

LFD

LAMINAR FLOW DIFFUSER

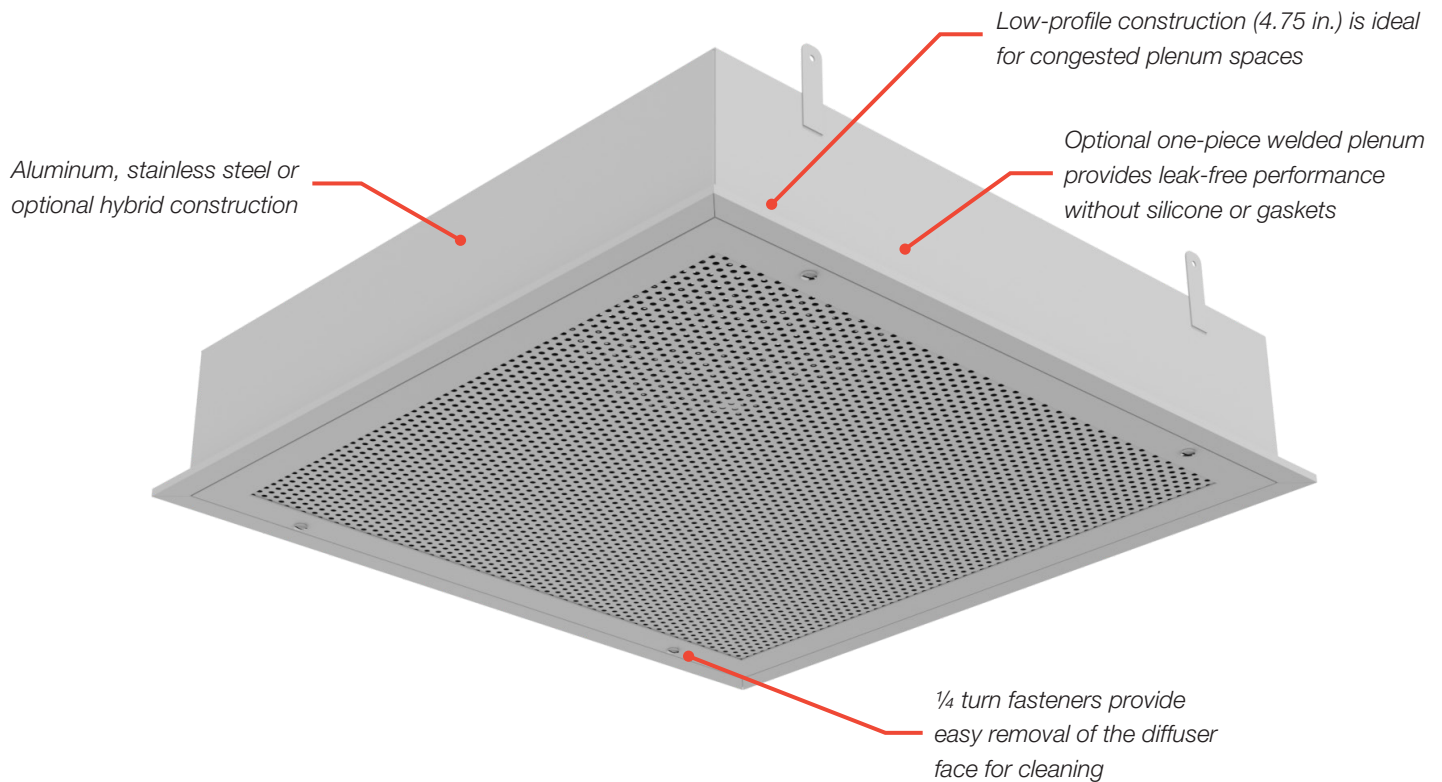


Photographer: BRUCE T. MARTIN, 2011

LFD

Laminar Flow Diffuser

Laminar flow diffusers are engineered to provide a uniform, unidirectional low velocity air pattern. The column-like airflow displaces airborne particulate down and away from the area below the diffuser. Available in a variety of sizes and construction types, with many standard and optional features, the LFD is the most versatile laminar flow diffuser on the market.

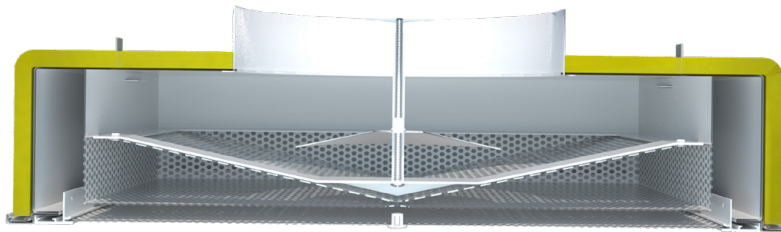


ENGINEERED EQUALIZATION BAFFLE

- + The integral equalization baffle divides the plenum to create a dual-chamber design, ensuring even distribution of supply air at consistent velocities across the face of the diffuser without excess pressure drop. Consistent low velocities across the diffuser face are essential to prevent room air from being entrained by the clean, filtered supply air.

EQUALIZATION “V” BAFFLE

- + The “V” baffle option optimizes flow and velocity equalization across the diffuser face using a multi-piece dual-chamber baffle system. An internal cone damper is ideal for applications where interstitial space restrictions make collar-mounted butterfly dampers impractical.



Cross section with “V” baffle option

ONE-PIECE WELDED PLENUM

- + Fully welded corners provide a tightly sealed plenum without the need for additional silicone or gasket.

HYBRID CONSTRUCTION

- + Customized hybrid solutions are available, as the plenum and face material can be independently selected. A variety of materials are available, including stainless steel, aluminum and steel.

TYPICAL APPLICATIONS

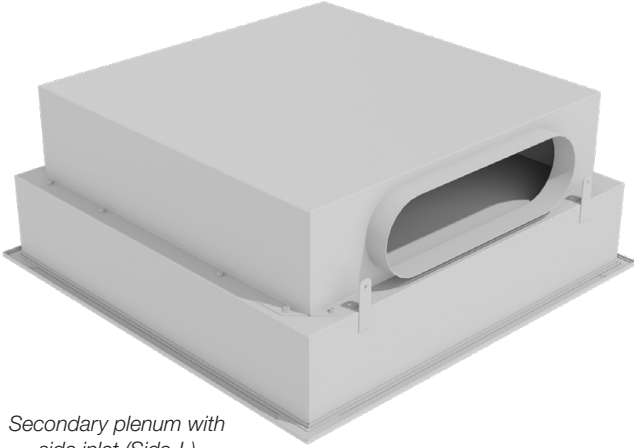
The LFD is ideal for use in applications where entrainment or mixing of room air is undesirable or unsafe including operating rooms, laboratories, pharmacies, pharmaceutical manufacturing facilities, cleanrooms and other critical environment spaces. Classified as an ASHRAE group E non-aspirating diffuser the LFD meets all ASHRAE 170 performance and construction requirements.

CONSTRUCTION

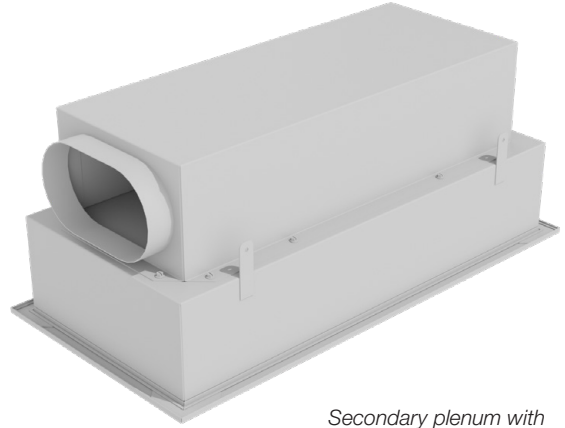
- + Baffle Style
 - Equalization baffle (LFD)
 - Equalization “V” Baffle (LFD3)
- + Options
 - Hybrid plenum construction
 - One-piece welded plenum
 - Adjustable inlet damper
 - Factory installed insulation
 - Side Inlet
 - Protective Film

SIDE AIRFLOW INLET

- + Optional side-inlet provides improved access to duct connections, especially in low-ceiling applications.
- + Oval-equivalent side-inlets can be located on either the length or width side of the diffuser.



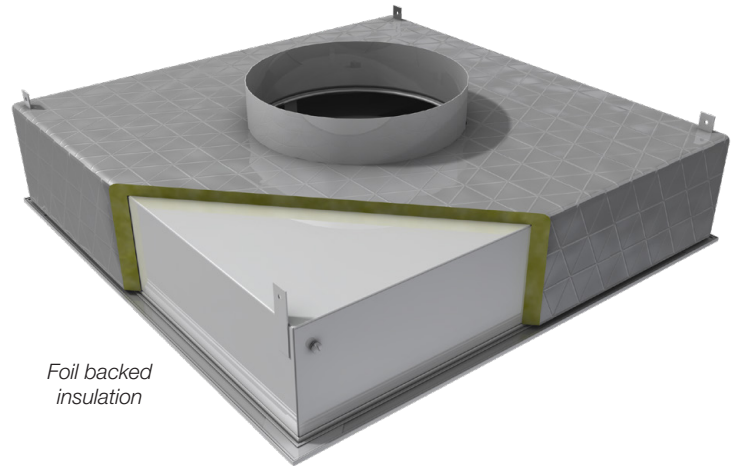
*Secondary plenum with
side inlet (Side-L)*



*Secondary plenum with
side inlet (Side-W)*

FACTORY INSTALLED 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.
- + Aluminum foil-backed 0.5" or 1.5" insulation options available.



*Foil backed
insulation*

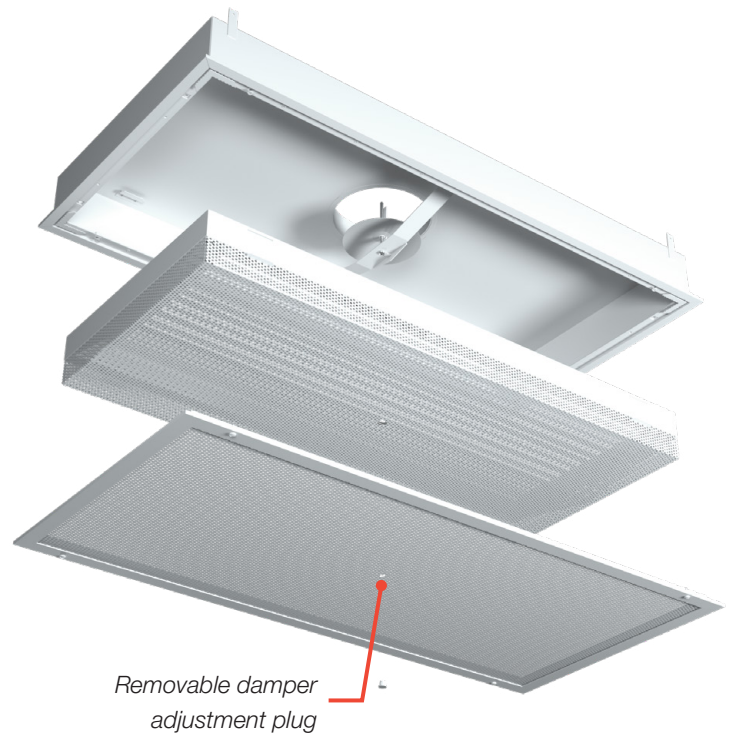


CLEANING & MAINTENANCE

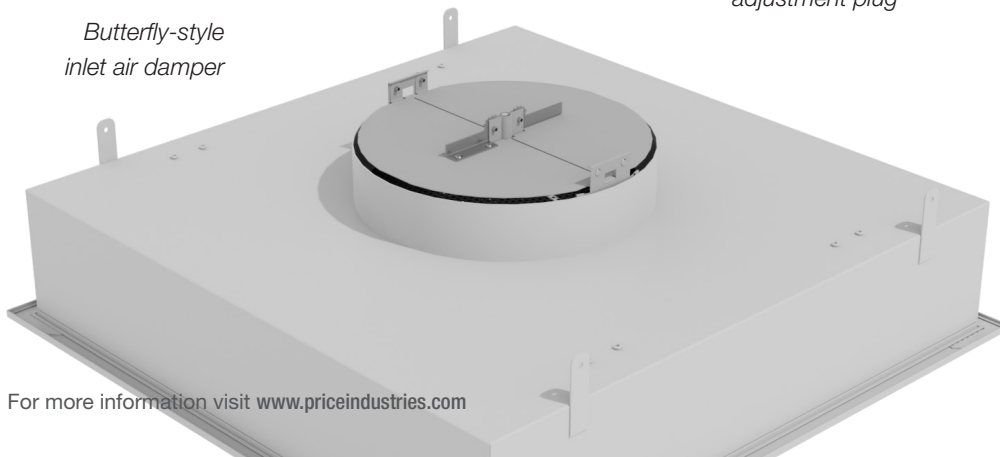
- + Both standard and “V” baffle equalization options are easily removable without tools and satisfy ASHRAE 170 requirements for full access to all internal surfaces for cleaning and sterilization.
- + Powder coat paint finish formulated for routine exposure to hospital grade cleaning solutions and disinfectants.
- + Stainless steel ¼ turn fasteners and retainer cables provide straightforward and convenient access to the plenum for cleaning or damper adjustment.

ADJUSTABLE INLET DAMPERS

- + Optional inlet dampers facilitate fine-tuning of supply airflow rates to ensure even distribution of supply air across all diffusers in an array.
- + Aluminum or stainless steel construction.
- + Collar-mounted butterfly dampers are available in standard or room-side accessible configurations.
- + Room-side adjustable cone dampers are internal to the diffuser thereby avoiding an increase to the overall height of the diffuser assembly (only available with the “V” equalization baffle option).



Butterfly-style inlet air damper



INTEGRATED LED LIGHTING (ULFD)

Optional integrated lighting transforms a typical laminar flow diffuser into a combination hospital-grade LED light fixture and laminar diffuser by incorporating LED lighting inside each diffuser module.

Reduced Ceiling Congestion

- + Incorporating high-performance LED lighting directly within the laminar flow diffusers dramatically reduces the HVAC footprint in the ceiling, effectively freeing space for additional LFDs or other ceiling mounted equipment.

Optimized Equipment Layout

- + Integrated LED lighting allows both airflow and the light source to be located directly above the work station to optimize visibility and ensure a contaminant free work area.

Improved Visibility

- + The large light-emitting surface of the LFD provides even lighting with a low luminous intensity to reduce glare on monitors and other reflective surfaces.
- + Various lighting color temperatures and flexible dimming control allow the LFD with integrated LED lighting to meet the unique requirements of modern healthcare and laboratory facilities.



High Efficiency 90+
lm/W LED



L80 > 60,000 hours



Dimmable



IP67 Sealed LED



90+ CRI

LFD

Laminar Flow Diffuser



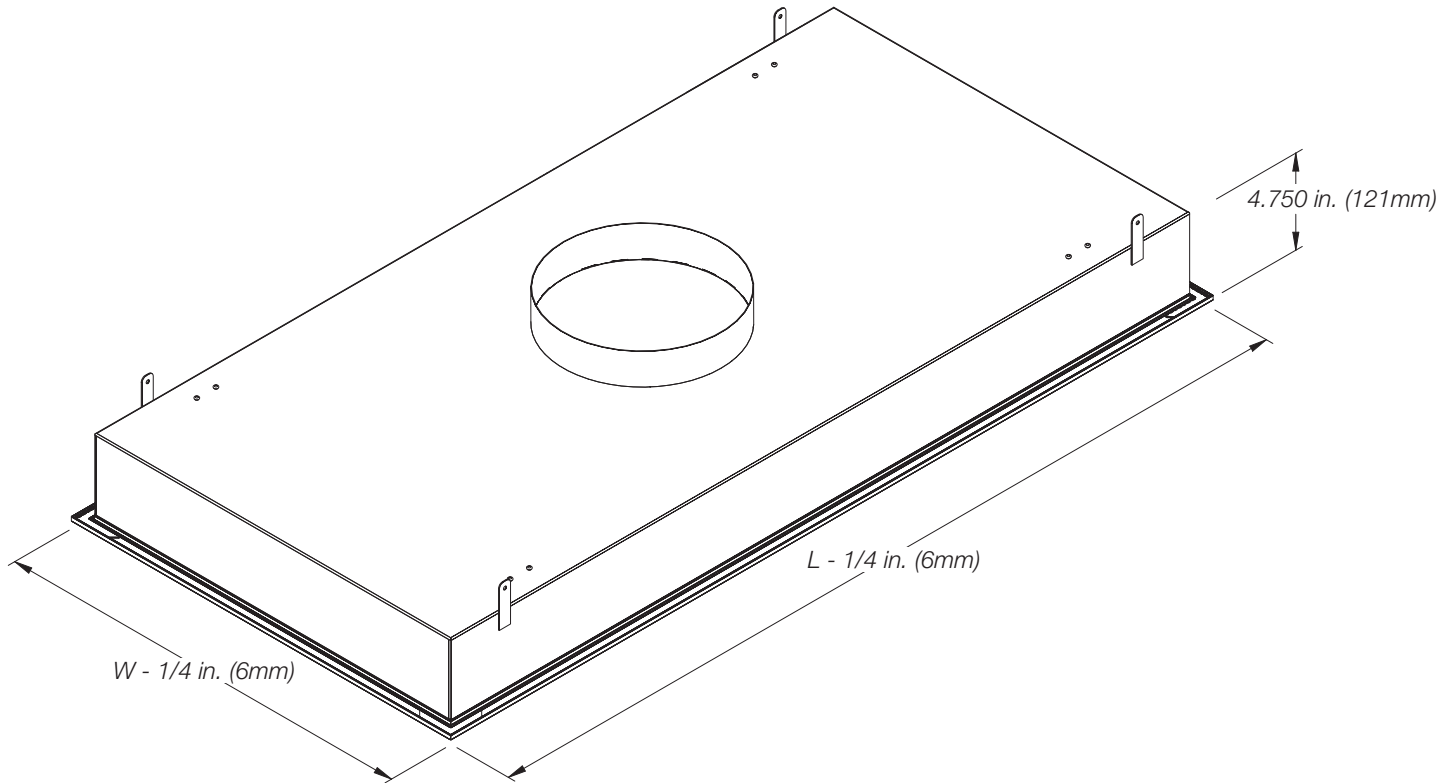
Simple Installation & Maintenance

- + Easy installation is realized with single-point electrical connection for the laminar diffuser with integrated lighting, as the LED lights and driver are factory installed and wired.
- + LED drivers are room-side accessible. To access the driver, simply remove the diffuser face and aperture plate damper.
- + The LFD with integrated LED lighting meets all ASHRAE 170 requirements for cleanability.
- + Integrated LED lighting is a sealed, IP67 rated fixture that effectively seals out debris and liquids.
- + Hospital-grade LED lights have a long lifespan, rated at 80% original brightness for 60,000 hours. If required, individual LED strips are tool-free replaceable with quick-connect wiring.

Code Compliance & Listings

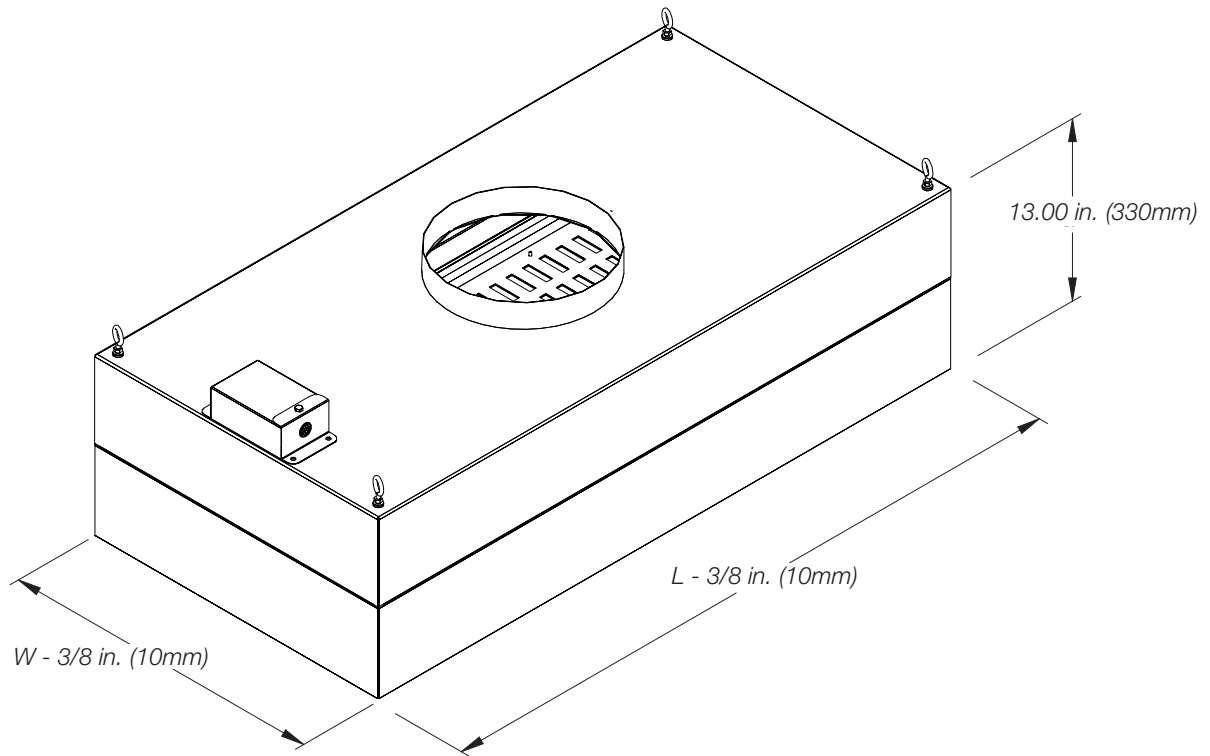
- + **NFPA 90A-2018** Installation of Air Conditioning and Ventilating Systems
- + **ASHRAE 170-2017** Ventilation of Healthcare Facilities
- + **UL1598** Air-Handling Luminaries
- + **UL 2043** Fire Test for Heat and Visible Smoke Release for Discrete Products and Their Accessories Installed in Air-Handling Spaces
- + **UL2108** Low Voltage Lighting System
- + **UL8750** Light Emitting Diode (LED) Equipment for Use in Lighting Products
- + **UL1310** Class 2 Power Units
- + **UL94** Flammability of Plastic Materials for Parts in Devices and Appliances
- + **IP67** rated Ingress Protection Against Dust and Liquids

LFD/LFD3 DIMENSIONAL DATA



Nominal Unit Size (W x L)	Actual Unit Size	Inlet Sizes
12 in. x 18 in.	11.75 in. x 17.75 in.	(6, 8) in.
12 in. x 24 in.	11.75 in. x 23.75 in.	(6, 8) in.
12 in. x 30 in.	11.75 in. x 29.75 in.	(6, 8) in.
12 in. x 36 in.	11.75 in. x 35.75 in.	(6, 8) in.
12 in. x 42 in.	11.75 in. x 41.75 in.	(6, 8) in.
12 in. x 48 in.	11.75 in. x 47.75 in.	(6, 8) in.
12 in. x 60 in.	11.75 in. x 59.75 in.	(6, 8) in.
12 in. x 72 in.	11.75 in. x 71.75 in.	(6, 8) in.
24 in. x 24 in.	23.75 in. x 23.75 in.	(6, 8, 10, 12, 14, 16) in.
24 in. x 30 in.	23.75 in. x 29.75 in.	(6, 8, 10, 12, 14, 16) in.
24 in. x 36 in.	23.75 in. x 35.75 in.	(6, 8, 10, 12, 14, 16) in.
24 in. x 42 in.	23.75 in. x 41.75 in.	(6, 8, 10, 12, 14, 16) in.
24 in. x 48 in.	23.75 in. x 47.75 in.	(6, 8, 10, 12, 14, 16) in.
24 in. x 60 in.	23.75 in. x 59.75 in.	(6, 8, 10, 12, 14, 16) in.
24 in. x 72 in.	23.75 in. x 71.75 in.	(6, 8, 10, 12, 14, 16) in.
300mm x 600mm	294mm x 594mm	(152, 203) mm
300mm x 1200mm	294mm x 1194mm	(152, 203) mm
600mm x 600mm	594mm x 594mm	(152, 203, 254, 305, 356, 406) mm
600mm x 1200mm	594mm x 1194mm	(152, 203, 254, 305, 356, 406) mm

ULFD DIMENSIONAL DATA



Nominal Unit Size (W x L)	Actual Imperial Unit Size	Actual Metric Unit Size	Inlet Sizes
24 in. x 24 in.	23.63 in. x 23.63 in.	600mm x 600mm	(6, 8,10) in. / (152, 203, 254) mm
24 in. x 36 in.	23.63 in. x 35.63 in.	600mm x 905mm	(6, 8,10,12) in. / (152, 203, 254, 305) mm
24 in. x 48 in.	23.63 in. x 47.63 in.	600mm x 1210mm	(6, 8,10,12) in. / (152, 203, 254, 305) mm

PERFORMANCE DATA

LFD

Unit Size (in.)	Inlet Size (in.)	Air Flow (cfm)	Static Pressure (in. w.g.)	Total Pressure (in. w.g.)	Sound (NC)
12 x 48	6	80	0.02	0.03	-
		100	0.03	0.05	-
		120	0.04	0.06	-
		140	0.05	0.09	-
		160	0.07	0.11	16
		200	0.11	0.17	24
		240	0.15	0.24	31
	8	80	0.02	0.02	-
		100	0.02	0.03	-
		120	0.03	0.04	-
		140	0.04	0.05	-
		160	0.06	0.07	-
		200	0.08	0.10	-
		240	0.12	0.15	15
24 x 24	8	80	0.02	0.02	-
		100	0.02	0.03	-
		120	0.03	0.04	-
		140	0.04	0.05	-
		160	0.05	0.07	-
		200	0.08	0.10	16
		240	0.11	0.14	23
	10	80	0.01	0.01	-
		100	0.02	0.02	-
		120	0.02	0.03	-
		140	0.03	0.03	-
		160	0.04	0.04	-
		200	0.06	0.07	-
		240	0.08	0.09	-
24 x 36	8	120	0.02	0.03	-
		150	0.03	0.05	-
		180	0.05	0.06	-
		210	0.06	0.08	16
		240	0.08	0.11	21
		300	0.12	0.16	29
		360	0.16	0.23	35
	10	120	0.02	0.02	-
		150	0.03	0.03	-
		180	0.03	0.04	-
		210	0.05	0.05	-
		240	0.06	0.07	-
		300	0.09	0.10	18
		360	0.12	0.15	25

Performance Notes:

1. All pressure drops are in inches water gauge (in. w.g.)
2. cfm = Air flow in cubic feet per minute, cfm.
3. NC = Noise Criteria. NC values are based on room absorption of 10dB re 10-12 watts.
4. Blanks "-" indicate NC level below 15 and a spl less than 0.01.
5. Total pressure, static pressure and NC performance assumes no damper.
6. Tested in accordance with ASHRAE Standard 70.

PERFORMANCE DATA

LFD

Unit Size (in.)	Inlet Size (in.)	Air Flow (cfm)	Static Pressure (in. w.g.)	Total Pressure (in. w.g.)	Sound (NC)
24 x 48	8	160	0.03	0.04	-
		200	0.05	0.07	-
		240	0.06	0.09	19
		280	0.08	0.12	24
		320	0.10	0.16	29
		400	0.15	0.24	37
		480	0.21	0.33	44
	10	160	0.02	0.03	-
		200	0.03	0.04	-
		240	0.05	0.06	-
		280	0.06	0.08	-
		320	0.08	0.10	19
		400	0.11	0.15	27
		480	0.16	0.21	33
	12	160	0.02	0.02	-
		200	0.03	0.03	-
		240	0.04	0.04	-
		280	0.05	0.06	-
		320	0.06	0.07	-
		400	0.09	0.10	18
		480	0.12	0.15	25
24 x 60	8	200	0.04	0.06	-
		250	0.06	0.09	19
		300	0.08	0.12	26
		350	0.10	0.17	31
		400	0.13	0.21	36
		500	0.19	0.32	44
		600	0.27	0.45	50
	10	200	0.03	0.04	-
		250	0.04	0.05	-
		300	0.06	0.08	15
		350	0.08	0.10	21
		400	0.10	0.13	26
		500	0.14	0.19	33
		600	0.20	0.27	40
	12	200	0.02	0.03	-
		250	0.03	0.04	-
		300	0.04	0.05	-
		350	0.06	0.07	-
		400	0.07	0.09	17
		500	0.11	0.14	25
		600	0.15	0.19	32

Performance Notes:

- All pressure drops are in inches water gauge (in. w.g.)
- 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 NC level below 15 and a sp less than 0.01.
- Total pressure, static pressure and NC performance assumes no damper.
- Tested in accordance with ASHRAE Standard 70.

PERFORMANCE DATA

LFD

Unit Size (in.)	Inlet Size (in.)	Air Flow (cfm)	Static Pressure (in. w.g.)	Total Pressure (in. w.g.)	Sound (NC)
24 x 72	8	240	0.03	0.05	-
		300	0.05	0.07	-
		360	0.07	0.10	21
		420	0.09	0.13	26
		480	0.11	0.16	31
		600	0.17	0.25	39
		720	0.24	0.34	45
	10	240	0.03	0.03	-
		300	0.04	0.05	-
		360	0.05	0.07	-
		420	0.07	0.09	18
		480	0.09	0.11	23
		600	0.13	0.17	30
		720	0.18	0.24	37
	12	240	0.02	0.02	-
		300	0.03	0.04	-
		360	0.04	0.05	-
		420	0.06	0.07	-
		480	0.07	0.08	15
		600	0.11	0.13	23
		720	0.15	0.18	30

Performance Notes:

- All pressure drops are in inches water gauge (in. w.g.)
- 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 NC level below 15 and a sp less than 0.01.
- Total pressure, static pressure and NC performance assumes no damper.
- Tested in accordance with ASHRAE Standard 70.

PERFORMANCE DATA

ULFD

Unit Size (in.)	Inlet Size (in.)	Air Flow (cfm)	Static Pressure (in. w.g.)	Total Pressure (in. w.g.)	Sound (NC)
24 x 24	8	100	0.05	0.05	-
		130	0.08	0.09	18
		160	0.13	0.14	24
		190	0.18	0.20	30
		220	0.24	0.26	35
		250	0.31	0.34	41
	10	100	0.05	0.05	-
		130	0.08	0.09	15
		160	0.12	0.13	20
		190	0.17	0.18	25
		220	0.23	0.24	32
		250	0.30	0.31	37
24 x 36	8	150	0.05	0.06	17
		190	0.08	0.10	23
		240	0.13	0.16	30
		280	0.17	0.21	36
		330	0.24	0.30	42
		370	0.31	0.38	48
	10	150	0.05	0.05	-
		190	0.07	0.08	18
		240	0.12	0.13	24
		280	0.16	0.18	30
		330	0.22	0.25	36
		370	0.28	0.31	41
24 x 48	8	200	0.04	0.06	21
		260	0.07	0.11	28
		320	0.11	0.17	35
		380	0.16	0.24	41
		440	0.22	0.32	47
		500	0.29	0.42	53
	10	200	0.04	0.05	-
		260	0.07	0.08	21
		320	0.10	0.12	27
		380	0.15	0.18	33
		440	0.20	0.24	38
		500	0.26	0.31	43
	12	200	0.04	0.04	-
		260	0.06	0.07	17
		320	0.10	0.11	22
		380	0.14	0.15	28
		440	0.18	0.20	33
		500	0.24	0.26	38

Performance Notes:

- All pressure drops are in inches water gauge (in. w.g.)
- 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 NC level below 15
- Total pressure, static pressure and NC performance assumes fully open damper/aperture plate and no filter.
- Tested in accordance with ASHRAE Standard 70.

PERFORMANCE DATA

LFD3

Unit Size (in.)	Inlet Size (in.)	Air Flow (cfm)	Static Pressure (in. w.g.)	Total Pressure (in. w.g.)	Sound (NC)
12 x 48	6	80	0.03	0.04	-
		100	0.05	0.06	17
		120	0.07	0.09	22
		140	0.09	0.12	26
		160	0.12	0.16	30
		200	0.19	0.25	36
		240	0.27	0.36	41
24 x 24	8	80	0.02	0.02	-
		100	0.02	0.03	-
		120	0.03	0.04	-
		140	0.05	0.06	-
		160	0.06	0.07	15
		200	0.09	0.11	23
		240	0.13	0.16	28
	10	80	0.01	0.02	-
		100	0.02	0.02	-
		120	0.03	0.03	-
		140	0.04	0.04	-
		160	0.05	0.06	-
		200	0.08	0.09	16
		240	0.11	0.12	22
24 x 36	8	120	0.02	0.03	-
		150	0.03	0.05	-
		180	0.05	0.07	16
		210	0.07	0.09	21
		240	0.08	0.11	26
		300	0.12	0.16	33
		360	0.16	0.23	39
	10	120	0.02	0.02	-
		150	0.03	0.04	-
		180	0.04	0.05	-
		210	0.06	0.07	-
		240	0.07	0.09	19
		300	0.11	0.13	26
		360	0.16	0.18	32
24 x 48	8	160	0.03	0.04	-
		200	0.04	0.06	18
		240	0.06	0.09	24
		280	0.08	0.12	29
		320	0.11	0.16	33
		400	0.16	0.24	40
		480	0.23	0.35	46
	10	160	0.03	0.03	-
		200	0.04	0.05	-
		240	0.05	0.07	17
		280	0.07	0.09	22
		320	0.09	0.12	26
		400	0.14	0.18	34
		480	0.20	0.25	40
	12	160	0.02	0.03	-
		200	0.03	0.04	-
		240	0.05	0.06	-
		280	0.07	0.07	17
		320	0.08	0.09	21
		400	0.13	0.14	28
		480	0.18	0.20	34

PERFORMANCE DATA

LFD3

Unit Size (in.)	Inlet Size (in.)	Air Flow (cfm)	Static Pressure (in. w.g.)	Total Pressure (in. w.g.)	Sound (NC)	
24 x 60	8	200	0.04	0.06	16	
		250	0.05	0.09	24	
		300	0.08	0.12	29	
		350	0.10	0.16	34	
		400	0.13	0.21	39	
		500	0.20	0.32	46	
		600	0.28	0.46	52	
	10	200	0.03	0.04	-	
		250	0.05	0.06	17	
		300	0.07	0.09	23	
		350	0.09	0.11	28	
		400	0.11	0.15	32	
		500	0.17	0.23	39	
		600	0.24	0.32	45	
	12	200	0.03	0.03	-	
		250	0.04	0.05	-	
		300	0.06	0.07	17	
		350	0.08	0.09	22	
		400	0.10	0.12	27	
		500	0.16	0.18	34	
		600	0.22	0.26	40	
	24 x 72	8	240	0.04	0.05	-
			300	0.06	0.07	22
			360	0.08	0.10	27
420			0.10	0.14	32	
480			0.13	0.18	37	
600			0.20	0.28	44	
720			0.28	0.39	50	
10		240	0.03	0.04	-	
		300	0.05	0.06	16	
		360	0.07	0.08	22	
		420	0.09	0.11	27	
		480	0.12	0.14	31	
		600	0.18	0.22	39	
		720	0.26	0.31	44	
12		240	0.03	0.03	-	
		300	0.05	0.05	-	
		360	0.06	0.07	17	
		420	0.09	0.09	22	
		480	0.11	0.12	27	
		600	0.17	0.19	34	
		720	0.23	0.26	40	

Performance Notes:

- All pressure drops are in inches water gauge (in. w.g.)
- 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 NC level below 15 and a sp less than 0.01.
- Total pressure, static pressure and NC performance assumes no damper.
- Tested in accordance with ASHRAE Standard 70.

PERFORMANCE DATA

LFD/LFD3

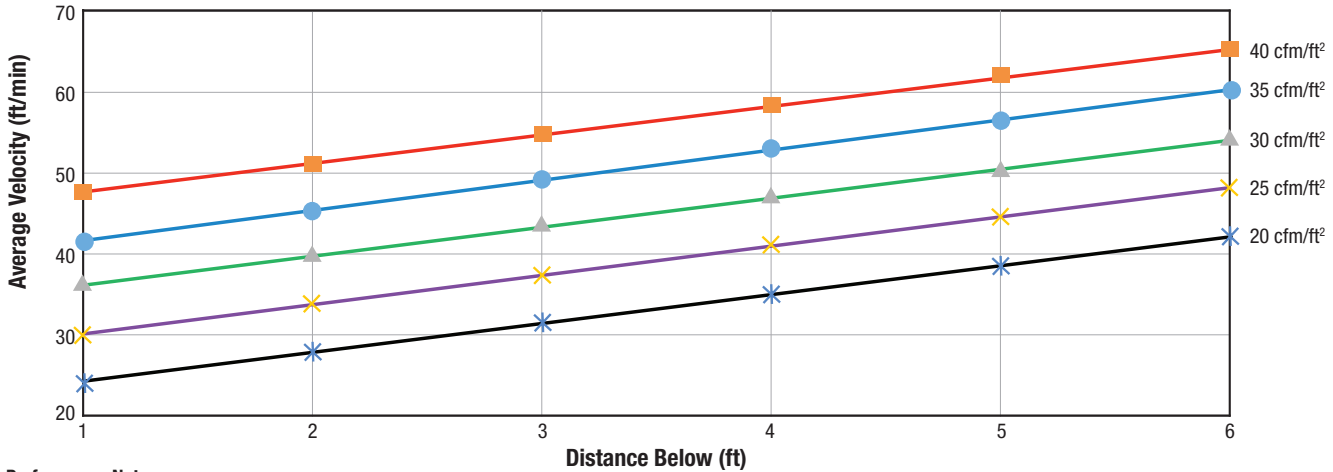
Average Velocities Below Modules @ Δ10°F

Face Velocity (cfm/ft ²)	Distance Below Face (ft)					
	1	2	3	4	5	6
20	24	28	31	35	38	42
25	30	34	37	41	44	48
30	36	40	43	47	50	54
35	42	45	49	53	56	60
40	48	51	55	58	62	65

Static Pressure and Sound Level

cfm/ft ²	Duct Application	
	Static Pressure ^{3,4}	N.C. Level ^{4,5}
20	0.03	<15
25	0.04	<15
30	0.05	17
35	0.07	22
40	0.09	26

LFD/LFD3 - Velocity vs. Distance Below



Performance Notes:

1. All pressure drops are in inches water gauge (in. w.g.).
2. cfm = Air flow in cubic feet per minute, cfm.
3. NC = Noise Criteria. NC values are based on room absorption of 10dB re 10-12 watts.
4. Blanks "-" indicate NC level below 15 and a sp less than 0.01.
5. Total pressure, static pressure and NC performance assumes no damper.
6. Tested in accordance with ASHRAE Standard 70.

PERFORMANCE DATA

LFD

Unit Size (mm)	Inlet Size (mm)	Air Flow (L/s)	Static Pressure (Pa)	Total Pressure (Pa)	Sound (NC)
300 x 1200	150	38	5	7	-
		47	7	12	-
		57	10	15	-
		66	12	22	-
		76	17	27	16
		94	27	42	24
		113	37	60	31
	203	38	5	5	-
		47	5	7	-
		57	7	10	-
		66	10	12	-
		76	15	17	-
		94	20	25	-
		113	30	37	15
600 x 600	203	38	5	5	-
		47	5	7	-
		57	7	10	-
		66	10	12	-
		76	12	17	-
		94	20	25	16
		113	27	35	23
	254	38	2	2	-
		47	5	5	-
		57	5	7	-
		66	7	7	-
		76	10	10	-
		94	15	17	-
		113	20	22	-
600 x 900	203	57	5	7	-
		71	7	12	-
		85	12	15	-
		99	15	20	16
		113	20	27	21
		142	30	40	29
		170	40	57	35
	254	57	5	5	-
		71	7	7	-
		85	7	10	-
		99	12	12	-
		113	15	17	-
		142	22	25	18
		170	30	37	25

Performance Notes:

1. All pressures are in Pascals, Pa.
2. L/s = Air flow in Liters per second.
3. NC = Noise Criteria. NC values are based on room absorption of 10dB re 10⁻¹² watts.
4. Blanks " - " indicate an NC level below 15 or a pressure less than 2 Pa.
5. Pressure and NC performance assumes no damper.
6. Tested in accordance with ASHRAE Standard 70.

PERFORMANCE DATA

LFD

Unit Size (mm)	Inlet Size (mm)	Air Flow (L/s)	Static Pressure (Pa)	Total Pressure (Pa)	Sound (NC)
600 x 1200	203	76	7	10	-
		94	12	17	-
		113	15	22	19
		132	20	30	24
		151	25	40	29
		189	37	60	37
		227	52	82	44
	254	76	5	7	-
		94	7	10	-
		113	12	15	-
		132	15	20	-
		151	20	25	19
		189	27	37	27
		227	40	52	33
	300	76	5	5	-
		94	7	7	-
		113	10	10	-
		132	12	15	-
		151	15	17	-
		189	22	25	18
		227	30	37	25
600 x 1500	203	94	10	15	-
		118	15	22	19
		142	20	30	26
		165	25	42	31
		189	32	52	36
		236	47	80	44
		283	67	112	50
	254	94	7	10	-
		118	10	12	-
		142	15	20	15
		165	20	25	21
		189	25	32	26
		236	35	47	33
		283	50	67	40
	300	94	5	7	-
		118	7	10	-
		142	10	12	-
		165	15	17	-
		189	17	22	17
		236	27	35	25
		283	37	47	32

Performance Notes:

1. All pressures are in Pascals, Pa.
2. L/s = Air flow in Liters per second.
3. NC = Noise Criteria. NC values are based on room absorption of 10dB re 10⁻¹² watts.
4. Blanks " - " indicate an NC level below 15 or a pressure less than 2 Pa.
5. Pressure and NC performance assumes no damper.
6. Tested in accordance with ASHRAE Standard 70.

PERFORMANCE DATA

LFD

Unit Size (mm)	Inlet Size (mm)	Air Flow (L/s)	Static Pressure (Pa)	Total Pressure (Pa)	Sound (NC)
600 x 1800	203	113	7	12	-
		142	12	17	-
		170	17	25	21
		198	22	32	26
		227	27	40	31
		283	42	62	39
		340	60	85	45
	254	113	7	7	-
		142	10	12	-
		170	12	17	-
		198	17	22	18
		227	22	27	23
		283	32	42	30
		340	45	60	37
	300	113	5	5	-
		142	7	10	-
		170	10	12	-
		198	15	17	-
		227	17	20	15
		283	27	32	23
		340	37	45	30

Performance Notes:

1. All pressures are in Pascals, Pa.
2. L/s = Air flow in Liters per second.
3. NC = Noise Criteria. NC values are based on room absorption of 10dB re 10⁻¹² watts.
4. Blanks " - " indicate an NC level below 15 or a pressure less than 2 Pa.
5. Pressure and NC performance assumes no damper.
6. Tested in accordance with ASHRAE Standard 70.

PERFORMANCE DATA

ULFD

Unit Size (mm)	Inlet Size (mm)	Air Flow (L/s)	Static Pressure (Pa)	Total Pressure (Pa)	Sound (NC)	
600 x 600	203	47	12	12	-	
		61	20	22	18	
		76	32	35	24	
		90	45	50	30	
		104	60	65	35	
		118	77	85	41	
	254	47	12	12	-	
		61	20	22	15	
		76	30	32	20	
		90	42	45	25	
		104	57	60	32	
		118	75	77	37	
	600 x 905	203	71	12	15	17
			90	20	25	23
113			32	40	30	
132			42	52	36	
156			60	75	42	
175			77	95	48	
254		71	12	12	-	
		90	17	20	18	
		113	30	32	24	
		132	40	45	30	
		156	55	62	36	
		175	70	77	41	
600 x 1210		203	94	10	15	21
			123	17	27	28
	151		27	42	35	
	179		40	60	41	
	208		55	80	47	
	236		72	105	53	
	254	94	10	12	-	
		123	17	20	21	
		151	25	30	27	
		179	37	45	33	
		208	50	60	38	
		236	65	77	43	
	305	94	10	10	-	
		123	15	17	17	
		151	25	27	22	
		179	35	37	28	
		208	45	50	33	
		236	60	65	38	

Performance Notes:

1. All pressures are in Pascals, Pa.
2. L/s = Air flow in Liters per second.
3. NC = Noise Criteria. NC values are based on room absorption of 10dB re 10⁻¹² watts.
4. Blanks " - " indicate an NC level below 15 or a pressure less than 2 Pa.
5. Pressure and NC performance assumes damper in the full open position.
6. Tested in accordance with ASHRAE Standard 70.

PERFORMANCE DATA

LFD3

Unit Size (mm)	Inlet Size (mm)	Air Flow (L/s)	Static Pressure (Pa)	Total Pressure (Pa)	Sound (NC)
300 x 1200	150	38	7	10	-
		47	12	15	-
		57	17	22	-
		66	22	30	-
		76	30	40	16
		94	47	62	24
		113	67	90	31
600 x 600	203	38	5	5	-
		47	5	7	-
		57	7	10	-
		66	12	15	-
		76	15	17	-
		94	22	27	-
		113	32	40	15
	254	38	2	5	-
		47	5	5	-
		57	7	7	-
		66	10	10	-
		76	12	15	-
		94	20	22	16
		113	27	30	23
600 x 900	203	38	5	7	-
		47	7	12	-
		57	12	17	-
		66	17	22	-
		76	20	27	-
		94	30	40	-
		113	40	57	-
	254	57	5	5	-
		71	7	10	-
		85	10	12	-
		99	15	17	16
		113	17	22	21
		142	27	32	29
		170	40	45	35
600 x 1200	203	57	7	10	-
		71	10	15	-
		85	15	22	-
		99	20	30	-
		113	27	40	-
		142	40	60	18
		170	57	87	25
	254	76	7	7	-
		94	10	12	-
		113	12	17	19
		132	17	22	24
		151	22	30	29
		189	35	45	37
		227	50	62	44
300	76	5	7	-	
	94	7	10	-	
	113	12	15	-	
	132	17	17	-	
	151	20	22	19	
	189	32	35	27	
	227	45	50	33	

PERFORMANCE DATA

LFD3

Unit Size (mm)	Inlet Size (mm)	Air Flow (L/s)	Static Pressure (Pa)	Total Pressure (Pa)	Sound (NC)	
600 x 1500	203	76	10	22	-	
		94	12	22	-	
		113	20	30	-	
		132	25	40	-	
		151	32	52	-	
		189	50	80	18	
		227	70	115	25	
	254	94	7	10	-	
		118	12	15	19	
		142	17	22	26	
		165	22	27	31	
		189	27	37	36	
		236	42	57	44	
	300	283	60	80	50	
		94	7	7	-	
		118	10	12	-	
		142	15	17	15	
		165	20	22	21	
	600 x 1800	203	189	25	30	26
			236	40	45	33
			283	55	65	40
94			10	12	-	
118			15	17	-	
142			20	25	-	
165			25	35	-	
254		189	32	45	17	
		236	50	70	25	
		283	70	97	32	
		113	7	10	-	
		142	12	15	-	
		170	17	20	21	
		198	22	27	26	
300	227	30	35	31		
	283	45	55	39		
	340	65	77	45		
	113	7	7	-		
	142	12	12	-		
	170	15	17	-		
	198	22	22	18		
600 x 1800	300	227	27	30	23	
		283	42	47	30	
		340	57	65	37	

Performance Notes:

1. All pressures are in Pascals, Pa.
2. L/s = Air flow in Liters per second.
3. NC = Noise Criteria. NC values are based on room absorption of 10dB re 10⁻¹² watts.
4. Blanks " - " indicate an NC level below 15 or a pressure less than 2 Pa.
5. Pressure and NC performance assumes damper in the full open position.
6. Tested in accordance with ASHRAE Standard 70.



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.