

Model 611L

Model 611L is a horizontal mount backdraft damper designed to allow airflow in one direction and to prevent reverse airflow. Models are available in exhaust and supply (intake), as well as vertical mount applications. These are designed for use in roof curbs, duct work, and wall collars, when using a fan or power roof exhauster (not for kitchen exhaust applications).

- Model 611L - exhaust and vertical mount. (611LV) Also available for supply (intake) applications (611LS)

Rectangular sizes available upon request.



Features:

Frame

- Frame is galvanized steel
- Conduit knock-out provided for ease of electrical connection
- Easy to motorize (order MTR-611 motor pack)
- 2" deep frame

Blades

- Blades are 26 ga mill finish aluminum with galvanized reinforcement strip
- Blades open freely to allow full opening and closing.
- Felt seal on leading edge of blades for quiet closing and better protection from the weather
- EPDM top and bottom frame and jamb seals
- Stainless steel pivot pins
- Tie rod attached to all blades for simultaneous opening.
- For vertical mount applications, blades pivot at bottom and fall with gravity

Size Limitations

- Minimum panel size: 8"w x 8"h
- Maximum panel size: 48"w x 48"h
- Multiple panels for sizes over 48"w x 48"h

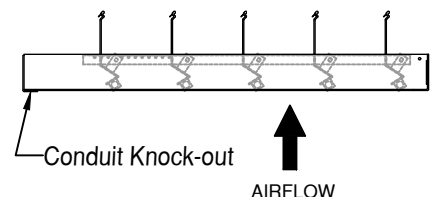
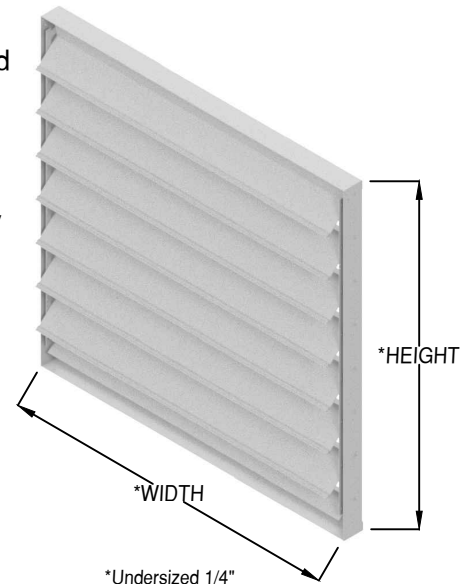
Ratings

- Maximum recommended velocity is 2,250 fpm
- Pressure: 2.0 in w.g. differential pressure
- Temperature: -40°F to 180°F

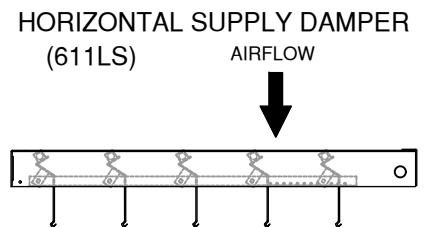
Options and Accessories (at additional cost)

- Motor Packs (24v, 115/230v, 208v, and 460v)
- End Switch for motor packs (115/230v)

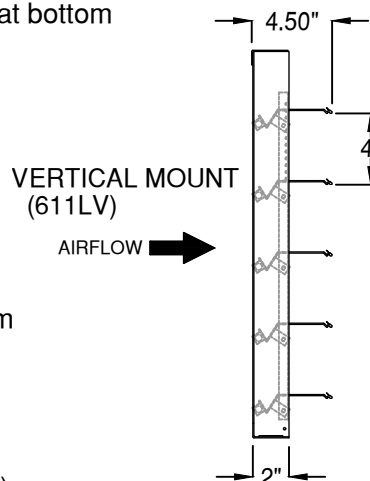
Steel Backdraft Damper



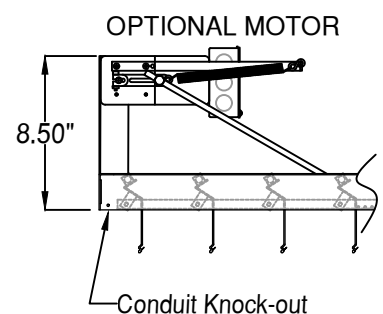
HORIZONTAL EXHAUST DAMPER (611L)



HORIZONTAL SUPPLY DAMPER (611LS)



VERTICAL MOUNT (611LV)



OPTIONAL MOTOR



MODEL 611L Steel Backdraft Damper

DRAWN BY:
CLJ

DATE:
June 2026

DWG. NO.:
SPAC-1

MODEL 611L

MOTOR PACKS

MTR-611 Motor pack optional. One motor pack is required for each panel.

Model MTR-611 motor packs are equipped with motor bracket linkage and mounting hardware, installation instructions and parts list.

Model MTR-611 motor packs are designed to be used with Model 611 backdraft dampers. Field installation required to convert Model 611 backdraft damper horizontal/vertical mount to motorized operation. This motor pack features power open spring close, which provides closure in the event of electrical failure.

SPECIFICATIONS

Motor Pack Part Number	Power Supply Required	Running AMPS	Stall Torque	Lead Length	Installed Unit Dimension		
					H	W	W
MTR-611	115/230V, 60Hz	.20/.14	41 in./lbs/47 in.lbs.	6"	8 ½"	4 ½"	7.375"
MTR-611 24V	24V, 60Hz	1.02	42 in.lbs	6"	8 ½"	4 ½"	7.375"
MTR-611 208V	208V, 60 Hz	0.10	42 in.lbs	6"	8 ½"	4 ½"	7.375"
MTR-611 460V	460V, 60Hz	0.11	48 in.lbs	6"	8 ½"	4 ½"	7.375"
MTR-611-E	115/230V, 60 Hz	.20/.14	41 in.lbs/47 in.lbs	6"	8 ½"	4 ½"	7.375"

Note: (MTR-611-E includes end switch:

(*) Motor is single-phase, continuous duty with a 40°C, (104°F) maximum ambient temperature.

Model 611L Free Area

For sizes 8"w x 8"h through 37"w x 37"h Free Area is approximately **84%**.

For sizes 38"w x 38"h through 60"w x 60"h Free Area is approximately **89%**.

Product Weight

Average weight of model 611L is approximately ***1.69 lbs per square foot**.

**Approximate weight is for the damper only (optional motor kit weight not included in this calculation)*

Note: Dimensions are approximate due to normal tolerances in the manufacturing process.

Estimated Free Area calculation is based upon the following formula: $MD(A+B+ (N \times C))/144$.

Free Area x FPM = CFM; actual performance may vary.

LIMITED WARRANTY

All products manufactured are warranted by Air Conditioning Products Company (ACP) to be free from original defects in workmanship for a period of one year from date of shipment, under conditions of normal use and service. ACP will replace or repair any defective parts upon return to our plant, freight prepaid. This limited warranty will, in no way, include the payment of labor charges for field replacement of defective parts, installation, repairs of adjustments, or any other work done. Back charges will not be accepted for any reason unless ACP has given prior written permission, nor will ACP be responsible for consequential damages of any character, no limited warranty expressed or implied will supersede the foregoing.

Manufactured for Air Conditioning Products CO.
30350 Ecorse Road * Romulus, MI 48174
acpshutters.com

AIR PERFORMANCE RATINGS

24 x 24 Pressure Drop			
Velocity		Pressure Drop	
fpm	(m/s)	inches wg	(Pa)
2479	12.59	0.27	68.00
1982	10.07	0.17	42.84
1482	7.53	0.10	24.91
988	5.02	0.06	15.19
344	1.75	0.02	5.23

48 x 48 Pressure Drop			
Velocity		Pressure Drop	
fpm	(m/s)	inches wg	(Pa)
116	0.59	0.02	5.48
81	0.41	0.02	4.23
68	0.35	0.01	3.49
54	0.27	0.009	2.24
14	0.07	0.001	0.25

48 x 8 Pressure Drop			
Velocity		Pressure Drop	
fpm	(m/s)	inches wg	(Pa)
1115	5.66	0.25	63.27
723	3.67	0.14	34.13
602	3.06	0.11	26.40
480	2.44	0.08	19.68
122	0.62	0.008	1.99

48 x 24 Pressure Drop			
Velocity		Pressure Drop	
fpm	(m/s)	inches wg	(Pa)
249	1.26	0.05	11.21
174	0.88	0.04	8.97
145	0.74	0.03	7.22
116	0.59	0.02	5.73
31	0.16	0.004	1.00

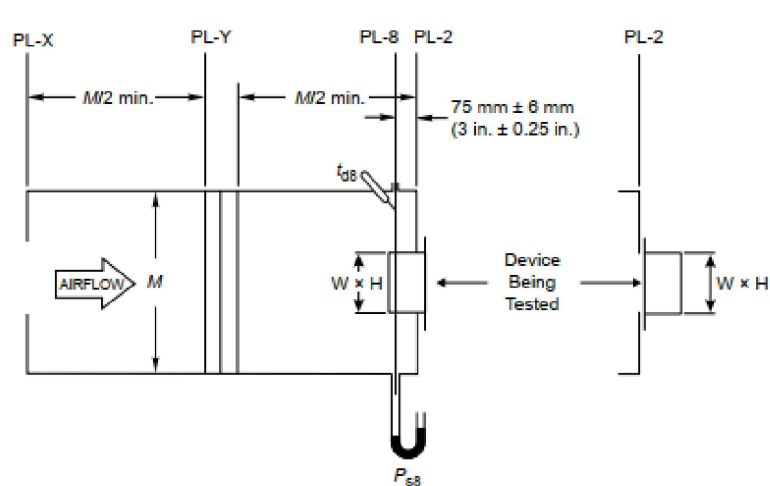
8 x 48 Pressure Drop			
Velocity		Pressure Drop	
fpm	(m/s)	inches wg	(Pa)
881	4.48	0.21	53.31
597	3.03	0.14	34.37
497	2.52	0.10	23.91
397	2.02	0.06	15.44
108	0.55	0.005	1.25

24 x 48 Pressure Drop			
Velocity		Pressure Drop	
fpm	(m/s)	inches wg	(Pa)
241	1.22	0.04	10.46
168	0.85	0.04	8.97
140	0.71	0.03	6.97
112	0.57	0.02	5.23
30	0.15	0.003	0.75

Model 611L sizes: 24"w x 24"h, 48"w x 8"h, 8"w x 48"h, 48"w x 48"h, 48"w x 24"h, 24"w x 24"h

Data corrected to standard air density

Pressure drop test per AMCA Standard 500-D, Figure 5.5



S&P Air Control certifies that the 611L is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Rating Seal applies to Air Performance and Air Leakage ratings.

ANSI/AMCA Standard 500-D, Figure 5.5

AIR LEAKAGE RATINGS

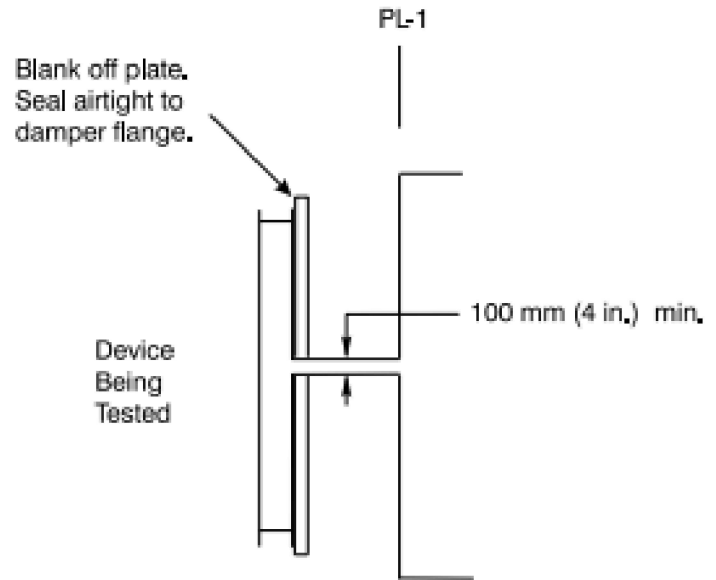
Damper size: 24x48	CFM/ft ² (leakage)	
	1" wg	2" wg
	14.6	20.4

Air leakage is based on operation between 32° F to 120° F. All data corrected to represent air density of 0.075 lbs/ft.³

Damper size: 48 x 24	CFM/ft ² (leakage)	
	0.5" wg	1" wg
	19.6	20.2

Damper size: 48 x 8	CFM/ft ² (leakage)	
	1" wg	2" wg
	18.2	38.8

Damper size: 8 x 48	CFM/ft ² (leakage)	
	1" wg	2" wg
	95.4	85



ANSI/AMCA Standard 500-D, Figure 5.4 Alternate



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Dampers were tested with static pressure pushing blades closed.
Pressure drop test per AMCA Standard 500-D, Figure 5.4 alternate

The 2015 International Energy Conservation Code (the IECC) and ASHRAE 90.1 both require that nonmotorized dampers (i.e. backdraft dampers) meet the following leakage requirements:

- Units with a width and height 24" or greater shall leak 20cfm/ft² or less at 1.0 inch w.g.
- Units with a width or height less than 24" shall leak 40 cfm/ft² or less at 1.0 inch w.g.