POWERED AIRE Inc.
AIRE CURTAINS
888-321-AIRE (2473)
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v5.0.0

Scan for complete model information and downloads

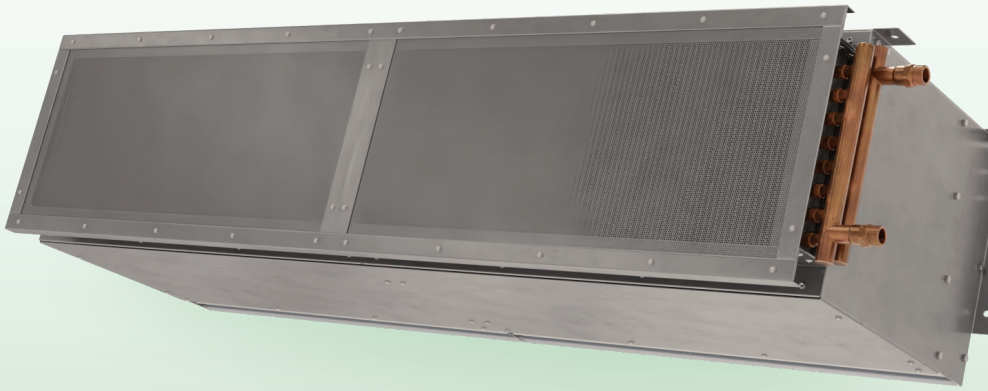
THS-HW THS-ST

THS-HW/ST

The THS-HW/ST (hot water or steam) air curtain provides a heated barrier of air that helps improve comfort and energy efficiency. This air curtain is ideal for climate control applications in retail, commerical and office settings. The highly efficient THS uses a plenum to provide consistent and equal coverage across the entire width of the door. It is ideal for hospitals, apartment buildings and other facilities relying on a hot water or steam based heat systems.

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)



OPTIONS

HEATING

Hot Water . . . . . .THS-HW
Steam . . . . . .THS-ST

FILTER

1" Cleanable

AT A GLANCE

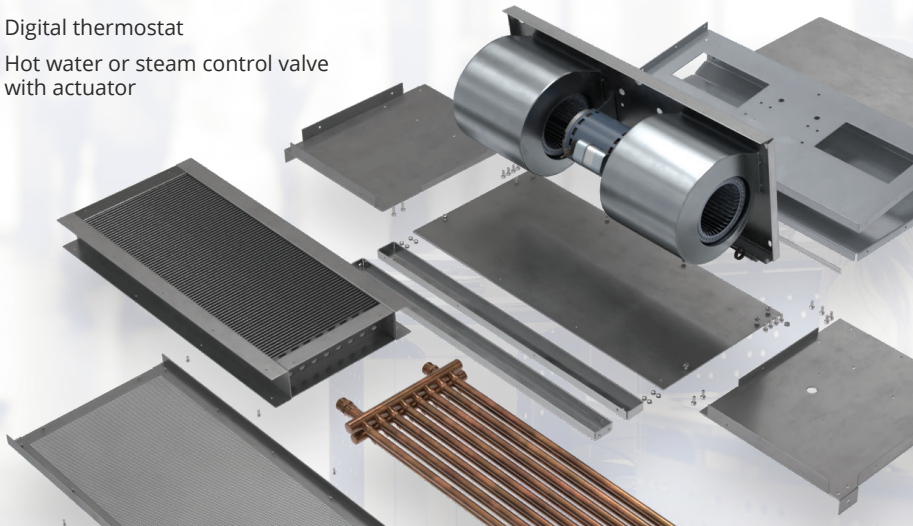
Single Incremental Widths	Max Installation Height	Heavy Duty Motors
3' to 12'	12'	¾ HP

KEY DESIGN FEATURES

- Outer cabinet constructed of 18-gauge 304 stainless steel with #3 finish
- 3/4 HP ODP (Open Drip Proof) direct-drive dual-speed motor(s)
- High-efficiency discharge plenum with adjustable air foil vane (+/-20˚)
- Top and bottom access panels for servicing and removal of motor-blower assembly
- NEMA 12 control panel
- 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
- Single length hot water coils up to 14 ft
- Single length steam coils up to 10 ft
- Custom coil selections available (consult factory)

RECOMMENDED CONTROLS

- Activation by 24V magnetic door switch
- Toggle disconnect switch
- Hand/Off/Auto selector switch
- Heat On/Off selector switch
- Digital thermostat
- Hot water or steam control valve with actuator



THS-HW/ST | PERFORMANCE

THS-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)	
THS-1-36HW/ST	36	H 4218 L 2837	H 3695 L 2487	H 2899 L 1950	H 2541 L 1710	95%	1	3/4	97	H 35 L 52	108	H 39 L 58	113
THS-1-48HW/ST	48	H 4218 L 2837	H 2771 L 1865	H 3867 L 2601	H 2559 L 1721	92%	1	3/4	102	H 37 L 54	108	H 39 L 58	145
THS-1-60HW/ST	60	H 4218 L 2837	H 2218 L 1493	H 4374 L 2792	H 2528 L 1703	91%	1	3/4	100	H 36 L 54	114	H 41 L 61	180
THS-2-72HW/ST	72	H 4218 L 2837	H 3696 L 2488	H 5803 L 3903	H 5082 L 3420	95%	2	3/4	194	H 35 L 52	202	H 36 L 54	249
THS-2-84HW/ST	84	H 4218 L 2837	H 3169 L 2133	H 6766 L 4551	H 5063 L 3382	93%	2	3/4	205	H 37 L 55	210	H 38 L 57	281
THS-2-96HW/ST	96	H 4218 L 2837	H 2773 L 1866	H 7732 L 5201	H 5081 L 3417	92%	2	3/4	194	H 35 L 52	215	H 39 L 58	306
THS-2-108HW/ST	108	H 4218 L 2837	H 2472 L 1661	H 8216 L 5520	H 5090 L 3421	95%	2	3/4	192	H 35 L 52	198	H 36 L 54	329
THS-3-108HW/ST	108	H 4218 L 2837	H 3702 L 2486	H 8702 L 5853	H 7623 L 5130	92%	3	3/4	283	H 34 L 51	292	H 35 L 52	365
THS-3-120HW/ST	120	H 4218 L 2837	H 3174 L 2134	H 9668 L 6503	H 7614 L 5127	95%	3	3/4	307	H 37 L 55	305	H 37 L 55	406
THS-3-132HW/ST	132	H 4218 L 2837	H 2792 L 1885	H 10177 L 7155	H 7589 L 5104	95%	3	3/4	307	H 37 L 55	326	H 39 L 59	470
THS-4-144HW/ST	144	H 4218 L 2837	H 3696 L 2488	H 11606 L 7806	H 10164 L 6840	95%	4	3/4	388	H 35 L 52	390	H 35 L 52	491

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

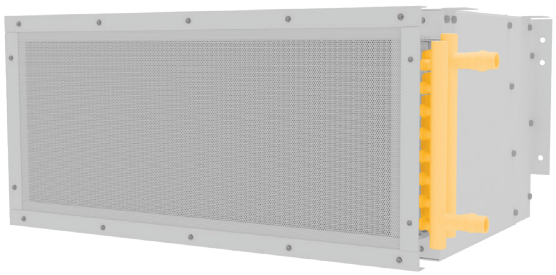
THS-HW/ST | Sound Levels

High Speed	63 dBA	**Low Speed**	56 dBA	Measured 10 ft. from unit in a free field based on a 1 motor unit

THS HW/ST | Amp Draw and Breaker Options

For three phase motors, consult factory

Model/Number of Motors	**120V** Amp Draw (Breaker size)	**208-230V** Amp Draw (Breaker size)	**480V** Amp Draw (Breaker size)	**575V** Amp Draw (Breaker size)
THS--1-36, 42, 48, 60	8.0A (15)	3.6A (15)	2.0A (15)	1.5A (15)
THS-2-72, 84, 96	16.0A (25)	7.2A (15)	4.0A (15)	3.0A (15)
THS--3-108, 120, 132	24.0A (35)	10.8A (15)	6.0A (15)	4.5A (15)
THS-4-144	32.0A (45)	14.4A (20)	8.0A (15)	6.0A (15)



Performance Highlight

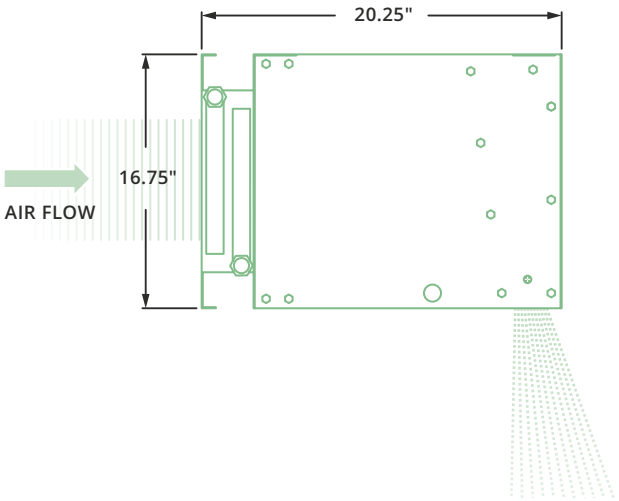
Made-to-order steam or hot water coil mounted to intake of air curtain. Coil consists of 5/8 in. O.D. copper tubes and aluminum fins. Coils certified to ARI standard 410.

THS-HW/ST | MECHANICAL DETAILS & DRAWINGS

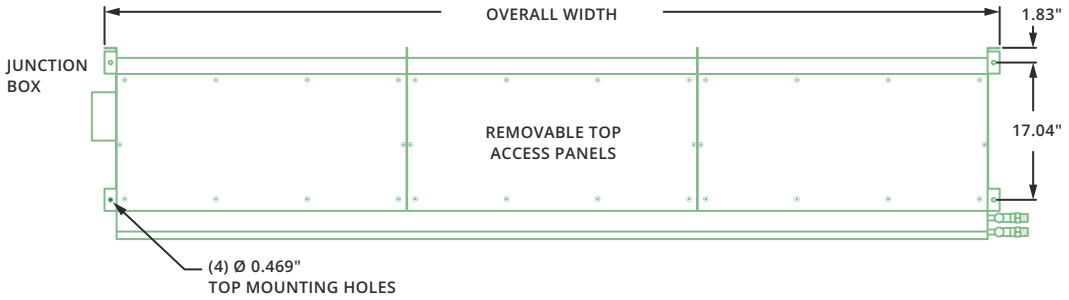
THS-HW/ST | Mechanical Information Table

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

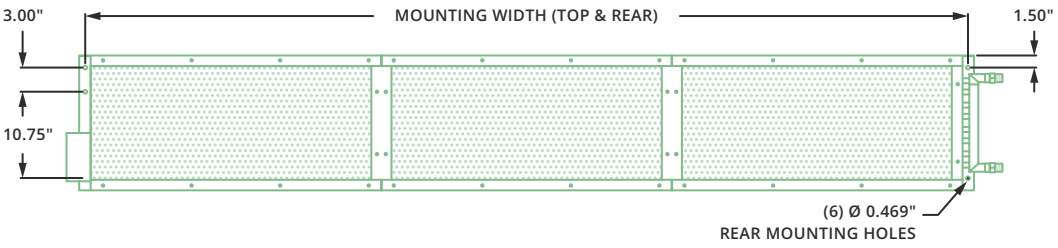
SIDE



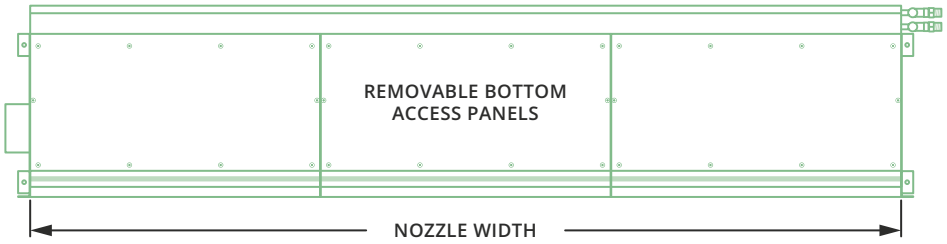
TOP



FRONT



BOTTOM



THS-HW/ST | INSTALLATION

NOTE

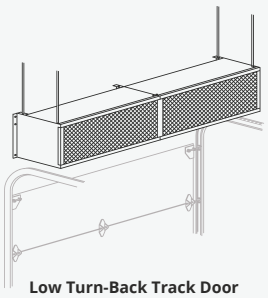
The air curtain should be mounted as close to the door header/opening as possible for maximum performance. For every one inch the bottom of the air curtain is mounted above the door header, the back side of the air curtain should be moved away from the wall ¼ inch.

A TOP MOUNT

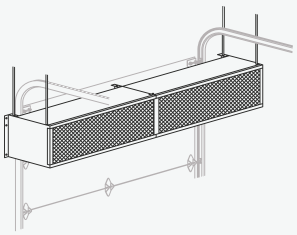
Unit has four 15/32 inch holes for installing one end of 7/16" threaded rods. The other ends of the threaded rods can be attached to the ceiling. Washers and lock washers or locknuts are recommended. Mounting structure should be of sufficient strength to hold air curtain, and hardware (supplied by others)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

*Powered Aire does not supply threaded rods.

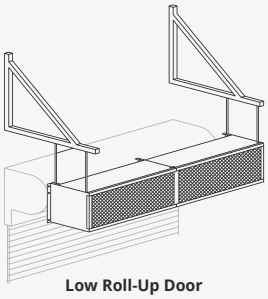
A



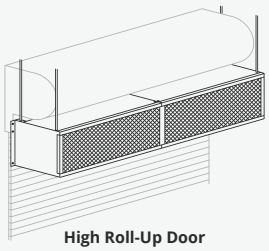
Low Turn-Back Track Door



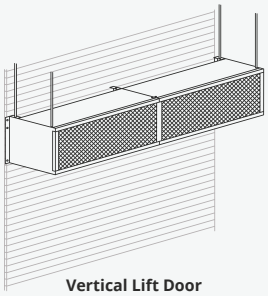
High Turn-Back Track Door



Low Roll-Up Door



High Roll-Up Door

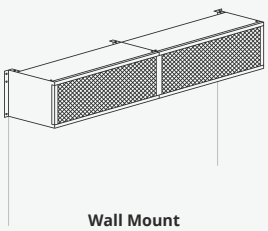


Vertical Lift Door

B WALL MOUNT

Rear flanges of air curtain have six holes, for six 7/16 inch bolts or lags with washers. When wall mounting use all six holes.

B



Wall Mount