



ECC-HW



ECC-ST

v5.0.0

# ECC-HW/ST



## ABOVE CEILING

The ECC model air curtain is specifically designed to be dropped into the ceiling above customer entryways where a standard air curtain cannot be exposed.

## OPTIONS

### HEATING

Hot Water . . . . .ECC-HW  
Steam . . . . .ECC-ST  
Unheated . . . . .pg 53  
Electric. . . . .pg 53

### FILTER

½" cleanable

### GRILLE COLOR

The white grille is standard with this model.  
Consult factory for custom color or metal.



## AT A GLANCE

Single Incremental Widths

3' to 12'

Max Installation Height

14'

Heavy Duty Motors

¾ HP

### KEY DESIGN FEATURES

- White decorative intake grille with hinged access panel (consult factory for custom finishes)
- ¾ HP EC (Electronically Commutated) direct-drive motor(s) with 2:1 speed turndown ratio and instantaneous startup
- High-efficiency discharge plenum with adjustable air foil vane (+/-20°)
- Coil made to AHRI Standard 410
- Hot water coil comprised of galvanized steel casing, 5/8" copper tube, aluminum fins, and same end supply/return connections
- Leak tested at 450 psi
- Custom coil selections available (consult factory)

### RECOMMENDED CONTROLS & ACCESSORIES

- Activation by 24V magnetic door switch
- Toggle disconnect switch
- SmartTouch Pro controller
- Hot water or steam control valve with actuator
- Filter (washable)

## ► ECC-HW/ST | PERFORMANCE

ECC-HW/ST | Performance Table

MODEL	Nozzle Width (in.)	Max. FPM at Nozzle	Avg. FPM	Max. CFM	CFM at Nozzle	Outlet Velocity Uniformity	Number of Motors	Motor HP	Hot Water		Steam		Weight (lbs)
									mbtu / Hour	Temp. Rise (°F)	mbtu / Hour	Temp. Rise (°F)	
ECC-1-36HW/ST	36	4218	3695	2899	2541	95%	1	3/4	97	35	108	39	206
ECC-1-48HW/ST	48	4218	2771	3867	2559	92%	1	3/4	102	37	108	39	224
ECC-1-60HW/ST	60	4218	2218	4374	2528	91%	1	3/4	100	36	114	41	255
ECC-2-72HW/ST	72.07	4218	3696	5803	5082	95%	2	3/4	194	35	202	36	402
ECC-2-84HW/ST	84.07	4218	3169	6766	5063	93%	2	3/4	205	37	210	38	415
ECC-2-96HW/ST	96.07	4218	2773	7732	5081	92%	2	3/4	194	35	215	39	430
ECC-2-108HW/ST	108.07	4218	2472	8216	5090	95%	2	3/4	192	35	198	36	455
ECC-3-108HW/ST	108.15	4218	3702	8702	7623	92%	3	3/4	283	34	292	35	598
ECC-3-120HW/ST	120.15	4218	3174	9668	7614	95%	3	3/4	307	37	305	37	615
ECC-3-132HW/ST	132.15	4218	2792	10177	7589	95%	3	3/4	307	37	326	39	630
ECC-4-144HW/ST	144.22	4218	3696	11606	10164	95%	4	3/4	388	35	390	35	794

**!** For a unit over 12 feet long, consult factory.

### ECC-HW/ST | Sound Levels

<b>High Speed</b>	63 dBA	<b>Low Speed</b>	56 dBA	Measured 10 ft. from unit in a free field based on a 1 motor unit
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### ECC-HW/ST | Amp Draw (Breaker Options)

Motors	120V (MOP)	208-230V (MOP)	277V (MOP)	480V (MOP)	575V (MOP)
ECC-HWST-1-36, 42, 48, 60	9.6A (15)	5.8A (15)	5.0A (15)	*	**
ECC-HWST-2-72, 84, 96, 108	19.2A (25)	11.6A (15)	10.0A (15)	*	**
ECC-HWST-3-108, 120, 132	28.8A (40)	17.4A (25)	15.0A (20)	*	**
ECC-HWST-4-144	38.4A (50)	23.2A (30)	20.0A (30)	*	**

\* Neutral wire will need to be run to use 277V motor. If not, a transformer will be required \*\*A transformer will be required.



#### NOTE

**When requesting a quote for a Hot Water/Steam heated air curtain, please provide:**

- Specifics of water/steam entering and exiting the air curtain
- Location for water/steam supplies and returns (both on one side or one each side)



#### Performance Highlight

Made-to-order steam or hot water coil mounted to intake of air curtain. Coil consists of 5/8 in. O.D. copper tubes and aluminum fins. Coils certified to ARI standard 410.

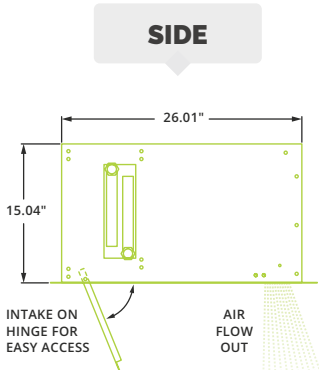
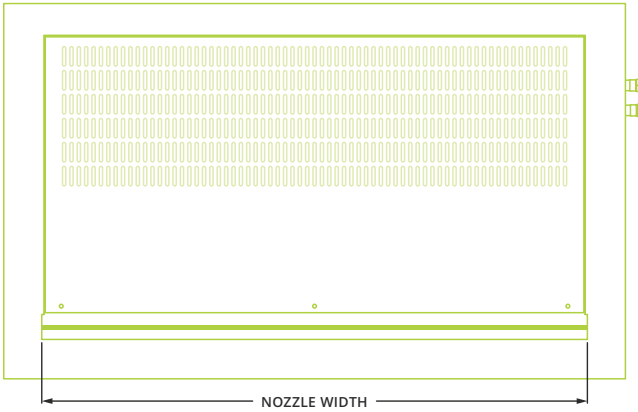
## ► ECC-HW/ST | MECHANICAL DETAILS & DRAWINGS

### ECC-HW/ST | Mechanical Information Table

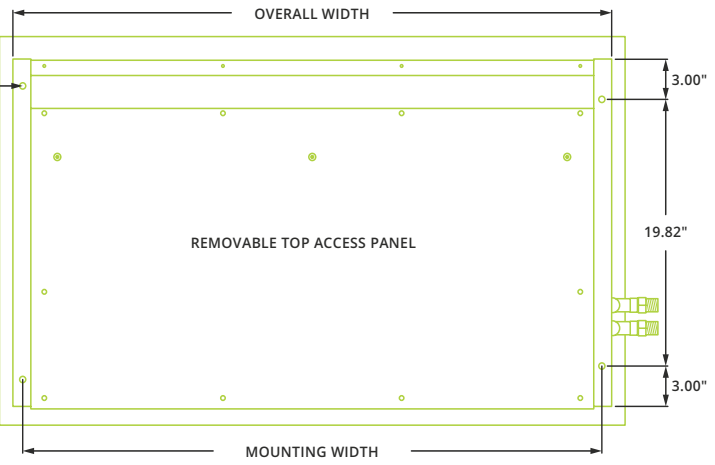
MODEL	Nozzle Width (in.)	Overall Width (in.)	Mounting Width (in.)
ECC-1-36HW/ST	36	39	37.5
ECC-1-48HW/ST	48	51	49.5
ECC-1-60HW/ST	60	63	61.5
ECC-2-72HW/ST	72.07	75.07	73.57
ECC-2-84HW/ST	84.07	87.07	85.57
ECC-2-96HW/ST	96.07	99.07	97.57
ECC-2-108HW/ST	108.07	111.07	109.57
ECC-3-108HW/ST	108.15	111.15	109.65
ECC-3-120HW/ST	120.15	123.15	121.65
ECC-3-132HW/ST	132.15	135.15	133.65
ECC-4-144HW/ST	144.22	147.22	145.72

### NOTE

1. Installer is responsible for structurally sound mounting of the unit.
2. Verify that overall dimensions will fit in the opening.
3. Size steam trap (provided by others) by 3x's the manufacturer's recommended size for satisfactory operation.
4. Coil connections are shown on right hand side, but they can be located on either right or left side of unit.



### BOTTOM



### TOP

### FRONT



## ► ECC, ECC-E, ECC-HW/ST | INSTALLATION

### ! IMPORTANT

- ✓ 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.

### ✍ NOTE

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.

Unit has four 15/32 inch holes for installing one end of 7/16" threaded rods. The other ends of the threaded rods can be attached to the ceiling. Washers and lock washers or locknuts are recommended. Mounting structure should be of sufficient strength to hold air curtain, and hardware (supplied by others) should be of sufficient strength and quality to support the unit safely.



#### STEP 1

Remove intake/discharge grille from bottom of air curtain. If ceiling is already in place, determine where air curtain location will be and cut a rectangular hole in the ceiling. The hole will be 1 inch longer and wider than the bottom length and width of the air curtain without the intake/discharge grille.



#### STEP 2

Suspend air curtain using threaded rods so that the bottom of the unit is centered within the cut out in the ceiling. There will be a 1/2 inch gap around the air curtain. Mount the unit so that the bottom is flush with the ceiling.



#### STEP 3

Attach the intake/discharge grille to the bottom of the air curtain. The grille is larger than the air curtain to cover the gaps between the air curtain and ceiling.