Specification

> General Information

The following description refers to the specification and design of portable cabins.
Our cabins match the ISO-norm dimensions and have therefore many advantages of that system.
They consist of a robust frame construction and interchangeable wall panels.

> Dimensions

External length: 6,055 mm
External width: 2,435 mm
External height: 2,591 mm

> Insulation

Roofs: 100 mm PU foam: u-value: 0.2 W/m2K
Walls: 60 mm PU foam: u-value: 0.38 W/m2K
Floors: 60 mm mineral wool: u-value: 0.55 W/m2K
Windows: gas filled: u-value: 1.1 W/m2K
External doors: u-value: 1.9 W/m2K

> Load bearing capacity

Floor loads: Ground Floor: max. load capacity 2.0 kN/m2 (200 kg/m2)
Top Floors: max. load capacity 1.5 kN/m2 (150 kg/m2) top floors
Snow load: up to 2 storeys: 1.50 kN/m2 (150 kg/m2)
3 storeys: 1.25 kN/m2 (125 kg/m2)
Wind load: up to 2 storeys: 97.2 km/h (27 m/s) – terrain category III
3 storeys: 90 km/h (25 m/s) – terrain category III

For wind speeds over 90 km/h (25 m/s), additional safeguards must be put in place for the cabins (bracing, screwing, etc.). These measures must be assessed by authorised professionals while taking into consideration the local norms and conditions.

The load capacities are only valid in accordance with the cabin configuration options.

> Basic principles of the static calculations

Exposed side EN 1990 (Eurocode 0, basic principles)
EN 1191-1-3 (Eurocode 1, snow)
EN 1191-1-4 (Eurocode 1, wind)
Non-exposed side EN 1993-1-1 (Eurocode 3, steel)
EN 1995-1-1 (Eurocode 5, wood)

> External colour

RAL 7032 pebble grey

Cabin Design

> Floor

Frame construction:	From cold rolled, welded steel profiles, four container corners welded Floor frame: 3 mm (S 235) Floor cross beam: made of Omega profile, s = 2.5 mm (S 235) Two fork lift pockets on the long side Inside clearance of fork lift pockets: 352 x 85 mm Fork lift pocket distance in centre: 950 mm Steel cross members with omega profiles, thickness = 2.5 mm
Insulation:	60 mm mineral wool (fire behavior A1 non flammable acc. to EN 13501-1)
Subfloor:	0.6 mm thick, galvanized steel sheets
Floor boards:	20 mm cement-bound chipboard (E1 in acc. to EN 717-1; fire behavior B-s1, d0 in acc. to EN 13986:2004)
Floor cover:	Vinyl floor cover, thickness 2 mm Fire behaviour Bfl-s1 in accordance to EN 13501-1 stress class 34 – 43 Welded seams

> Roof

Frame construction:	Made of cold rolled, welded steel profiles, 4 container corners welded thickness 3 mm (S 235) Roof cross members made of wood
Cover:	Galvanized steel sheet with double fold, thickness 0.6 mm
Insulation:	100 mm PU foam (fire behavior E in accordance with EN 13501-1)
Ceiling:	10 mm plasterboard with white coated steel cladding; flame behavior A2-s1,d0 acc. to EN 13501-1
CEE connectors:	Externally recessed into short end of cabin frame
Corner posts:	Made from cold rolled, welded steel profiles bolted to a floor and roof frame, 4 mm (S 275)

> Wall panels

External cladding:	Corrugated, galvanized and coated steel sheet, thickness 0.6 mm
Insulation:	60 mm PU foam (flame behavior B-s3, d0 acc. to EN 13501-1)
Internal cladding:	White galvanized and coated steel sheet, thickness 0.5 mm

> Partition walls

Steel version:	Total thickness 60 mm Frame: wooden frame with cardboard comb thickness 60 mm cladding on both sides: white coated steel sheet, thickness 0.5 mm

> Doors:

Steel doors	Design acc. to DIN regulations	
	Right or left hand hinged	
	Inward or outward opening	
	Steel frame with triangular wrap-around seal	
	Door blade with galvanized steel sheets on both sides	
Dimensions	Nominal: 875 x 2,125 mm	
	Clear opening: 811 x 2,065 mm	
	Nominal: 1,000 x 2,125 mm	
	Clear opening: 936 x 2,065 mm	
	Nominal: 2,000 x 2,125 mm	
	Clear opening: 1,936 x 2,065 mm	
	Iinactive leaf with concealed frame joint	
Optional	Emergency door furniture (acc. to EN 1125)	
	Door grille with security fittings for dimension 875 x 2,125 mm only	
	Door closer	
	Insulated safety glazing:	238 x 1,108 mm
		550 x 1,108 mm
		550 x 450 mm

> Windows

Pvc frame with insulated glazing and integrated aluminium roller shutters
Roller shutter housing with belt take-up reel and vents: housing height 145 mm, lamella colour light grey
One hand tilt & turn mechanism
High level windows just tilt and no shutters

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

External Dimensions:	Office windows: 945 x 1,200 mm (window parapet: 870 mm)	
	High level windows (frosted):	652 x 714 mm
Fixed Safety Glazing:	945 x 1,345 mm	
	945 x 2,040 mm	
	1,970 x 1,345 mm	

Fixed Glazing With Sliding Part: 945 x 1,200 mm

Ticket windows: 945 x 1,200 mm

Window Parapet: Office windows: 870 mm

High Level Windows: 1,525 mm

Options: Window grilles (for office and high level windows)

> Electrical installation

Specification:	Concealed cabling IP20/IP44 (for sanitary rooms) Plug insert to GB standard
Connection:	Recessed CEE external plug and socket connections
Voltage:	230V/3 poles/32 A
Frequency:	50 Hz
Protection:	Residual current operated device 63 A/0.03 A, 2 poles
Distribution Board:	Surface mounted type
Cable:	(N)YM-J / H05 VV-F
Light:	Circuit breaker 10 A, 2 poles (3x1.5 mm2)
Double socket:	Circuit breaker 13 A, 2 poles (3x2.5 mm2)
Lighting:	Cat. II LED light fittings 2 x 36 W Single (1 x 36 W) or double fluorescent light fittings (2 x 36 W) with covers operated by PIR sensors
Earthing:	Universally usable grounding terminal: On both short ends 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 cabin and need to be fitted by the client on site. The protective earthing installation on site must be carried out by the client.
Wiring:	Flexible cable system with plug contact and cables in full length.
Safety advice:	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 must be considered. The commissioning must be carried out by an approved electrician. The manual for the assembly, start up, utilization 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 are not secured with an overcurrent protection device. The connection of the cabins to the external electrical power supply only may be undertaken by an authorized 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 authorized specialist company.

ATTENTION:

- The commissioning of the boilers and/or under table units is only permitted when 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 cabins are delivered into areas with increased lightning activity further measures must be taken into account to prevent overvoltage depending on the country specific rules.
- 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 electric fittings of the cabins are designed for minimal vibration exposure. If the exposure is higher measures need to be taken depending on country specific rules.
- The cabins are designed for areas with little seismic activity. If the cabins are used in areas with higher seismic activity, the country's national regulations are valid, The equipment needs to be adjusted 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. IN = 32A.

> Water Installation

Supply:	Using ½", ¾" or 1" pipe through the cabin wall
Internal:	PP-R piping (in acc. with EN ISO 15874)
Operating Pressure:	Max. permitted operation/connection pressure – 4 bar
Warm Water Prep:	By electric boilers
ATTENTION:	The boiler is suitable for a max. operating pressure of 6 bar. A higher water pressure is reduced with an appropriate pressure reducing valve.
Discharge:	The wastewater is collected via pvc pipes and discharged through the cabin wall. The discharge of the wastewater into an authorised sewage network has to be undertaken by the buyer/hirer in compliance with the official regulations for waste and fecal water.
NOTE:	Should the cabin not be used at temperatures below +3°C, the entire piping system, must be emptied including 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

> Paint

Paint system with high weather and ageing durability suitable for city and industrial atmosphere.

Wall panels: 25 µm coating thickness

Frame: 15 – 40 µm primer

40 – 60 µm topcoat

> Construction / Assembly / Statics / Servicing

General information:

- Each individual cabin must be placed on foundations provided on site (eg wood, concrete) with at least 6 points of support.
- 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 rainwater. During set up or placement of the cabin (constructions), maximum permitted loads and regional conditions (eg snow loads) must be taken into account.
- After removing the transport covers, the holes in the floor frame must be sealed with silicone. Packaging and transport covers must be disposed of by the customer.

Possible combinations of several cabins:

- Individual cabins can be selectively configured next to, behind, or on top of each other, while bearing in mind the structural indications and the max. permitted loads.
- The containers must be stacked exactly on top of each other. You must use the special CTX stacking cones and steel brackets provided.
- The container roof is not suitable for storage of goods and materials.
- The Prima 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.

Sanitary fittings: After connecting with the water supply the entire water circulation should be checked once more on water tightness (possible loosening during transport).

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

Handling

- By forklift or crane (angle between lifting rope and horizontal line must be at least 60 °)
- Due to construction and design, handling with spreader is not allowed.
- Regulatory and legal requirements for the storage, placement and use of the cabins must be observed by the client.
- The suitability of the cabin (modular building) and any supplied accessories (eg stairs, air conditioning etc) for the planned application must be checked by the customer.
- Subject to technical alterations.