



# TFD

LIGHT INDUSTRIAL



The TFD is typically used over medium sized dock doors, or openings in an industrial environment. Available in unheated, hot water heated, steam heated, indirect gas fired (closed combustion heaters are available), and direct gas fired versions.

## OPTIONS

### HEATING

Electrical . . . . .	pg 155
Hot Water . . . . .	pg 159
Steam . . . . .	pg 159
Indirect Gas . . . . .	pg 161

### FILTER

1" Cleanable (Unheated, Hot Water and Steam Units)



## AT A GLANCE

Single Incremental Widths

3' to 14'

Max Installation Height

14'

Heavy Duty Motors

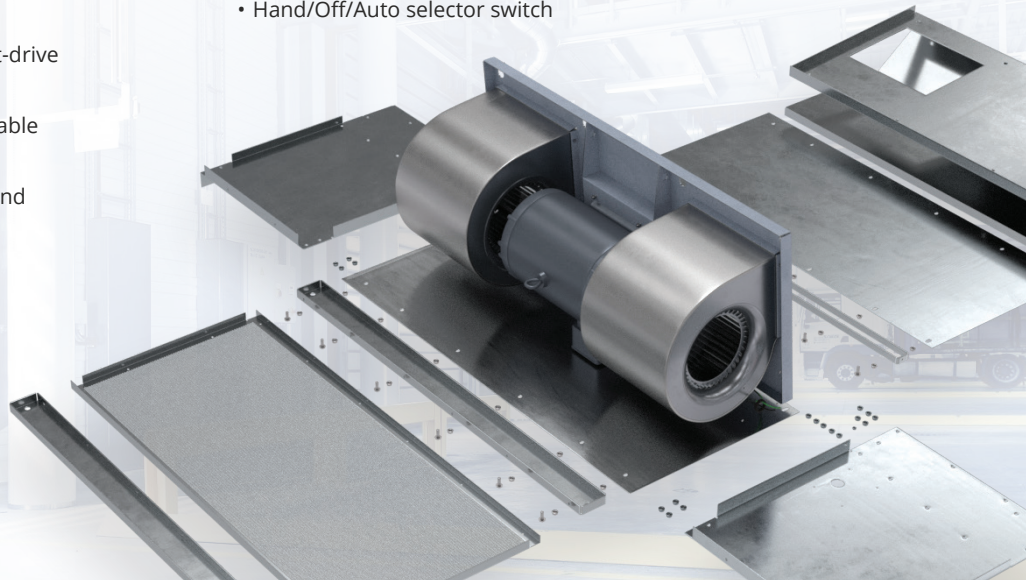
1.5 HP

### KEY DESIGN FEATURES

- AMCA tested performance
- Outer cabinet constructed of 18-gauge 304 stainless steel with #3 finish
- 1.5 HP TEAO (Totally Enclosed Air Over) direct-drive single-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

### RECOMMENDED CONTROLS

- Activation by 24V magnetic door switch
- Toggle disconnect switch
- Hand/Off/Auto selector switch



## ► TFD | PERFORMANCE

### TFD | Performance Table

Model	Nozzle Width (in.)	Max. FPM at Nozzle	Avg. Outlet Velocity FPM	CFM at Nozzle	Outlet Velocity Uniformity	Power Rating (kW)	Number of Motors	Motor HP	Sound Pressure (dBA)*	Sound Power [LWA] (dBA)‡	Weight (lbs.)
TFD-1-36	36	4500	3108	2331	92.0%	1.2	1	1.5	73	87	119
TFD-1-48	48	4500	3565	2565	94.0%	1.3	1	1.5	76	90	152
TFD-1-60	60	4500	2146	2682	73.0%	1.3	1	1.5	69	82	188
TFD-2-72	72	4500	3108	4662	92.0%	2.4	2	1.5	76	90	256
TFD-2-84	84	4500	2798	4896	92.0%	2.6	2	1.5	79	93	290
TFD-2-96	96	4500	2565	5130	94.0%	2.6	2	1.5	79	93	316
TFD-2-108	108	4500	2332	5247	73.0%	2.6	2	1.5	79	93	342
TFD-3-108	108	4500	3108	6993	92.0%	3.6	3	1.5	77	92	378
TFD-3-120	120	4500	2891	7227	92.0%	3.7	3	1.5	80	95	420
TFD-3-132	132	4500	2713	7461	92.0%	3.8	3	1.5	80	95	489
TFD-4-144	144	4500	3108	9324	92.0%	4.8	4	1.5	79	93	509
TFD-4-156	156	4500	2941	9558	92.0%	4.9	4	1.5	82	96	522
TFD-4-168	168	4500	2798	9792	92.0%	5.0	4	1.5	82	96	534

\*dBA levels are not licensed by AMCA International

dBA levels calculated from some values supplied by AMCA based on spherical free field at 5 ft.

‡ The A-weighted sound power ratings shown have been calculated per AMCA Standard 301

Values shown are for total LWA sound power levels for Installation Type A: free inlet, free outlet.

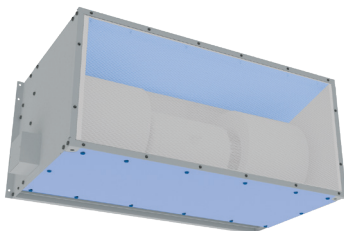
**!** For a unit over 14 feet long, consult factory.  
For Top Intake, consult factory.

### Velocity Projection Model (Model TFD-1-36)

Distance from Nozzle	40 in.	80 in.	120 in.	160 in.	200 in.
Core Velocity (fpm)	2029	1525	1353	1180	1071

### TFD | Three Phase Motor Options

Voltages available	120	208	240	480	575
Amp draw per motor	NA	5.0	4.6	2.3	1.9



### Performance Highlight

The TFD has top and bottom access panels to replace or service motors or blowers without lowering entire unit or bottom half of unit. With hot water and steam heat these access panels enable service to the unit without removing the coils.

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

Powered Aire Inc. certifies that the Model TFD 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.

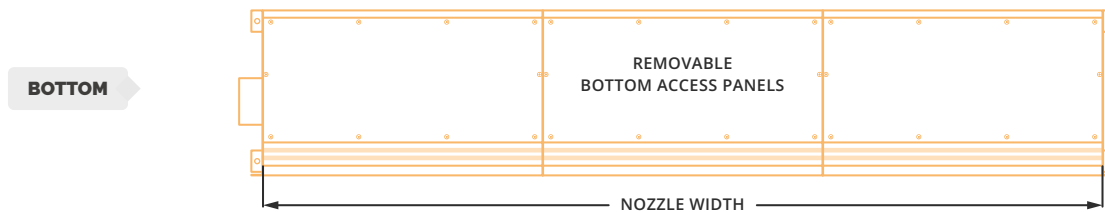
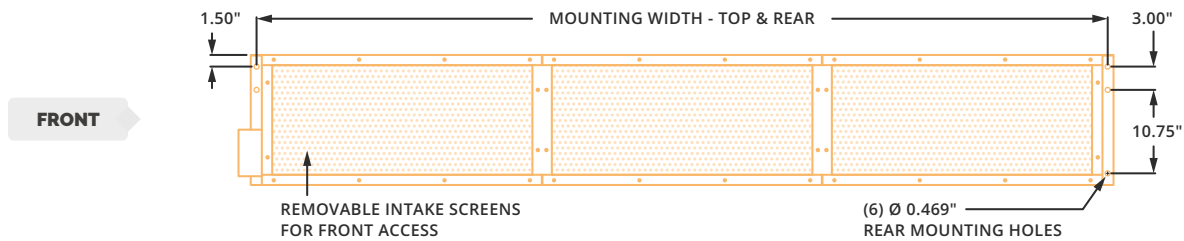
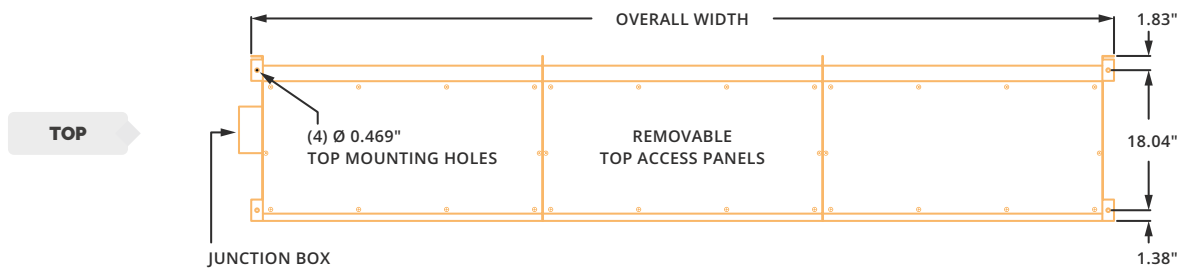
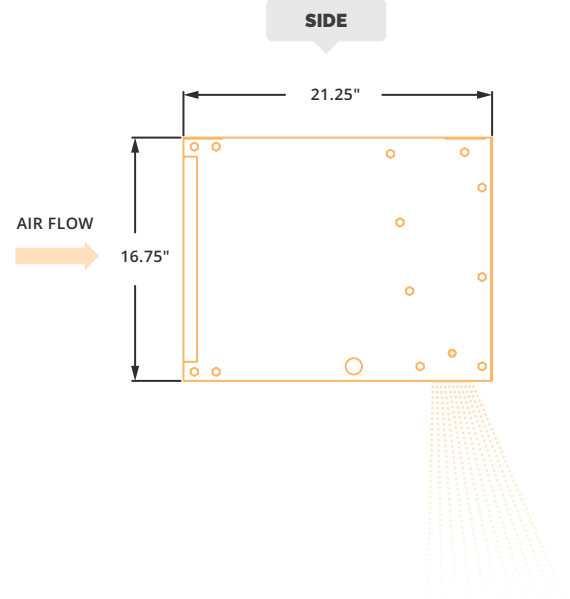
December  
2023  
PAAC-501



## ► TFD MECHANICAL DETAILS & DRAWINGS

### TFD | Mechanical Information Table

MODEL	Overall Width (in.)	Nozzle Width (in.)	Mounting Width Rear and Top (in.)
TFD-1-36	39	36	37.5
TFD-1-48	51	48	49.5
TFD-1-60	63	60	61.5
TFD-2-72	75.07	72.07	73.57
TFD-2-84	87.07	84.07	85.57
TFD-2-96	99.07	96.07	97.57
TFD-2-108	111.07	108.07	109.57
TFD-3-108	111.15	108.15	109.65
TFD-3-120	123.15	120.15	121.65
TFD-3-132	135.15	132.15	133.65
TFD-4-144	147.22	144.22	145.72
TFD-4-156	159.22	156.22	157.72
TFD-4-168	171.22	168.22	169.72



## ▶ TFD, TFD-E & TFD-HW/ST | INSTALLATION



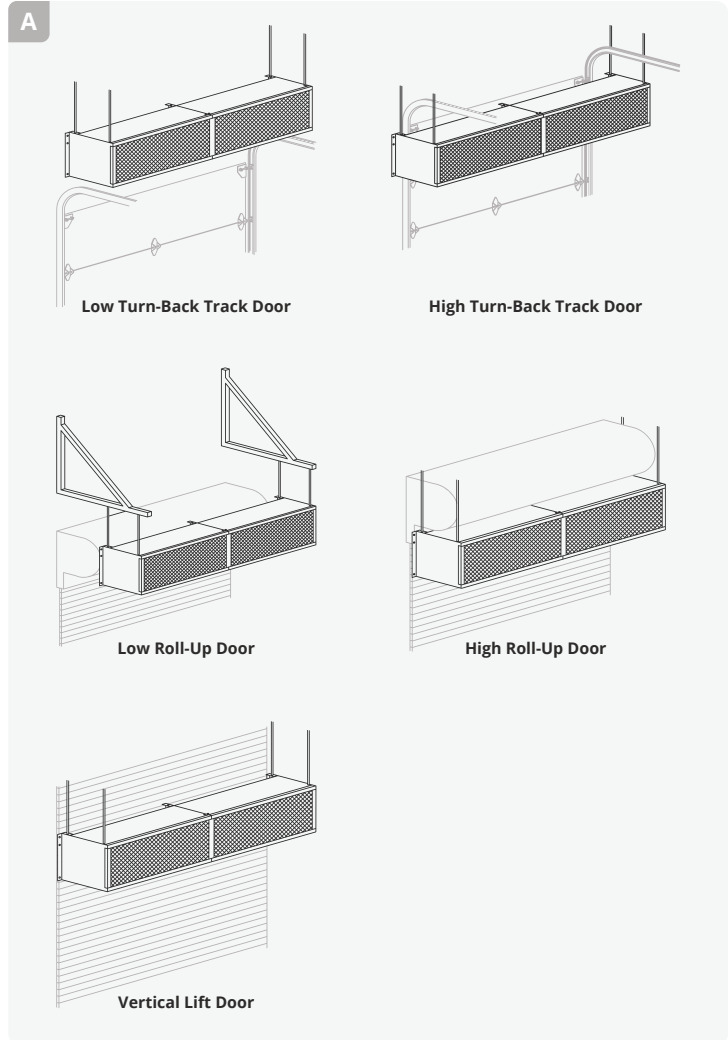
### NOTE

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 ½ 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.



### 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.

