RadialSHIELD® – RESPA® Cab Air Quality Filters

Interchangeable filtration program includes particulate, odor, and gas options for the most demanding, debris-laden industrial jobsites.

SY-KLONE® INTERNATIONAL

LSM TECHNOLOGIES

Three Steps to Selecting a Cab Air Quality Filter for Your Jobsite

1. SELECT HVAC APPLICATION — FRESH or RECIRCULATED

FRESH
Page 2

RESPA CF2
Precleaner/Filter/Pressurizer
Standard (shown) or Extended Length

Ejective Filter Cap
Designed to eject debris from filter housing as part of the precleaning process and self-cleaning capability

RECIRC
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RESPA CFX2 or FFX2
High-Efficiency Filtration

Closed Filter Cap

Louvered Filter Cap

2. SELECT FILTRATION TYPE

- For job sites with heavy dust and debris, a **MERV 16** filter will substantially improve cab air quality.
- For job sites with harmful dust, such as asbestos, coal dust, etc., or where influenced by regulatory concerns, upgrade selection to **HEPA** filtration.
- Where odor is a concern but toxic gases are not present, use standard-length **Odor+HEPA** filters.
- Where gas is an issue, use extended-length **Gas+HEPA** filters.

3. SELECT FILTER SIZE

- **Standard:** For use in standard-size Sy-Klone RESPA systems, providing advanced precleaning, pressurization, and filtration in the smallest footprint possible. Odor+HEPA is standard-length only.
- **Extended:** For use in extended RESPA systems, providing increased filter life on jobsites. Gas+HEPA is extended-length only.

Recirculated Air Filters For RESPA-CFX2, CFX, FFX2 Type and Length	Sy-Klone Part No.	Filter Classification (standard, classification at nominal airflow)	Minimum Average Efficiency	Nominal Airflow	Effective Against	Applications
MERV 16 **STANDARD** FEFF211 FEFF220 **EXTENDED** FEFF212	**FEFF211** Closed filter cap **FEFF220** *FFX2 only* Louvered filter cap **FEFF212** Closed filter cap	ASHRAE 52.2, **MERV 16** EN779:2002, **F9**	≥95% on 0.3 µm to 1.0 µm particle size ≥95% on 0.4 µm (Em) particle size	≤ 150 CFM (255 m3/h)	All 0.3 µm to 1.0 µm particulate, including: • Bacteria • Diesel particulate matter (DPM) • Droplet nuclei (sneeze) • Most tobacco smoke • Respirable crystalline silica (RCS) • Other respirable particulate within the size range	• Agricultural, meets **EN15695 Category 2 cab** filter requirement • Construction • Demolition • Forestry, logging, mulching • Mining • Rail maintenance of way • Waste and indoor recycling • All applications where respirable dust is present

HEPA
STANDARD
FEFF210
FEFF222
EXTENDED
FEFF213
	FEFF210
	Closed filter cap
	FEFF222 *FFX2 only*
	Louvered filter cap
	FEFF213
	Closed filter cap
		HEPA
		EN1822-1,
		H13
		ISO 29463-1,
		ISO 35 H
			Initial efficiency ≥99.95% at MPPS[1] (0.063 µm)	≤ 100 CFM (170 m3/h)	All MERV 16 contaminants, plus all 0.06 µm to 1.0 µm particulate, including:
					• All combustion smoke
					• Carbon dust, sea salt dust
					• Carcinogenic materials
					• Friable asbestos
					• Sub-100 nanometer particulate, such as:
					  • Viruses greater than 60nm (COVID-19 is 60nm - 100nm)
					  • Respiratory droplet nuclei
					  • Ultra fine aerosols
						• **ISO 23875 compliant filter**
						• Agricultural, meets **EN15695 Category 3 cab** filter requirement
						• Demolition
						• Fire fighting
						• Industrial processing of cement, rock, aggregate, man-made stone
						• Mining
						• Rail maintenance of way
						• Waste and indoor recycling
						• Any applications where harmful particulate or ultra fine aerosols are of concern, or required by regulations

NOTES: µm = micrometer. Mishandling can result in loss of efficiency rating. Change filter based on cabin pressure. Hazardous gas or particulate environments require additional monitoring. For latest information, see sy-klone.com

[1]MPPS = Most Penetrating Particle Size. Each filter passes breach test at time of manufacture.

Fresh Air Filters For RESPA-CF2, CF Type and Length	Sy-Klone Part No.	Filter Classification (standard, classification at nominal airflow)	Minimum Average Efficiency	Nominal Airflow	Effective Against	Applications
MERV 16  FEFF208 **STANDARD**  FEFF209 **EXTENDED**	**FEFF208** Ejective filter cap	ASHRAE 52.2, **MERV 16** EN779:2002, **F9**	≥95% on 0.3 µm to 1.0 µm particle size ≥95% on 0.4 µm (Em) particle size	≤ 150 CFM (255 m3/h)	All 0.3 µm to 1.0 µm particulate, including: • Bacteria • Diesel particulate matter (DPM) • Droplet nuclei (sneeze) • Most tobacco smoke • Respirable crystalline silica (RCS) • Other respirable particulate within the size range	• Agricultural, meets **EN15695 Category 2 cab** filter requirement • Construction • Demolition • Forestry, logging, mulching • Mining • Rail maintenance of way • Waste and indoor recycling • All applications where respirable dust is present
	FEFF209 Ejective filter cap					

HEPA
 
FEFF218
STANDARD
 
FEFF219
EXTENDED
	FEFF218
	Ejective filter cap
		HEPA
		
		EN1822-1, **H13**
		
		ISO 29463-1, **ISO 35 H**
			Initial Efficiency ≥99.95% at MPPS[1] (0.063 µm)	≤ 100 CFM (170 m3/h)	All MERV 16 contaminants, plus all 0.06 µm to 1.0 µm particulate, including:
					• All combustion smoke
					• Carbon dust, sea salt dust
					• Carcinogenic materials
					• Friable asbestos
					• Sub-100 nanometer particulate, such as:
					  • Viruses greater than 60nm (COVID-19 is 60nm - 100nm)
					  • Respiratory droplet nuclei
					  • Ultra fine aerosols
						• **ISO 23875 compliant filter**
						• Agricultural, meets **EN15695 Category 3 cab** filter requirement
						• Demolition
						• Fire fighting
						• Industrial processing of cement, rock, aggregate, man-made stone
						• Mining
						• Rail maintenance of way
						• Waste and indoor recycling
						• Any applications where harmful particulate or ultra fine aerosols are of concern, or required by regulations

	FEFF219 Ejective filter cap					
Odor+HEPA and Gas+HEPA  FEFF131 **STANDARD**  FEFF130 **EXTENDED**	**FEFF131**[2] Ejective filter cap	**HEPA** EN1822-1, **H13** ISO 29463-1, **ISO 35 H** and ISO 11155-2, **Odor Retention**	Initial efficiency ≥99.95% at MPPS[1] (0.126 µm)	≤ 50 CFM (85 m3/h)	• General odors caused by particulate and non-toxic gas contaminants • Particulate as listed above for HEPA filters, excluding sub-100 nanometer items	• Applications that involve non-toxic odors • **ISO 23875 compliant filter** • Agricultural, meets **EN15695 Category 3 cab** filter requirement • Farming and ag spraying equipment • Waste and indoor recycling • Applications as listed above for HEPA filters
	FEFF130[3] *RESPA-CF2 only* Ejective filter cap	**HEPA** EN1822-1, **H13** ISO 29463-1, **ISO 35 H** and EN12941:1998 + A1:2004 + A2:2008, **Gas ABEK1**	Initial efficiency ≥99.95% at MPPS[1] (0.126 µm)	≤ 50 CFM (85 m3/h)	• Ammonia gases • Inorganic gases • Sulfur gases • Volatile organic compounds (VOC) • Particulate as listed above for HEPA filters, excluding sub-100 nanometer items	• For use in known toxic gas environments[3] • **ISO 23875 compliant filter** • Agricultural, meets **EN15695 Category 4 cab** filter requirement • Ag spraying equipment • Industrial processing, ore processing • Applications as listed above for HEPA filters

NOTES: µm = micrometer. Mishandling can result in loss of efficiency rating. Change filter based on cabin pressure. Hazardous gas or particulate environments require additional monitoring. For latest information, see sy-klone.com

[1]MPPS = Most Penetrating Particle Size. Each filter passes breach test at time of manufacture. [2]Fits RESPA-CF2; RESPA-CF requires Odor Filter Retrofit Kit. [3]Additional steps should be taken to monitor gas exposure. Use appropriate replacement interval.