

CLEAN ROOMS

[PHARMACEUTICAL * CHEMICAL * BIOTECH * ELECTRONICS]

[TECHNICAL DOCUMENTATION]





TECHNICAL DOCUMENTATION INDEX





The quality of our products is the strength of our work.









The freestanding modular wall that we produce is extraordinarily simple: a 45 mm thick sandwich panel, expertly squared with CNC machines, edged by a high-adherence aluminium profile specifically designed to allow connection to all fitting systems.

All panels are custom made according to scrupulous design guidelines to ensure the correct balance between spaces, alignment and design. The possibility of choosing different types of elements makes the panel suitable for different areas of application in contamination controlled environments.

The quality of each component is guaranteed by the selection based on extensive experience in this sector along with relative certification. Available in various colours.





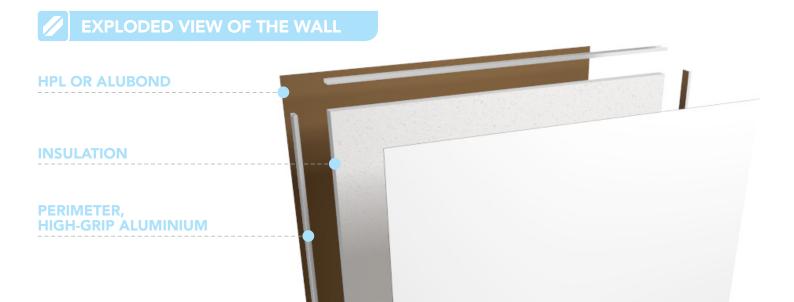


a solid compound consisting of over 40 layers of paper impregnated with melamine and phenolic resins. The sheet of HPL, measuring 1300x3050 mm, has a transparent finishing (1) layer on both external sides that protects the decorative layer below. The central layer, dark brown (3), is composed of a series of kraft papers impregnated with phenolic resins, pressed to 9 MPa at 150 ° C. A protective PVC coating protects the panel during the production, transportation and installation phases. We chose to use HPL-grade products only, in accordance with standard ENA38



modern construction material, widely used in architecture for exterior curtain walls. Ideal for environments with relative humidity <20%. It consists of an extruded polyethylene IDPE (2) central core and on the outside, on both sides, by a sheet of pre-painted (1) aluminium, highly resistant to atmospheric agents PVDF 25 micron - Kynar 500 ref. (EN AW-3005 (A) (Al 0.5 Mn 1mg) ACC. EN 573) H42. A protective PVC coating protects the panel during the production, transportation and installation phases.

DESCRIPTION	HPL	ALB
THICKNESS	4 mm	4 mm
MODULAR PANEL DIMENSIONS	1270 x h3000 mm	1200 x h3000 mm
OVERLAPPING PANELS	YES	YES
WEIGHT	5,9 kg/mq	5,5 kg/mq
PROTECTIVE FILM	YES	YES
FIRE RESISTANCE CLASS	B-S2-D0 (EN 13501-1)	C-S2-D0 (EN 13501-1)
COLOUR	FROM THE TABLE	WHITE RAL 9010
RESISTANCE TO SCRATCHES AND BUMPS (1-10)	9	7
STEAM AND WATER RESISTANT (1-10)	9	8
ANTISTATIC PROPERTIES (1-10)	10	6
HYGIENIC AND EASY TO CLEAN (1-10)	10	8







POLYSTYRENE [PL]



Description

Slabs of expanded polystyrene (EPS), calibrated to a thickness of 37 mm.



Density 35 Kg/m3



Declared thermal conductivity (λ) 0,033 W/mK (EN 12667 or 13163)



Fire reaction class E (EN 13501-1)

ROCKWOOL [RW]



Description

Slabs of fireproof rock wool oriented perpendicular to the plane, calibrated to a thickness of 37 mm.



Density 100 Kg/m3



Declared thermal conductivity (λ) 0,037 W/mK (EN 12667 or 14303)



Fire reaction class A1 (EN 13501-1)





ALUMINIUM HONEYCOMB [HC]



Sheets of aluminium honeycomb, fireproof, consisting of hexagonal cells with a diameter of 12 mm made of aluminium alloy 3003, thickness 37 mm.



Density 35 Kg/m3



Declared thermal conductivity (λ) 0,026 W/mK (still air)



Fire reaction class A0 (EN 13501-1)

POLYURETHANE [PU]



Sheets of polyurethane foam, calibrated to a thickness of 37 mm.



Density 35 Kg/m3



Declared thermal conductivity (λ) 0,022 W/mK (EN 12667)



Fire reaction class B3 (EN 13501-1 or DIN4102)



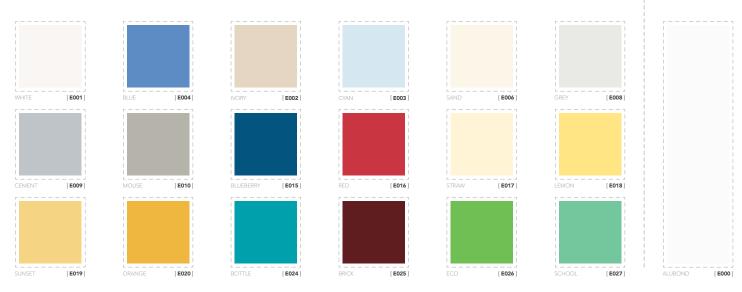




CERTIFICATION AND TESTING

O HPL COLORS





*THE CLOSEST TO THE REAL COLOURS



CLEANING

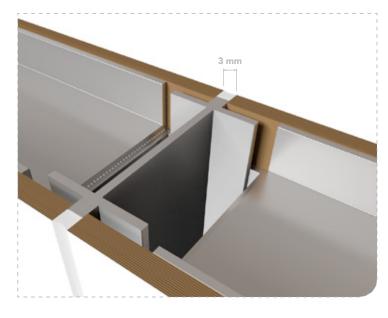
HPL SURFACES

Are resistant to all commonly used solvents and chemical products, for example: acetone, alcohol, petrol, perchlorethylene, MEK. Do not use abrasives or scouring substances (steel wool, abrasive powder), do not use strong acids, drain cleaners or hydrochloric acid.

SURFACES IN ALB

The most common non-abrasive detergents can be used, ph 6-7 in a solution up to 10%. After cleaning, use water to remove any residue.







SILICONE

Silicone, silicone-based single-component sealant, is a vital material for seals and sealing clean rooms.

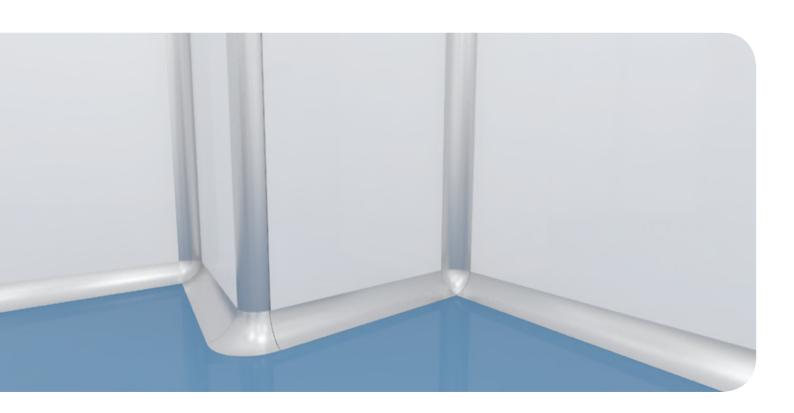
We always select the best silicone available on the market with the following characteristics: high elastic properties, excellent resistance to aging and exposure to UV rays, high resistance to friction, free of blisters, non-sticky surfaces, high adhesion level, non-corrosive, fungicidal properties, tested according to DIN 18545 Part 2 group E, conforming to the requirements of DIN 18540-F and the requirements of ISO 11600 G 25 LM.

COLORS

Walls: neutral transparent and opaque Floors: neutral transparent and opaque T false ceiling: opaque white acetic

HLFC false-ceiling: antique matt white neutral Glass and window panels: neutral matte black







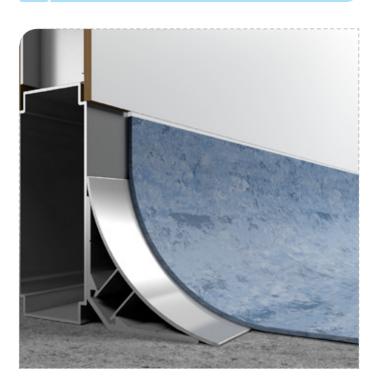
Coupling systems between the partition wall and the floor. Made entirely in-house using corporate design profiles, they are produced by carefully following the GMP guidelines, the twenty years of experience in the design, production and installation of clean rooms. Attention to detail is a priority for a MADE IN ITALY design.







N90 + R70 - FLOOR



Description

Support coupling system, with click-in profiles for high precision fitting to screeds. Curvature radius - 70 mm.



Materia

Extruded aluminium alloy 6060



Colour

Natural anodised silver (RAL 9010 on request



Description

Flush-fitting coupling system, with click-in profiles for the preparation of a high-precision fitting with 2 mm thick PVC flooring or epoxy resin. Bending radius - 70 mm.



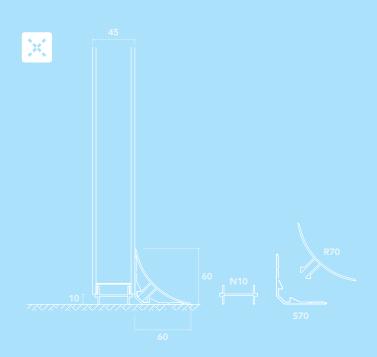
Material

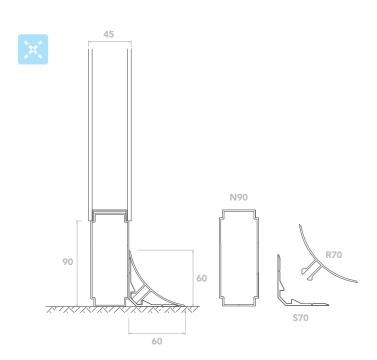
Extruded aluminium alloy 6060



Colour

Raw

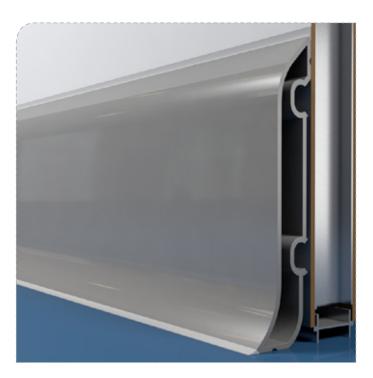




BUMPER 120 - FLOOR



BUMPER 200 - FLOOR



B

Description

Protection system for walls against from accidental impact when handling with transpallet devices. Fitting i support of any type of floor.



Material

Extruded aluminium alloy 6060



Colour

Natural anodised silver (RAL 9010 on request)



Description

High protection system for walls with absorption of accidental impact when handling with transpallet devices. Fitting in support of any type of floor.



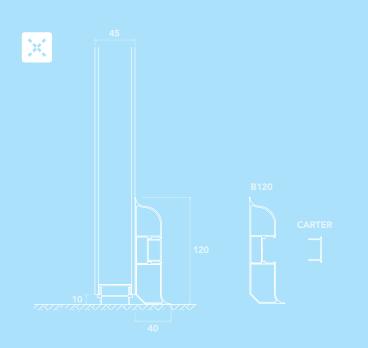
Material

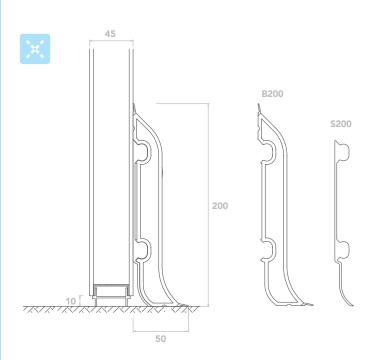
Co-extruded PVC



Colour

Grey RAL 7040 (white RAL 9010 on request)



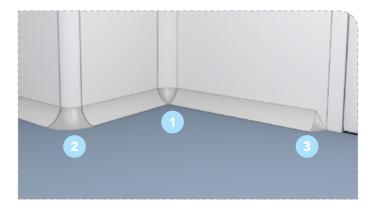


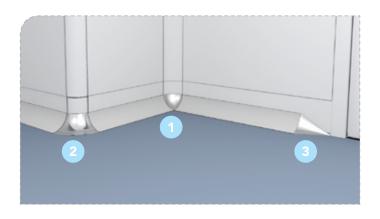


CONNECTIONS N10 + R70



CONNECTIONS N90 + R70







Description

- [1] Eighth of a sphere [2] Quarter of a sphere
- [3] Terminal.



Material

Die-cast aluminium.



Colour

Natural silver grey paint, manufactured and tested for 1000 hours in salt spray. Surface with anti-scratch treatment.



Description

- [1] Eighth of a sphere [2] Quarter of a sphere
- [3] Terminal.



Material

Die-cast aluminium.



Colour

Raw.

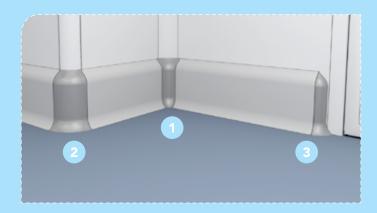


CONNECTIONS + BUMPER 120





CONNECTIONS + BUMPER 200





Description

- [1] Eighth of a sphere [2] Quarter of a sphere
- [3] Terminal.



Material

Anticorrosive aluminium alloy 6082.



Colour

Anticorrosive aluminium alloy 6082 Colour: Natural silver grey paint, manufactured and tested for 1000 hours in salt spray. Surface with anti-scratch treatment.



Description

- [1] Eighth of a sphere [2] Quarter of a sphere
- [3] Terminal



Material

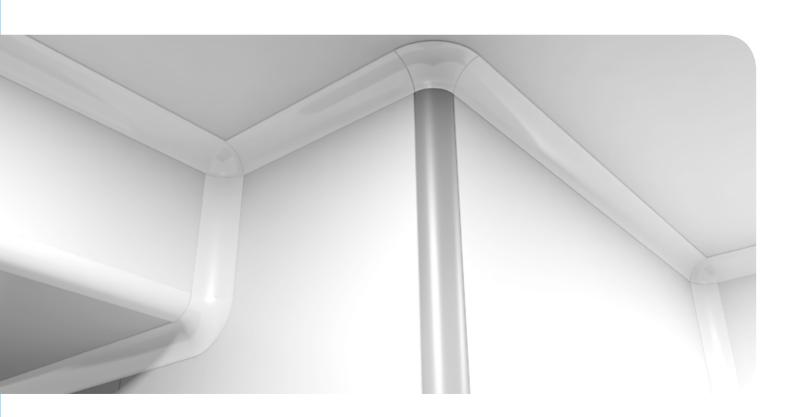
Die-cast aluminium



Colour

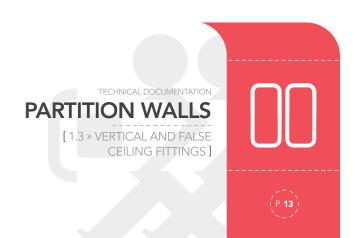
Grey RAL 7040 Surface with anti-scratch treatment





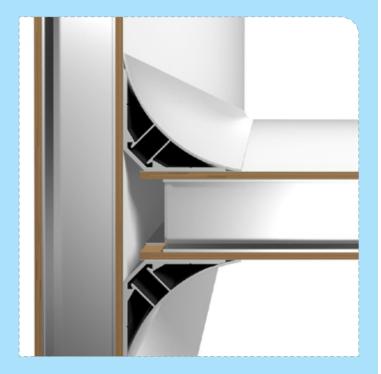


Coupling systems for the vertical connection between partition walls and horizontal connection of walls and false ceilings. Made entirely in-house using corporate design profiles, they are produced by carefully following the GMP guidelines, and twenty years of experience in the design, production and installation of clean rooms. Attention to detail is a priority for a MADE IN ITALY design.





R70 - VERTICAL





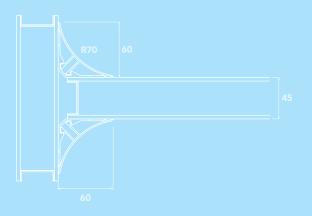














Description

Flush-fitting coupling system, with click-in profiles, for the high-precision corner fitting between partition walls. Bending radius - 50 mm.



Material

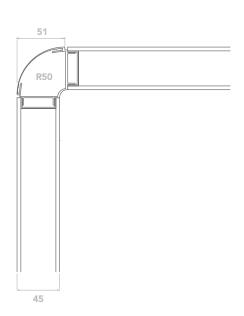
Extruded aluminium alloy 6060



Colour

Natural anodised silver (RAL 9010 on request)

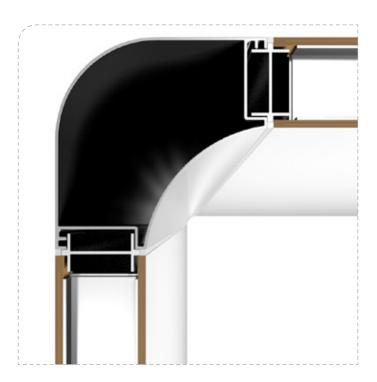








R90 - VERTICA



Description

Flush-fitting coupling system, with click-in profiles, for the high-precision corner fitting between partition walls Bending radius - 70 mm.



Materia

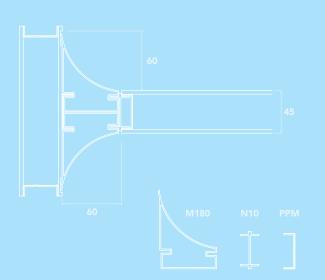
Extruded aluminium alloy 6060



Colour

Natural anodised silver (RAL 9010 on request







Description

Flush-fitting coupling system, with click-in profiles, for the high-precision corner fitting between the various partition walls. Bending radius - 70 mm.



Material

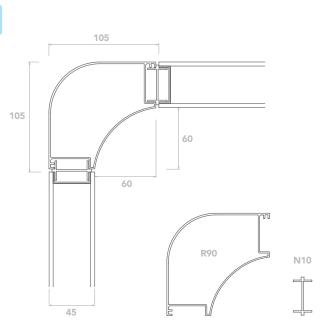
Extruded aluminium alloy 6060



Colour

Natural anodised silver (RAL 9010 on request)



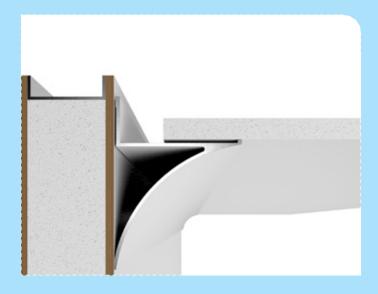




R70N - FALSE CEILINGS



R70 - FALSE CEILINGS







Description

Support coupling system support, fully compatible with R70 for the high-precision connections between wall and ceiling built in-house (see 3.1 T.Ceilings - composition)



Material

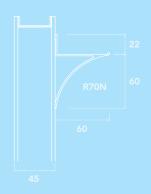
Extruded aluminium alloy 6060



Colour

White RAL 9010 (silver anodized natural on request)







Description

support coupling system, with click-on profiles, for the high precision connections between walls and high-load false ceilings (see 3.2 false ceilings - high load). Bending radius - 70 mm.



/laterial

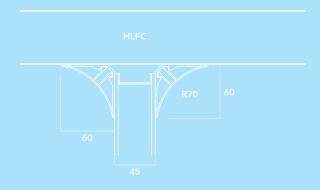
Extruded aluminium alloy 6060

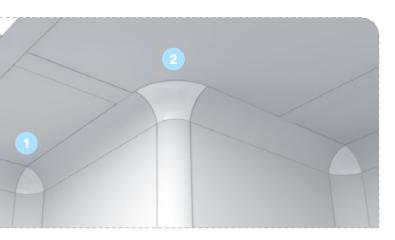


Calaur

White RAL 9010 (silver anodized natural on request









R70N E R70 CONNECTIONS



Descrizione

• [1] Eighth of a sphere • [2] Quarter of a sphere



Materiale

Die-cast aluminium



Colorazione

White RAL 9010 (natural silver-grey on request)



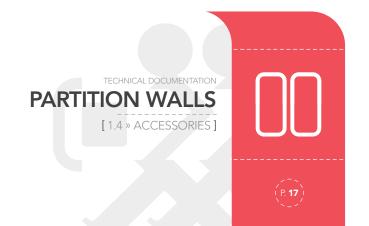




We have always been at the complete disposal of our customers to include all required accessories within the clean rooms, creating a tailored product giving flexibility to meet constantly evolving requirements.

Based on the experience gained over time, we propose a range of accessories chosen and created as standard products, aiming to facilitate the choice by customers and speed up all production and installation phases.

Always available for your every need!









3-module electrical

code: F503 colour: yellow



4-module electrical

code: F504 colour: yellow



socket 1P 16AX - 250V a.c

code: AM5001



shunting switch 1P 16AX – 250V a.c (1 module)

code: AM5003 colour: white



Socket 1P (NO) 10A – 250V a.c (1 module)

code: AM5005 colour: white



Bypass socket 2P + E 16 A 250 V ac (1 module)

code: AM5180 colour: white or red



Bypass button and Schuko 2P + E 16A 250V ac (2 modules)

code: AM5440/16 colour: white or red



RJ11 connector

code: AM5982 colour: white



RJ45 connector Category 6 UTP (1 module)

code: AM5979C6



False polo (1 module)

code: AM5000 colour: white





» FLUSH-FITTING



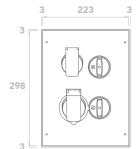
• Stainless steel plate, 15/10

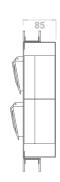
• Finish: electrolytic polishing

• Can only be installed on double wall or perimeter walls. Requires preparation of no. 2 x 30 mm raceways for cable laying

• BLUE 16A 220V 2P + E 16A 230V 6H SBF - IP44 socket

• RED 32A 380V 3P + N + E 32A 400V 6H SBF - IP44 socket





» SURFACE MOUNTED



• Complete system in 15/10 stainless steel

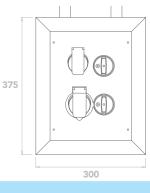
• Finish: electrolytic polishing

• Can be installed on single partition walls. Requires preparation of no. 2 x 30 mm raceways for cable laying.

• BLUE 16A 220V 2P + E 16A 230V 6H SBF - IP44 socket

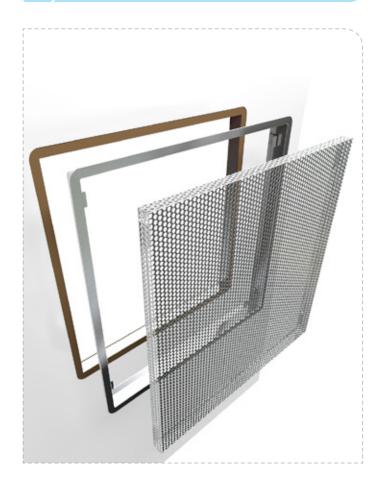
• RED 32A 380V 3P + N + E 32A 400V 6H SBF - IP44 socket











Complete wall-mounting system for air intake filtration. Designed to house the pre-filter and regulator shutter, where applicable, this a flexible and high-performing solution for all types of use.



Main features

- Made from stainless steel, 15/10
- Finish: electrolytic polishing
- Perforation: 40% (empty/solid)
- No visible fastener screws.
- Perfectly flush-fitting with the wall.
- Designed to house a pre-filter, class G3 (EN779)
- Designed to house a regulator shutter.
- Magnetic system for removal of the front section.
- Easy maintenance and cleaning.



Proposed standard dimensions

- 300xh.300 mm
- 300xh.600 mm
- 600xh.600 mm
- 600xh.900 mm

EASY MAGNEHELIC

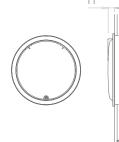
» FLUSH FITTING

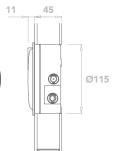


- Dwyer magnehelic, Series 2000
 Precision ± 2% 81 fields

- Version with airtight housing IP 65
 Simple interlocking fitting
 Can only be installed on double walls or perimeter walls











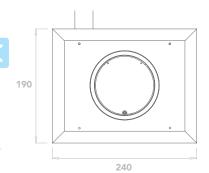
» SURFACE MOUNTED

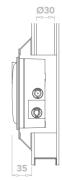


- Dwyer magnehelic, Series 2000
 Precision ± 2% 81 fields

for connection pipe laying.

Version with airtight housing IP 65
Complete system in 15/10 stainless steel
Finish: electrolytic polishing
Can be installed on single partition walls.
Requires preparation of no. 1 x 30 mm raceways











Flush-mounted telephone system for hands-free communication in contamination controlled environments.

131

- R 10



Description

Complete system for the preparation of an easily removable area on a partition wall. This accessory is used to facilitate access for machines during the installation phase, their maintenance over the years to come or to enter inspection areas or double walls.



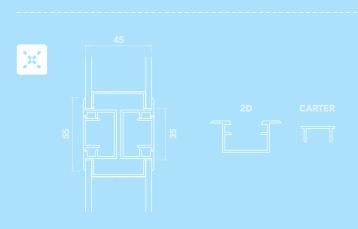
Material

Extruded aluminium alloy 6060



Colour

Natural anodised silver





Description

• Antibacterial properties guaranteed by the special front surface coated with a hardwearing bacteria-resistant membrane, totally free of holes.

286

- IP66 protection
- Total depth 34 mm, it requires preparation of no. 1 x 30 mm diameter raceway to lay the cables
- diameter raceway to lay the cables.

 Powered directly by the standard analogue lines, both urban and internal (PABX)
- Adjustable ring tones and incoming call LEDs
- Auto-hang up and autoreply.
- Fully washable with common detergents or bactericides.
- VolP version available on demand







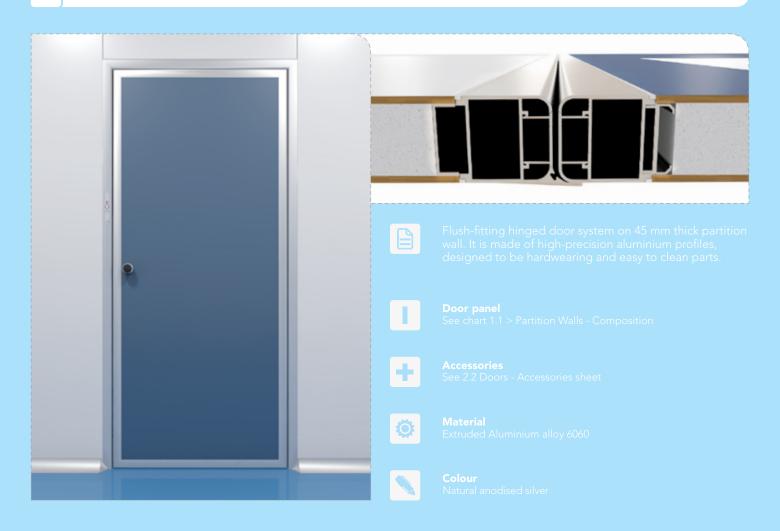
We have decided to produce a sturdy and elegant door.

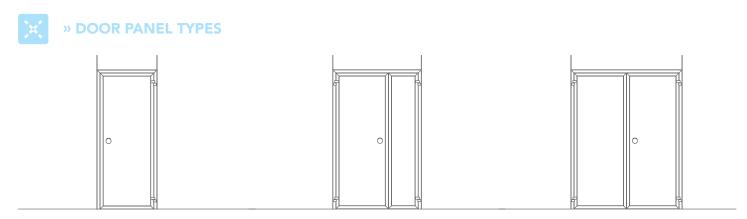
The jamb and the sash profile are extruded in aluminium which have been refined and redesigned over the years so as to achieve efficient mechanical performance and make them capable of accommodating a wide range of accessories.

Whether fitted with hinged or sliding panels, maximum attention has been given to all detail of these doors: the panel is framed on all four sides, all the cuts are at 45 degrees and all the accessories, after indepth research, enhance the door making it absolutely unique.



HINGED DOORS ON PARTITION WALLS





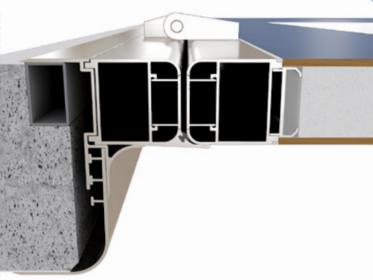
1 wing: 700, 800, 900, 1000, 1200 mm standard height 2100 mm **1.5 wing:** 900+300, 800+400, 1000+600 mm standard height 2100 mm **2 wings:** 800+800, 900+900, 1000+1000 mm standard height 2100 mm

» OPENING DIRECTION











Hinged door system supported by brick or plasterboard Realised by coupling a system to the partition wall door profiles that connects to and embraces the wall and another used to achieve the desired thickness (> 100 mm). Sturdy and easy to clean parts.

Requires preparation of galvanized steel subframe.



Door panel

See chart 1.1 > Partition Walls - Composition



Accessories

See chart 2.2 > Doors - Accessories sheet



Application

Partition plasterhoard or brick wall



Mataria

extruded aluminium alloy 6060



Colour

Natural anodised silver

COUNTERFRAME 40x20 [not supplied]	
20	
	45
75	
35	

11	SG	CARTER	BA
IP II2		1	

NOMINAL D	DIMENSION
В	Н
800 mm	2100 mm
900 mm	2100 mm
1000 mm	2100 mm
800 + 800 mm	2100 mm
1000 + 600 mm	2100 mm

COMPARTMENT ON WALL		
B + 150 mm	H + 75 mm	
950 mm	2175 mm	
1050 mm	2175 mm	
1150 mm	2175 mm	
1750 mm	2175 mm	
1750 mm	2175 mm	



SLIDING DOOR

Automation system for sliding doors. It is simple to assemble as both the electric drive unit and electric panel are housed in a single extruded aluminium cabinet. Equipped with battery which ensures the opening in the event of a power outage, it is safe and quiet with its engine 24V. Control unit with microprocessor logic and anti-crushing device. Numerous opening and control accessories available.

Manual non-motorised version also available



Door panel see chart 1.1 > Partition



Opening speed 0,8 m/s (1 wing) 1,6 m/s (2 wings)



Accessories
See 2.2 > Doors Accessories sheet







SEALED SLIDING DOOR

Automation system for totally airtight sliding doors, where the panel during the closing phase is lowered and moved sideways to compress against the seal on the door jamb perimeter and simultaneously against the floor, to guarantee total airtightness. Equipped with battery which ensures the opening in the event of a power outage, it is safe and quiet with its engine 24V. Control unit with microprocessor logic and anti-crushing device. Rounded cabinet with concealed screws. Integrated detection sensors flush-fitted in the automation system and exceptional silence levels make it the best product for use in contamination controlled environments.



Door panelSee chart 1.1 > Partition
Walls - Composition



Opening speed 0,5 m/s (1 wing) 1,0 m/s (2 wings)



ApplicationsEasypharma partition
plasterboard or brick wall



Accessories sheet



ROLL-UP

Automation system for roll-up doors perfectly airtight against wind, moisture and dust. The panel is flexible with no rigid elements, it is self-repairing as it automatically fits back onto the slide rails, and rolls up inside the small drum which houses the motor. Wireless electronic protection at the bottom of the panel for additional safety.



Applicationparete mobile Easypharm
parete in cartongesso



Sheet Reinforced pol



Opening speed Up to 2,7 m/s



 Colour

 Yellow
 RAL 1013

 Orange
 RAL 2006

 Red
 RAL 3000

 Blue
 RAL 5002

 Green
 RAL 6005

 Grey
 RAL 7035

 White
 RAL 9010

 Black
 RAL 9005

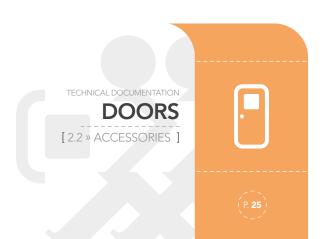


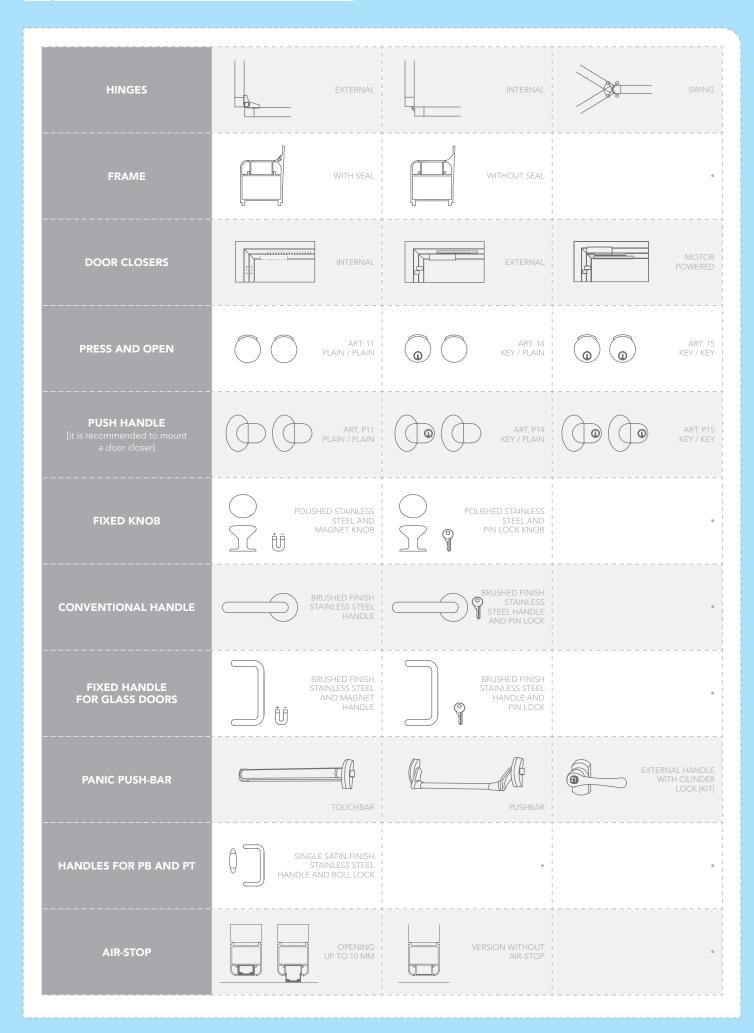




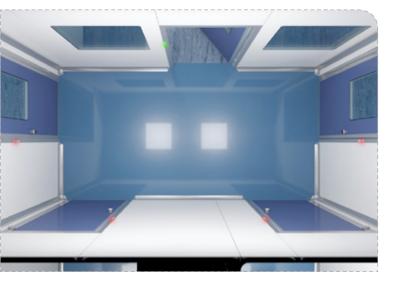


Each door has its own accessory!
Entrance doors for clean rooms, production areas, air locks, QC/R & D labs, locker rooms, heavy traffic areas, warehouses etc.
A wide range of accessories chosen for their quality and durability allow us to produce the perfect door to meet the requirements of every possible situation.





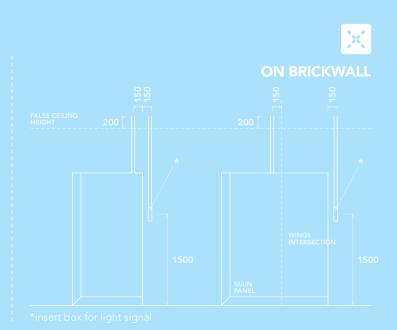




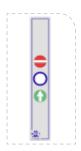
In contamination controlled environments interlock logic for the access and transit of persons and/or materials are essential. The proposed system is fully integrated within its own frame for doors, Pass-Box or Pass-Trolley products. It consists of: red/green double light signal with emergency release button, with an easy to clean screen printed polycarbonate coating; an electric lock, with integrated door status installed on the top inside the jamb, which mechanically prevents the door from opening; a multiple control unit (to manage from 2 to more ports) that can be programmed according to the different procedures, methods or timings required.

Description of a standard 2-door interlock: in stand-by mode with the doors closed, all the lights are green. When any door is opened, the mechanism locks the other door via the electric lock and the light signal changes from green to red. If the door remains open for a prolonged length of time, an audible timer alarm will go off to signal that the door has not been closed. The system returns to stand-by mode when the door is closed. In case of an emergency, the button on the light signal allows you to override the system and open the door, even if the light signal is red. This is called the "green logic".

INTERLOCK PREDISPOSAL ON PARTITION WALLS



Ⅲ INTERLOCKING TYPES



EASY LIGHTS
Light signal with button

with red/green LED lights and clear symbols to regulate transit. Central emergency release button



EASY CODE

Digipad access

For entries authorised only by entering a pin code on a programmable digipad.





EASY BADGE

Stand-alone proximity badge reader

For entries authorised only by using programmable and personal proximity badges.

Platform and software for remote control of accesses in real time are also available.

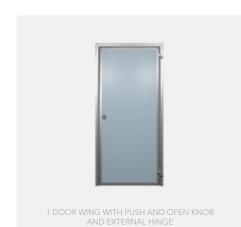


EASY PROX

Proximity sensor

Unlocks the door by swiping your hand a few centimetres from the touch sensor.







1 DOOR WING WITH GLASS PANEL 500X700 mm, PUSH-PULL HANDLE AND INTERNAL HINGE



1 DOOR WING WITH MIRROR 500X1500 mm, STEEL KNOB AND EXTERNAL HINGE



1 FULLGLASS DOOR WING WITH STAINLESS STEEL PUSHBAR HANDLE AND PIN LOCK



1 HALFGLASS WING WITH PUSH AND OPEN KNOB AND EXTERNAL HINGE



1 FULLGLASS WING AND TOUCHBAR



1 SLIDING DOOR WING WITH GLASS PANEL 900X1000 mm



2 HINGED DOOR WINGS WITH GLASS PANELS 500X700 mm HANDLE AND CYLINDER LOCK



2 FULLGLASS WINGS AND STAINLESS STEEL HANDLE



2 SLIDING DOOR WINGS WITH GLASS PANELS 500X700 mm



1 DOOR WING ON BRICKWALL WITH GLASS PANEL 500X700 MM



1.5 DOOR WING ON BRICKWALL WITH PUSH AND OPEN KNOB



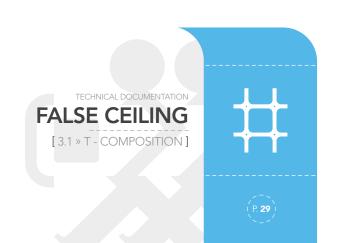




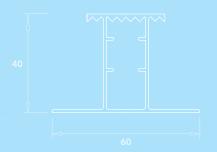
Attention to detail in a product with a traditional look.

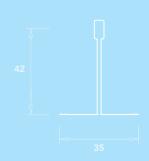
The typical 60 mm T-shaped structure is made from a vertical closed double-edge extruded aluminium profile, designed for interlocking with galvanized steel plates that create the orthogonal grid. Each panel, chosen according to individual requirements, is fastened to the frame with panel clips and sealed to ensure and maintain the desired pressure in the clean rooms.

The hanging system is flexible and adaptable to every situation. Structure, panels and lighting fixtures that compose our false ceilings are characterised by a uniform colour - semi-gloss white RAL 9010.







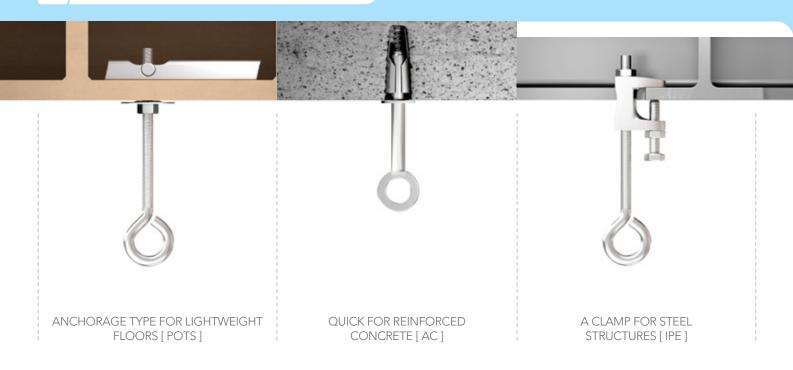


Т60	« STRUCTURE »	T35
590X590 mm other measurements by request (x)	NET LIGHT (x)	565x565mm
650 (x+60) mm	PITCH	600 mm
615 (x+25) mm	PANEL DIMENSIONS	590 mm
2,2 Kg/mq	STRUCTURE WEIGHT	1,2 Kg/sqm
Extruded aluminium alloy 6060	MATERIAL	Lamiera di acciaio presso-piegata
80 Kg/sqm	LOAD CAPACITY	12 Kg/sqm
from ISO-3 to ISO-9	APPLICATION (FED STD 209E)	from ISO-8 to ISO-9
SAP10, SAP38, LP5, LP5P, SAH10, ALB4	PANELLING AVAILABLE	SAP10, LP5, SAH10, ALB4
White RAL 9010 (silver anodized natural on request)	COLOUR	White RAL 9010
1200x1200 mm	HANGER PITCH	1200x1200 mm





HANGER TYPE · M6







SAP10

Surface-mounted panelling consisting of a 0.6 mm sandwich in pre-coated aluminium RAL 9010, insulated with high-density polystyrene 30 Kg/m3. Complete with panel-block clips. Finished panel thickness 10 mm.



Declared thermal conductivity $(\lambda) = 0.033 \text{ W/mK} (EN 12667 \text{ or }$ 13163) data of polystyrene



Fire resistance class B-S2-D1 (EN 13501-1)



SAP38

Surface-mounted panelling consisting of a 0.6 mm sandwich in pre-coated aluminium RAL 9010, insulated with high-density polystyrene 30 Kg/ m3. Complete with panel-block plates. Finished thickness 38 mm.



Declared thermal conductivity $(\lambda) = 0.033 \text{ W/mK} (EN 12667 \text{ or }$ 13163) data of polystyrene



Fire resistance class B-S2-D1 (EN 13501-1)



LP5

Surface-mounted panelling consisting of a HPL bidecor white RAL 9010 (E001) panel. Complete with panel-block clips. Finished thickness 5 mm.



Declared thermal conductivity $(\lambda) = 0.02 \text{ W/mK (EN 12667) by}$ EASYPHARMA test



Fire resistance class B-S2-D0 (EN 13501-1)



LP5P

Flush-fitting panelling consisting of a HPL bi-decor white RAL 9010 (E001) panel, milled on all four sides to be fitted perfectly flush with the false ceiling structure. Complete with panel-block clips. Finished thickness 5 mm.



Declared thermal conductivity $(\lambda) = 0.02 \text{ W/mK (EN 12667) by}$ EASYPHARMA test



Fire resistance class B-S2-D0 (EN 13501-1)



SAH10

Surface-mounted panelling consisting of a 0.8 mm sandwich in pre-coated aluminium RAL 9010, insulated with aluminium honeycomb cells 12 mm diam. Complete with panel-block clips. Finished thickness 10 mm.



Declared thermal conductivity (λ) = 0,026 W/mK (EN 12667) STILL air



Fire resistance class A2-S2-D0 (EN 13501-1)



ALB4

Surface-mounted panelling consisting of an ALB (alubond) bi-decor white RAL 9010 (E000) panel. Complete with panel-block clips. Finished thickness 4 mm.



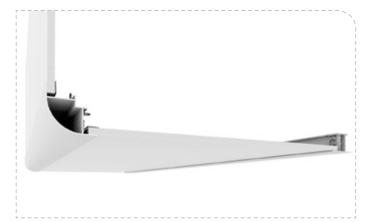
Declared thermal conductivity (λ) = 0,040 W/mK (EN 12667)



Fire resistance class C-S2-D0 (EN 13501-1)







Support coupling system, perfectly compatible with R70 and R70N, if the false ceiling height is changed inside the same room (downstand).

The vertical panel can be made using the same ceiling panels, or with the partition walls.



Material

Extruded aluminium alloy 6060



Colour

White RAL 9010 (silver anodized natural on request)



LIGHTING SYSTEMS

Possibility of using fluorescent tubes or LEDs



LAMP T

Recessed lighting fixture for low-load false ceilings, with a steel sheet body, resting on the structure and tightly sealed. The prismatic polycarbonate (or tempered clear or frosted glass) optical diffuser is fitted inside a steel frame, fixed to the main structure with a clip system to guarantee safe and easy maintenance from below. Complete with electronic ballast and quick connector. Version for low load false ceilings with maintenance from inside the clean room zones.



Nominal sizes available

600x300 mm (2x18W), 600x600 mm (4x18W), 600x1200 mm (4x36W)



Colour White RAL 9010



Protection rating





TEARDROP

Lighting system suitable for areas with laminar flow, made of steel sheets (or stainless steel) and the typical teardrop shape with extremely reduced overall dimensions. The optical lens with transparent or frosted polycarbonate diffuser allows targeted delivery of light without creating turbulence in the air flow. These lighting systems are designed to be fixed directly to the structure of the false ceiling. They are built in a manner so as to permit continuous coupling.



Rated power available 1x18W, 1x36W, 1x58W



Colour

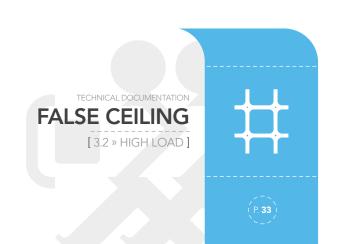
painted white RAL 9010 or satin-finish 304 stainless steel

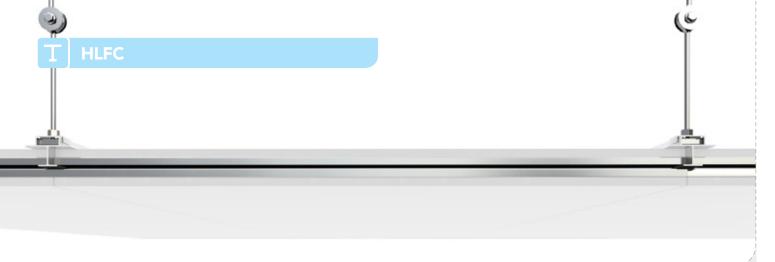






High load false ceiling is simple and functional. The high load false ceiling made with the traditional 60 mm T-shape structure is accompanied by an innovative monolithic system, ideal for high sterility zones. Years of experience and targeted research have made it possible to connect a wide pitch flexible hanging system to the flush-fitting of its surface at the bottom, allowing easy mounting of filters and lighting fixtures.



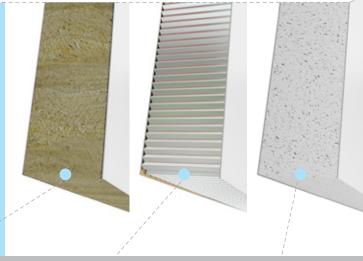


Completely flush-fitting HLFC high load false ceiling system

consists of two steel plates pre-coated in RAL 9010 with an insulation that can vary according to demands. The panel is surrounded on all four sides by a frame of extruded aluminium which is inserted in the steel plates, rimmed and bevelled, to create the finished panel.

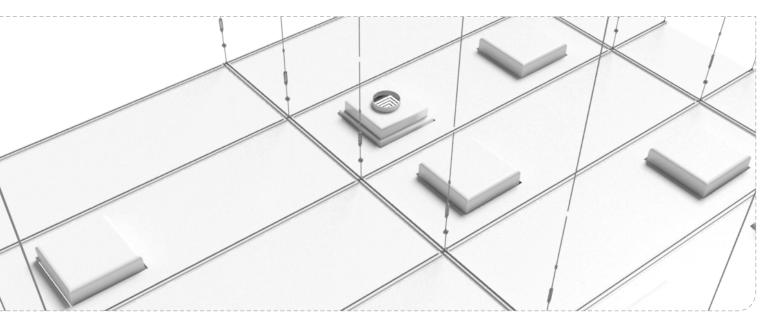
In addition to providing rigidity to the panel, it also serves as a housing for the false ceiling bearing structure.

This latter feature ensures a uniform 3 mm gap between the panels and makes it possible to create a flexible hanging system using a specially designed rail which allows the hangers to slide. This means that there is the possibility during installation of preventing interference with the facility systems present in the areas above.



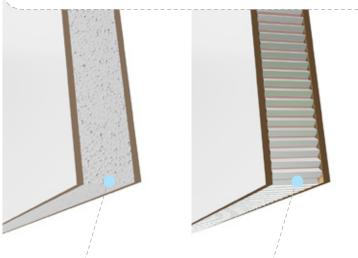
	HLFC-RW ROCKWOOL	HLFC-HC ALUMINIUM HONEYCOMB	HLFC-PL POLYSTYRENE
INSULATION DENSITY	100 Kg/m3	40 Kg/m3 - cell diam. 12 mm	35 Kg/m3
DECLARED THERMAL CONDUCTIVITY (λ)	0,037 W/mK (EN 12667 oR 14303)	0,026 W/mK (EN 12667) still air	0,033 W/mK (EN 12667 or 13163)
FIRE RESISTANCE CLASS - PANEL	A2-S1-D0	A2-S1-D0	B-S2-D0
PANEL PITCH	1003x2953 mm	1003x2953 mm	1003x2953 mm
PANEL DIMENSIONS	1000x2950 mm	1000x2950 mm	1000x2950 mm
PANEL THICKNESS	60 mm	60 mm	60 mm
SHEET THICKNESS	0,7 mm	0,7 mm	0,7 mm
COUPLING FITTING WIDTH	3 mm	3 mm	3 mm
PANEL AND STRUCTURE WEIGHT	22 Kg/sqm	21 Kg/sqm	20 Kg/sqm
DYNAMIC MAXIMUM LOAD	100 Kg/sqm	150 Kg/sqm	130 Kg/sqm
COLOUR	White RAL 9010	White RAL 9010	White RAL 9010
HANGER PITCH	1003x2953 mm	1003x2953 mm	1003x2953 mm

HANGERS STRUCTURE









Realised with the use of the T60 false ceiling structure, maintaining the classic look of a clean room at a nominal modularity of 600x600 mm or 600x1200 mm with the performance of a high-load false ceiling.

The panelling is realised with a 4 mm thick HPL sandwich with selected internal insulation giving the panel a total thickness of 38 mm. A galvanized steel plate blocks the panel ensuring it maintains the same thickness as the structure, allowing the creation of a level plane on the load surface.

A sturdy hanging system with M10 threaded galvanized steel rods

		/
	HT60-HC ALUMINIUM HONEYCOMB	HT60-PL POLYSTYRENE
INSULATION DENS	40 Kg/mc	35 Kg/mc
DECLARED THERMAL CONSUCTIVITY	0,062 W/mK (EN 12667) TEST EASY	0,942 W/mK (EN 12667) TEST EASY
FIRE RESISTANCE CLASS - PAN	B-S2-D0	B-S3-D0
NET LIG	590x590, 590x1190 mm other measurements by request (x)	590x590, 590x1190 mm other measurements by request (x)
PIT	650 (x+60) mm	650 (x+60) mm
PANEL S	615 (x+25) mm	615 (x+25) mm
DYNAMIC MAXIMUM LO.	170 Kg/sqm	140 Kg/sqm
COLC	White E001 (RAL 9010)	White E001 (RAL 9010)
HANGER PIT	1200x1200 mm	1200x1200 mm

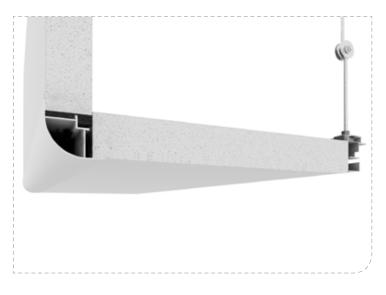
HANGER TYPE · M10

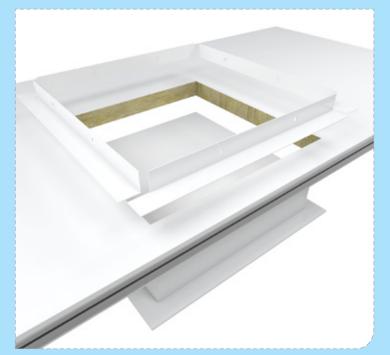


QUICK FOR REINFORCED CONCRETE (AC)

A CLAMP FOR STEEL STRUCTURES (IPE)

VEIL SECTION







HLFC CEILING LIGHT

Recessed lighting fixture for high load false ceilings, with steel sheet body and optical lens with prismatic polycarbonate diffuser (or tempered, clear or frosted glass) fixed to the appliance with high-strength adhesives. Complete with electronic ballast and quick connector. The ceiling lamp is realised with a 40 mm larger than normal flange on the lower side to ensure perfect adherence to the panel and a total insulation from the environment above. A frame on the top side, made of painted steel, closes and completely insulates the lamp body. The appliance is easy to maintain accessing from the top side (load surface of the false ceiling).



Nominal sizes available

600x300 mm (2x18W), 600x600 mm (4x18W), 600x1200 mm (4x36W)



Coloui

White RAL 9010



Protection rating

P54

Fluorescent tubes or LEDs available providing warm or cool light





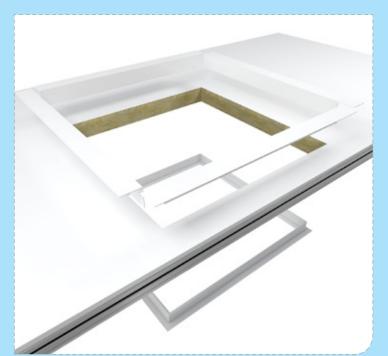














HLFC SUPPORT FRAME

A "T" bar in pre-painted steel sheet produced from high precision laser cutting of the solid sheet, to avoid any sign of welding. An adapter ideal for use with the most common types of lamps, filters, diffusers for high load false ceilings.

The support frame is secured to the panel with a structure on the top side, and is made of heavy gauge painted steel.



Nominal sizes available

600x300 mm (2x18W), 600x600 mm (4x18W) 600x1200 mm (4x36W)



Colour

White RAI 9010

















[PHARMACEUTICAL * CHEMICAL * BIOTECH * ELECTRONICS]

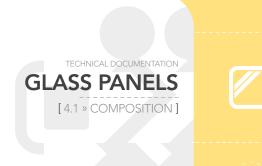




A sheet of heavy gauge glass, laminated or tempered, characterised by absolute transparency and quality certified with 10 years warranty. This is the Easypharma glass panel: the best result between quality and design that we could achieve.

To further expand these viewing points and make our clean rooms even more "open" and bright, we have created glass panels, one or two metres in height, for uninterrupted continuous vision.

The glass panels are always produced with 45 mm thick double glazing completely flush with the surface of the partition walls or doors.





GLASS DOORS



- Total double glazing thickness 45 mm
- Standard size doors: 500x700 mm
- Standard size wall: 900x1000 mm
- Radius available: R0 Right angle, R30 and R80
- 3 +3 safety glass or 6 mm tempered glass
- Natural silver colour structural raceway containing anti-condensation salts
- Satin finish by request to block vision whilst ensuring the diffusion of light
- For installations over 1000 meters above sea level, decompression valves are inserted in the glass panels
- Roller shutter type adjustable blinds can be fitted inside the double-glazing. Available with manual or electric open/close system



GLASS PANELS ON DOORS



1 door wing with glass panel 500x700 mm R30



1 door wing with mirror R80 500x1500 mm, 4 mm thick



1 sliding door with glass panel 900x1000 mm R80



1 FULLGLASS door wing



1 HALFGLASS



1 door wing with handle



GLASS PANELS ON WALLS







Modular with glass panel 900x1000 mm R80 satin



Double glass panel 900x1000 mm R30 on partition walls



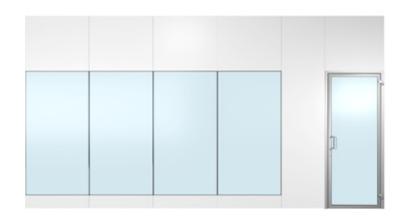
FULLGLASS WALLS



Complete system with glass walls and doors perfectly flush with the partition walls. Consistent thickness of 45 mm

To exploit the sunlight, to make supervision and communication easier, to allow your customers to view your work from the visitor corridor.

Possibility to insert screen prints with your company logo.





HALFGLASS WALLS



Complete system with glass doors and curtain glass wall panelling 45 mm thick and 1000 mm high, fitted perfectly flush with the partition walls. A different way of conceiving clean rooms, with large long glass panels 1100 mm from the floor level, ideal in situations where there are work benches or production equipment.



DOUBLE GLASS PANELS

» DOUBLE GLASS PANEL ON PARTITION WALL SYSTEM



Flush-fitting telescopic system to provide vision on a double wall. Made with two 45 mm thick glass panels with partition wall type inner structure.

Possible preparation for external PVC coating.



» DOUBLE GLASS PANEL ON BRICKWALL



Flush-fitting telescopic system to provide vision on a brick wall (>120 mm). Made with two 45 mm thick glass panels with partition wall type inner structure. It is coupled with a natural anodised aluminium "T"-shape frame.

Possible preparation for external PVC coating.

» SINGLE GLASS PANEL ON BRICKWALL



Surface-mounted system to provide vision on a brick wall (>100 mm). Made with one 45 mm thick glass panel edged with rounded natural silver anodised aluminium profiles. Solution that provides flush-fitting on one of the 2 sides of the glass panel with a stylishly rounded and easy to clean finish on the other side of the glass panel.





[PHARMACEUTICAL * CHEMICAL * BIOTECH * ELECTRONICS]





A specific line of furniture and accessories for changing rooms in contamination controlled environments is essential so as to combine design and functionality which conforms with the required standards. All the accessories are perfectly integrated within the Easypharma partition walls, or to be positioned on existing brick walls, and are the result of extensive research and selection of materials in terms of quality, reliability and ease of use.

The range consists of: lockers, benches and hand sanitising systems; all available in different versions, colours and finishes.

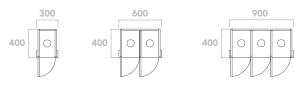




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Lockers for changing rooms in controlled contamination areas, and fully integrated and flush with the partition walls, with 7/10 thick HPL coated MDF doors. PVC edging.

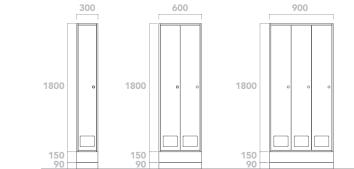
Included accessories: knob and key locking system, metal tube with 2 clothes hooks, 2 shelves and front grille.





Colour

see chart 1.1 > Partition Walls - Composition



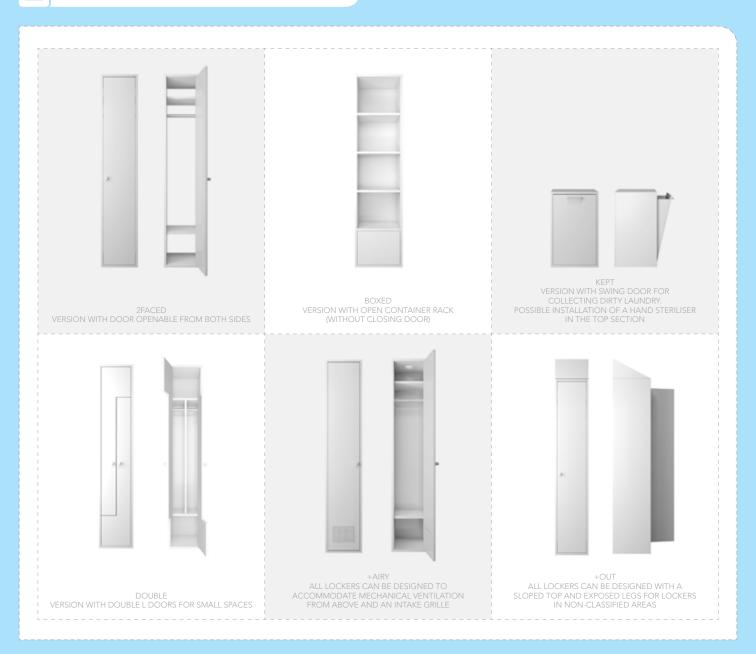


Standard size

single 300x400xh1800mm, double 600x400xh1800mm, triple 900x400xh1800mm



TYPES



;x;

Panca a scavalcare con alloggio calzature in entrambe i lati e sezione a "S". Interamente realizzata con lo stesso pannello delle parei e profili estrusi in alluminio.

Possibilità di predisposizione per aspirazione forzata.



Colour

See chart 1.1 > Partition Walls - Composition



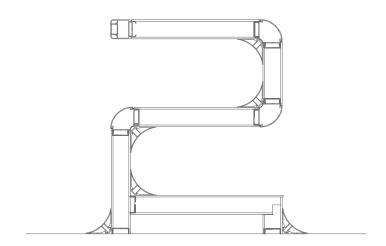
Aluminium colour

natural anodised silver (RAL 9010 on request)

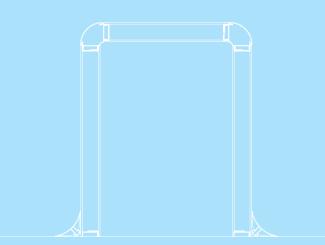


Standard size

400xH500 mm, length up to 3000 mm









EASY BENCH - U

Inverted "U" shaped free-standing step over bench to change shoes/clothes. Entirely made with the same panel of the walls and extruded aluminium profiles.



Colour

See chart 1.1 > Partition Walls - Compositior



Aluminium colour

natural anodised silver (RAL 9010 on request)



Standard size

400×H500 mm length up to 3000 mm



EASY BENCH - L

Wall-mounted or cabinet-mounted bench for changing shoes/clothes. Inverted "L" shape. Entirely made with the same panel of the walls and extruded aluminium profiles.



Colour

See chart 1.1 > Partition Walls - Composition



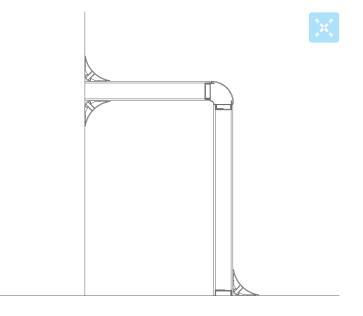
Aluminium colour

natural anodised silver (RAL 9010 on request)



Standard size

400xH500 mm, length up to 3000 mm



•• EASY STERIL



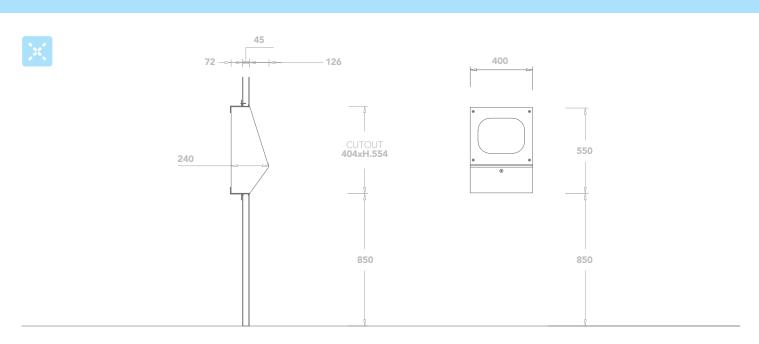
Electronic nebuliser to sanitise and sterilise hands

The appliance is built-in to the double wall providing the ideal solution for small spaces, while maintaining the linearity and design that distinguishes it. Designed specifically to sanitise hands quickly and safely, without contact with taps, towels, disinfectant containers, etc.



- Made entirely of polished finish AISI 304 stainless stee
- Automatic start with photocells
- Does not need a drain or plumbing work (stand alone system)
- Nebulises medical alcohol only
- Red LED low disinfectant liquid level indicator
- Easy maintenance from the front (with a tank capacity of 2000 ml)







[PHARMACEUTICAL * CHEMICAL * BIOTECH * ELECTRONICS]



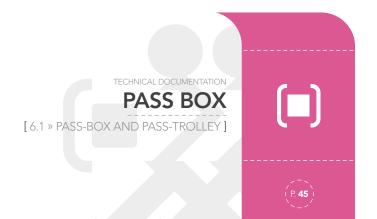


Essential elements in sterile environments in production, quality control laboratories, goods and bulk materials flow areas, in controlled environments.

The germicidal treatment provided inside the Pass Box and Pass Trolley is generated by direct irradiation (programmable) with UV-C lamps, ensuring sterility on the surfaces reached and the surrounding air, in turn, previously filtered through absolute H14 filters.

An important advantage of this physical (not chemical) disinfection procedure is that bacteria, viruses, spores, fungi, moulds and mites are all sensitive to UV-C radiation, and consequently the microbial load on treated products is eliminated.

There are several extensive solutions of optional accessories, designed to offer a solution for every possible requirement.



(III) STATIC PASS-BOX [PB]





Complete system for the passage of small objects between rooms. Fully integrated and flush-fitted on the partition wall. The door wings are made from the same profile as the anodised aluminium doors, FULLGLASS glass and 10/10 scotch-brite finish stainless steel interior.

Complete with stainless steel handles and perimeter seals.



Exterior colour



Standard size

BxHxP - 600x600x600 mm - 800x800x800 mm (or other as requested by the Customer)



- **+INTERLOCK •** Version with complete electronic interlock system and EASY LIGHTS programmable timer. (See 6.0 DOORS Accessories)
- **+AIRY** Version designed to connect to the central laminar flow system. Made with perforated stainless steel grille on the shelf and hole for the absolute filter on the too.
- **+UV** Version with 2 UV-C type germicidal lamps installed on the top.
- **+COM** Version designed to accommodate a concealed flush-fitted intercom, with protective membrane, inside the door frame. This solution allows for easy hands-free communication between operators who are on either side of the pass-box, thanks to the high performance of the device
- **+OUT** ersion for column installation in environment without Fasypharma partition walls

Ø

DYNAMIC PASS-BOX [DPB]





Complete stand-alone system for the passage and filtration of small objects. Fully integrated and flush-fitted on the partition wall. The door wings are made from the same profile as the anodised aluminium doors, FULLGLASS glass and 10/10 scotch-brite finish stainless steel interior. Complete with stainless steel handles and perimeter seals.



Included accessories

- complete electronic interlock system and EASY LIGHTS programmable timer. (see 2.2 DOORS - Accessories)
- High-efficiency HEPA FILTER H14 fluid seal, easy to remove and change from below RSC (room side change)
- Stainless steel perforated grille on the support surface, easily removed for cleaning.
- FFU RSC self-ventilating unit (room side change) AC 230V-1ph-50Hz
 - Made from aluminium.
 - 5-speed control panel (3rd nominal flow speed of 0.45 m/s)
- No.2 Dwyer Magnehelic analogues to control and manage air flow and filter status.
 - electrical wiring, connectors, flow channelling duct and accessories installed and tested during the manufacturing phases
- No. 2 UV/C type germicide lamps inserted in the top section of the pass-box



Exterior colour

See chart 1.1 Partition Walls - Composition



Standard size

BxHxP - 600x600x600 mm - 800x800x800 mm (or other as requested by the Customer)



- **+COM** Version designed to accommodate a concealed flush-fitted intercom, with protective membrane, inside the door frame. This solution allows for easy hands-free communication between operators who are on either side of the pass-box, thanks to the high performance of the device.
- **+OUT** · Version for column installation in environments without Easypharma partition walls.



STATIC PASS-TROLLEY [PT]





Complete system for the passage of materials on the ground between two or more environments. The door wings are completely integrated and flush-fitted with the partition walls and made from the same profile as the anodised aluminium doors, FULLGLASS glass and partition wall type 45 mm thick internal panelling. Floor connections with R70 coving profile. Complete with stainless steel handles, perimeter seals and air-stop on the floor.



Exterior colour

See chart 1.1 Partition Walls - Composition



Standard size

BxHxP – 1000x1500x1270 mm - 1500x1500x1270 mm (or other as requested by the Customer)



- **+AIRY** Version designed to connect to the central laminar flow system. Made with perforated stainless steel grille on one side and hole for the absolute filter on the too.
- **+UV** · Version with 2 UV-C type germicidal lamps installed on the top.
- **+COM** Version designed to accommodate a concealed flush-fitted intercom, with protective membrane, inside the door frame. This solution allows for easy hands-free communication between operators who are on either side of the pass-trolley, thanks to the high performance of the device.
- +SS · Version with internal scotch-brite finish stainless stee
- **+OUT** Version for column installation in environments without Easypharma partition walls.



DYNAMIC PASS-TROLLEY [DPT]





Complete system for the passage of materials on the ground between two or more environments. Fully integrated and flush-fitted on the partition wall. The door wings are made from the same profile as the anodised aluminium doors, FULLGLASS glass and 45 mm thick internal partition wall type panel. Floor connections with R70 coving profiles. Complete with stainless steel handles, perimeter seals and air-stop on the floor.



Included accessories

- Complete electronic interlock system and EASY LIGHTS programmable timer. (see 2.2 Doors - Accessories)
- High-efficiency HEPA FILTER H14 fluid seal, easy to remove and change from below RSC (room side change)
- Stainless steel perforated grille positioned on the side support surface, easily removed for cleaning.
- FFU RSC self-ventilating unit (room side change) AC 230V-50Hz-1ph
- Made from aluminium.
 - 5-speed control panel (3rd nominal flow speed of 0.45 m/s)
- No.2 Dwyer Magnehelic analogues to control and manage air flow and filter status.
 - electrical wiring, connectors, flow channelling duct and accessories installed and tested during the manufacturing phases
- No. 2 UV/C type germicide lamps inserted in the top section of the pass-box



Exterior colour

See chart 1.2 > Partition Walls - Composition

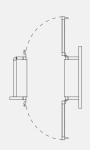


Standard size

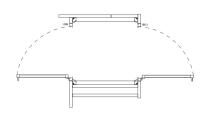
 $\rm BxHxP-1000x1500x1270~mm$ - $\rm 1500x1500x1270~mm$ (or other as requested by the Customer)



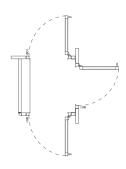
- **+COM** Version designed to accommodate a concealed flush-fitted intercom, with protective membrane, inside the door frame. This solution allows for easy hands-free communication between operators who are on either side of the pass-trolley, thanks to the high performance of the device.
- **+OUT** · Version for column installation in environments without Easypharma partition walls.



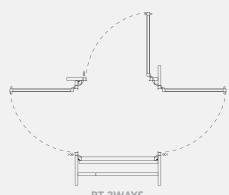
PB 2WAYSPASS-BOX VERSION WITH 2 WINGS FOR 2-WAY TRANSIT



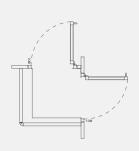
PT 2WAYSPASS-TROLLEY VERSION WITH 2 WINGS FOR 2-WAY TRANSIT



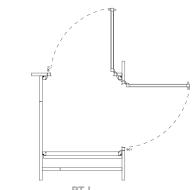
PB 3WAYSPASS-BOX VERSION WITH 3 WINGS FOR MULTIPLE WAY TRANSIT



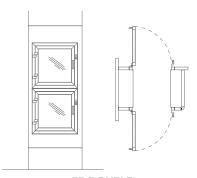
PT 3WAYSPASS-TROLLEY VERSION WITH 3 WINGS FOR MULTIPLE WAY TRANSIT



PB LPASS-BOX VERSION WITH L-SHAPED DOOR WING

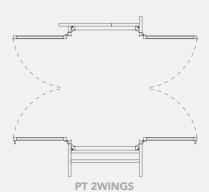


PT L
PASS-TROLLEY VERSION WITH L-SHAPED DOOR WING



PB DOUBLE

VERSIONS WITH 2 STACKED PASS-BOXES (4 WINGS) AND MULTIPLE DIRECTION INTERLOCKS (MATERIAL ENTRANCE/EXIT)



PASS-TROLLEY VERSION WITH DOUBLE WING DOOR FOR TRANSIT DIMENSIONS OF > 1000 MM



