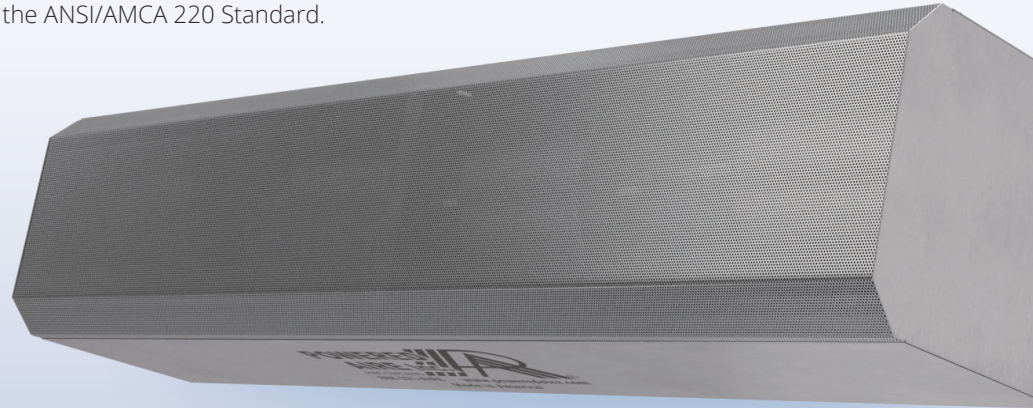




CED



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.



OPTIONS

HEATING

Electric.pg 29

FILTER

½" Cleanable

AT A GLANCE

Single Incremental Widths

3' to 14'

Max Installation Height

11'

Heavy Duty Motors

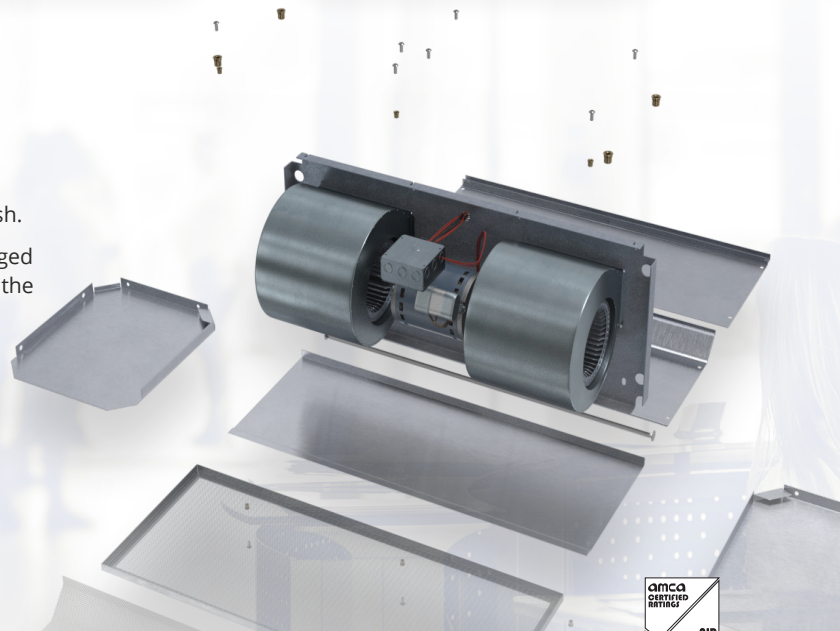
½ HP

KEY DESIGN FEATURES

- 18 gauge 304 stainless steel in a number three finish.
- Heavy duty ½ HP motors. 1075 rpm each. 50/60 cycle.
- Galvanized fans.
- Air intake screen is perforated stainless steel with mill grain finish.
- High efficiency discharge plenum ensures that air being discharged fills the entire width and height of the opening. This also lowers the unit's operational sound level.
- All units are direct drive, which avoids misalignment of couplers and outboard bearings and eliminates belt replacement.

RECOMMENDED CONTROLS

- ON / OFF Switch
- Magnetic Door Switch for activation
- Time delay relay



► 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	5560	1205	892	88%	0.25	1	1/2	83
CED-1-42	42	5305	1209	1040	90%	0.28	1	1/2	90
CED-1-48	48	4628	1131	1108	89%	0.28	1	1/2	97
CED-1-60	60	5096	998	1227	79%	0.29	1	1/2	111
CED-2-60*	60	6269	1268	1560	92%	0.38	2	1/2	140
CED-2-72	72	5560	1205	1784	88%	0.50	2	1/2	162
CED-2-84	84	5305	1209	2080	90%	0.56	2	1/2	182
CED-2-96	96	4628	1131	2216	89%	0.56	2	1/2	196
CED-3-108	108	5560	1205	2676	88%	0.75	3	1/2	239
CED-3-120	118	5028	1176	2892	88%	0.78	3	1/2	267
CED-3-132	133	4996	1111	3011	79%	0.79	3	1/2	276
CED-4-144	145	5560	1205	3568	88%	1.00	4	1/2	324
CED-4-156	157	5300	1208	3864	88%	1.06	4	1/2	342
CED-4-168	169	5305	1209	4160	90%	1.12	4	1/2	360

*Model CED-2-60 is not licensed to bear the AMCA seal.



For a unit over 14 feet long, consult factory.

CED | Velocity Projection

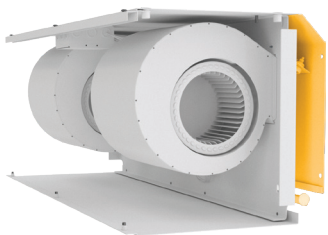
Distance From Nozzle	40"	80"	120"	160"
CED-1-36 Core Velocity (fpm)	996	746	636	574

CED | Sound Levels

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

CED | Single Phase Motor Options

Voltages available	120	208/230	480	Note: 575v is transformed down to 120v
Amp draw per motor	2.5	1.4	0.7	



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.

May 2020
PAAC-501

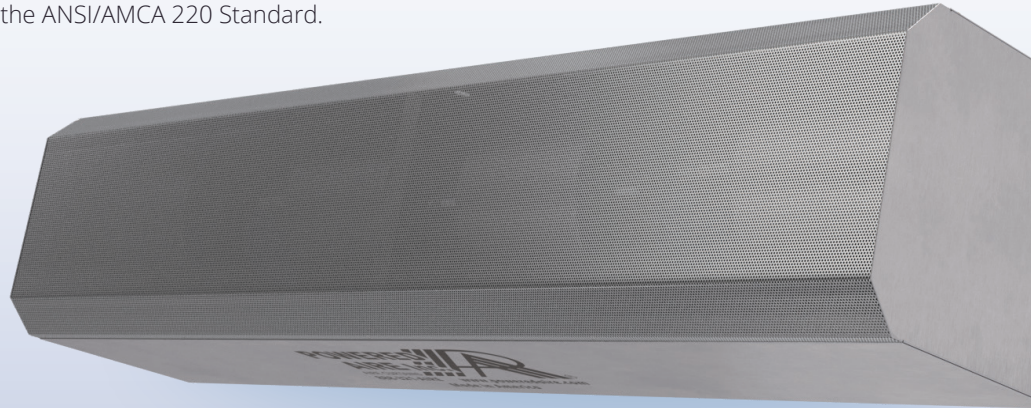




CED-E



The Customer Entrance Door with electric heat (CED-E) air curtain from Powered Aire is specially designed for high-traffic retail facilities where customer satisfaction is key. The CED-E creates a barrier to keep conditioned air inside the building and unconditioned/unwanted elements out. It also maximizes employee and customer comfort. The CED-E has a gentle airflow and its unique plenum design helps make it one of the quietest air curtains in the industry. The CED-E 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.



OPTIONS

HEATING

Unheatedpg 27

FILTER

½" Cleanable

AT A GLANCE

Single Incremental Widths

3' to 14'

Max Installation Height

11'

Heavy Duty Motors

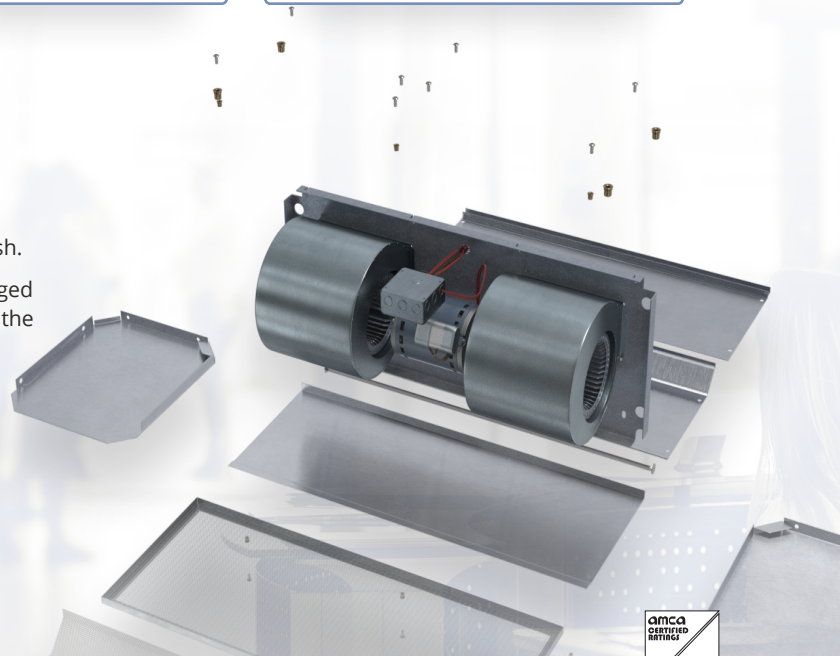
½ HP

KEY DESIGN FEATURES

- 18 gauge 304 stainless steel in a number three finish.
- Heavy duty ½ HP motors. 1075 rpm each. 50/60 cycle.
- Galvanized fans.
- Air intake screen is perforated stainless steel with mill grain finish.
- High efficiency discharge plenum ensures that air being discharged fills the entire width and height of the opening. This also lowers the unit's operational sound level.
- All units are direct drive, which avoids misalignment of couplers and outboard bearings and eliminates belt replacement.

RECOMMENDED CONTROLS

- ON / OFF switch
- Thermostat
- Magnetic Door Switch for activation
- Time delay relay



► CED-E | PERFORMANCE

CED-E | 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	Heater kW	Temp. Rise (° F)	Weight (lbs)
CED-1-36E	36	5560	1074	795	87%	0.24	1	1/2	10	40	88
CED-1-42E	42	5305	1030	886	96%	0.24	1	1/2	10	36	95
CED-1-48E	48	4628	987	967	94%	0.25	1	1/2	10	33	102
CED-1-60E	60	5096	822	1011	89%	0.25	1	1/2	10	32	113
CED-2-60E*	60	6269	1080	1329	94%	0.37	2	1/2	15	36	150
CED-2-72E	72	5560	1074	1590	87%	0.48	2	1/2	20	40	172
CED-2-84E	84	5305	1030	1772	96%	0.48	2	1/2	20	36	192
CED-2-96E	96	4628	987	1934	94%	0.50	2	1/2	20	33	206
CED-3-108E	108	5560	1074	2385	87%	0.72	3	1/2	30	40	244
CED-3-120E	118	5028	1039	2557	87%	0.73	3	1/2	30	37	272
CED-3-132E	133	4996	960	2601	87%	0.73	3	1/2	30	37	285
CED-4-144E	145	5560	1074	3180	87%	0.96	4	1/2	40	40	344
CED-4-156E	157	5300	1051	3362	87%	0.96	4	1/2	40	38	362
CED-4-168E	169	5305	1030	3554	96%	0.96	4	1/2	40	36	380

*Model CED-2-60E is not licensed to bear the AMCA seal.

! For a unit over 14 feet long, or a non-standard electric heater kW, consult factory.

CED-E | Velocity Projection

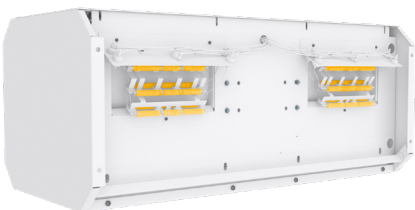
Distance From Nozzle	40"	80"	120"	160"
CED--1-36E Core Velocity (fpm)	859	675	542	437

CED-E | Sound Levels

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

CED-E | Single Phase Motor Options

Voltages available	120	208/230	480	Note: 575v is transformed down to 120v
Amp draw per motor	2.5	1.4	0.7	



Performance Highlight

Heating elements are mounted inside the plenum, on the discharge side of the blowers. Here, heat won't affect motor life and the heaters are protected from dust that would accumulate on them if they were mounted on the air intake.

The AMCA Certified Ratings Seal applies to airflow rate, average outlet velocity, outlet velocity uniformity, velocity projection and power rating at free delivery only. Rated data shown are based on tests of units with heating elements present but not in use.

Powered Aire Inc. certifies that the Model CED-E 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-502



► **CED-E | ELECTRICAL**

CED-E | AMP Draw, Circuits & Breaker Size Table

* With optional branch fusing for Single Point Power (SPP)

^ SPP by default

‡ High amp draws may be prohibitive. Reduced and custom kW available. Contact Factory.

MODEL	AMP DRAW (Breaker Size)														
	208 / 1 / 60			240 / 1 / 60		208 / 3 / 60			240 / 3 / 60			480 / 3 / 60			575 / 3 / 60
	Separate Supply Circuits		SPP*	Circuit 1	Separate Supply Circuits		SPP*	Separate Supply Circuits		SPP*	Separate Supply Circuits		SPP*	Circuit 1	
1	2			1	2		1	2		1	2				
CED-1-36E															
CED-1-42E	25.4 (35)	24.0 (35)	49.4 (70)	43.1 (60)	29.2 (40)	-	^	25.5 (35)	-	^	12.7 (20)	-	^	10.6 (15)	
CED-1-48E															
CED-1-60E															
CED-2-60E	‡	-	‡	‡	44.4 (60)	-	^	38.9 (50)	-	^	19.4 (25)	-	^	16.4 (25)	
CED-2-72E															
CED-2-84E	‡	-	‡	‡	30.6 (40)	27.8 (35)	58.4 (80)	26.9 (35)	24.1 (35)	51.0 (70)	25.6 (35)	-	^	21.3 (30)	
CED-2-96E															
CED-3-108E															
CED-3-120E	‡	-	‡	‡	45.8 (60)	41.6 (60)	87.4 (110)	40.3 (60)	36.1 (50)	76.4 (100)	38.2 (50)	-	^	31.9 (40)	
CED-3-132E															
CED-4-144E															
CED-4-156E	‡	-	‡	‡	‡	-	‡	‡	-	‡	26.9 (35)	24.1 (35)	51 (70)	42.8 (60)	
CED-4-168E															



Model CED | Wall Mount

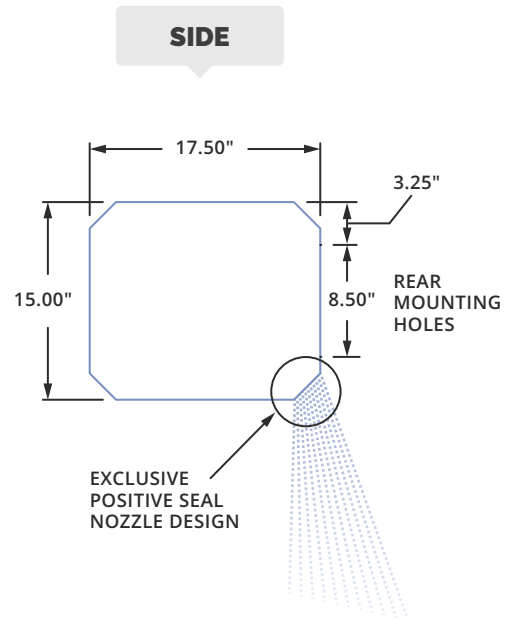


Model CED | Top Mount (Threaded Rods)

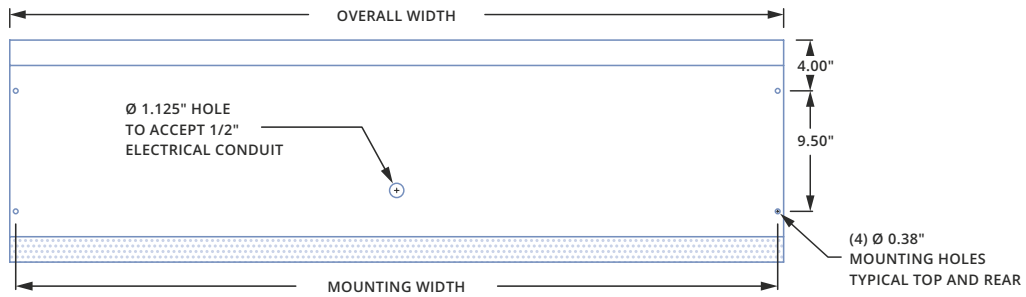
► CED & CED-E | MECHANICAL DETAILS & DRAWINGS

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-2-60 (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



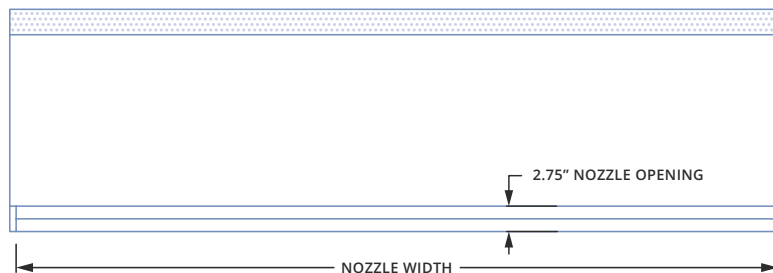
TOP



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 1/2 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

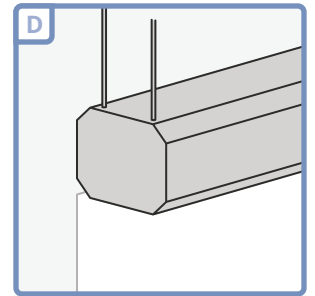
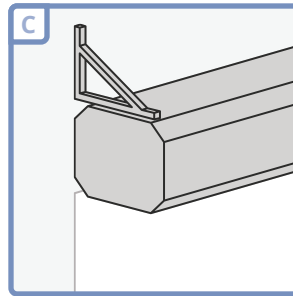
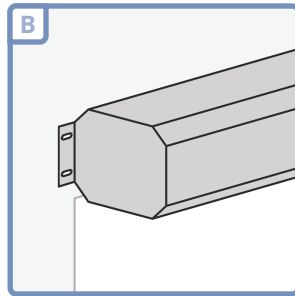
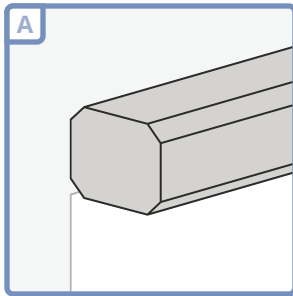
Extension plates bolt onto the back of the unit, utilizing the 4 original mounting holes. Brackets have elongated mounting slots that extend the mounting width by 2-1/2 to 3-1/2 inches.

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 224 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.

