

BACKDRAFT DAMPERS

MODEL 411

Horizontal mount backdraft dampers designed to allow airflow in one direction and to prevent reverse airflow. Models are available for exhaust and supply (intake). (also available for vertical mount applications). Designed for use in roof curbs, duct work, wall collars when using a fan or power roof exhauster. (Do not use with any kitchen exhaust applications)

- **411 Model – exhaust and vertical mount.** Sizes range from 08" to 30" square or rectangular. Standard construction or available with 1" flange.
- **413 Model – supply (intake).** Sizes range from 08" to 30" square or rectangular. Standard construction or available with 1" flange.

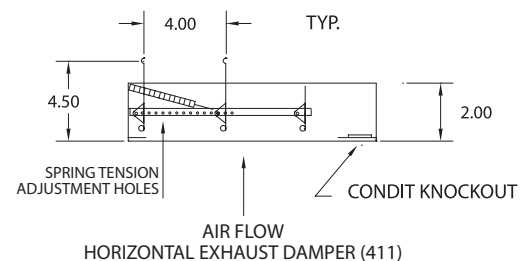
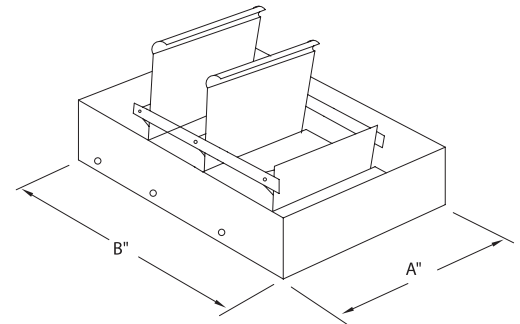
Features:

Frame

- Frame is galvanized steel.
- Conduit knockout provided for ease of electrical hook up.
- Easy to motorize. (order MTR-611 motor pack)
- 2" deep frame.

Blades

- Blades are 26 gauge mill finish aluminum.
- 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.
- Nylon bushing and stainless steel pivot pins.
- Tie rod attached to all blades for simultaneous opening.
- Spring assist to allow blades to open quickly.
- For vertical mount applications, blades pivot at top and open against gravity.



Size limitations – Single Panel Only

- Minimum panel size 8" W x 8" H
- Maximum panel size 30" W x 30" H

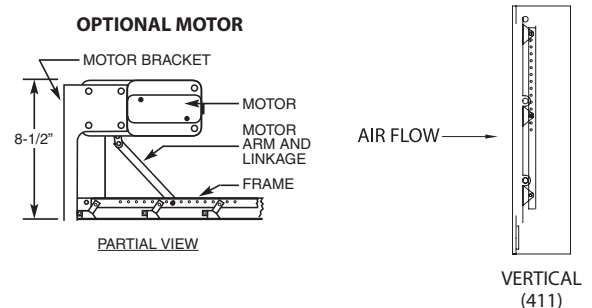
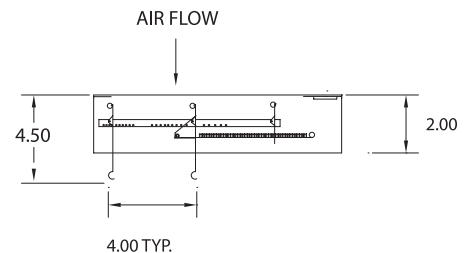
Ratings

- Maximum recommended velocity is 2,000 FPM
- Pressure – 1.0 in. w.g. – differential pressure (see page 2)
- Temperature - -40 F to 180 F

Options and Accessories (at additional cost)

- Flanged frame – exhaust or supply (intake)
- Aluminum flanged frame for exhaust only
- Motor Packs (24V, 115/230V, 208V, 277V and 460V)
- Motor Pack available with end switch (115/230V)
- Motor Pack available in 50 Hz (not UL rated)
- Transformer 460V
- Manual pull chain operated

HORIZONTAL SUPPLY DAMPER (413)



MODEL 411

MOTOR PACKS

MTR-611 Motor pack Optional.

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 411 Backdraft Dampers. Field installation required to convert Model 411 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	D
MTR-611	115/230V, 60 Hz	.20/.14	41 in.lbs/47 in.lbs.	6"	8 1/2"	4 1/2"	7.375"
MTR-611 24V	24V, 60Hz	1.02	42 in.lbs	6"	8 1/2"	4 1/2"	7.375"
MTR-611 208V	208V, 60Hz	0.10	42 in.lbs	6"	8 1/2"	4 1/2"	7.375"
MTR-611 277V	277V, 60Hz	0.12	50 in.lbs.	6"	8 1/2"	4 1/2"	7.375"
MTR-611 460V	460V, 60 Hz	0.11	48 in.lbs	6"	8 1/2"	4 1/2"	7.375"
MTR-611-E	115/230V, 60 Hz	.20/.14	41 in.lbs/47 in.lbs.	6"	8 1/2"	4 1/2"	7.375"

Note: (MTR-611-E includes end switch; 50 Hz versions of above motor packs available but not UL rated).

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

STANDARD SIZES

Part No.	Overall Frame Dimension (width X height)	Free Area Dimension (width X height)	Face Area (Sq. Ft.)	Free Area (Sq. Ft.)	Shipping Weight Lbs.
411-STD 08"	7.75" x 7.75"	6.125" x 7.25"	0.42	0.31	2.00
411-STD 10"	9.75" x 9.75"	7.125" x 8.25"	0.66	0.41	2.50
411-STD 11"	10.75" x 10.75"	8.50" x 9.25"	0.80	0.55	3.00
411-STD 12"	11.75" x 11.75"	9.125" x 10.25"	0.96	0.65	3.50
411-STD 13"	12.75" x 12.75"	10.125" x 11.25"	1.13	0.79	4.00
411-STD 14"	13.75" x 13.75"	11.125" x 12.25"	1.31	0.95	4.00
411-STD 15"	14.75" x 14.75"	12.125" x 13.25"	1.51	1.12	4.00
411-STD 16"	15.75" x 15.75"	13.125" x 14.25"	1.72	1.30	4.00
411-STD 18"	17.75" x 17.75"	15.125" x 16.25"	2.19	1.71	4.50
411-STD 19"	18.75" x 18.75"	16.125" x 17.25"	2.44	1.93	4.50
411-STD 20"	19.75" x 19.75"	17.125" x 18.25"	2.71	2.17	5.00
411-STD 22"	21.75" x 21.75"	19.125" x 20.25"	3.29	2.69	5.00
411-STD 23"	22.75" x 22.75"	20.125" x 21.25"	3.59	2.97	5.50
411-STD 24"	23.75" x 23.75"	21.125" x 22.25"	3.92	3.26	6.00
411-STD 26"	25.75" x 25.75"	23.125" x 24.25"	4.60	3.89	7.00
411-STD 28"	27.75" x 27.75"	25.125" x 26.25"	5.35	4.58	7.50
411-STD 30"	29.75" x 29.75"	27.125" x 28.25"	6.15	5.32	8.00

Note: Dimension 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.

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