

CONTAINEX

PLUS Line



- Basic principles (dimensions, insulation, load bearing capacity, ...)
- Container design (floor, wall, roof)
- Equipment and sanitary installations
- Internal staircase container and corridor cabin
- Fire protection and certifications
- Delivery and assembly
- General information / Where do I find what?

Dimensions and weights



Type	external (mm)			inward (mm)			Weight (kg)
	Length	Width	Height	Length	Width	Height	(approx. specifications)
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' (3m) staircase cabin	6.055	2.989	3.100	5.815	2.749	2.550	3.500

ROOF

PU80 + MW120: **0,18 W/m²K**

PU100+MW100: **0,17 W/m²K**

WALL

PIR110: **0,20 W/m²K**

PIR110+MW80: **0,14 W/m²K**

EXTERNAL DOOR:

$U_d = 0,87 \text{ W/m}^2\text{K}$

WINDOW: $U_g = 0,70 \text{ W/m}^2\text{K}$

$U_w = 1,0 \text{ W/m}^2\text{K}$



FLOOR

PIR110 + MW50: **0,20 W/m²K**

PIR110 + PU50: **0,17 W/m²K**

Payloads and sound



SNOW LOAD

$s_k = 250 \text{ kg/m}^2$



FLOOR LOAD

400 / 300 / 300 kg/m²
Ground floor / Upper
floor / Upper floor



WIND LOAD

$v_{\text{ref}} = 27,5 \text{ m/s}$



SOUND INSULATION VALUE (Standard values for individual panels)

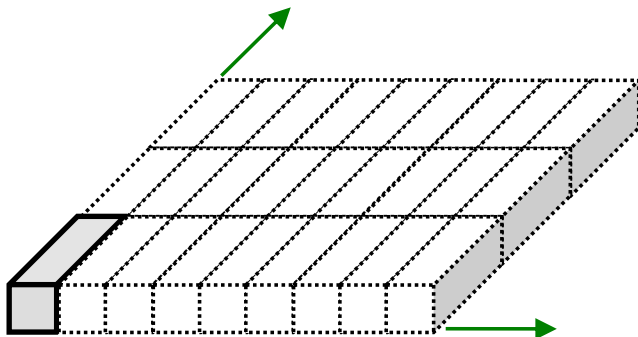
PIR110: 26dB

PIR110 + extra wall: 36dB

- Self-supporting frame
- NO restriction on the open room sizes
- 24': NO support columns required for ground level installation (1-storey)

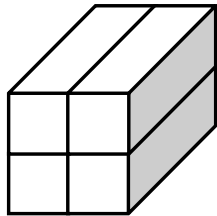
The following minimum requirements for stacking:

- 1-storey ➡ 10' - 16' - 20' - 24' (WITHOUT support)



NO restrictions

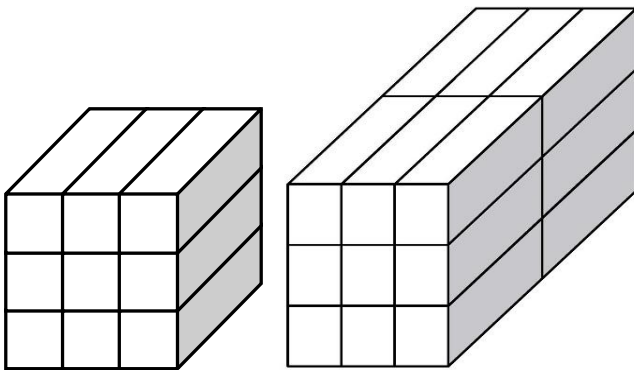
- 2-storey ➡ 10' - 16' - 20'



Minimum requirement 2x1x2

The block 2x1x2 can be expanded as required

- 3-storey ➡ 10' - 16' - 20'



Minimum requirement 3x1x3 (reduced wind loads)

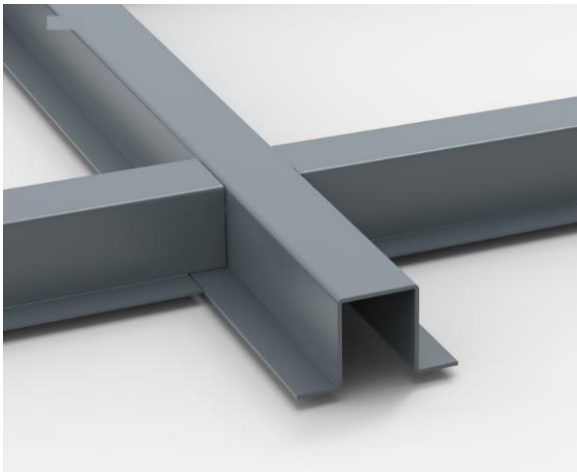
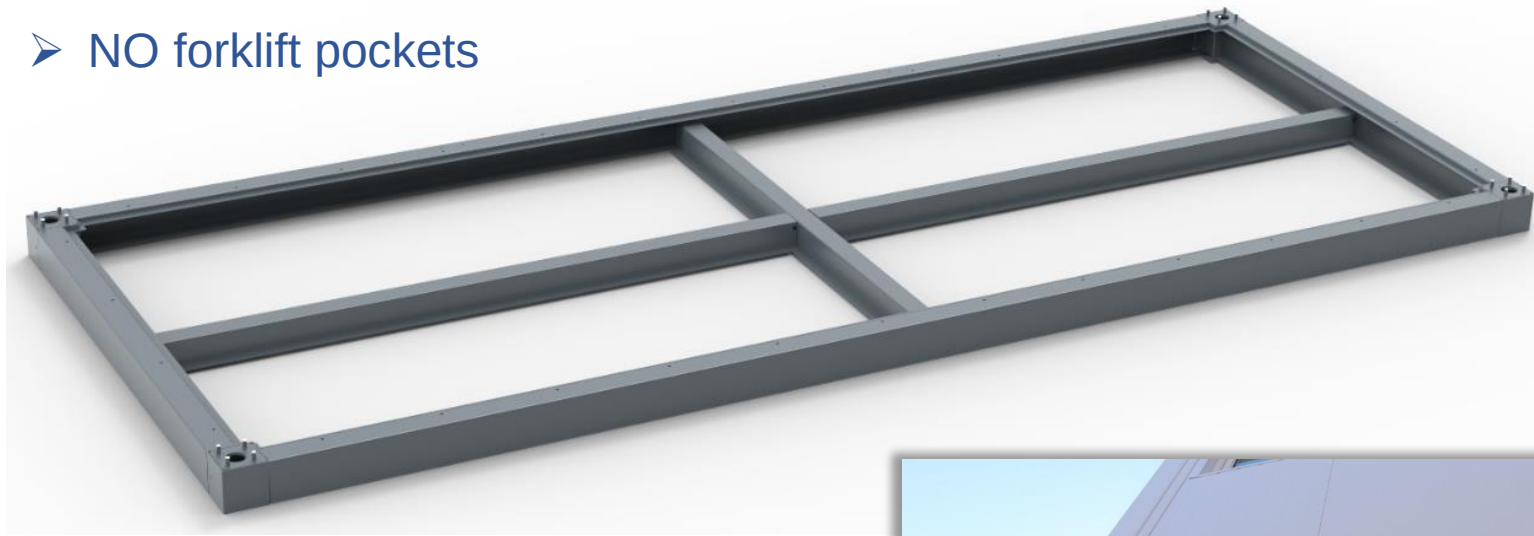
No restrictions with the 3x2x3 arrangement

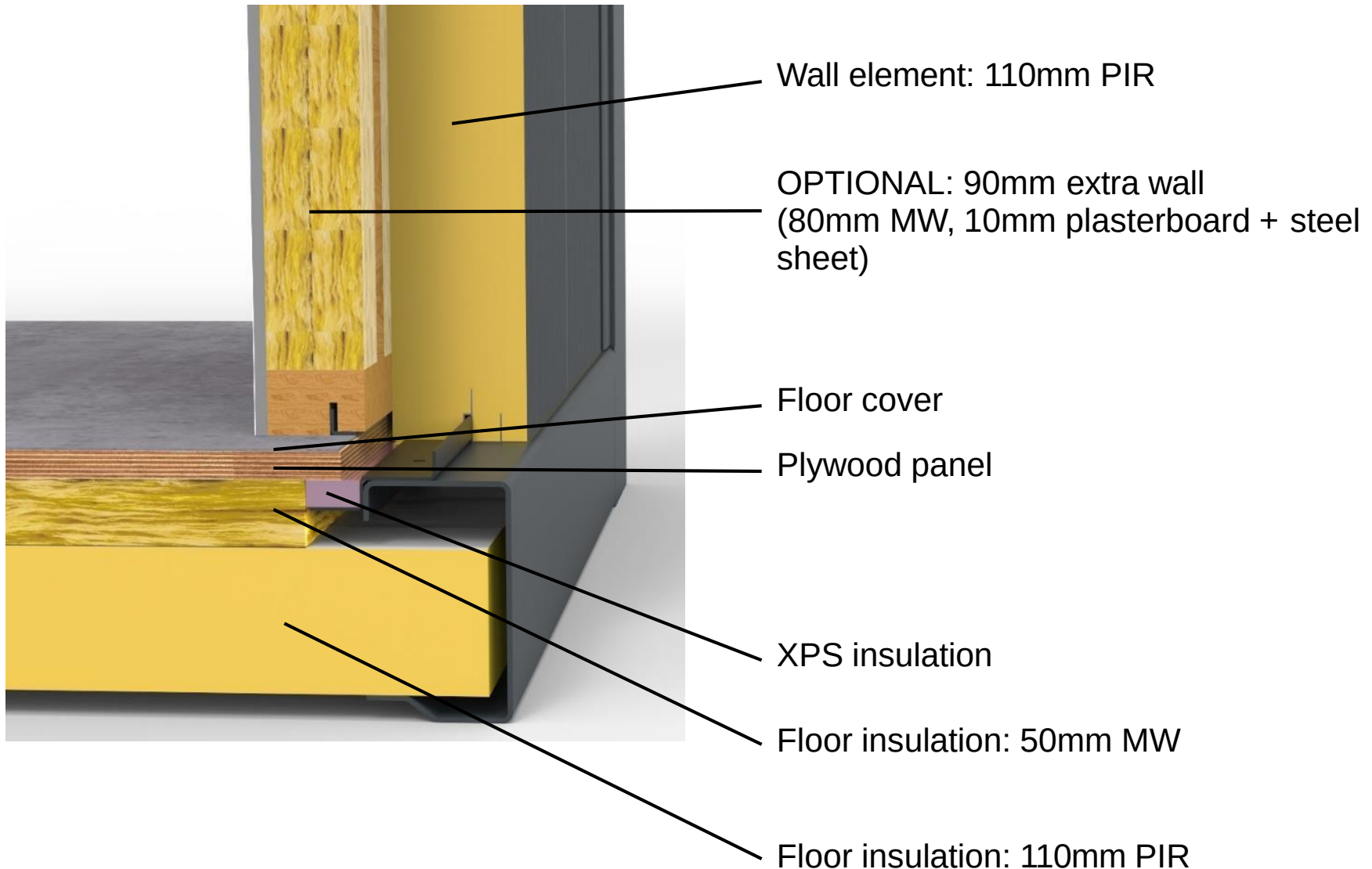
These blocks can be expanded as required

Design of support points and foundations as per CLASSIC Line

Floor assembly

- One type of floor section for all requirements
- NO forklift pockets



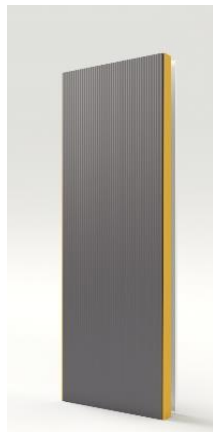


Panels with micro corrugation

➤ Full panel



➤ Rest panel



➤ Door panel
(fixed glazings as per CLASSIC Line)



➤ Double door panel
(only on the longitudinal side)

➤ Window panel



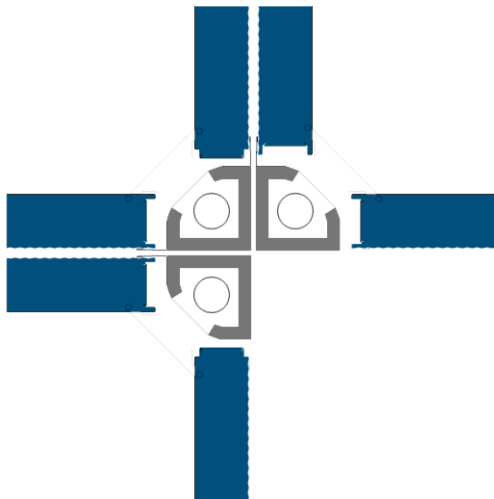
➤ Sanitary window panel



➤ Double window panel



- NO specific assembly sequence for the panels (symmetrical corner columns)
- NO tie wires due to self-supporting construction
- Repainting of the panels in the factory is not possible (due to micro corrugation)



PLUS Line

vs.

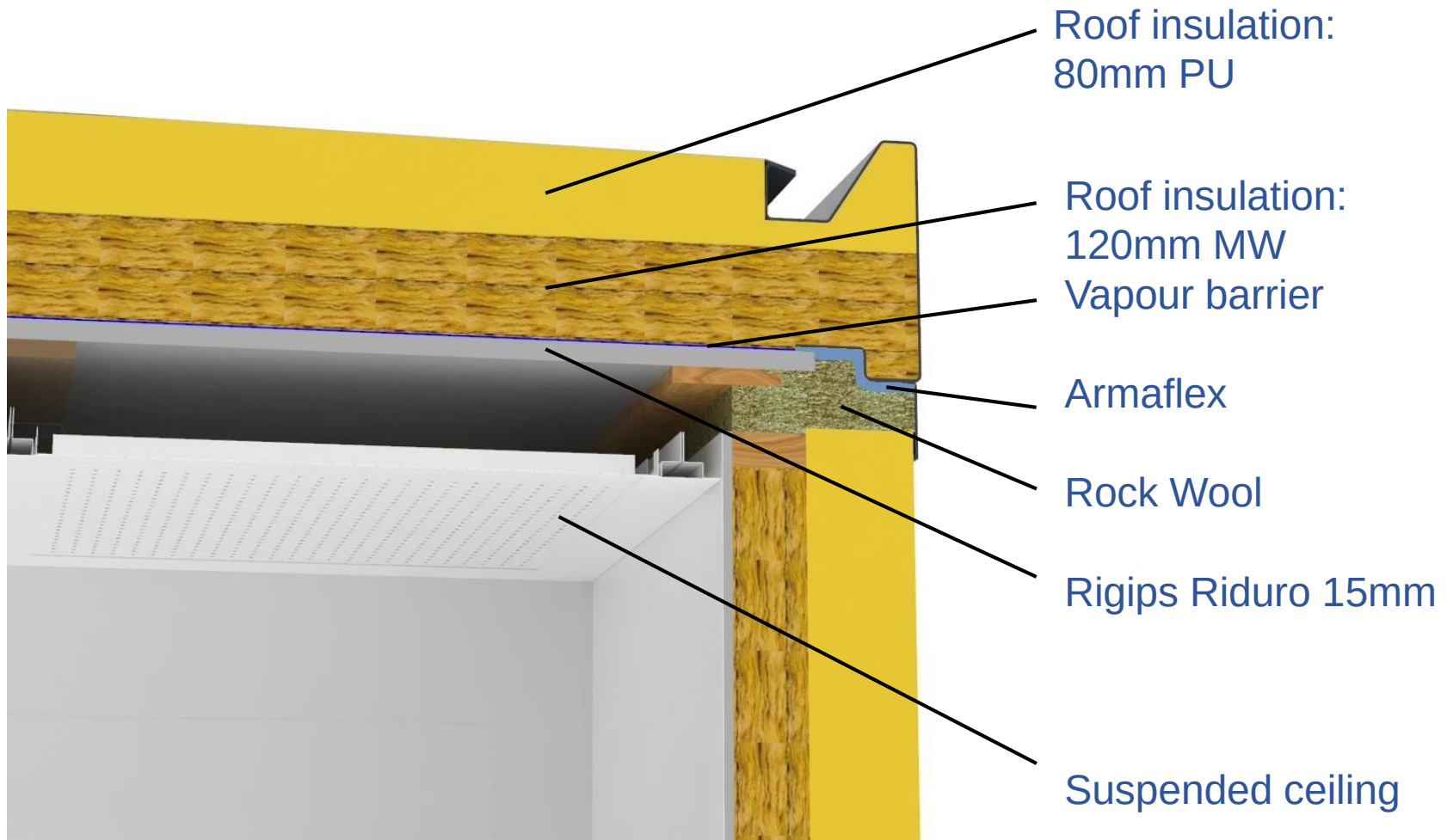


CLASSIC Line

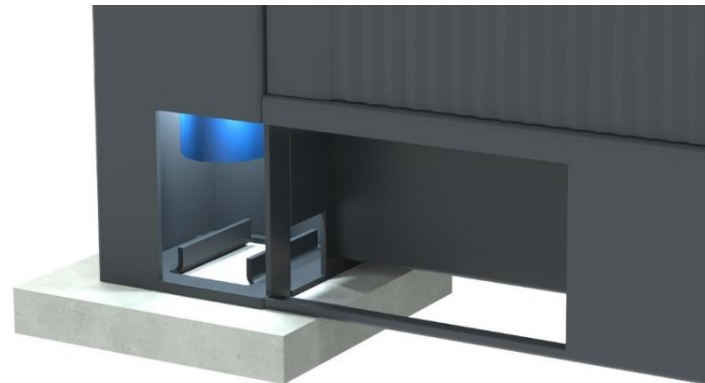
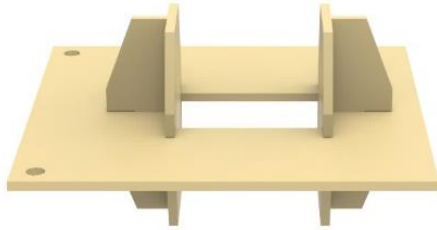
- 90 mm wooden stud wall (80mm mineral wool + 10mm plasterboard + sheet steel)
- Optimised thermal insulation
- Improved soundproofing properties
- Simple cable laying
(free choice of socket position and electrical installations)
- Almost continuous wall without disruptive transitions



Roof assembly



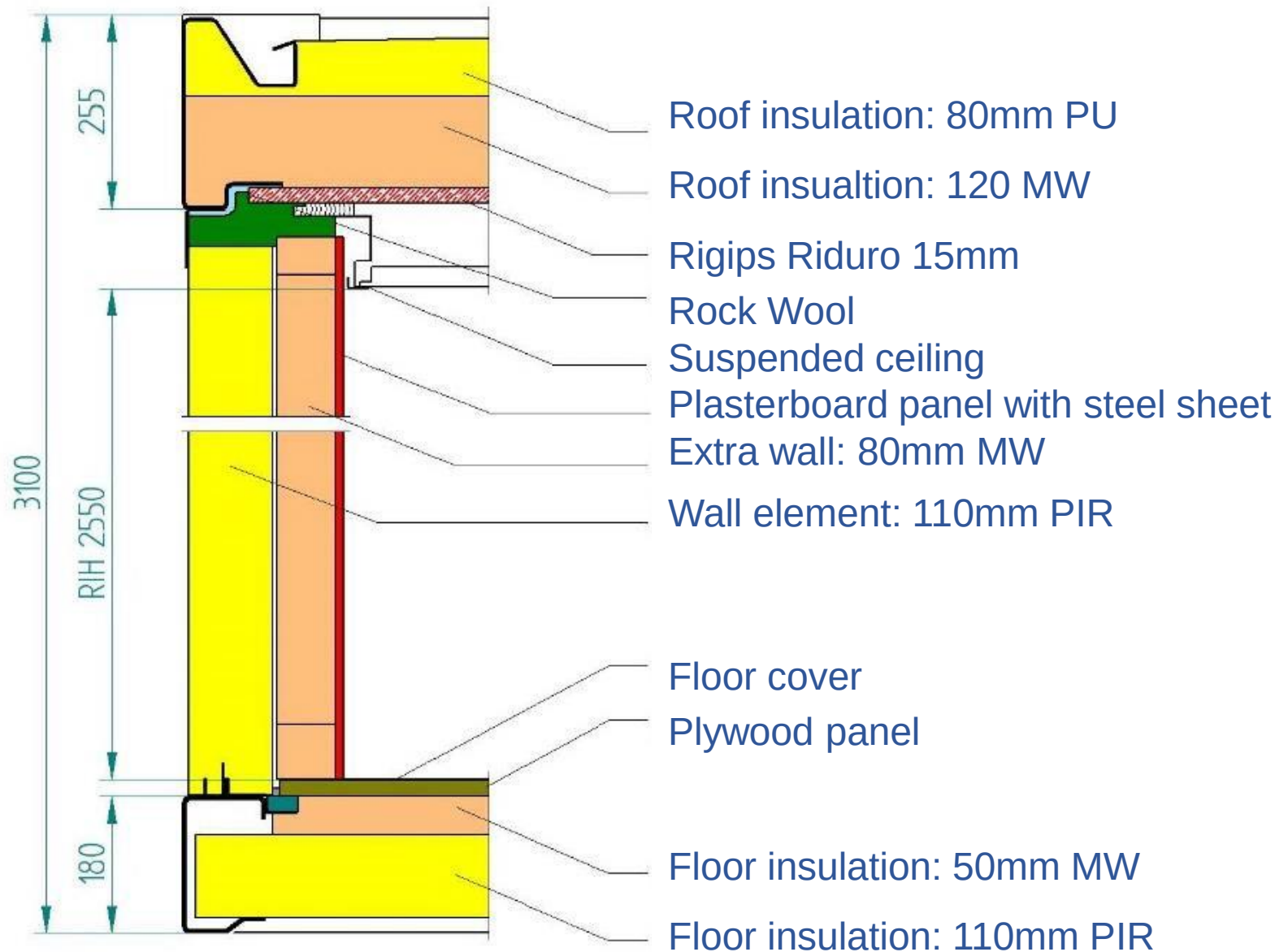
- Controlled roof drainage via the corner columns
- Drainage of rainwater via newly developed stacking cones in multi-storey buildings



- Suspended ceiling with perforated steel panels
- Integrated LED lighting
- Recessed distribution box, cable runs behind suspended ceiling
- Flush cladding material - NO top trims



Sectional sketch



- Optionally available "building entrance door"
- Ud value 0.87 W/m²K (without glazing)
- Order volume 1.150 x 2.100 mm
- Clear opening 1.000 x 2.005 mm
- Including door closer
- Always outward opening
- Optional: insulated glazing 150 x 1.603 mm
- right or left hand hinged
- Installation in double panel

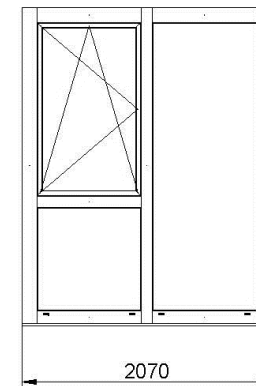
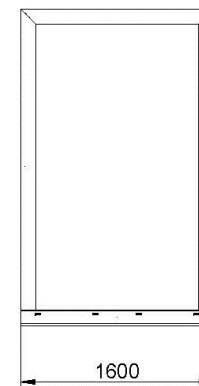
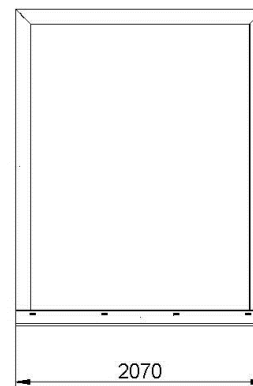
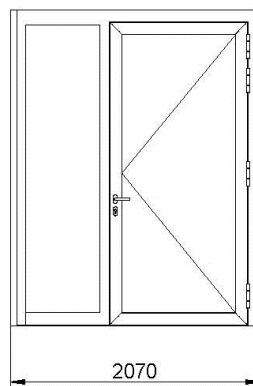
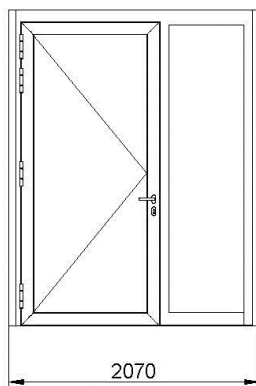
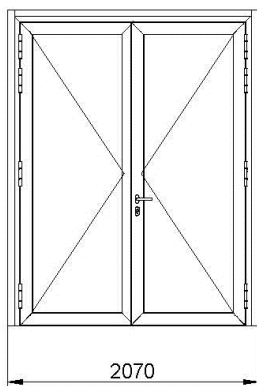


Schematic representation

- 3-pane insulated glazing (ESG) – U_g value 0,7 W/m²K
- External aluminium clip in cabin colour, Interior RAL 9010
- Optional: VSG glazing
- Insulated roller shutter box with aluminium slats in RAL 9006 (also available without roller shutters)
- Parapet height: 1.030 mm (Office window), 1.525 mm (sanitary window)
- Double wing window with floating mullion (without centre bar) – Clearance 1.560 x 1.015 mm



- Aluminium frame with 3-pane insulated glazing (ESG)
- Exterior RAL 7016, Interior RAL 9010
- Optional: VSG glazing
- Optional: IP glazing in white pvc (by means of a technical request)



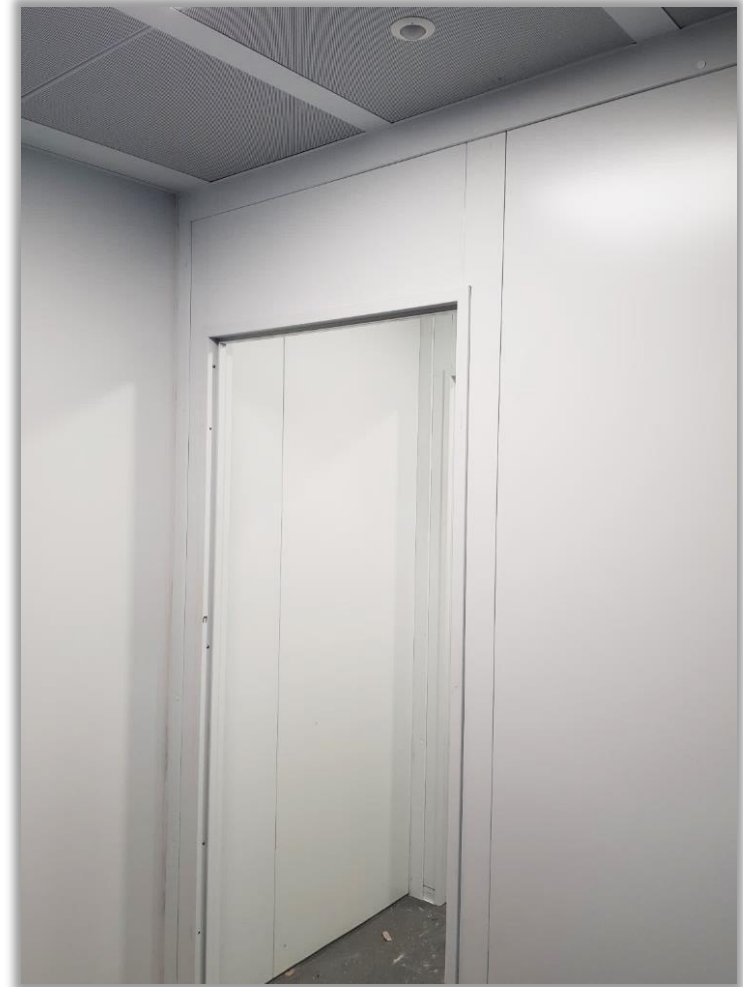
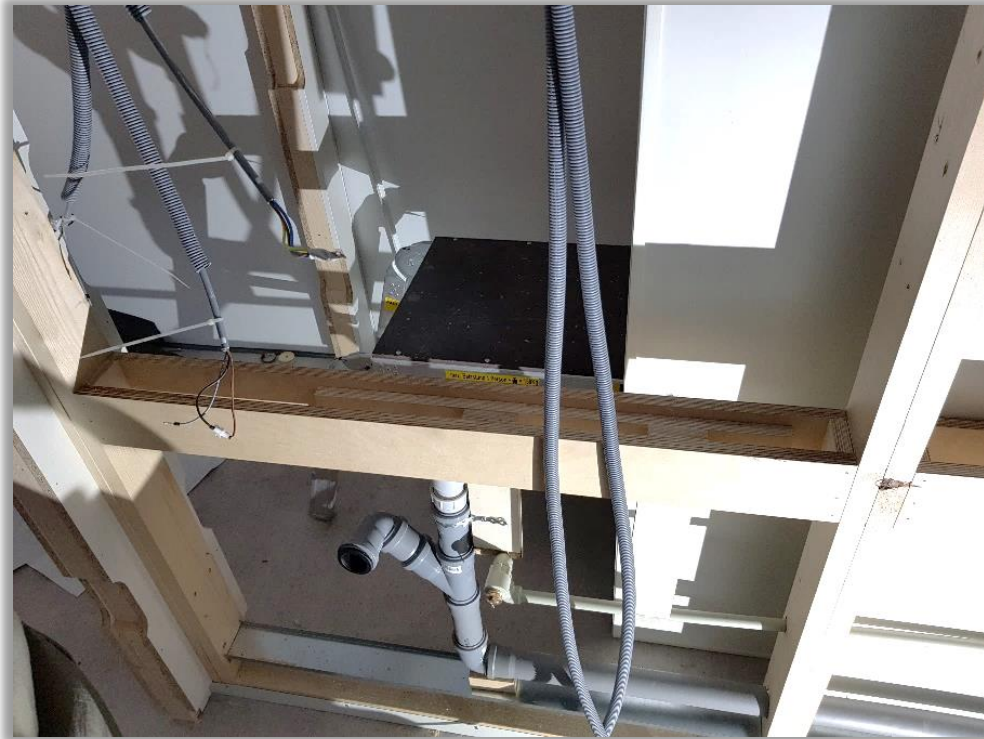
Venetian blinds

- Venetian blinds available for all window types (excluding sanitary windows)
- Electrically controlled
- Assembly always at installation site



Partition wall

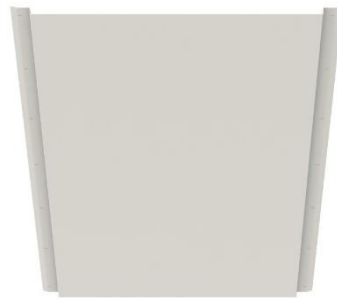
- Wooden frame with MW insulation, plasterboard and steel sheet RAL 9010
- Thickness 80mm or 120mm (pipework up to DN50 possible in the wall)



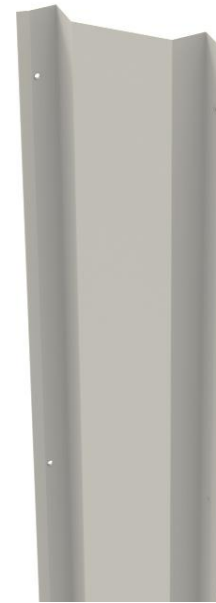
- NO top trims
- NO skirting
- Vertically ALWAYS one-piece linking kit



"Standard"
side tunnel



Side tunnel
for extra wall



Corner cover strip
"standard"



Corner cover strip
for extra wall

- E-convectors and fan heaters as per CLASSIC Line
- Wall-mounted air conditioning unit with heat pump technology
 - NO external unit
 - Ready-to-use assembly in the factory
 - Heating and cooling for room sizes up to 40 m² (guideline)
 - Total output 3,3 kW



- Concealed pipework boxed in
- High-quality sanitary equipment





➤ Hot water boiler as per CLASSIC Line

Internal staircase container

- Saddled staircase with landing (wood type beech)
- Only 20', Width 2.989 mm
- Floor load 500 kg/m², fire resistance R 30
- Light passage width 1.200 mm
- 3m "counter frame" for buildings only available in connection with internal staircase cabin



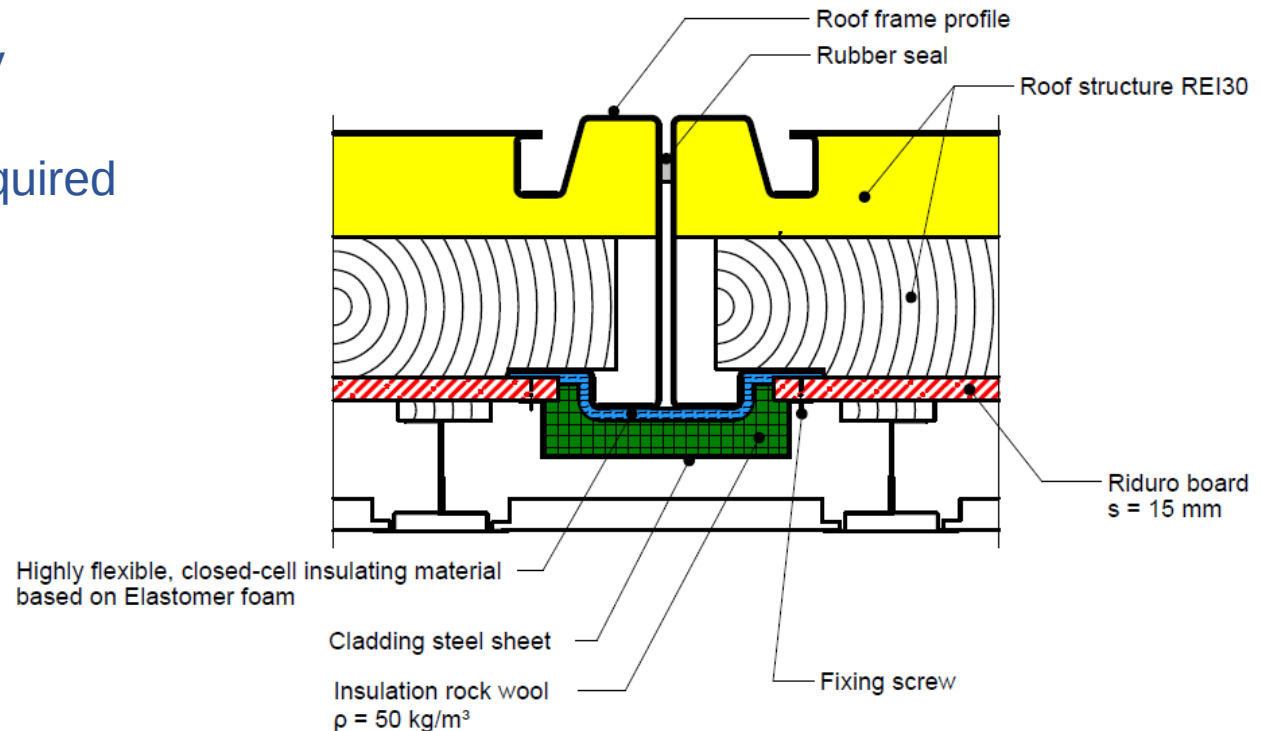
- Weight of stairs 1.000 kg
- Assembly only by company Lieb, A-8160 Weiz

Corridor cabin

- Available in 16' und 24'
- Due to the symmetrical corner column, no panel offset in openings (doors, glazings, etc.)



- Fire resistance classification according to EN 13501-2 by IBS-LINZ
- Standard version includes REI30 fire protection system
- NO reduction in internal ceiling height - all components of the REI30/60/90 versions are above the suspended ceiling
- NO filling necessary
- NO drywall work required



- CLEAN AIR emissions test certificate for compliance with the required indoor air values

Structural calculations



Currently available (can only be ordered from engineering department once an order is placed):

- For Europe: site specific calculations (project-specific) according to Eurocode EXCLUDING national application documents
- For D, A, CH: site specific calculations country-specific according to Eurocode INCLUDING national application documents

Work in progress:

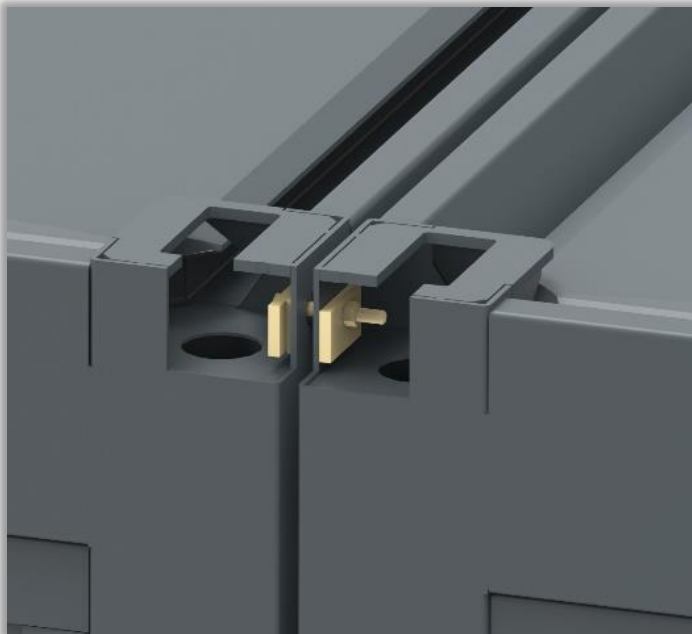
- Type structural calculations according to Eurocode EXCLUDING national application documents (for Europe), until August 2020
- Additional type structural calculations in country-specific version (only D, A, CH)

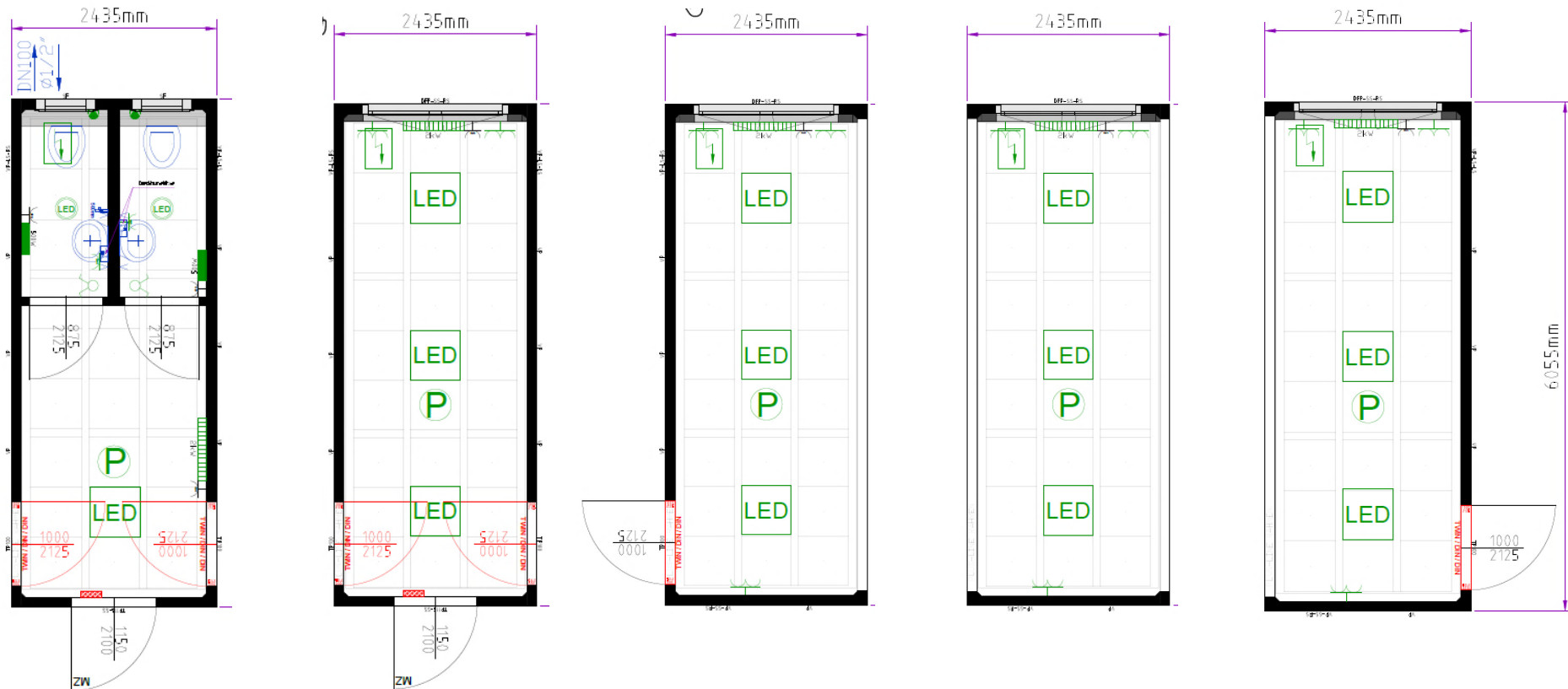


- Delivery with open flat trailers due to external height of 3,100 mm
- NO Transpack
- NO forklift pockets - handling with crane only
- Open modules must only be transported with transport protection film (transport protection film is reuseable)



- Newly developed locator plates
 - Automatic horizontal alignment
 - NO linking bolts required on the floor frame
- Small linking bolts on roof frame
- Special stacking cones and support wedges
- Rubber seal as per CLASSIC Line







Layout exam





Layout exam



- Modern appearance (inside and outside)
- Large glazing areas in building colour
- REI30 fire resistance as standard
- Acoustically optimised interior with suspended ceiling
- Highest thermal insulation
- Concealed sanitary installation
- Assembly advantages (locator plates, pre-assembled linking kit)
- No restriction on the open room sizes
- Due to its properties and equipment, the PLUS Line is ideal for the construction of modular buildings in municipal areas