



CED



The Customer Entrance Door (CED) air curtain from Powered Aire is specially designed for high-traffic retail facilities where customer satisfaction is key. The CED creates a barrier to keep conditioned air inside the building and unconditioned/unwanted elements out. It also maximizes employee and customer comfort. The CED has a gentle airflow and its unique plenum design helps make it one of the quietest air curtains in the industry. The CED is capable of being used as an exception to vestibules, having met all the criteria set forth in various codes. It has also been tested in accordance with the ANSI/AMCA 220 Standard to be used as an exception to vestibules.

OPTIONS

HEATING

Electricpg 69
Hot Waterpg 75
Steampg 75

FILTER

½" Cleanable



AT A GLANCE

Single Incremental Widths

3' to 14'

Max Installation Height

11'

Heavy Duty Motors

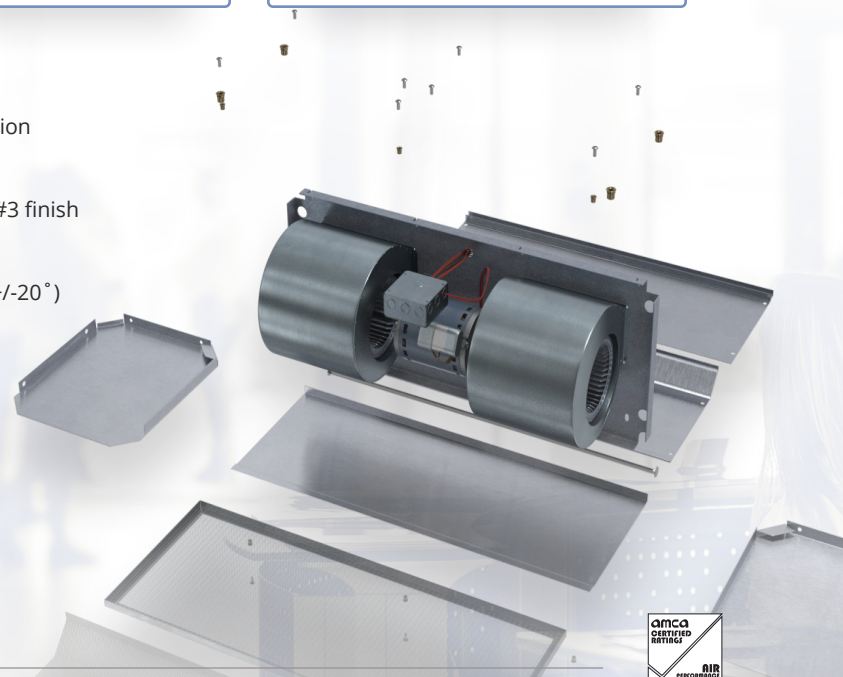
½ HP

KEY DESIGN FEATURES

- Meets ASHRAE 90.1 and IECC requirements for vestibule exception
- AMCA tested performance
- Outer cabinet constructed of 18-gauge 304 stainless steel with #3 finish
- 1/2 HP ODP (Open Drip Proof) direct-drive dual-speed motor(s)
- High-efficiency discharge plenum with adjustable air foil vane (+/-20°)

RECOMMENDED CONTROLS & ACCESSORIES

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



► CED | PERFORMANCE

CED | 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)
CED-1-36	36	3000	1205	892	88%	0.25	1	1/2	83
CED-1-42	42	3000	1209	1040	90%	0.28	1	1/2	90
CED-1-48	48	3000	1131	1108	89%	0.28	1	1/2	97
CED-1-60	60	3000	998	1227	79%	0.29	1	1/2	111
CED-2-72	72	3000	1205	1784	88%	0.50	2	1/2	162
CED-2-84	84	3000	1209	2080	90%	0.56	2	1/2	182
CED-2-96	96	3000	1131	2216	89%	0.56	2	1/2	196
CED-3-108	108	3000	1205	2676	88%	0.75	3	1/2	239
CED-3-120	118	3000	1176	2892	88%	0.78	3	1/2	267
CED-3-132	133	3000	1111	3011	79%	0.79	3	1/2	276
CED-4-144	145	3000	1205	2568	88%	1.00	4	1/2	324
CED-4-156	157	3000	1208	3864	88%	1.06	4	1/2	342
CED-4-168	169	3000	1209	4160	90%	1.12	4	1/2	360



For a unit over 14 feet long, consult factory.

CED | Velocity Projection

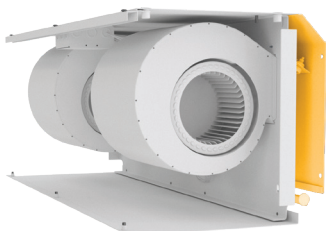
Distance From Nozzle	40"	80"	120"	160"
CED-1-36 Core Velocity (fpm)	996	746	636	574

CED | Sound Levels

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

CED | 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)
CED-1-36, 42, 48, 60	2.5A (15)	1.4A (15)	0.7A (15)	0.6A (15)
CED-2-72, 84, 96	5.0A (15)	2.8A (15)	1.4A (15)	1.2A (15)
CED-3-108, 120, 132	7.5A (15)	4.2A (15)	2.1A (15)	1.8A (15)
CED-4-144, 156, 168	10.0A (15)	5.6A (10)	2.8A (15)	2.4A (15)



Performance Highlight

Perfect for customer facing spaces in retail environments, the model CED positions the blowers pointing toward the back of the air curtain. Here they fill a specially designed plenum that when pressurized is more efficient and lowers the operational sound level.

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 CED 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.

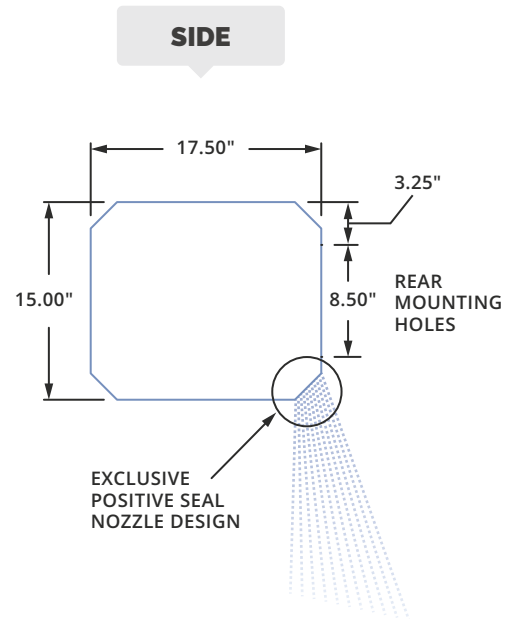


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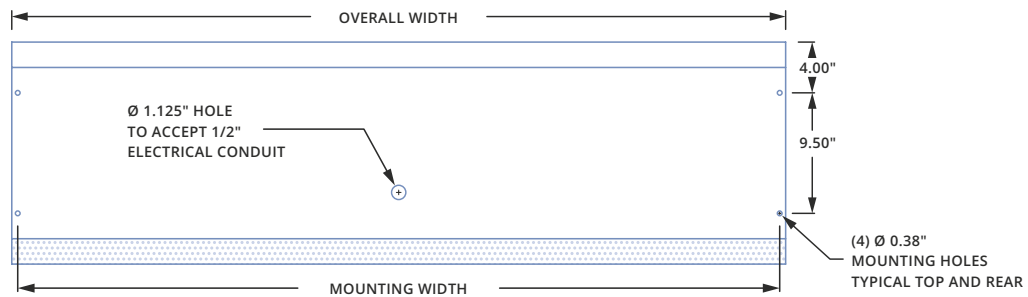
► CED & CED-E | MECHANICAL DETAILS & DRAWINGS

CED & CED-E | Mechanical Information Table

MODEL	Overall Width (in.)	Nozzle Width (in.)	Mounting Width (in.)
CED-1-36 (E)	37	36	36.06
CED-1-42 (E)	43	42	42.06
CED-1-48 (E)	49	48	48.06
CED-1-60 (E)	61	60	60.06
CED-2-72 (E)	73	72	72.06
CED-2-84 (E)	85	84	84.06
CED-2-96 (E)	97	96	96.06
CED-3-108 (E)	109	108	108.06
CED-3-120 (E)	119	118	118.06
CED-3-132 (E)	134	133	133.06
CED-4-144 (E)	146	145	145.06
CED-4-156 (E)	158	157	157.06
CED-4-168 (E)	170	169	169.06



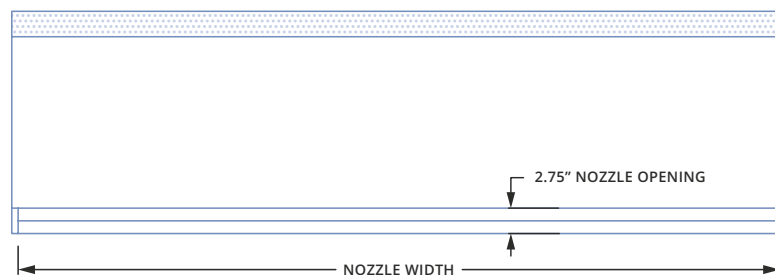
TOP



FRONT



BOTTOM



► CED & CED-E | INSTALLATION

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.

A 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 7/8 inch holes 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.

The electrical switches have a lever that slides in one direction to release the switch contacts from the switch body. All wires will then stay intact for easy installation when replacing the blower plate.

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 rotate top in last.

B WALL MOUNT EXTENSION PLATES

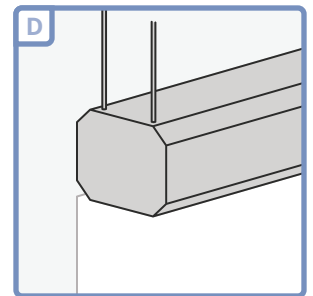
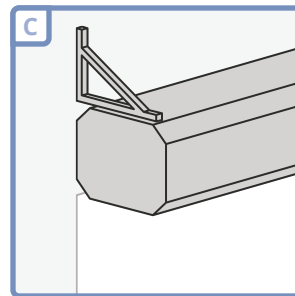
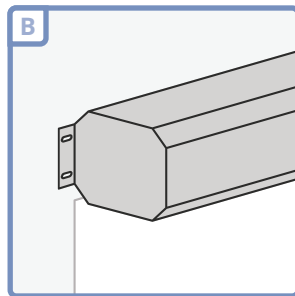
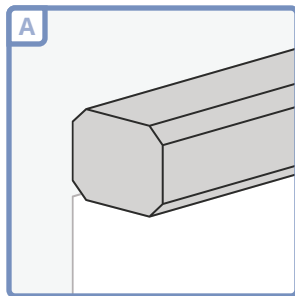
Extension plates bolt onto the back of the unit, utilizing the 4 original mounting holes. Brackets have elongated mounting slots that extend the mounting width by 2-1/2 to 3-1/2 inches.

C BRACKETS

Mounting brackets (also called knee, angle or L-brackets) can be flush to the wall or constructed to account for a projection from the wall. For proper size brackets measure standoff distance from wall to back of where air curtain will be.

D 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.



MB123 QUICK MOUNTING PLATE

Optional Installation (See page 240 for more detail)

Step 1

Attach top mounting bracket to back of air curtain using the upper mounting holes on back of unit.

Step 2

Attach the mounting bracket to the wall. Make sure there is sufficient room between mounting plate and ceiling to mount air curtain.

Step 3

Place air curtain over mounting bracket. The top and bottom brackets will lock into place supporting the weight of the air curtain. Attach the bottom bracket to the air curtain using the lower mounting holes.



When mounted, bottom of air curtain is to be flush with bottom of the door header.

