



CONTAINEX PLUS Line

Technical Description



Content

Abbreviations	4
1 General	4
1.1 Dimensions and weights	4
1.2 Assumed load	5
1.2.1 Snow loads	5
1.2.2 Wind loads	5
1.2.3 Floor payloads	5
1.2.4 Basic principles of the static calculations	6
1.3 Insulation.....	6
2 Container design	7
2.1 Frame construction.....	7
2.2 Floor structure	7
2.3 Roof structure.....	8
3 Wall panels	9
3.1 Doors	9
3.1.1 External door "Thermo65"	9
3.1.2 Steel doors.....	10
3.2 Window	10
3.3 Glazing.....	11
3.4 Partition walls	12
4 Fire resistance	13
5 Electrical installations	13
5.1 Technical data.....	13
5.2 Heating and air conditioning	16
6 Design options	16
7 Water installations	17
8 Paint	17
9 Certifications	17
10 Miscellaneous	18
10.1 Layout possibilities	18
10.2 Transport.....	19
10.3 Handling.....	19
10.4 Installation / Assembly / Statics / Maintenance	20

11 Support points	21
11.1 Support points BP / SP 10', 16' and 20'	21
11.2 Support points BP / SP 24'	21
11.3 Support points corridor cabin GP 16' and 24'.....	22
11.4 Support points 3P20 and 4P20.....	22
11.5 Support points internal staircase cabin TP20.....	23

Abbreviations

The following abbreviations are used in the document:

Portable cabin PLUS Line	BP
Sanitary cabin PLUS Line	SP
Corridor cabin PLUS Line	GP
Portable cabin PLUS Line 20'x10'*	3P20
Sanitary cabin PLUS Line 20' x10'*	4P20
Internal staircase cabin PLUS Line 20'x10'	TP20

* only available in a modular building in combination with an internal staircase cabin TP20

Polyisocyanurate	PIR
Polyurethane	PU
Internal height	RIH
External cabin height	CAH
Toughened safety glass	ESG
Laminated safety glass	VSG

1 General

1.1 Dimensions and weights

Type	external [mm]			internal [mm]			Weight [kg] (approx. specifications)
	Length	Width	Height	Length	Width	Height	
10'	2,989	2,435	3,100	2,749	2,195	2,550	1,500
16'	4,885	2,435	3,100	4,645	2,195	2,550	2,400
20'	6,055	2,435	3,100	5,815	2,195	2,550	2,900
24'	7,335	2,435	3,100	7,095	2,195	2,550	3,500
20'x10'	6,055	2,989	3,100	5,815	2,749	2,550	3,500

1.2 Assumed load

1.2.1 Snow loads

Characteristic snow load on the floor $s_k = 2,50 \text{ kN/m}^2$ (250 kg/m²)
Shape parameters $\mu=0,8$ ($s = \mu_1 \cdot s_k = 2,0 \text{ (kN/m}^2 \text{ (200 kg/m}^2\text{))}$)

1.2.2 Wind loads

Wind load $v_{ref} = 27,5 \text{ m/s}$, (100 km/h) terrain category III

At wind speeds of more than than 27.5 m/s (100 km/h) additional securing of the cabins must be carried out (anchoring, screwing, etc.). Such measurements are to be calculated by approved specialists taking into consideration local standards and conditions.

1.2.3 Floor payloads

1.2.3.1 ***Payloads for BP / SP 10', 16' and 20'***

Ground floor: max. load capacity 4,0 kN/m² (400 kg/m²)
Top floors: max. load capacity 3,0 kN/m² (300 kg/m²)

1.2.3.2 ***Payloads for BP / SP 24'***

Ground floor: max. load capacity 4,0 kN/m² (400 kg/m²)

1.2.3.3 ***Payloads for corridor cabin GP16' and GP24'***

Ground floor: max. load capacity 5,0 kN/m² (500 kg/m²)
Top floors: max. load capacity 5,0 kN/m² (500 kg/m²)

1.2.3.4 ***Payloads for internal staircase cabin TP20***

Ground floor: max. load capacity 5,0 kN/m² (500 kg/m²)
Top floors: max. load capacity 5,0 kN/m² (500 kg/m²)

1.2.3.5 ***Payloads for 3P20 and 4P20***

Ground floor: max. load capacity 3,0 kN/m² (300 kg/m²)
Top floors: max. load capacity 3,0 kN/m² (300 kg/m²)

1.2.4 Basic principles of the static calculations

Exposed side: EN 1990 (Eurocode 0; basic principles)
 EN 1991-1-3 (Eurocode 1; snow)
 EN 1991-1-4 (Eurocode 1; wind)

Non-exposed side: EN 1993-1-1 (Eurocode 3; steel)
 EN 1995-1-1 (Eurocode 5; wood)

For the countries DE, AT and CH, site specific structural calculations are available on request, taking into account the national application documents for the impact and resistance sides specified above.

Special load cases (as e.g. seismic safety) are not explicitly considered and must be requested separately!

1.3 Insulation

Component	Insulating material	Thickness [mm]	U _{max} value [W/m ² K]	U-value [W/m ² K]
			in the infill	according to EN 10211
Roof				
	PU+MW	80+120	0.16	0.18
	PU+MW	100+100	0.15	0.17
Wall element				
Full panel	PIR	110	0.20	0.20
Extra wall	PIR+MW	110+80	0.13	0.14
Floor				
	PIR+MW	110+50	0.14	0.20
	PIR+PU	110+50	0.13	0.17

Doors			
Order volume		Thickness	U _d -value (W/m ² K)*
External door "Thermo65"			
1150x2100	thermally separated door	65 mm	0.87
Steel doors			
1000x2125	polystyrene	40 mm	1.70
875x2125	polystyrene	40 mm	1.80

* The U-values relate to the U_d-value (U-value of the doors) of the specified construction width.

Window			U _g -value (W/m ² K)*
	3 pane insulation glazing with gas filling	4/12/4/12/4 mm	0.7

* The U-values relate to the U_g value (U-value of the glass) of the specified glazing.

2 Container design

2.1 Frame construction

Floor frame:

Welded steel frame construction made of edged and rolled sections, 4 welded frame corners, edged and welded cross beams, profile height of floor frame: 180 mm, no forklift pockets available

Roof frame:

Welded steel frame construction made of edged and rolled sections, 4 welded frame corners, edged and welded roof cross beams, profile height of roof frame: 250 mm

Corner column:

Made of edged and welded steel profiles, edge length 170 mm, screwed tightly to the floor and roof frame

Rainwater drainage:

Insulated rainwater drainage pipes DN 75 inside the corner columns, unrestricted drainage of the rainwater each on the front facing inwards at the lower frame corners

2.2 Floor structure

Insulation:

Insulating material:

110mm PIR + 50mm MW

PIR, fire performance B-s2, d0 according to EN 13501-1

Fire behaviour MW: fire behaviour A1 (not flammable) according to EN 13501-1

110mm PIR + 50mm PU

PIR, fire performance B-s2, d0 according to EN 13501-1

Fire behaviour PU: D-s2, d0 according to EN 13501-1

Floor panel:

Plywood panel - thickness 21 mm

E1 in accordance with EN 636:2012

Fire behaviour D-s2, d0 or Dfl-s1 according to EN 13501-1

Floor cover:

	Vinyl floor cover, welded in sheets in sanitary area including skirting		According to standard
	Eternal	Safestep (SA Container)	
Total thickness	2.0 mm	2.0 mm	EN ISO 24346
Wear layer	0.7 mm	0.7 mm	EN ISO 24340
Fire behaviour	B _{fl} -s1	B _{fl} -s1	EN 13501-1
Slip resistance	R 10	R 11	DIN 51130
	---	B	DIN 51097
Classification usage class	34 / 43	34 / 43	EN ISO 10874
Electrostatic behaviour	≤ 2 kV	≤ 2 kV	EN 1815

2.3 Roof structure

External cladding: Corrugated, galvanised and coated steel sheet, thickness 0.60 mm

Insulation:

Insulating material:

80mm PU + 120mm MW

Fire behaviour PU: E according to EN 13501-1

Fire behaviour MW: fire behaviour A1 (not flammable) according to EN 13501-1

100mm PU + 100mm MW

Fire behaviour PU: E according to EN 13501-1

Fire behaviour MW: fire behaviour A1 (not flammable) according to EN 13501-1

Ceiling sheeting: 15mm plasterboard

Fire behaviour A2-s1, d0 according to EN 13501-1

Internal cladding: Suspended ceiling with removable individual elements

Rainwater drainage: Rainwater collection in short sided roof frame, drainage in the corners with DN 75

Interior ceiling: Interior ceiling as acoustic ceiling, consisting of suspended, micro-perforated or smooth sheet steel profiles 600 x 600 mm, similar to RAL 9010, individual elements removable with restraint, including acoustic tiles

CEE connectors: Externally sunk into short sided container frame

3 Wall panels

Panels:	wall thickness 110 mm
Available items:	- full panel * - double panels / rest panels <i>* doors / windows only in full panel</i>
External cladding:	corrugated, galvanised and coated steel sheet, thickness 0,60 mm
Insulating material:	PIR Fire performance B-s2, d0 according to EN 13501-1
Insulation thickness:	110 mm
Internal cladding:	galvanised steel sheet Thickness 0.50 mm, colour: RAL 9010
Extra wall:	wall thickness 90 mm
Available items:	- on the short side and on the long side
Insulating material:	MW Fire behaviour MW: fire behaviour A1 (not flammable) according to EN 13501-1
Insulation thickness:	80 mm
Internal cladding:	galvanised steel sheet 9.5 mm plasterboard, fire behaviour A2-s1, d0 according to EN 13501-1 internal colour: RAL 9010

3.1 Doors

3.1.1 External door "Thermo65"

General:	- right or left hand hinged - outward opening - including door closer
Door leaf:	- all-over foam filling, thermally separated - 4-sided double sealing levels
Frame:	- thermally separated aluminium frame - 3-sided sealing level - including thermally separated aluminium-plastic threshold

Belts: - 3 two-part roller belts, 3-dimensionally adjustable, with protective caps, pin-secured

External door:	Nominal dimension	Clear opening
	1,150 x 2,100 mm	1,000 x 2,005 mm

Optional: - emergency exit according to EN 179
 - panic bolt according to EN 1125
 - 3-pane insulation glazing: W x H = 150 x 1,603 mm
 (external VSG clear / middle Float sandblasted / internal ESG clear)

3.1.2 Steel doors

Stop: - right or left hand hinged
 Door leaf: - door leaf made of galvanised and laminated steel sheet on both sides
 Frame: - steel frame with triangular wrap-around sealing
 Belts: - 2 two-part door hinges

Dimensions: Steel doors:	Nominal dimension	Clear opening
	875 x 2,125 mm	811 x 2,065 mm
	1,000 x 2,125 mm	936 x 2,065 mm

Optional: - emergency exit according to EN 179
 - panic bolt according to EN 1125
 - door closer
 - insulated glazing:
 border frame: plastic white
 W x H = 238 x 1,108 mm (ESG)
 550 x 1,108 mm (ESG)
 550 x 450 mm (ESG)

3.2 Windows

Specification: - frame with 3-pane insulated glazing (ESG) including gas filling and fitted roller shutters
 - externally with aluminium clips in cabin colour
 - interior colour: RAL 9010
 - insulated roller shutter box with blind fastener
 - aluminium slats, foamed, colour similar to RAL 9006
 - one hand tilt & turn mechanism

ATTENTION: The built-in insulation glass is only suitable for use at altitudes up to 1,100 m above sea level. Above 1,100 m sea level windows with a pressure compensating valve need to be used.

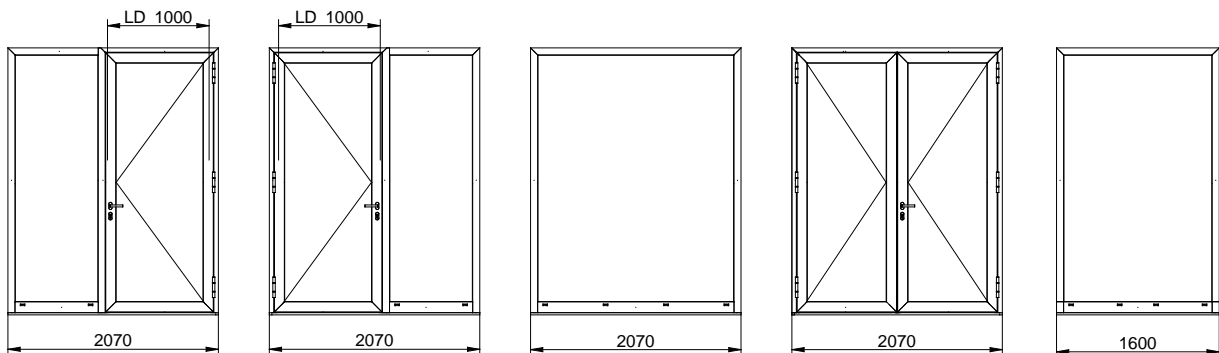
Window options:	Parapet height	External dimension	Clearance
Office window	1,030 mm	945 x 1,200 mm	820 x 1,080 mm
Sanitary window (privacy glass)	1,525 mm	644 x 706 mm	520 x 580 mm
Double wing window with floating mullion (without centre bar)	1,030 mm	1,745 x 1,200 mm	1,560 x 1,015 mm

- Optional:
- VSG glazing
 - venetian blinds (for office windows and double wing windows) with remote control

3.3 Glazing

- Specification:**
- Thermally separated aluminium frame with 3-pane insulated glazing (ESG) including gas filling
 - external paint: container colour
 - interior colour: RAL 9010

ATTENTION: The built-in insulation glass is only suitable for use at altitudes up to 1,100 m above sea level. Above 1,100 m sea level windows with a pressure compensating valve need to be used.



- Optional:
- VSG glazing
 - emergency exit according to EN 179
 - panic bolt according to EN 1125
 - venetian blinds with remote control

3.4 Partition walls

Available items: full panels on the front and long side, door elements (doors see point 3.1.2) on the front and long side

Total thickness: 80 mm or 120 mm

Insulating **MW**
material: fire behaviour MW: Fire behaviour A1 (not flammable) according to EN 13501-1

Insulation 60 mm (for overall thickness 80 mm) or 100 mm (for overall thickness
thickness: 120 mm)

internal cladding: double-sided plasterboard - sheet steel
9.5 mm plasterboard, fire behaviour A2-s1, d0 according to EN 13501-1
sheet steel decor: similar to RAL 9010

4 Fire resistance

Standard equipment: fire resistance class of the components in accordance with EN 13501-2

Supporting structure: R30

Roof construction REI30

Wall panels: EI30

Verification: Classification report according to EN13501-2, accredited institute IBS Linz

5 Electrical installations

Specification: concealed cabling

Protection class IP20

Plug insert according to country standards (VDE, ÖVE, NIN)

Country specific design / variations possible

5.1 Technical data

	Basis VDE (= ÖVE, NIN)		CH
Connection:	recessed CEE external plug and socket connections		
Voltage:	230 V / 3-poles / 32 A (3x6 mm ²)		
	400 V / 5-poles / 32 A (5x6 mm ²)		
Frequency:	50 Hz		
Protection:	residual current operated device 40 A / 0.03 A, 2-poles (230 V) Type A X**		
	residual current operated device 40 A / 0,03 A, 4-poles (400 V) Type A X**		
Distribution box*:	cavity distribution box, double row		
Cable:	type: H07ZZ-F & H07Z1-K (1x6mm ²) halogen-free mix, fire behaviour C _{CA} - s1b, d1, a1		
Electrical circuits***:	light:	circuit breaker 10 A , 2-poles , 3x1,5 mm ² , I _k <10 kA	
	heating:	circuit breaker 13 A , 2-poles , I _k <10 kA	
		3x 2,5mm ²	
	socket	circuit breaker 13 A , 2-poles , I _k <10 kA	circuit breaker 10 A , 2-poles , I _k <10 kA
3x2,5 mm ²			
Socket:	twin wall sockets single socket		

* mounting on ceiling

** thermally protected with fuse at the same rated current

*** LC-release switch characteristic C

Optional: - spur

- Compliance with the following CENELEC regulations regarding protection against electric shock and protection against overload and short circuit
- HD 60364-1:2008
 - HD 60364-4-41:2017
 - HD 60364-7-717:2010
 - HD 60364-7-701:2007
 - HD 384.4.482 S1:1997
 - HD 384.7.711 S1:2003

Earthing: universally usable grounding terminal:

On both short sides in the floor frame of each corner a drill hole with a diameter of 9.4 mm is prepared for the fixture of the grounding terminal.

- The fitting of the grounding terminal is undertaken with a screw M10 with a self-cutting screw thread. The positioning of the screw is carried out in the factory on a suitable spot of the cabin.
- A grounding terminal and a four-wire connector are delivered with the container and need to be fitted by the customer on site.
- The protective earthing of the container must be carried out by the customer at the installation site..
- The effectiveness of the container's earthing connection and the measurement of the earthing resistance or the loop resistance must be verified by a qualified electrician on site, during the course of the electrical inspection, prior to commissioning.

Lightning and overvoltage protection

- The required measures for the outer and inner lightning protection (grounding measures, overvoltage protection devices) for the devices operated in the cabin for the installation site and their sensitivity must be observed and be established if necessary.

Wiring:

- Fixed cabling depending on the panel configuration and the user
- Flexible cable system with plug contact and cables in full length

Safety advice: PE rail of the distribution box must be electro-technically connected with a 1x6mm² PE cable on the inside of the roof frame with a grounding pin and may not be removed (torque 10-15 Nm).

The cabins can be linked electrically at the external CEE plugs and sockets. For the decision how many units to connect electrically the expected constant current in the link circuits has to be considered. The commissioning has to be carried out by an approved electrician.

The manual for the assembly, start up, utilisation and maintenance of the electrical installations is delivered in the fuse box and needs to be followed!

Before connecting the cabin to the supplying low voltage grid all appliances (consumer loads) need to be switched off and earthing needs to be ensured (earthing feed cable and earthing connecting lines between the cabins need to be checked on potential equity and low Ohm level).

Attention: The supply- and connection cables are made for an operating voltage of max. 32 Ampere. These aren't secured with an overcurrent protection device. The connection of the cabins to the external electrical power supply may be only undertaken by a certified specialist company.

Before using the cabin (modular building) for the first time the effectiveness of the protection measures for the fault protection need to be checked by an authorised specialist company.

Attention: The commissioning of boilers and/or under table units is only permitted if they are filled!

Cleaning with a high-pressure cleaner is FORBIDDEN..

The electrical equipment of the cabin may not be cleaned by a direct water jet under any circumstances.

- If the containers are delivered into areas with increased lightning activity further measurements have to be taken under account to prevent overvoltage depending on the country specific rules.
- When cabins are placed near the ocean it is necessary to consider the special atmospheric conditions (salt content and humidity of the air) when the intervals for the periodic inspections by the operator are defined.
- In case machines or appliances with high starting current peaks are used (according to the manual of the respective appliances) adequate RCD/MCB must be used.
- The electrical fittings in the cabin are designed for minimal vibration exposure. If the exposure is higher, appropriate measures (and plug/screw contact checks) must be taken depending on the national technical regulations.
- If the cabins are used in areas with earthquake risks, the national regulations must be applied and the equipment must be adapted accordingly.
- The choice of the external linking cables of the cabins has to suit the country's national technical regulations.
- The cabins have to be secured against thermal overload with a type gL fuse or gG with max. $I_N = 32A$.

5.2 Heating and air conditioning

Individual heating through frost monitors, electric convectors or fan heaters with thermostat control and safety switch for overheating. Mechanical ventilation options available with electrical ventilators.

Regular ventilation of the rooms must be provided. A relative humidity of 60 % should not be exceeded in order to avoid condensation.

Description: (depending on number of cabins)		Output:
		hygrostatic controlled ventilator
	convector heater ¹	2 kW
	convector heater	0.5 kW
	fan heater	2 kW

All safety distances and instructions issued by the supplier for the equipment must be adhered to!

The appropriate manuals and instructions are sent with the cabins.

6 Design options

General equipment	
- cable bushing in the panel	- telephone duct in the panel
- cable bushing in the panel fastening	- motion and presence detector
- cable channel on panel	- ventilation unit VL-100
Sanitary fixtures	
- sanitary fixtures accessible to disabled persons	- sanitary connection sunk into the panel
- Shower	- intermediate panel
- boiler: 50 l / 80 l / 150 l	- soap dispenser
- pressure reduction valve	- Stop & Go fitting for wash hand basin
- wet room electrics (optional)	- continuous-flow water heater (for pressureless fittings)
- ceramic hand wash basin	- urinal
- electrical hand dryer	- water installations (water inlet and outlet)
- mirror	- WC cabin
- paper towel dispenser	

7 Water installations

Supply: supply using 1/2", 3/4" or 1" pipe, sideways through cabin wall concealed cabling

Internal: PP-R pipework (according to EN ISO 15874)

Operating pressure: max. permitted operating / connection pressure 4 bar

Warm water preparation: by using electric boilers, depending on the cabin type (50, 80 or 150 liters)

ATTENTION:

The boilers with 50/80/150 litres capacity are suitable for a max. operating pressure of 6 bar. A higher water pressure is reduced with an appropriate pressure reducing valve!

Discharge: The waste water is collected via PVC pipes, DN 50 or DN 110 (external diameter 50 or 110mm) and discharged sideways through the cabin wall.
The customer must drain any sewage into an approved sewage network in accordance with local regulations for water and faecal drains.

NOTE: Should the cabin not be used at temperatures below +3°C, the entire piping system must be emptied including the boiler (risk of frost!).
If residual water is left over (eg. drainage water, etc.) an anti-freeze agent must be used to prevent damage from water freezing. The shut-off valve on the water conduit must always stay open.

8 Paint

Paint system with high weather and aging durability, suitable for city and industry atmosphere.

Wall panels: 25 µm coating thickness

Frame: 75-120 µm coating thickness

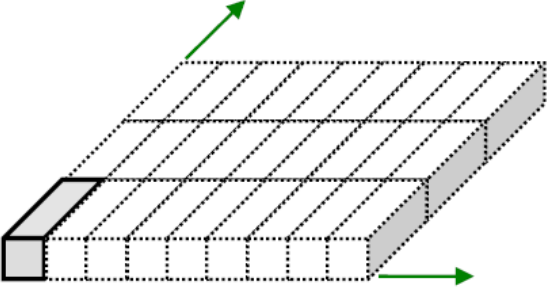
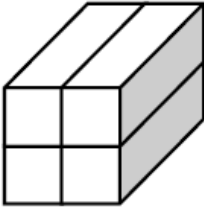
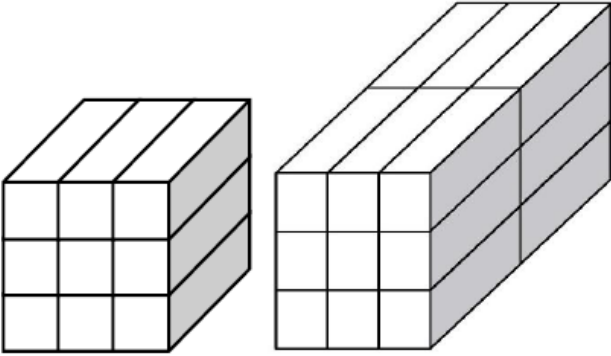
The painting of above mentioned parts is carried out with different types of production.. These achieve shades similar to RAL. We do not accept liability for colour variations in comparison with the RAL tones..

9 Certifications

CE marking in accordance with EN 1090 EXC 2

10 Miscellaneous

10.1 Layout possibilities

ground floor	
valid for 10' – 16' – 20' – 24' - TP20 – 3P20 – 4P20	
	<p>No restriction on the open room sizes!</p> <p>Attention: BP/SP 24' ground floor version without additional central support - it is not possible to add storeys at a later date!</p> <p>Note: 3P20 and 4P20 are designed without additional central supports</p>
2- storey	
valid for 10' – 16' – 20' - TP20 - 3P20 - 4P20	
	<p>No restriction on the open room sizes!</p> <p>Minimum requirement 2x1x2 (reduced wind loads: 22.5 m/s)</p> <p>The block 2x1x2 can be expanded as required</p> <p>Note: 3P20 and 4P20 are designed without additional central supports</p>
3- storey	
valid for 10' – 16' – 20' - TP20 - 3P20 - 4P20	
	<p>No restriction on the open room sizes!</p> <p>Minimum requirement single row 3x1x3 (reduced wind loads: 22.5 m/s)</p> <p>Minimum requirement double row 3x2x3 (reduced wind loads: 22.5 m/s)</p> <p>These blocks can be expanded as required</p> <p>Note: 3P20 and 4P20 are designed without additional central supports</p>

10.2 Transport

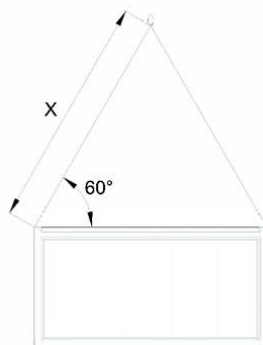
Containers must be transported on suitable trucks. The local laws for load securing must be adhered to.

The containers are not suitable for rail transport. The containers must be transported empty. Open container sides must be closed with appropriate covers before transport.

10.3 Handling

The following handling regulations for the cabins must be observed:

- The 10', 16', 20' and 20'x10' containers can be lifted by crane. The ropes/chains need to be fastened to the upper cabin corners. The angle between the rope/chain and the horizontal line must be a minimum of 60° (picture 1). The necessary rope length for a 20' container is at least 6.055 m.
- The 24' containers can also be lifted by crane. The ropes must be attached to the eyebolts/crane eyes screwed on at the top (not the cabin corners!). The angle between the lifting rope and the horizontal line must be a minimum of 60°.
- Due to the construction and design, handling with a spreader is not possible!
- The cabins may not be handled when loaded.



min. required rope length:
10': 2,989 mm
16': 4,880 mm
20': 6,055 mm

10.4 Installation / Assembly / Statics / Maintenance

General:

Each individual cabin must be placed on foundations provided on site with the respective number of support points (see item 11 support points). The dimensions of the foundation has to be adapted to local circumstances, norms and frost line, under consideration of the local soil condition and the maximum possible loads. The levelness of the foundation is a precondition for a smooth assembly and the failure-free standing of the entire construction. Should the load points not be horizontally aligned, these must be highlighted in the width of the profile.

The design of the foundations must ensure a free flow of rain water.

During set up or placement of the cabin (constructions), maximum permitted loads and regional conditions (e.g. snow loads) must be taken into account. Packaging and transport covers must be disposed of or stored by the customer.

Possible combinations of several cabins:

Individual cabins can be placed side by side, one behind the other or one on top of the other, taking into account the configuration options (see item 10.1) and the max. payloads.

The cabins must be stacked exactly on top of each other. The special CTX stacking cones must be used. The container roof is not suitable for storage of goods and materials.

The CONTAINEX assembly instructions and the service notes must be adhered to and can be sent upon request.

Handling and installation instructions are enclosed in the cabin and must be observed.

Before starting the work, a risk analysis must be carried out in accordance with the local requirements and the applicable provisions on site. Necessary measures must be implemented by the assembly personnel. Particularly when working on the cabin roof, safeguards must be put in place to stop anyone from falling.

Sanitary fittings:

After connecting to the water supply the entire water circulation should be checked once more for water tightness (possible loosening during transport).

Containex denies any warranty for damages, which may result from placement contrary to the principles. Liability for consequential damages is excluded on principle.

Regulatory and legal requirements regarding storage, installation and use of cabins must be observed by the customer.

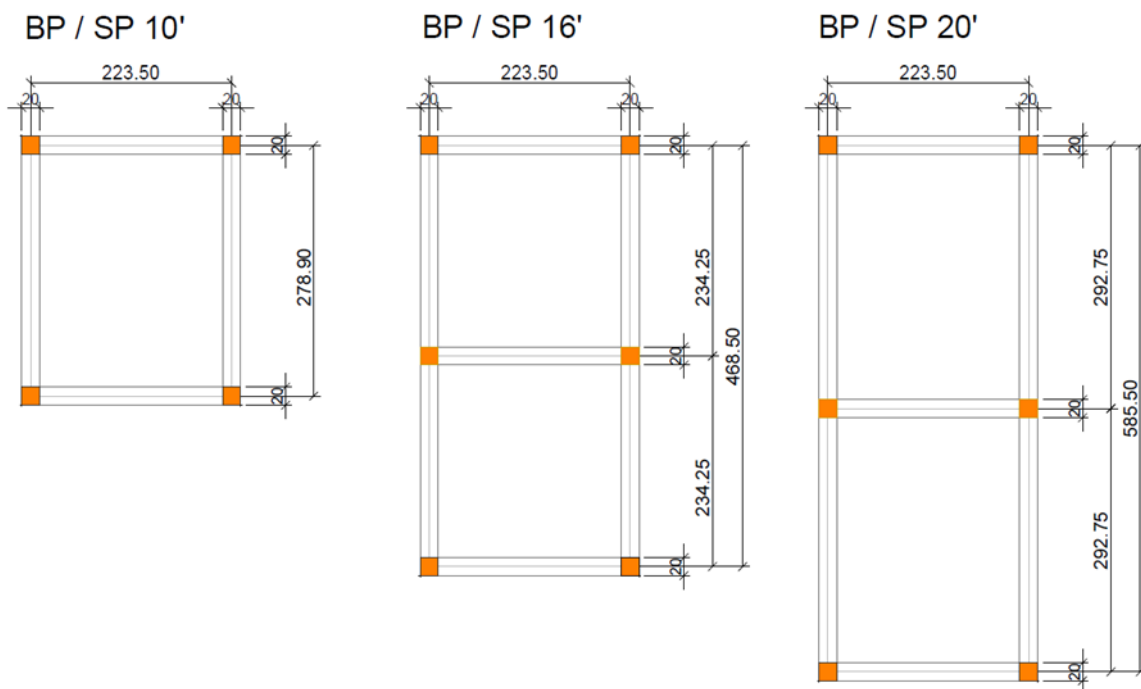
he suitability of the cabin (modularsystem) and any supplied accessories (e.g. stairs, air conditioning etc.) for the planned application must be checked by the customer.

Subject to technical alterations!

11 Support points

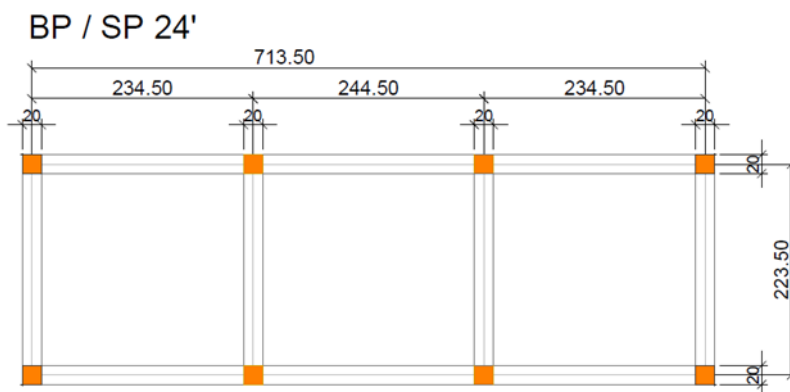
Each individual cabin must be placed on foundations provided on site with the respective number of support points. The smallest foundation size is 20 x 20 cm, but dimensions of the foundation have to be adapted to local circumstances, norms and frost line, under consideration of the local soil condition and the maximum possible loads. The customer must carry out the relevant measures.

11.1 Support points BP / SP 10', 16' and 20'



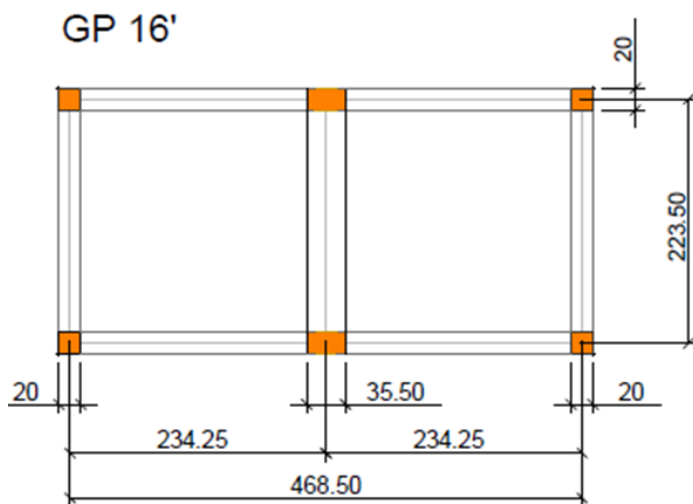
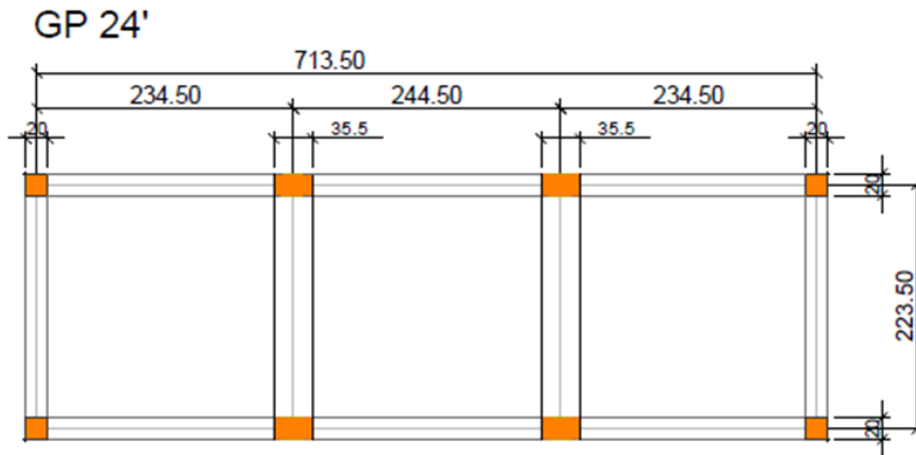
■ ...minimum required container contact points

11.2 Support points BP / SP 24'



■ ...minimum required container contact points

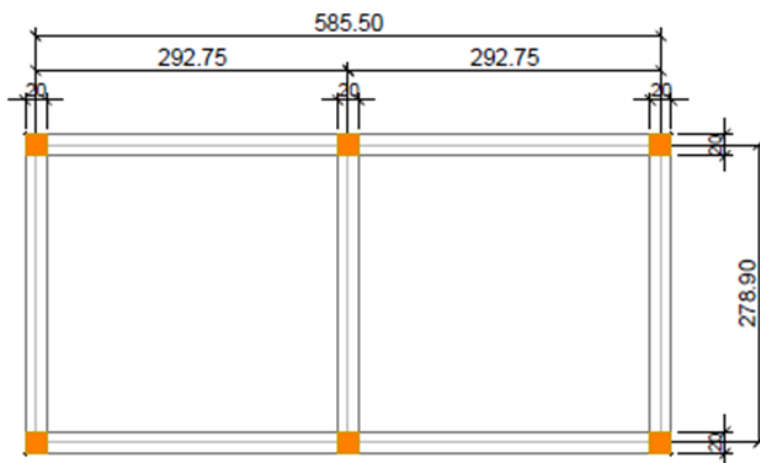
11.3 Support points corridor cabin GP 16' and 24'



■ ...minimum required container contact points

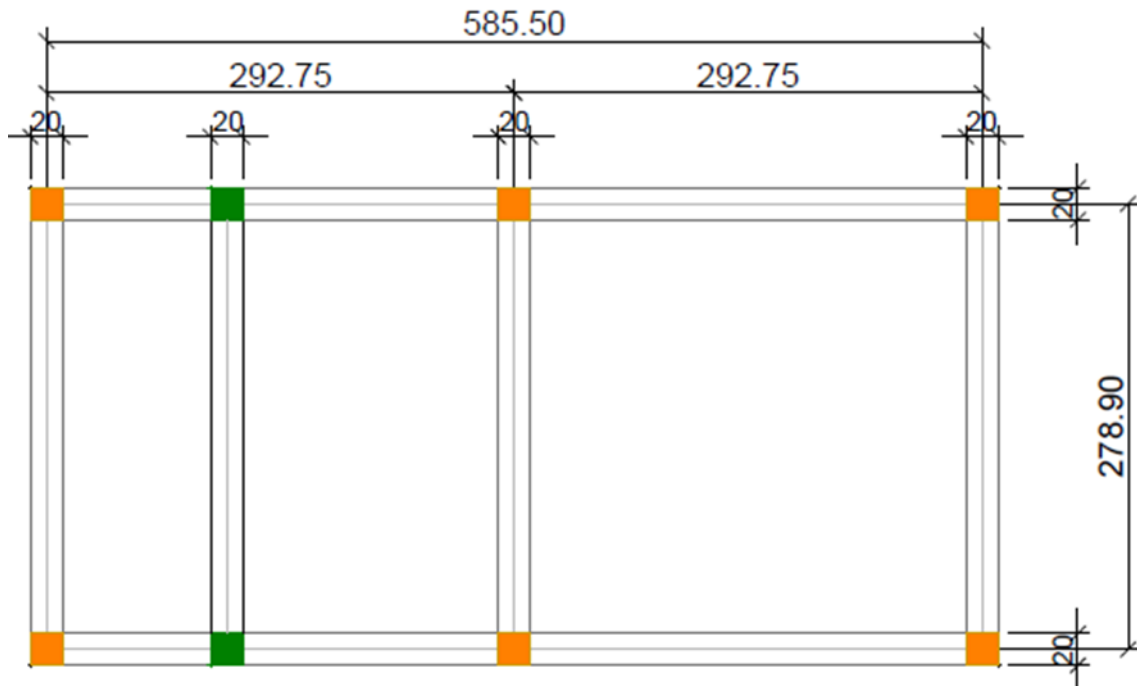
11.4 Support points 3P20 and 4P20

3P20 / 4P20



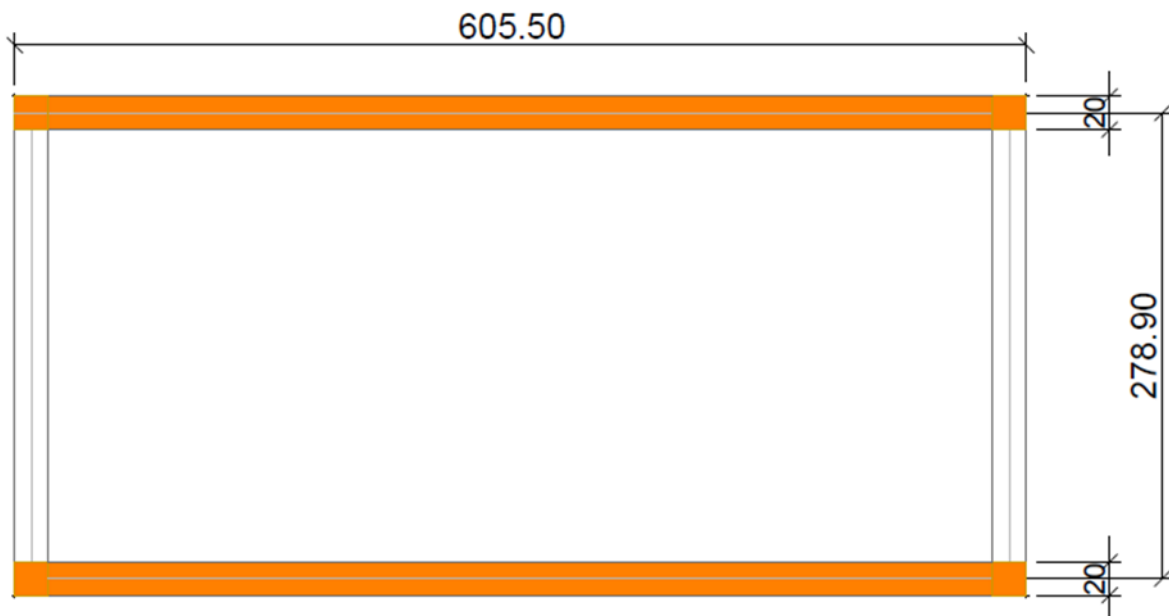
■ ...minimum required container contact points

11.5 Support points internal staircase cabin TP20



- ...minimum required container contact points
- ...support points depending on the type of stairs

or strip foundation version



- ...minimum required container contact points

Note: Foundation loads are disclosed on a project-specific basis. Additional support points may be required depending on the installation variant.

Further technical information upon request - subject to technical alterations.