CANWALL

Wall-mounted safety filter system

SagiCofim

Features

CANWALL safety systems are designed to filter exhaust air from environments containing toxic or harmful contaminants.

They consist of a Canister safety system equipped with a **SCAN-TEST socket, pressure sockets and a barrier bag**, an air intake grille within the environment and a stainless-steel wall with a safety system to avoid accidental falls. Fittings and supports complete the supply.

APPLICATION

CANWALL systems are mainly used in industrial, laboratory and process applications and are installed directly in the hazardous environment.

The purpose of these systems is to allow contaminated filters to be replaced with maximum safety for maintenance personnel and the surrounding environment.
In the **Bag-In/Bag-Out** procedure spent filters are sealed inside the barrier bag and then sent for disposal, never coming into contact with any operator.

MATERIAL AND FINISH

The standard version of CANWALL systems includes:

- **CANISTER**, decontaminable epoxy powder-coated steel fittings and supports
- AISI 304 stainless steel **SCAN-TEST sockets** for checking filter integrity
- upstream/downstream **pressure sockets**
- **safety bag** with ring and incorporated glove
- **wall and grille** of AISI 304 satin scotch brite stainless steel

OPTIONS

- All components of AISI 304 or AISI 316 L stainless steel
- ATEX II 2 GD T6 version:
  - RAL 7021 painted, with stainless steel grille and wall
  - all made of stainless steel
- Mirror-polished wall finish

ACCESSORIES

- Air tight Class 4 C damper complying with standard EN 1751
- CANWELD heatsealing sealer

ADVANTAGES

- **Direct wall mounting prevents ducts from being contaminated by dust or harmful toxic materials present in the environment.**
- **All maintenance work by specialist operators can be carried out directly within the environment.**

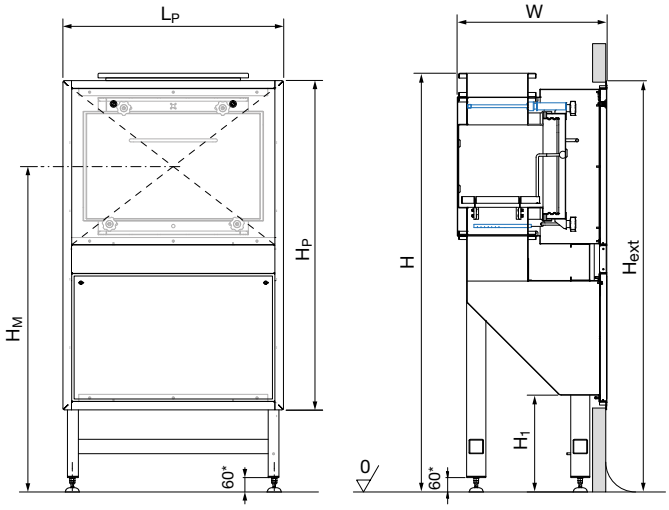
TESTING AND PROCESS TESTS

- System air tightness
  ISO 10648-2 (Class 2)
  ANSI ASME 509 (± 5 kPa)
- Filters
  ISO 16890:2016
  EN 1822-1:2019
  ISO 29463:2017
- Filter replacement procedure suitable for OEB band 5 filters
  In accordance with SMEPAC guidelines

IN SITU TESTING

- Fitted filter leak test
  ISO 14644-3

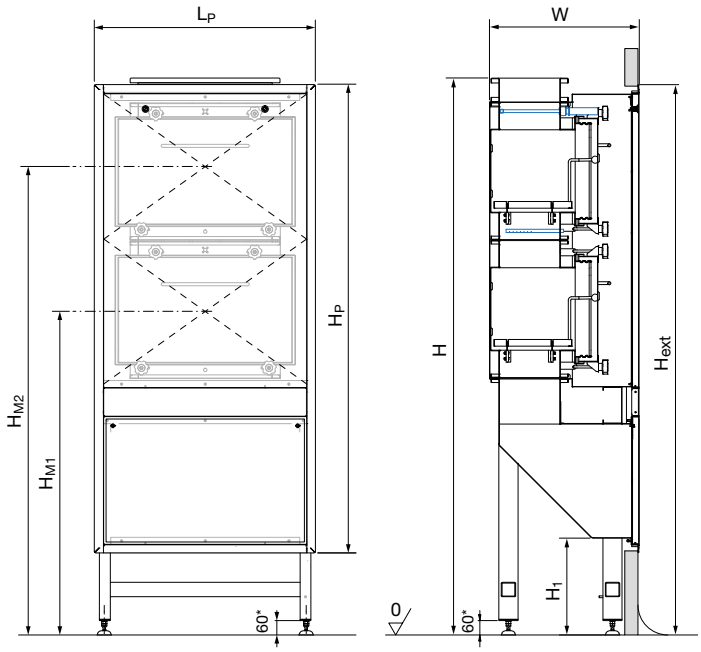
Technical data



SINGLE STAGE CANWALL

Code	Dimensions [mm]						
	L_p	H_p	H_{ext}	W	H	H_1	H_M
31	620	1369	1712	625	1748	405	1358
5-52	920	1375	1717	625	1750	405	1362
5	920	1700	2044	929	2075	405	1685

* adjustable ± 20 mm

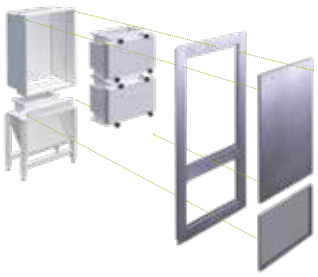


DOUBLE STAGE CANWALL

Code	Dimensions [mm]							
	L_p	H_p	H_{ext}	W	H	H_1	H_{M1}	H_{M2}
31 / 31	620	1943	2289	625	2321	405	1358	1933
5-52 / 5-52	920	1956	2299	625	2327	405	1362	1937
5 / 5	920	2276	2620	929	2652	405	1687	2262

* adjustable ± 20 mm

CONFIGURATIONS



STANDARD configuration

Direct maintenance within the environment.

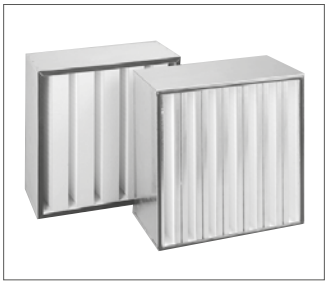
CUSTOM configuration

A different canister assembly orientation with access for maintenance out of the clean environment is available on request.

For configurations other than those shown, please contact our Technical Department.

System-compatible filters

HEPA DELTA SERIES / HIGH EFFICIENCY SIGMA SERIES



NB / NA / NH

NB-P / NA-P / NH-P

	NB NB-P	NA NA-P
MPPS efficiency	**99,95 %**	**99,995 %**
Class EN 1822-1:2019	**H13**	**H14**
Recommended final pressure drop	600 Pa	600 Pa
Maximum pressure drop	1000 Pa	1000 Pa
Maximum operating temperature	70°C	70°C
Maximum relative humidity	100 %	100 %

HEPA FILTERS
DELTA series

DELTA series high flow HEPA filters are of the tightly pleated type arranged in V-packs, with a larger filter surface area. Compared to normal flow filters, they ensure longer operating life and greater energy savings.

The filter frame is made of galvanized steel or polystyrene, with a seamless polyurethane sealing gasket.

	NH NH-P
Class ISO 16890:2016	**ePM_1 85 %**
Class EN 779:2012	**F9**
Recommended final pressure drop	450 Pa
Maximum pressure drop	600 Pa
Maximum operating temperature	70°C
Maximum relative humidity	100 %

HIGH EFFICIENCY FILTERS
SIGMA series

SIGMA series high efficiency filters are used in air conditioning and ventilation systems where high level of air purity is required. The filter medium is made of tightly pleated glass microfibre paper with continuous thermoplastic separators. The frame is made of galvanised sheet steel.

The filter medium is attached to the frame with glass microfibre in between. The filters have a low pressure drop, a high dust holding capacity and offer appreciable mechanical strength.

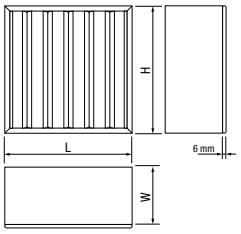
Activated carbon filters to reduce gaseous pollutants can be incorporated

SagiCofim

System-compatible filters

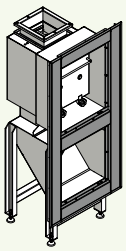
HEPA DELTA SERIES / HIGH EFFICIENCY SIGMA SERIES

DIMENSIONS AND PERFORMANCE



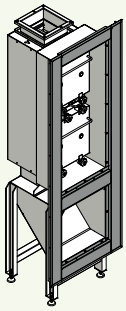
Code	Dimensions [mm]			Air flow rate, $Q_{nominal}$ [m^3/h]						Pressure drop ΔP [Pa]					
				Filters						Filters					
	L	H	W	NB	NA	NB-P	NA-P	NH	NH-P	NB	NA	NB-P	NA-P	NH	NH-P
31	305	305	292	850	720	-	-	850	-	280	300	-	-	140	-
5-52	305	610	292	1800	1550	1800	1550	1800	1800	280	300	280	300	140	140
5	610	610	292	4000	3400	4000	3400	4000	4000	280	300	280	300	140	140

Filter models combined with CANWALL systems



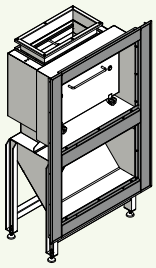
CANWALL **31**

H13	NB
H14	NA



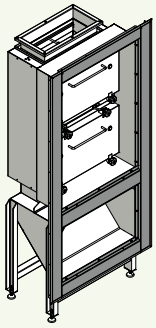
CANWALL **31/31**

H13 + F9	NB + NH
H14 + F9	NA + NH



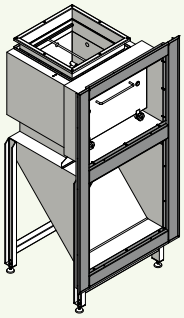
CANWALL **5-52**

H13	NB-P
	NB
H14	NA-P
	NA



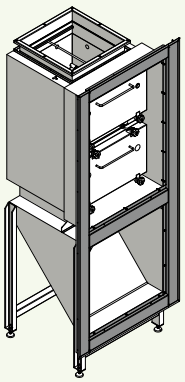
CANWALL **5-52/5-52**

H13 + F9	NB-P + NH-P
	NB + NH
H14 + F9	NA-P + NH-P
	NA + NH



CANWALL **5**

H13	NB-P
	NB
H14	NA-P
	NA

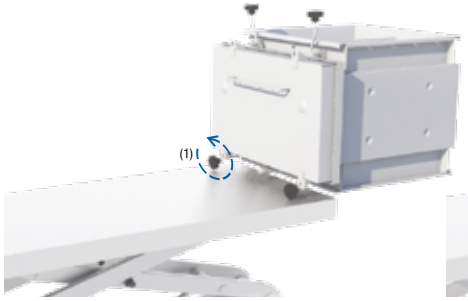


CANWALL **5/5**

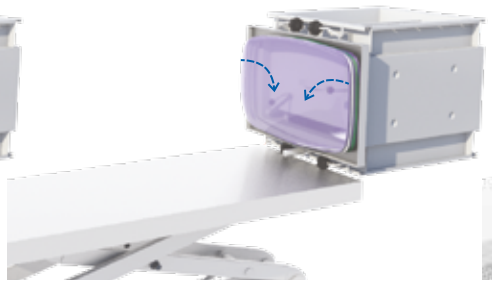
H13 + F9	NB-P + NH-P
	NB + NH
H14 + F9	NA-P + NH-P
	NA + NH

Maintenance and testing

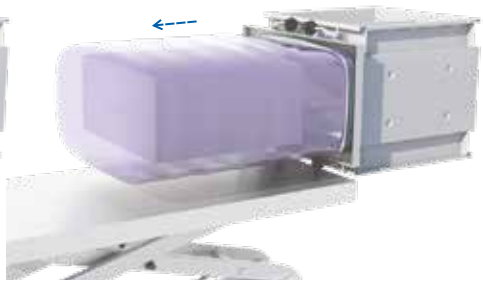
BAG/IN - BAG/OUT PROCEDURE FOR SAFE FILTER REPLACEMENT



1. Remove the cover by unscrewing the knobs (1)

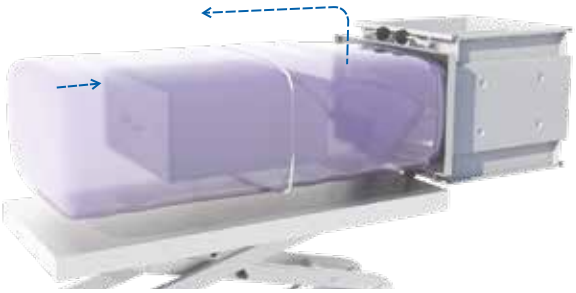


2. Open the eccentric bars



3. Remove filter

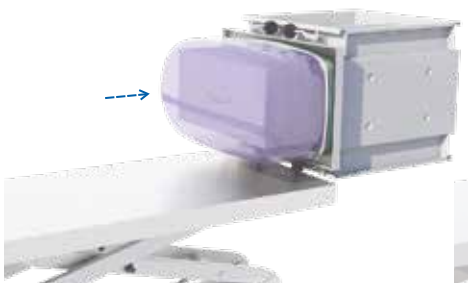
4. Heat seal and cut the barrier bag using the CANWELD 400 sealer



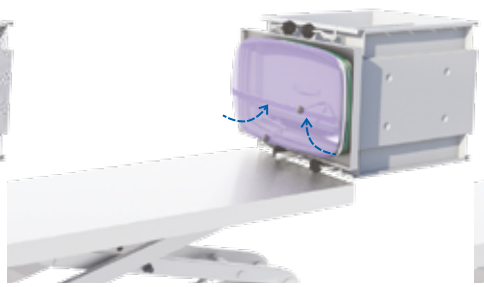
5. Prepare the new filter with a new barrier bag

6. Remove the rest of the spent bag

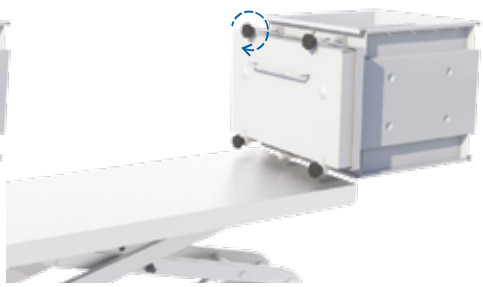
7. Heat seal and cut off the rest of the bag using the CANWELD 400 sealer



8. Insert the new filter



9. Close the eccentric bars



10. Close the lid by tightening up the knobs

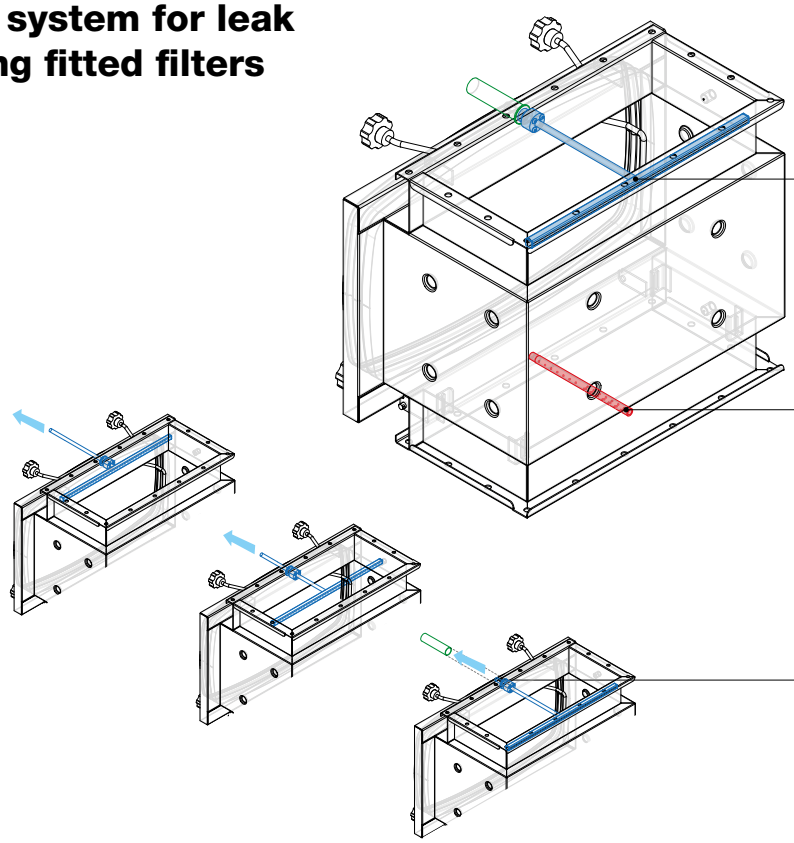
Maintenance and testing

SAFETY CONTAINER IDENTIFICATION PLATE

A plate has been placed on the canister (as in the picture) to ensure the safety of operators carrying out maintenance.

Filters must only be replaced using a barrier bag with original SagiCofim spare parts, as the material might be contaminated.

Scan system for leak testing fitted filters



SCAN SYSTEM
(in accordance with ISO 14644-3)

Mobile sensor incorporated downstream of the filter, dimensioned for a suction flow of 28.3 l/min

CHALLENGE AEROSOL CONCENTRATION SOCKET

For reading tracer concentration upstream of the filter

SAFETY DEVICE
(in accordance with ISO 4414)

Plug-in unit for connecting the measuring instrument to the scan system

Pressonce: automatic decompression of the downstream connection

Pressagain : no pressure in the plug-in unit, the connections can be uncoupled

STRENGTH AND RELIABILITY

With its AISI 316 L stainless steel structure, this plug-in unit is designed to withstand the most difficult working environments and eliminate any risk of corrosion, ensuring reliable performance over time.

OPERATOR SAFETY

The safety release function has to be pressed twice to disconnect the two parts of the plug-in unit, to eliminate the dangerous risk of uncoupling under pressure.

APPLICATIONS

Plug-in units for inert gas systems in corrosive environments.

Industrial applications:

- food industry
- chemical industry
- pharmaceutical industry
- nuclear power plants
- maritime systems

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CERTIFIED MANAGEMENT SYSTEM
ISO 9001 - ISO 14001

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