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HIPHARMA MODULAR CLEANROOM Nicomac is leader in the pharmaceutical clean rooms, coating systems and granulators market for pharmaceutical, life science and healthcare industries. Founded in 1977 in Milan, Italy, in so many years of activity it has completed over 1.800 projects in 65 Countries around the world.

Certified quality, materials and an expert and qualified team are at the base of Nicomac's success and customer satisfaction, many of them FDA/EMA approved.













Patented systems

New devices or novelties

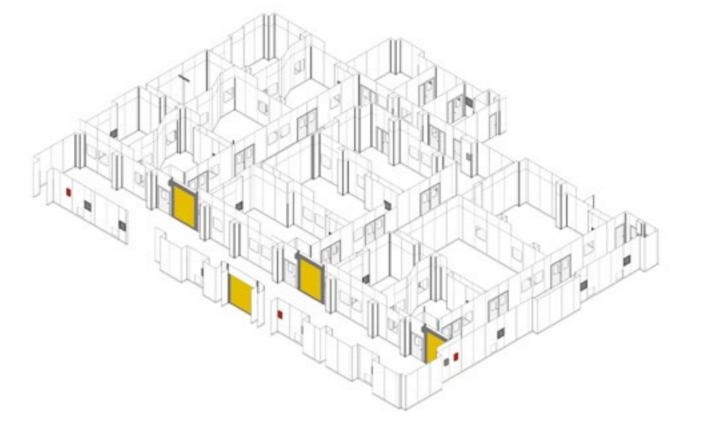
4.500m<sup>2</sup> of production site

65 Countries served 1.800+
successful projects

40+
years of experience

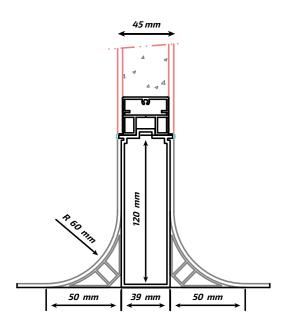
#### Federal Standard 209E Airborne Particulate Cleanliness Classes

CLASS	NUMBER OF PARTICLES PER CUBIC METER BY MICROMETER SIZE ISO 14644-1						FED STD 209E (0.5 μm)		EMA
	0.1 µm	0.2 μm	0.3 μm	0.5 µm	1 μm	5 μm	English Cu ft	Metric	
ISO 1	10	2	-	-	_	-	-	-	-
ISO 2	100	24	10	4	-	-	-	-	-
ISO 3	1.000	237	102	35	8	-	1	M 1.5	-
ISO 4	10.000	2.370	1.020	352	83	-	10	M 2.5	-
ISO 5	100.000	23.700	10.200	3.520	832	29	100	M 3.5	A / B
ISO 6	1.000.000	237.000	102.000	35.200	8.320	293	1.000	M 4.5	-
ISO 7	-	-	-	352.000	83.200	2.930	10.000	M 5.5	С
ISO 8	-	-	-	3.520.000	832.000	29.300	100.000	M 6.5	D
ISO 0				35 200 000	8 330 000	203 000			

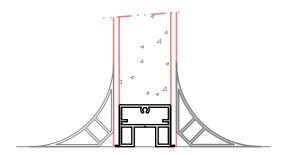


## Nicomac: your one-stop supplier for all your cleanroom needs

Building Information Modeling (BIM) is the most advanced process of creating and managing information for built asset and cleanroom in the Architecture, Engineering and Construction industry (AEC). That process allows to plan, verify and prevent any possible interference among all system at site and managing the life cycle assets (Structural, Civil, MEP).



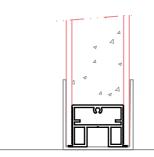
Aluminium coving profiles covered with PVC flooring for a completely smooth surface



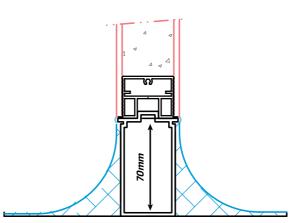
Aluminium coving profiles at sight applied after floor treatment



## Floor to wall connections



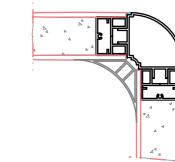
Aluminium kickplate for not classified areas

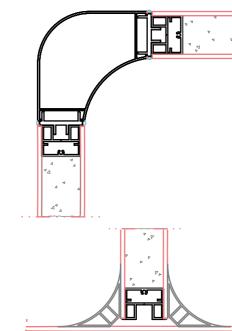


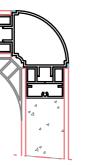
Technical solution for epoxy resin floor smooth surfaces



internal and external vertical corners

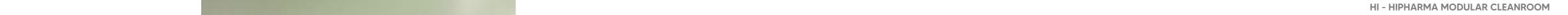






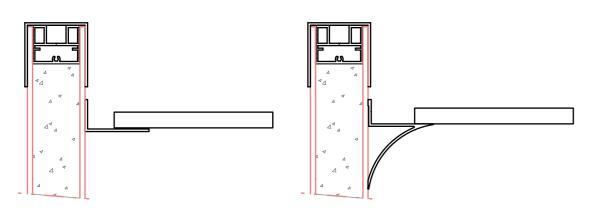








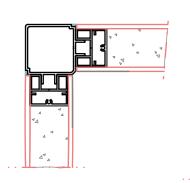
# Wall to ceiling connections

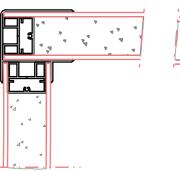


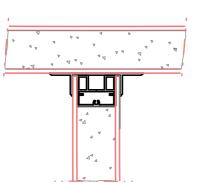


## **Wall to wall connections**

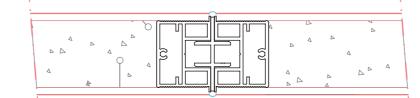
Easy solution for internal and external vertical corners









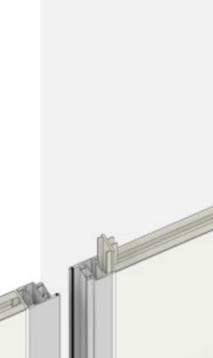


# **Wall Panels Skin**

HPL High Pressure Laminate 4 mm. thickness
GA Powder-coated galvanized steel
AL Aluminium steel sheets

**ST/ST** Stainless steel AISI 304 sheets

**UPVC** uPVC coated galvanized steel



# **Wall Panels Insulation Materials**

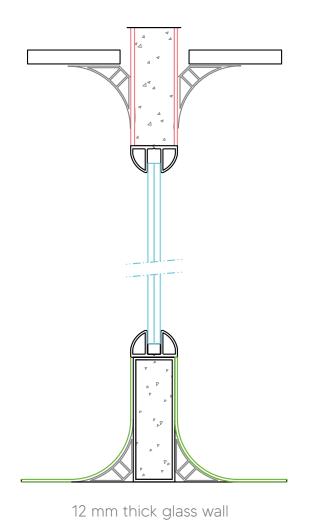
**HDP** High density polystyrene **PUR** High density polyurethane

**PIR** Polyisocyanurate

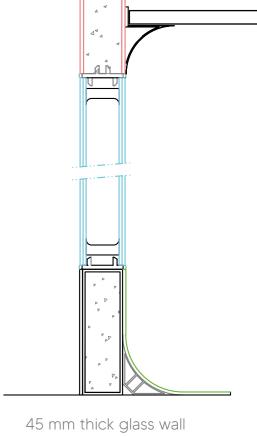
**RW** Rock wool

**HC** Honeycomb aluminium









## **Glass Walls**

Can be supplied in any size

Glass walls are adopted in the pharmaceutical industry where it is necessary to inspect the rooms without having to enter with the risk of bringing contamination.

They assure great illumination to the premises allowing operators to work in a comfortable environment, who will be much more careful towards wall where glass is used.

# Window units with dual panel safety glass



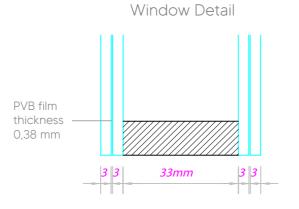
Square corners R 10 mm



Customized window









Continuous windows

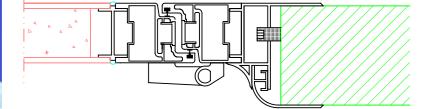






### **Cleanroom Doors**

Our doors have rounded profiles, no visible screws, double gaskets in the frame and in the leaf with automatic drop seal at floor allowing air tight system.









Doors air-tightness is a fundamental aspect for the calculation of the ventilation system in a clean room, where the only point of air loss is trough the doors. Nicomac designed door profiles using a CFD software to minimize losses.



Open close knob



Key-key open close knob



Ergonomic handle



Stainless steel sanitary handle



Stainless steel fixed handle





Anodized fixed knob

Stainless steel fixed knob



External self-closing system



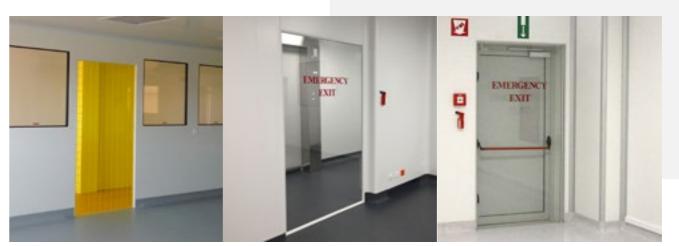
**Cleanroom door** 

accessories

Internal self-closing system

# **Emergency Exits**

Doors adjustable



Access Controls



Badge reader



Numeric key pad



Light indicator with push to open and emergency button with stainless steel plate

## **Automatic Roll-up Doors**



Air-tight roll-up door suitable for ISO Roll-up door suitable for CNC or ISO 8 7 environments (in accordance to ISO 14644 -14)

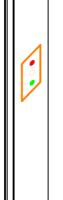


Light indicator with open microwave, touchless system and emergency button









Open push button



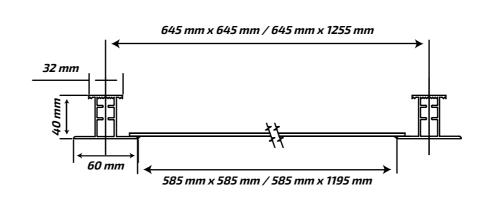
#### Technical panel for fixing roll-up doors and for electrical cables passages.

# **T-Grid Cleanroom ceiling**











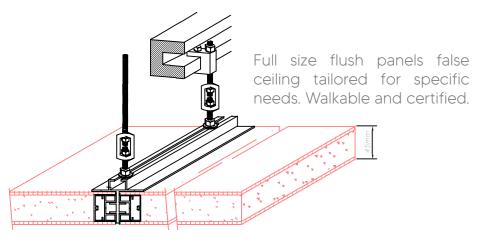


T-Grid walkable and not walkable ceiling tailored to specific needs. This modular solution offers max flexibility for HEPA filters and lights positioning. Many kind of panels are available, single sheet and sandwich type.

# **PPS Seamless Cleanroom walk on ceiling**





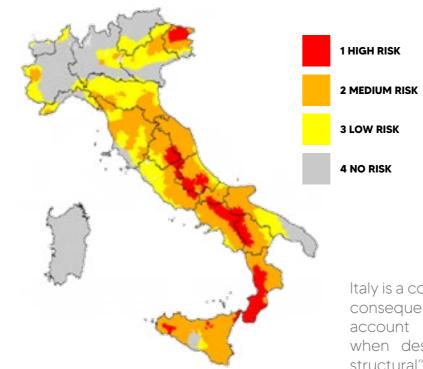


Z-Shape metal frame for HEPA filters and lights installation.



Technical area access door.

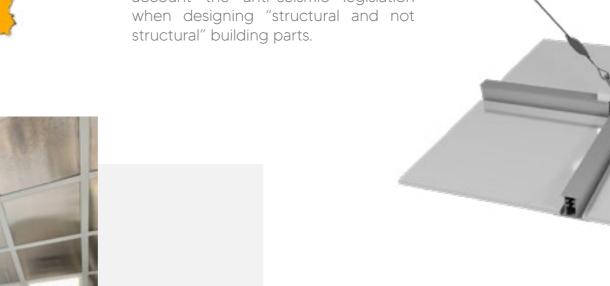






**Anti-Seismic** 

false ceiling





bending of the beam

due to exceptional overload (snow)

# **Anti-Seismic wall**



Anti-seismic metal structure for single high cleanroom wall



Stainless steel lockers



# PAL (Personal Air Lock) gowning room

Fully integrated dressing rooms accessories to customize and complete your cleanroom enviroment.







HPL Lockers



## Accessories





Stainless steel electrical sockets





Air wall system and stainless steel flush perforated air return grilles





Stainless steel or HPL control board for rooms differential pressure gauge



Fire hydrant box



LED lights embedded into false ceiling profiles



Sterile cleanrooms LED lights. Removable screen by ST.ST screws placed into the cleanroom side. Available also for:

- Zone 2-22 ATEX 3 GD
- Zone 1-21 ATEX 2 GD



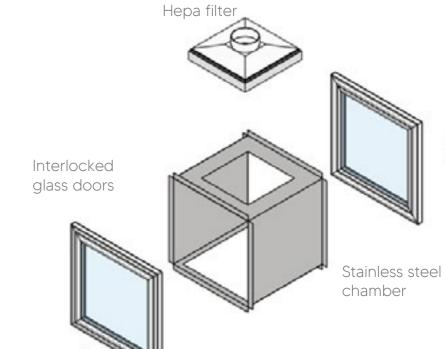




- **B** Passive and dynamic pass-box to be connected to HVAC system
- **C** Stand-alone dynamic pass-box that includes filter and air fan

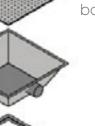




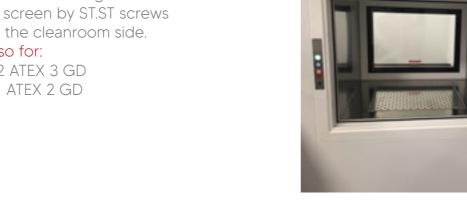




Stainless steel lower hopper with flange for air return duct connection









and ceiling

Stainless steel walls, doors



Integrated stainless steel sink



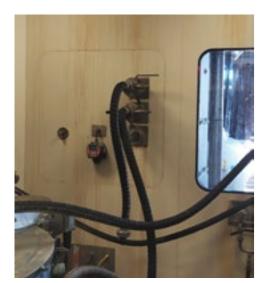
RABS (Restricted Access Barrier System) with Nicomac walls and pass box



# **Special film for cleanroom refitting**

An efficient solution for renew the surface of walls, furnitures and structures.

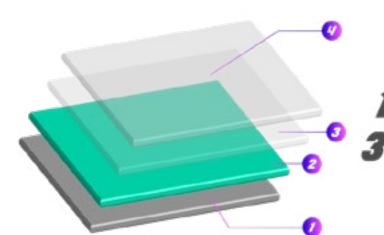
#### Very aggressive chemical environment



Before application

24





PRESSURE SENSITIVE ACRYLIC ADHESIVE IN THE CHOSEN LOGO, COLOR OR IMAGE

ADHESION LAYER
BETWEEN BASE AND LAMINATION

ADMINISTRANSPARENT PROTECTIVE LAMINATION LAYER



Before application



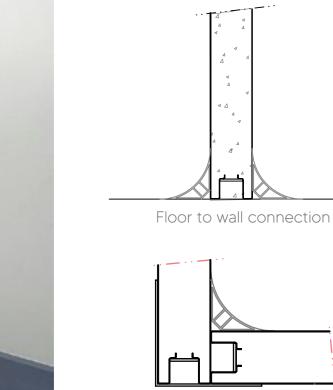
After application

# **Easy Panel**

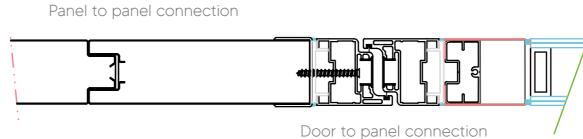
A convenient solution for every need







Wall to wall connection



Door to panel connection / HI - HIPHARMA MODULAR CLEANROOM

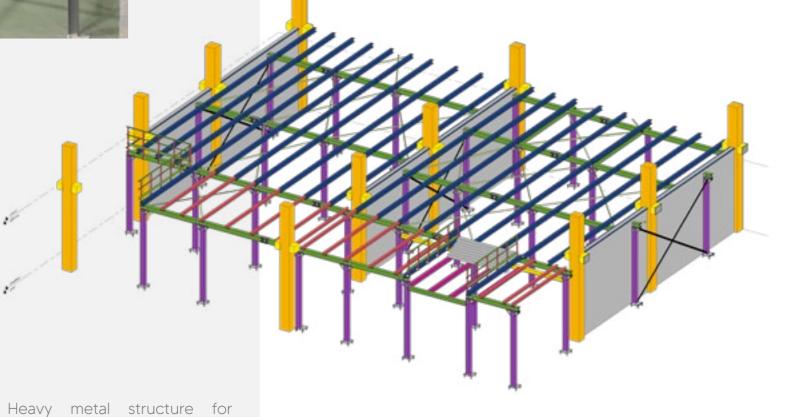


Light metal structure to support air ducts and false ceilings only (100/150 kg/sqm)

the creation of a technical

compartment.

# **Metal support structure to** complete your cleanroom system



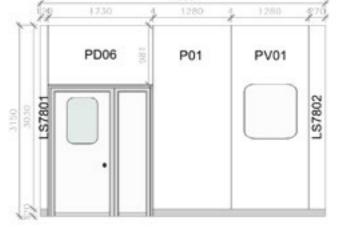
## **Project Design**

Rooms layout

Drawings are normally based on-site survey carried-out by Nicomac technicians. Nicomac Europe will arrange the following drawings: rooms layout, walls front view, false ceiling layout in three different issues (for customer comments and approval, for construction and as built).



1280 4 1280 970 PV01



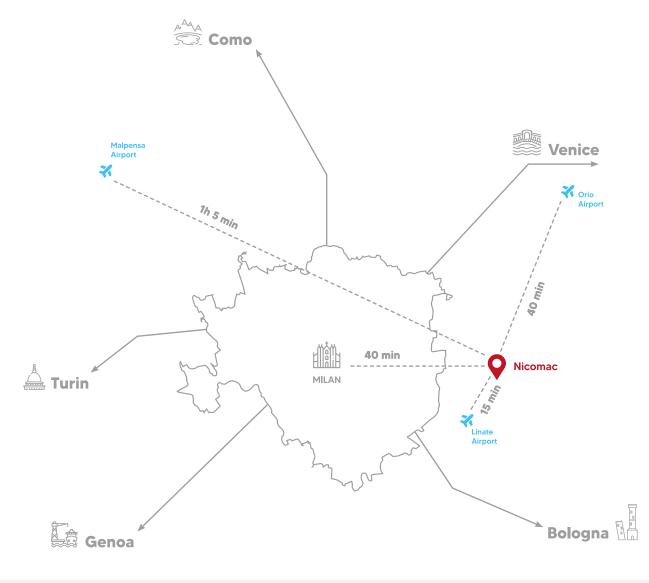
Walls front view

False ceiling layout

The installation teams are certified by Nicomac through continuous checks on competence, efficiency, professionalism, safety and refresher, training courses. During the design, construction and installation, our experts and our ISO 9001 certified quality system since 1997 ensure the correct execution.











**GET IN TOUCH**