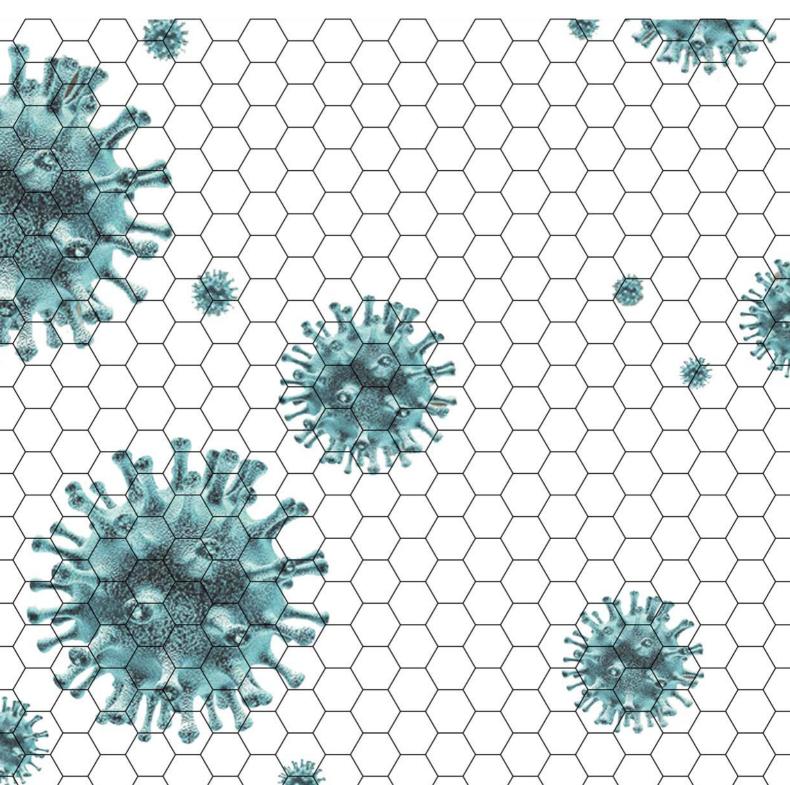


# LA NEGATIVE PRESSURE FLEXWALLS BIOROOM





## **ISOLA**

#### Introduction:

The new Mitec solution, ISOLA, is a further evolution of confinement structures for controlled contamination systems Flexwall Cleanroom in kit, aimed at bio-containment for Research, Hospital and Pharma fields.

This makes installation possible even without any particular tools nor specialized personnel, also in rooms which are not particularly accessible to traditional structures. The proposed system allows for disassembly, reassembly, expansion, reconfiguration and enhancement of air treatment, further enhancing the modularity and flexibility features that are typical of the MITEC production. ISOLA is based on assembling equal portions that can be joined together until the desired dimensions are reached.

The biological containment is obtained with the study of an optimized layout: an entrance pre-chamber AIRLOCK, accessories for infectious material outlet or for wall interfacing of equipment and process plant, a confinement structure with very small losses, a double barrier (air inlet and outlet) with HEPA filters, a double stage of HEPA filters in outlet for safety redundancy, a high performance industrial self-ventilating extraction module for continuous use.

The modularity of the ISOLA system allows the creation of multiple modules for 2 or more workstations, up to the creation of real departments.

#### The constituent parts of the ISOLA are:

- supporting structure in modules realized with technological profiles that are joined together with hidde bolting, colour RAL9010;
- transparent flexible wall module in conductive / dissipative plastic material; cleanable with the sterilizin products normally used
- ceiling module with flexible wall module in conductive / dissipative plastic material; cleanable with th sterilizing products normally used
- door module, consisting of an anodised aluminum frame with coupled safety glass or all-clear transparen methacrylate designed to fit the wall module. It can be equipped accessories for interlock; door dimensions 1225x2200 mm
- MTF 4824 K module, same size as the ceiling module, in the necessary number to guarantee the air intak the required class of contamination; filtration class: H14
- Filtering outlet flow module MRF SPECIALE K, predisposed for flexible connection to the extraction unit OM PF 4 H13; filtration efficiency: H 13
- self-ventilating module OMK PF 4 H13, stand alone extraction unit on trolley, necessary for the depressio control in the room;
- prewired electrical systems with rapid plugs including the electrical control panel and control throug the MODBUS protocol. All the functional parameters which are typical of the Bioroom, such as flow rate, pressure and filter wear can be monitored and controlled locally or remotely.



#### **Technical data:**

• Inlet filtration efficiency: H1

• Outlet filtration efficiency: H14 + H1

• Treated air flow: 800 mc/h +/-20

• Volume exchanges per hour: 45 +/-20

• Contamination class according to ISO 14644: ISO

• Differential pressure-External: -20Pa +/-20

• Checks: differential pressure, wear of filter

• Installed power: 0,6 k

• Power supply: 230V 1F 50Hz (CEE interlocked plug

Noise: <58 dB (A</li>Certification: C

• Documentation: user, service and installation manua





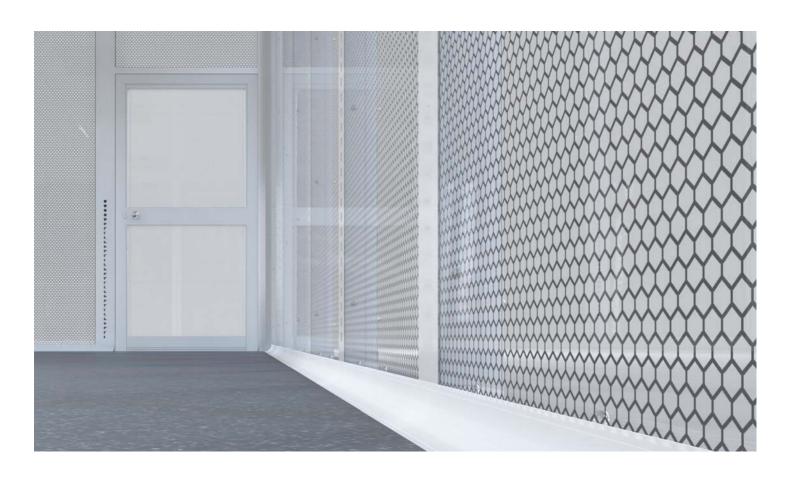


#### **Conclusions:**

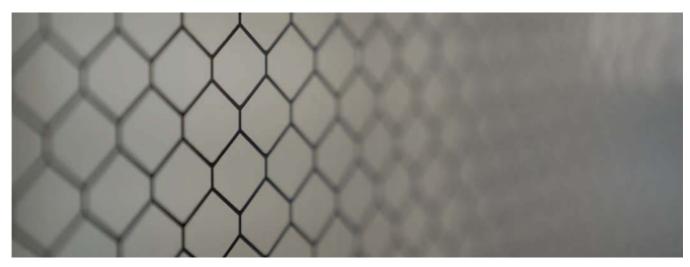
Itoffersaremarkableoverallaestheticeffect, given the technological design, with an enviable brightness that reduces the isolation factor of the operators. It guarantees finishes and performances for the most demanding sectors. ISOLA can be an effective and a very convenient solution to satisfy the request of contamination controlled systems for activities that don't traditionally use them because they can be implemented very quickly with costs which are less demanding and give you maximum system flexibility.

#### **ACCESSORIES:**

- decking floor covering with single sheet, self-laying PVC;
- -interlock for 2 doors (4 lights + n.2 electro-locks +n.1 control unit + wiring)
- -lightning to guarantee 500 lux average
- air conditioning system to guarantee 24°C +/-2°C Ur <60% with external conditions -5°C<T<35°C and Ur 50%;
- portable sterilizing system ad aria with compressed air, for the production of mists of peracetic acid
- MDA 3000 air shower for personnel
- laminar fluxed passbox with UV irradiation and door interlock
- pass-through steam sterilizer, interfaced to the wall of the entrance room



### Scheda Prodotto - Product Data Sheet



#### PRODOTTO / PRODUCT

Foglio morbido di PVC dissipativo statico (GRIGLIA) con NUCLEO IN PLASTICA. Static Dissipative PVC soft sheet (GRID) with PLASTIC CORE.

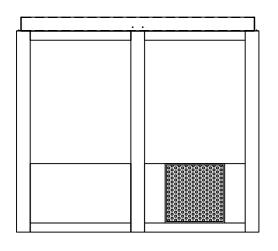
#### **DESCRIZIONE / DESCRIPTION**

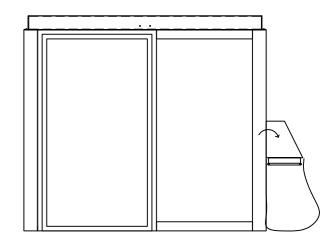
Le applicazioni sono partizioni per camere bianche e tende, finestre portatili, materiali di rivestimento per pannelli IC e altri per applicazioni antistatiche.

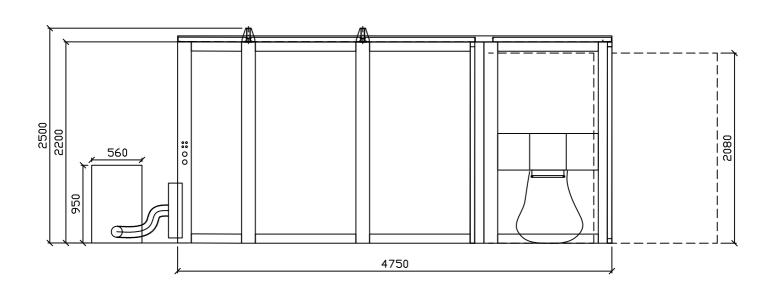
The applications are partition for cleanroom and curtains, portable window, covering materials for IC panels and others for anti-static application.

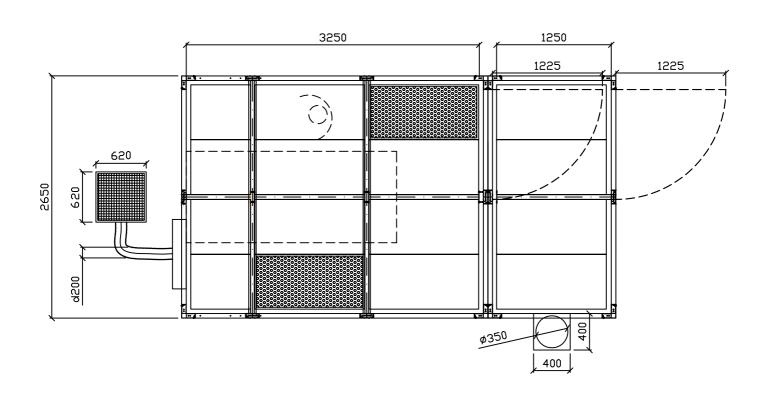
#### PROPRIETÀ / PROPERTIES

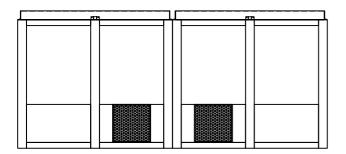
Caratteristiche / Content		Specifiche / Specification		Metodo di Prova / Test Method
Resistenza della Superficie Surface Resistance		Griglia <i>Grid</i>	Trasparente Transparent	ANSI/ESD S4.1
		<= 1 X 10 <sup>6</sup> ohms	<= 1 X 10 <sup>11</sup> ohms	
Tensione Elettrostatica Electrostatic Voltage		< 50 V	< 100 V	Misuratore di campo elettrostatico Electrostatic Field Meter
Decadimento Elettrostatico Electrostatic Decay		< 0.5 sec		MIL-B-81705C, 5000V to 500V
Forza di tensione Tensile Strenght		MD (↔) 1.8 kg/mm <sup>2</sup>		ASTM D-882
		TD ( <u>†</u> ) 1.8 kg/mm²		
100% Modulabile 100% Modulus		MD (↔) 1.1 kg/mm <sup>2</sup>		ASTM D-882
		TD ( <u>†</u> ) 1.8 kg/mm²		
Allungamento Elongation		MD (↔) 170%		ASTM D-882
		TD ( <u>↑</u> ) 210%		
Restringimento al calore Heat Shrinkage		A temperatura ambiente : < 1% At room temperature : < 1%		l Nostri Test di Laboratorio Our Lab Testing
		60 C x 30min in H2O : < 5%		
Misure / Size	Spessore / Thickness	0.3 mm, 0.5 mm, 1 mm		l Nostri Test di Laboratorio Our Lab Testing
	Larghezza / Width	1370 mm		
	Lunghezza / Length	30M per r	rotolo / roll	

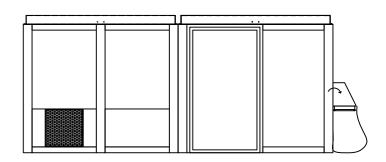


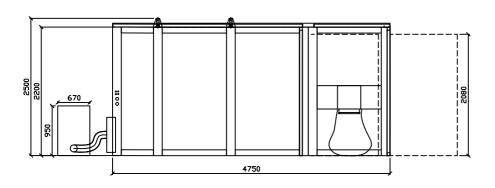


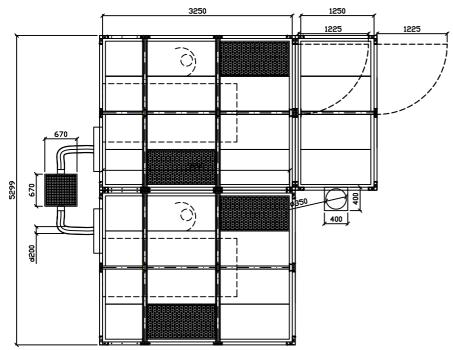






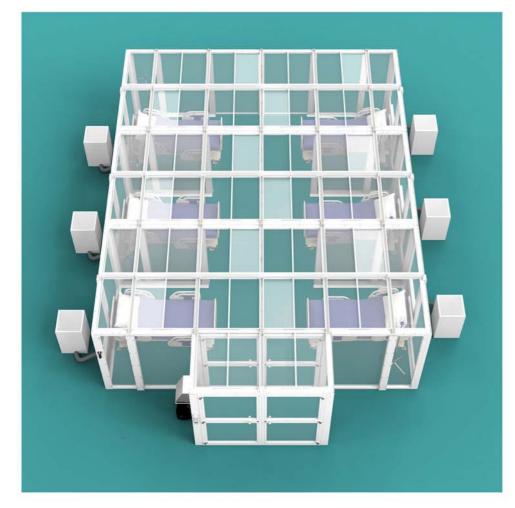






ISOLA 2





## ISOLA 6 example of system multi modul

