

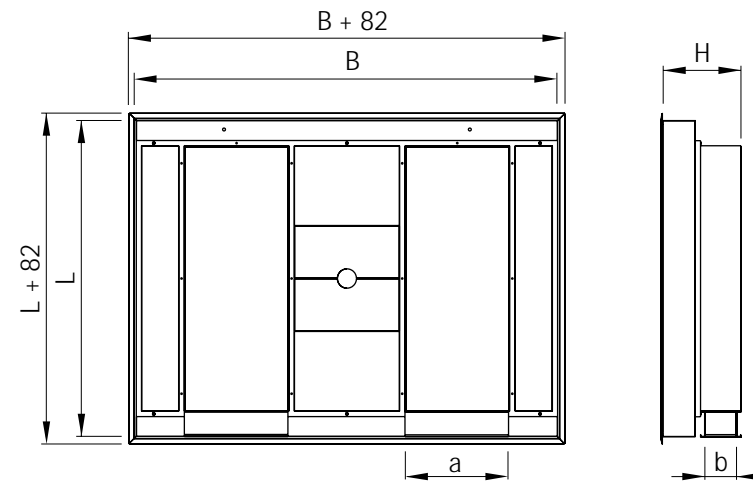
Product catalog

SIP

Ceiling filtration unit

Air filtration

Version 1.0.0
Date: 15.04.2024.



- [Dimensions](#)
- [Ordering key](#)
- [Installation](#)

SIP

SIP ceiling system uses absolute HEPA filters, with 99.995% MPPS and H14 efficiency, in accordance with UNI standard EN 1822. Each individual filter is produced using mini-pleat technology, with an aluminium frame, aluminium protection grid painted on both sides and semi-rounded continuous polyurethane fully airtight seal.

Each individual filter is efficiency tested by scanning with an optical particle counter (OPC), in accordance with EN 1822-4. Each filter comes with a factory test certificate, as required by this standard.

They are tested and packaged in an ISO 5 class cleanroom.



AIR FILTRATION

DIMENSIONS

Type	Casing dimension B x L x H (mm)	Duct connection a x b (mm)	HEPA filter dimension H14 (mm)	Air flow velocity (m/s)	Air flow (m ³ /h)
SIP 1818	1800x1800x450	540 x 180 (2 pcs.)	610 x 1525 x 68 (2 pcs.)	0.15	1740
				0.20	2320
				0.25	2900
				0.30	3480
SIP 2014	2000x1400x450	540 x 180 (2 pcs.)	610 x 1220 x 68 (2 pcs.)	0.15	1500
				0.20	2000
				0.25	2500
				0.30	3000
SIP 2414	2400x1400x450	690x180 (2 pcs.)	762 x 1220 x 68 (2 pcs.)	0.15	1800
				0.20	2400
				0.25	3000
				0.30	3600
SIP 2418	2400x1800x450	690x180 (2 pcs.)	762 x 1525 x 68 (2 pcs.)	0.15	2300
				0.20	3000
				0.25	3800
				0.30	4600
SIP 2720	2700x2000x450	690 x 180 (2 pcs.)	762 x 1830 x 68 (2 pcs.)	0.15	2900
				0.20	3880
				0.25	4860
				0.30	5800
SIP 2424	2400x2400x450	690 x 180 (2 pcs.)	762 x1830 x 68 (2 pcs.)	0.15	3100
				0.20	4100
				0.25	5100
				0.30	6200
SIP 2727	2700x2700x450	845x180 (4 pcs.)	915 x 1220 x 68 (4 pcs.)	0.15	3930
				0.20	5250
				0.25	6560
				0.30	7870
SIP 3030	3000x3000x450	845x180 (4 pcs.)	1220 x 915 x 68 (4 pcs.)	0.15	4860
				0.20	6480
				0.25	8100
				0.30	9720

ADVANTAGES

- Easy to handle at the work site and install owing to its light and modular structure.
- Diffusers made of perforated stainless steel AISI 304 SB, easy to remove to replace filters.
- Every system is supplied with a sampling port for measuring the pressure drop for measuring the pollutant concentration upstream of the single filter.

MATERIAL AND FINISH

- Mounting structure in stainless steel.
- Aluminum HEPA filter housings.
- Perforated plate diffusers in stainless steel AISI 304 SB

APPLICATION

- Conventional operating rooms in class ISO 7 or ISO 8, according to the ISO 14644 standard.
- Preparation rooms.
- Pharmacy aseptic suites.

VERSIONS

- AISI 304 stainless steel perforated plate diffusers.
- LV model membrane diffusers.
- UPON REQUEST Setting for surgical light.



- ▼ [Dimensions](#)
- ▼ [Ordering key](#)
- ▼ [Installation](#)



AIR FILTRATION

ORDERING KEY FOR SIP

(1) Ceiling filter unit (2) Dimension (3) Material (4) Diffuser plate (5) Ambient light (6) Tripod hole

SIP - 2414 - 304 - PEF - AMB - 110

- (1) Ceiling filter unit: **SIP**
- (2) Dimensions:
1818
2014
2414
2418
2720
2424
2727
3030
- (3) Material:
Stainless steel **304**
Stainless steel **316L**
- (4) Diffuser plate:
PC304 - Perforated ceiling AISI304
PC316L- Perforated ceiling AISI304
PEF - Polyethylene fibre ceiling
- (5) Ambient light: **AMB**
- (6) Tripod hole : **110**
*Optional

ORDERING KEY FOR FILTER

(1) HEPA filter type (2) Dimensions

LF14 - 610 x 305 x 69

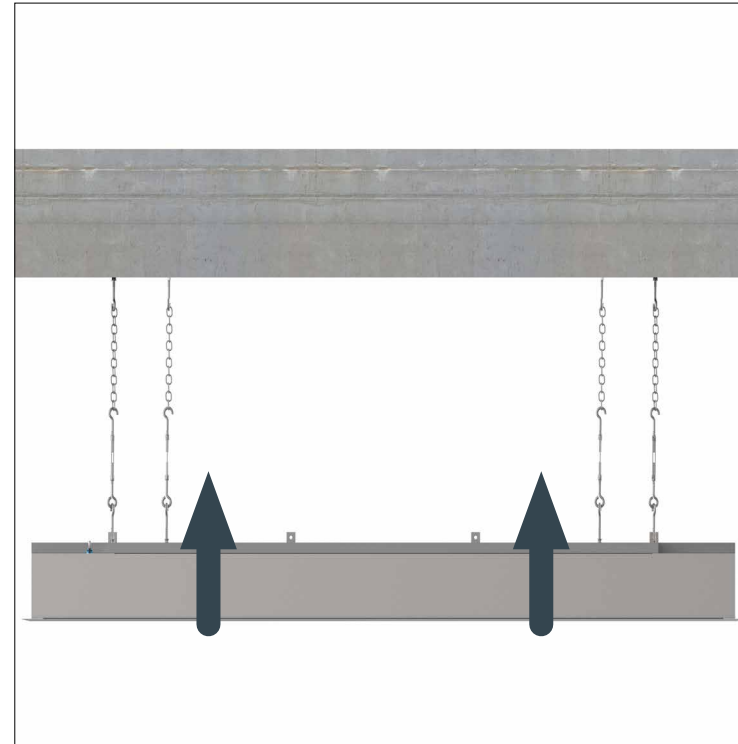
- (1) Hepa filter type: **H14**
- (2) Filter dimensions:
610 x 1525 x 68
610 x 1220 x 68
762 x 1220 x 68
762 x 1525 x 68
762 x 1830 x 68
915 x 1220 x 68

Installation instructions

NOTE: Lighting support has to be installed prior the operating ceiling!

Installation

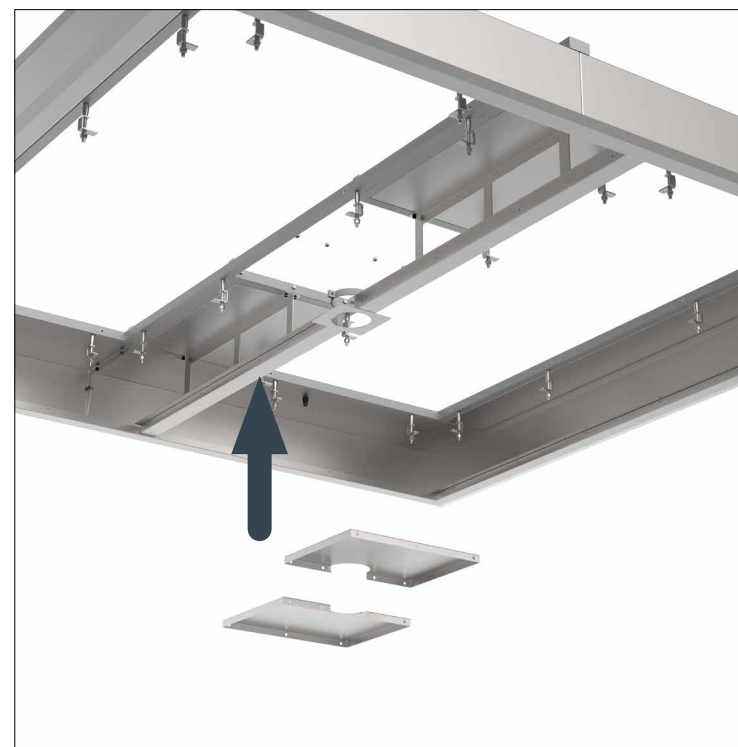
1. Drill the holes in concrete ceiling to mount M8 anchors and install suspension hooks. Install hooks into prepared holes on the operating ceiling construction. Connect both hooks from device and ceiling with chain. Lift the SIP up and align it with suspended ceiling



2. Procedure of covering a Lamp column hole

After successful installation of operation ceiling, central opening for lamp support construction has to be closed. Use prepared cover plates and tighten them with M6 screws. Make sure that all gaps are sealed with antibacterial silicone seal.

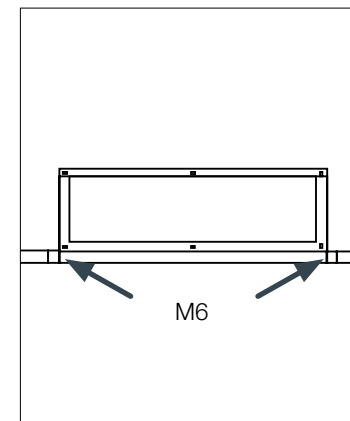
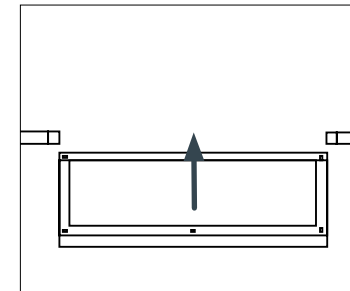
NOTE: Prior the installation, supply air ducts has to be disabled and blown out. Air-tight dampers, if there are any, has to be closed also. As a final step of installation, each surface of operation ceiling must be wiped.



- ▼ Riveted plenum boxes
- ▼ Welded plenum boxes
- ▼ Filters
- ▼ Diffusers
- ▼ Ordering key
- ▼ Installation
- ▼ Diagrams

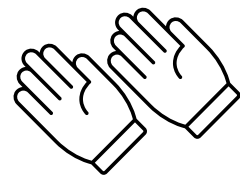
3. Module installation

Lift the filter module up and secure it with M6 screws to SIP housing.

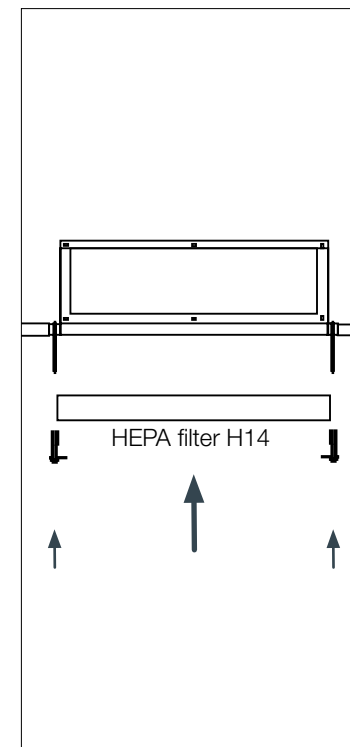


4. Filter installation

Carefully align HEPA filter between filter fasteners placed on the filter frame perimeter. While holding the filter, be careful not to touch media of HEPA filter because just slight force can easily damage it – hold it by aluminum frame. When the filter is aligned, use filter fasteners to tighten it.



Use gloves during installations to avoid contamination of the filters.

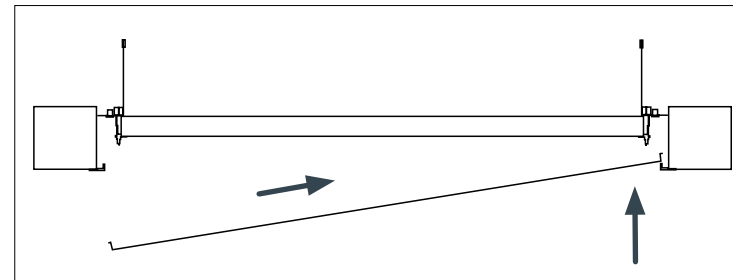


- ▼ Riveted plenum boxes
- ▼ Welded plenum boxes
- ▼ Filters
- ▼ Diffusers
- ▼ Ordering key
- ▼ Installation
- ▼ Diagrams

INSTALLATION

5. Perforated plate installation

Installation is performed by lifting one side of perforated ceiling plate and inserting it inside the housing. The other side should be inserted afterwards and whole plate should sit smoothly onto housing frame. In the end, wipe the operation room ceiling surface.



- ▼ Riveted plenum boxes
- ▼ Welded plenum boxes
- ▼ Filters
- ▼ Diffusers
- ▼ Ordering key
- ▼ Installation
- ▼ Diagrams



AIR DISTRIBUTION

Projektiranje, proizvodnja i održavanje opreme za klimatizaciju, ventilaciju i čiste prostore.
Design, production and service of Ventilation, Air-Conditioning and Cleanroom equipment.

-  Gradna 78A, 10430 Samobor, Croatia
-  +385 (0)1 33 62 513
-  info@klimaoprema.com
-  www.klimaoprema.com