

MODULAR OPERATION THEATRE



METHODOLOGY

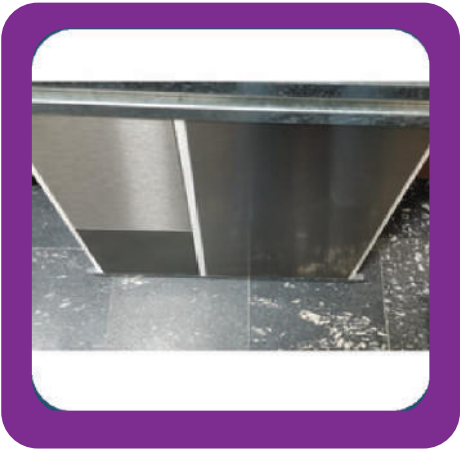
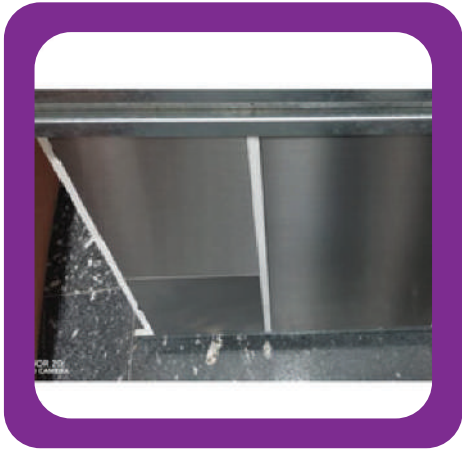
Wall, Ceiling, and Flooring Systems:

Tailoring modular operation theaters to each market's needs, we deliver meticulously designed walls, ceilings, equipment, and doors that meet international standards

Business Pillars:

- Commercial Excellency (ComEX)
- Engineering Facilities
- Value Engineering Assessment
- After Sales Processes





Stainless-Steel wall panel

our metal wall panels boast a lawlessly flat surface, devoid of pores, ensuring resistance against both living organisms and chemicals. Our wall boards, come in 15mm/12.5mm variants, offering the choice of H1 fire moisture resistance. Plus, enjoy top-tier Fire resistance

Performance

Anti-bacterial coating for stainless-steel sheets Reaction to fire Mineral wool insulation layer

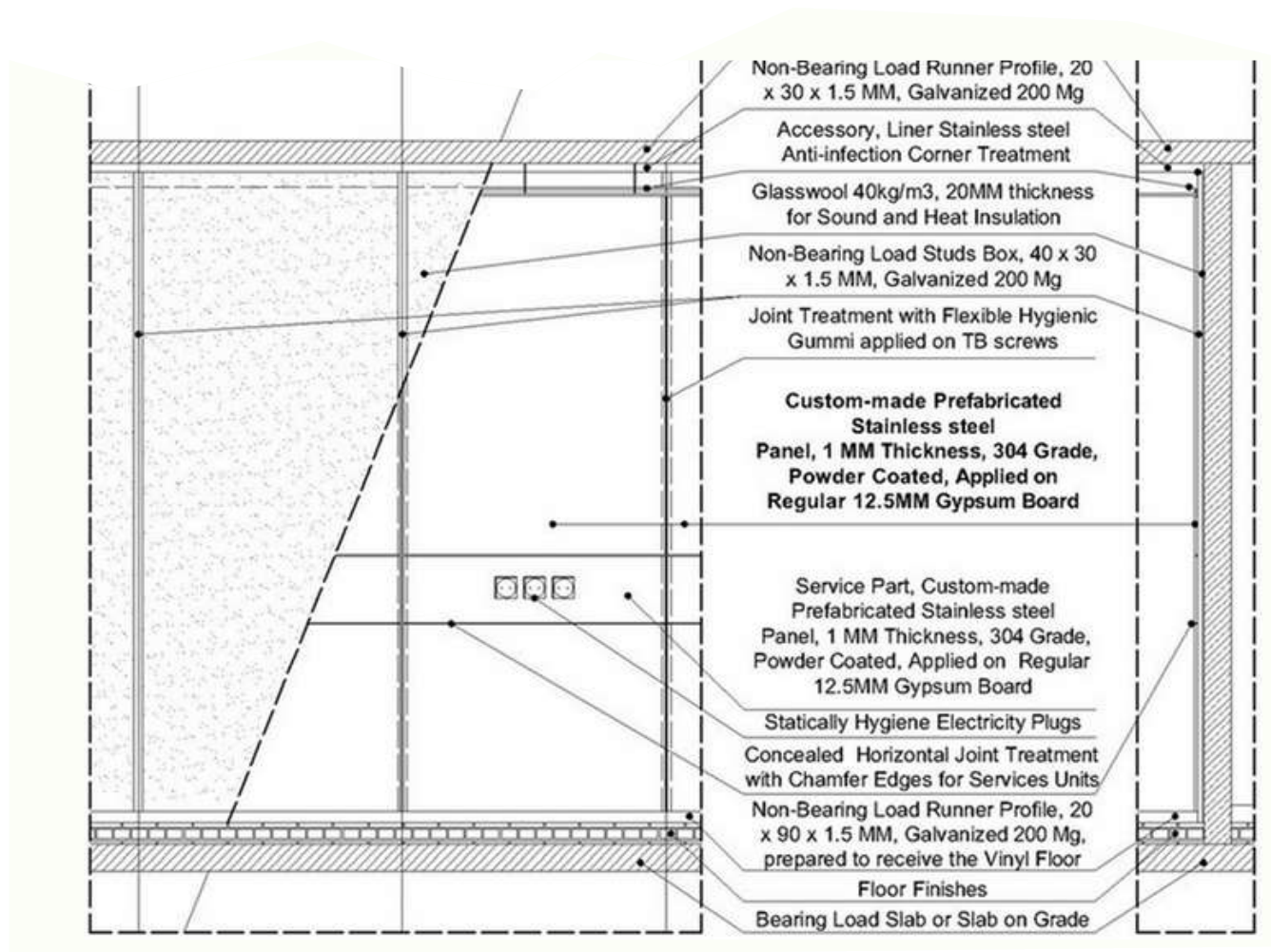
Sound insulation For Stainless-steel it is a subject of the international law of steel grade 304



PRODUCTS & SERVICES



STAINLESS-STEEL WALL PANEL



Customize off-site prefabricated stainless-steel walls. for high sterilized areas in healthcare sectors, especially for the operations rooms.



MODULAR WALL SYSTEMS

(Effective/stand 04/2023)

1. GENERAL INFORMATION

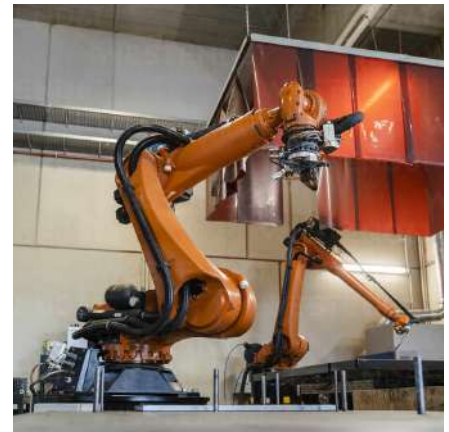
Zatus GmbH has developed a remarkable pre-fabricated wall system for hygienically closed hospital areas, including operation premises (ORIS), intensive care units (ICU), and other critical facilities. Let's delve into the details:

1. Wall System Overview:

- The wall panel system is designed as a modular structural frame system.
- The axis distances between panels range from 500 mm to 1000 mm.
- It is important to note that this wall system is non-load bearing, meaning it does not carry the structural load of the building.
The system is specifically tailored to meet the high demands of installation flexibility and *antibacterial surface quality—both crucial features for operating rooms.

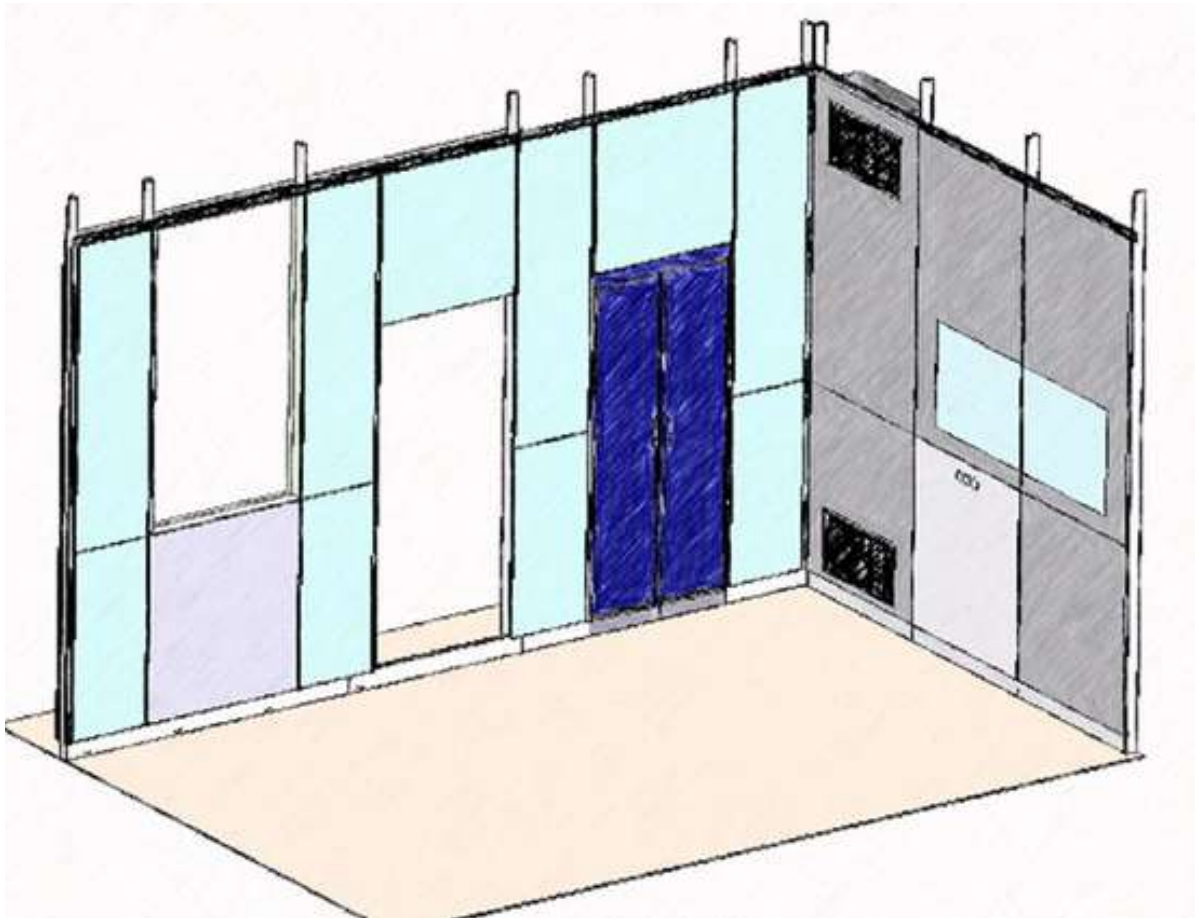
2. Prefabrication and Assembly:

- The system is produced and prepared at the OMEGA Blechbearbeitung Limbach-Oberfrohna AG location.
It arrives in a ready-for-assembly condition, streamlining the installation process.



In summary, this innovative wall system combines flexibility, hygiene, and precision, making it an excellent choice for critical healthcare environments.

MODULAR WALL CONCEPT



2.SUBSTRUCTURE

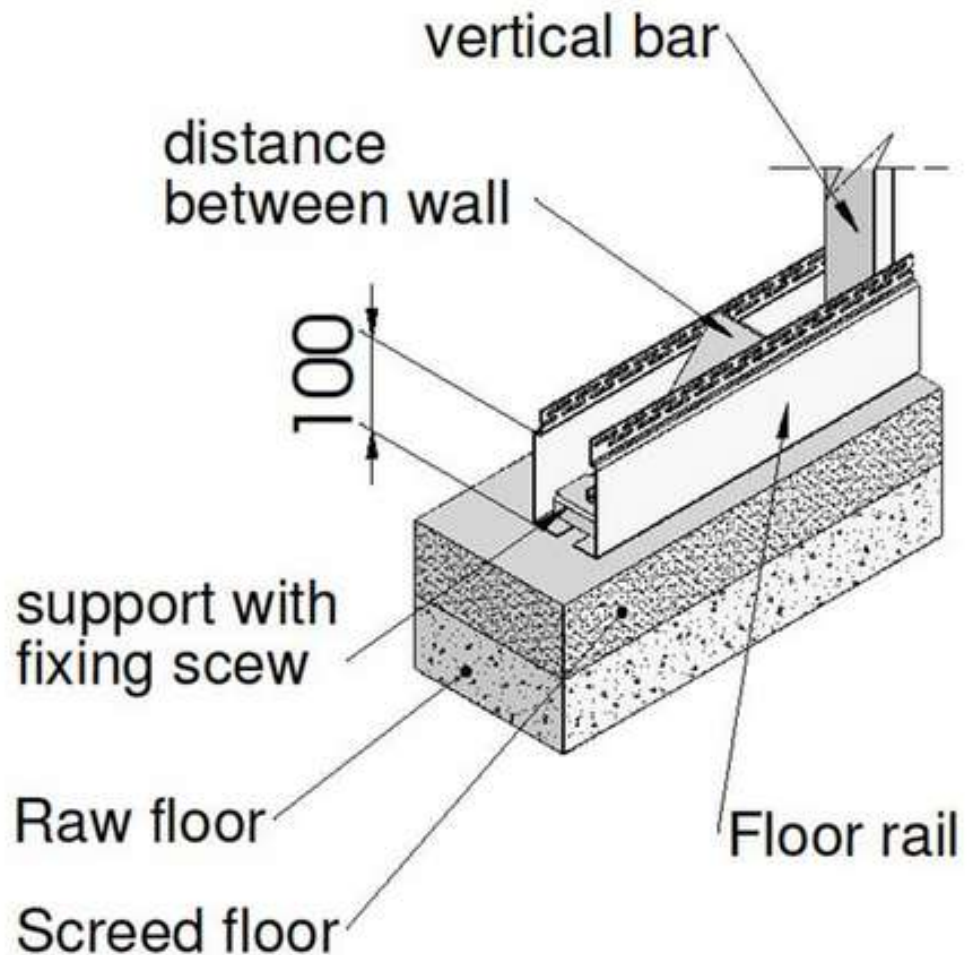
As substructure recommend Knaut dry-wall profiles.

2.1 FLOOR RAIL AND VERTICAL BARS

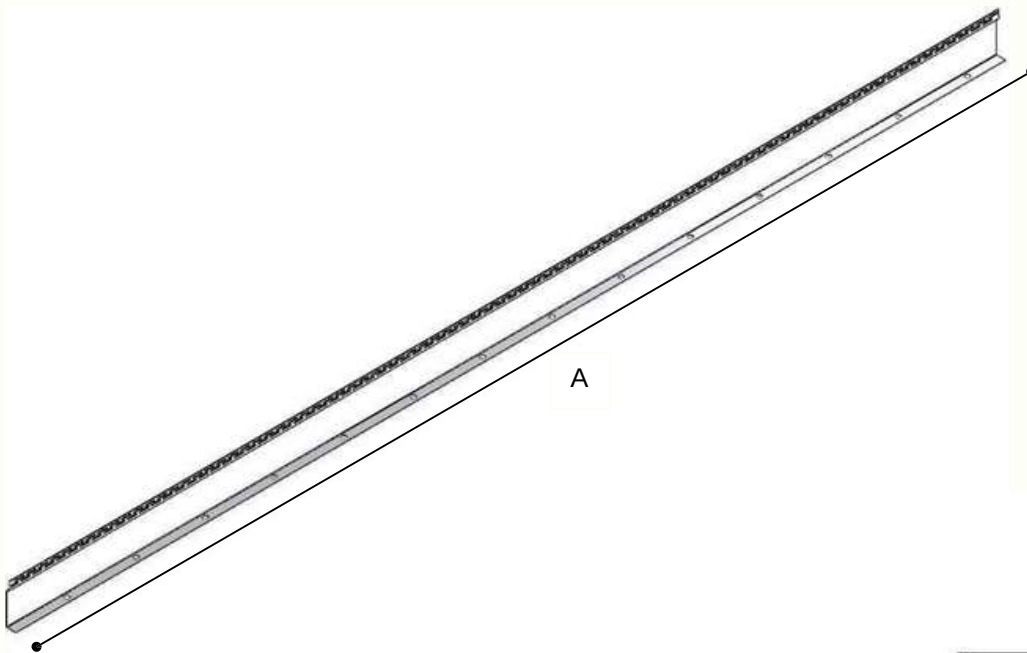
The floor rail, crafted from durable 2mm galvanized sheet steel with a standard height of 100mm, is securely affixed to the floor using a combination of clamps, screws, and dowels. To accommodate varying wall thicknesses, spacer sheets and distance pieces are seamlessly integrated between the floor rails.

Vertical bars, distance sheets, and fixing screws are to be provided by the client, ensuring a tailored fit for the specific installation requirements."

Vertical bars, distance sheets and fixing screws by client.



FLOOR RAIL / BODENSCHIENE

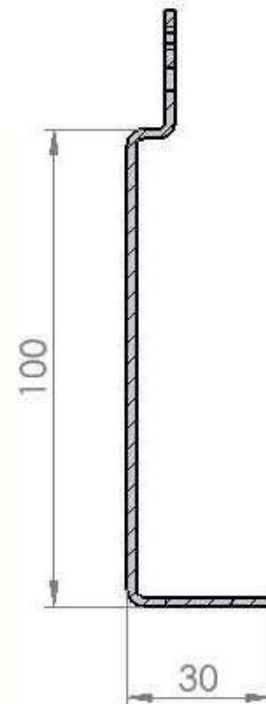


**Material: Galvanized
standard steel t = 2,0
mm**

Material: Stahl, bandverzinkt
s = 2,0 mm

Length: A = 3000 mm

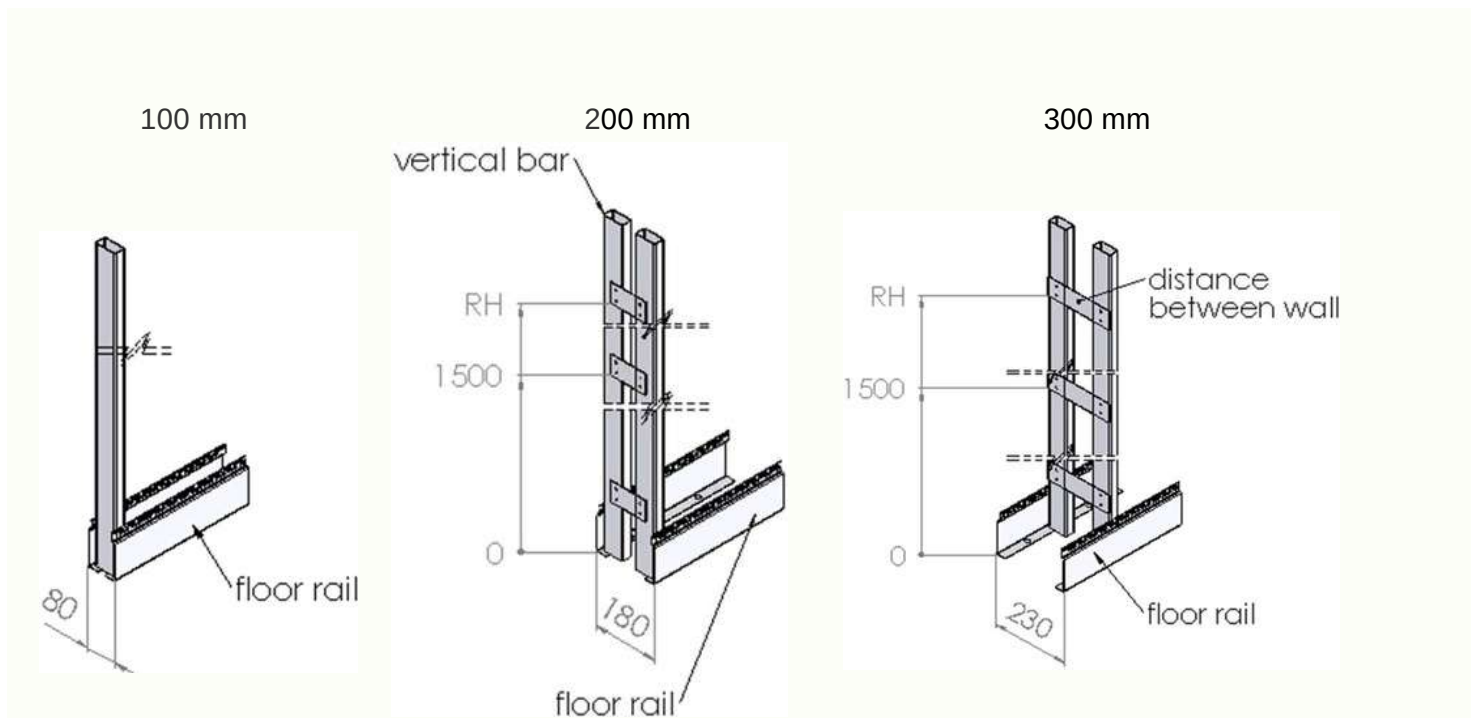
Länge: A = 3000 mm



The substructure serves as a basic structural frame for fixing the wall and ceiling panels.

The wall panels are screwed to the vertical rectangular hollow profiles.

The following wall thicknesses can be obtained by the use of spacer sheets:



Vertical bars, distance sheets and fixing screws by client.

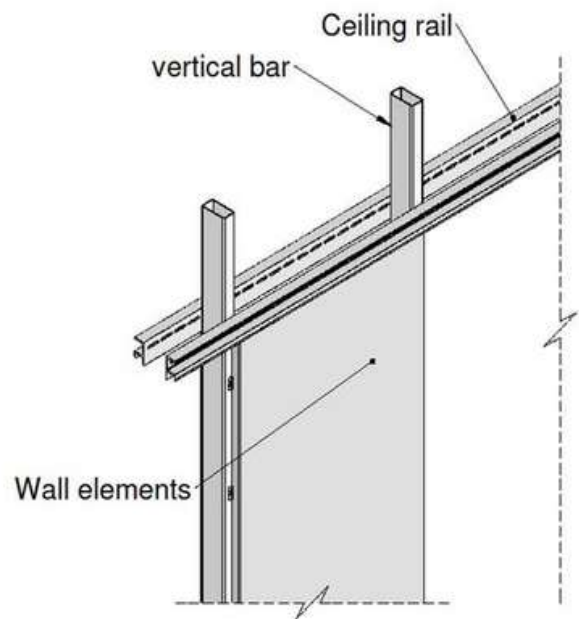
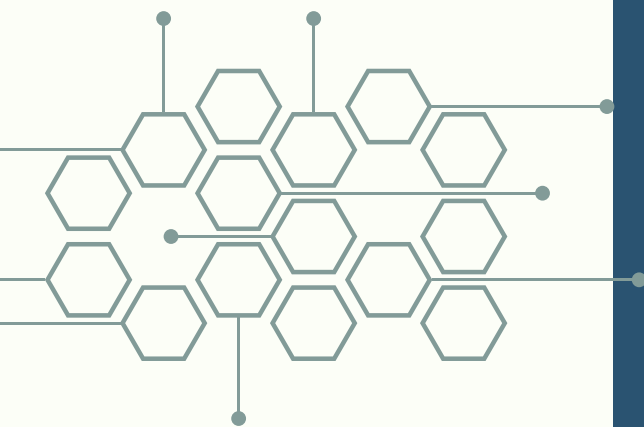


2.2 COLOR COATED ALUMINUM CEILING AND CORNER PROFILES

The profiles are extruded aluminum profiles which are powder coated in the basic- color of the wall panels.

The ceiling rail forms the upper closure of the wall and is screwed to the hollow profiles. A large number of slotted holes in the profile provide a high flexibility regarding to the different axis distances.

The ceiling track connects with the wall and ceiling panels, which can be up to 26 mm thick. The upper wall panel is guided into the slot of the ceiling rail.

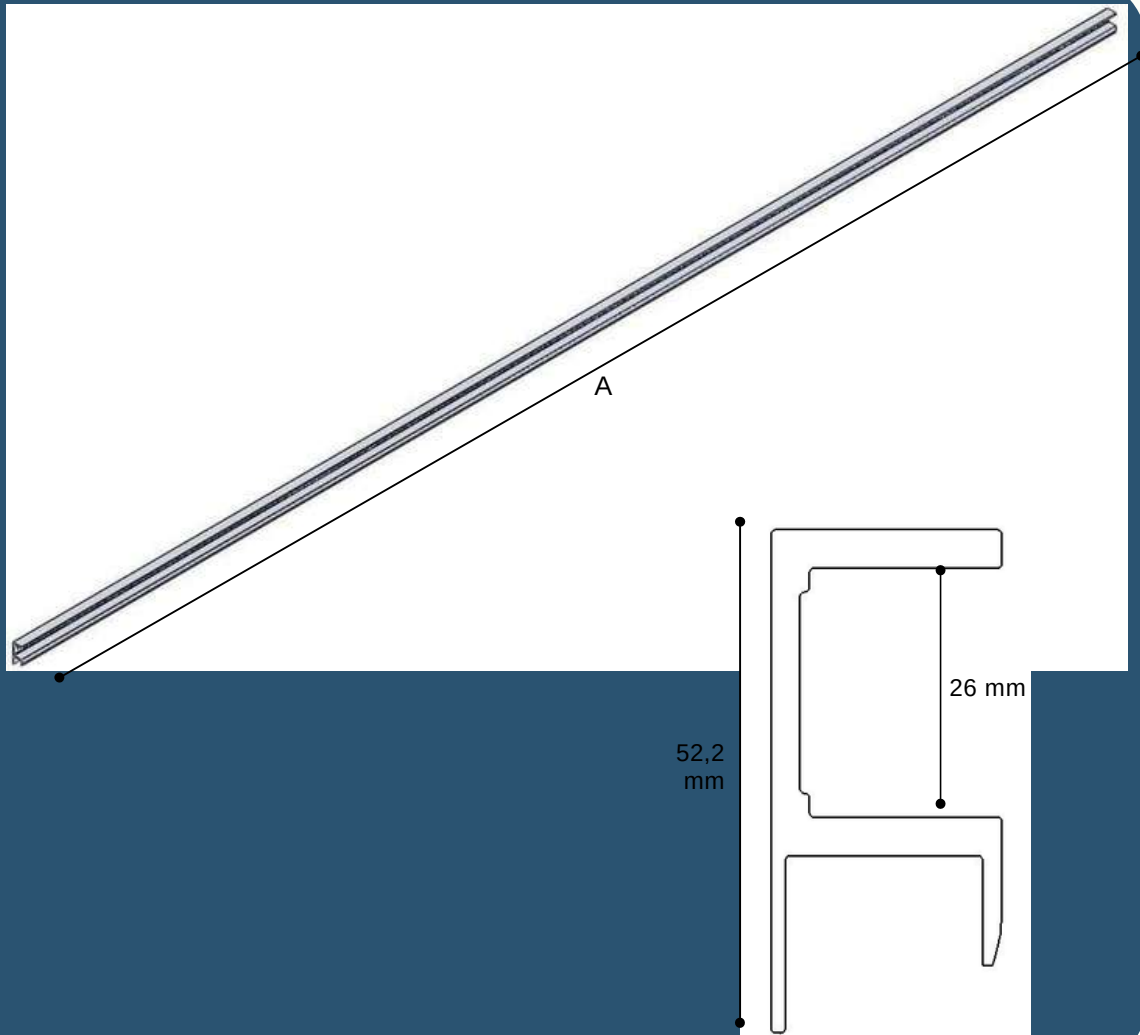
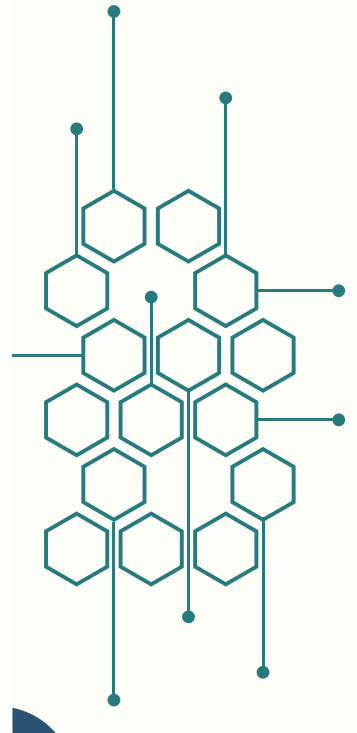




● CEILING RAIL

**Material: Color coated
aluminum $t = 2/4$ mm**

Length: $A = 3000$ mm

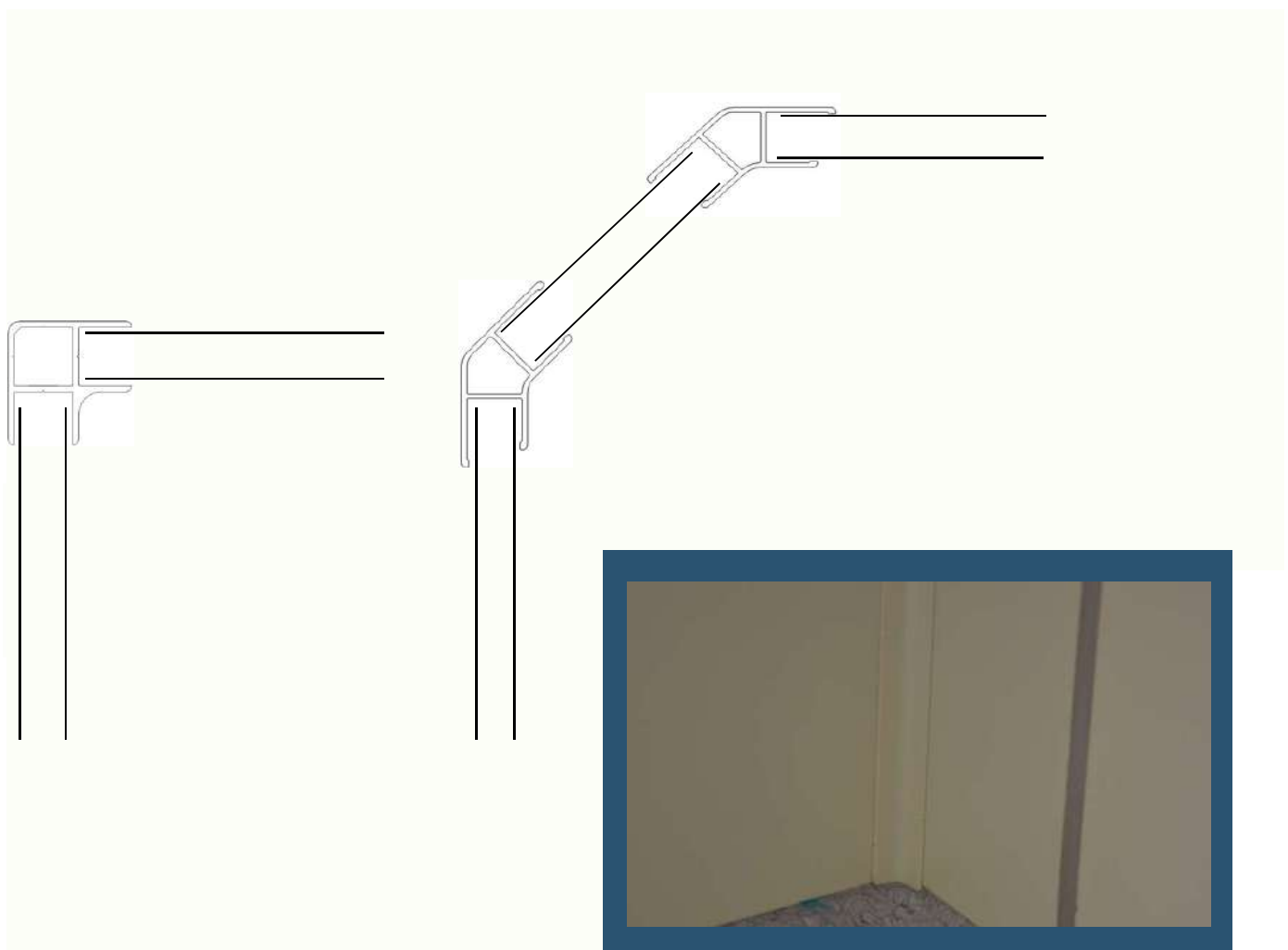


The corner profiles provide a seamless transition from one wall to another of the wall system. It reaches from the floor rail up to the ceiling profile and is set parallel to the hollow profiles. Both grooves of the corner profiles must be fixed with foam tape.

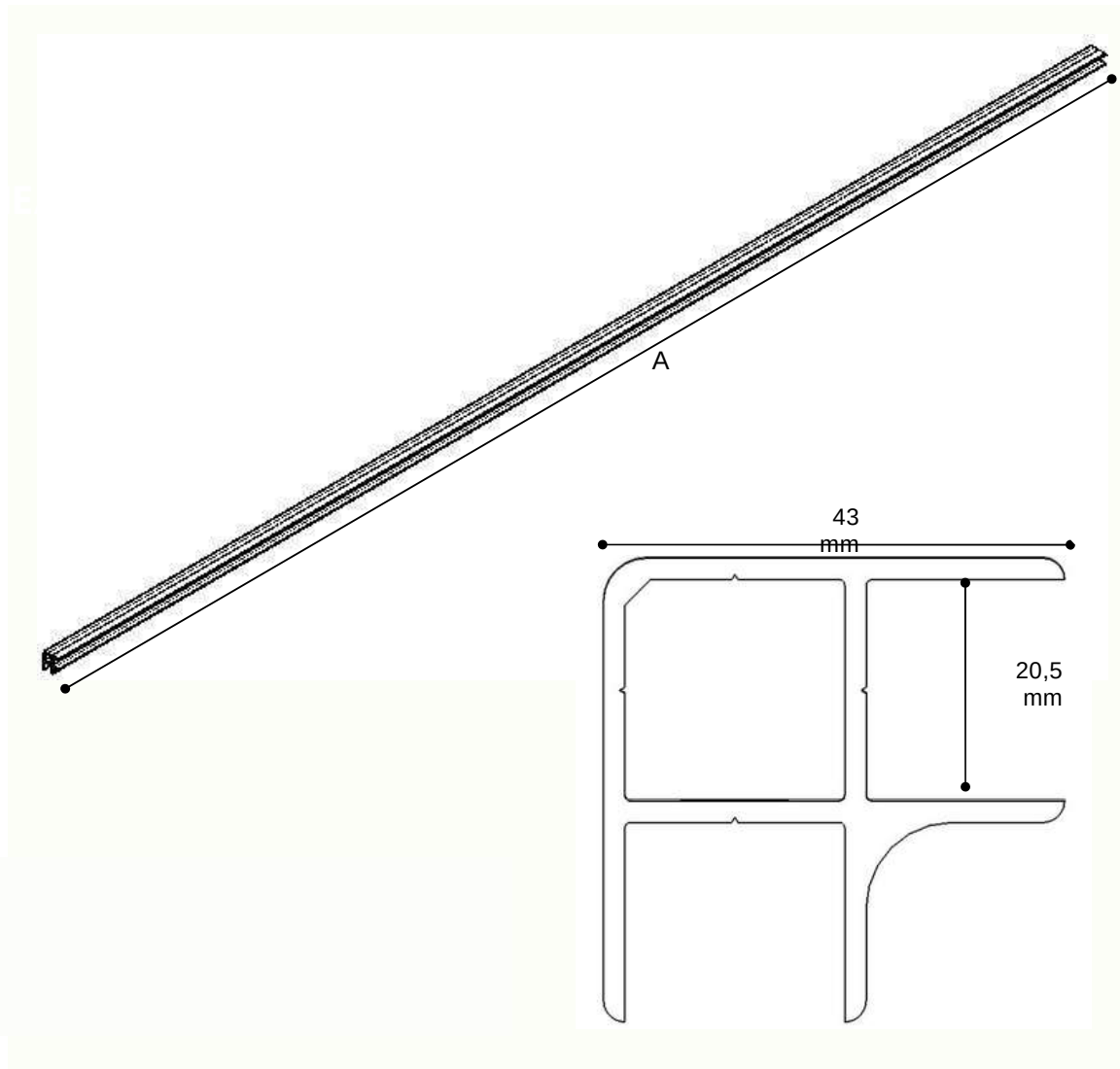
The three lateral wall panels are guided into the slot of the corner profile and will be fixed with clips.

The lateral mounting tabs of the wall panels must be removed with an angle grinder, that the panels have a correct fit in the corner profiles. This corner profile can be used as an inside- and outside corner profile.

With the corner profile 135° it is possible to cover the 90 degree corners with a panel segment for hygienic purposes.



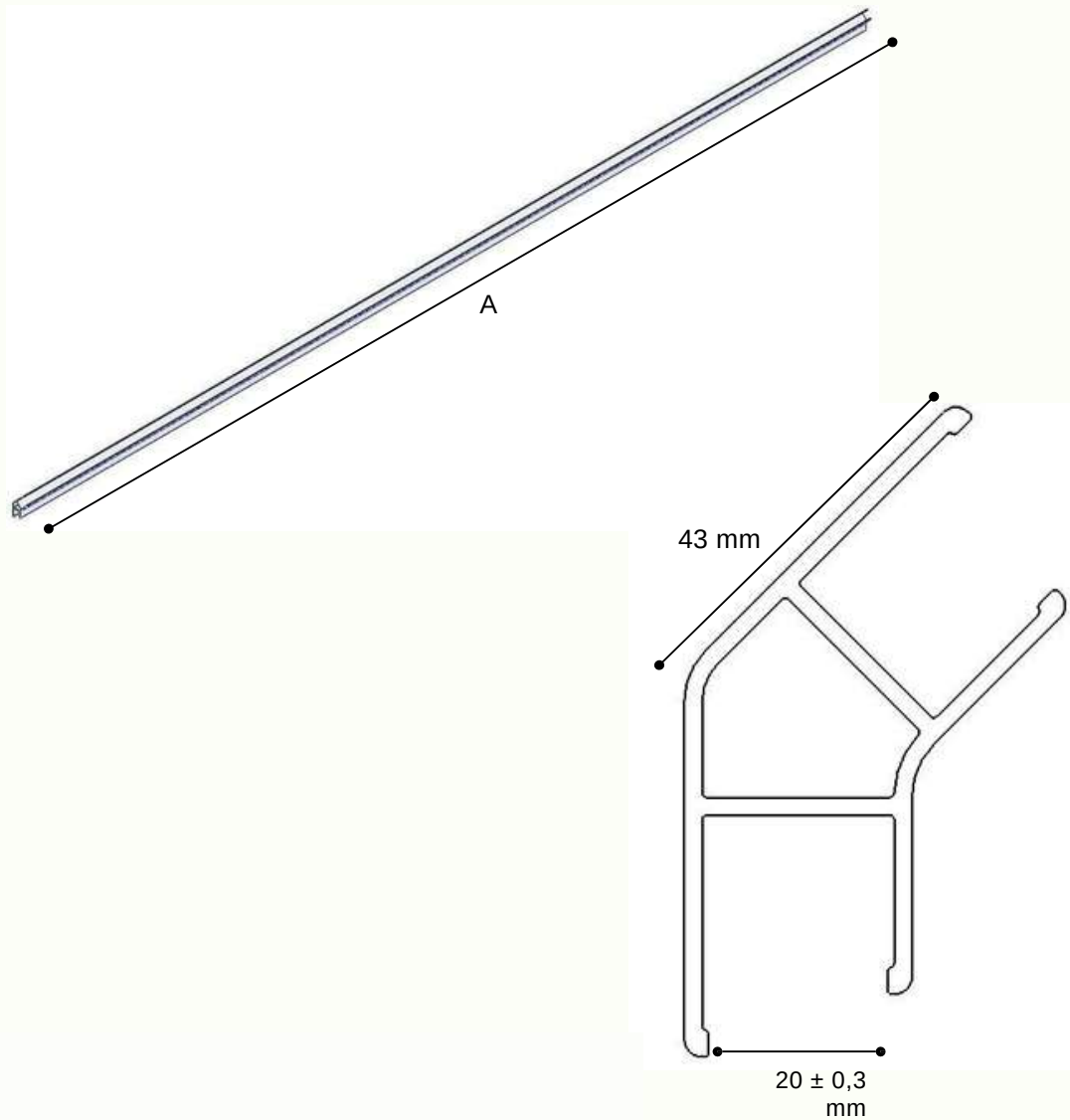
● INTERNAL & EXTERNAL CORNER PROFILE



Material: Color coated aluminum $t = 2,0$ mm

Length: A 2885 mm

● INTERNAL/EXTERNAL CORNER PROFILE 135°

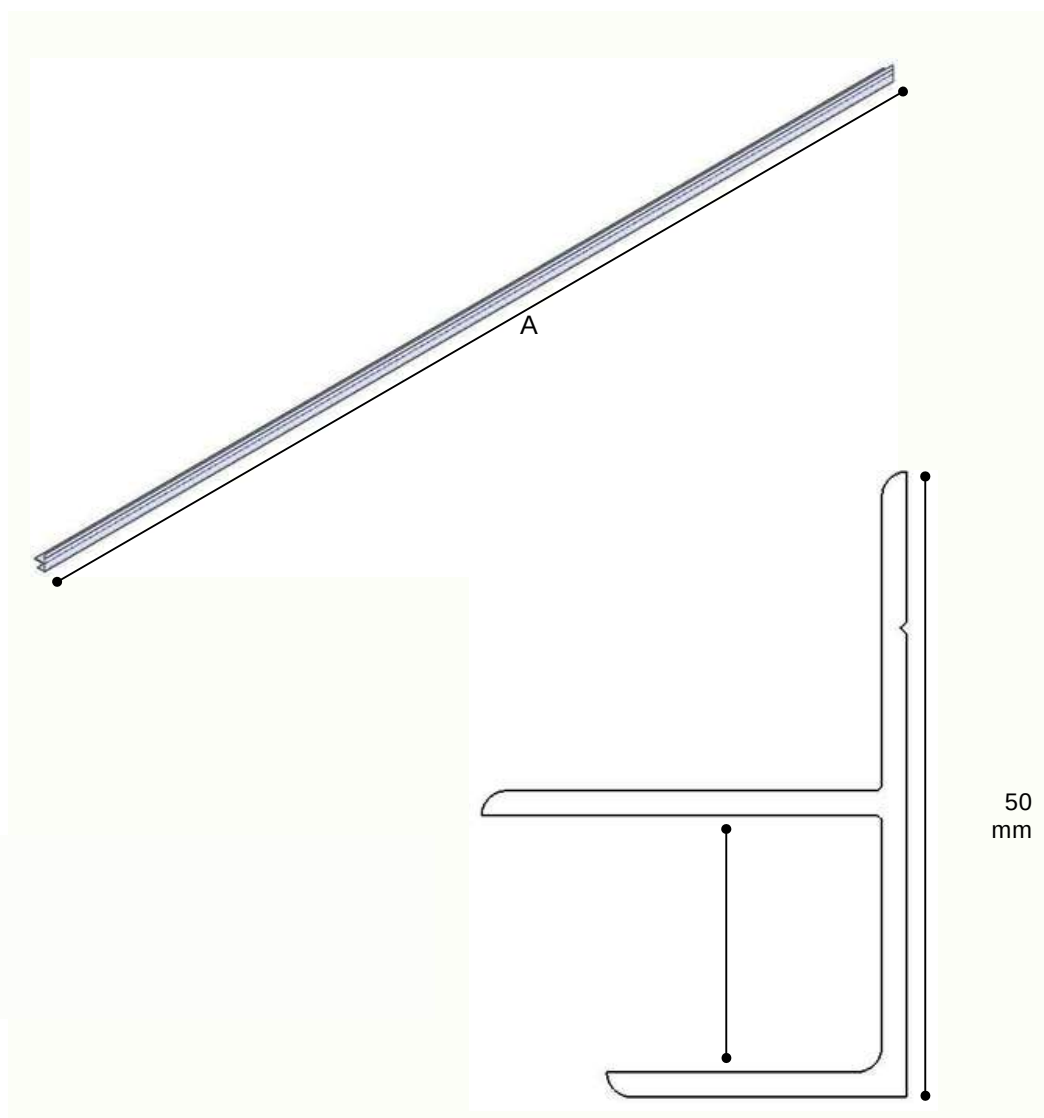


Material: Color coated aluminum $t = 2,0 \text{ mm}$

Length: $A = 2885 \text{ mm}$

● CORNER PROFILE

This Profile is used by built in cabinets for installing in the Wall System and a clean joint of the wall panel to the cabinet.



Material: Color coated aluminum $t = 2,0 \text{ mm}$

Length: A 2885 mm



3.WALL PANELS

The individual wall panels consist of a stainless steel (alternatively galvanized steel) case and gypsum cardboard permanently joint for stability. The segments consist of three panels: a lower panel, a service panel and an upper panel. The lower element is located on a 100 mm high floor rail and has a height of 900 mm. The upper wall element runs up to the lower edge of the pre-fabricated ceiling.

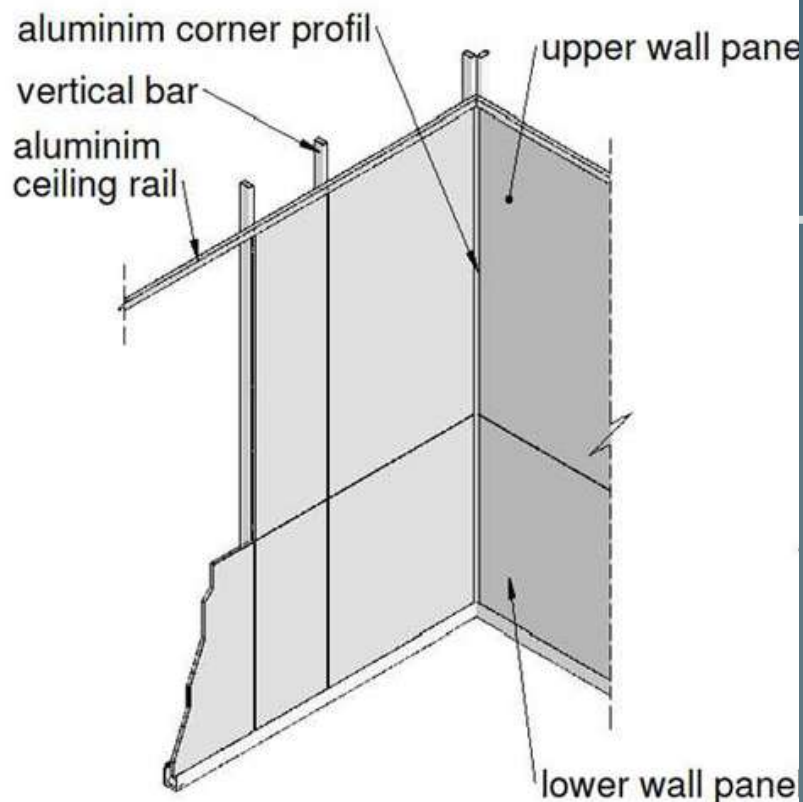
The service panel is mounted in between the lower and the upper element, has a height of 200 mm and has all of the service functions, such as openings for electric switches or gas terminals. The wall elements can be easily dismantled and reinstalled.

The wall panels are screwed to the vertical rectangular hollow profiles (by client). The connections are vertically sealed and covered by means of an antibacterial joint rubber sealing.

Individual wall panels can be easily dismantled for any subsequent installation of cables etc. in the hollow walls.

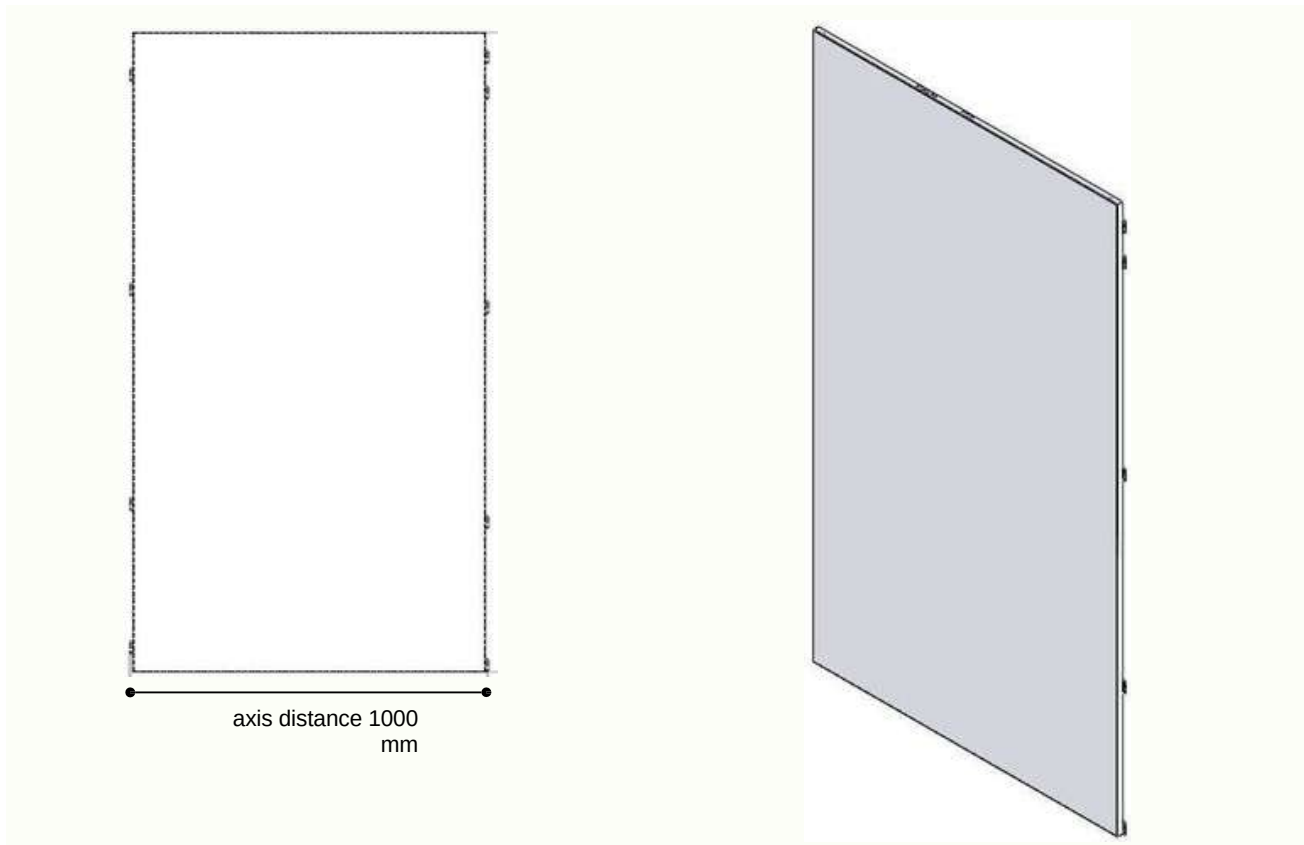
The wall panels are closed all around and are separated from each other by means of foam ribbon up to the next horizontal wall panel, floor rail or ceiling profile.

These foam ribbons are not visible.



3.1 UPPER PANELS

• STANDARD UPPER PANEL



Material: Stainless-Steel 1.4301 ($t = 1,0 \text{ mm}$) with an antibacterial paint coating and filled with gypsum cardboard ($t = 18 \text{ mm}$)

The standard upper panel is available in a printed version where the surface of the panel is coated in white and then printed with the chosen picture.

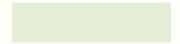
POSTER AND COLOR EXAMPLES



Basic color: Green – B600

Contrast color; Green – C660

Image: Shutterstock, White lily field



Basic color: Cream – 8100

Contrast color: Gray – C750

Image: Shutterstock, Footprints in the sand



Basic color; Gray – 8700

Contrast color; Green – C690

Image: Shutterstock, Idyllic landscape with



Basic color; Cream – 8100

Contrast color: Red – C360

Image: Shutterstock, Pink tulip and a shallow



Basic color: White – B9016

Contrast color: Blue – 5013

Image: Shutterstock, Dandelion spores blowing away





Basic color: Cream – B100

Contrast color: Yellow – C160

Image: Shutterstock, Pair lovebirds



Basic color: Grey – B710

Contrast color: Red – C350

Image: Shutterstock, Pink tulips, very shallow focus



Basic color: Grey – B700

Contrast color: Green – C670

Image: Shutterstock, Pink honeysuckle petals



Basic color: Green – 8600

Contrast color: Green – C690

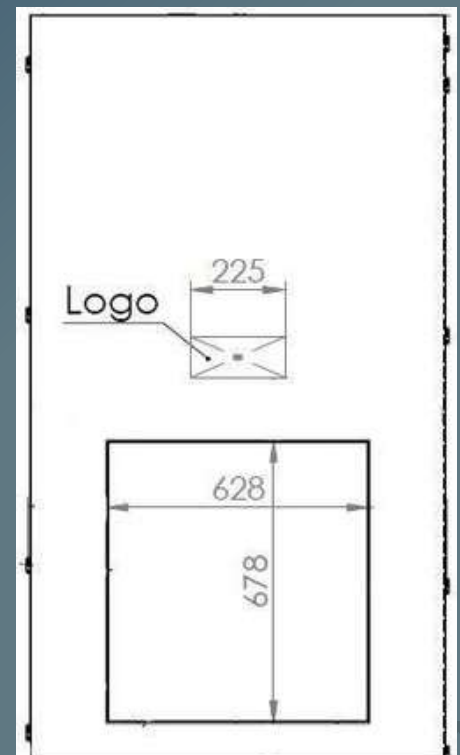
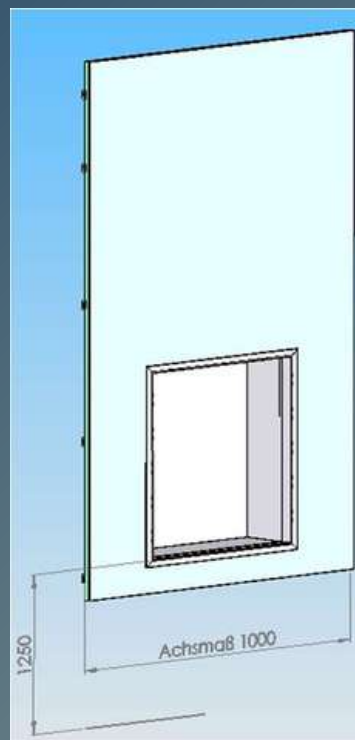
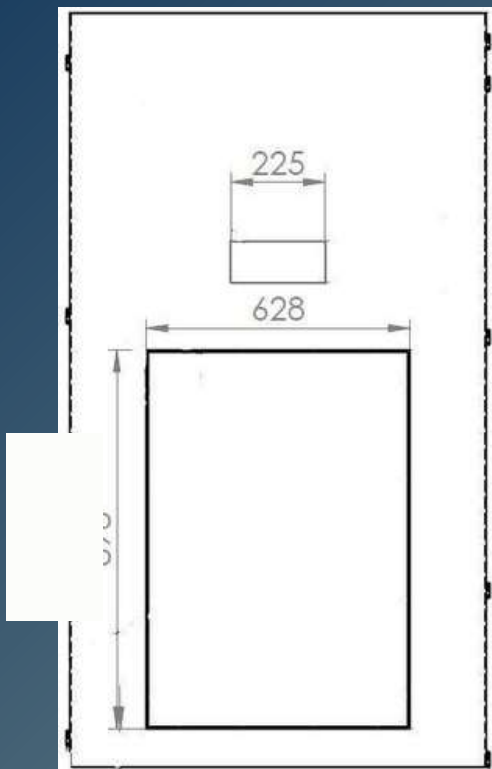
Image: Shutterstock, Butterfly in hand on grass



• UPPER PANEL FOR CONTROL A/B

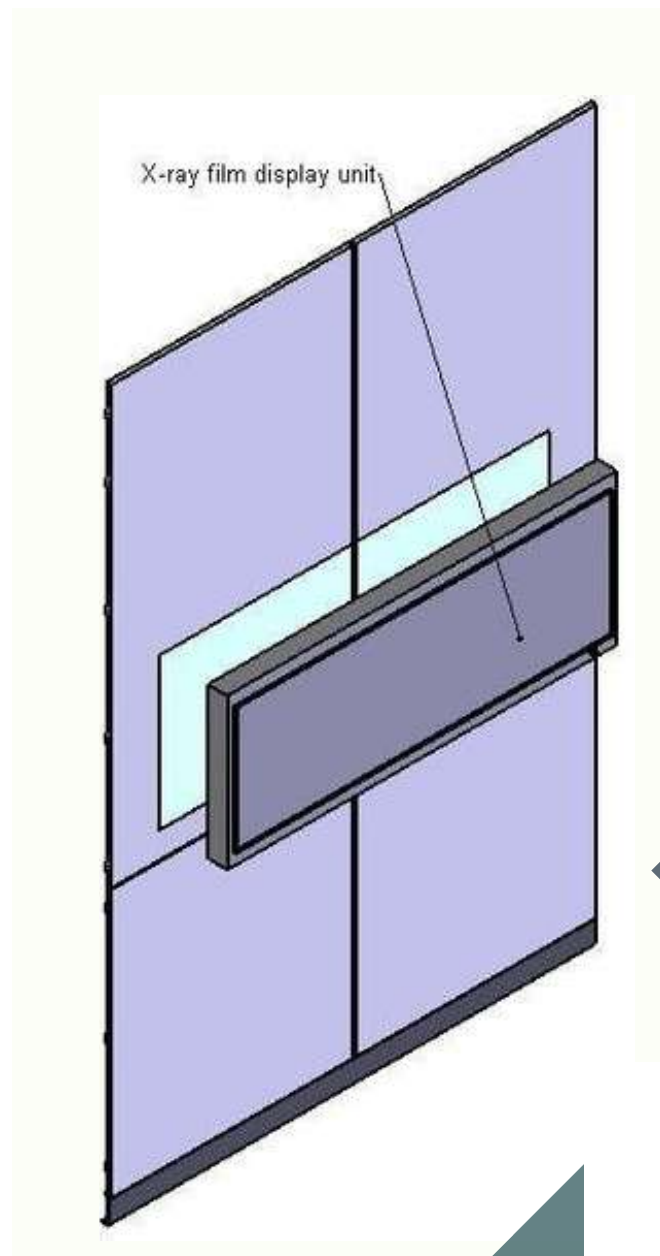
The control wall panel is an upper wall panel with an open aperture the control panel.

The aperture for the control panel is available in two variants: 650 mm x 920 mm and 650 mm x 700 mm.



UPPER PANEL FOR X-RAY VIEWER R/L

The X-ray film display unit is a separate module stretching over two panel fields and mounted flush into the wall. Between the display unit and the wall panel, an aluminium profile frame is mounted.

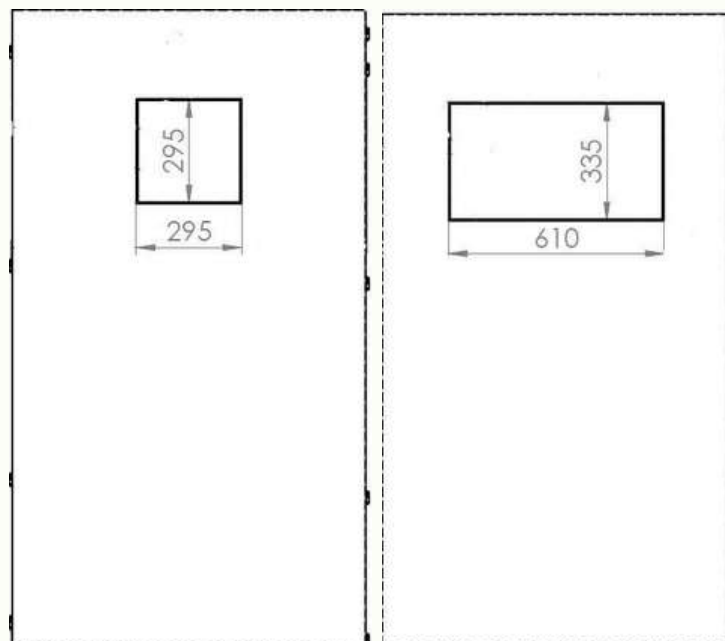
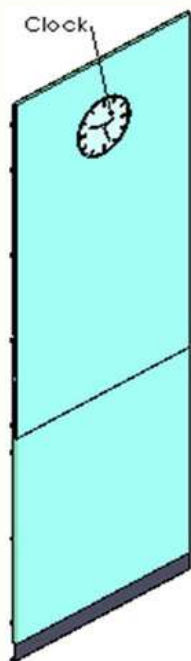


ONE/TWO CLOCK UPPER PANEL

The wall panel is provided with a rectangular opening for the clocks.

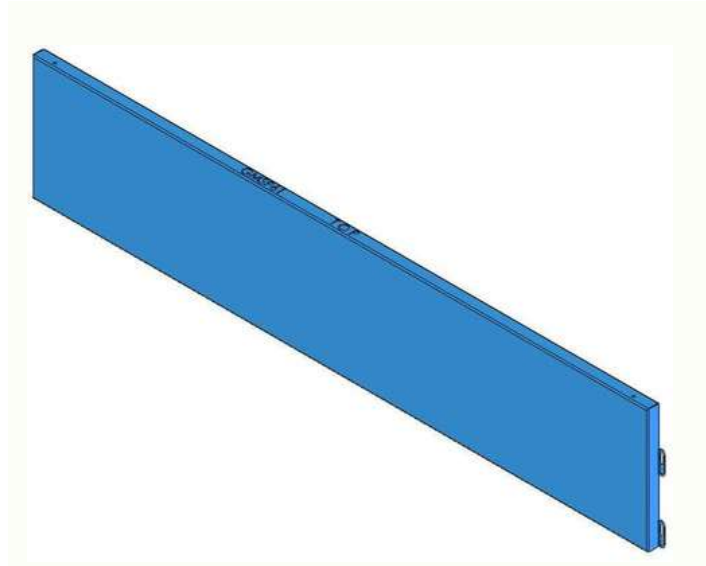
The clocks are flush with the wall panel.

It is also possible to install "double clocks" side by side. If so, the apertures have to be adjusted accordingly.



3.2 SERVICE PANELS

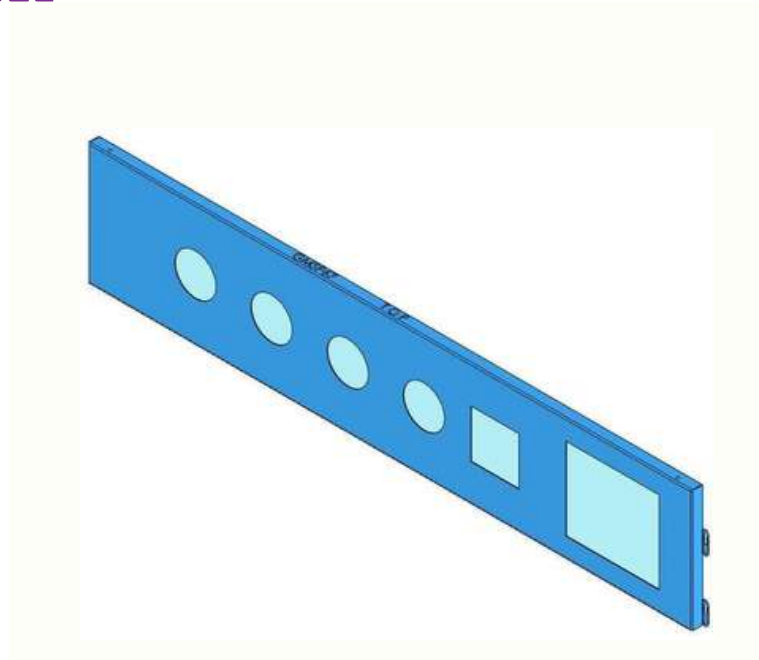
- STANDARD SERVICE PANEL



Material: Stainless-Steel 1.4301 ($t = 1,0 \text{ mm}$) with an antibacterial paint coating and filled with gypsum cardboard ($t = 18 \text{ mm}$)

The service panels are mounted in between the lower and the upper elements, have a height of 200 mm and have all of the service functions, such as openings for electric switches or gas terminals.

SERVICE PANEL



Material: Stainless-Steel 1.4301 ($t = 1,0 \text{ mm}$) with an antibacterial paint coating and filled with Gypsumboard ($t = 15 \text{ mm}$)

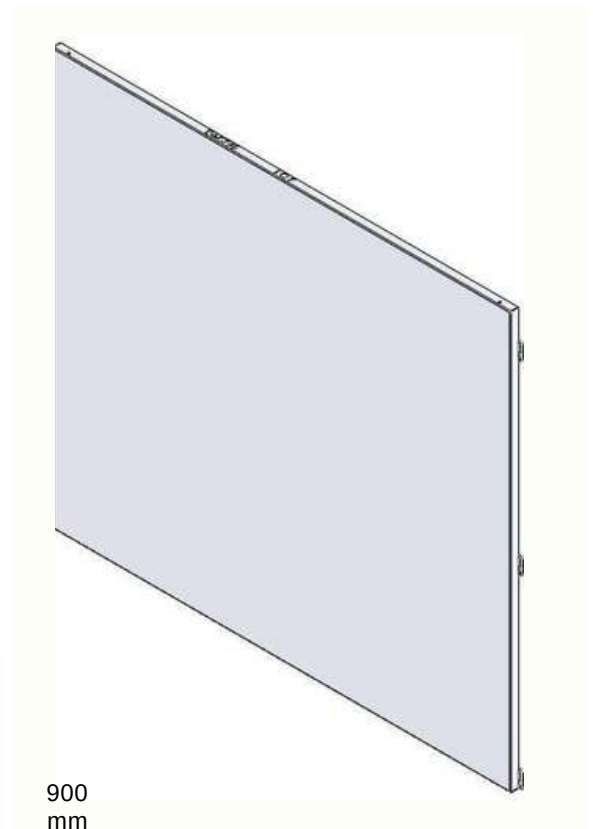
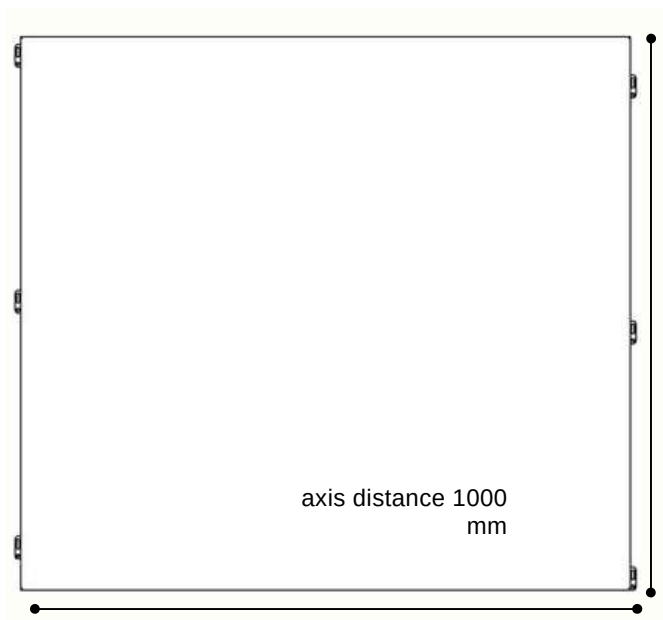
The service wall panel provided with connections as required.

The connections are standardized accordingly.

3.3 LOWER PANELS

3-Piece lower panel

Material: Stainless steel 1.4301
(t = 1,0 mm) with an
antibacterial paint coating and filled
with gypsum cardboard (t = 18 mm)



SILICONE RUBBER

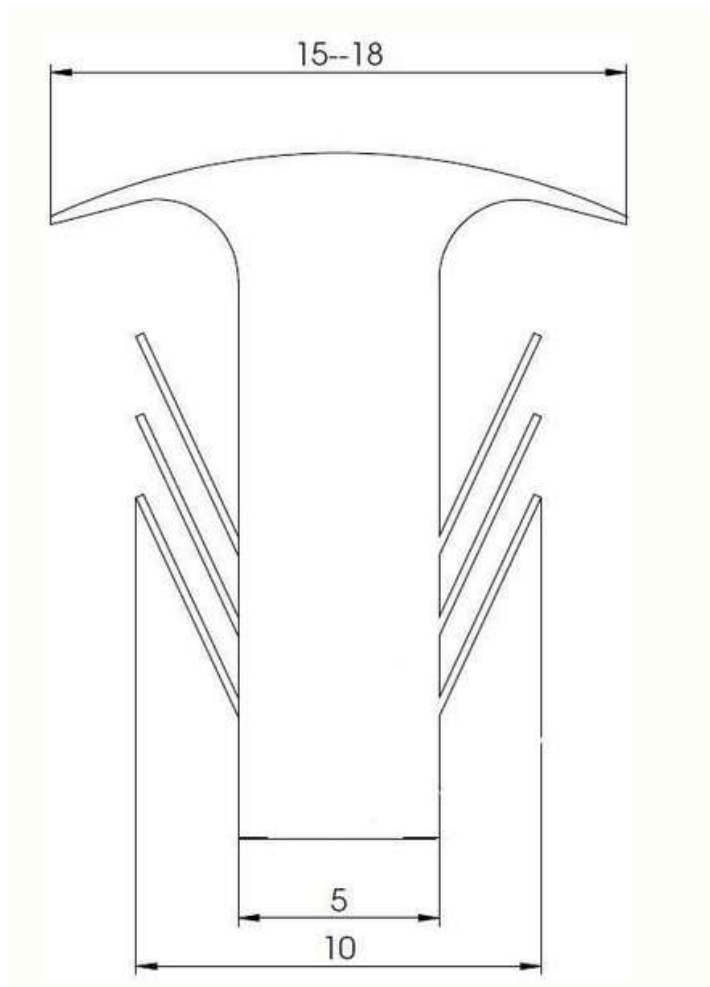
Material: antibacterial silicone

Available in these colors

Jade Green



Light Grey



The connections of two wall segments with the vertical bar are vertically sealed and covered by means of an antibacterial joint rubber sealing.

4. BUILT-IN EQUIPMENT

4.1 HUTCH CABINET AND BUILT-IN CABINET

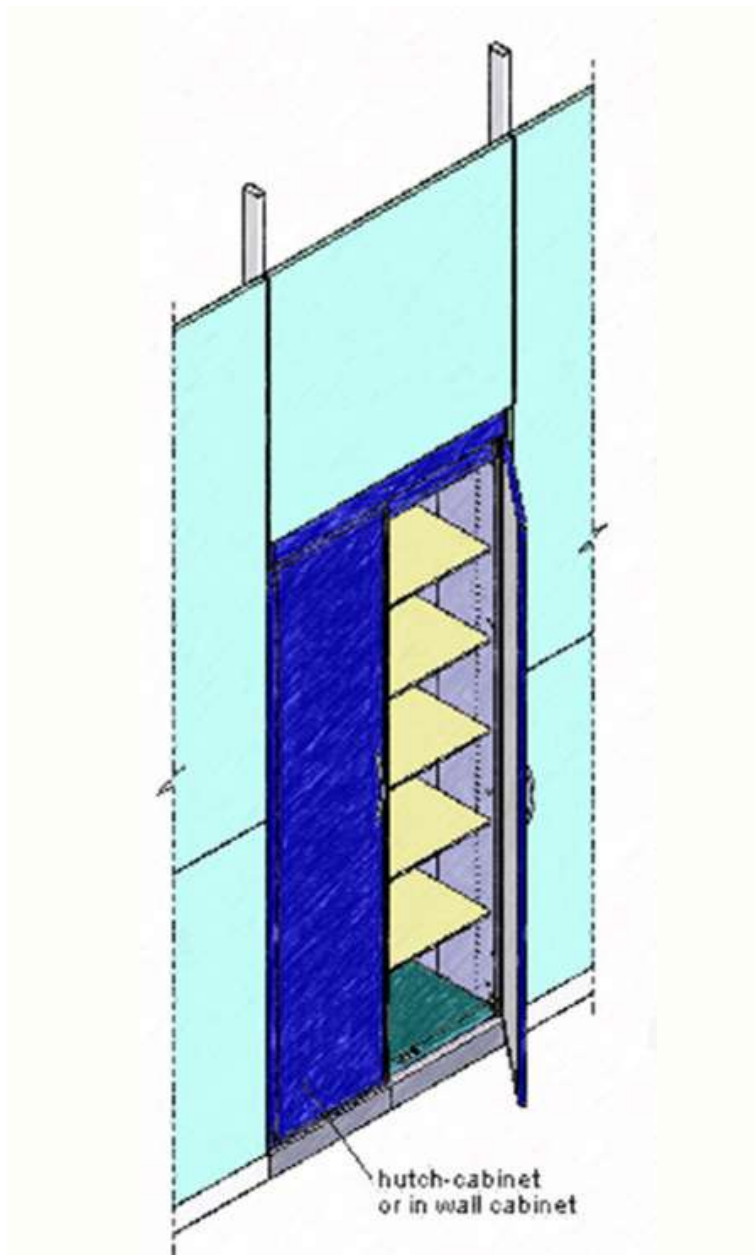
Hutch cabinets and built-in cabinets are integrated in the wall panel system. Their surfaces are flush with each other. They consist of galvanized sheet steel and have an identical paint coating. This ensures identical hygienic standards at all built-in elements.

The built-in cabinet has a width of 1200 mm and a depth of 660 mm.

The hutch cabinet has a width of 900 mm and a depth of 700 mm.

Its place of installation is the operation preparation room.

It has a control system which prevents the simultaneous opening of both sides. A LED display in the upper fascia of the hutch cabinet shows whether the cabinet is open on the other side. This stops any penetration of germs into the operating room.



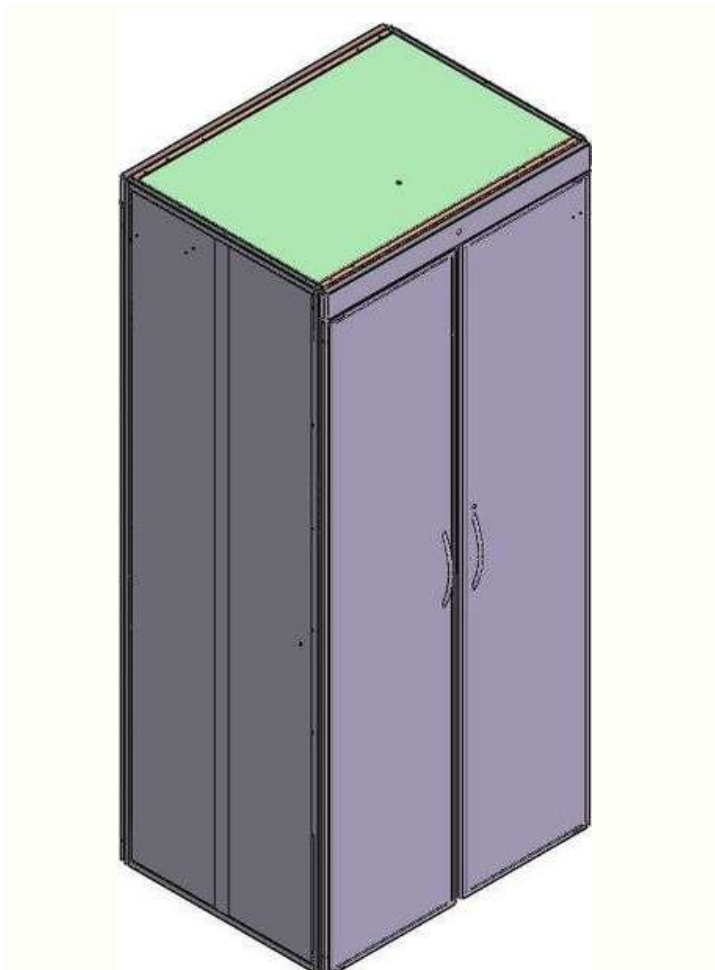
Both types of cabinets have a height of 2000 mm from the upper edge of the floor rail.

The floor rail has a height of 100 mm. Each cabinet has 5 shelves.

The height between the shelves is approx.

300 mm.

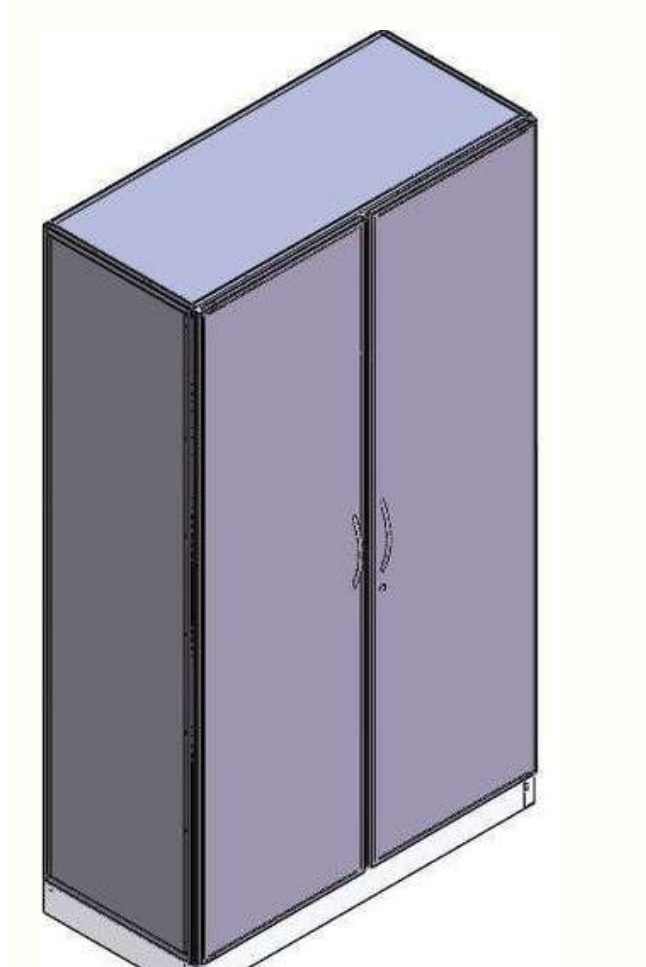
HUTCH CABINET



Material: Galvanized standard steel ($t = 1,0 \text{ mm}$) with an antibacterial paint coating
H x W x D: 2000 x 900 x 700 mm



BUILT-IN CABINET

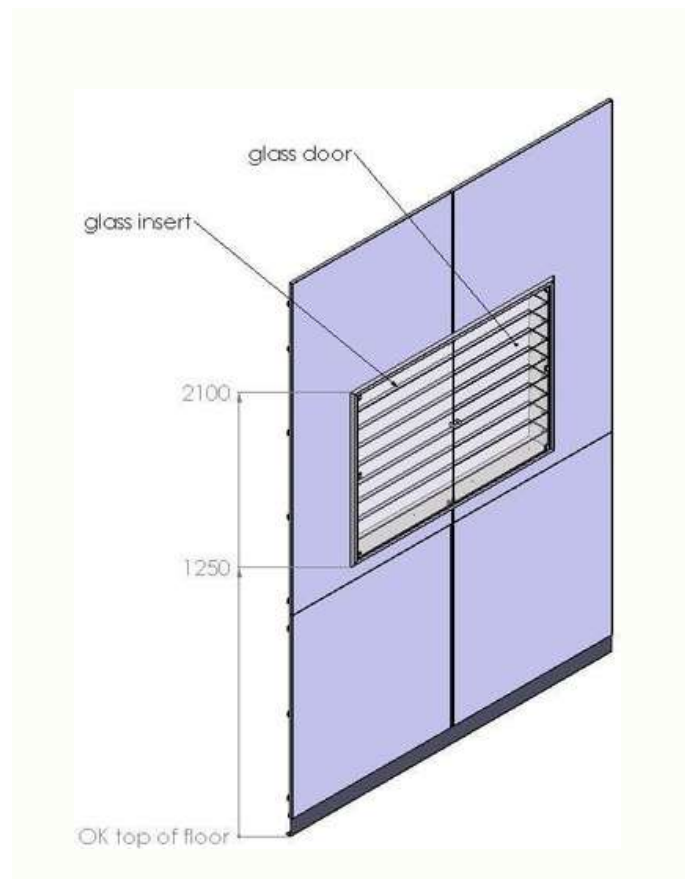


Material: Galvanized standard steel ($t = 1,0 \text{ mm}$) with an antibacterial paint coating

H X W x D: 2000 x 1200 x 525 mm

4.2 BUILT-IN GLASS CABINET

The built-in glass cabinet consists of a stainless-steel cabinet body with an integrated frame which is flush with the wall panel. It is equipped with double glass doors (opening angle up to 177°) and seven glass inserts. The distance between the glass shelves is about 110 mm. The installed width is 1100 mm, and the cabinets span over two elements.

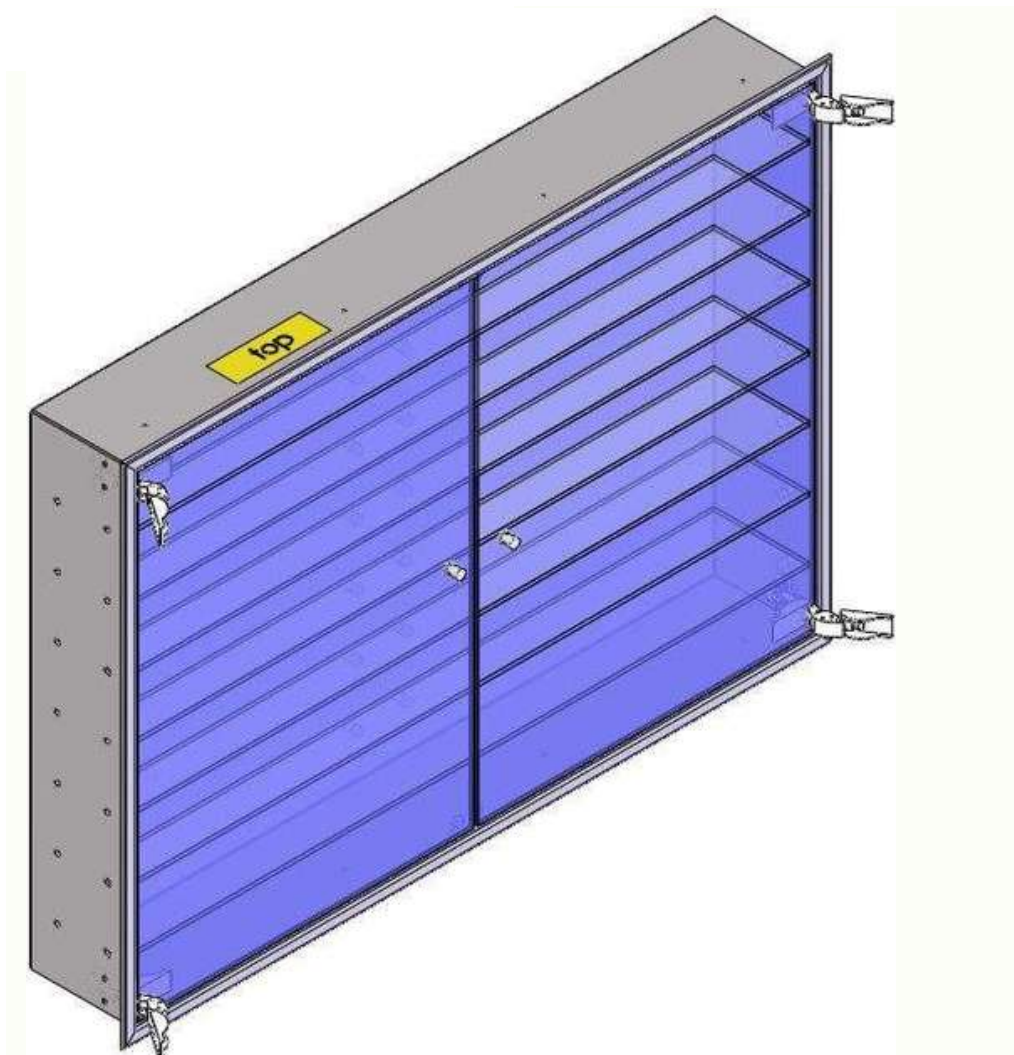


CATGUT

Material: Stainless-Steel cabinet body; double glass doors; 7 glass shelves

Installation dimensions: H x W x D: 780 x 1100 x 171 mm

Visible dimensions: H x W: 820 x 1140 mm



4.3 EXHAUST AIR DUCT WALL ELEMENT



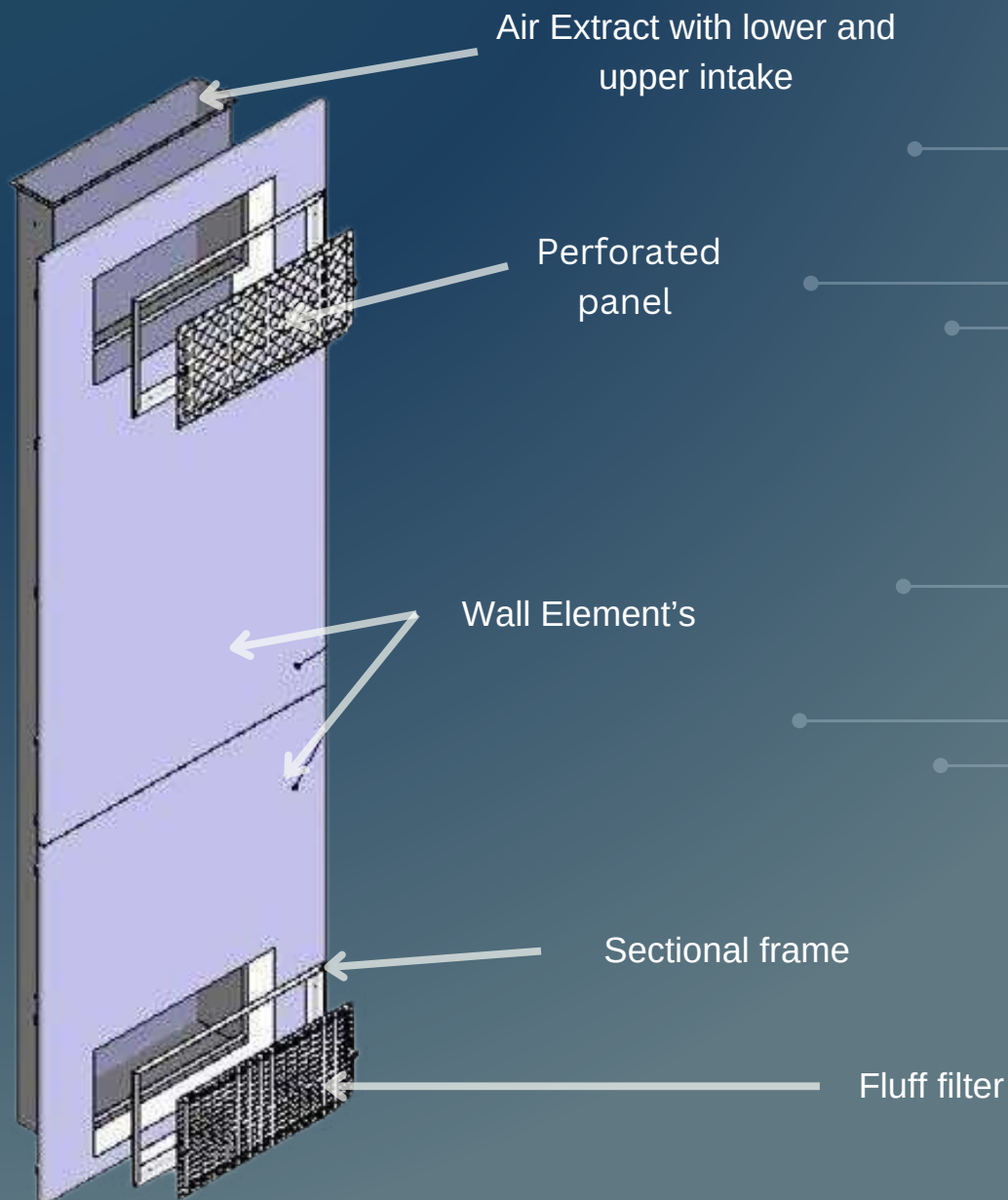
The exhaust air duct is aligned with the wall panels. The complete component is made of stainless steel and spans over the lower and upper wall panels. The air duct cross section is 125 mm x 625 mm.

A frame connects the intake of the exhaust air duct with the lower or upper wall panel. The intakes have a size of 625 mm x 325 mm. The frame seals airtight with the surrounding wall panel.

The fluff filters can be easily removed for cleaning. The upper fluff filter consists of a perforated panel, and the lower fluff filter is made of stainless steel gauze.

The bottom of the lower opening is inclined towards the room for an optimized air current. By installed regulating valves, the air current of the complete duct or the ratio of the air current between the lower and upper intake distributor can be changed.

The adjustment is performed manually and the adjustment system is easily accessible through the intakes after removing the fluff filters.





Material: Stainless-Steel ($t = 1,0 \text{ mm}$)
with an antibacterial paint coating
(visible area)

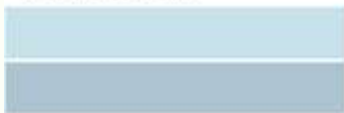
Cross section: $125 \times 625 \text{ mm}$

Openings: $625 \times 325 \text{ mm}$



5.APPENDIX ANHANG

Basic colors

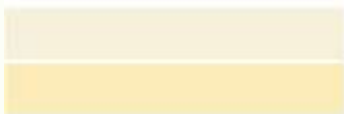


Blue – B500

NCS S0515-B

Blue – B510

NCS S1515-B

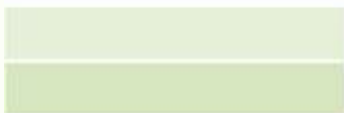


Cream – B100

NCS S0505-Y

Cream – B110

NCS S0515-Y



Green – B600

NCS S0510-G30Y

Green – B610

NCS S0520-G30Y

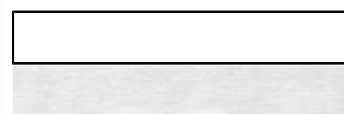


Grey – B700

NCS S1000-N

Grey – B710

NCS S1500-N



White – B9016

RAL 9016

Stainless Steel – K240

CrNiSt

Contrast colors



Blue – C550

NCS S3020-B

Blue – C560

NCS S5020-B



Yellow – C150

NCS S0540-Y10R

Yellow – C160

NCS S0560-Y20R



Green – C650

NCS S2020-G30Y

Green – C660

NCS S4030-G



Grey – C750

NCS S3500-N

Grey – C760

NCS S4500-N



Blue – C5013

RAL 5013

Green – C670

NCS S2555-B30G



Red – C350

NCS S4050-R30B

Red – C360

NCS S2570-R



Green – C680

NCS S4550-B30G

Green – C690

NCS S1070-G50Y



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