



MP



The Mini-Power's (MP) compact low-profile design is ideal for entrances where space is limited. The MP air curtain from Powered Aire has met all criteria to be used as an exception to vestibules as well as being tested in accordance with the ANSI/AMCA 220 standard. The MP model is often seen in toll booths (for fume control), zoos/amusements parks, food trucks, cannabis grow houses, restaurants (to separate smoking and nonsmoking sections) and offices.

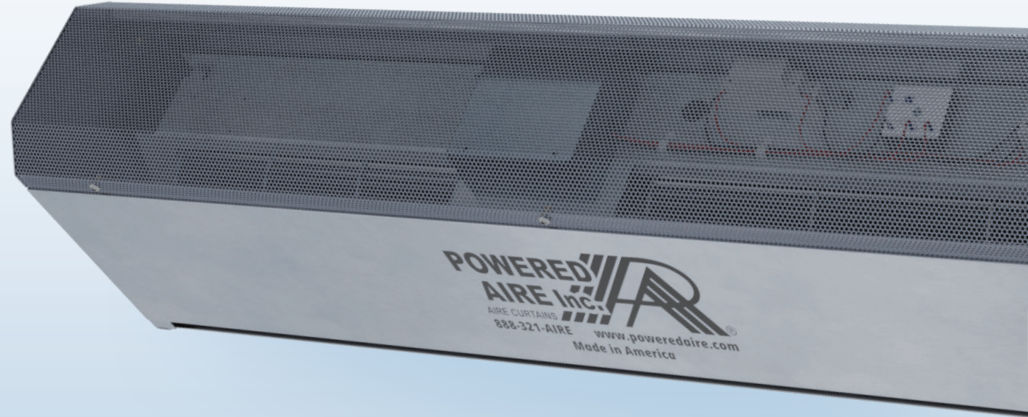
OPTIONS

HEATING

- Electric.....pg 119
- Hot Water.....pg 123
- Steam.....pg 123

FILTER

- ½" Cleanable (Unheated only)



AT A GLANCE

Single Incremental Widths

30" to 10'

Max Installation Height

10'

Heavy Duty Motors

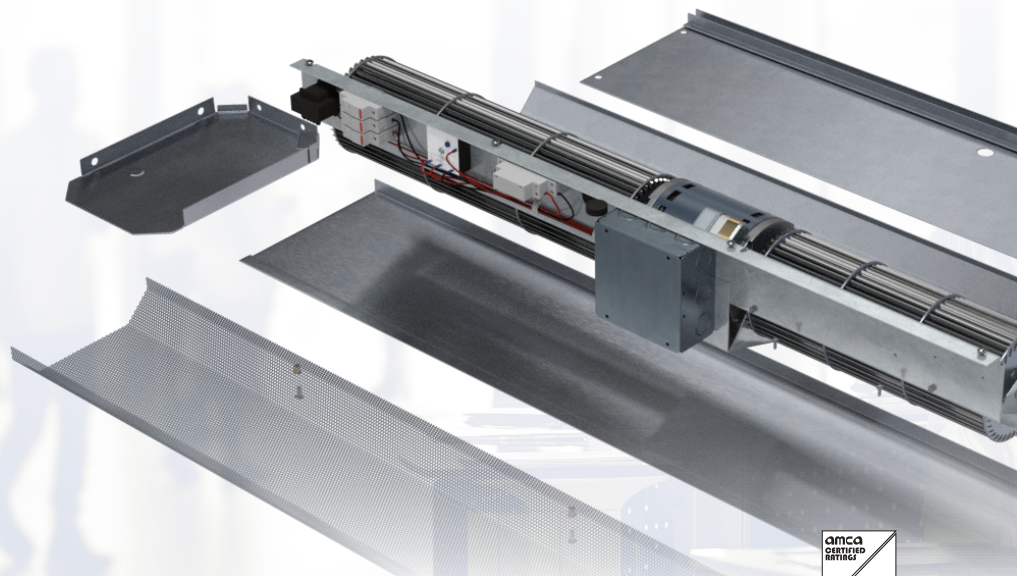
1/5 HP

KEY DESIGN FEATURES

- Meets ASHRAE 90.1 and IECC requirements for vestibule exception
- AMCA tested performance
- Low-profile outer cabinet constructed of 18-gauge 304 stainless steel with #3 finish
- 1/5 HP ODP (Open Drip Proof) direct-drive variable-speed motor(s)
- Adjustable air foil vane (+/-20°)

RECOMMENDED CONTROLS & ACCESSORIES

- Activation by 24V magnetic door switch
- SmartTouch controller
- Filter (washable)



▶ MP | PERFORMANCE

MP | Performance Table

MODEL	Nozzle Width (in.)	Max. FPM at Nozzle	Avg. Outlet Velocity (FPM)	Airflow Rate (CFM)	Outlet Velocity Uniformity	Power Rating (kW)	Number of Motors	Motor HP	Weight (lbs)
MP-1-30	29	3050	1335	801	66%	0.22	1	1/5	42
MP-1-36	35	3262	1348	984	84%	0.28	1	1/5	53
MP-1-42	41	3269	1462	1243	84%	0.33	1	1/5	60
MP-1-48	48	3256	1520	1474	85%	0.38	1	1/5	67
MP-1-60	59	3218	1529	1865	84%	0.46	1	1/5	85
MP-2-72	71	3262	1348	1968	84%	0.56	2	1/5	94
MP-2-84	83	3269	1462	2486	84%	0.66	2	1/5	105
MP-2-96	95	3256	1520	2948	85%	0.76	2	1/5	114
MP-2-108	107	3242	1525	3339	84%	0.84	2	1/5	130
MP-2-120	117	3218	1529	3730	84%	0.92	2	1/5	141

MP-1-72 is not AMCA Certified

MP-1-72	71	3225	1948	1796	62%	n/a	1	1/5	92
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! For Hot Water or Steam heat, consult factory.

MP | Velocity Projection

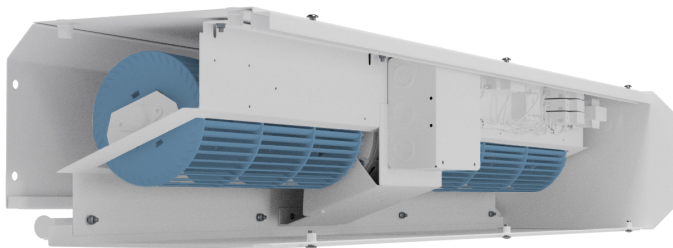
Distance From Nozzle	40"	80"	120"	160"
MP-1-36 Core Velocity (fpm)	1048	784	677	603

MP | Sound Levels

Measured 10 ft. from unit in a free field based on a 1 motor unit 53 dBA

MP | Amp Draw and Breaker Options

Motors	120V Amp Draw (Breaker size)	208-230V Amp Draw (Breaker size)	480V Amp Draw (Breaker size)	575V Amp Draw (Breaker size)
MP-1-30	3.0A (15)	1.5A (15)	1.1A (15)	0.9A (15)
MP-1-36, 42, 48, 60, 72	4.4A (15)	2.0A (15)	1.1A (15)	0.9A (15)
MP-2-72, 84, 96, 108, 120	8.8A (15)	4.0A (15)	2.2A (15)	1.8A (15)



Performance Highlight

This unit can fit a larger diameter tangential blower wheel than competitors' models to increase performance without increasing size. The motor/ blower plate comes out of the unit as an entire piece and the electrical connections can be made on the top or sides of the unit for more versatility.

The AMCA Certified Ratings Seal applies to airflow rate, average outlet velocity, outlet velocity uniformity, velocity projection and power rating at free delivery only.

Powered Aire Inc. certifies that the Model MP Air Curtain shown herein is licensed to bear the AMCA Seal for Air Performance. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.

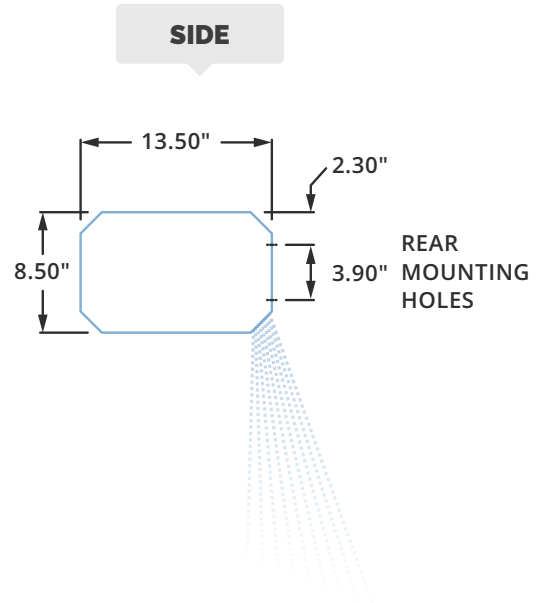
May 2020
PAAC-601



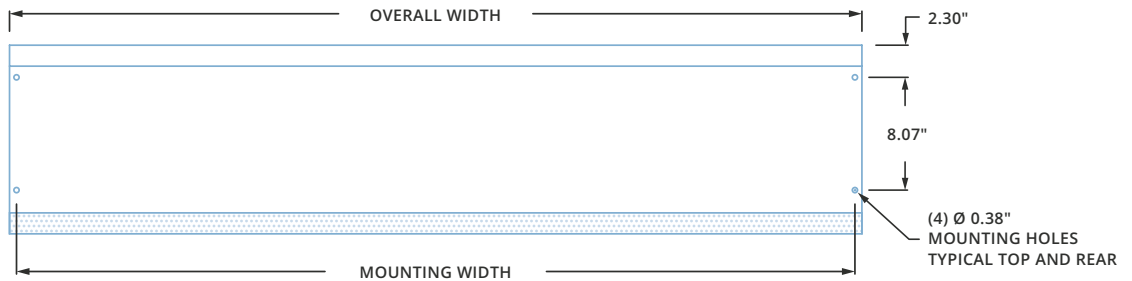
▶ MP & MP-E | MECHANICAL DETAILS & DRAWINGS

MP & MP-E | Mechanical Information Table

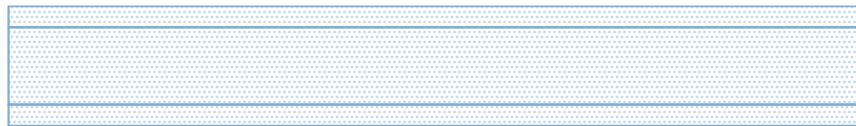
MODEL	Overall Width (in.)	Mounting Width (in.)	Nozzle Width (in.)
MP-1-30 (E)	31	30	29
MP-1-36 (E)	37	36	35
MP-1-42 (E)	43	42	41
MP-1-48 (E)	49	48	47
MP-1-60 (E)	61	60	59
MP-1-72 (E)	73	72	71
MP-2-72 (E)	73	72	71
MP-2-84 (E)	85	84	83
MP-2-96 (E)	97	96	95
MP-2-108 (E)	109	108	107
MP-2-120 (E)	119	118	117



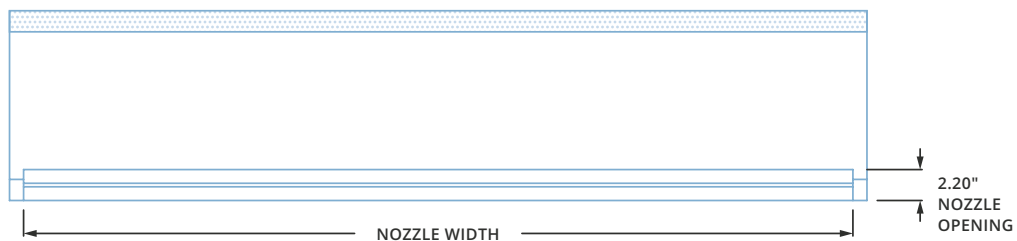
TOP



FRONT



BOTTOM



▶ MP, MP-E & MP-HW/ST | INSTALLATION

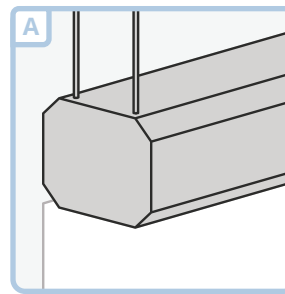


IMPORTANT

- ✓ **NOTE:** The air curtain should be mounted as close to the door header/opening as possible for maximum performance. For every one inch the bottom of the air curtain is mounted above the door header, the back side of the air curtain should be moved away from the wall ¼ inch.
- ✓ Trained and experienced mechanic / electrician required.
- ✓ **WARNING:** Risk of electrical shock, can cause injury or death: Disconnect all remote electrical supplies before servicing.
- ✓ Units must be field wired in accordance with all applicable local, state, provincial and national codes, including wire size and materials.
- ✓ All hardware and brackets must be of sufficient strength to safely support air curtain.

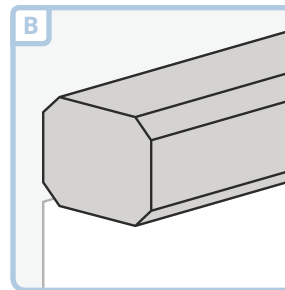
A TOP MOUNT

Unit has four 3/8 - 16 threaded inserts for installing one end of threaded rods. The other ends of the threaded rods can be attached to the ceiling. Threaded rod should not extend more than 3/4 inch into air curtain.



B WALL MOUNT

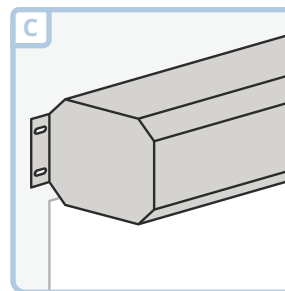
Back side of air curtain has 4 mounting holes capable of accepting four 3/8 mounting bolts or lags, with washers (use these holes only for mounting). Mark and pre-drill mounting surface accurately. A long extension and ratchet will negate the need to remove the motor/blower plate when installing. Mounting bolts or lags of sufficient size and strength should be installed and tightened through the four slots in motor/blower plate.



If motor/blower plate has to be removed, the junction box inside the unit must be removed along with any electrical switches that may be in the way. Remove 7/16 whizlock nuts holding plate in place, and slide plate out, rotating top portion of plate so it comes out first. Remember when installing plate to put bottom of plate in first and push and rotate top in last.

C EXTENSION BRACKETS (WALL MOUNT)

Extension brackets bolt on to the back of the unit, utilizing the 4 original mounting holes, and allowing for external mounting of unit to wall. Brackets have elongated mounting slots that extend the mounting width by 2½ to 3½ inches.



D LP123 BRACKETS

Universal mounting slots are used to lag the bracket to the wall (bolts by others). 3/8" mounting bolts (supplied) are threaded into the holes located in all four corners of the back side of the air curtain, leaving 1/2" of the bolts exposed.

