

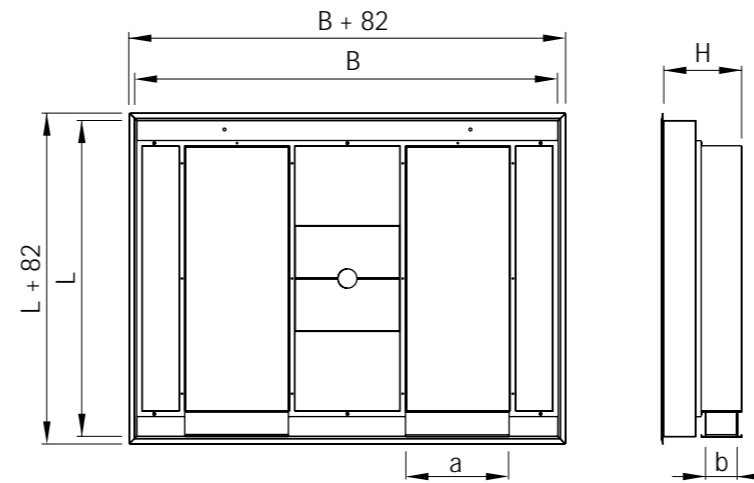
Product catalog

SIP

Ceiling filtration unit

Air filtration

Version 1.0.0
Date: 20.01.2025.



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SIP

SIP ceiling system uses absolute HEPA filters, with 99,95-99.995% MPPS and H13 or 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. Operation ceiling is intended for supply of filtrated air into operating rooms. Optimal aseptic conditions are being achieved due to laminar air flow which is gradually directed toward exhaust openings.

CEILING FILTRATION UNIT

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, easy to remove to replace filters.
- Every system is supplied with a sampling port for measuring the pressure drop or for measuring the pollutant concentration upstream of the single filter.
- Easy to clean and disinfect.

MATERIAL AND FINISH

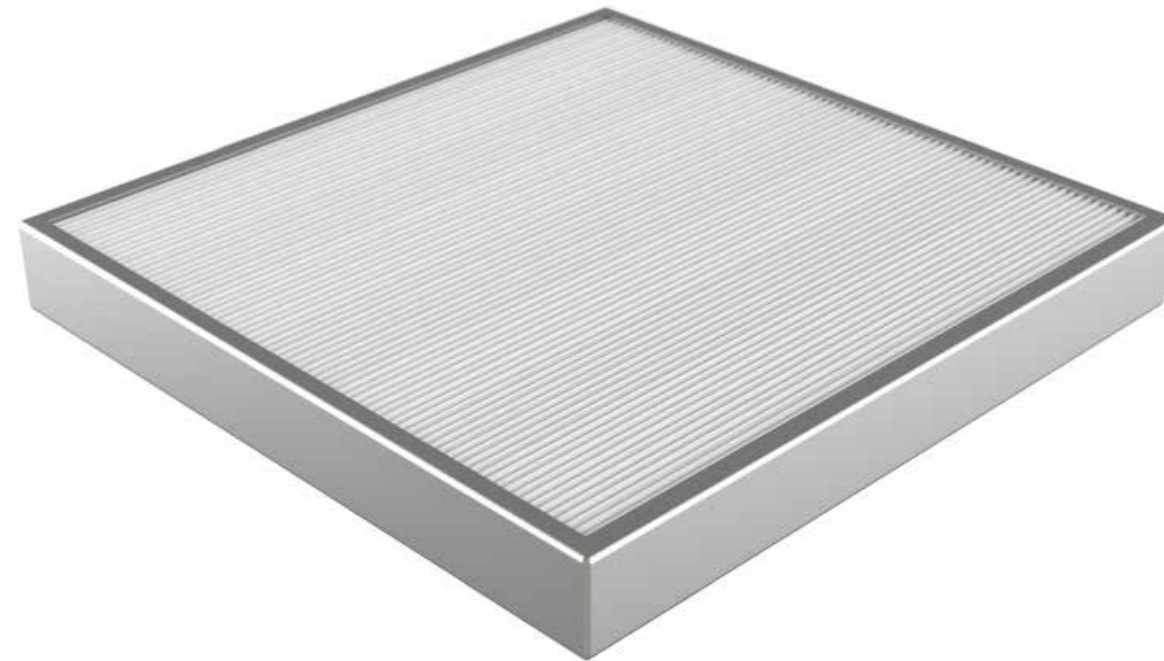
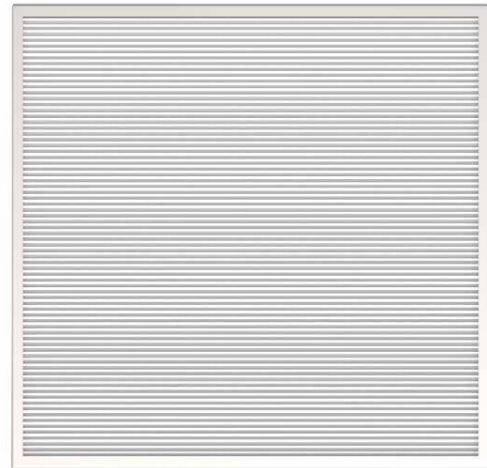
- Mounting structure in stainless steel.
- Aluminum HEPA filter housings.

APPLICATION

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

VERSIONS

- Mounting structure and diffusers made from stainless steel AISI 316L.
- Textile diffusers (instead of perforated steel) made of polyethylene canvas.
- LED ambient light.
- UPON REQUEST Setting for surgical light.



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Filters

They can be of type LF13 or LF14 of the Klimaoprema range. Note that all the filters in our range are filters of standardized sizes with the aim of simplifying maintenance replacement operations and in order not to lock users into a single manufacturer.

Filters must be ordered separately!

FILTERS

AIR FILTRATION

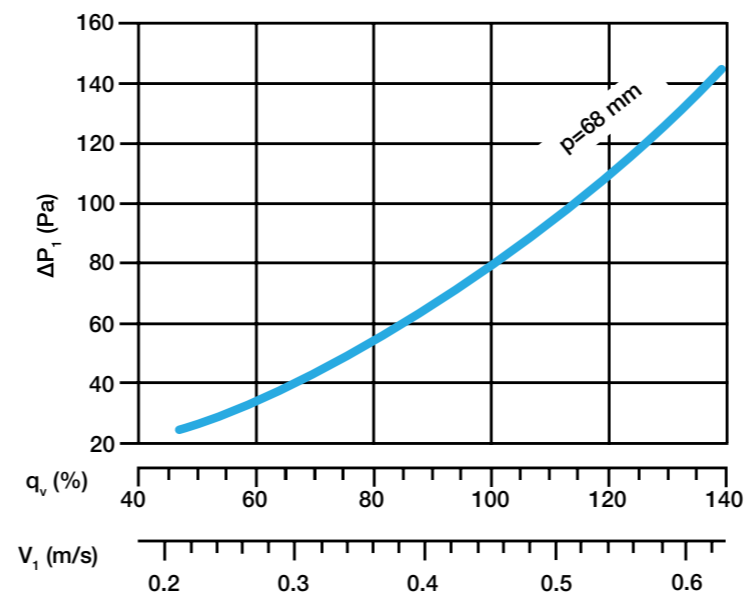
LF13 and LF14, thickness 68 mm

They consist of a frame in anodized aluminum profile 68 mm thick receiving the filter media (micro-fiber glass paper in mini-ply). A white lacquered metal grid protects the media on both sides during handling. The filters have been tested in accordance with EN 1822 and are effective, as desired:

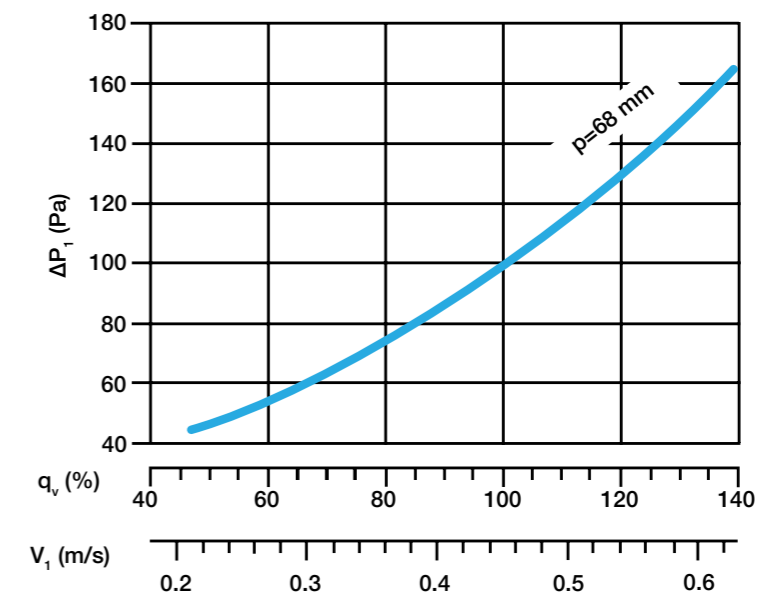
- H13 (≥ 99.95% MPPS)
- H14 (≥ 99.995% MPPS)

Each filter, delivered in individual plastic packaging, in a rigid cardboard box, is supplied with its individual test certificate according to EN 1822 (MPPS 100% scanning) which must be given to the future user. A polyurethane gasket (continuously cast on the aluminum frame) ensures tightness during the mechanical tightening of the filter on the underside of the self-supporting frame.

H13- initial pressure drop



H14- initial pressure drop





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ORDERING KEY

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 1525 x 68

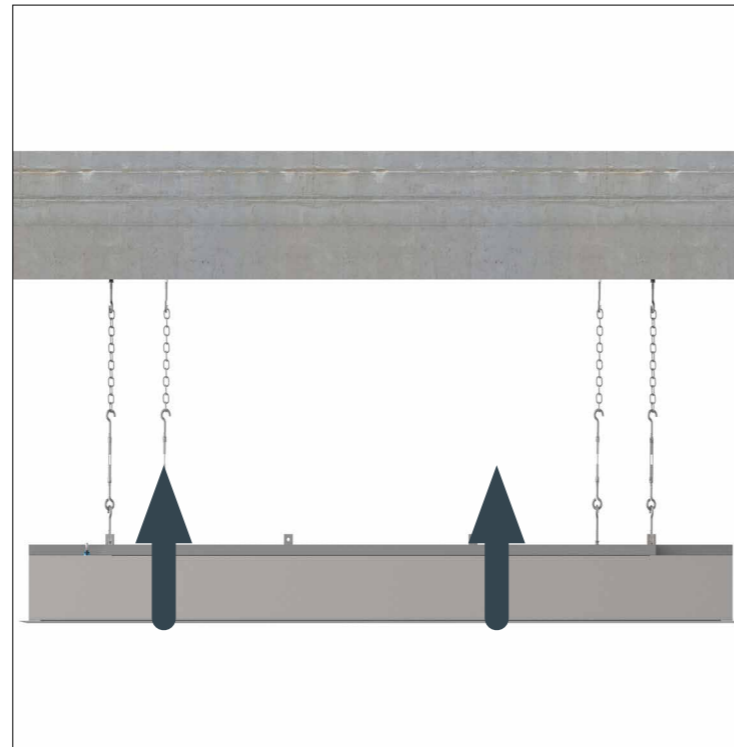
- (1) Hepa filter type: **LF13, LF14**
- (2) Filter dimensions:
610 x 1525 x 68
610 x 1220 x 68
762 x 1220 x 68
762 x 1525 x 68
762 x 1830 x 68
915 x 1220 x 68

Installation instructions

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

Installation

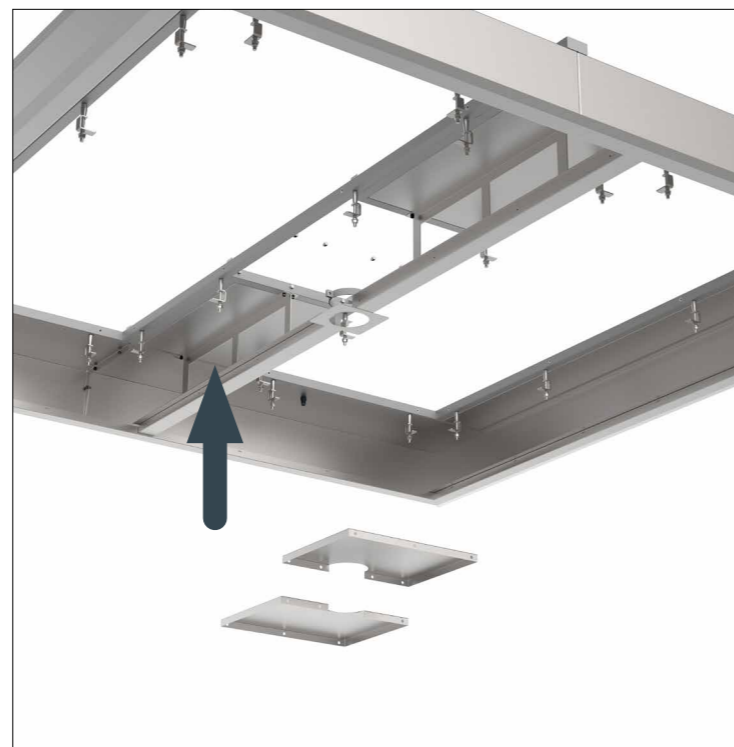
1. Drill the holes in concrete ceiling to mount M8 anchors and install suspension hooks. Install hooks into prepared holes on the operating ceiling construction. Connect both hooks from device and ceiling with chain. Lift the SIP up and align it with suspended ceiling.



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.

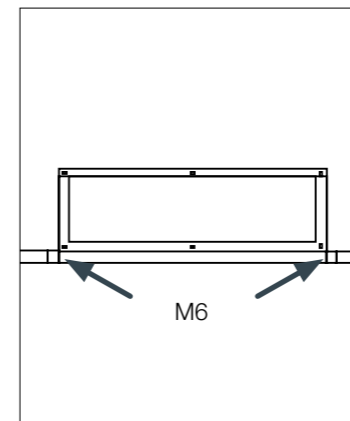
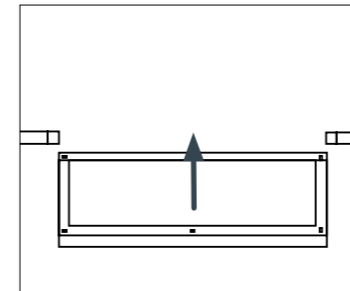


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INSTALLATION

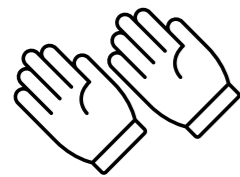
3. Module installation

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

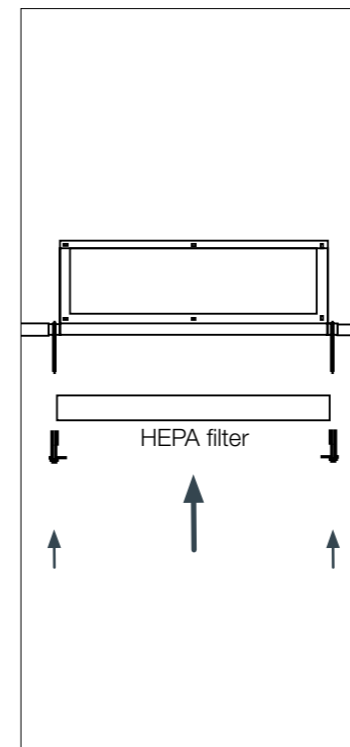


4. Filter installation

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.

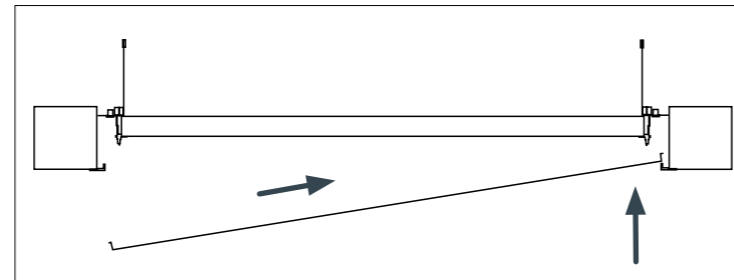


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INSTALLATION

5. Perforated plate installation

Installation is performed by lifting perforated ceiling plate and inserting it inside the housing. The centerpiece is an option and should be connected to the light mount. The other side should be inserted afterwards and whole plate should sit smoothly onto the housing frame. In the end, wipe the operation room ceiling surface.



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INSTALLATION



AIR FILTRATION

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

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