Criti-Clean[™] Ultra Reverse Flow Fan Filter Units

Ceiling-mounted and portable models for patient isolation and other negative pressure applications.







Protecting health care workers and patients while reducing the spread of infectious diseases.



For many years, our reverse flow Criti-Clean Ultra fan filter units have helped medical centers across America and around the world successfully provide critical patient isolation care and reduce the spread of contagious diseases.

The reverse flow unit creates a negative pressure environment that removes the air from an isolation room and cleans it through the unit's built-in HEPA filter, keeping airborne contaminants from escaping the room. The unit then exhausts clean air into existing HVAC ductwork or to the outdoors.

The variable-speed EC motor provides constant airflow, automatically adjusting for changes in filter load and static pressure. CFM is clearly displayed on the front of the unit.

Two reliable options for permanent and temporary patient isolation rooms.

The Criti-Clean Ultra FFU is available as a traditional ceiling-mounted unit, as well as a portable model that can quickly convert existing space into a patient isolation room. This gives health care facilities and providers two powerful options to prepare for and combat the threats posed by contagious diseases.

Both Criti-Clean Ultra models are the most powerful FFUs available, offering a wide range of industry-leading advantages:

STANDARD FEATURES

- The industry's highest output, up to 1200 CFM
- Energy efficiency (only 42 watts at 90 FPM velocity/450 CFM)
- Quiet performance (only 45 DBA at 90 FPM, 58 DBA at 1100 CFM)
- Computer controlled, variable speed EC motors
- All type 304 stainless steel construction
- Pre-filter
- HEPA filter (99.99% @ 0.3 micron)
- Easy access to pre-filter and HEPA filter

OPTIONAL FEATURES

- ULPA filter (99.9995% @0.12 micron)
- Air inlet sensor that measures CFM in real time
- Continuous filter monitoring
- · Filter overload indicator light
- Challenge/pressure ports
- Networking control for multiple units
- Built-in LED lights
- Antimicrobial painted finish



Proven technology in a compact, energy efficient, ceiling-mounted unit.

This reverse flow Criti-Clean Ultra model is installed in the ceiling of the isolation room and is connected to existing exhaust/return ductwork. The FFU creates a negative pressure environment that draws the air up and out of the room, removes airborne contaminants via the unit's built-in HEPA filter and discharges clean air.

Ideal for both new construction and retrofits, the Criti-Clean Ultra ceiling model offers a plenum height of just 15.8", making it easy to fit into existing ceiling spaces. The unit can easily be installed in a ceiling grid system, or into a plaster/hard ceiling with our innovative surface mount clamps.

Optional built-in LED lights are also available to eliminate the need for an additional light fixture and maximize the use of limited ceiling space.





FEATURES

- Up to 1200 CFM
- 48"x24" and 24"x24" sizes
- Stainless steel construction
- Welded plenum construction
- 15.8" plenum height
- Room-side access to HEPA filter and pre-filter
- Room-side CFM display and adjustment
- 120V, 208/204V, or 277V ECM motor
- External 1.5" foil backed insulation (optional)



Ceiling space can be maximized by adding built-in LED lights to the FFU.

Portable Reverse Flow Criti-Clean Ultra

Temporary patient isolation when and where you need it.



Stay ready for virus outbreaks with portable reverse flow Criti-Clean Ultra FFUs.

The portable reverse flow Criti-Clean Ultra provides a fast solution for turning existing spaces (general hospital rooms, field hospitals, converted facilities, etc.) into effective patient isolation areas. The portable FFU can simply be rolled into place near the patient, plugged into a standard electrical wall outlet and connected to ductwork.

Like the ceiling-mounted unit, the portable model draws air in, cleans it through a HEPA filter, then exhausts filtered air out the back of the unit and into ductwork. Duct openings must be sealed to prevent leakage and maintain room pressurization. The unit features a push/pull handle and swivel casters for easy movement.

Portable reverse flow Criti-Clean Ultra FFUs can be put into storage and then deployed quickly when needed. They offer healthcare facilities an easy, convenient way to stay prepared for infectious disease outbreaks.





FEATURES

- Up to 1100 CFM
- 4 swivel casters (2 with brakes) for easy movement
- 10-foot hospital grade power cord and plug
- · Push/pull handle
- Stainless steel construction
- 120V EC motor
- Size: 48"x24"



Performance Data

Ceiling-Mounted Reverse Flow Units

48"x24" STANDARD FILTER, AT 0 STATIC, 208-277VAC

SETPOINT	CFM	CFM/ Sq Ft	WATTS	RPM
100%	1125	216	365	2450
90%	1004	193	274	2205
80%	848	163	195	1960
70%	708	136	127	1715
60%	545	105	81	1470
50%	395	76	48	1225
40%	260	50	26	980
30%	141	27 14		735
20%	56	11	8	490

48"x24" STANDARD FILTER, AT 0 STATIC, 120VAC

SETPOINT	CFM	CFM/ Sq Ft	WATTS	RPM
100%	930	179	237	2090
90%	806	155	155 174	
80%	672	129	120	1672
70%	545	105	81	1463
60%	415	80	80 50	
50%	292	56	56 32	
40%	183	35	35 17	
30%	104	20	12	627
20%	34	7	8	418

Portable Reverse Flow Unit

48"x24"x12RD STANDARD FILTER, AT 0 STATIC, 120VAC

SETPOINT	CFM	CFM/ Sq Ft	WATTS	RPM
100%	785	151	218	2090
90%	687	132	164	1881
80%	563	108	110	1672
70%	454	87	76	1463
60%	350	67	46	1254
50%	272	52	30	1045
40%	174	33	17	836
30%	98	19	12	627
20 %	34	7	8	418

48"x24" FILTER OPTIONS

UNIT SIZE	ТҮРЕ	FLOW	WIDTH	HEIGHT	DEPTH	RATED CFM
48x24	HEPA	HIGH	43.5	19.5	3.5	1200
48x24	HEPA	STANDARD	43.5	19.5	2.88	900

Performance data on the 24"x24" unit is available on request.

EXCERPTS FROM ASHRAE STANDARD 170 AND OTHER GUIDELINES

- 2 air changes per hour are recommended, with a suggested design set point of 40%-50%.
- Air should be exhausted directly outdoors, but if that is not possible, it may also be exhausted to an adjacent room or hallway as long as the air first passes through a HEPA filter.
- To maintain a negative pressure differential, the room must be a minimum of .01" w.c. between the occupied room and the adjacent space.
- Supply air should be provided by a nonaspirating diffuser to allow the reverse flow FFU to operate at peak performance.

AJ Manufacturing: The Industry Leader In Critical Environment Air Distribution.

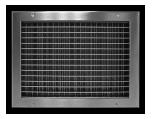
AJ Manufacturing is the industry leader in custom and standard stainless steel air distribution products for critical environments, particularly health care facilities. We also specialize in custom designing and building our products to meet individual project requirements.

PRODUCT LINES

- · Critical Environment Diffusers
- · Return Grilles
- · Supply Grilles
- Hinged Filter Grilles
- · Removable Filter Grilles
- · Ceiling Diffusers
- Operating Room Ceiling Systems
- · Bar Grilles
- Dampers
- Drum Louvers
- Air Extractors
- Accessories
- · Architectural Grilles
- · Security Products
- · Door Grilles
- · Aluminum Products



Return Grilles



Supply Grilles



Removable Filter Grilles



S6 Ceiling System



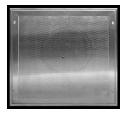
Hinged Filter Grilles



Dampers



Louvers



Laminar Flow Diffusers