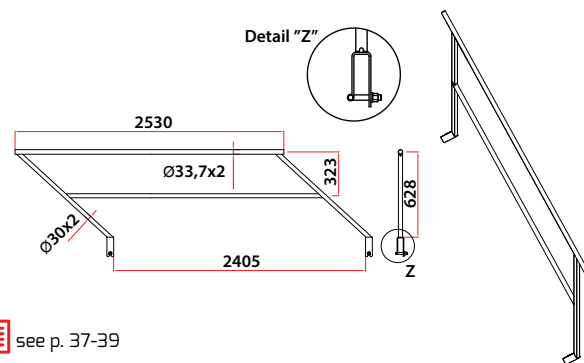


■ Internal railing for stairs

Assures safety when entering or exiting the scaffolding.

Index	Dimensions [m]	Weight [kg]
E286300	-	11.85

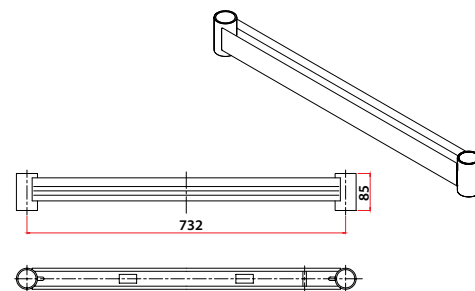
 see p. 37-39



■ Initial U-transom for stairs

Component necessary on the first scaffolding level as a support for stairs.

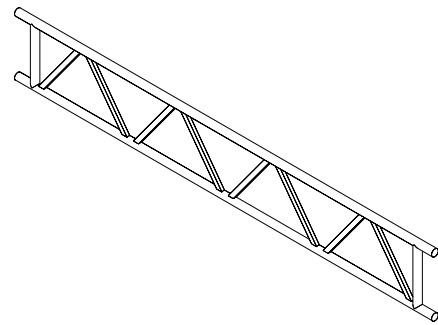
Index	Dimensions [m]	Weight [kg]
E286207	0.73	3.02



■ Steel lattice girder

For constructing passages under the scaffoldings, spans over the structural elements of the building, and all types of platforms. The girder is connected to the vertical frame using 4 standard couplings. The girder is made of pipes of the diameter of 48.3 mm x 3.2 mm.

Index	Dimensions [m]	Weight [kg]
E503330	0.40x3.00	29.22
E503332	0.40x3.24	31.14
E503340	0.40x4.00	39.28
E503342	0.40x4.24	39.67
E503352	0.40x5.24	48.55
E503360	0.40x6.00	57.42
E503362	0.40x6.24	58.03
E503230	0.50x3.24	36.40
E503240	0.50x4.24	45.60
E503250	0.50x5.24	52.33
E503260	0.50x6.24	61.12



■ Aluminium lattice girder

Lighter alternative to the steel lattice girder. Assures much easier assembly and disassembly due to lighter weight.

Index	Dimensions [m]	Weight [kg]
E501230	0.40x3.00	12.70
E501240	0.40x4.00	17.00
E501252	0.40x5.24	20.96
E501260	0.40x6.00	24.70
E501262	0.40x6.24	25.12
E501280	0.40x8.00	32.40
E501330	0.50x3.24	14.97
E501340	0.50x4.24	18.79
E501350	0.50x5.24	22.60
E501360	0.50x6.24	26.43
E501380	0.50x8.24	34.03



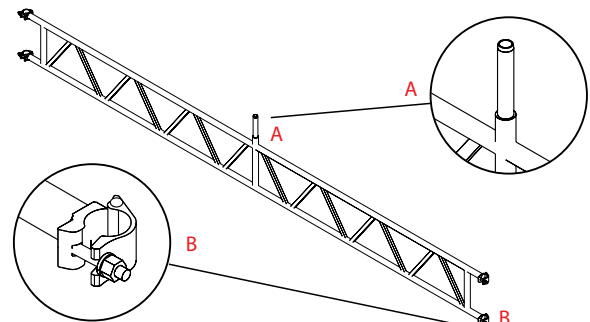
Renovation of the church facade - Szydtowiec

 see p. 30

■ Transfer steel girder

Used for constructing the passages of the following system dimensions: 5.14 (2x2.57), 6.14 (2x3.07). The ends of girder's upper and lower section are fitted with the permanent half-couplings that enable fixing the girder to the frame. The transfer girder transoms can be used to install platforms in the transfer girder areas.

Index	Dimensions [m]	Weight [kg]
E503152	0.40x5.14	56.00
E503162	0.40x6.14	62.13

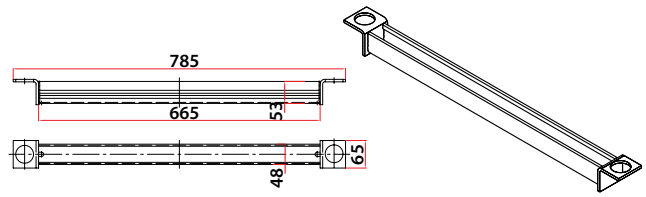


 see p. 33

■ Transfer girder transom

Used together with the E503152 and E503162 steel transfer girders as a support for platforms in the central part of the girder.

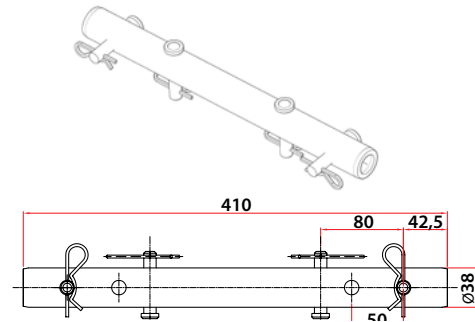
Index	Dimensions [m]	Weight [kg]
E503407	0.73	2.80



■ Girder connector with fixture elements

Enables connecting the truss girders of different length allowing the construction of the spans 6 to 12 meters long.

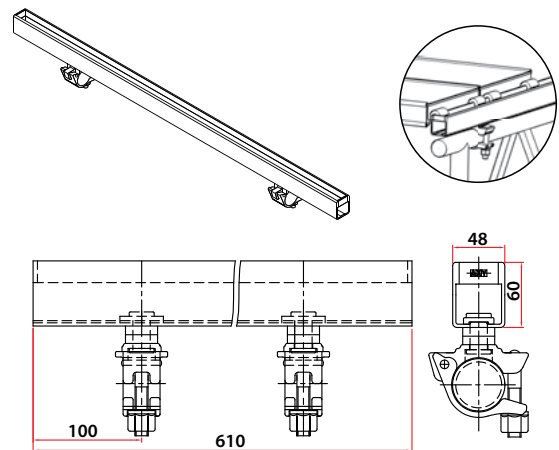
Index	Dimensions [m]	Weight [kg]
E502000	0.44	2.20



■ Aluminium platform cross-bar

U-section for 2, 3, 4, 5, 6 platforms 0.32 m wide and the appropriate lengths of girders - 3 m, 4 m, 5 m, 6 m. Fixed to the upper girder section with a coupling. Used for constructing platforms.

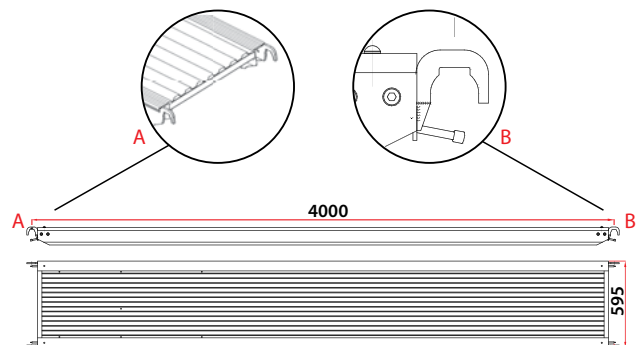
Index	Dimensions [m]	Weight [kg]
E501006	0.60	2.70
E501009	0.90	3.30
E501012	1.20	3.80
E501016	1.60	5.20
E501019	1.90	5.80
E501030	3.00	8.50
E501040	4.00	10.20
E501050	5.00	12.70
E501060	6.00	15.20



■ Aluminium platform

Universal light aluminium platform facilitating traffic on the construction site. Enables constructing elevated work and inspection platforms.

Index	Dimensions [m]	Weight [kg]
E491042	0.59x4.20	32.70
E491052	0.59x5.20	39.68
E491061	0.59x6.10	46.90
E491071	0.59x7.10	53.51



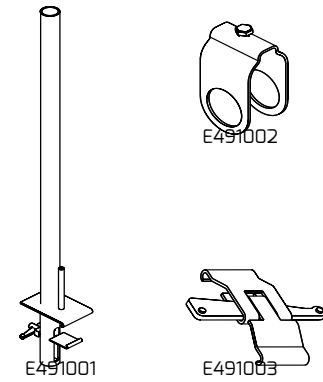
 see p. 40

■ **Aluminium railing post. Railing clamp.**
Clamp for aluminium platform

Elements used together with the aluminium platform. The aluminium post for the railings including a railing clamp and pipe of the diameter of 48.3 mm enables installing protective railings on the aluminium platform. An aluminium platform clamp is used for connecting the adjacent platform to increase the width of a platform or traffic route.

Index	Dimensions [m]	Weight [kg]
E491001	-	2.50
E491002	-	0.30
E491003	-	0.30

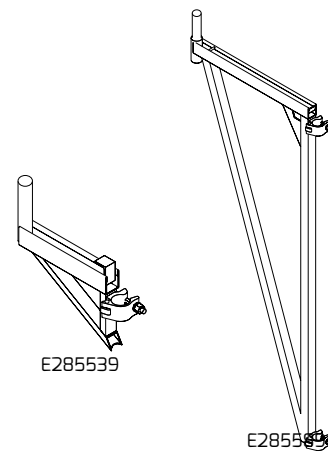
see p. 39-40



■ **Console**

Permissible console load:
 0.73 m up to 1 kN/m² when not propped.
 And up to 3 kN/m² when propped. E285579 and E285519 consoles are also used together with the E285179 or E285119 transverse brace. The E285589 (high) console does not need any support.

Index	Dimensions [m]	Weight [kg]
E285539	0.36x0.28	3.40
E285589	0.73x1.76	19.40
E285579	0.73x0.38	6.54
E285519	1.09x0.38	10.64
E285550	0.50x0.30	5.15

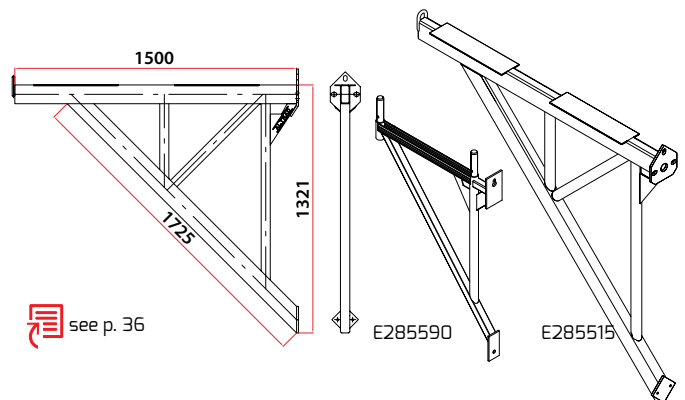


■ **Steel console – anchored**

The console is anchored to the wall and thanks to its design it enables 0.73 m wide frames and E4913... platforms to be installed on it.

Index	Dimensions [m]	Weight [kg]
E285590	0.73	16.10
E285515	1.50	41.10

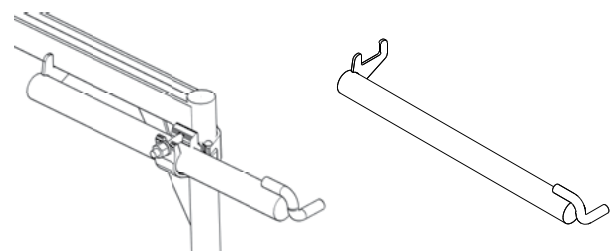
see p. 36



■ **Anchor coupling with hook**

Installed in the cut outs in the frame gusset plates using one standard coupling enabling free adjustment of distance between the scaffolding and the wall and transferring the external load from the scaffolding to the building.

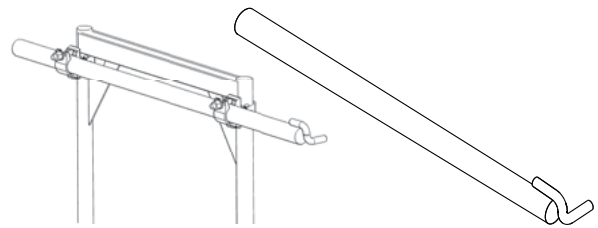
Index	Dimensions [m]	Weight [kg]
E286606	0.60	2.74



■ Distance anchor coupling with hook

Long anchor couplings (1.30 m and 1.50 m long) are fixed to both stands of the vertical frames using two standard couplings. Short anchor couplings (0.40 m and 0.80 m long) are fixed to just one frame stand, located near the wall, using one standard coupling.

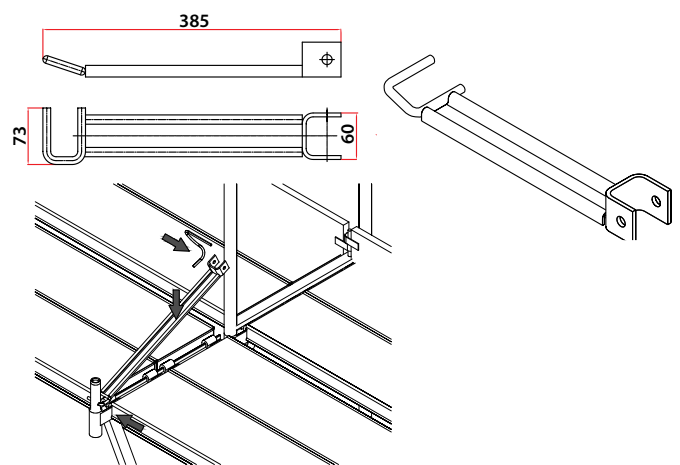
Index	Dimensions [m]	Weight [kg]
E286504	0.40	1.66
E286508	0.80	2.96
E286513	1.30	4.58
E286515	1.50	5.20



■ Platform securing element

Secures the platforms against falling out of the frame u-section on the highest level of the scaffolding with the installed standard railing posts and platforms placed on the steel supports.

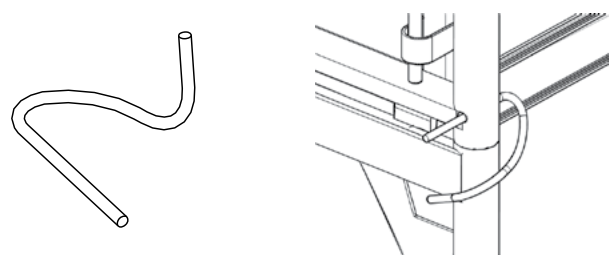
Index	Dimensions [m]	Weight [kg]
E285403	0.36	0.99
E285407	0.73	1.75
E285410	1.09	2.48



■ Securing pin

The pin protects vertical frames against disconnecting. It is drawn through the holes for connecting two frames.

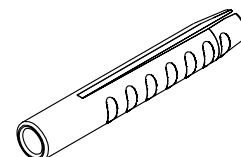
Index	Dimensions [m]	Weight [kg]
E511100	-	0.10



■ Plastic rawplug

Plastic rawplug of the diameter of 14 mm for fixing eye bolts (E5110xx).

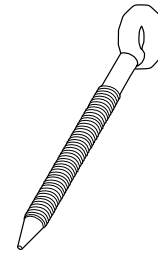
Index	Dimensions [m]	Weight [kg]
E511907	14 / 70	0.03
E511910	14 / 100	0.03



■ Anchor eye bolt

Bolt used for anchoring the scaffolding to a wall, used together with the rawplug (E511907).

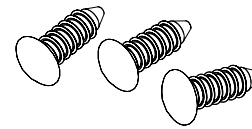
Index	Dimensions [m]	Weight [kg]
E511012	0.12	0.20
E511016	0.16	0.25
E511019	0.19	0.30
E511023	0.23	0.40
E511028	0.28	0.50
E511030	0.30	0.55
E511035	0.35	0.60



■ Hole plug

Used for plugging the holes created after removing the anchor bolts.

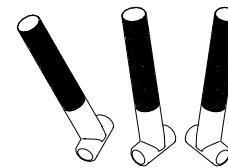
Index	Dimensions [m]	Weight [kg]
E511800	-	0.01



■ Tee head bolt

Used together with the E581302 flange nut. A spare part for the couplings.

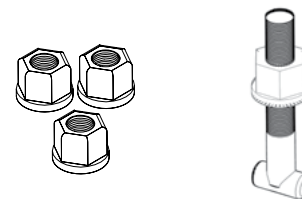
Index	Dimensions [m]	Weight [kg]
E581301	-	0.10



■ Flange nut

A service component and a component of all types of couplings and vertical braces. Used together with the SW 19 tee head bolt.

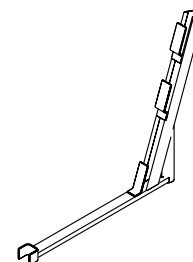
Index	Dimensions [m]	Weight [kg]
E581302	-	0.04



■ Protective roof console

Used together with the steel support with a clamp (E285579) for securing personnel traffic routes against falling objects.

Index	Dimensions [m]	Weight [kg]
E288501	0.73	5.65



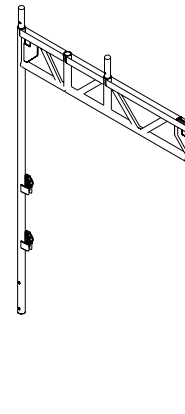
 see p. 31

■ **Steel transfer frame**

Enables safe and convenient personnel traffic under the constructed scaffolding. Bottom parts of the transfer frame stands are connected together in parallel to the wall using the horizontal braces (or pipes and couplings) or secured near the ground against shifting. Compatible with frames 0.73 m and 1.09 m wide.

Index	Dimensions [m]	Weight [kg]
E202195	1.50x2.20	34.54
E281515	1.50x2.20	35.96

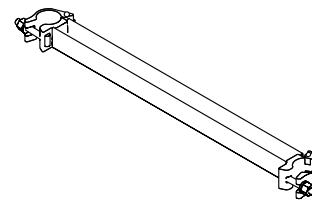
 see p. 31



■ **Transverse transom**

Designed for fixing platforms at any height on the frame.

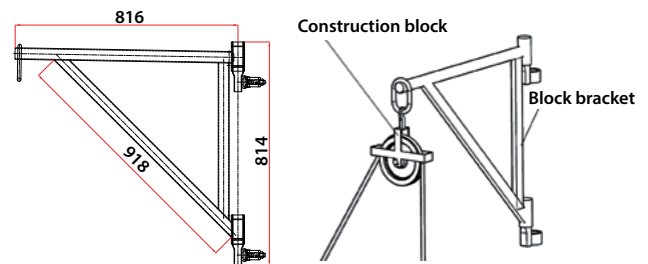
Index	Dimensions [m]	Weight [kg]
E285379	0.73	3.40
E285319	1.09	6.14



■ **Jib for block. Block for jib**

For vertical transportation of the scaffolding components or materials. Maximum lifting capacity – 150 kg.

Index	Dimensions [m]	Weight [kg]
E552100	0.85	7.70
E552000	-	3.00

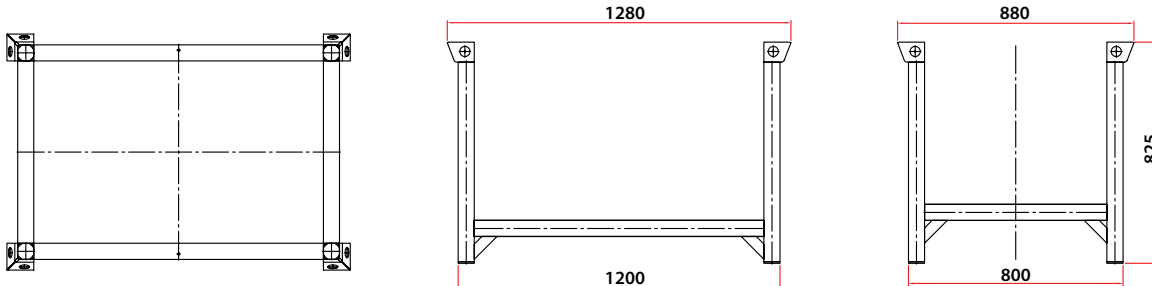
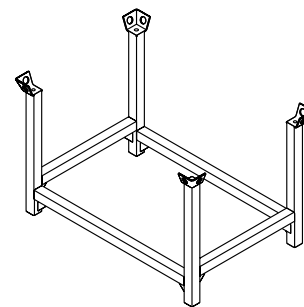


■ **Module pallet**

Perfect for space-efficient storage and transportation of the scaffolding components. Can be moved using a forklift or crane.

Index	Dimensions HxAxB [m]	Load capacity of a single pallet [kN]	Max. number of levels	Weight [kg]
E822800	0.82x0.88x1.28	20	3 levels - 60 kN	40.20
E823800	0.82x0.88x1.28	15	3 levels - 45 kN	29.00

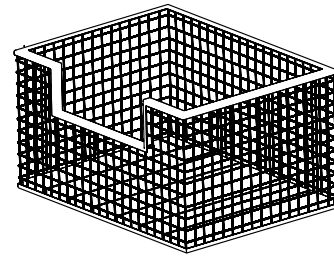
 see p. 41



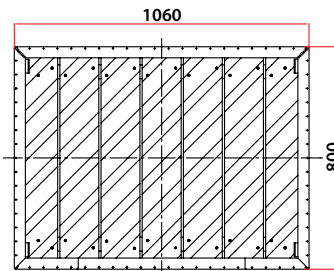
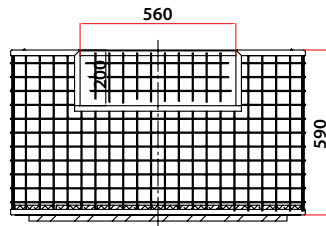
■ Module basket

Comes together with the Modul pallet, used for storing small scaffolding components (couplings, stands, anchor connectors, brackets).

Index	Dimensions (m)	Weight (kg)
E822900	0.68x1.08	30.40



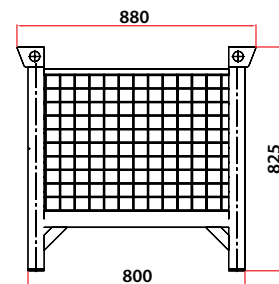
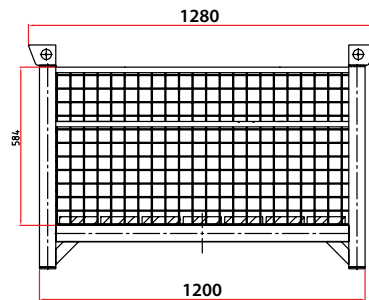
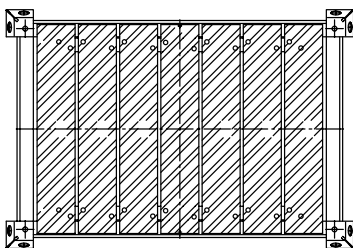
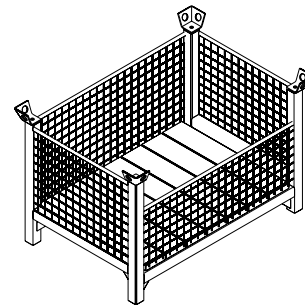
 see p. 41



■ Net pallet

Perfect for space-efficient storage and transportation of the scaffolding components.

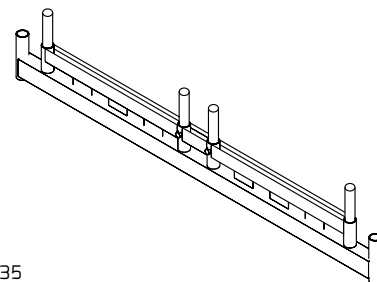
Index	Dimensions HxAxB (m)	Load capacity of a single pallet (kN)	Max. number of levels	Weight (kg)
E822808	0.82x0.88x1.28	20	3 levels - 60 kN	69.70
E823808	0.82x0.88x1.28	15	3 levels - 45 kN	58.50




■ Mobile scaffolding guide beam

Designed for installing mobile scaffoldings using the frame scaffolding components. Used exclusively with the E571175 base jack with two nuts and the MP-116 mobile scaffolding wheel, and the horizontal brace.

Index	Dimensions (m)	Weight (kg)
E571110	1.09x2.60	37.76
E571173	0.73x1.90	26.34




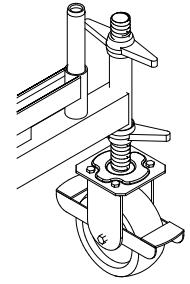
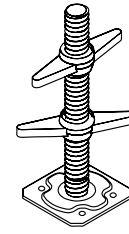
 see p. 34-35

■ Base jack with two nuts

Designed for compensating surface irregularities. Used also as a mobile scaffolding base jack.

Index	Dimensions [m]	Weight [kg]
E571175	0.40	4.10


 see p. 34-35

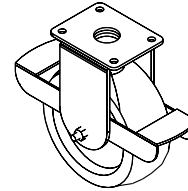


■ Mobile scaffolding wheel

Used together with E571175. Operational load of a single wheel is 750 kg. The wheel is fitted with a lock.

Index	Dimensions [m]	Weight [kg]
MP-116	-	4.00

 see p. 34-35



■ Scaffolding net

Securing net reinforced with the black-coloured threads, with fixing holes every 10 cm on the entire length. Basis weight – approx 65 g/m². Wind permeability – 50-55%.

Index	Dimensions [m]	Weight [kg]
E732025	2.57x10	0.05
	2.57x20	-
E732030	3.07x10	0.06
	3.07x20	-



Scaffolding net



Przemienienie Pańskie Church - Łuków



Apollo Rida Construction - Warsaw

■ Scaffolding canvas cover

The canvas cover coated on both sides (polyethylene – TEX 12x12 fabric). Basis weight approx 180 g/m².

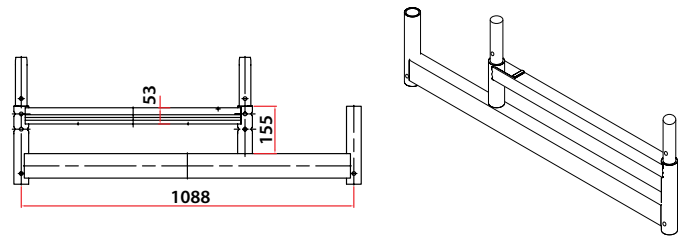
Index	Dimensions (m)	Weight (kg)
E733725	2.60x10	0.18
	2.60x20	-
E733730	3.10x10	0.18
	3.10x20	-



■ Reducing transom (steel adjusting beam)

Designed for reducing the scaffolding bay area (changing the bay width from 1.09 m to 0.73 m).

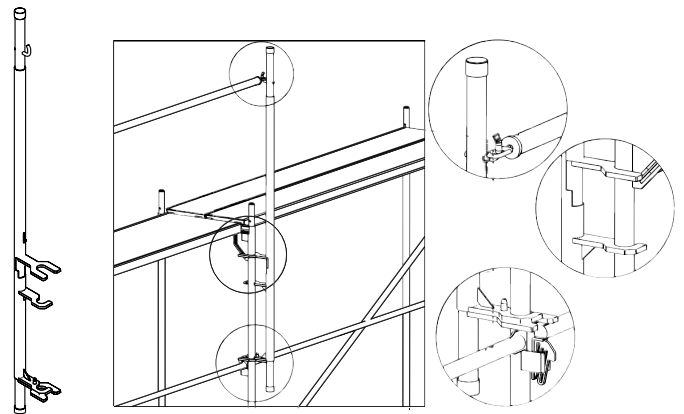
Index	Dimensions (m)	Weight (kg)
E281402	0.73x1.09	12.85



■ Installation post (leading)

Component of the Safety Kit. One set consists of two posts which together with the telescopic railing constitute a temporary safety feature for the installer during the scaffolding assembly.

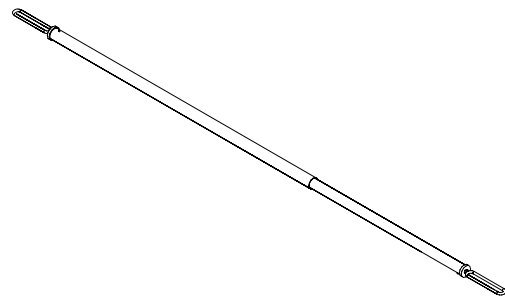
Index	Dimensions (m)	Weight (kg)
E206600	2.00	6.82



■ Telescopic railing

Component of the Safety Kit. Enables moving the installation posts to the following levels without disassembling the kit. Adjustment range 1.5 - 2.07 m or 2.07 - 3.7 m.

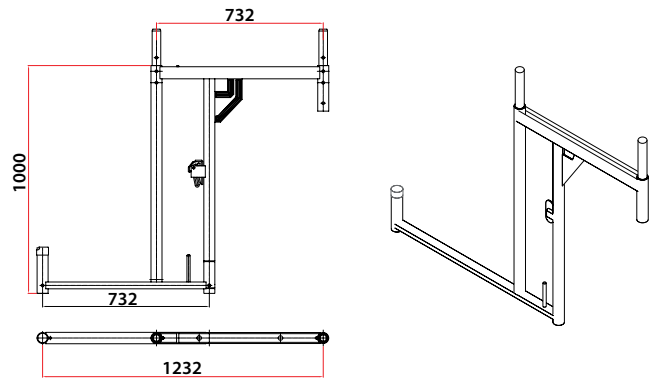
Index	Min. length (m)	Max. length (m)	Weight (kg)
E206700	2.07	3.70	4.23
E206800	1.50	2.07	3.45



■ Steel and aluminium eaves frame

Designed for bypassing eaves and cornices of the building.

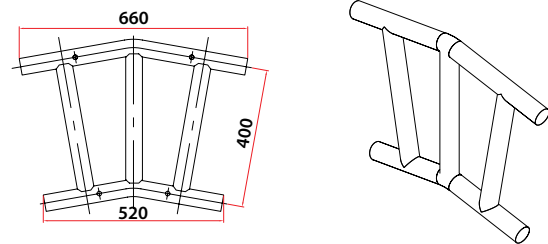
Index	Dimensions (m)	Weight (kg)
E281525 steel	1.00	15.22
E281530 alu.	1.00	7.96



■ Steel roof girder

Component for connecting the system girders when building roofs of halls and tents.

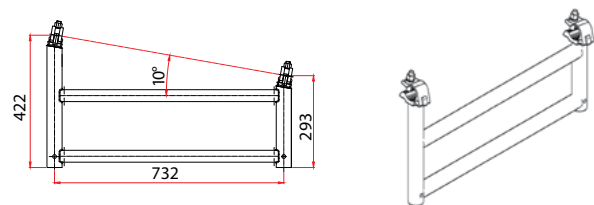
Index	Dimensions (m)	Weight (kg)
E502140	0.4x0.80	8.20



■ Girder bracket

Component connecting the frame with the girder. Provides a 10-degree slope of hall or tent roofs.

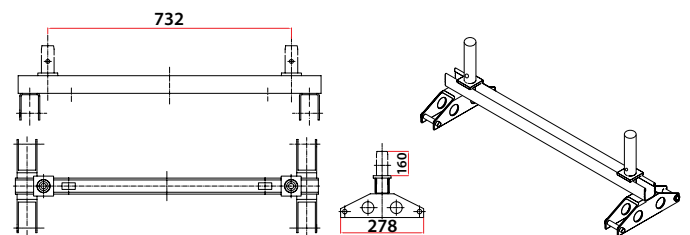
Index	Dimensions (m)	Weight (kg)
E503507	0.73	5.99



■ Steel girder transom

Constitutes the base for constructing the scaffolding over passageways. Installed on the girders.

Index	Dimensions (m)	Weight (kg)
E503573	0.28x0.91	7.47

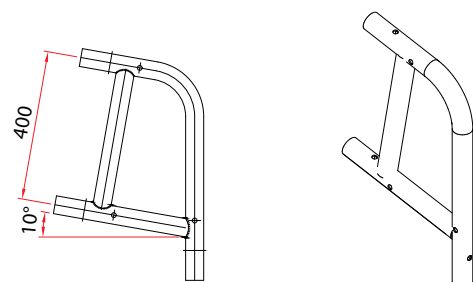


 see p. 33

■ Roof ending beam

Element intended for system end of beams 0,4xL. It plays the role of an eaves.

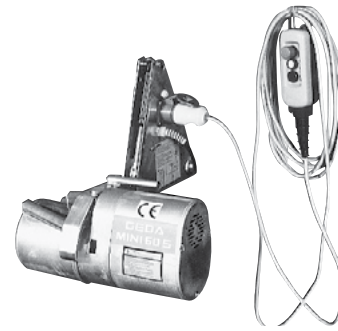
Index	Dimensions (m)	Weight (kg)
E501940	0.4x0.62	5.59



■ **Electric hoisting winches Mini 60S, Maxi 120S, Maxi 150S**

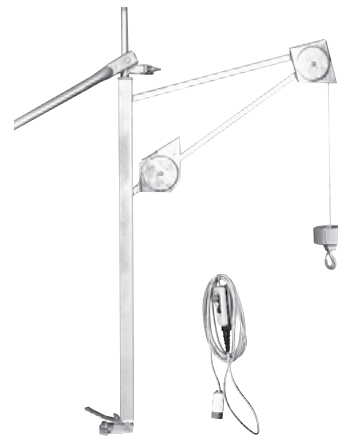
Lifting capacity - 120 kg; 2 lifting speeds 20/60 m/min;
 power - 0.45/1.35 kW; power supply - 230 V/50 Hz.
 Lifting capacity - 150 kg; 2 lifting speeds 15/45 m/min;
 power - 0.45/1.35 kW; power supply - 230 V/50 Hz.

Index	Lifting capacity (kg)
E552606 with 51 m cable	50.00
with 81 m cable	56.00
E552612 with 51 m cable	60.00
with 81 m cable	65.00
E552615 with 51 m cable	60.00
with 81 m cable	65.00



■ **Accessories for hoisting winches**

- Block for jib
- Jib for block
- Rotary outrigger
- Hook
- Holder for 5 hooks
- Cable (5 mm diameter, 35 cm long) for suspending several hooks
- Hanger for 4 buckets
- Power supply cable 30 m
- Power supply cable 50 m
- Cable 51 m
- Cable 81 m

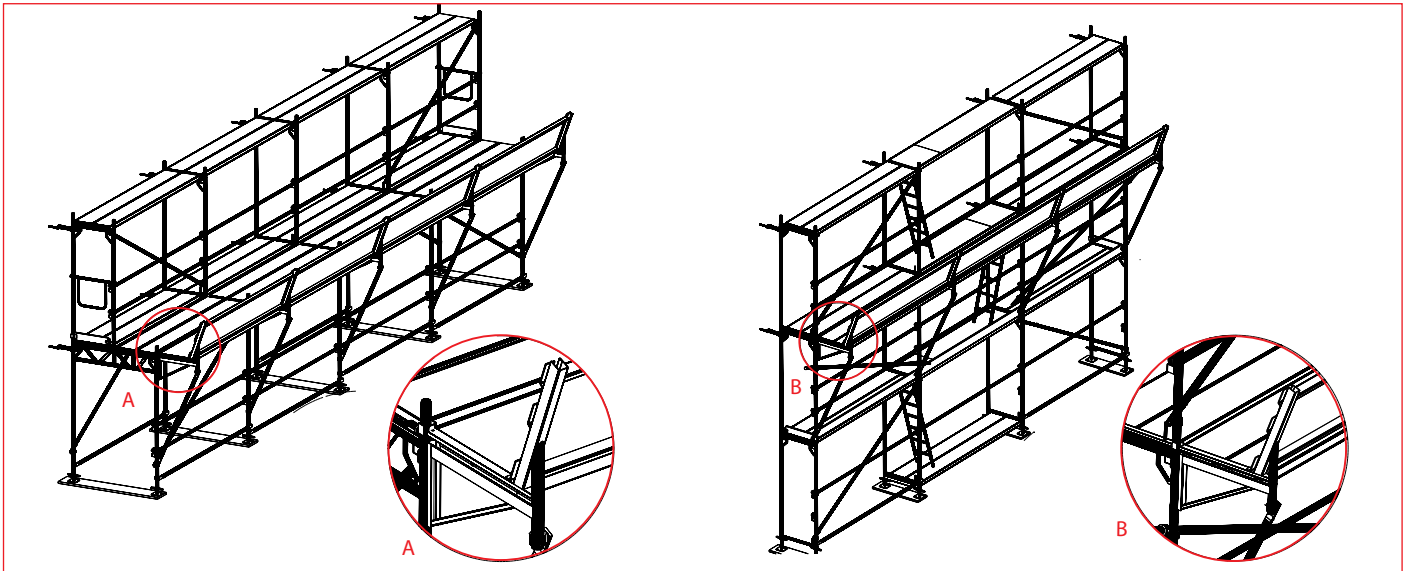


4. FOOTWAYS (PASSAGE FRAMES)

■ Passages under scaffoldings

The passage frames are installed to provide a passage for people under the scaffolding. The frames should be inter-connected with the horizontal braces. The connection should be made directly over the screw base jack nut parallel to the facade.

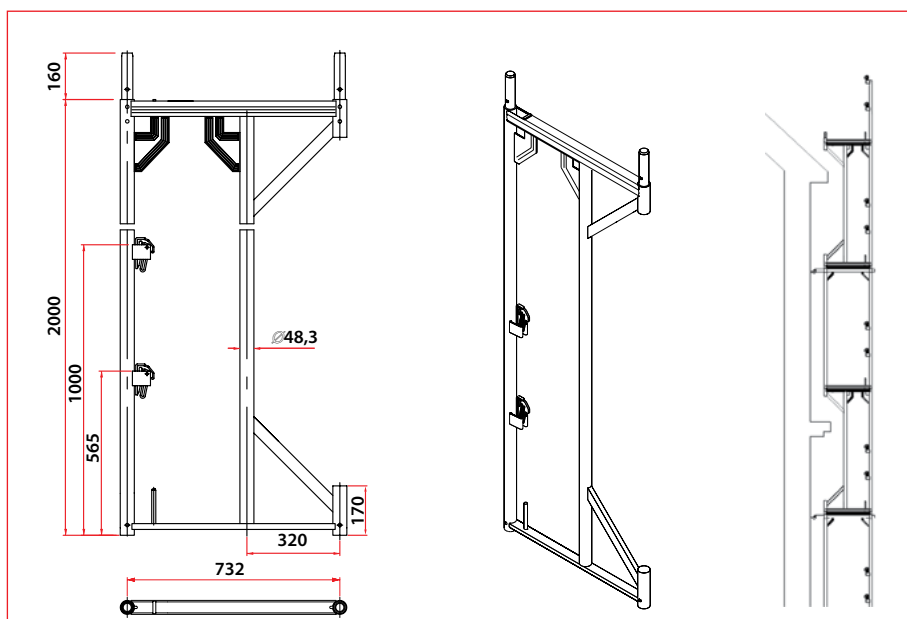
The scaffolding made of the passage frames is max. 34 m high providing that all first and second level nodes are anchored. The passage frames are braced on both (external and internal) frame sides. For higher levels brace the external frames.



5. BYPASS FRAMES

■ Bypass frames

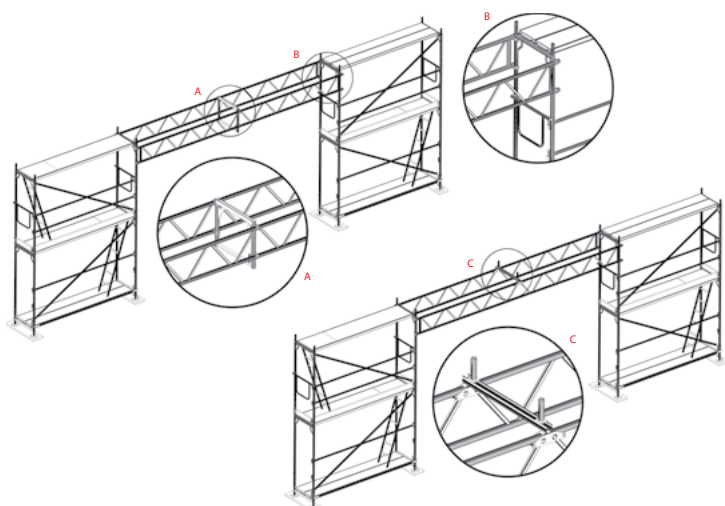
Used where the cornices, roof protrusions overlap the scaffolding. Bypass frames may be fitted with the standard system vertical frames 2.0x0.73 m. The bypass frame may be built up to 8 m.



6. GATE ENTRIES (PASSAGES UNDER SCAFFOLDINGS - GIRDERS)

Gate entries

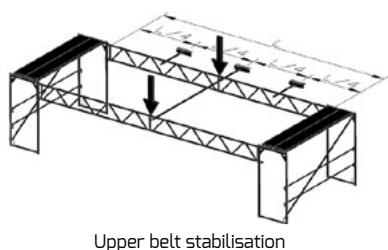
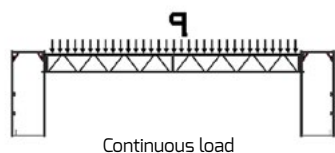
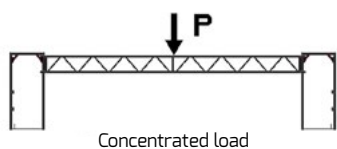
Grate girders are used to provide passages under the scaffolding and they are installed outside the adjacent frames with the standard couplings. Each girder is fixed to the frame stands with 4 couplings. When the passage must be more than 3.07 m wide use the E503573 girder transom or steel frame 0.6 m where you can put next level frames (adjacent figure). When building the passage under the scaffolding with a grate girder it can replace no more than 2 bays. For the scaffoldings 20 m - 34 m high and 1.09 m wide the structure should be additionally reinforced above the girder and fitted with the standard pipes 6 m long to reinforce the frame stands in the passage zone.



The example of using the lattice girder

EFFECTIVE LOAD CAPACITY OF ALUMINIUM MOSTOSTAL Plus GIRDERS

Girder fixed to the supports (frames) with 4 normal connectors

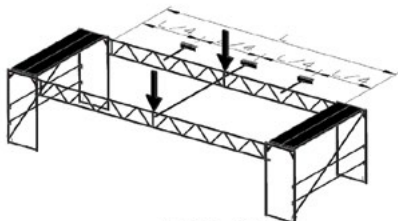
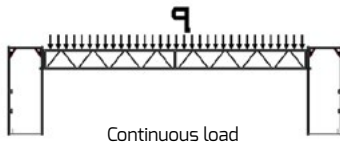
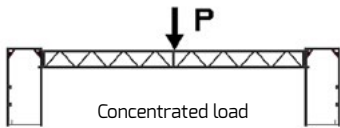


Aluminium girders, 0.4 XL + min. 0.1 m	Girder supports spacing (bay dimens.) L (m)	Concentrated force F (kN)	Concentrated force F (kN)	Uniform load q (kN/m)
			Loaded with force concentrated in the middle of the bay length. Upper belt stabilised in the middle of the bay length.	Loaded with force concentrated in the middle of the bay length. Upper belt stabilised uniformly every (...) m.
	3.07	7.50	10.90 (1.02)	2.87
	4.14	5.70	10.50 (1.38)	2.17
	5.14	4.40	4.30 (1.29)	2.84
	6.14	3.50	4.30 (1.54)	2.29
	8.00	2.30	6.90 (1.36)	1.15
	10.00	1.60	4.90 (1.42)	0.83
	12.00	1.50	4.10 (1.50)	0.51

Aluminium girders, 0.5 XL + min. 0.1 m	Girder supports spacing (bay dimens.) L (m)	Concentrated force F (kN)	Concentrated force F (kN)	Uniform load q (kN/m)
			Loaded with force concentrated in the middle of the bay length. Upper belt stabilised in the middle of the bay length.	Loaded with force concentrated in the middle of the bay length. Upper belt stabilised uniformly every (...) m.
	3.07	7.66	23.13 (1.02)	4.15
	4.14	5.82	14.20 (1.38)	2.98
	5.14	4.45	13.80 (1.29)	2.29
	6.14	3.49	10.93 (1.54)	2.09
	8.00	2.29	7.53 (1.36)	1.27
	10.00	1.58	5.73 (1.42)	0.91
	12.00	1.15	6.13 (1.50)	0.60

■ Effective load capacity of steel MOSTOSTAL Plus girders

Girder fixed to the supports (frames) with 4 normal connectors



(anchored transversely)

Steel girders, 0.4 XL + min. 0.1 m	Girder supports spacing (bay dimens.) L (m)	Concentrated force F (kN)	Concentrated force F (kN)	Uniform load q (kN/m)
			Loaded with force concentrated in the middle of the bay length. Upper belt stabilised in the middle of the bay length.	Loaded with force concentrated in the middle of the bay length. Upper belt stabilised uniformly every (...) m.
	3.07	8.13	9.73 (1.02)	2.20
	4.14	6.61	9.00 (1.38)	1.69
	5.14	5.57	8.20 (1.29)	2.37
	6.14	4.50	5.13 (1.54)	1.97
	8.00	3.05	5.53 (1.36)	0.80
	10.00	2.08	3.87 (1.42)	0.58
	12.00	1.52	3.07 (1.50)	0.41

Steel girders, 0.5 XL + min. 0.1 m	Girder supports spacing (bay dimens.) L (m)	Concentrated force F (kN)	Concentrated force F (kN)	Uniform load q (kN/m)
			Loaded with force concentrated in the middle of the bay length. Upper belt stabilised in the middle of the bay length.	Loaded with force concentrated in the middle of the bay length. Upper belt stabilised uniformly every (...) m.
	3.07	8.45	9.27 (1.02)	2.41
	4.14	6.91	13.53 (1.38)	2.39
	5.14	5.59	9.27 (1.29)	1.47
	6.14	4.53	10.47 (1.54)	1.71
	8.00	2.97	6.2 (1.36)	1.07
	10.00	2.09	4.67 (1.42)	0.69
	12.00	1.53	3.67 (1.50)	0.49

7. MOBILE SCAFFOLDINGS MOSTOSTAL Plus

■ Mobile scaffoldings supported on frame scaffoldings

The following rule must be obeyed when building mobile scaffoldings: scaffolding height cannot exceed tripled length of the smaller side of the scaffolding base (outside).

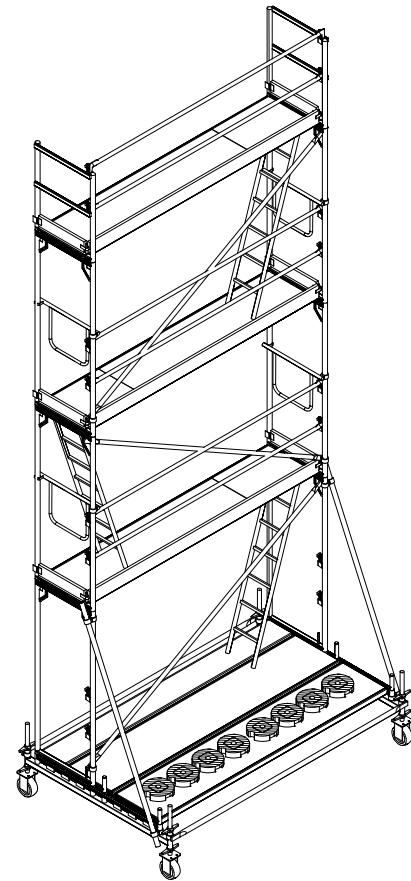
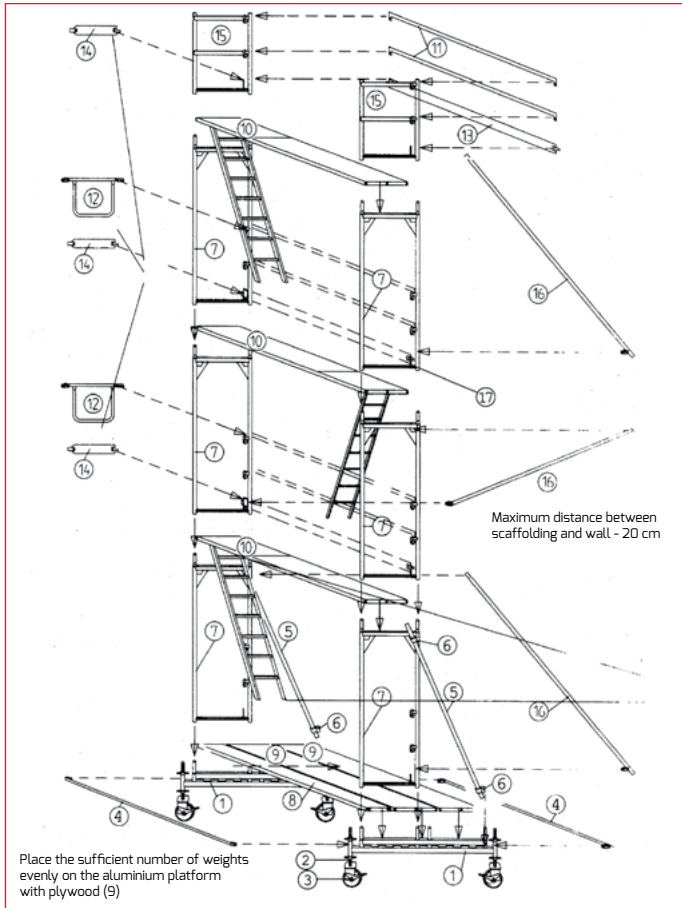
Scaffolding height cannot exceed quadrupled length of the smaller side of the scaffolding base (inside).

These rules do not apply to the mobile scaffoldings anchored to the building.

Following rules must be obeyed when working on this type of scaffolding:

- work only on one working level,
- do not mount hoisting winches,
- move the scaffolding only across flat, even and sufficiently strong surface,
- move the scaffolding only along its longer axis,
- workers and tools are not allowed to be/remain on the scaffolding when it is moved,
- when the scaffolding reaches its destination point lock the caster brakes,
- check the scaffolding stability (all castors supporting the scaffolding) each time it is moved.

■ Wall scaffolding building diagram



• Example: working platform height: 6.53 m

Working height [m]	4.53	6.53	8.53
Scaffolding height [m]	3.53	5.53	7.53
Working platform height [m]	2.53	4.53	6.53

Lp.	No.	Component name	Index			
MOBILE SCAFFOLDING UNIT	1.	Mobile scaffolding guide beam	E571173	2	2	2
	2.	Base jack with two nuts	E571175	4	4	4
	3.	Mobile scaffolding wheel	MP-116	4	4	4
	4.	Steel horizontal brace 2.57 m**	E283825	2	2	2
SCAFFOLDING STRUCTURE	5.	Universal pipe 4 m	E440540			2
	6.	Rotary coupling	E581319			4
	7.	Steel frame 2.0x0.73 m***	E202026	2	4	6
	8.	Steel platform 2.57 m**	E491325	1	1	1
	9.	Aluminium platform 2.57 m with plywood**	E491125	2	2	2
	10.	Aluminium-plywood access platform 2.57 m**	E492125	1	2	3
	11.	Single railing 2.57 m**	E283625	2	4	6
	12.	Front railing 0.73 m	E283907		2	4
	13.	Longitudinal toe board 2.57 m**	E286825	1	2	3
	14.	Transverse toe board 0.73 m	E286807	2	4	6
	15.	Front frame 0.73 m	E202023	2	2	2
	16.	Diagonal for bay 2.57**	E284725	1	2	3
	17.	Securing pin	E511100	8	12	16

Ballast for working inside building

Ballast for working outside building

6 weights

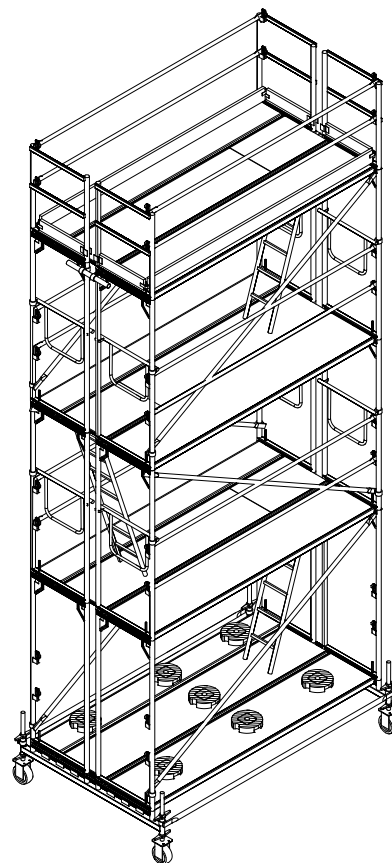
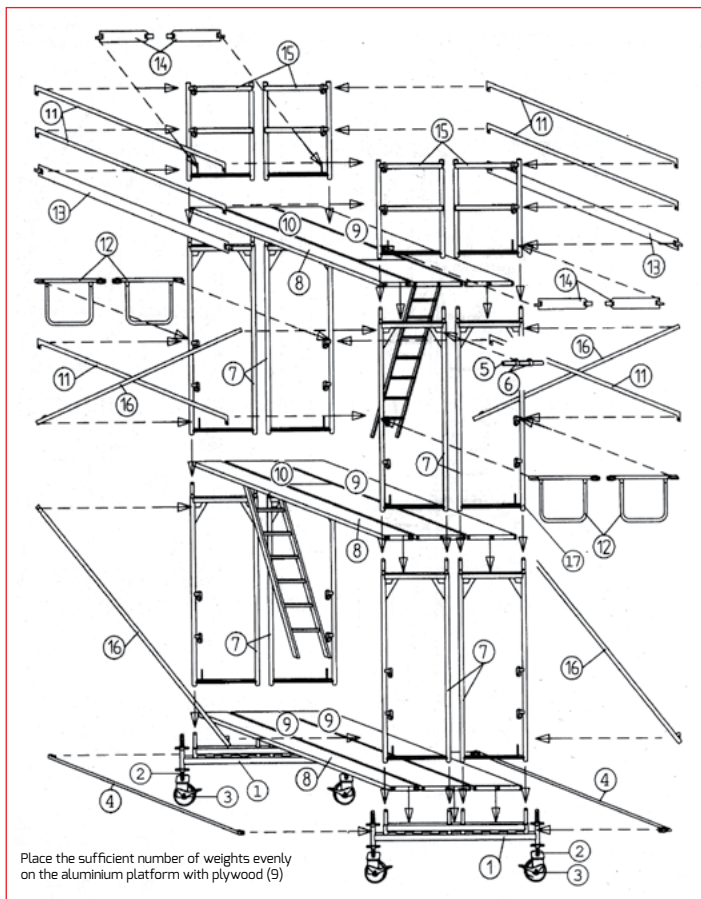
8 weights

* weights 26 kg

** replacement parts for bay 3.07 m

*** alternative to aluminium

■ Ceiling scaffolding building diagram



■ Example: working platform height: 4.53 m

Working height [m]	4.53	6.53	8.53	10.53
Scaffolding height [m]	3.53	5.53	7.53	9.53
Working platform height [m]	2.53	4.53	6.53	8.53

Lp.	No.	Component name	Index				
MOBILE SCAFFOLDING UNIT	1.	Mobile scaffolding guide beam	E571173	2	2	2	2
	2.	Base jack with two nuts	E571175	4	4	4	4
	3.	Mobile scaffolding wheel	MP-116	4	4	4	4
	4.	Steel horizontal brace 2.57 m**	E283825	2	2	2	2

SCAFFOLDING STRUCTURE	5.	Universal pipe 4 m	E440505			2	4
	6.	Normal coupling	E581119			4	8
	7.	Steel frame 2.0x0.73 m***	E202026	4	8	12	16
	8.	Steel platform 2.57 m**	E491325	2	3	4	6
	9.	Aluminium platform 2.57 m with plywood**	E491125	3	4	5	6
	10.	Aluminium-plywood access platform 2.57 m**	E492125	1	2	3	4
	11.	Single railing 2.57 m**	E283625	4	8	12	16
	12.	Front railing 0.73 m	E283907		4	8	12
	13.	Longitudinal toe board 2.57 m**	E286825	2	2	2	2
	14.	Transverse toe board 0.73 m	E286807	4	4	4	4
	15.	Front frame 0.73 m	E202023	4	4	4	4
	16.	Diagonal for bay 2.57**	E284725	2	4	6	8
	17.	Securing pin	E511100	16	24	32	40

Ballast for working inside building

Ballast for working outside building

7 weights

2x7 weights

* weights 26 kg

** replacement parts for bay 3.07 m

*** alternative to aluminium

8. ANCHORED CONSOLES

■ Scaffoldings build on anchored consoles

Anchored consoles allow building the scaffoldings at any height. It is often required when it is not necessary or possible to build the scaffolding on the ground level. A scaffolding cannot be often installed on roofs, balconies or ceilings due to their structure or load capacity and a wall anchored console is often used then to build a scaffolding by using the grate girders.

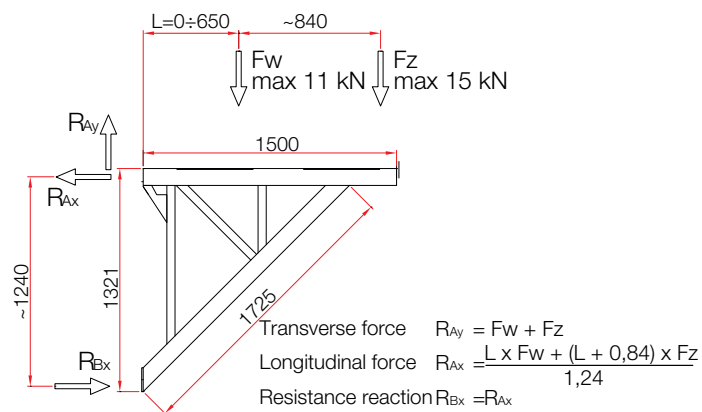
The console must be anchored with two or three anchors while considering the base (wall) characteristics. In general, it is recommended to make holes through the entire wall thickness and mount the consoles with the threaded stays. When it is not possible to make such holes it is recommended to use chemical anchors stuck according to the supplier guidelines.

When calculating the forces acting on the console you should consider the structure weight and the operational load.

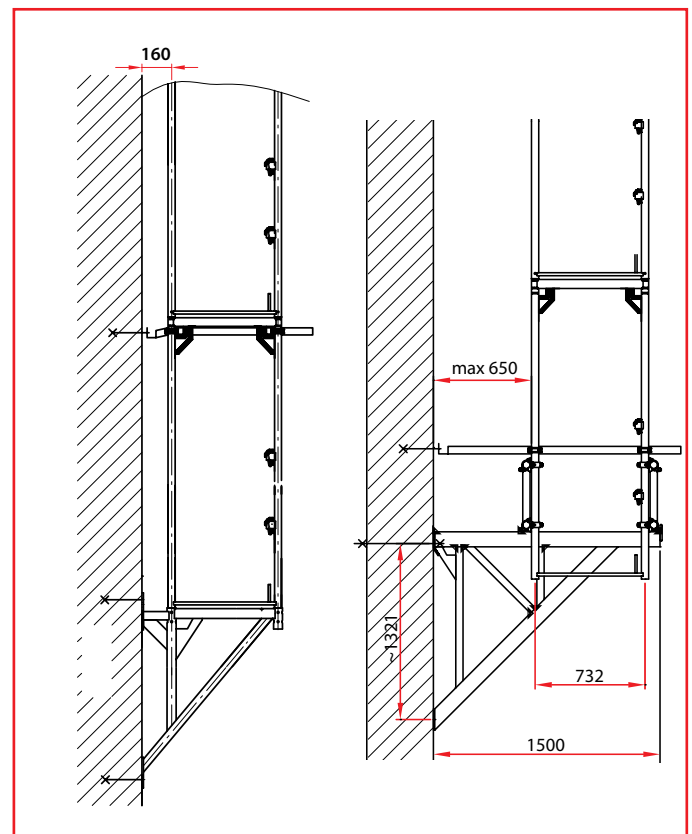
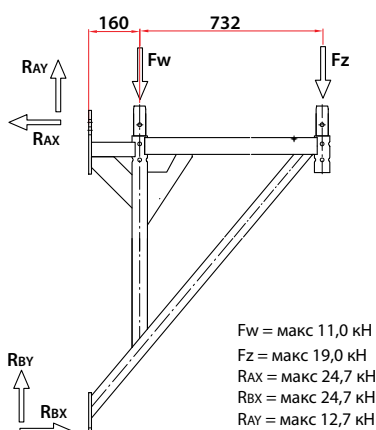
Put simply, you can assume that the height of the facility is as follows:
 Frame scaffolding 0.73 m, L - 2.75 m - 34 m; (console 1.5 m)
 Frame scaffolding 0.73 m, L - 3.07 m - 32 m; (console 1.5 m)
 Frame scaffolding 0.73 m, L - 2.75 m, L = 3.07 m -20 m; (console 0.73)



Town Hall in Głubczycze - console 1.5 m



■ Method for calculation the reaction for the anchorage sites

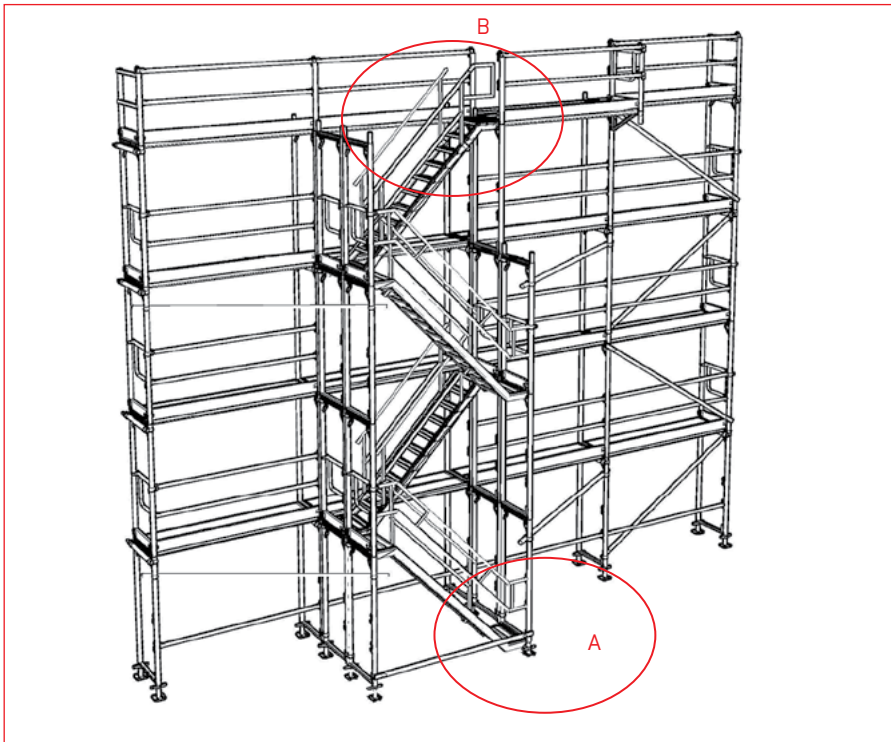


■ Assembly diagram presenting the position of the anchored console 0.73 m and 1.5 m

9. EXTERNAL STAIRCASES

External staircases

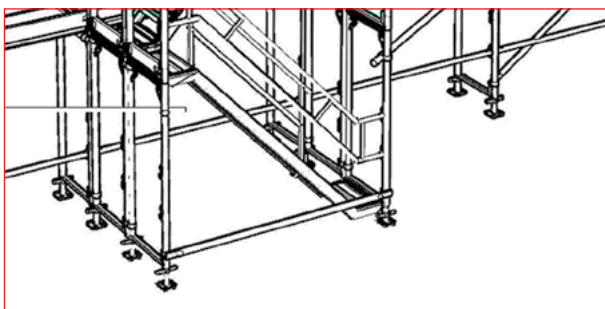
To provide convenient vertical communication external staircases are installed on the scaffolding. Typically, an external staircase is installed in the bay measuring 3.07 m or 2.57 m according to one of the two presented diagrams. Additionally, installed frames are vertically connected with the wall scaffolding every 4 m with the wall scaffolding node anchored in the connection points. The connections are made of pipes of the diameter of 48.3x3.2 and normal couplings. The staircase front surfaces are secured with the front railings, external surface should be secured with the stairs external railing and internal surface - with the stairs internal railing.



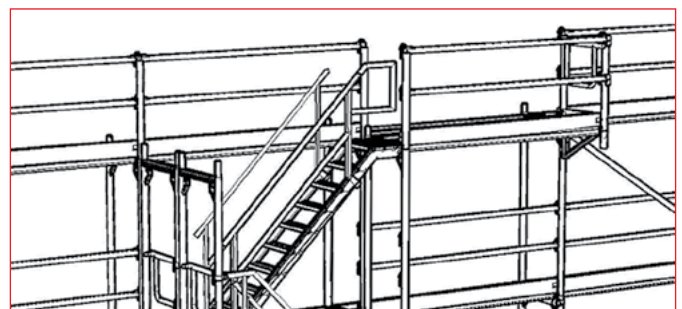
Complete view - double staircase



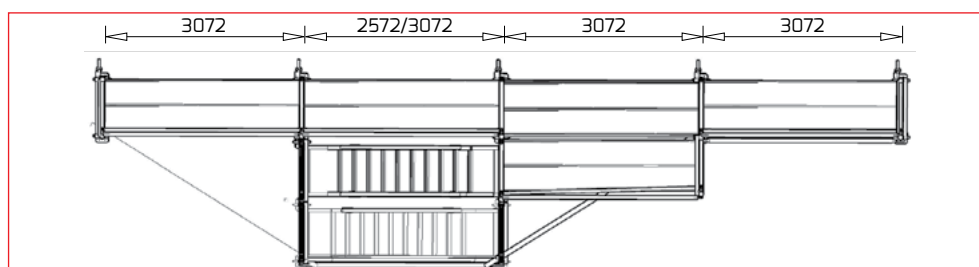
Example - installed double staircase



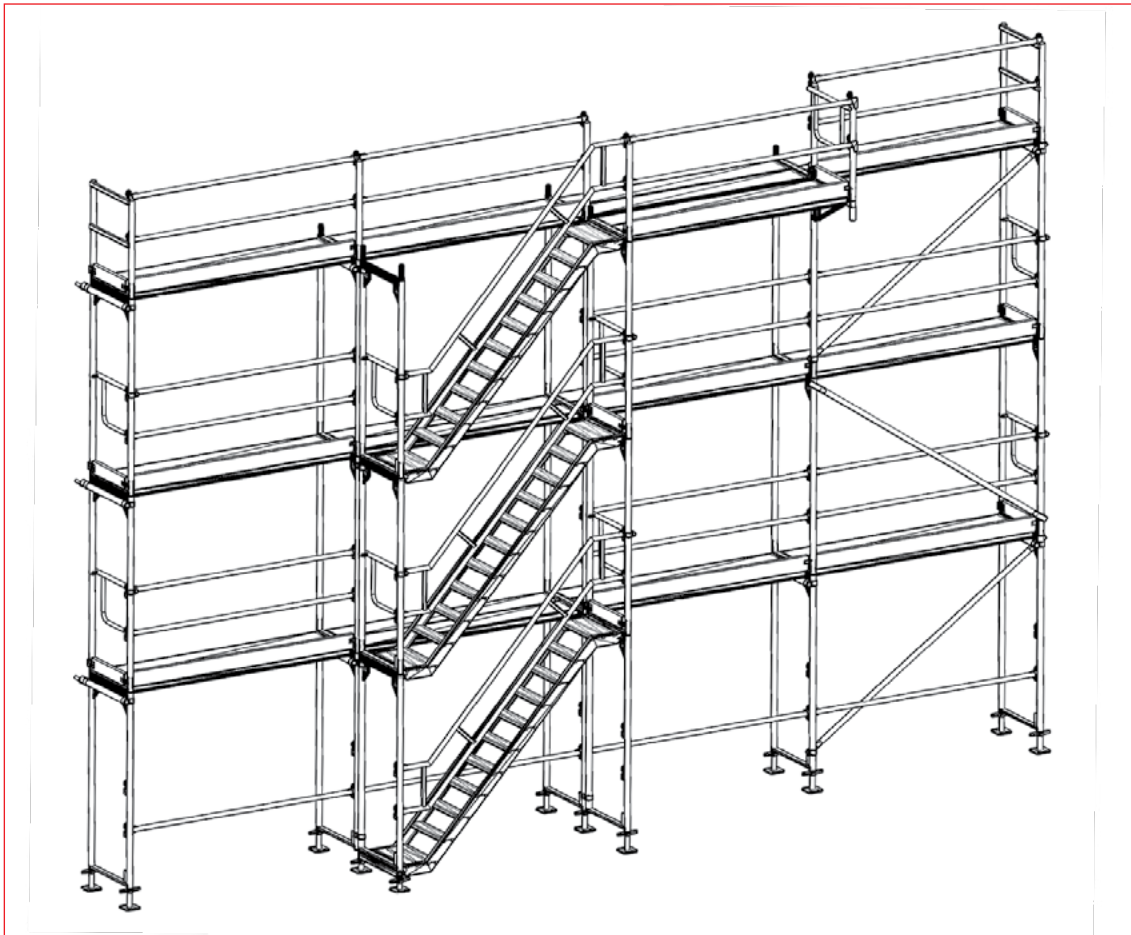
Detail A



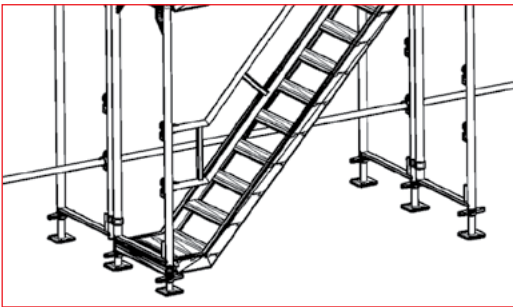
Detail B



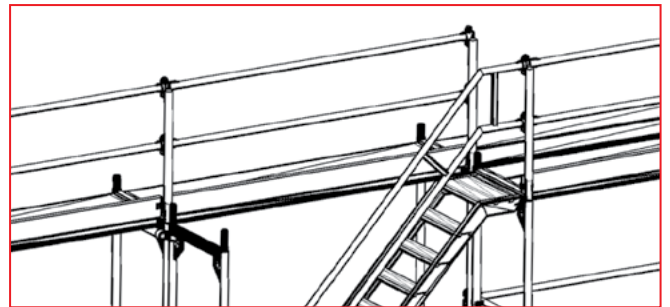
Top view



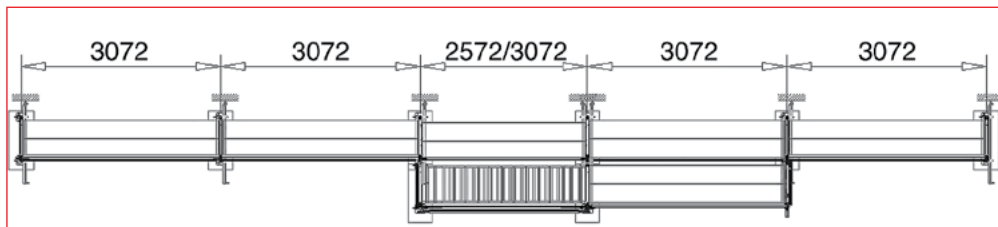
• Complete view - single staircase



• Detail A



• Detail B



• Top view

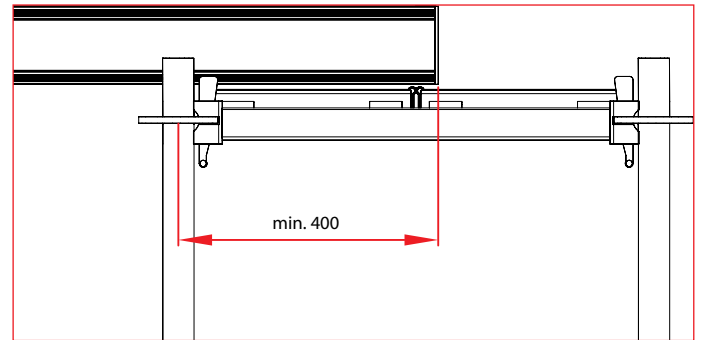
10. ALUMINIUM PLATFORMS

■ Aluminium platforms

To facilitate construction works an aluminium platform system has been designed. They act as movable platforms. When laid on the scaffolding or the building structural elements they act as a working platform, ceiling, communication and inspection platforms.

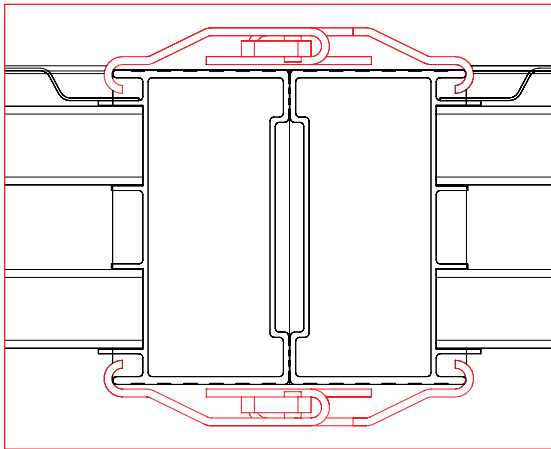
A platform is made of the aluminium sections and skin trapezoidal plate. The system includes also steel auxiliary components which are rust-protected. You can use platforms 4.25 m, 5.2 m, 6.1 m and 7.1 m long and 0.6 wide. The platform load capacity is 2 kN/m².

7.1 m long and 0.6 wide. The platform load capacity is 2 kN/m². When selecting the platform length you should consider the overlap to be kept to properly support the component. For AL-TRAD-MOSTOSTAL platforms the overlap is at least 400 mm. Fig. 10.1 presents an example of supporting the aluminium platform on the structure made of the modular scaffoldings.

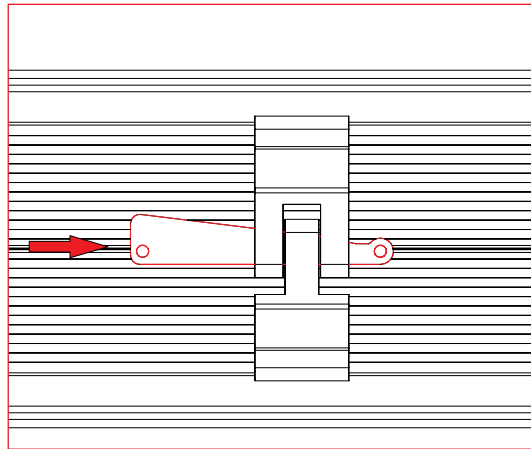


• Figure 10.1

When several platforms are laid next to each other you should join them with a clamp (E491003). The clamps are installed both on the upper and bottom platform plane (Fig. 10.2). Installation includes fixing the clamp handles on the side sections of the adjacent platforms and clamping the movable clamp parts by driving a wedge (Fig. 10.3).



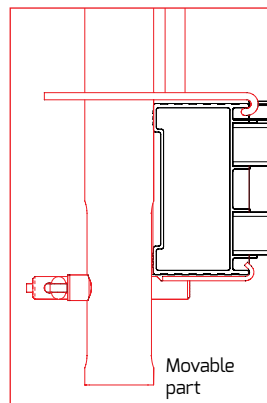
• Figure 10.2



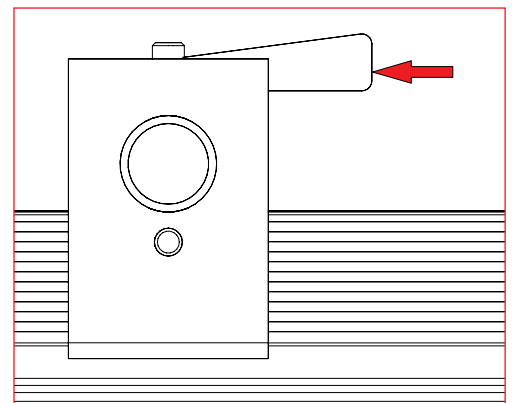
• Figure 10.3

To protect the persons on the platform you should install the protective railings. To do this you should use the railing post, railing clamp and universal pipes.

The railing post is installed by clamping its movable part (Fig. 10.4) by driving a wedge (Fig. 10.5).

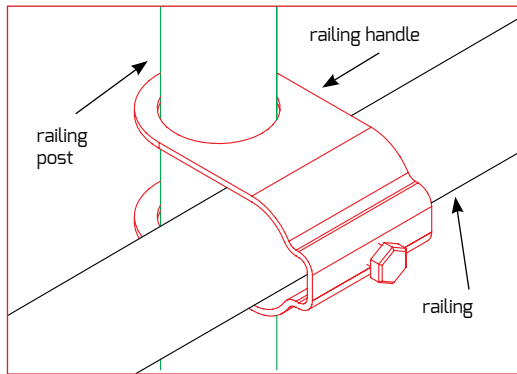


• Figure 10.4

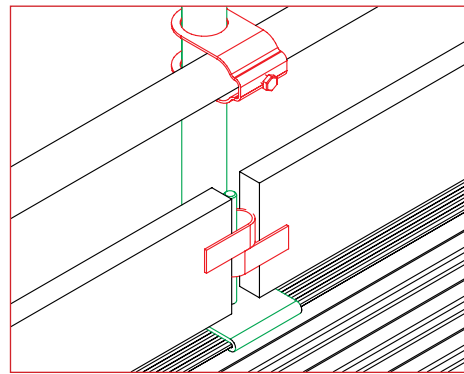


• Figure 10.5

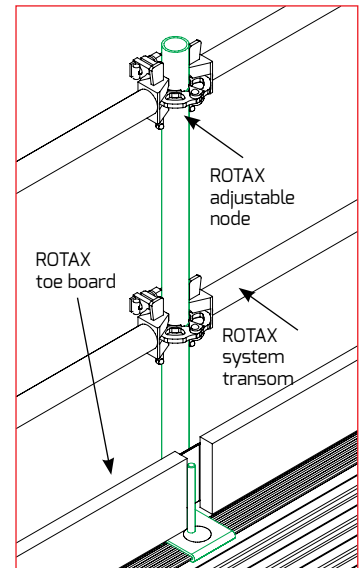
By using the railing handle you can fasten the universal pipe to the post to act as a railing. The horizontal pipe is clamped to the vertical pipe with a screw fitted with a handle (Fig. 10.6).



• Figure 10.6



• Figure 10.7



• Figure 10.8

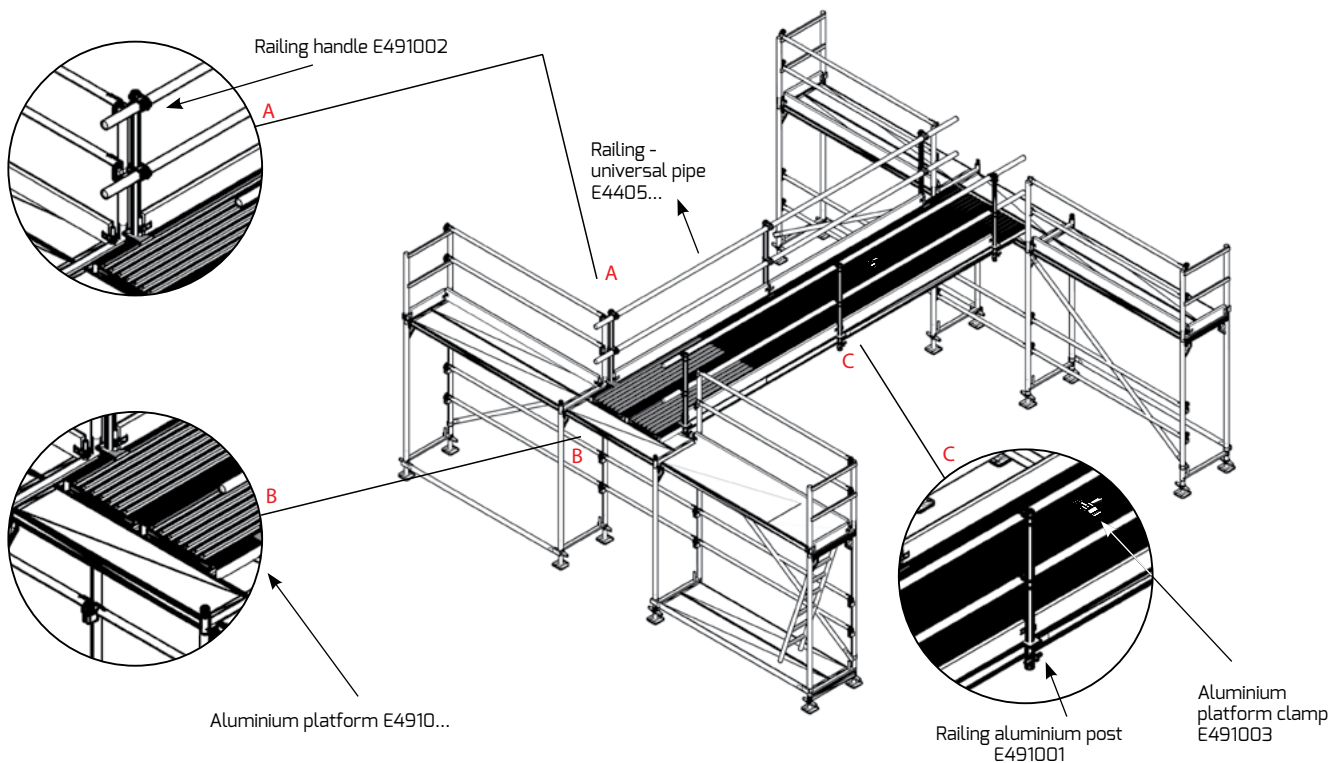
The upper railing should be installed 1.0 m over the platform surface.

Eventually, instead of installing the railings in this manner you can install the universal pipes with the rotary or normal couplings. Join the length of the universal pipes with a longitudinal coupling.

The railing posts should be spaced so that you could install the system toe boards. A post allows for installing both the MOSTOSTAL Plus system scaffolding toe boards (Fig. 10.7) and the ROTAX scaffolding system toe boards.

Spacing the posts at 0.73 m, 1.09 m, 1.57 m, 2.07 m, 2.57 m or 3.07 m is also important when you want to use the ROTAX transoms of the system length as the protective railings. However, this solution requires using the additional component - a Rotax adjustable node (E371200) (Fig. 10.8).

Below is a figure presenting an example of the frame scaffolding set-up with the aluminium platforms.



11. PALLETS FOR THE FACADE SCAFFOLDING STORAGE AND TRANSPORT



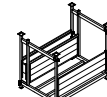

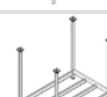
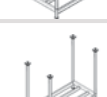

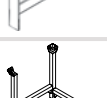
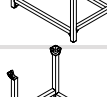
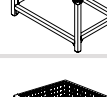


■ Pallets for the facade scaffolding storage and transport

By using the pallets for the facade scaffolding storage and transport you will save both time and money.

Our offer includes different pallet versions used for storage and vertical transport of the frames, platforms, small component and similar parts.

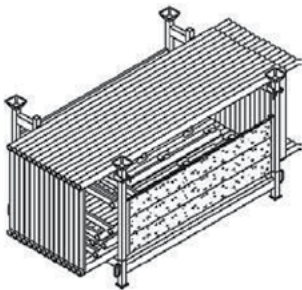
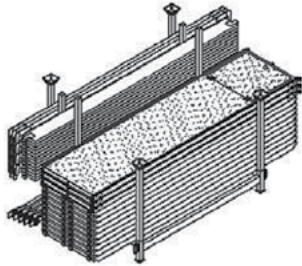
The pallets can be stacked and save not only space but also time and costs.



No.	Index	Component name	L./H. (m)	B. (m)	G. (kg)	
1.	E826500	Scaffolding pallet - Combi, steel, for 15 frames. Storage and transport of frames 0.73 m wide	1.20/0.95	0.90	40.70	
2.	E824400	Pallet for 15 steel frames 0.73 m wide, galvanized	1.54/1.00	1.07	122.30	
3.	E824410	Pallet for 15 steel frames 1.09 m wide, galvanized	1.54/1.36	1.07	125.10	
4.	E824300	Scaffolding pallet for 15 frames, 30 steel platforms, galvanized	1.54/1.41	1.07	73.10	
5.	E824301	Scaffolding pallet for 23 steel or aluminium frames, galvanized	1.50/1.41	0.80	53.00	
6.	E824302	Pallet for 15 E491325 or E491930 aluminium platforms for 30 E491325 or E491330 steel platforms, galvanized	1.50/1.41	0.65	52.00	
7.	E826701	Platform transport transom	0.67/0.24	-	4.28	
8.	E822800	Module pallet	1.28/0.88	0.80	40.20	
9.	E823800	Module Light Pallet. The main profile of the Wall 2 mm	1.28/0.88	0.80	29.00	
10.	E822900	Module basket	1.06/0.59	0.61	30.40	
11.	E822808	Net pallet	1.28/0.80	0.88	69.70	
12.	E823808	Net pallet light	1.28/0.80	0.88	58.50	

12. LIST OF COMPONENTS STORED ON THE PALLETS

■ Scaffoldings 0.73 m wide, with 2.57 m long bay

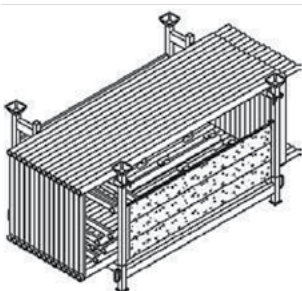
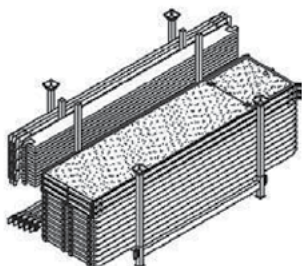


Working surface area in m²	86.35
Height	8.40
Length	10.28
Number of levels	3
Circulation paths	1
Braced columns	1

Lp.	Index	Component name	Quantity (pcs.)
1.	E202026	Plus steel frame 2.00x0.73	15
2.	E202091	Plus steel railing post with platform protection 0.73 m	3
3.	E202023	Plus front frame 0.73 m	2
4.	E283625	Single railing 2.57 m	28
5.	E283907	Front railing 0.73 m	4
6.	E284725	Diagonal for bay 2.57 m	3
7.	E283825	Horizontal brace 2.57 m	1
8.	E286606	Anchor coupling with hook 0.60 m	7
9.	E286807	Transverse toe board 0.73 m	6
10.	E286825	Longitudinal toe board 2.57 m	12
11.	E491625	ECO STEEL PLATFORM 2.57 m	18
12.	E492125	Alum. platform with hatch and ladder 2.57 m	3
13.	E511206	Base jack with a nut 0.60 m	10
14.	E581119	Normal coupling	7
15.	E824400	Pallet for steel frames	1
16.	E824300	Pallet for platforms	1

Scaffolding weight [kg] 1038

■ Scaffoldings 0.73 m wide, with 3.07 m long bay



Working surface area in m²	103.15
Height	8.40
Length	12.28
Number of levels	3
Circulation paths	1
Braced columns	1

No.	Index	Component name	Quantity (pcs.)
1.	E202026	Plus steel frame 2.00x0.73	15
2.	E202091	Plus steel railing post with platform protection 0.73 m	3
3.	E202023	Plus front frame 0.73 m	2
4.	E283630	Single railing 3.07 m	28
5.	E283907	Front railing 0.73 m	4
6.	E284730	Diagonal for bay 3.07 m	3
7.	E283830	Horizontal brace 3.07 m	1
8.	E286606	Anchor coupling with hook 0.60 m	7
9.	E286807	Transverse toe board 0.73 m	6
10.	E286830	Longitudinal toe board 3.07 m	12
11.	E491630	ECO STEEL PLATFORM 3.07 m	18
12.	E492130	Alum. platform with hatch and ladder 3.07 m	3
13.	E511206	Base jack with a nut 0.60 m	10
14.	E581119	Normal coupling	7
15.	E824400	Pallet for steel frames	1
16.	E824300	Pallet for platforms	1

Scaffolding weight [kg] 1148

13. TABLES – PLATFORM AND BASE JACK LOAD

■ Tables - platform and base jack load

Table 1. Platform load

Platform load class acc. to EN-12 811							
No.	Platform type	3.07	2.57	2.07	1.57	1.09	0.73
1.	Steel platforms 0.32 E4913xx, 4914xx, 4916xx, 4955xx, 4956xx	4 kl. (3.0 kN/m ²)	5 kl. (4.5 kN/m ²)	6 kl. (6.0 kN/m ²)	6 kl. (6.0 kN/m ²)	6 kl. (6.0 kN/m ²)	6 kl. (6.0 kN/m ²)
2.	Filling steel platforms 0.19 E491810xx	6 kl. (6.0 kN/m ²)	6 kl. (6.0 kN/m ²)	6 kl. (6.0 kN/m ²)	6 kl. (6.0 kN/m ²)	6 kl. (6.0 kN/m ²)	6 kl. (6.0 kN/m ²)
3.	Alu-plywood platforms 0.61 E4920xx, 4919xx, 4923xx, 4925xx	3 kl. (2.0 kN/m ²)	3 kl. (2.0 kN/m ²)	3 kl. (2.0 kN/m ²)	3 kl. (2.0 kN/m ²)	3 kl. (2.0 kN/m ²)	3 kl. (2.0 kN/m ²)

Length - L [m]							
No.	Platform type	3.00	2.50	2.00	1.50	1.00	0.70
4.	Filling platform 0.30 E4943xx	3 kl. (2.0 kN/m ²)	4 kl. (3.0 kN/m ²)	5 kl. (4.5 kN/m ²)	6 kl. (6.0 kN/m ²)	6 kl. (6.0 kN/m ²)	6 kl. (6.0 kN/m ²)
5.	Filling platform 0.19 E4944xx	4 kl. (3.0 kN/m ²)	5 kl. (4.5 kN/m ²)	6 kl. (6.0 kN/m ²)	6 kl. (6.0 kN/m ²)	6 kl. (6.0 kN/m ²)	6 kl. (6.0 kN/m ²)

Table 2. Coupling load capacity

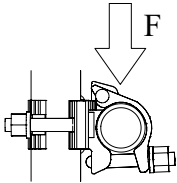
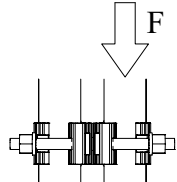
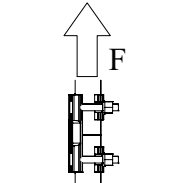
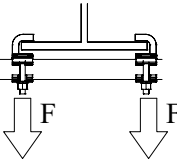
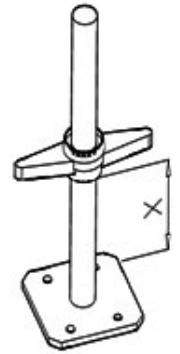
L.p	Index	Name of the element		Permissible coupling load capacity
1.	E581119	Normal coupling		F ≤ 9.1 kN
2.	581320	Rotary coupling		F ≤ 5.9 kN
3.	E581419	In Line coupling		F ≤ 6.0 kN
4.	E284620	Anchor coupling		F ≤ 9.0 kN

Table 3. Base jack bearing capacity

Standards base jack

Types of base jacks		Permissible unscrewing the nut X [cm]				
		20	30	40	50	60
E511204		40	-	-	-	-
E511206	Permissible vertical load capacity* [kN]	40	29	22	-	-
E511208		40	29	22	17	15

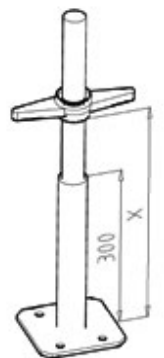
* The values take into account a 5% share of horizontal forces. Appropriate calculations allows the use of higher loads.



Reinforced base jack 1.5 m

Types of base jacks		Permissible unscrewing the nut X [cm]					
		30+20	30+30	30+40	30+50	30+60	30+70
E511313	Permissible vertical load capacity* [kN]	38	26	20	16	15	13

* The values take into account a 5% share of horizontal forces. Appropriate calculations allows the use of higher loads.



14. ANNEX NO. 1 – SCAFFOLDING COMMISSION PROTOCOL



SCAFFOLDING COMMISSION PROTOCOL

No. _____ of _____

To agreement no. _____ of _____

Contractor Authorised person Phone no.	User Authorised person Phone no.
Scaffolding type: <input type="checkbox"/> Frame <input type="checkbox"/> Wall <input type="checkbox"/> Rotax modular <input type="checkbox"/> Free-standing <input type="checkbox"/> Mobile <input type="checkbox"/> Hanging <input type="checkbox"/> Facade <input type="checkbox"/>	Assembly site
Scaffolding parameters: Structure dimensions Net dimensions Structure load capacity Working platform permissible load capacity kNm ²	Scaffolding purpose
Earthing resistance Ω Subsequent inspection dates	Additional equipment

Declaration and confirmation

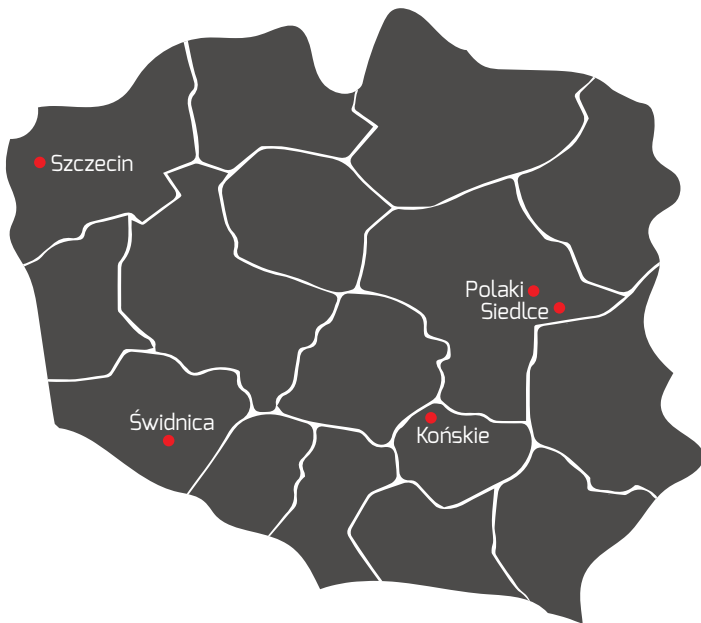
1. Assembly Contractor certifies that the scaffolding described in this protocol is complete. The scaffolding was assembled according to the best construction practices and the assembly manual issued by the manufacturer as well as according to the OHS requirements. The assembly was performed by certified fitters.
2. The scaffolding structure may be modified only by the Assembly Contractor.
3. The Assembly Contractor provides the following along with this protocol:
 - a) scaffolding scheme
 - b) scaffolding assembly manual
 - c)
 - d)
4. Scaffolding user accepts this scaffolding for use without any reservations and declares that he/she is aware of the rules of use resulting from the assembly manual.
5. Before each use of the scaffolding the User should check its technical condition and completeness.
6. Commission in the following panel confirms the scaffolding hand-over after assembly and acceptance for use.

a) - User
b) - User
c) - Contractor

full name
position
signature

Application date for scaffolding disassembly:

15. LOCALIZATION OF ALTRAD-MOSTOSTAL



SALES

- **Altrad-Mostostal Sp. z o.o. (Siedlce)**
+48 25 644 72 84

HIRE

- **Altrad Montaż Sp. z o.o. (Polaki)**
GSM 694 461 182
- **Altrad - Prymat Sp. z o.o. (Świdnica)**
GSM 608 383 497
- **Altrad - Końskie Sp. z o.o. (Końskie)**
GSM 608 362 364
- **Altrad - Pomorze Sp. z o.o. (Szczecin)**
GSM 601 711 584

Katarzyna Kalicka – Regional Sales Manager

(mazowieckie, podlaskie, łódzkie, warmińsko-mazurskie)

GSM +48 604 481 381

e-mail: k.kalicka@altrad-mostostal.pl

Jarostaw Sawicki – Regional Sales Manager

(pomorskie, kujawsko-pomorskie, wielkopolskie, dolnośląskie, opolskie)

GSM +48 602 578 861

e-mail: j.sawicki@altrad-mostostal.pl

Jacek Goss – Regional Sales Manager

(lubelskie, świętokrzyskie, małopolskie, podkarpackie, śląskie, lubuskie, zachodniopomorskie)

GSM +48 602 578 860

e-mail: j.goss@altrad-mostostal.pl

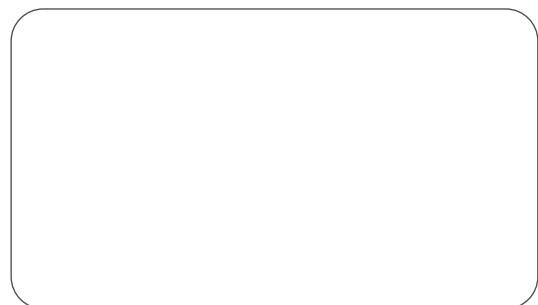
Bogdan Bentkowski – Regional Sales Manager

GSM +48 602 578 862

e-mail: b.bentkowski@altrad-mostostal.pl



[/altradmostostal](https://www.facebook.com/altradmostostal)





MOSTOSTAL
SCAFFOLDING
FORMWORK

ALTRAD-MOSTOSTAL Spółka z o.o.
ul. Starzyńskiego 1, 08-110 Siedlce - Poland
Tel. +48 25 644 72 84 - Fax +48 25 633 32 78 - Email: handlowy@altrad-mostostal.pl
www.altrad-mostostal.pl

04.2022

