

CLEANROOM SYSTEMS



c l e a n r o o m s y s t e m s

SECANORM

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Clean Room Systems

A clean room is one or more working environment(s) established for research and production purposes, free from airborne particulate concentration and other particles, where business-specific pollutants are kept under control and humidity controls are provided. In order to ensure the desired level of cleanliness, the ventilation system, the equipment used and the entrances and exits of the users of the environment must be controlled. Additionally, the employees of the clean room use special clothes.

There are different types of clean rooms which need different filtration and air conditioning solutions for their intended use. Appropriate design and project planning is carried out in line with the sphere of activity, cleaning class and usage requirements of the room.

AREAS OF UTILIZATION

Pharmaceutical Industry
Biotechnology
Medical Production
Chemical Industry
Microelectronics
Aviation
Defense Industry
Medical Device Production
Food Industry
Cosmetics
Automotive

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Pharmaceutical Industry



Biotechnology



Medical Production



Chemical Industry



Microelectronics



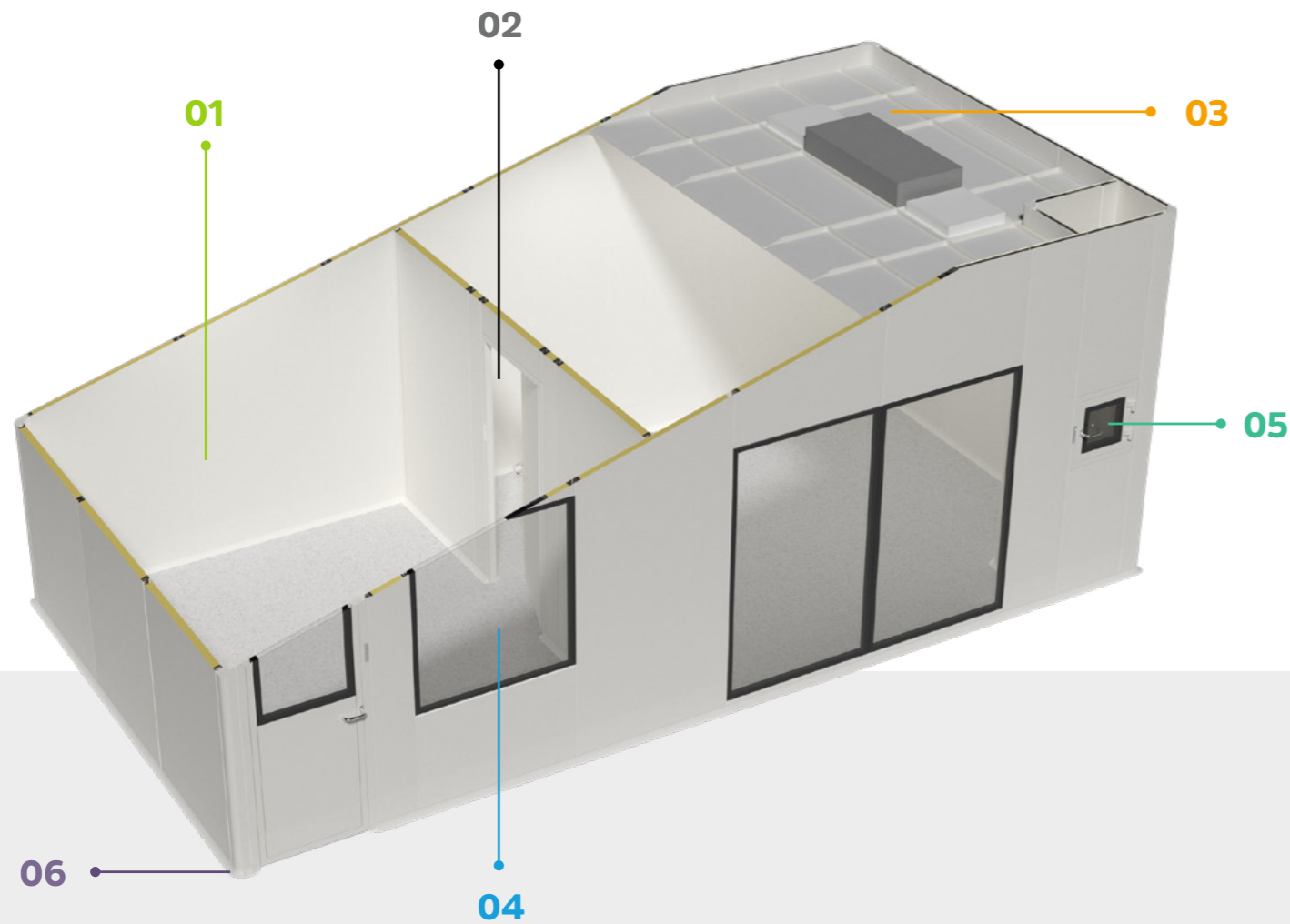
Aviation



Food Industry



Automotive



Clean Room Constructional Components

Clean room projects are designed by our expert team according to user requests and standards.

In the post-design stages; architectural application, mechanical installation, electrical installation, HVAC, automation, instrumentation and all similar work items can be applied on a turnkey basis.

All of our clean room constructional components are specially designed by us

and all constructional components work in perfect harmony with each other. In this way, the risk of contamination due to the structure is completely eliminated with the superior sealing ability.

Clean room equipment is designed to be easy to assemble / disassemble when necessary. Thanks to the composite structure of the constructional components, higher fire resistance is provided.

Wall Panel 01

In clean rooms, modular panels with composite structure consisting of PVDF coated, galvanized steel and aluminum profiles are used. Removable clean room panels, which have high quality standards, are durable and long-lasting as well as easy to install.

Door 02

Our door systems which are prepared in accordance with clean room standards have high impermeability. The doors are manufactured from PVDF coated galvanized steel with or without glass.

Glass Panel 03

All window units are double glazed. Window and panel thicknesses are equal and they are flush with each other. Clean room glass thickness is 4mm tempered glass. The window system is completely sealed by silicone.

Ceiling Panel 04

Thanks to the clean room suspended ceiling systems, it is produced as a T-grid carrelage ceiling with a strong carrying capacity. T-grid types of ceiling are a carrier structure made of aluminum profile to support ceiling panels, lighting and filtering equipment units.

Pass box 05

Clean rooms are compact structures with UV lamp and electronically controlled magnetic lock system, designed statically or dynamically depending on the general conditions of the room, working according to active and passive door logic, for material transfer between rooms.

Accessories 06

These are finishing elements designed by us to be in full harmony with all our building elements.

Clean Room Wall Panel

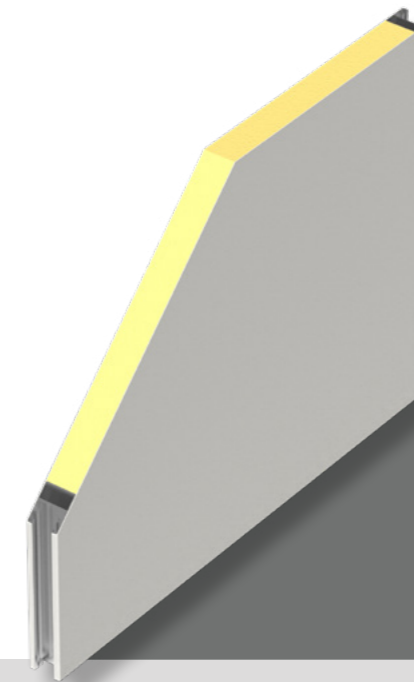
Panels with PVDF coating, galvanized metal surface and aluminum carcass structure are manufactured as standard. Alternatively, combinations with different surface materials can be created according to application details and user requests. Our clean room wall panels and mounting equipment compatible with the panels provide a system which is free of indentations, leak-proof, easy to assemble and reusable after disassembly.


- Main metal sheet: PVDF coated galvanized steel
- Sheet thickness: 0.8 MM
- Standard panel size: 1200x3050 MM (Contact for different panel sizes)
- Standard Panel thickness: 50 MM ±1 MM
- Inner frame material: Aluminum
- Aluminum profile and 4 mm PVC gasket as wall fitting
- After assembly, panel gaps are filled with antibacterial silicone
- Fireproof panel feature: B-S1-D0 (EN 13501)
- Other certifications: ISO 9001:2015 ; CE

<p>Non-flammable</p> 	<p>Detachable</p> 	<p>Insulation</p> 	<p>Chemically Resistant</p> 	<p>Cleanable</p> 
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Fireproof PU Filled Panel




 Standards
* ISO 9001 * CE * EN 13501

 Fireproof panel feature:
B-S1-D0 (EN 13501)

 Water Absorption Resistance

 Air Resistance

 Dimensions
1.200 x 3.050 mm
other dimensions optional

 Thickness
50 mm

FILLING

40 ± 2 kg/m³
polyurethane

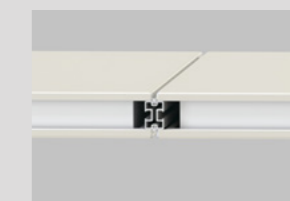
EXTERIOR METAL SHEETS

Sheet thickness: 0,8 mm
Paint: 25 um

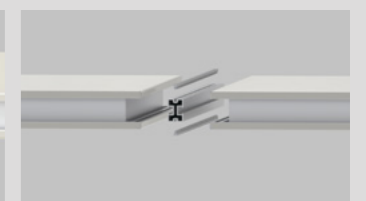
Material:
• Steel | PVDF
• Steel | AISI 304
• Steel | AISI 316

Colors:
• RAL 9002
• RAL 9010

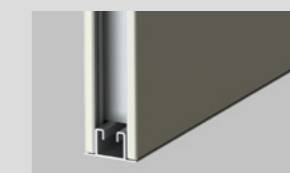
INSTALLATION DETAILS



Wall joint
4 mm silicone gap



Wall joint Profile and
Silicone Gasket



Floor Profile

Rockwool Filled Panel



FILLING

150 kg/m³ rockwool

Thicknesses

- 50 mm

EXTERIOR METAL SHEETS

Sheet thickness: 0,8 mm
Paint: 25 um

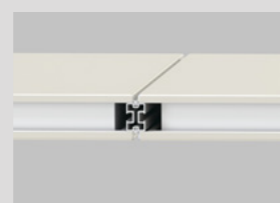
Material:

- Steel | PVDF
- Steel | AISI 304
- Steel | AISI 316

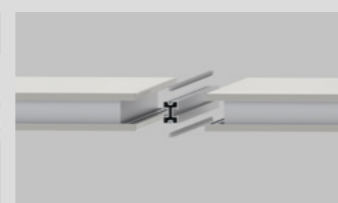
Colors:

- RAL 9002
- RAL 9010

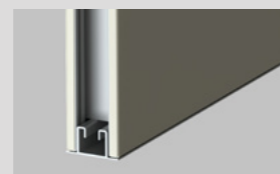
INSTALLATION DETAILS



Wall joint
4 mm silicone gap



Wall joint Profile and
Silicone Gasket



Floor Profile

Aluminum Honeycomb Filled Panel



FILLING

Thicknesses

- 48 mm

Foil thickness

- 0,05 mm

Core width

- 14 mm

EXTERIOR METAL SHEETS

Sheet thickness: 0,8 mm
Paint: 25 um

Material:

- Steel | PVDF
- Steel | AISI 304
- Steel | AISI 316

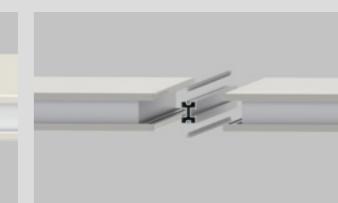
Colors:

- RAL 9002
- RAL 9010

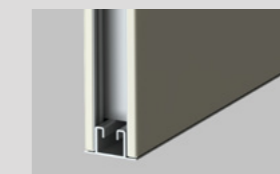
INSTALLATION DETAILS



Wall joint
4 mm silicone gap



Wall joint Profile and
Silicone Gasket



Floor Profile

Clean Room Doors

02

Our door systems which are prepared in accordance with clean room standards feature high impermeability. Doors are produced from PVDF coated galvanized steel with or without glass, as single-wing, double-wing and sliding doors. Airlock system doors are produced for transitions from a clean room of a specific class and category, classified according to the intended use, to a room of a different class. There are traffic lights, emergency exit button, timer for waiting in the open or closed position at the doors which provide controlled transitions. In addition to the standard sizes in all door types, custom sizes are also produced by our company as per the projects.

Flexibility 	Easy-to-install 	Impermeability 	Quality of Material 	Visual Aesthetics
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Single Leaf Clean Room Door



	Standards * ISO 9001 * CE * EN 13501
	Airlock
	Water Absorption Resistance
	3D Adjustable Hinge
	Air Resistance
	Filler Fireproof Polyurethane / Aluminum / Rockwool
	Thickness 50 mm

OPTIONS AND ACCESSORIES

Panel Metal Sheet
• Steel | PVDF

Colors:
• RAL 9010
• RAL 9002

Options
• Stainless Handle
• Airlock
• Magnetic
• Mechanical
• Threshold guillotine

Hinge
Adjustable in 3 axes

DOOR OPTIONS



Double Leaf Clean Room Door



Standards
* ISO 9001 * CE * EN 13501



Airlock



Water Absorption
Resistance



3D Adjustable
Hinge



Air Resistance



Filler Fireproof
Polyurethane
/ Aluminum /
Rockwool



Thickness **50 mm**



OPTIONS AND ACCESSORIES

Panel Metal Sheet
• Steel | PVDF

Colors:
• RAL 9010
• RAL 9002

Options
• Stainless Handle
• Airlock
• Magnetic
• Mechanical
• Threshold guillotine

Hinge
Adjustable in 3 axes



DOOR OPTIONS



Clean Room Glass Panel

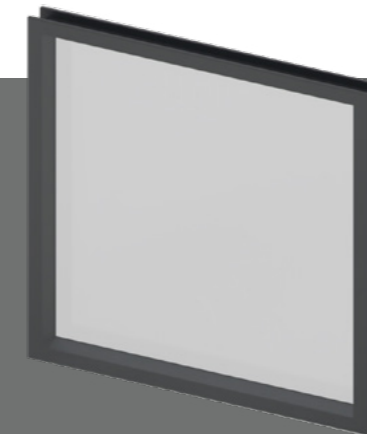
It is manufactured in a constructive structure compatible with clean room wall panels. It is used in areas where visibility is required and where transparency is desired in clean rooms according to the design.

- Double Glazed Tempered Glass Panel
- Laminated Glass Panel

Non-flammable	Sökülebilir	Tempered	Chemically Resistant	Cleanable
				

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Double Glazed Tempered Glass Panel



Standards
* ISO 9001 * CE * EN 13501

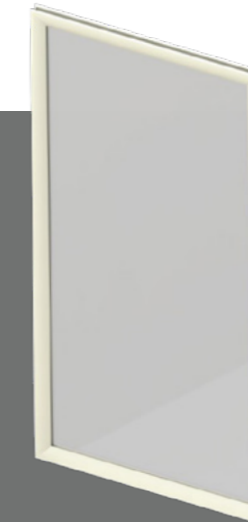


Tempered Glass Thickness
4+42+4 mm



Dimensions
120*100 cm
Other dimensions optional

Laminated Glass Panel



Standards
* ISO 9001 * CE * EN 13501



Laminated Glass Thickness
6+1,14+6 mm



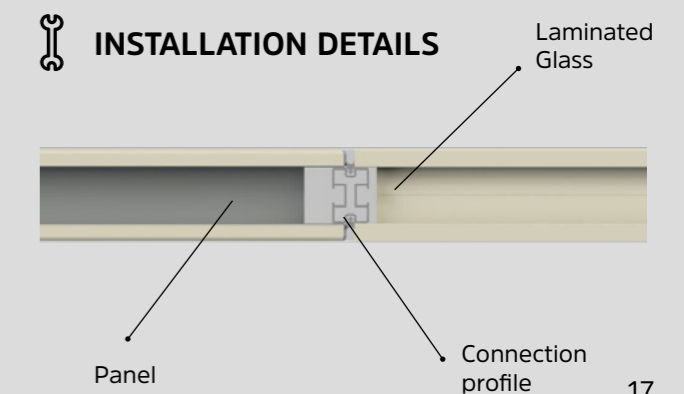
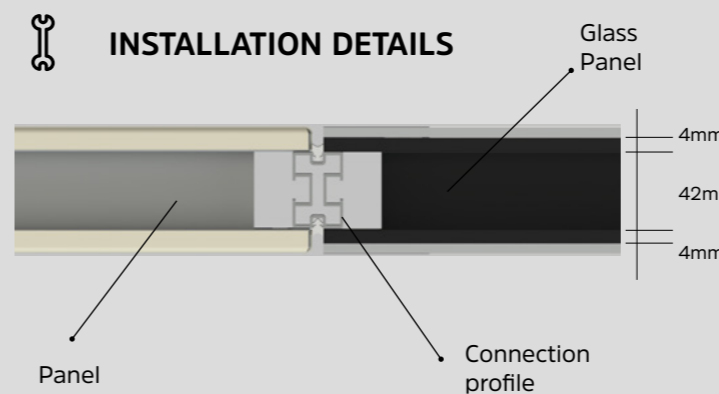
Dimensions
120*200 cm
Other dimensions optional

• Double Glazed Tempered Glass Panel

Double Glazed Tempered Glass Panel consists of 4+42+4 mm double-sided tempered glass. It is produced to your desired dimensions.

• Laminated Glass Panel

Laminated Glass panel system consists of single glazed, 6+6 mm laminated glass. It is produced to your desired dimensions.





Clean Room Ceiling Panel

The clean room ceiling panel is manufactured as compatible with our wall panels. Ceiling panels are manufactured to have a structure which will create a sealed ceiling surface in the clean room and can carry accessories to be used on the ceiling such as HEPA Filter and Lighting Fixture.

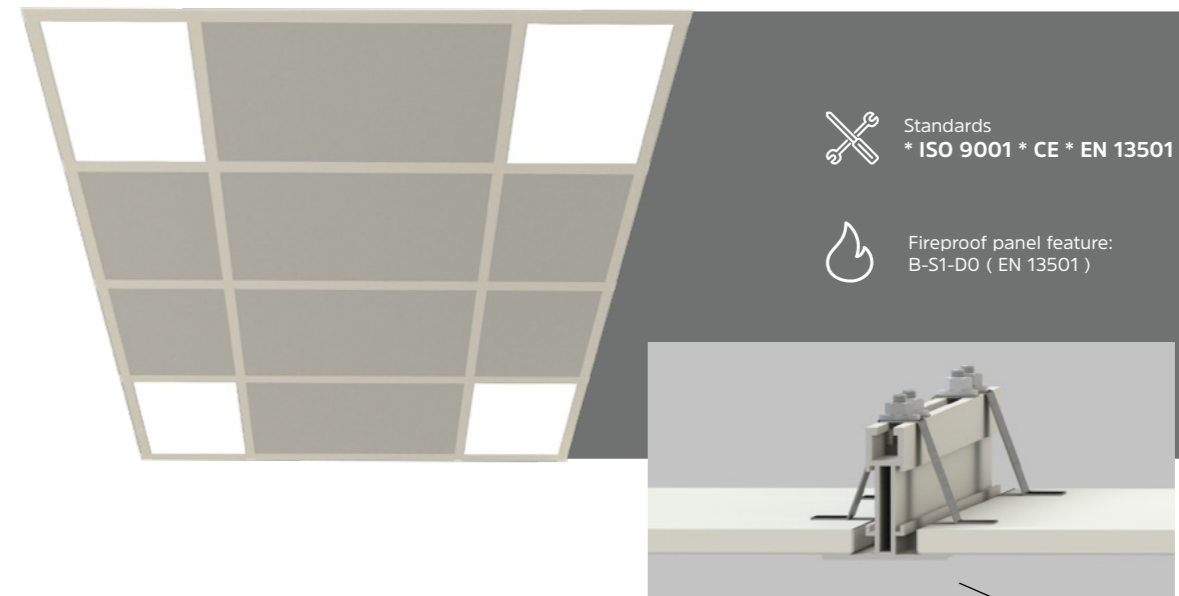
Due to its structure, the ceiling system provides easy assembly and disassembly with the accessories on it.

- T-Grid Modular Ceiling
- Walkable Panel Ceiling

Non-flammable 	Detachable 	Chemically Resistant 	Cleanable 
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T-Grid Modular Ceiling

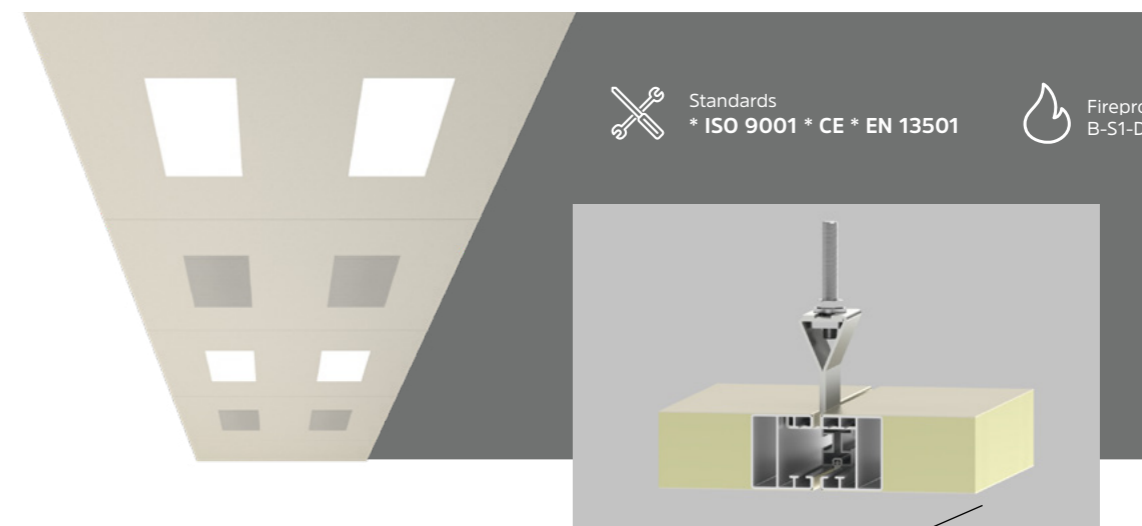


Standards
* ISO 9001 * CE * EN 13501

Fireproof panel feature:
B-S1-D0 (EN 13501)

Modular Ceiling Profile

Walkable Ceiling



Standards
* ISO 9001 * CE * EN 13501

Fireproof panel feature:
B-S1-D0 (EN 13501)

Walkable Ceiling Profile

Clean Room Pass box

They are compact cabinets specially designed for material transfer between clean rooms. There are three types of pass boxes: Active, static and dynamic.

- Hepa filter
- Airlock
- Chemically Resistant
- Cleanable

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Pass box

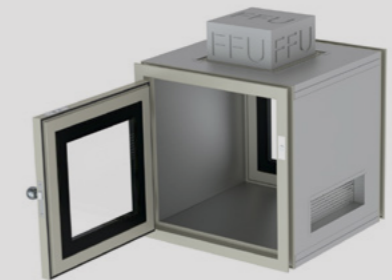


- Standards * ISO 9001 * CE * EN 13501
- Airlock
- Water Absorption Resistance
- 3D Adjustable Hinge
- Air Resistance
- Filler Fireproof Polyurethane / Aluminum / Rockwool
- Thickness 50 mm

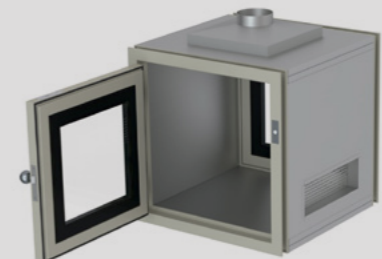
OPTIONS AND ACCESSORIES

- Interior surface**
 - AISI 304 steel
- Exterior surface:**
 - Painted galvanized steel
 - AISI 304 steel
- Özellikleri:**
 - HEPA filter
 - UV led
 - Airlock
 - Air flow
 - Mechanical lock
 - Emergency button

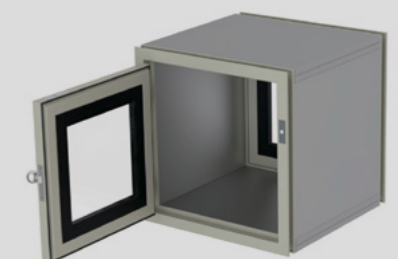
OPTIONS AND ACCESSORIES



DYNAMIC PASS BOX



ACTIVE PASS BOX



STATIC PASS BOX

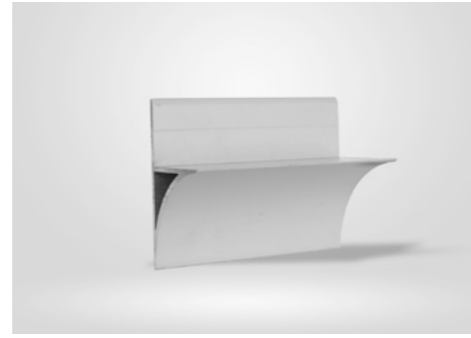


Accessories

Vertical Corner Profile



Ceiling Profile



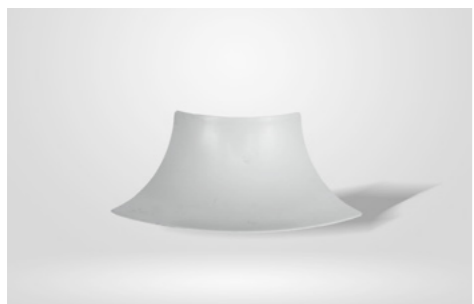
Door Finish Model 1



Door Finish Model 2



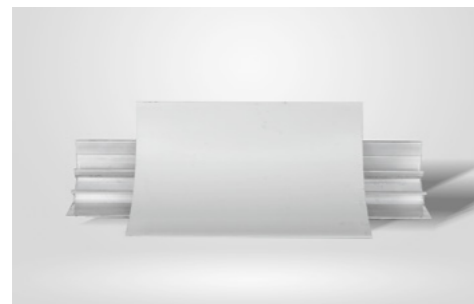
Lower Outside Corner



Lower Inside Corner



Upper Hygiene Profile



Lower Hygiene Profile



Our Expertise in CLEAN ROOM for your Applications

Our 30 years of experience in TURN KEY SOLUTIONS make us your ideal Contract Development Organization.

Your vision. Our Know-How
From Lab to Factory
Building a GMP Facility



We SETUP

- Quality management
- Personnel and organization
- Building, equipment, equipment and materials
- Documentation
- Raw product input, product processing, storage and distribution
- Quality control and proficiency tests
- Approval and authorization of all transactions
- Complaints and recalls
- Investigation of errors, clinical follow-up of the manufactured products after use
- Storage of samples, disposal of problematic, returned products
- Internal and external audit



We SUPPORT

- Raw material
- Processing
- Product development
- Production
- Packaging
- Storage
- Distribution

With all TECHNOLOGY TRANSFER AND documentary Works!

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Clean
Room
Techn
ology

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