

AMDC

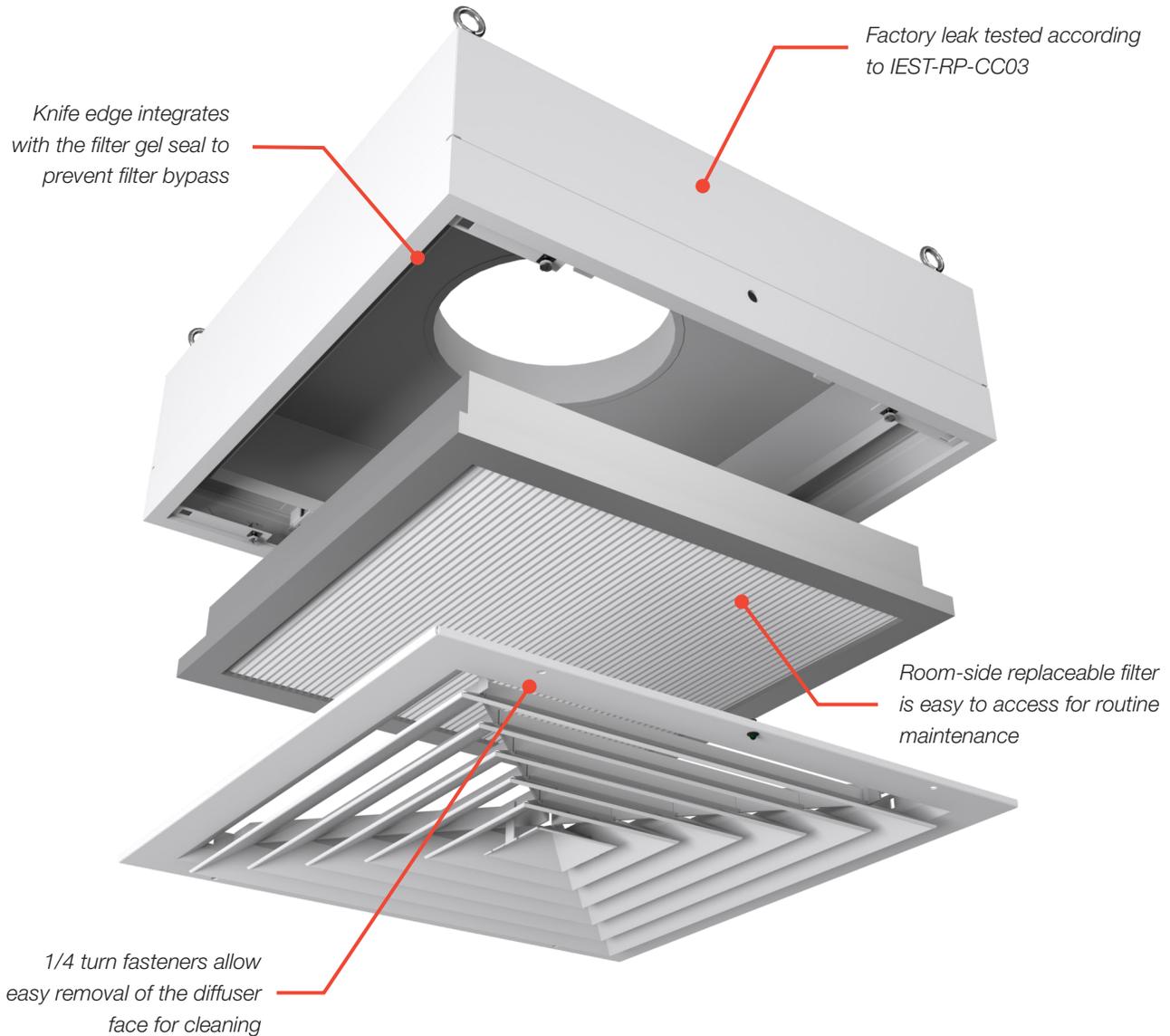
LOUVERED FACE DIFFUSER WITH HEPA FILTER



AMDC

Louvered Face Diffuser with HEPA Filter

The all-aluminum AMDC provides a high volume of filtered airflow with a very high induction rate and horizontal air pattern. The high induction rate works to dilute contaminants by quickly mixing room and supply air. The horizontal air pattern helps to direct the contaminated room air toward low-level exhaust grilles where it is removed from the space.



ROOM-SIDE REPLACEABLE FILTER

- + Convenient access from the room-side for periodic filter replacement.
- + Gel seal filter frame and diffuser “knife edge” flange create a reliable seal to prevent filter bypass.
- + Optional factory supplied HEPA filter removes 99.99% of particulate.

CLEANING AND MAINTENANCE

- + AMDC units satisfy all ASHRAE 170 requirements for diffuser cleaning and maintenance.
- + Powder coat paint finish is formulated for routine exposure to hospital grade cleaning solutions and disinfectants.
- + Stainless steel 1/4 turn fasteners and retainer cables provide straightforward and convenient access to the filter and knife-edge frame.

FACTORY LEAK TESTING AND CERTIFICATION

- + Every AMDC is factory tested and certified leak-free in accordance with IEST-RP-CC034.

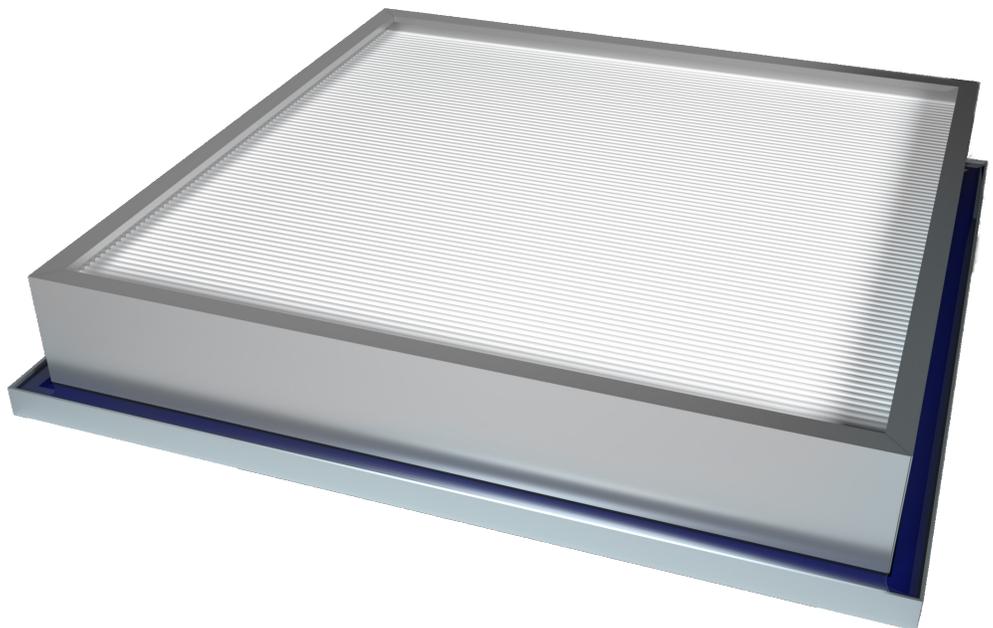
TYPICAL APPLICATIONS

AMDC louvered face diffusers with replaceable HEPA filters are an effective air distribution solution in today's modern cleanrooms. They are designed to provide large volumes of filtered air in a 4-way horizontal air pattern.

CONSTRUCTION

- + Options
 - Exterior insulation
 - Room-side adjustable damper
 - Aerosol test system
 - LED Filter status indicator

*Room-side replaceable filter
with integral gel seal*



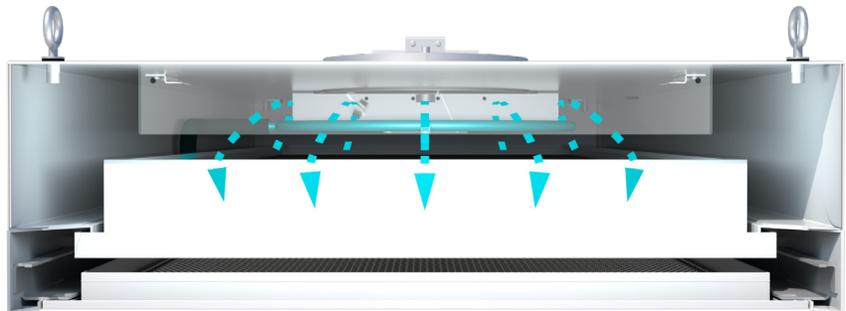
LED FILTER STATUS INDICATOR

- + An optional LED filter status light, visible from the room-side, changes from green to yellow when the filter is loaded and due for replacement.
- + The LED light is factory calibrated to trigger once the filter pressure drop has increased by 50% above that of an unloaded filter and can be adjusted in the field to suit facility preferences.



AEROSOL TEST SYSTEM

- + Unique and convenient option when upstream aerosol injection during field commissioning is impractical.
- + The barbed aerosol injection port for 1/2 in. ID tubing and aerosol sample and static pressure port facilitate the complete room-side aerosol challenge of the diffuser.
- + Stainless steel aerosol dispersion ring for equalized aerosol challenge across the entire active filter area.

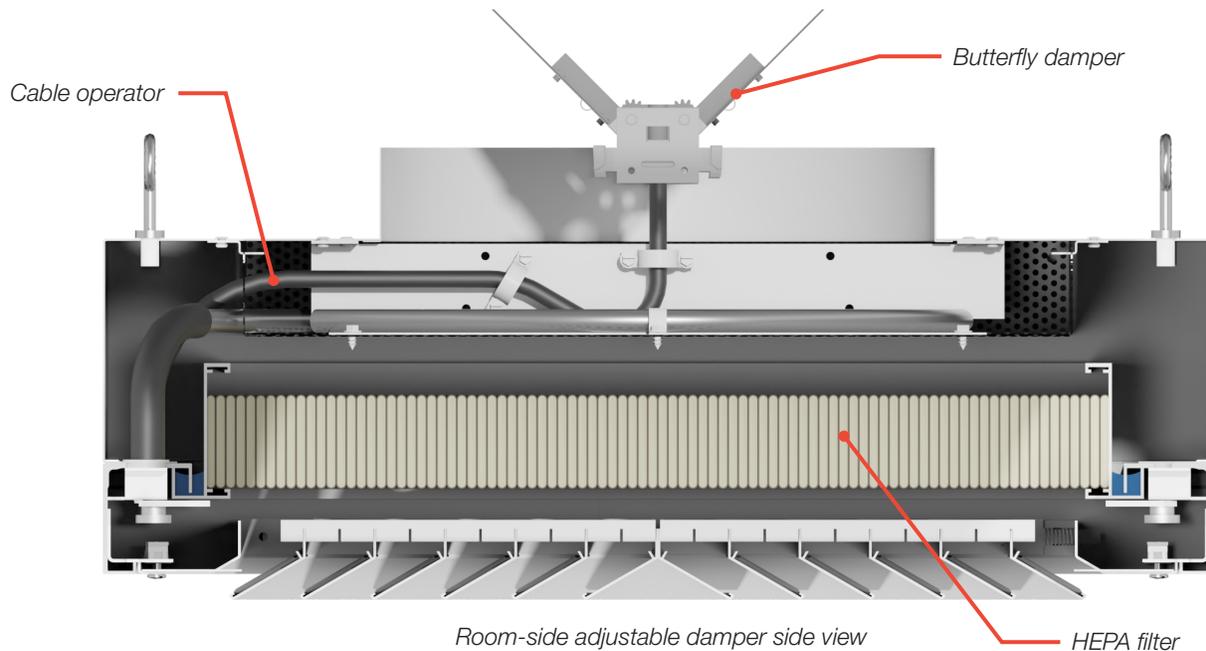


AEROSOL SAMPLE & STATIC PRESSURE PORT

- + Used for room-side field measurement of static pressure and challenge aerosol concentrations upstream of the filter during the commissioning process.

ROOM-SIDE ADJUSTABLE DAMPER

- + An optional remote cable operated damper allows adjustment of the damper with the filter in place using a standard screwdriver.
- + Locating the damper operator outside of the filter maximizes filter area, leading to a larger airflow capacity and less pressure drop.

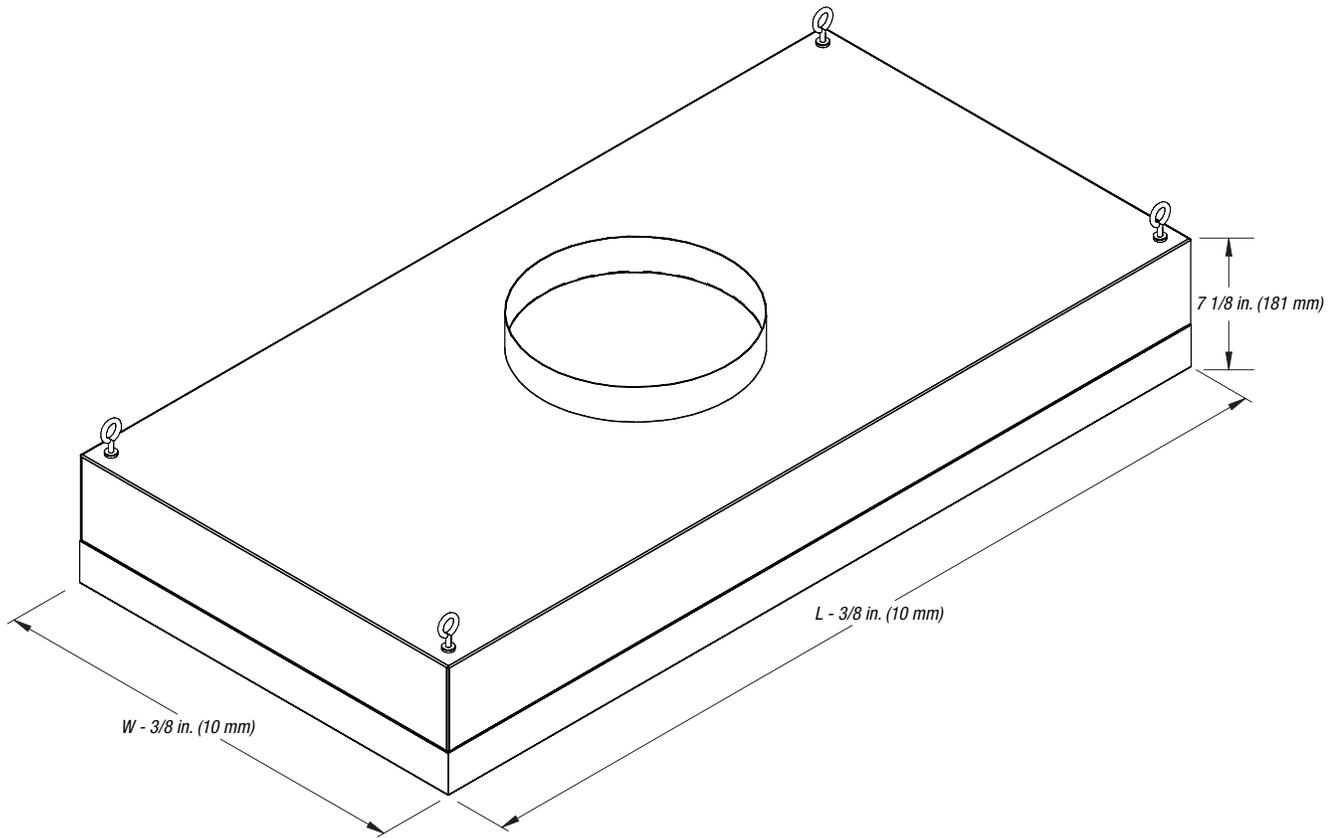


EXTERNAL INSULATION

- + Ensures quality application and minimize field labor with factory installed insulation.
- + Eliminates condensation risk associated with unconditioned plenum air exposure to cold diffuser surfaces.
- + Reduces thermal gain for improved energy savings.
- + Insulation meets ASTM E84 and UL723 requirements.



DIMENSIONAL DATA



Nominal Unit Size (W x L)	Actual Width	Actual Length	Inlet Sizes
24 in. x 24 in.	23.63 in.	23.63 in.	(8, 10, 12) in.
24 in. x 48 in.	23.63 in.	47.63 in.	(8, 10, 12) in.
610 mm x 610 mm	600 mm	600 mm	(203, 254, 305) mm
610 mm x 1220 mm	600 mm	1210 mm	(203, 254, 305) mm

PERFORMANCE DATA

Imperial

Unit Size (in.)	Inlet Size (in.)	Air Flow (cfm)	Filter	Static Pressure (in. w.g.)	Sound (NC)	Side	Horizontal Throw (ft.) 150-100-50 fpm
24 x 24	10	100	HE	0.17	-	-	1-2-5
		150		0.28	-	-	1-3-6
		200		0.40	-	-	2-4-7
		250		0.52	16	-	3-6-8
		100	HEPA	0.26	-	-	1-2-5
		150		0.44	-	-	1-3-6
		200		0.60	15	-	2-4-7
		250		0.76	21	-	3-6-8
		100	ULPA	0.37	-	-	1-2-5
		150		0.61	-	-	1-3-6
		200		0.84	8	-	2-4-7
		250		1.08	26	-	3-6-8
24 x 48	12	300	HE	0.17	-	A	1-3-1
						B	----1
		400		0.25	-	A	3-6-19
						B	----3
		500	0.34	15	A	4-9-21	
					B	--1-4	
		600	0.43	21	A	6-12-23	
					B	--1-6	
		300	HEPA	0.37	-	A	1-3-12
						B	----1
		400		0.5	-	A	3-6-19
						B	----3
		500	0.64	15	A	4-9-21	
					B	--1-4	
		600	0.76	21	A	6-12-23	
					B	--1-6	
		300	ULPA	0.53	-	A	1-3-12
						B	----15
		400		0.7	-	A	3-6-19
						B	----3
		500	0.9	17	A	4-9-21	
					B	--1-4	
		600	1.08	22	A	6-12-23	
					B	--1-6	

Performance Notes:

- sp = Static Pressure, in. w.g., required at inlet for the listed cfm.
- cfm = Air flow in cubic feet per minute [cfm].
- NC = Noise Criteria. NC values are based on room absorption of 10dB, re 10⁻¹² watts.
- Blanks "-" indicate an NC level below 15.
- Throw values are given in feet to terminal velocities of 150 fpm (minimum), 100 fpm (middle) and 50 fpm (maximum).
- Throw values are based on isothermal conditions. For cooling conditions, see correction factors.
- sp and NC at full open damper position.
- Tested in accordance with ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets."

Throw Correction Factors

For throw at cooling conditions, multiply the listed throw values by the following correction factors:

10 °F cooling differential	0.70
20 °F cooling differential	0.50

PERFORMANCE DATA

Metric

Unit Size (mm)	Inlet Size (mm)	Airflow (L/s)	Filter	Static Pressure (Pa)	Sound (NC)	Side	Horizontal throw (m) 0.76 - 0.51 - 0.25 m/s
600 x 600	254	47	HE	42	-	-	0.3 - 0.6 - 1.5
		71		70	-	-	0.3 - 0.9 - 1.8
		94		100	-	-	0.6 - 1.2 - 2.1
		118		130	16	-	0.9 - 1.8 - 2.4
		47	HEPA	65	-	-	0.3 - 0.6 - 1.5
		71		110	-	-	0.3 - 0.9 - 1.8
		94		149	15	-	0.6 - 1.2 - 2.1
		118		189	21	-	0.9 - 1.8 - 2.4
		47	ULPA	92	-	-	0.3 - 0.6 - 1.5
		71		152	-	-	0.3 - 0.9 - 1.8
		94		209	8	-	0.6 - 1.2 - 2.1
		118		269	26	-	0.9 - 1.8 - 2.4
600 x 1200	300	142	HE	42	-	A	0.3 - 0.9 - 0.3
						B	- - - - 0.3
		189		62	-	A	0.9 - 1.8 - 5.8
						B	- - - - 0.9
		236	85	15	A	1.2 - 2.7 - 6.4	
					B	- - 0.3 - 1.2	
		283	107	21	A	1.8 - 3.7 - 7.0	
					B	- - 0.3 - 1.8	
		142	HEPA	92	-	A	0.3 - 0.9 - 3.7
						B	- - - - 0.3
		189		125	-	A	0.9 - 1.8 - 5.8
						B	- - - - 0.9
		236	159	15	A	1.2 - 2.7 - 6.4	
					B	- - 0.3 - 1.2	
		283	189	21	A	1.8 - 3.7 - 7.0	
					B	- - 0.3 - 1.8	
		142	ULPA	132	-	A	0.3 - 0.9 - 3.7
						B	- - - - 4.6
		189		174	-	A	0.9 - 1.8 - 5.8
						B	- - - - 0.9
		236	224	17	A	1.2 - 2.7 - 6.4	
					B	- - 0.3 - 1.2	
		283	269	22	A	1.8 - 3.7 - 7.0	
					B	- - 0.3 - 1.8	

Performance Notes:

- sp = Static Pressure, Pa, required at inlet for the required L/s.
- L/s = Airflow in Liters per second.
- NC = Noise Criteria. NC values are based on room absorption of 10dB, re 10-12 watts
- Blanks " - " indicate an NC level below 15.
- sp and NC at full open damper position.
- Tested in accordance with ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets."
- Throw values are given in m to terminal velocities of 0.76 m/s (minimum), 0.51 m/s (middle), 0.25 m/s (maximum).
- Throw values are based on isothermal conditions. For cooling conditions, see correction factors.

Throw Correction Factors

For throw at cooling conditions, multiply the listed throw values by the following correction factors:

6 °C Cooling Differential	0.70
11 °C Cooling Differential	0.50



Product Improvement is a continuing endeavour at Price. Therefore, specifications are subject to change without notice. Consult your Price Sales Representative for current specifications or more detailed information. Not all products may be available in all geographic areas. All goods described in this document are warranted as described in the Limited Warranty shown at priceindustries.com. The complete Price product catalog can be viewed online at priceindustries.com.