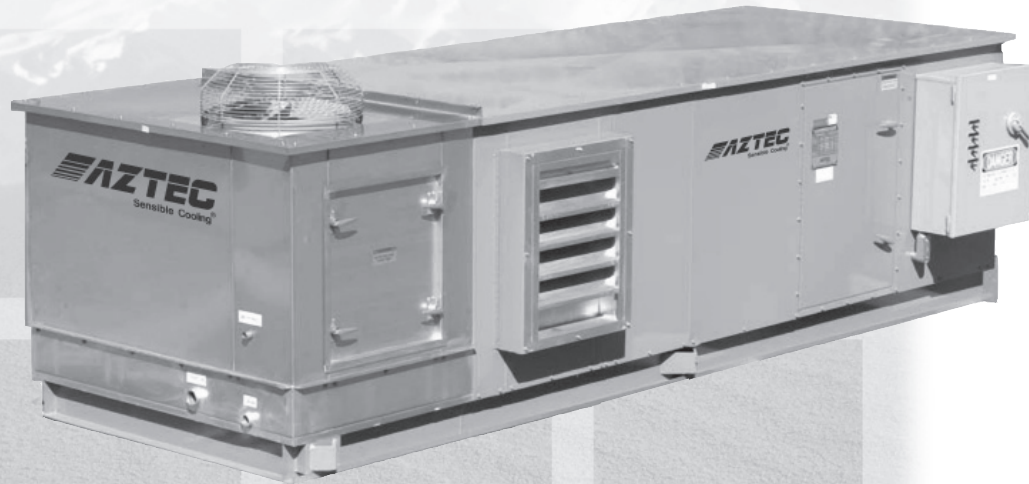


# Indirect and Indirect/Direct Evaporative Units

Technical Guide for:

- **ASC** Low Operating Cost, High Efficiency, Environmentally Friendly Evaporative Cooling Units



Aztec

Keeps You

Comfortable

---

## TABLE OF CONTENTS

Standard Features and Optional Equipment .....	3
Model Designation.....	3
Leaving Air Performance Tables .....	4
Typical Design Conditions for US Cities .....	5
Equipment Data Chart .....	6
Heating Capacity Chart.....	7
Blower Performance Charts .....	8 – 13
Amp Draw Table .....	14
Fan Efficiency .....	15
Dimensional Data.....	16 – 31
Roof Curb.....	32
Plumbing.....	33
Controls.....	34 – 40
Typical Specifications .....	41 – 43

---

**A**ztec has been manufacturing quality heating and cooling, Indirect and Indirect/Direct Evaporative products since 1969. We have provided HVAC equipment to numerous school districts, prisons, military bases, defense contractors, large industrial facilities, and small business complexes.

Our design and engineering staff has extensive experience in Indirect and Indirect/Direct air handler design, heat recovery, heating, ventilation, and refrigeration equipment. We are committed to supplying top quality catalog and custom equipment at a reasonable cost. Our nationwide sales organization is available to help you select the right equipment to solve your problem.

---

### WHY USE THIS TYPE OF EQUIPMENT?

- Evaporative cooling is the most energy efficient form of cooling that exists.
- Equipment cost is lower than a refrigeration system.
- Installation is simple and inexpensive.
- Reduced operating costs compared to expensive refrigeration system.
- Maximum comfort when you need it most. The hotter and drier the air, the greater the cooling.
- Provides fresh air to building, forcing stale air out.
- Provides fresh air ventilation anytime by just turning off the indirect and/or direct evaporative cooling section. The blower continues to supply fresh filtered air to the building.
- Flexible design allows you to add return air capability, indirect fired gas fired heating section and other components to fit any application.

---

### WHY USE AZTEC UNITS?

- All standard “A” Series units are ETL listed and have undergone years of development to produce one of the finest Indirect and Indirect/Direct Evaporative Cooling units in the industry. This assures the owner of equipment reliability and conformance to recognized standards.
- Units are designed for outdoor application, either roof or grade mounted with standard models in 11 different cabinet sizes, and range in size from 2,000 to 37,500 CFM. Larger models are also available. Contact your local Aztec representative or the factory for more information.
- Indirect fired gas heating sections with two pass drum and tube design and capacities up to 1,400 MBH input are available on standard units. Entire primary and secondary heat exchanger is constructed of 400 series stainless steel. Inputs up to 600 MBH incorporate the Digital High Turndown modulating power gas burner (pat. 2,709,802) with individually controlled variable speed combustion air blower motor and motorized gas valve for linkageless design. Larger inputs incorporate standard modulating power gas burners. If gas is not accessible, steam or hot water coils or electric heating elements are also available.
- Aztec’s long term perspective is that all standard air handlers are built to last. We use only top quality components and design units for quick access to simplify routine maintenance.
- Every unit is tested and run at the factory before shipment. This insures customer satisfaction and minimizes field start up problems. Factory approved start up service is also available on all units.

# Aztec Features

## Indirect Section:

- Direct drive centrifugal, backward airfoil, SWSI plenum type blower(s) rated in accordance with AMCA Standard 211 and bearing the AMCA seal.
- U.L. Listed three phase supply fan motor(s)
- Variable frequency drive for supply air blower motor(s).
- Internal seismic-rated blower/motor isolation with flexible ducting between blower(s) and unit casing.
- Stainless steel integral cooling tower with Turbodek media and submersible pump(s).
- 6 row, aluminum fin/copper tube indirect cooling coil section
- PVC plumbing
- Adjustable sump water bleed-off valve assembly in cooling tower section
- Low sump water level shut-off switch in cooling tower section
- Automatic fill and drain system
- Cabinet constructed of galvanized steel with corrosion-resistant enamel finish
- Formed galvanized steel channel base and intermediate equipment supports. Suitable for slab or curb mounting.
- Supply air, front access, nominal 2" MERV 8 filters.
- Hinged, double wall, insulated access door(s).
- Weather resistant, outside air intake louvers and birdscreen. One side hinged for filter access.
- Integral control box.
- DDC control system
- Listed by ETL Testing Laboratories.

## Direct Section:

- 12" deep Turbodek media
- Stainless steel direct evaporative section
- Adjustable sump water bleed-off valve
- Low sump water level shut-off switch
- Automatic fill and drain system
- U.L. listed, single phase submersible pump

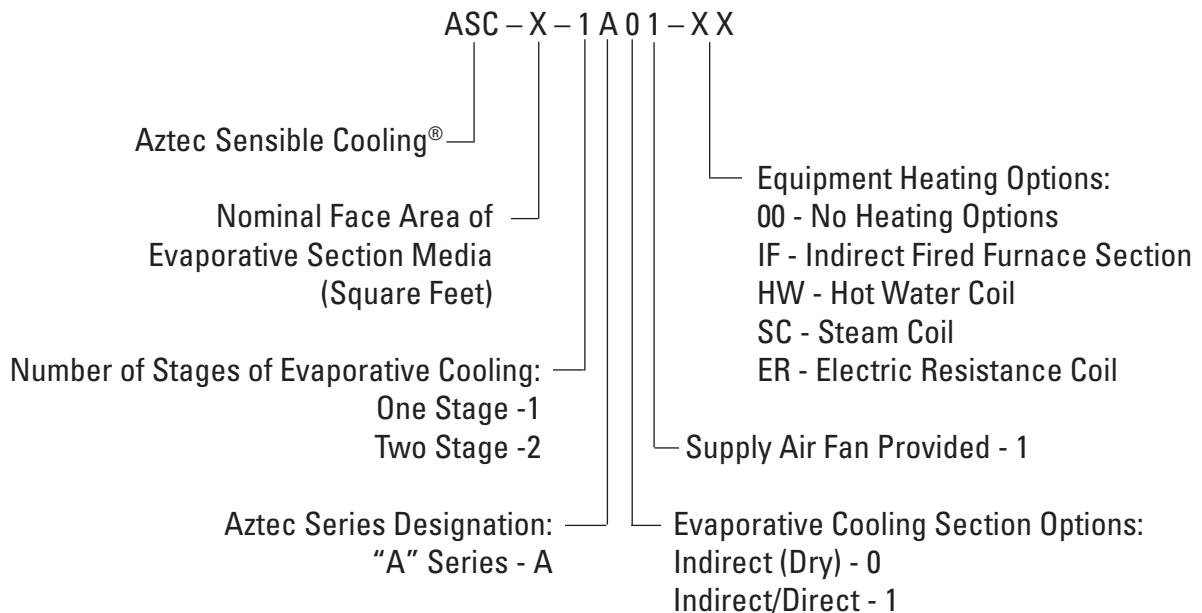
## Heating Section:

- Stainless steel heat exchanger and secondary tubes
- Power type gas burner with integral combustion air blower and motor, and combustion air proving switch
- Solid-state ignition control system
- Integral venting system
- ETL listed gas-fired duct furnace

## Equipment Options:

- Insulated cabinet
- Double wall and roof cabinet construction
- Mixing section with return air and outside air dampers
- 12" or 18" high full perimeter roof curb
- Direct drive centrifugal, backward airfoil, SWSI plenum type fan arrays
- MERV 11 and MERV 14 supply air filters
- Fiberdek media meeting UL Class 2 rating
- Direct expansion or chilled water cooling coil
- Variable frequency drive on cooling tower fan
- Smoke detector
- Firestat
- Copper plumbing
- UL labeled control panel

# MODEL DESIGNATION



# LEAVING AIR TEMPERATURE PERFORMANCE TABLES

## THERMAL PERFORMANCE - INDIRECT EVAPORATIVE COOLING UNITS

EAWB	Entering Air Temperature Dry Bulb Temp. (EADB)															
	80° F		85° F		90° F		95° F		100° F		105° F		110° F		115° F	
	DB	WB	DB	WB	DB	WB	DB	WB	DB	WB	DB	WB	DB	WB	DB	WB
56	62.0	48.2	63.3	46.6	64.5	44.7	65.8	42.6	-	-	-	-	-	-	-	-
58	63.5	51.1	64.8	49.5	66.0	47.5	67.3	46.1	68.5	44.0	-	-	-	-	-	-
60	65.0	54.2	66.3	52.8	67.5	51.0	68.8	49.2	70.0	47.6	71.3	46.0	-	-	-	-
62	66.5	57.1	67.8	55.6	69.0	54.1	70.3	52.2	71.5	50.9	72.8	49.4	74.0	47.6	-	-
64	68.0	59.8	69.3	58.4	70.5	57.1	71.8	55.4	73.0	53.9	74.3	52.6	75.5	50.8	76.8	49.2
66	69.5	62.3	70.8	61.1	72.0	59.6	73.3	58.4	74.5	56.8	75.8	55.5	77.0	54.1	78.3	52.3
68	71.0	65.0	72.3	63.8	73.5	62.3	74.8	61.0	76.0	59.8	77.3	58.4	78.5	57.0	79.8	55.5
70	72.5	67.8	73.8	66.6	75.0	65.1	76.3	63.9	77.5	62.8	78.8	61.4	80.0	60.0	81.3	59.0
72	74.0	71.0	75.3	69.0	76.5	68.0	77.8	66.8	79.0	65.6	80.3	64.4	81.5	63.1	82.8	61.7
74	75.5	72.7	76.8	71.6	78.0	70.5	79.3	69.4	80.5	68.2	81.8	67.1	83.0	66.0	84.3	64.8
76	77.0	74.8	78.3	74.1	79.5	73.0	80.8	71.9	82.0	71.0	83.3	69.9	84.5	68.8	85.8	67.6
78	78.5	77.6	79.8	76.8	81.0	75.8	82.3	74.7	83.5	73.6	84.8	72.5	86.0	71.5	87.3	70.4
80	80.0	80.0	81.3	79.2	82.5	78.2	83.8	77.3	85.0	76.4	86.3	75.5	87.5	74.4	88.8	73.3
82	-	-	82.8	81.5	84.0	80.5	85.3	79.6	86.5	78.8	87.8	77.9	89.0	77.0	90.3	76.2
84	-	-	84.3	83.9	85.5	82.9	86.8	81.9	88.0	81.1	89.3	80.2	90.5	79.3	91.8	78.5

Notes:

1. Indirect evaporative cooling performance is based on 75% saturation efficiency.

## THERMAL PERFORMANCE - INDIRECT/DIRECT EVAPORATIVE COOLING UNITS

EAWB	Entering Air Temperature Dry Bulb Temp. (EADB)															
	80° F		85° F		90° F		95° F		100° F		105° F		110° F		115° F	
	DB	WB	DB	WB	DB	WB	DB	WB	DB	WB	DB	WB	DB	WB	DB	WB
56	49.9	48.2	48.6	46.6	47.1	44.7	45.4	42.6	-	-	-	-	-	-	-	-
58	52.6	51.1	51.3	49.5	49.7	47.5	48.6	46.1	46.9	44.0	-	-	-	-	-	-
60	55.5	54.2	54.4	52.8	53.0	51.0	51.5	49.2	50.3	47.6	49.0	46.0	-	-	-	-
62	58.2	57.1	57.1	55.6	55.9	54.1	54.4	52.2	53.4	50.9	52.2	49.4	50.8	47.6	-	-
64	60.8	59.8	59.7	58.4	58.7	57.1	57.4	55.4	56.2	53.9	55.2	52.6	53.8	50.8	52.5	49.2
66	63.2	62.3	62.3	61.1	61.1	59.6	60.2	58.4	58.9	56.8	57.9	55.5	56.8	54.1	55.4	52.3
68	65.7	65.0	64.8	63.8	63.6	62.3	62.7	61.0	61.7	59.8	60.7	58.4	59.6	57.0	58.4	55.5
70	68.4	67.8	67.5	66.6	66.3	65.1	65.4	63.9	64.6	62.8	63.5	61.4	62.4	60.0	61.7	59.0
72	71.4	71.0	69.8	69.0	69.0	68.0	68.1	66.8	67.2	65.6	66.3	64.4	65.3	63.1	64.2	61.7
74	73.0	72.7	72.2	71.6	71.4	70.5	70.6	69.4	69.7	68.2	68.9	67.1	68.0	66.0	67.1	64.8
76	75.1	74.8	74.6	74.1	73.8	73.0	73.0	71.9	72.3	71.0	71.5	69.9	70.7	68.8	69.8	67.6
78	77.7	77.6	77.2	76.8	76.4	75.8	75.6	74.7	74.8	73.6	74.0	72.5	73.2	71.5	72.4	70.4
80	80.0	80.0	79.4	79.2	78.7	78.2	78.1	77.3	77.4	76.4	76.8	75.5	76.0	74.4	75.2	73.3
82	-	-	81.7	81.5	80.9	80.5	80.3	79.6	79.7	78.8	79.1	77.9	78.4	77.0	77.9	76.2
84	-	-	83.9	83.9	83.2	82.9	82.5	81.9	81.9	81.1	81.3	80.2	80.6	79.3	80.1	78.5

Notes:

1. Indirect evaporative cooling performance is based on 75% saturation efficiency.
2. Direct evaporative cooling performance is based on 88% saturation efficiency.
3. See formula below to calculate saturation efficiency for Indirect/Direct Evaporative Cooling Performance.

FORMULA:

$$SE = \frac{(OA\ db - LA\ db)}{(OA\ db - OA\ wb)} \times 100$$

Where:

SE = Saturation Efficiency  
 OA db = Outside Air Dry Bulb temperature  
 LA db = Leaving Air Dry Bulb temperature  
 OA wb = Outside Air Wet Bulb temperature

EXAMPLE:

Find Saturation Efficiency for Indirect/Direct system installed in Salt Lake City, UT (Use 95/66 Entering Air Temps in chart above).

SOLUTION:

$$SE = \frac{(95 - 60.2)}{(95 - 66)} \times 100 = 120\%$$

# TYPICAL DESIGN CONDITIONS CHART

State	City	DB °F	WB °F	State	City	DB °F	WB °F
<b>AL</b>	Birmingham	95	78	<b>MT</b>	Billings	94	66
<b>AZ</b>	Flagstaff	86	61		Great Falls	91	64
	Phoenix	110	76	<b>NE</b>	Lincoln	97	78
<b>AR</b>	Tucson	105	72		Omaha	96	78
	Fort Smith	99	79	<b>NV</b>	Las Vegas	108	71
Little Rock	98	80	Reno		95	63	
<b>CA</b>	Bakersfield	104	73	<b>NM</b>	Albuquerque, NM	96	65
	Los Angeles	84	70	<b>NY</b>	Albany	88	75
	Sacramento	100	72		Buffalo	86	74
	San Diego	85	73		New York City	89	77
	San Francisco	83	65	<b>NC</b>	Greensboro	92	77
<b>CO</b>	Denver	93	65		Raleigh	94	78
	Grand Junction	97	65	<b>ND</b>	Bismarck	93	74
	Pueblo	98	68		Fargo	91	75
<b>FL</b>	Jacksonville	95	80	<b>OH</b>	Cincinnati	93	78
	Orlando	94	79		Cleveland	89	76
	Pensacola	94	81		Columbus	91	77
<b>GA</b>	Atlanta, GA	94	77	<b>OK</b>	Oklahoma City	99	77
<b>ID</b>	Boise	97	66		Tulsa	100	79
	Coeur d'Alene	91	65	<b>OR</b>	Pendleton	96	67
<b>IL</b>	Chicago	92	79		Portland	91	69
	Decatur	93	79	<b>PA</b>	Philadelphia	93	78
	Rockford	91	78		Pittsburgh	89	75
<b>IN</b>	Evansville	94	79	<b>SC</b>	Columbia	97	78
	Indianapolis	91	78		Greenville	94	77
	South Bend	90	77	<b>SD</b>	Rapid City	95	71
<b>IA</b>	Des Moines	93	78		Sioux Falls	93	77
	Dubuque	89	78	<b>TN</b>	Knoxville	92	77
<b>KS</b>	Salina	101	77		Memphis	96	80
	Wichita	101	77		Nashville	94	78
<b>KY</b>	Bowling Green	93	78	<b>TX</b>	Amarillo	97	71
	Lexington	91	77		Dallas	101	78
	Louisville	93	79		El Paso	101	70
	Paducah	95	80		Houston	97	80
<b>LA</b>	New Orleans	94	81		San Antonio	98	78
	Shreveport	97	80	<b>UT</b>	Salt Lake City	97	67
<b>MI</b>	Detroit	90	77	<b>VA</b>	Richmond	95	79
	Grand Rapids	89	76		Roanoke	92	75
	Saginaw	90	77	<b>WA</b>	Seattle	85	66
<b>MN</b>	Minneapolis	91	77		Spokane	92	65
	Rochester	88	76	<b>WI</b>	Madison	90	77
<b>MO</b>	Kansas City	96	79		Milwaukee	90	77
	Springfield	95	78	<b>WY</b>	Casper	93	63
	St Louis	95	79		Cheyenne	88	63

# EQUIPMENT DATA CHART

Model	CFM	Face Area/ Media Size	Face Velocity	Indirect Cooling Coil $\Delta P$	Direct Evaporative Cooling Media (12" Deep) $\Delta P$	Indirect Section Exhaust Fan Motor HP	2" Supply Air Filters					Supply Air Louver $\Delta P$	Dampers	
							Qty/Size	Velocity	Pressure Drop (" W.C.)				Return Air $\Delta P$	Outside Air $\Delta P$
									Std MERV 8 ①③	Opt MERV 11 ②③	Opt MERV 14 ④⑤			
ASC-5	1500	5.0 30" x 24"	300	0.36	0.08	0.5	2) 16" x 25"	270	0.08	0.09	0.10	0.06	0.03	0.01
	2000		400	0.53	0.14			360	0.14	0.16	0.18	0.10	0.05	0.02
	2500		500	0.71	0.21			450	0.22	0.25	0.28	0.16	0.08	0.02
ASC-7	2500	7.5 36" x 30"	357	0.45	0.12	0.5	4) 16" x 20"	281	0.09	0.10	0.11	0.08	0.04	0.01
	3000		429	0.58	0.16			338	0.12	0.14	0.16	0.12	0.06	0.02
	3500		500	0.71	0.21			394	0.17	0.19	0.22	0.16	0.08	0.02
ASC-10	3500	10.5 42" x 36"	350	0.44	0.11	1.0	2) 20" x 20" 2) 20" x 25"	315	0.11	0.12	0.14	0.08	0.04	0.01
	4250		425	0.57	0.15			383	0.16	0.18	0.21	0.12	0.06	0.02
	5000		500	0.71	0.21			450	0.22	0.25	0.28	0.16	0.08	0.02
ASC-15	5000	15.0 48" x 45"	333	0.41	0.10	2.0	6) 16" x 25"	333	0.12	0.14	0.16	0.07	0.04	0.01
	6250		417	0.56	0.15			417	0.19	0.22	0.24	0.11	0.06	0.02
	7500		500	0.71	0.21			500	0.27	0.31	0.35	0.16	0.08	0.02
ASC-20	7500	20.0 63" x 45"	357	0.50	0.12	2.0	6) 16" x 20" 3) 16" x 25"	346	0.13	0.15	0.17	0.09	0.05	0.01
	8750		438	0.62	0.17			404	0.18	0.20	0.23	0.12	0.06	0.02
	10,000		500	0.71	0.21			462	0.23	0.26	0.30	0.16	0.08	0.02
ASC-25	10,000	25.0 68" x 54"	400	0.51	0.14	3.0	6) 18" x 24" 3) 20" x 24"	353	0.13	0.15	0.17	0.10	0.05	0.01
	11,250		450	0.60	0.18			397	0.17	0.20	0.22	0.13	0.06	0.02
	12,500		500	0.71	0.21			441	0.21	0.24	0.27	0.16	0.08	0.02
ASC-30	12,500	30.0 72" x 60"	417	0.56	0.15	3.0	9) 20" x 25"	400	0.17	0.20	0.22	0.11	0.06	0.01
	13,750		458	0.63	0.18			440	0.21	0.24	0.27	0.13	0.07	0.02
	15,000		500	0.71	0.21			480	0.25	0.29	0.32	0.16	0.08	0.02
ASC-40	15,000	42.0 84" x 72"	375	0.50	0.12	5.0	9) 16" x 25" 6) 20" x 25"	327	0.12	0.13	0.15	0.09	0.05	0.01
	17,500		438	0.62	0.17			382	0.16	0.18	0.20	0.12	0.06	0.02
	20,000		500	0.71	0.21			436	0.21	0.24	0.27	0.16	0.08	0.02
ASC-50	20,000	50.0 102" x 72"	400	0.53	0.14	7.5	9) 16" x 25" 9) 20" x 25"	400	0.17	0.20	0.22	0.10	0.05	0.01
	22,500		450	0.60	0.18			450	0.22	0.25	0.28	0.13	0.06	0.02
	25,000		500	0.71	0.21			500	0.27	0.31	0.35	0.16	0.08	0.02
ASC-60	25,000	60.0 102" x 87"	417	0.56	0.15	7.5	21) 18" x 25"	381	0.16	0.18	0.20	0.11	0.06	0.01
	27,500		458	0.63	0.18			419	0.19	0.22	0.25	0.13	0.07	0.02
	30,000		500	0.71	0.21			457	0.23	0.26	0.29	0.16	0.08	0.02
ASC-75	30,000	75.0 103" x 105"	400	0.53	0.14	10.0	24) 18" x 25"	384	0.16	0.18	0.21	0.10	0.05	0.01
	33,750		450	0.60	0.18			432	0.21	0.23	0.26	0.13	0.06	0.02
	37,500		500	0.71	0.21			480	0.25	0.29	0.32	0.16	0.08	0.02

## NOTES:

- MERV 8 removes over 70% of particles 3.0 – 10.0 micron size ( Pollen and mold spores) from the airstream.
- MERV 11 removes over 80% of particles 1.0 – 3.0 micron size ( Legionella and humidifier dust )from the airstream.
- Pressure drop shown is for clean filters. Recommended maximum dirty filter pressure drop is 1.0" W.C.
- MERV 14 removes over 85% of particles 0.3 – 1.0 micron size ( All bacteria and most tobacco smoke ) from the airstream.
- Pressure drop shown is for clean filters. Recommended maximum dirty filter pressure drop is 1.5" W.C.

# HEATING CAPACITY CHART

Model	CFM	Furnace Model	Max. BTU/hr Input	Min. BTU/hr Input	Max. Temp Rise	Min. Temp Rise	Press. Drop " W.C.
ASC-5	1500	IFD-160	200,000	6,000	98.3	3.24	0.09
	2000				73.7	2.43	0.17
	2500				59.0	1.95	0.27
ASC-7	2500	IFD-160	200,000	6,000	59.0	1.95	0.27
	3000				49.2	1.62	0.40
	3500				42.1	1.39	0.55
ASC-7	3000	IFD-320	400,000	6,000	98.3	1.62	0.25
	3500				84.3	1.39	0.32
ASC-10	3500	IFD-160	200,000	6,000	42.1	1.39	0.55
	4250				34.7	1.15	0.79
	5000				29.5	0.97	1.10
ASC-10	3500	IFD-320	400,000	6,000	84.3	1.39	0.32
	4250				69.4	1.15	0.41
	5000				59.0	0.97	0.50
ASC-15	5000	IFD-320	400,000	6,000	59.0	0.97	0.50
	6250				47.2	0.78	0.68
	7500				39.3	0.65	0.85
ASC-15	5000	IFD-480	600,000	6,000	88.5	0.97	0.29
	6250				70.8	0.78	0.44
	7500				59.0	0.65	0.59
ASC-20	7500	IFD-320	400,000	6,000	39.3	0.65	0.85
	8750				33.7	0.56	1.13
ASC-20	7500	IFD-480	600,000	6,000	59.0	0.65	0.59
	8750				50.6	0.56	0.77
	10,000				44.2	0.49	0.95
ASC-25	10,000	IFD-480	600,000	6,000	44.2	0.49	0.95
	11,250				39.3	0.43	0.84
	12,500				35.4	0.39	0.98
ASC-25	10,000	IFD-800	1,000,000	294,118	73.7	23.0	0.48
	11,250				65.5	20.5	0.55
	12,500				59.0	18.4	0.61
ASC-30	12,500	IFD-480	600,000	6,000	35.4	0.39	0.98
	13,750				32.2	0.35	1.12
ASC-30	12,500	IFD-800	1,000,000	294,118	59.0	18.4	0.61
	13,750				53.6	16.8	0.68
	15,000				49.2	15.4	0.76
ASC-40	15,000	IFD-800	1,000,000	294,118	49.2	15.4	0.76
	17,500				42.1	13.2	0.85
	20,000				36.9	11.5	1.09
ASC-40	15,000	IFD-1120	1,400,000	435,294	68.8	22.7	0.35
	17,500				59.0	19.5	0.44
	20,000				51.6	17.1	0.56
ASC-50	20,000	IFD-1120	1,400,000	435,294	51.6	17.1	0.56
	22,500				45.9	15.2	0.67
	25,000				41.3	13.6	0.84
ASC-60	25,000	IFD-1120	1,400,000	435,294	41.3	13.6	0.84
	27,500				37.5	12.4	1.08
	30,000				34.4	11.4	1.30
ASC-75	30,000	IFD-1120	1,400,000	435,294	34.4	11.3	1.30
	33,750				30.6	10.1	1.60



# BLOWER PERFORMANCE CHART WITH STANDARD ARRANGEMENT FAN(S)

SUPPLY AIR FAN PERFORMANCE TABLE AT STANDARD CONDITIONS

Model	SCFM	Fan and Motor Qty	Fan Size	FEG	TSP - System Total Static Pressure (Inches W.C.)											
					1.5			2.0			2.5			3.0		
					Fan RPM	Motor RPM	MHP	Fan RPM	Motor RPM	MHP	Fan RPM	Motor RPM	MHP	Fan RPM	Motor RPM	MHP
ASC-5	1,500	1	15.0"	75	1724	1200	1	1882	1800	1	2033	1800	1	2178	1800	1-1/2
	2,000				1785	1200	1	1937	1800	1-1/2	2080	1800	1-1/2	2218	1800	1-1/2
	2,500				1857	1800	1-1/2	2004	1800	1-1/2	2141	1800	2	2272	1800	2
ASC-7	2,500	1	18.2"	75	1388	1200	1	1517	1200	1-1/2	1644	1200	2	1767	1200	2
	3,000				1522	1200	1-1/2	1631	1200	2	1739	1200	2	1846	1800	3
	3,500				1673	1200	1-1/2	1768	1200	2	1862	1800	3	1955	1800	3
ASC-10	3,500	1	18.2"	75	1673	1200	1-1/2	1768	1200	2	1862	1800	3	1955	1800	3
	4,250				1655	1200	2	1752	1200	3	1847	1800	3	1941	1800	5
	5,000				1678	1200	3	1774	1200	3	1867	1800	5	1959	1800	5
ASC-15	5,000	1	22.2"	75	1215	1200	2	1308	1200	3	1399	1200	5	1487	1200	5
	6,250				1385	1200	3	1465	1200	5	1542	1200	5	1617	1200	5
	7,500				1569	1200	5	1640	1200	5	1708	1200	7-1/2	1774	1200	7-1/2
ASC-20	7,500	1	22.2"	75	1423	1200	5	1501	1200	5	1576	1200	5	1649	1200	7-1/2
	8,750				1584	1200	5	1655	1200	7-1/2	1723	1200	7-1/2	1788	1200	7-1/2
	10,000				1750	1200	7-1/2	1816	1800	7-1/2	1878	1800	7-1/2	1938	1800	10
ASC-25	10,000	1	27.0"	75	1079	1200	5	1146	1200	7-1/2	1212	1200	7-1/2	1278	1200	7-1/2
	11,250				1165	1200	5	1226	1200	7-1/2	1285	1200	7-1/2	1344	1200	10
	12,500				1255	1200	7-1/2	1311	1200	7-1/2	1365	1200	10	1419	1200	10
ASC-30	12,500	1	27.0"	75	1255	1200	7-1/2	1311	1200	7-1/2	1365	1200	10	1419	1200	10
	13,750				1348	1200	7-1/2	1400	1200	10	1450	1200	10	1499	1200	15
	15,000				-	-	-	1491	1200	10	1538	1200	15	1584	1200	15
ASC-40	15,000	1	30.0"	75	1106	1200	7-1/2	1157	1200	10	1207	1200	10	1257	1200	15
	17,500				-	-	-	1287	1200	15	1331	1200	15	1374	1200	15
	20,000				-	-	-	1423	1200	15	1462	1200	20	1501	1200	20
ASC-50	20,000	2	27.0"	75	1079	1200	2 @ 5	1146	1200	2 @ 7-1/2	1212	1200	2 @ 7-1/2	1278	1200	2 @ 7-1/2
	22,500				1165	1200	2 @ 5	1226	1200	2 @ 7-1/2	1285	1200	2 @ 7-1/2	1344	1200	2 @ 10
	25,000				1255	1200	2 @ 7-1/2	1311	1200	2 @ 7-1/2	1365	1200	2 @ 10	1419	1200	2 @ 10
ASC-60	25,000	2	27.0"	75	1255	1200	2 @ 7-1/2	1311	1200	2 @ 7-1/2	1365	1200	2 @ 10	1419	1200	2 @ 10
	27,500				1348	1200	2 @ 7-1/2	1400	1200	2 @ 10	1450	1200	2 @ 10	1499	1200	2 @ 15
	30,000				-	-	-	1491	1200	2 @ 10	1538	1200	2 @ 15	1584	1200	2 @ 15
ASC-75	30,000	2	30.0"	75	1106	1200	2 @ 7-1/2	1157	1200	2 @ 10	1207	1200	2 @ 10	1257	1200	2 @ 15
	33,750				1208	1200	2 @ 10	1254	1200	2 @ 10	1299	1200	2 @ 15	1344	1200	2 @ 15
	37,500				-	-	-	1355	1200	2 @ 15	1396	1200	2 @ 15	1437	1200	2 @ 20

**NOTES:**

- 1 MHP = Motor Horse Power FEG = Fan Efficiency Grade
- 2) Fans are Direct Drive Single Width, Single Inlet (SWSI) Plenum Fan(s)
- 3) Equipment can be supplied with CFM different from those stated, contact factory for selection and pricing
- 4) The selections above are based on Total Static Pressure (TSP). To find the system Total Static Pressure: add supply duct static, return duct static, and applicable components from Equipment Data Chart on page 6.



# BLOWER PERFORMANCE CHART WITH STANDARD ARRANGEMENT FAN(S)

SUPPLY AIR FAN PERFORMANCE TABLE AT STANDARD CONDITIONS

Model	SCFM	Fan and Motor Qty	Fan Size	FEG	TSP - System Total Static Pressure (Inches W.C.)											
					3.5			4.0			4.5			5.0		
					Fan RPM	Motor RPM	MHP	Fan RPM	Motor RPM	MHP	Fan RPM	Motor RPM	MHP	Fan RPM	Motor RPM	MHP
ASC-5	1,500	1	15.0"	75	2318	1800	1-1/2	2454	1800	2	2587	1800	2	2715	1800	3
	2,000				2352	1800	2	2482	1800	3	2609	1800	3	2733	1800	3
	2,500				2399	1800	3	2523	1800	3	2644	1800	3	2762	1800	5
ASC-7	2,500	1	18.2"	75	1887	1800	3	2003	1800	3	2115	1800	3	-	-	-
	3,000				1951	1800	3	2055	1800	3	2157	1800	5	2257	1800	5
	3,500				2047	1800	5	2138	1800	5	2229	1800	5	2319	1800	5
ASC-10	3,500	1	18.2"	75	2047	1800	5	2138	1800	5	2229	1800	5	2319	1800	5
	4,250				2034	1800	5	2127	1800	5	2219	1800	5	2310	1800	7-1/2
	5,000				2051	1800	5	2142	1800	5	2232	1800	7-1/2	2322	1800	7-1/2
ASC-15	5,000	1	22.2"	75	1574	1200	5	1660	1200	7-1/2	1744	1200	7-1/2	1826	1800	7-1/2
	6,250				1690	1200	7-1/2	1762	1200	7-1/2	1833	1800	7-1/2	1903	1800	10
	7,500				1838	1800	7-1/2	1901	1800	7-1/2	1962	1800	10	2023	1800	10
ASC-20	7,500	1	22.2"	75	1719	1200	7-1/2	1789	1200	7-1/2	1858	1800	10	1926	1800	10
	8,750				1851	1800	10	1913	1800	10	1974	1800	10	2034	1800	15
	10,000				1996	1800	10	2052	1800	15	2108	1800	15	2162	1800	15
ASC-25	10,000	1	27.0"	75	1343	1200	10	1409	1200	10	1473	1200	15	1538	1200	15
	11,250				1403	1200	10	1461	1200	15	1519	1200	15	1578	1200	15
	12,500				1472	1200	15	1525	1200	15	1577	1200	15	1630	1200	20
ASC-30	12,500	1	27.0"	75	1472	1200	15	1525	1200	15	1577	1200	15	1630	1200	20
	13,750				1548	1200	15	1596	1200	15	1645	1200	20	1693	1200	20
	15,000				1629	1200	15	1674	1200	20	1718	1200	20	1763	1200	20
ASC-40	15,000	1	30.0"	75	1306	1200	15	1356	1200	15	1405	1200	20	1454	1200	20
	17,500				1417	1200	20	1459	1200	20	1502	1200	20	1544	1200	25
	20,000				1539	1200	20	1576	1200	25	1614	1200	25	1651	1200	30
ASC-50	20,000	2	27.0"	75	1343	1200	2 @ 10	1409	1200	2 @ 10	1473	1200	2 @ 15	1538	1200	2 @ 15
	22,500				1403	1200	2 @ 10	1461	1200	2 @ 15	1519	1200	2 @ 15	1578	1200	2 @ 15
	25,000				1472	1200	2 @ 15	1525	1200	2 @ 15	1577	1200	2 @ 15	1630	1200	2 @ 20
ASC-60	25,000	2	27.0"	75	1472	1200	2 @ 15	1525	1200	2 @ 15	1577	1200	2 @ 15	1630	1200	2 @ 20
	27,500				1548	1200	2 @ 15	1596	1200	2 @ 15	1645	1200	2 @ 20	1693	1200	2 @ 20
	30,000				1629	1200	2 @ 15	1674	1200	2 @ 20	1718	1200	2 @ 20	1763	1200	2 @ 20
ASC-75	30,000	2	30.0"	75	1306	1200	2 @ 15	1356	1200	2 @ 15	1405	1200	2 @ 20	1454	1200	2 @ 20
	33,750				1388	1200	2 @ 15	1432	1200	2 @ 20	1476	1200	2 @ 20	1520	1200	2 @ 25
	37,500				1477	1200	2 @ 20	1517	1200	2 @ 20	1556	1200	2 @ 25	1596	1200	2 @ 25

**NOTES:**

1. MHP = Motor Horse Power FEG = Fan Efficiency Grade
2. Fans are Direct Drive Single Width, Single Inlet (SWSI) Plenum Fan(s)
3. Equipment can be supplied with CFM different from those stated, contact factory for selection and pricing
4. The selections above are based on Total Static Pressure. To find the system Total Static Pressure: add supply duct static, return duct static, and applicable components from Equipment Data Chart on page 6.

# BLOWER PERFORMANCE CHART FOR FAN ARRAY

SUPPLY AIR FAN PERFORMANCE TABLE AT STANDARD CONDITIONS

Model	SCFM	Fan and Motor Qty	Fan Size	FEG	TSP - System Total Static Pressure (Inches W.C.)											
					1.5			2.0			2.5			3.0		
					Fan RPM	Motor RPM	MHP	Fan RPM	Motor RPM	MHP	Fan RPM	Motor RPM	MHP	Fan RPM	Motor RPM	MHP
ASC-5	1,500 2,000 2,500				Not Available											
ASC-7	2,500 3,000 3,500				Not Available											
ASC-10	3,500 4,250 5,000				Not Available											
ASC-15	5,000	2	18.2"	71	1373	1200	2 @ 1-1/2	1497	1200	2 @ 3	1619	1200	2 @ 3	1738	1800	2 @ 3
	6,250				1543	1200	2 @ 3	1647	1200	2 @ 3	1748	1800	2 @ 3	1847	1800	2 @ 3
	7,500				1518	1200	2 @ 3	1624	1200	2 @ 3	1727	1800	2 @ 3	1829	1800	2 @ 3
ASC-20	7,500	2	20.0"	71	1315	1200	2 @ 3	1423	1200	2 @ 3	1526	1200	2 @ 3	1626	1200	2 @ 3
	8,750				1426	1200	2 @ 3	1526	1200	2 @ 3	1620	1200	2 @ 3	1710	1800	2 @ 5
	10,000				1545	1200	2 @ 3	1637	1200	2 @ 3	1725	1800	2 @ 5	1808	1800	2 @ 5
ASC-25	10,000	4	16.5"	71	1761	1800	4 @ 3	1874	1800	4 @ 3	1984	1800	4 @ 3	2094	1800	4 @ 3
	11,250				1898	1800	4 @ 3	2002	1800	4 @ 3	2102	1800	4 @ 3	2200	1800	4 @ 3
	12,500				1774	1800	4 @ 3	1886	1800	4 @ 3	1996	1800	4 @ 3	2104	1800	4 @ 3
ASC-30	12,500	4	18.2"	67	1552	1200	4 @ 3	1659	1800	4 @ 3	1761	1800	4 @ 3	1862	1800	4 @ 3
	13,750				1457	1200	4 @ 3	1573	1200	4 @ 3	1685	1800	4 @ 3	1796	1800	4 @ 3
	15,000				1527	1200	4 @ 3	1636	1200	4 @ 3	1741	1800	4 @ 3	1843	1800	4 @ 5
ASC-40	15,000	4	22.2"	71	1180	1200	4 @ 3	1277	1200	4 @ 3	1371	1200	4 @ 3	1464	1200	4 @ 3
	17,500				1283	1200	4 @ 3	1370	1200	4 @ 3	1454	1200	4 @ 3	1535	1200	4 @ 5
	20,000				1392	1200	4 @ 3	1472	1200	4 @ 3	1549	1200	4 @ 5	1623	1200	4 @ 5
ASC-50	20,000	4	22.2"	71	1392	1200	4 @ 3	1472	1200	4 @ 3	1549	1200	4 @ 5	1623	1200	4 @ 5
	22,500				1314	1200	4 @ 3	1398	1200	4 @ 5	1480	1200	4 @ 5	1559	1200	4 @ 5
	25,000				1287	1200	4 @ 3	1373	1200	4 @ 5	1457	1200	4 @ 5	1538	1200	4 @ 5
ASC-60	25,000	4	24.5"	71	1115	1200	4 @ 3	1198	1200	4 @ 5	1279	1200	4 @ 5	1358	1200	4 @ 5
	27,500				1177	1200	4 @ 5	1254	1200	4 @ 5	1329	1200	4 @ 5	1403	1200	4 @ 7-1/2
	30,000				1243	1200	4 @ 5	1315	1200	4 @ 5	1385	1200	4 @ 5	1454	1200	4 @ 7-1/2
ASC-75	30,000	4	24.5"	67	1146	1200	4 @ 5	1225	1200	4 @ 5	1302	1200	4 @ 5	1378	1200	4 @ 7-1/2
	33,750				1232	1200	4 @ 5	1304	1200	4 @ 5	1374	1200	4 @ 7-1/2	1443	1200	4 @ 7-1/2
	37,500				1322	1200	4 @ 5	1388	1200	4 @ 7-1/2	1453	1200	4 @ 7-1/2	1516	1200	4 @ 10

**NOTES:**

1. MHP = Motor Horse Power FEG = Fan Efficiency Grade
2. Fans are Direct Drive Single Width, Single Inlet (SWSI) Plenum Fan(s)
3. Equipment can be supplied with CFM different from those stated, contact factory for selection and pricing
4. The selections above are based on Total Static Pressure (TSP). To find the system Total Static Pressure: add supply duct static, return duct static, and applicable components from Equipment Data Chart on page 6.

# BLOWER PERFORMANCE CHART FOR FAN ARRAY

SUPPLY AIR FAN PERFORMANCE TABLE AT STANDARD CONDITIONS

Model	SCFM	Fan and Motor Qty	Fan Size	FEG	TSP - System Total Static Pressure (Inches W.C.)											
					3.5			4.0			4.5			5.0		
					Fan RPM	Motor RPM	MHP	Fan RPM	Motor RPM	MHP	Fan RPM	Motor RPM	MHP	Fan RPM	Motor RPM	MHP
ASC-5	1,500 2,000 2,500				Not Available											
ASC-7	2,500 3,000 3,500				Not Available											
ASC-10	3,500 4,250 5,000				Not Available											
ASC-15	5,000	2	18.2"	71	1855	1800	2 @ 3	1969	1800	2 @ 3	2080	1800	2 @ 5	-	-	-
	6,250				1945	1800	2 @ 3	2041	1800	2 @ 5	2137	1800	2 @ 5	2232	1800	2 @ 5
	7,500				1929	1800	2 @ 5	2028	1800	2 @ 5	2126	1800	2 @ 5	2222	1800	2 @ 7.5
ASC-20	7,500	2	20.0"	71	1723	1800	2 @ 5	1817	1800	2 @ 5	1910	1800	2 @ 5	2000	1800	2 @ 7-1/2
	8,750				1797	1800	2 @ 5	1883	1800	2 @ 5	1966	1800	2 @ 7-1/2	2048	1800	2 @ 7-1/2
	10,000				1889	1800	2 @ 5	1967	1800	2 @ 7-1/2	2043	1800	2 @ 7-1/2	2118	1800	2 @ 7-1/2
ASC-25	10,000	4	16.5"	71	2202	1800	4 @ 3	2310	1800	4 @ 3	2417	1800	4 @ 5	2523	1800	4 @ 5
	11,250				2298	1800	4 @ 3	2395	1800	4 @ 5	2491	1800	4 @ 5	2587	1800	4 @ 5
	12,500				2211	1800	4 @ 3	2318	1800	4 @ 5	2424	1800	4 @ 5	2529	1800	4 @ 5
ASC-30	12,500	4	18.2"	67	1961	1800	4 @ 3	2058	1800	4 @ 5	2155	1800	4 @ 5	2250	1800	4 @ 5
	13,750				1904	1800	4 @ 5	2011	1800	4 @ 5	2116	1800	4 @ 5	2219	1800	4 @ 5
	15,000				1945	1800	4 @ 5	2045	1800	4 @ 5	2143	1800	4 @ 5	2240	1800	4 @ 7-1/2
ASC-40	15,000	4	22.2"	71	1554	1200	4 @ 5	1643	1200	4 @ 5	1730	1800	4 @ 5	1816	1800	4 @ 7-1/2
	17,500				1615	1200	4 @ 5	1694	1800	4 @ 5	1772	1800	4 @ 7-1/2	1849	1800	4 @ 7-1/2
	20,000				1695	1800	4 @ 5	1766	1800	4 @ 7-1/2	1836	1800	4 @ 7-1/2	1906	1800	4 @ 7-1/2
ASC-50	20,000	4	22.2"	71	1695	1800	4 @ 5	1766	1800	4 @ 7-1/2	1836	1800	4 @ 7-1/2	1906	1800	4 @ 7-1/2
	22,500				1637	1200	4 @ 7-1/2	1714	1800	4 @ 7-1/2	1789	1800	4 @ 7-1/2	1864	1800	4 @ 7-1/2
	25,000				1618	1200	4 @ 7-1/2	1697	1800	4 @ 7-1/2	1775	1800	4 @ 7-1/2	1851	1800	4 @ 10
ASC-60	25,000	4	24.5"	71	1437	1200	4 @ 7-1/2	1515	1200	4 @ 7-1/2	1591	1200	4 @ 7-1/2	1666	1800	4 @ 10
	27,500				1475	1200	4 @ 7-1/2	1547	1200	4 @ 7-1/2	1618	1200	4 @ 10	1688	1800	4 @ 10
	30,000				1521	1200	4 @ 7-1/2	1588	1200	4 @ 10	1654	1800	4 @ 10	1719	1800	4 @ 10
ASC-75	30,000	4	24.5"	67	1454	1200	4 @ 7-1/2	1529	1200	4 @ 10	1603	1200	4 @ 10	1676	1800	4 @ 15
	33,750				1511	1200	4 @ 10	1578	1200	4 @ 10	1645	1200	4 @ 10	1712	1800	4 @ 15
	37,500				1578	1200	4 @ 10	1639	1200	4 @ 10	1700	1800	4 @ 15	1761	1800	4 @ 15

**NOTES:**

1. MHP = Motor Horse Power FEG = Fan Efficiency Grade
2. Fans are Direct Drive Single Width, Single Inlet (SWSI) Plenum Fan(s)
3. Equipment can be supplied with CFM different from those stated, contact factory for selection and pricing
4. The selections above are based on Total Static Pressure. To find the system Total Static Pressure: add supply duct static, return duct static, and applicable components from Equipment Data Chart on page 6.

# BLOWER PERFORMANCE CHART FOR FAN ARRAY WITH 100% REDUNDANCY

SUPPLY AIR FAN PERFORMANCE TABLE AT STANDARD CONDITIONS

Model	SCFM	Fan and Motor Qty	Fan Size	FEG	TSP - System Total Static Pressure (Inches W.C.)											
					1.5			2.0			2.5			3.0		
					Fan RPM	Motor RPM	MHP	Fan RPM	Motor RPM	MHP	Fan RPM	Motor RPM	MHP	Fan RPM	Motor RPM	MHP
ASC-5	1,500 2,000 2,500				Not Available											
ASC-7	2,500 3,000 3,500				Not Available											
ASC-10	3,500 4,250 5,000				Not Available											
ASC-15	5,000	2	18.2"	71	1373	1200	2 @ 3	1497	1200	2 @ 5	1619	1200	2 @ 5	1738	1800	2 @ 5
	6,250				1543	1200	2 @ 5	1647	1200	2 @ 7-1/2	1748	1800	2 @ 7-1/2	1847	1800	2 @ 7-1/2
	7,500				1518	1200	2 @ 7-1/2	1624	1200	2 @ 7-1/2	1727	1800	2 @ 7-1/2	1829	1800	2 @ 10
ASC-20	7,500	2	20.0"	71	1315	1200	2 @ 5	1423	1200	2 @ 7-1/2	1526	1200	2 @ 7-1/2	1626	1200	2 @ 7-1/2
	8,750				1426	1200	2 @ 7-1/2	1526	1200	2 @ 7-1/2	1620	1200	2 @ 10	1710	1800	2 @ 10
	10,000				1545	1200	2 @ 10	1637	1200	2 @ 10	1725	1800	2 @ 15	1808	1800	2 @ 15
ASC-25	10,000	4	16.5"	71	1761	1800	4 @ 3	1874	1800	4 @ 3	1984	1800	4 @ 3	2094	1800	4 @ 3
	11,250				1898	1800	4 @ 3	2002	1800	4 @ 3	2102	1800	4 @ 3	2200	1800	4 @ 5
	12,500				1774	1800	4 @ 3	1886	1800	4 @ 3	1996	1800	4 @ 5	2104	1800	4 @ 5
ASC-30	12,500	4	18.2"	67	1552	1200	4 @ 3	1659	1800	4 @ 3	1761	1800	4 @ 5	1862	1800	4 @ 5
	13,750				1457	1200	4 @ 3	1573	1200	4 @ 3	1685	1800	4 @ 5	1796	1800	4 @ 5
	15,000				1527	1200	4 @ 3	1636	1200	4 @ 5	1741	1800	4 @ 5	1843	1800	4 @ 5
ASC-40	15,000	4	22.2"	71	1180	1200	4 @ 3	1277	1200	4 @ 3	1371	1200	4 @ 5	1464	1200	4 @ 5
	17,500				1283	1200	4 @ 3	1370	1200	4 @ 5	1454	1200	4 @ 5	1535	1200	4 @ 5
	20,000				1392	1200	4 @ 5	1472	1200	4 @ 5	1549	1200	4 @ 5	1623	1200	4 @ 7-1/2
ASC-50	20,000	4	22.2"	71	1392	1200	4 @ 5	1472	1200	4 @ 5	1549	1200	4 @ 5	1623	1200	4 @ 7-1/2
	22,500				1314	1200	4 @ 5	1398	1200	4 @ 5	1480	1200	4 @ 7-1/2	1559	1200	4 @ 7-1/2
	25,000				1287	1200	4 @ 5	1373	1200	4 @ 5	1457	1200	4 @ 7-1/2	1538	1200	4 @ 7-1/2
ASC-60	25,000	4	24.5"	71	1115	1200	4 @ 5	1198	1200	4 @ 5	1279	1200	4 @ 7-1/2	1358	1200	4 @ 7-1/2
	27,500				1177	1200	4 @ 5	1254	1200	4 @ 7-1/2	1329	1200	4 @ 7-1/2	1403	1200	4 @ 7-1/2
	30,000				1243	1200	4 @ 7-1/2	1315	1200	4 @ 7-1/2	1385	1200	4 @ 7-1/2	1454	1200	4 @ 10
ASC-75	30,000	4	24.5"	67	1146	1200	4 @ 7-1/2	1225	1200	4 @ 7-1/2	1302	1200	4 @ 7-1/2	1378	1200	4 @ 10
	33,750				1232	1200	4 @ 7-1/2	1304	1200	4 @ 7-1/2	1374	1200	4 @ 10	1443	1200	4 @ 10
	37,500				1322	1200	4 @ 10	1388	1200	4 @ 10	1453	1200	4 @ 15	1516	1200	4 @ 15

**NOTES:**

1. MHP = Motor Horse Power FEG = Fan Efficiency Grade
2. Fans are Direct Drive Single Width, Single Inlet (SWSI) Plenum Fan(s)
3. Equipment can be supplied with CFM different from those stated, contact factory for selection and pricing
4. The selections above are based on Total Static Pressure (TSP). To find the system Total Static Pressure: add supply duct static, return duct static, and applicable components from Equipment Data Chart on page 6.

# BLOWER PERFORMANCE CHART FOR FAN ARRAY WITH 100% REDUNDANCY

SUPPLY AIR FAN PERFORMANCE TABLE AT STANDARD CONDITIONS

Model	SCFM	Fan and Motor Qty	Fan Size	FEG	TSP - System Total Static Pressure (Inches W.C.)											
					3.5			4.0			4.5			5.0		
					Fan RPM	Motor RPM	MHP	Fan RPM	Motor RPM	MHP	Fan RPM	Motor RPM	MHP	Fan RPM	Motor RPM	MHP
ASC-5	1,500 2,000 2,500	Not Available														
ASC-7	2,500 3,000 3,500	Not Available														
ASC-10	3,500 4,250 5,000	Not Available														
ASC-15	5,000	2	18.2"	71	1855	1800	2 @ 7-1/2	1969	1800	2 @ 7-1/2	2080	1800	2 @ 7-1/2	NA	NA	NA
	6,250				1945	1800	2 @ 7-1/2	2041	1800	2 @ 10	2137	1800	2 @ 10	2232	1800	2 @ 10
	7,500				1929	1800	2 @ 10	2028	1800	2 @ 10	2126	1800	2 @ 15	2222	1800	2 @ 15
ASC-20	7,500	2	20.0"	71	1723	1800	2 @ 10	1817	1800	2 @ 10	1910	1800	2 @ 10	2000	1800	2 @ 15
	8,750				1797	1800	2 @ 10	1883	1800	2 @ 15	1966	1800	2 @ 15	2048	1800	2 @ 15
	10,000				1889	1800	2 @ 15	1967	1800	2 @ 15	2043	1800	2 @ 15	2118	1800	2 @ 20
ASC-25	10,000	4	16.5"	71	2202	1800	4 @ 5	2310	1800	4 @ 5	2417	1800	4 @ 5	2523	1800	4 @ 5
	11,250				2298	1800	4 @ 5	2395	1800	4 @ 5	2491	1800	4 @ 5	2587	1800	4 @ 7-1/2
	12,500				2211	1800	4 @ 5	2318	1800	4 @ 5	2424	1800	4 @ 5	2529	1800	4 @ 7-1/2
ASC-30	12,500	4	18.2"	67	1961	1800	4 @ 5	2058	1800	4 @ 5	2155	1800	4 @ 5	2250	1800	4 @ 7-1/2
	13,750				1904	1800	4 @ 5	2011	1800	4 @ 5	2116	1800	4 @ 7-1/2	2219	1800	4 @ 7-1/2
	15,000				1945	1800	4 @ 5	2045	1800	4 @ 7-1/2	2143	1800	4 @ 7-1/2	2240	1800	4 @ 7-1/2
ASC-40	15,000	4	22.2"	71	1554	1200	4 @ 5	1643	1200	4 @ 5	1730	1800	4 @ 7-1/2	1816	1800	4 @ 7-1/2
	17,500				1615	1200	4 @ 7-1/2	1694	1800	4 @ 7-1/2	1772	1800	4 @ 7-1/2	1849	1800	4 @ 7-1/2
	20,000				1695	1800	4 @ 7-1/2	1766	1800	4 @ 7-1/2	1836	1800	4 @ 10	1906	1800	4 @ 10
ASC-50	20,000	4	22.2"	71	1695	1800	4 @ 7-1/2	1766	1800	4 @ 7-1/2	1836	1800	4 @ 10	1906	1800	4 @ 10
	22,500				1637	1200	4 @ 7-1/2	1714	1800	4 @ 10	1789	1800	4 @ 10	1864	1800	4 @ 10
	25,000				1618	1200	4 @ 10	1697	1800	4 @ 10	1775	1800	4 @ 10	1851	1800	4 @ 15
ASC-60	25,000	4	24.5"	71	1437	1200	4 @ 7-1/2	1515	1200	4 @ 10	1591	1200	4 @ 10	1666	1800	4 @ 15
	27,500				1475	1200	4 @ 10	1547	1200	4 @ 10	1618	1200	4 @ 15	1688	1800	4 @ 15
	30,000				1521	1200	4 @ 10	1588	1200	4 @ 15	1654	1800	4 @ 15	1719	1800	4 @ 15
ASC-75	30,000	4	24.5"	67	1454	1200	4 @ 10	1529	1200	4 @ 15	1603	1200	4 @ 15	1676	1800	4 @ 15
	33,750				1511	1200	4 @ 15	1578	1200	4 @ 15	1645	1200	4 @ 15	1712	1800	4 @ 15
	37,500				1578	1200	4 @ 15	1639	1200	4 @ 15	1700	1800	4 @ 20	1761	1800	4 @ 20

**NOTES:**

1. MHP = Motor Horse Power FEG = Fan Efficiency Grade
2. Fans are Direct Drive Single Width, Single Inlet (SWSI) Plenum Fan(s)
3. Equipment can be supplied with CFM different from those stated, contact factory for selection and pricing
4. The selections above are based on Total Static Pressure. To find the system Total Static Pressure: add supply duct static, return duct static, and applicable components from Equipment Data Chart on page 6.

# ASC AMP DRAW TABLE

ITEM	SOURCE	AMPS	Motor Horsepower												
			1/2			1			1-1/2			2			
			Motor Qty			Motor Qty			Motor Qty			Motor Qty			
			1	2	4	1	2	4	1	2	4	1	2	4	
A	Blower Motor(s)	200 V 3 Ph	2.6	5.2	10.4	4.8	9.6	19.2	6.9	13.8	27.6	7.8	15.6	31.2	
		208 V 3 Ph	2.5	5.0	10.0	4.6	9.2	18.4	6.6	13.2	26.4	7.5	15.0	30.0	
		230 V 3 Ph	2.0	4.0	8.0	4.2	8.4	16.8	6.0	12.0	24.0	6.8	13.6	27.2	
		460 V 3 Ph	1.0	2.0	4.0	2.1	4.2	8.4	3.0	6.0	12.0	3.4	6.8	13.6	
		575 V 3 Ph	0.8	1.6	3.2	1.7	3.4	6.8	2.4	4.8	9.6	2.7	5.4	10.8	
		AMPS	Motor Horsepower												
			3			5			7-1/2			10			
			Motor Qty			Motor Qty			Motor Qty			Motor Qty			
			1	2	4	1	2	4	1	2	4	1	2	4	
			200 V 3 Ph	11.0	22.0	44.0	17.5	35	70	25.3	50.6	101	32.2	64.4	129
			208 V 3 Ph	10.6	21.2	42.4	16.7	33.4	66.8	24.2	48.4	96.8	30.8	61.6	123
		230 V 3 Ph	9.6	19.2	38.4	15.3	30.6	61.2	22.0	44.0	88.0	28.8	57.6	115	
		460 V 3 Ph	4.8	9.6	19.2	7.6	15.2	30.4	11.0	22.0	44.0	14.4	28.8	57.6	
		575 V 3 Ph	3.9	7.8	15.6	6.1	12.2	24.4	9.0	18.0	36.0	11.5	23.0	46.0	
		AMPS	Motor Horsepower												
			15			20			25			30			
			Motor Qty			Motor Qty			Motor Qty			Motor Qty			
			1	2	4	1	2	4	1	2	4	1	2	4	
			200 V 3 Ph	48.3	96.6	193	62.1	124	248	78.2	156	313	92.0	184	368
			208 V 3 Ph	46.2	92.4	185	59.4	119	238	74.8	150	299	88.0	176	352
230 V 3 Ph	42.0		84.0	168	54.0	108	216	68.0	136	272	80.0	160	320		
460 V 3 Ph	21.0	42.0	84.0	27.0	54.0	108	34.0	68.0	136	40.0	80.0	160			
575 V 3 Ph	17.0	34.0	68.0	22.0	44.0	88.0	27.0	54.0	108	32.0	64.0	128			
B	Controls (Cooling Only)	AMPS	Pump(s) and Control Circuit Amps												
			Indirect Unit Size						Indirect/Direct Unit Size						
			5	7-30	40	50	60	75	5	7-30	40	50	60	75	
			200 V 3 Ph	10.0	15.0	10.2	17.0	16.6	16.6	25.0	25.0	16.4	28.2	27.8	27.8
			208 V 3 Ph	9.6	14.4	10.0	16.8	16.4	16.4	24.0	24.0	16.0	27.6	27.2	27.2
			230 V 3 Ph	8.7	13.0	9.1	15.3	14.9	14.9	21.7	21.7	14.5	25.0	24.6	24.6
	460 V 3 Ph	4.3	6.5	4.5	7.6	7.4	7.4	10.9	10.9	7.2	12.5	12.3	12.3		
	575 V 3 Ph	3.5	5.2	CF	6.1	CF	CF	8.7	8.7	CF	10.0	CF	CF		
	Controls (Cooling and Heating)	AMPS	Pump(s) and Control Circuit Amps												
			Indirect Unit Size						Indirect/Direct Unit Size						
			5	7-30	40	50	60	75	5	7-30	40	50	60	75	
			200 V 3 Ph	10.0	15.0	13.9	20.7	20.3	20.3	25.0	25.0	16.4	28.2	27.8	27.8
			208 V 3 Ph	9.6	14.4	13.6	20.4	20.0	20.0	24.0	24.0	16.0	27.6	27.2	27.2
			230 V 3 Ph	8.7	13.0	12.3	18.5	18.1	18.1	21.7	21.7	14.5	25.0	24.6	24.6
460 V 3 Ph			4.3	6.5	6.2	9.3	9.1	9.1	10.9	10.9	7.2	12.5	12.3	12.3	
575 V 3 Ph			3.5	5.2	CF	7.4	CF	CF	8.7	8.7	CF	10.0	CF	CF	

- NOTES** 1) CF = Contact Factory  
 2) Above motor amps are based on 2011 edition of NEC.  
 3) Control circuit amps are based on standard controls.

### Steps to Size Optional Disconnect Switch:

1. Find the Indirect Section Exhaust Fan Motor HP from chart on page 23.
2. Find amp draw for Indirect Section Exhaust Fan Motor HP from chart in Item A above.
3. Find the blower motor HP required from charts on pages 24 - 29.
4. Find amp draw for blower motor HP from chart in Item A above.
5. Find amps for controls from chart in Item B above.
6. Add amps from steps 2, 4 and 5, then multiply by 1.25.

## ***FAN EFFICIENCY***

---

In order to reduce fan-energy consumption in commercial HVAC systems across the US, the industry has initiated the development of a federal efficiency standard for commercial and industrial fans. The FEG, or Fan Efficiency Grade, was developed as a means to measure fan efficiency. The FEG is an indicator of the air moving device's aerodynamic quality and is calculated using the fan's peak total efficiency and fan size. ASHRAE Standard 90.1-2013 states that fans shall achieve an FEG of 67 or higher based on the manufacturer's certified data, as defined by AMCA 205. The total efficiency of the fan at the design point of operation shall be within 15 percentage points of the maximum total efficiency of the fan.

The air handler used in the Aztec ASC Series of evaporative cooling unit incorporates Direct Drive Plenum Fan(s). The backward inclined airfoil wheels used here have the highest efficiency of all centrifugal fan designs. The high efficiency wheel combined with the direct drive motor eliminates belt drive losses and offers a compact space-saving design. By eliminating the belt drive package, maintenance costs for the belts and bearings are also eliminated. The direct drive motor is also connected to a Variable Frequency Drive (VFD) controller to vary the airflow as needed as design conditions change throughout the day or year.

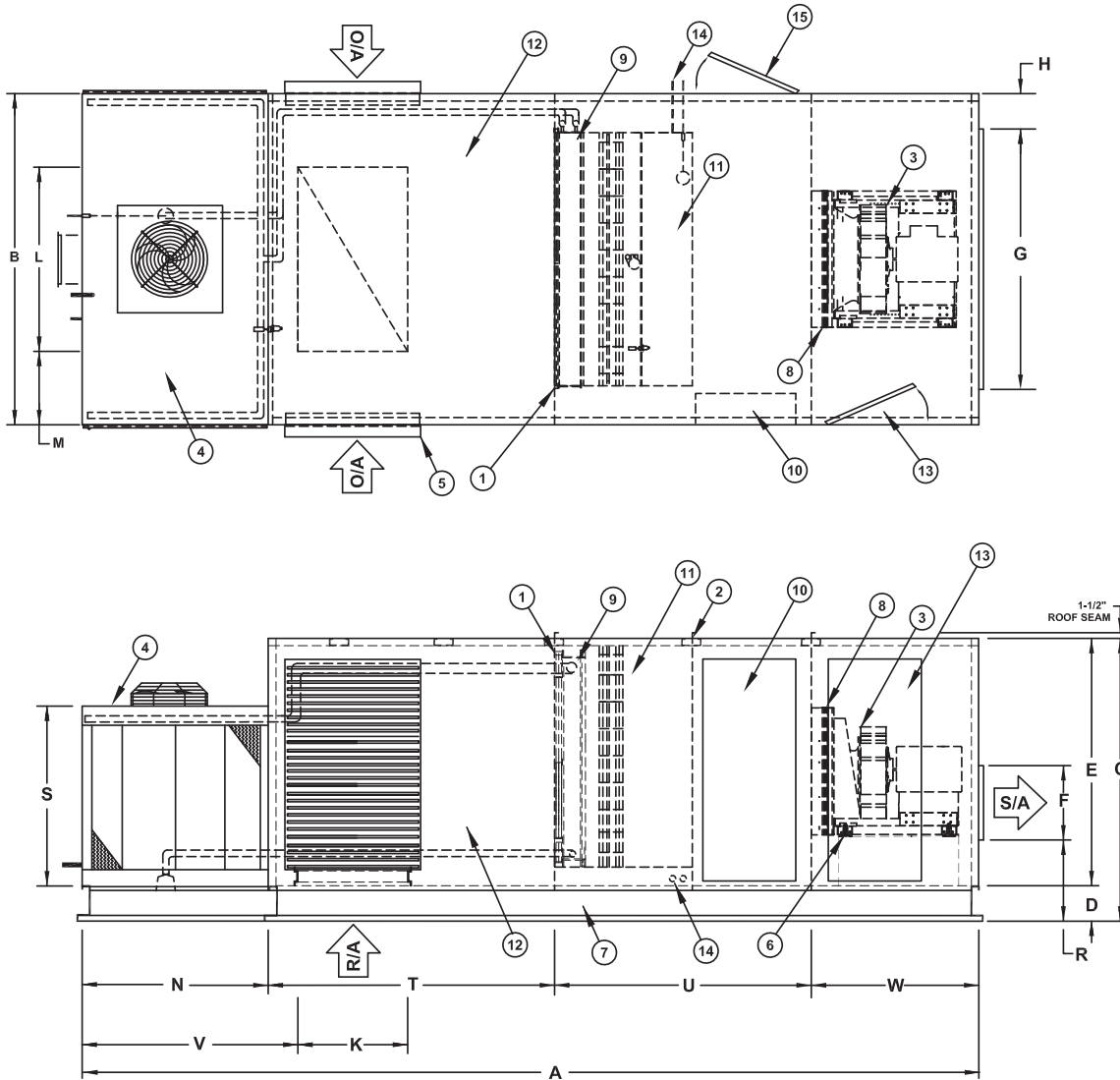


# DIMENSIONAL DATA FOR COOLING ONLY UNITS WITH STANDARD ARRANGEMENT FAN(S) AND END DISCHARGE

AZTEC "2A11" SERIES WITH DIRECT DRIVE PLENUM FAN AND MIXING BOX SECTION

C000743A

- ① 2" THICK FILTER SECTION.
- ② HEAVY GAUGE ROOF AND WALL PANELS.
- ③ DIRECT DRIVE PLENUM FAN (SINGLE FAN SHOWN, TWIN FANS USED ON MODELS ASC - 50, 60, AND 75).
- ④ INTEGRAL COOLING TOWER WITH DIRECT DRIVE PROP FAN.
- ⑤ HINGED, SUPPLY AIR INLET LOUVER FOR FILTER ACCESS.
- ⑥ SEISMIC RATED, SPRING ISOLATION.
- ⑦ UNIT BASE.
- ⑧ FLEX CONNECTION.
- ⑨ INDIRECT COOLING COIL.
- ⑩ ELECTRICAL CONTROL BOX.
- ⑪ STAINLESS STEEL DIRECT EVAPORATIVE COOLING SECTION.
- ⑫ MIXING SECTION (OPTIONAL).
- ⑬ ACCESS DOOR TO DIRECT DRIVE PLENUM FAN ASSEMBLY.
- ⑭ DRAIN CONNECTION.
- ⑮ ACCESS DOOR TO DIRECT COOLING SECTION.



		Model										
		ASC-5	ASC-7	ASC-10	ASC-15	ASC-20	ASC-25	ASC-30	ASC-40	ASC-50	ASC-60	ASC-75
Unit Shipping Weight (lbs)	1A01	2080	2385	2710	3800	4545	5630	5690	7100	9050	10,070	12,035
	2A11	2280	2615	2965	4110	4925	6060	6125	7630	9640	10,735	12,770
Unit Operating Weight (lbs)	1A01	2360	2720	3140	4430	5275	6465	6655	8455	10,790	11,865	13,930
	2A11	2685	3110	3590	4965	5955	7235	7460	9440	11,930	13,120	15,310

## ***DIMENSIONAL DATA FOR COOLING ONLY UNITS WITH STANDARD ARRANGEMENT FAN(S) AND END DISCHARGE***

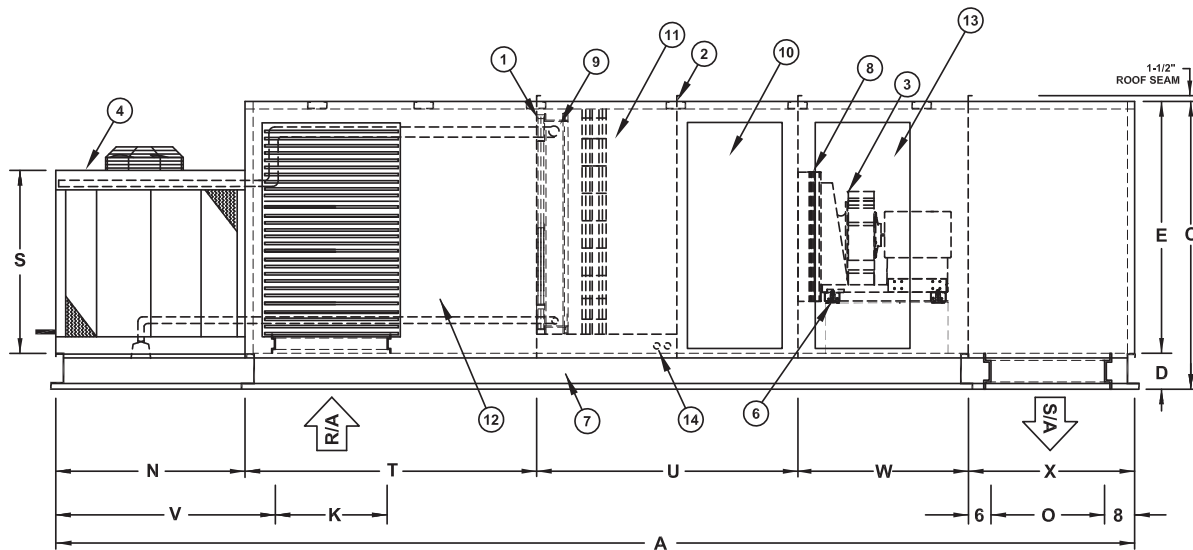
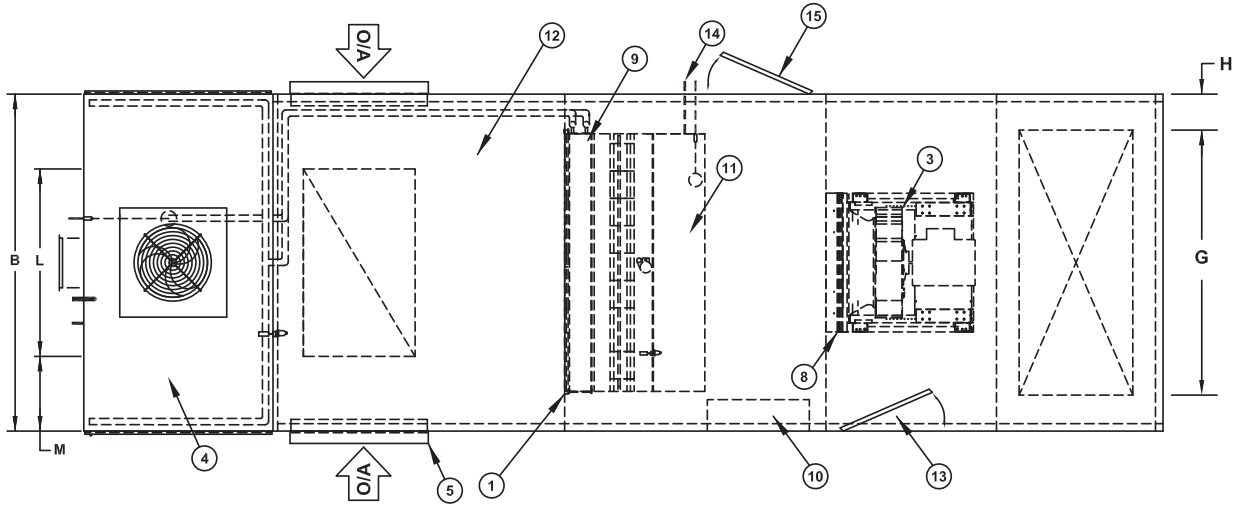
MODEL	DIMENSIONS								
	A	B	C	D	E	F	G	H	K
ASC-5	188-5/16	52	42-1/2	6	36-1/2	16	42	5	14-1/8
ASC-7	190-13/16	56	48-1/2	6	42-1/2	16	46	5	14-1/8
ASC-10	203-3/4	64	55-1/2	8	47-1/2	20	46	8	17-1/2
ASC-15	225-1/4	71	66-1/2	8	58-1/2	20	54	8-1/2	22-13/16
ASC-20	241-5/16	84	66-1/2	8	58-1/2	20	54	15	26
ASC-25	250-5/16	89	74-1/2	8	66-1/2	20	70	9-1/2	29-1/2
ASC-30	254-3/8	92	80-1/2	8	72-1/2	20	70	11	32-1/2
ASC-40	280	106	92-1/2	8	84-1/2	30	79	13-1/2	35-1/2
ASC-50	292-13/16	123	92-1/2	8	84-1/2	30	82	20-1/2	42-3/8
ASC-60	298-13/16	123	107-1/2	8	99-1/2	38	82	20-1/2	42-3/8
ASC-75	318-7/8	123	125-1/2	8	117-1/2	38	82	20-1/2	46
MODEL	DIMENSIONS								
	L	M	N	R	S	T	U	V	W
ASC-5	23-1/2	14-1/4	32	10-5/16	36-1/2	47-1/2	69	40	39-13/16
ASC-7	29-1/2	13-1/4	34	10-5/16	36-1/2	47-1/2	69	42	40-5/16
ASC-10	35-1/2	14-1/4	38	12-5/16	36-1/2	52	69	48-1/2	44-3/4
ASC-15	43-1/2	13-3/4	50	14-5/16	48-1/2	52	73-7/8	59-3/8	49-3/8
ASC-20	49-1/2	17-1/4	50	15-5/16	48-1/2	68	73-7/8	59-3/8	49-3/8
ASC-25	49-1/2	19-3/4	50	20-5/16	48-1/2	77	73-7/8	60-1/2	49-3/8
ASC-30	53-1/2	19-1/4	50	20-5/16	60-1/2	80	75	60-1/2	49-3/8
ASC-40	65-1/2	20-1/4	62	20-5/16	60-1/2	88	75	72-1/2	55
ASC-50	88	17-1/2	66	20-5/16	72-1/2	93	78-13/16	81-13/16	55
ASC-60	88	17-1/2	72	20-5/16	72-1/2	93	78-13/16	81-13/16	55
ASC-75	88	17-1/2	78	20-5/16	84-1/2	104-3/4	78-13/16	90-1/2	57-3/8

# DIMENSIONAL DATA FOR COOLING ONLY UNITS WITH STANDARD ARRANGEMENT FAN(S) AND DOWN DISCHARGE

AZTEC "2A11" SERIES WITH DIRECT DRIVE PLENUM FAN AND MIXING BOX SECTION WITH DISCHARGE PLENUM.

C000744A

- ① 2" THICK FILTER SECTION.
- ② HEAVY GAUGE ROOF AND WALL PANELS.
- ③ DIRECT DRIVE PLENUM FAN (SINGLE FAN SHOWN, TWIN FANS USED ON MODELS ASC - 50, 60, AND 75).
- ④ INTEGRAL COOLING TOWER WITH DIRECT DRIVE PROP FAN.
- ⑤ HINGED, SUPPLY AIR INLET LOUVER FOR FILTER ACCESS.
- ⑥ SEISMIC RATED, SPRING ISOLATION.
- ⑦ UNIT BASE.
- ⑧ FLEX CONNECTION.
- ⑨ INDIRECT COOLING COIL.
- ⑩ ELECTRICAL CONTROL BOX.
- ⑪ STAINLESS STEEL DIRECT EVAPORATIVE COOLING SECTION.
- ⑫ MIXING SECTION (OPTIONAL).
- ⑬ ACCESS DOOR TO DIRECT DRIVE PLENUM FAN ASSEMBLY.
- ⑭ DRAIN CONNECTION.
- ⑮ ACCESS DOOR TO DIRECT COOLING SECTION.



		Model										
		ASC-5	ASC-7	ASC-10	ASC-15	ASC-20	ASC-25	ASC-30	ASC-40	ASC-50	ASC-60	ASC-75
Unit Shipping Weight (lbs)	1A01	2220	2560	2915	4090	4860	6015	6125	7550	9680	10,770	12,895
	2A11	2420	2790	3170	4400	5240	6445	6560	8080	10,270	11,435	13,630
Unit Operating Weight (lbs)	1A01	2500	2895	3345	4720	5590	6850	7090	8905	11,420	12,565	14,790
	2A11	2825	3285	3795	5255	6270	7620	7895	9890	12,560	13,820	16,170

## ***D***IMENSIONAL DATA FOR COOLING ONLY UNITS WITH STANDARD ARRANGEMENT FAN(S) AND DOWN DISCHARGE

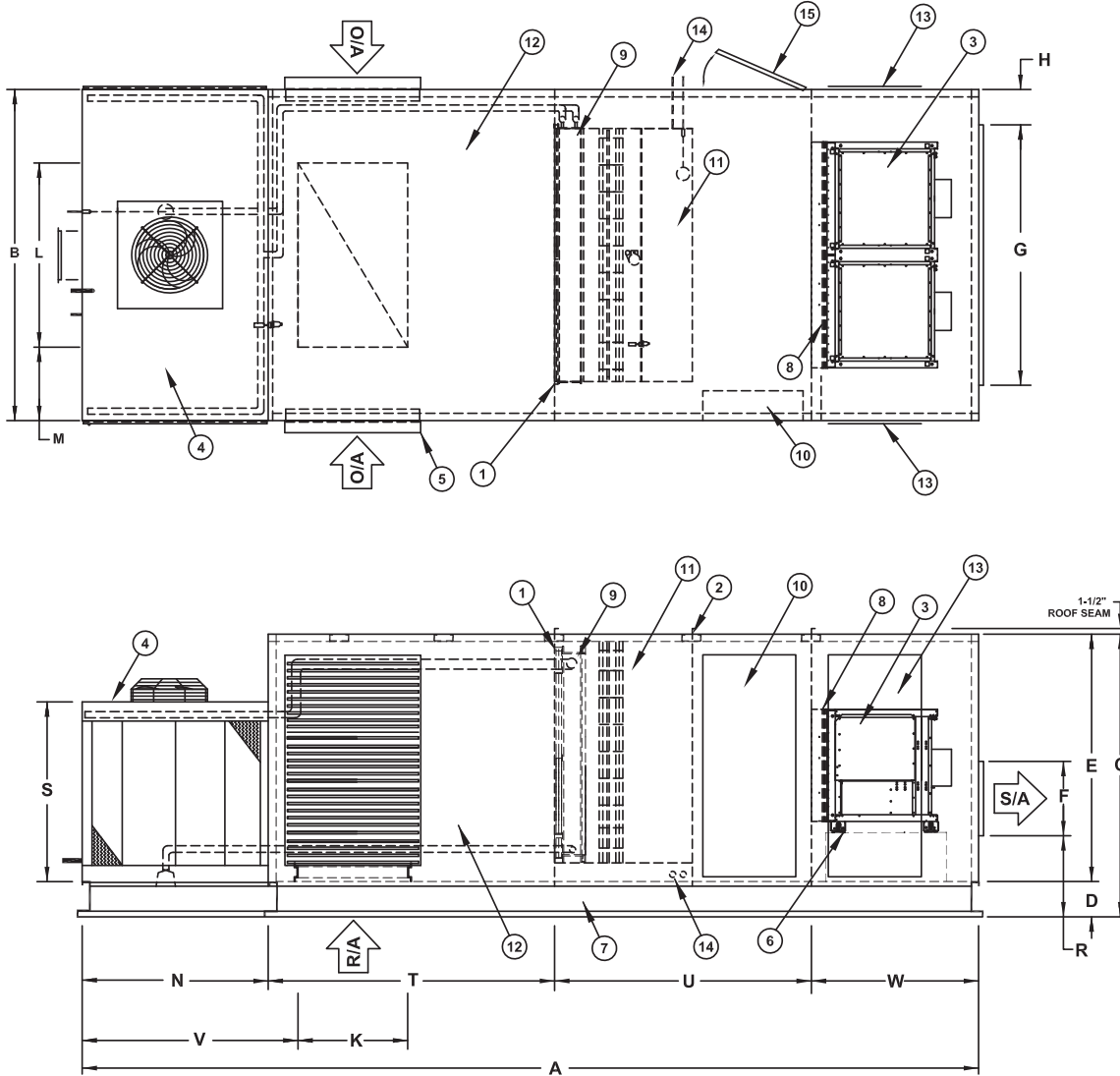
MODEL	DIMENSIONS								
	A	B	C	D	E	G	H	K	L
ASC-5	215-5/16	52	42-1/2	6	36-1/2	42	5	14-1/8	23-1/2
ASC-7	220-13/16	56	48-1/2	6	42-1/2	46	5	14-1/8	29-1/2
ASC-10	237-3/4	64	55-1/2	8	47-1/2	46	8	17-1/2	35-1/2
ASC-15	259-5/16	71	66-1/2	8	58-1/2	54	8-1/2	22-13/16	43-1/2
ASC-20	279-5/16	84	66-1/2	8	58-1/2	54	15	26	49-1/2
ASC-25	295-5/16	89	74-1/2	8	66-1/2	70	9-1/2	29-1/2	49-1/2
ASC-30	301-3/8	92	80-1/2	8	72-1/2	70	11	32-1/2	53-1/2
ASC-40	330	106	92-1/2	8	84-1/2	79	13-1/2	35-1/2	65-1/2
ASC-50	344-13/16	123	92-1/2	8	84-1/2	82	20-1/2	42-3/8	88
ASC-60	350-13/16	123	107-1/2	8	99-1/2	82	20-1/2	42-3/8	88
ASC-75	380-7/8	123	125-1/2	8	117-1/2	82	20-1/2	46	88
MODEL	DIMENSIONS								
	M	N	O	S	T	U	V	W	X
ASC-5	14-1/4	32	13	36-1/2	47-1/2	69	40	39-13/16	27
ASC-7	13-1/4	34	16	36-1/2	47-1/2	69	42	40-5/16	30
ASC-10	14-1/4	38	20	36-1/2	52	69	48-1/2	44-3/4	34
ASC-15	13-3/4	50	20	48-1/2	52	73-7/8	59-3/8	49-3/8	34
ASC-20	17-1/4	50	24	48-1/2	68	73-7/8	59-3/8	49-3/8	38
ASC-25	19-3/4	50	30	48-1/2	77	73-7/8	60-1/2	49-3/8	45
ASC-30	19-1/4	50	33	60-1/2	80	75	60-1/2	49-3/8	47
ASC-40	20-1/4	62	36	60-1/2	88	75	72-1/2	55	50
ASC-50	17-1/2	66	38	72-1/2	93	78-13/16	81-13/16	55	52
ASC-60	17-1/2	72	38	72-1/2	93	78-13/16	81-13/16	55	52
ASC-75	17-1/2	78	48	84-1/2	104-3/4	78-13/16	90-1/2	57-3/8	62

# DIMENSIONAL DATA FOR COOLING ONLY UNITS WITH FAN ARRAY AND END DISCHARGE

AZTEC "2A11" SERIES WITH DIRECT DRIVE FAN ARRAY AND MIXING BOX SECTION

C000745A

- ① 2" THICK FILTER SECTION.
- ② HEAVY GAUGE ROOF AND WALL PANELS.
- ③ DIRECT DRIVE TWIN PLENUM FANS (TWIN FANS SHOWN FOR MODELS ASC - 15, 20 AND QUAD FANS USED ON 25, 30, 40, 50, 60 AND 75)
- ④ INTEGRAL COOLING TOWER WITH DIRECT DRIVE PROP FAN.
- ⑤ HINGED, SUPPLY AIR INLET LOUVER FOR FILTER ACCESS.
- ⑥ SEISMIC RATED, SPRING ISOLATION.
- ⑦ UNIT BASE.
- ⑧ FLEX CONNECTION.
- ⑨ INDIRECT COOLING COIL.
- ⑩ ELECTRICAL CONTROL BOX.
- ⑪ STAINLESS STEEL DIRECT EVAPORATIVE COOLING SECTION.
- ⑫ MIXING SECTION (OPTIONAL).
- ⑬ ACCESS PANEL TO DIRECT DRIVE PLENUM FAN ASSEMBLY.
- ⑭ DRAIN CONNECTION.
- ⑮ ACCESS DOOR TO DIRECT COOLING SECTION.



		Model										
		ASC-5	ASC-7	ASC-10	ASC-15	ASC-20	ASC-25	ASC-30	ASC-40	ASC-50	ASC-60	ASC-75
Unit Shipping Weight (lbs)	1A01	NA	NA	NA	3785	4575	5905	5940	7,635	9,275	10,295	12,365
	2A11	NA	NA	NA	4095	4955	6335	6375	8,165	9,865	10,960	13,100
Unit Operating Weight (lbs)	1A01	NA	NA	NA	4415	5305	6740	6905	8,990	11,015	12,090	14,260
	2A11	NA	NA	NA	4950	5985	7510	7710	9,975	12,155	13,345	15,640

## ***D***IMENSIONAL DATA FOR COOLING ONLY UNITS WITH FAN ARRAY AND END DISCHARGE

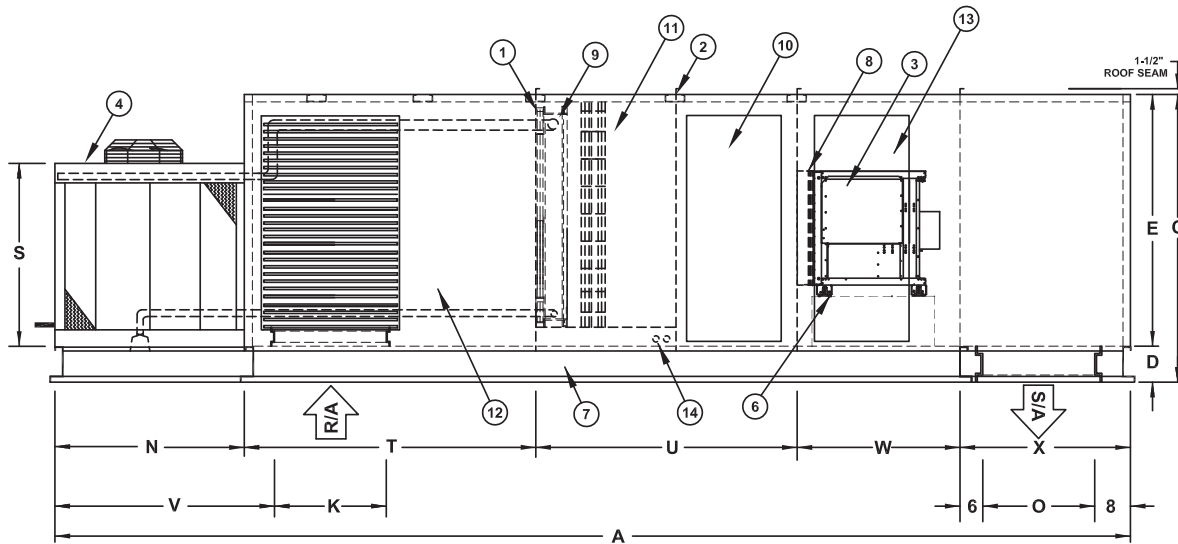
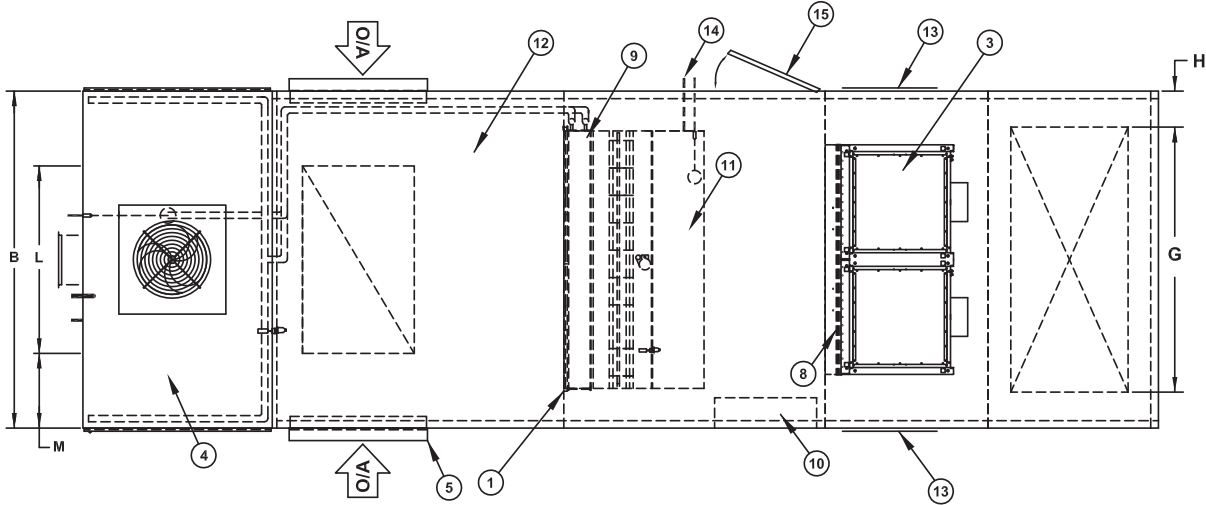
MODEL	DIMENSIONS								
	A	B	C	D	E	F	G	H	K
ASC-15	225-1/4	71	66-1/2	8	58-1/2	20	54	8-1/2	22-13/16
ASC-20	241-5/16	84	66-1/2	8	58-1/2	20	54	15	26
ASC-25	250-5/16	89	74-1/2	8	66-1/2	20	70	9-1/2	29-1/2
ASC-30	254-3/8	92	80-1/2	8	72-1/2	20	70	11	32-1/2
ASC-40	280	106	92-1/2	8	84-1/2	30	79	13-1/2	35-1/2
ASC-50	292-13/16	123	92-1/2	8	84-1/2	30	82	20-1/2	42-3/8
ASC-60	298-13/16	123	107-1/2	8	99-1/2	38	82	20-1/2	42-3/8
ASC-75	318-7/8	123	125-1/2	8	117-1/2	38	82	20-1/2	46
MODEL	DIMENSIONS								
	L	M	N	R	S	T	U	V	W
ASC-15	43-1/2	13-3/4	50	14-5/16	48-1/2	52	73-7/8	59-3/8	49-3/8
ASC-20	49-1/2	17-1/4	50	15-5/16	48-1/2	68	73-7/8	59-3/8	49-3/8
ASC-25	49-1/2	19-3/4	50	20-5/16	48-1/2	77	73-7/8	60-1/2	49-3/8
ASC-30	53-1/2	19-1/4	50	20-5/16	60-1/2	80	75	60-1/2	49-3/8
ASC-40	65-1/2	20-1/4	62	20-5/16	60-1/2	88	75	72-1/2	55
ASC-50	88	17-1/2	66	20-5/16	72-1/2	93	78-13/16	81-13/16	55
ASC-60	88	17-1/2	72	20-5/16	72-1/2	93	78-13/16	81-13/16	55
ASC-75	88	17-1/2	78	20-5/16	84-1/2	104-3/4	78-13/16	90-1/2	57-3/8

# DIMENSIONAL DATA FOR COOLING ONLY UNITS WITH FAN ARRAY AND DOWN DISCHARGE

AZTEC "2A11" SERIES WITH DIRECT DRIVE FAN ARRAY AND MIXING BOX SECTION WITH DISCHARGE PLENUM.

C000746A

- ① 2" THICK FILTER SECTION.
- ② HEAVY GAUGE ROOF AND WALL PANELS.
- ③ DIRECT DRIVE TWIN PLENUM FANS (TWIN FANS SHOWN FOR MODELS ASC - 15, 20 AND QUAD FANS USED ON 25, 30, 40, 50, 60 AND 75)
- ④ INTEGRAL COOLING TOWER WITH DIRECT DRIVE PROP FAN.
- ⑤ HINGED, SUPPLY AIR INLET LOUVER FOR FILTER ACCESS.
- ⑥ SEISMIC RATED, SPRING ISOLATION.
- ⑦ UNIT BASE.
- ⑧ FLEX CONNECTION.
- ⑨ INDIRECT COOLING COIL.
- ⑩ ELECTRICAL CONTROL BOX.
- ⑪ STAINLESS STEEL DIRECT EVAPORATIVE COOLING SECTION.
- ⑫ MIXING SECTION (OPTIONAL).
- ⑬ ACCESS PANEL TO DIRECT DRIVE PLENUM FAN ASSEMBLY.
- ⑭ DRAIN CONNECTION.
- ⑮ ACCESS DOOR TO DIRECT COOLING SECTION.



		Model										
		ASC-5	ASC-7	ASC-10	ASC-15	ASC-20	ASC-25	ASC-30	ASC-40	ASC-50	ASC-60	ASC-75
Unit Shipping Weight (lbs)	1A01	NA	NA	NA	4075	4890	6290	6375	8,185	9,905	10,995	13,225
	2A11	NA	NA	NA	4385	5270	6720	6810	8,715	10,495	11,660	13,960
Unit Operating Weight (lbs)	1A01	NA	NA	NA	4705	5620	7125	7340	9,540	11,645	12,790	15,120
	2A11	NA	NA	NA	5240	6300	7895	8145	10,525	12,785	14,045	16,500



## ***D***IMENSIONAL DATA FOR COOLING ONLY UNITS WITH FAN ARRAY AND DOWN DISCHARGE

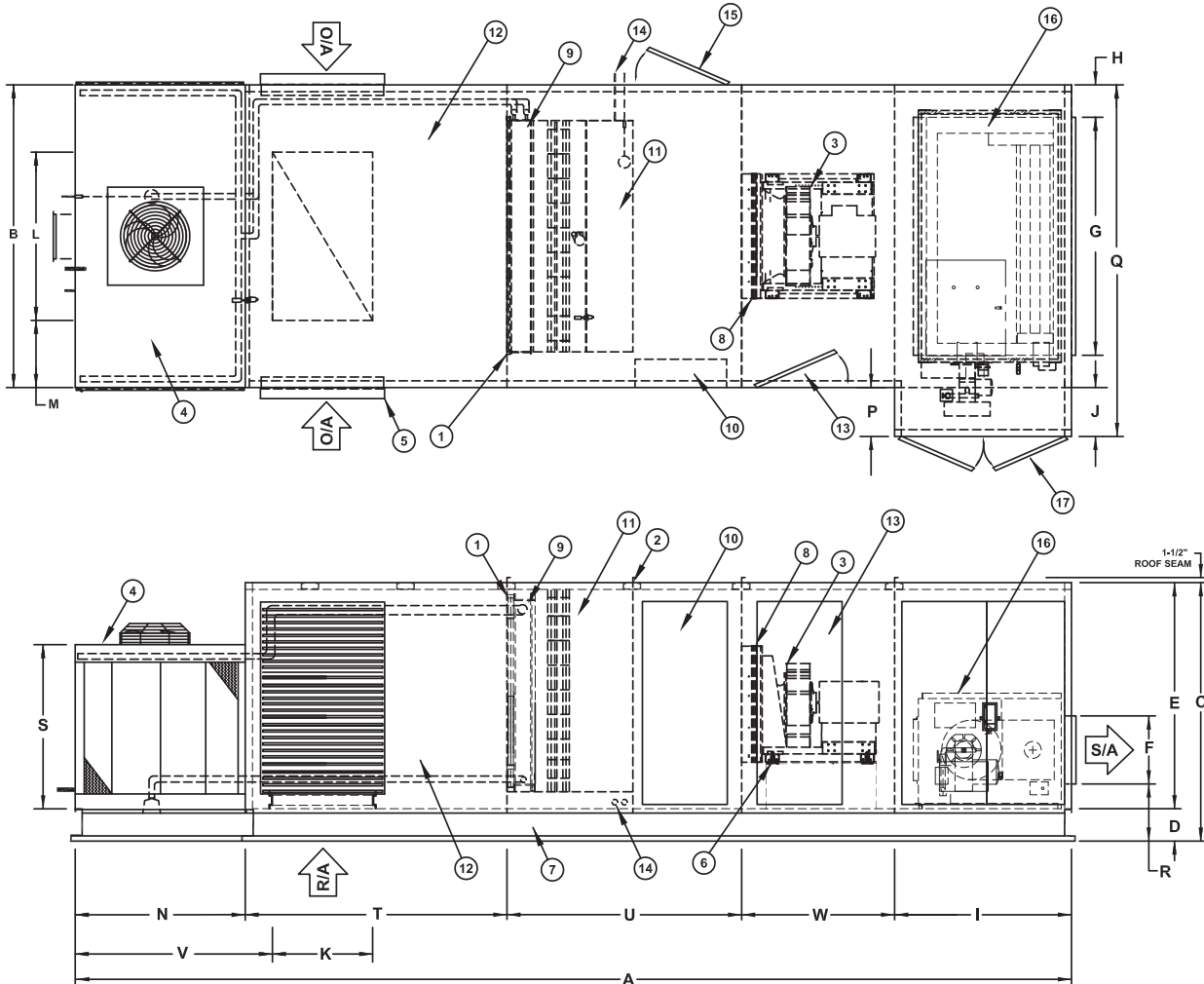
MODEL	DIMENSIONS								
	A	B	C	D	E	G	H	K	L
ASC-15	259-5/16	71	66-1/2	8	58-1/2	54	8-1/2	22-13/16	43-1/2
ASC-20	279-5/16	84	66-1/2	8	58-1/2	54	15	26	49-1/2
ASC-25	295-5/16	89	74-1/2	8	66-1/2	70	9-1/2	29-1/2	49-1/2
ASC-30	301-3/8	92	80-1/2	8	72-1/2	70	11	32-1/2	53-1/2
ASC-40	330	106	92-1/2	8	84-1/2	79	13-1/2	35-1/2	65-1/2
ASC-50	344-13/16	123	92-1/2	8	84-1/2	82	20-1/2	42-3/8	88
ASC-60	350-13/16	123	107-1/2	8	99-1/2	82	20-1/2	42-3/8	88
ASC-75	380-7/8	123	125-1/2	8	117-1/2	82	20-1/2	46	88
MODEL	DIMENSIONS								
	M	N	O	S	T	U	V	W	X
ASC-15	13-3/4	50	20	48-1/2	52	73-7/8	59-3/8	49-3/8	34
ASC-20	17-1/4	50	24	48-1/2	68	73-7/8	59-3/8	49-3/8	38
ASC-25	19-3/4	50	30	48-1/2	77	73-7/8	60-1/2	49-3/8	45
ASC-30	19-1/4	50	33	60-1/2	80	75	60-1/2	49-3/8	47
ASC-40	20-1/4	62	36	60-1/2	88	75	72-1/2	55	50
ASC-50	17-1/2	66	38	72-1/2	93	78-13/16	81-13/16	55	52
ASC-60	17-1/2	72	38	72-1/2	93	78-13/16	81-13/16	55	52
ASC-75	17-1/2	78	48	84-1/2	104-3/4	78-13/16	90-1/2	57-3/8	62

# DIMENSIONAL DATA FOR COOLING/HEATING UNITS WITH STANDARD ARRANGEMENT FAN(S) AND END DISCHARGE

AZTEC "2A11" SERIES WITH DIRECT DRIVE PLENUM FAN AND MIXING BOX SECTION WITH INDIRECT FIRED FURNACE.

C000756A

- ① 2" THICK FILTER SECTION.
- ② HEAVY GAUGE ROOF AND WALL PANELS.
- ③ DIRECT DRIVE PLENUM FAN (SINGLE FAN SHOWN, TWIN FANS USED ON MODELS ASC - 50, 60, AND 75).
- ④ INTEGRAL COOLING TOWER WITH DIRECT DRIVE PROP FAN.
- ⑤ HINGED, SUPPLY AIR INLET LOUVER FOR FILTER ACCESS.
- ⑥ SEISMIC RATED, SPRING ISOLATION.
- ⑦ UNIT BASE.
- ⑧ FLEX CONNECTION.
- ⑨ INDIRECT COOLING COIL.
- ⑩ ELECTRICAL CONTROL BOX.
- ⑪ STAINLESS STEEL DIRECT EVAPORATIVE COOLING SECTION.
- ⑫ MIXING SECTION (OPTIONAL).
- ⑬ ACCESS DOOR TO DIRECT DRIVE PLENUM FAN ASSEMBLY.
- ⑭ DRAIN CONNECTION.
- ⑮ ACCESS DOOR TO DIRECT COOLING SECTION.
- ⑯ INDIRECT-GAS FIRED BURNER.
- ⑰ BURNER CONTROL PANEL ACCESS DOOR.



		Model										
		ASC-5	ASC-7	ASC-10	ASC-15	ASC-20	ASC-25	ASC-30	ASC-40	ASC-50	ASC-60	ASC-75
Unit Shipping Weight (lbs)	1A01	3135	3515	4190	5530	6995	8135	8790	10,805	13,565	14,430	16,240
	2A11	3335	3745	4445	5840	7375	8565	9225	11,335	14,155	15,095	16,975
Unit Operating Weight (lbs)	1A01	3415	3850	4620	6160	7725	8970	9755	12,160	15,305	16,225	18,215
	2A11	3740	4240	5070	6695	8405	9740	10,560	13,145	16,445	17,480	19,600

# DIMENSIONAL DATA FOR COOLING/HEATING UNITS WITH STANDARD ARRANGEMENT FAN(S) AND END DISCHARGE

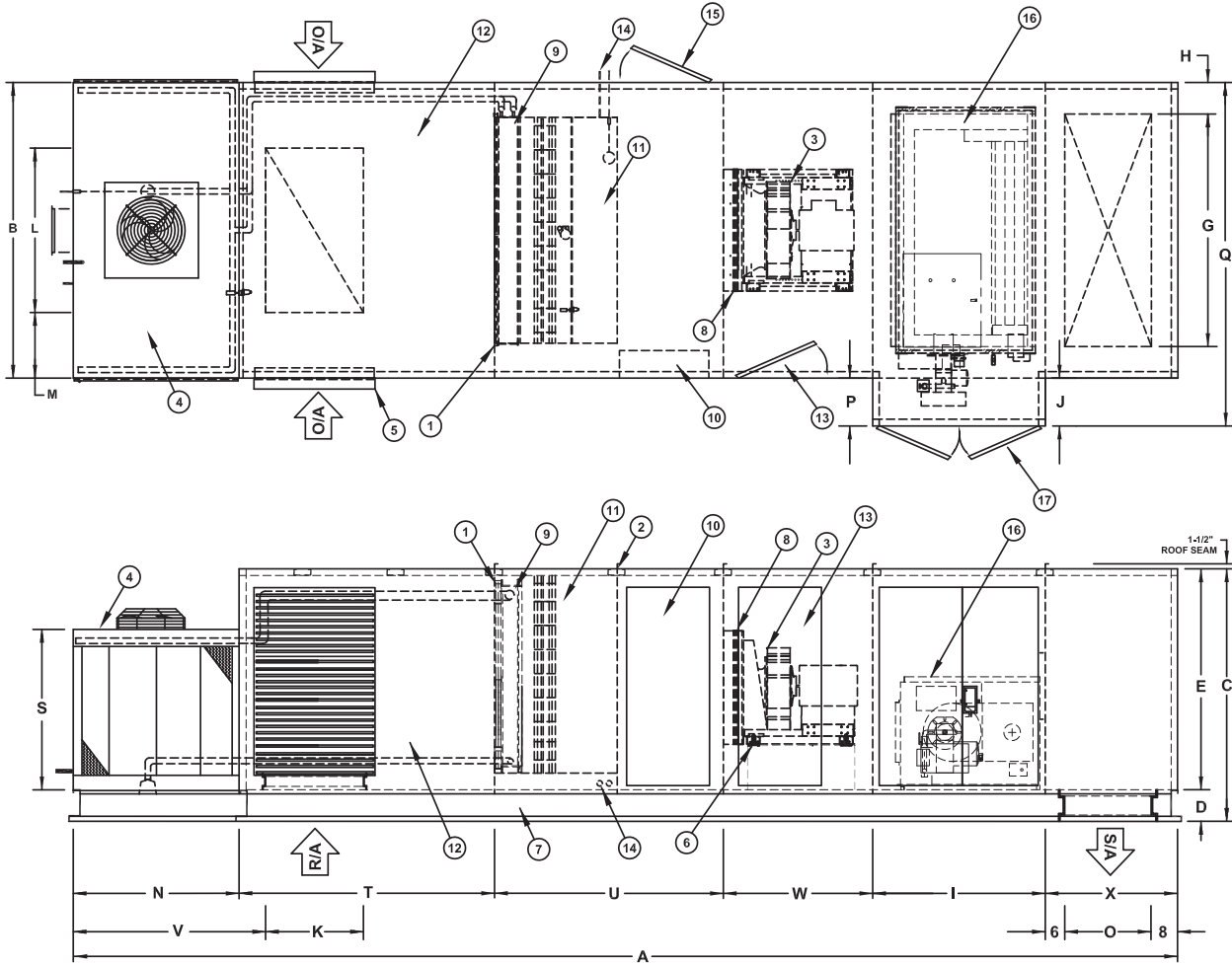
MODEL	FURNACE SIZE	DIMENSIONS										
		A	B	C	D	E	F	G	H	I	J	K
ASC-5	IFD-160	228-5/16	52	42-1/2	6	36-1/2	16	42	5	40	22-7/8	14-1/8
ASC-7	IFD-160	242-13/16	56	48-1/2	6	42-1/2	16	46	5	52	26-7/8	14-1/8
ASC-7	IFD-320	242-13/16	56	48-1/2	6	42-1/2	16	46	5	52	26-7/8	14-1/8
ASC-10	IFD-160	255-3/4	64	55-1/2	8	47-1/2	20	46	8	52	18-7/8	17-1/2
ASC-10	IFD-320	255-3/4	64	55-1/2	8	47-1/2	20	46	8	52	18-7/8	17-1/2
ASC-15	IFD-320	277-5/16	71	66-1/2	8	58-1/2	20	54	8-1/2	52	27-7/8	22-13/16
ASC-15	IFD-480	277-5/16	71	66-1/2	8	58-1/2	20	54	8-1/2	52	27-7/8	22-13/16
ASC-20	IFD-320	293-5/16	84	66-1/2	8	58-1/2	20	54	15	52	16-7/8	26
ASC-20	IFD-480	293-5/16	84	66-1/2	8	58-1/2	20	54	15	52	16-7/8	26
ASC-25	IFD-480	309-5/16	89	74-1/2	8	66-1/2	20	70	9-1/2	59	23	29-1/2
ASC-25	IFD-800	309-5/16	89	74-1/2	8	66-1/2	20	70	9-1/2	59	23	29-1/2
ASC-30	IFD-480	313-3/8	92	80-1/2	8	72-1/2	20	70	11	59	21-1/2	32-1/2
ASC-30	IFD-800	313-3/8	92	80-1/2	8	72-1/2	20	70	11	59	21-1/2	32-1/2
ASC-40	IFD-800	349	106	92-1/2	8	84-1/2	30	79	13-1/2	69	20-5/8	35-1/2
ASC-40	IFD-1120	349	106	92-1/2	8	84-1/2	30	79	13-1/2	69	20-5/8	35-1/2
ASC-50	IFD-1120	361-13/16	123	92-1/2	8	84-1/2	30	82	20-1/2	69	12-1/8	42-3/8
ASC-60	IFD-1120	367-13/16	123	107-1/2	8	99-1/2	38	82	20-1/2	69	12-1/8	42-3/8
ASC-75	IFD-1120	387-7/8	123	125-1/2	8	117-1/2	38	82	20-1/2	69	12-1/8	46
MODEL	FURNACE SIZE	DIMENSIONS										
		L	M	N	P	Q	R	S	T	U	V	W
ASC-5	IFD-160	23-1/2	14-1/4	32	22-7/8	74-7/8	10-5/16	36-1/2	47-1/2	69	40	39-13/16
ASC-7	IFD-160	29-1/2	13-1/4	34	26-7/8	82-7/8	10-5/16	36-1/2	47-1/2	69	42	40-5/16
ASC-7	IFD-320	29-1/2	13-1/4	34	26-7/8	82-7/8	10-5/16	36-1/2	47-1/2	69	42	40-5/16
ASC-10	IFD-160	35-1/2	14-1/4	38	18-7/8	82-7/8	12-5/16	36-1/2	52	69	48-1/2	44-3/4
ASC-10	IFD-320	35-1/2	14-1/4	38	18-7/8	82-7/8	12-5/16	36-1/2	52	69	48-1/2	44-3/4
ASC-15	IFD-320	43-1/2	13-3/4	50	27-7/8	98-7/8	14-5/16	48-1/2	52	73-7/8	59-3/8	49-3/8
ASC-15	IFD-480	43-1/2	13-3/4	50	27-7/8	98-7/8	14-5/16	48-1/2	52	73-7/8	59-3/8	49-3/8
ASC-20	IFD-320	49-1/2	17-1/4	50	16-7/8	100-7/8	15-5/16	48-1/2	68	73-7/8	59-3/8	49-3/8
ASC-20	IFD-480	49-1/2	17-1/4	50	16-7/8	100-7/8	15-5/16	48-1/2	68	73-7/8	59-3/8	49-3/8
ASC-25	IFD-480	49-1/2	19-3/4	50	23	112	20-5/16	48-1/2	77	73-7/8	60-1/2	49-3/8
ASC-25	IFD-800	49-1/2	19-3/4	50	23	112	20-5/16	48-1/2	77	73-7/8	60-1/2	49-3/8
ASC-30	IFD-480	53-1/2	19-1/4	50	21-1/2	113-1/2	20-5/16	60-1/2	80	75	60-1/2	49-3/8
ASC-30	IFD-800	53-1/2	19-1/4	50	21-1/2	113-1/2	20-5/16	60-1/2	80	75	60-1/2	49-3/8
ASC-40	IFD-800	65-1/2	20-1/4	62	20-5/8	126-5/8	20-5/16	60-1/2	88	75	72-1/2	55
ASC-40	IFD-1120	65-1/2	20-1/4	62	20-5/8	126-5/8	20-5/16	60-1/2	88	75	72-1/2	55
ASC-50	IFD-1120	88	17-1/2	66	12-1/8	135-1/8	20-5/16	72-1/2	93	78-13/16	81-13/16	55
ASC-60	IFD-1120	88	17-1/2	72	12-1/8	135-1/8	20-5/16	72-1/2	93	78-13/16	81-13/16	55
ASC-75	IFD-1120	88	17-1/2	78	12-1/8	135-1/8	20-5/16	84-1/2	104-3/4	78-13/16	90-1/2	57-3/8

# DIMENSIONAL DATA FOR COOLING/HEATING UNITS WITH STANDARD ARRANGEMENT FAN(S) AND DOWN DISCHARGE

AZTEC "2A11" SERIES WITH DIRECT DRIVE PLENUM FAN AND MIXING BOX SECTION WITH INDIRECT FIRED FURNACE AND DISCHARGE PLENUM.

C000757A

- ① 2" THICK FILTER SECTION.
- ② HEAVY GAUGE ROOF AND WALL PANELS.
- ③ DIRECT DRIVE PLENUM FAN (SINGLE FAN SHOWN, TWIN FANS USED ON MODELS ASC - 50, 60, AND 75).
- ④ INTEGRAL COOLING TOWER WITH DIRECT DRIVE PROP FAN.
- ⑤ HINGED, SUPPLY AIR INLET LOUVER FOR FILTER ACCESS.
- ⑥ SEISMIC RATED, SPRING ISOLATION.
- ⑦ UNIT BASE.
- ⑧ FLEX CONNECTION.
- ⑨ INDIRECT COOLING COIL.
- ⑩ ELECTRICAL CONTROL BOX.
- ⑪ STAINLESS STEEL DIRECT EVAPORATIVE COOLING SECTION.
- ⑫ MIXING SECTION (OPTIONAL).
- ⑬ ACCESS DOOR TO DIRECT DRIVE PLENUM FAN ASSEMBLY.
- ⑭ DRAIN CONNECTION.
- ⑮ ACCESS DOOR TO DIRECT COOLING SECTION.
- ⑯ INDIRECT-GAS FIRED BURNER.
- ⑰ BURNER CONTROL PANEL ACCESS DOOR.



		Model										
		ASC-5	ASC-7	ASC-10	ASC-15	ASC-20	ASC-25	ASC-30	ASC-40	ASC-50	ASC-60	ASC-75
Unit Shipping Weight (lbs)	1A01	3275	3690	4395	5820	7310	8520	9225	11,355	14,195	15,130	17,100
	2A11	3475	3920	4650	6130	7690	8950	9660	11,885	14,785	15,795	17,835
Unit Operating Weight (lbs)	1A01	3555	4025	4825	6450	8040	9355	10,190	12,710	15,935	16,925	19,075
	2A11	3880	4415	5275	6985	8720	10,125	10,995	13,695	17,075	18,175	20,460

# DIMENSIONAL DATA FOR COOLING/HEATING UNITS WITH STANDARD ARRANGEMENT FAN(S) AND DOWN DISCHARGE

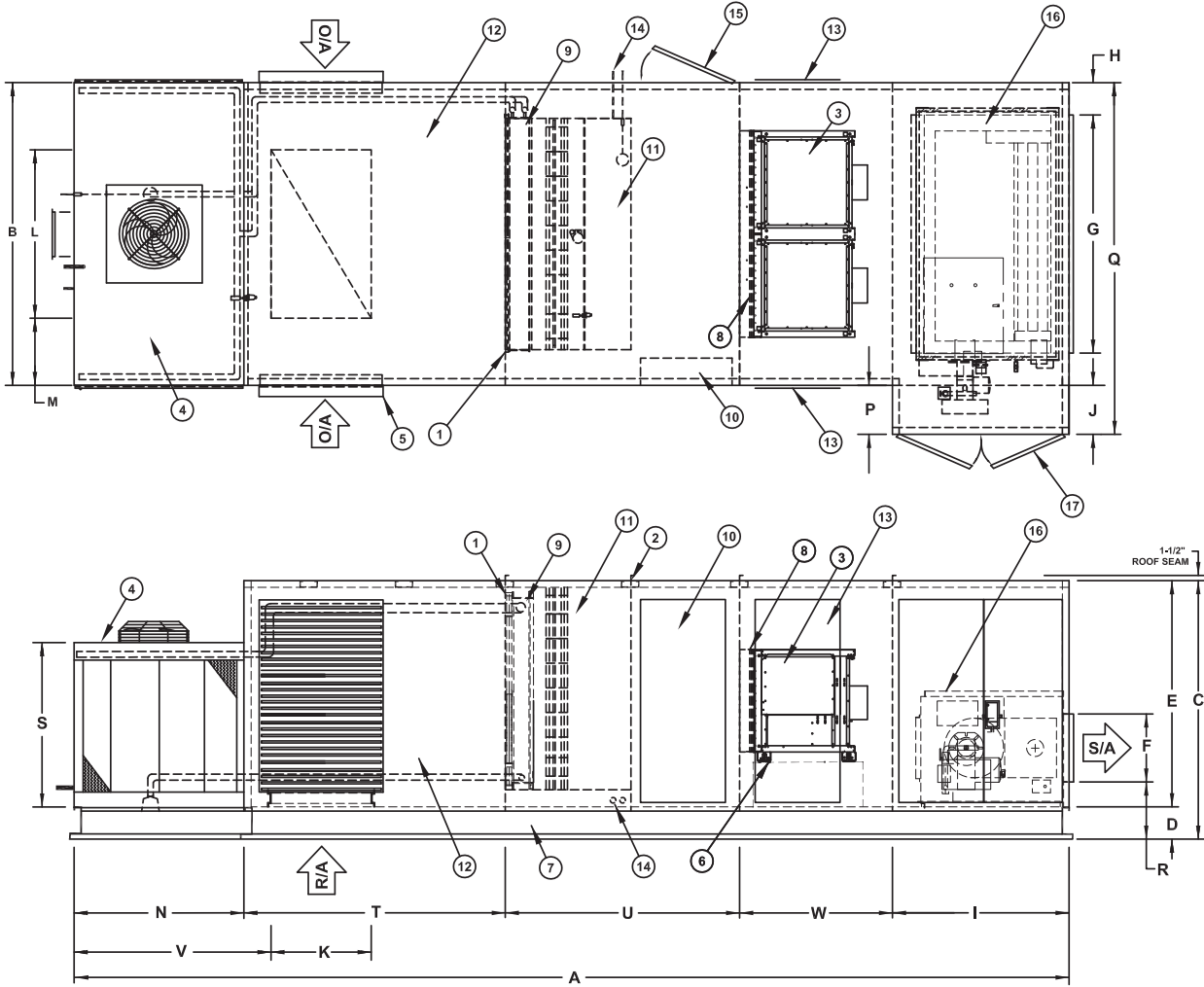
MODEL	FURNACE SIZE	DIMENSIONS										
		A	B	C	D	E	G	H	I	J	K	L
ASC-5	IFD-160	255-5/16	52	42-1/2	6	36-1/2	42	5	40	22-7/8	14-1/8	23-1/2
ASC-7	IFD-160	272-13/16	56	48-1/2	6	42-1/2	46	5	52	26-7/8	14-1/8	29-1/2
ASC-7	IFD-320	272-13/16	56	48-1/2	6	42-1/2	46	5	52	26-7/8	14-1/8	29-1/2
ASC-10	IFD-160	289-3/4	64	55-1/2	8	47-1/2	46	8	52	18-7/8	17-1/2	35-1/2
ASC-10	IFD-320	289-3/4	64	55-1/2	8	47-1/2	46	8	52	18-7/8	17-1/2	35-1/2
ASC-15	IFD-320	311-5/16	71	66-1/2	8	58-1/2	54	8-1/2	52	27-7/8	22-13/16	43-1/2
ASC-15	IFD-480	311-5/16	71	66-1/2	8	58-1/2	54	8-1/2	52	27-7/8	22-13/16	43-1/2
ASC-20	IFD-320	331-5/16	84	66-1/2	8	58-1/2	54	15	52	16-7/8	26	49-1/2
ASC-20	IFD-480	331-5/16	84	66-1/2	8	58-1/2	54	15	52	16-7/8	26	49-1/2
ASC-25	IFD-480	354-5/16	89	74-1/2	8	66-1/2	70	9-1/2	59	23	29-1/2	49-1/2
ASC-25	IFD-800	354-5/16	89	74-1/2	8	66-1/2	70	9-1/2	59	23	29-1/2	49-1/2
ASC-30	IFD-480	360-3/8	92	80-1/2	8	72-1/2	70	11	59	21-1/2	32-1/2	53-1/2
ASC-30	IFD-800	360-3/8	92	80-1/2	8	72-1/2	70	11	59	21-1/2	32-1/2	53-1/2
ASC-40	IFD-800	399	106	92-1/2	8	84-1/2	79	13-1/2	69	20-5/8	35-1/2	65-1/2
ASC-40	IFD-1120	399	106	92-1/2	8	84-1/2	79	13-1/2	69	20-5/8	35-1/2	65-1/2
ASC-50	IFD-1120	413-13/16	123	92-1/2	8	84-1/2	82	20-1/2	69	12-1/8	42-3/8	88
ASC-60	IFD-1120	419-13/16	123	107-1/2	8	99-1/2	82	20-1/2	69	12-1/8	42-3/8	88
ASC-75	IFD-1120	449-7/8	123	125-1/2	8	117-1/2	82	20-1/2	69	12-1/8	46	88
MODEL	FURNACE SIZE	DIMENSIONS										
		M	N	O	P	Q	S	T	U	V	W	X
ASC-5	IFD-160	14-1/4	32	13	22-7/8	74-7/8	36-1/2	47-1/2	69	40	39-13/16	27
ASC-7	IFD-160	13-1/4	34	16	26-7/8	82-7/8	36-1/2	47-1/2	69	42	40-5/16	30
ASC-7	IFD-320	13-1/4	34	16	26-7/8	82-7/8	36-1/2	47-1/2	69	42	40-5/16	30
ASC-10	IFD-160	14-1/4	38	20	18-7/8	82-7/8	36-1/2	52	69	48-1/2	44-3/4	34
ASC-10	IFD-320	14-1/4	38	20	18-7/8	82-7/8	36-1/2	52	69	48-1/2	44-3/4	34
ASC-15	IFD-320	13-3/4	50	20	27-7/8	98-7/8	48-1/2	52	73-7/8	59-3/8	49-3/8	34
ASC-15	IFD-480	13-3/4	50	20	27-7/8	98-7/8	48-1/2	52	73-7/8	59-3/8	49-3/8	34
ASC-20	IFD-320	17-1/4	50	24	16-7/8	100-7/8	48-1/2	68	73-7/8	59-3/8	49-3/8	38
ASC-20	IFD-480	17-1/4	50	24	16-7/8	100-7/8	48-1/2	68	73-7/8	59-3/8	49-3/8	38
ASC-25	IFD-480	19-3/4	50	30	23	112	48-1/2	77	73-7/8	60-1/2	49-3/8	45
ASC-25	IFD-800	19-3/4	50	30	23	112	48-1/2	77	73-7/8	60-1/2	49-3/8	45
ASC-30	IFD-480	19-1/4	50	33	21-1/2	113-1/2	60-1/2	80	75	60-1/2	49-3/8	47
ASC-30	IFD-800	19-1/4	50	33	21-1/2	113-1/2	60-1/2	80	75	60-1/2	49-3/8	47
ASC-40	IFD-800	20-1/4	62	36	20-5/8	126-5/8	60-1/2	88	75	72-1/2	55	50
ASC-40	IFD-1120	20-1/4	62	36	20-5/8	126-5/8	60-1/2	88	75	72-1/2	55	50
ASC-50	IFD-1120	17-1/2	66	38	12-1/8	135-1/8	72-1/2	93	78-13/16	81-13/16	55	52
ASC-60	IFD-1120	17-1/2	72	38	12-1/8	135-1/8	72-1/2	93	78-13/16	81-13/16	55	52
ASC-75	IFD-1120	17-1/2	78	48	12-1/8	135-1/8	84-1/2	104-3/4	78-13/16	90-1/2	57-3/8	62

# DIMENSIONAL DATA FOR COOLING/HEATING UNITS WITH FAN ARRAY AND END DISCHARGE

AZTEC "2A11" SERIES WITH DIRECT DRIVE PLENUM FAN AND MIXING BOX SECTION WITH INDIRECT FIRED FURNACE.

C000758A

- ① 2" THICK FILTER SECTION.
- ② HEAVY GAUGE ROOF AND WALL PANELS.
- ③ DIRECT DRIVE TWIN PLENUM FANS (TWIN FANS SHOWN FOR MODELS ASC - 15, 20 AND QUAD FANS USED ON 25, 30, 40, 50, 60 AND 75)
- ④ INTEGRAL COOLING TOWER WITH DIRECT DRIVE PROP FAN.
- ⑤ HINGED, SUPPLY AIR INLET LOUVER FOR FILTER ACCESS.
- ⑥ SEISMIC RATED, SPRING ISOLATION.
- ⑦ UNIT BASE.
- ⑧ FLEX CONNECTION.
- ⑨ INDIRECT COOLING COIL.
- ⑩ ELECTRICAL CONTROL BOX.
- ⑪ STAINLESS STEEL DIRECT EVAPORATIVE COOLING SECTION.
- ⑫ MIXING SECTION (OPTIONAL).
- ⑬ ACCESS PANEL TO DIRECT DRIVE PLENUM FAN ASSEMBLY.
- ⑭ DRAIN CONNECTION.
- ⑮ ACCESS DOOR TO DIRECT COOLING SECTION.
- ⑯ INDIRECT-GAS FIRED BURNER.
- ⑰ BURNER CONTROL PANEL ACCESS DOOR.



		Model										
		ASC-5	ASC-7	ASC-10	ASC-15	ASC-20	ASC-25	ASC-30	ASC-40	ASC-50	ASC-60	ASC-75
Unit Shipping Weight (lbs)	1A01	NA	NA	NA	5515	7025	8410	9040	11,340	13,790	14,655	16,570
	2A11	NA	NA	NA	5825	7405	8840	9475	11,870	14,380	15,320	17,305
Unit Operating Weight (lbs)	1A01	NA	NA	NA	6145	7755	9245	10,005	12,695	15,530	16,450	18,545
	2A11	NA	NA	NA	6680	8435	10,015	10,810	13,680	16,670	17,705	19,930

# DIMENSIONAL DATA FOR COOLING/HEATING UNITS WITH FAN ARRAY AND END DISCHARGE

MODEL	FURNACE SIZE	DIMENSIONS										
		A	B	C	D	E	F	G	H	I	J	K
ASC-15	IFD-320	277-5/16	71	66-1/2	8	58-1/2	20	54	8-1/2	52	27-7/8	22-13/16
ASC-15	IFD-480	277-5/16	71	66-1/2	8	58-1/2	20	54	8-1/2	52	27-7/8	22-13/16
ASC-20	IFD-320	293-5/16	84	66-1/2	8	58-1/2	20	54	15	52	16-7/8	26
ASC-20	IFD-480	293-5/16	84	66-1/2	8	58-1/2	20	54	15	52	16-7/8	26
ASC-25	IFD-480	309-5/16	89	74-1/2	8	66-1/2	20	70	9-1/2	59	23	29-1/2
ASC-25	IFD-800	309-5/16	89	74-1/2	8	66-1/2	20	70	9-1/2	59	23	29-1/2
ASC-30	IFD-480	313-3/8	92	80-1/2	8	72-1/2	20	70	11	59	21-1/2	32-1/2
ASC-30	IFD-800	313-3/8	92	80-1/2	8	72-1/2	20	70	11	59	21-1/2	32-1/2
ASC-40	IFD-800	349	106	92-1/2	8	84-1/2	30	79	13-1/2	69	20-5/8	35-1/2
ASC-40	IFD-1120	349	106	92-1/2	8	84-1/2	30	79	13-1/2	69	20-5/8	35-1/2
ASC-50	IFD-1120	361-13/16	123	92-1/2	8	84-1/2	30	82	20-1/2	69	12-1/8	42-3/8
ASC-60	IFD-1120	367-13/16	123	107-1/2	8	99-1/2	38	82	20-1/2	69	12-1/8	42-3/8
ASC-75	IFD-1120	387-7/8	123	125-1/2	8	117-1/2	38	82	20-1/2	69	12-1/8	46

MODEL	FURNACE SIZE	DIMENSIONS										
		L	M	N	P	Q	R	S	T	U	V	W
ASC-15	IFD-320	43-1/2	13-3/4	50	27-7/8	98-7/8	14-5/16	48-1/2	52	73-7/8	59-3/8	49-3/8
ASC-15	IFD-480	43-1/2	13-3/4	50	27-7/8	98-7/8	14-5/16	48-1/2	52	73-7/8	59-3/8	49-3/8
ASC-20	IFD-320	49-1/2	17-1/4	50	16-7/8	100-7/8	15-5/16	48-1/2	68	73-7/8	59-3/8	49-3/8
ASC-20	IFD-480	49-1/2	17-1/4	50	16-7/8	100-7/8	15-5/16	48-1/2	68	73-7/8	59-3/8	49-3/8
ASC-25	IFD-480	49-1/2	19-3/4	50	23	112	20-5/16	48-1/2	77	73-7/8	60-1/2	49-3/8
ASC-25	IFD-800	49-1/2	19-3/4	50	23	112	20-5/16	48-1/2	77	73-7/8	60-1/2	49-3/8
ASC-30	IFD-480	53-1/2	19-1/4	50	21-1/2	113-1/2	20-5/16	60-1/2	80	75	60-1/2	49-3/8
ASC-30	IFD-800	53-1/2	19-1/4	50	21-1/2	113-1/2	20-5/16	60-1/2	80	75	60-1/2	49-3/8
ASC-40	IFD-800	65-1/2	20-1/4	62	20-5/8	126-5/8	20-5/16	60-1/2	88	75	72-1/2	55
ASC-40	IFD-1120	65-1/2	20-1/4	62	20-5/8	126-5/8	20-5/16	60-1/2	88	75	72-1/2	55
ASC-50	IFD-1120	88	17-1/2	66	12-1/8	135-1/8	20-5/16	72-1/2	93	78-13/16	81-13/16	55
ASC-60	IFD-1120	88	17-1/2	72	12-1/8	135-1/8	20-5/16	72-1/2	93	78-13/16	81-13/16	55
ASC-75	IFD-1120	88	17-1/2	78	12-1/8	135-1/8	20-5/16	84-1/2	104-3/4	78-13/16	90-1/2	57-3/8

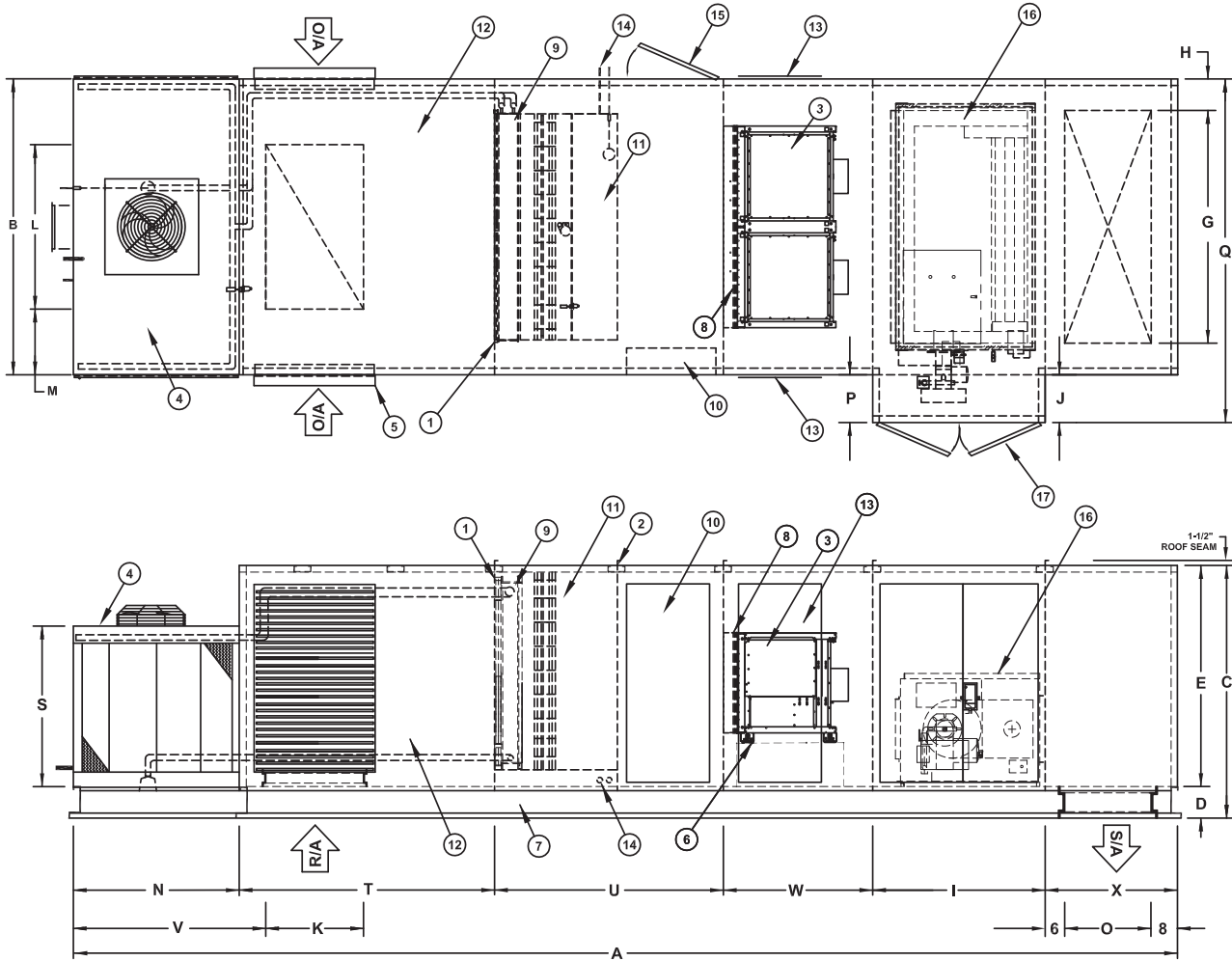


# DIMENSIONAL DATA FOR COOLING/HEATING UNITS WITH FAN ARRAY AND DOWN DISCHARGE

AZTEC "2A11" SERIES WITH DIRECT DRIVE PLENUM FAN AND MIXING BOX SECTION WITH INDIRECT FIRED FURNACE AND DISCHARGE PLENUM.

C000759A

- ① 2" THICK FILTER SECTION.
- ② HEAVY GAUGE ROOF AND WALL PANELS.
- ③ DIRECT DRIVE TWIN PLENUM FANS (TWIN FANS SHOWN FOR MODELS ASC - 15, 20 AND QUAD FANS USED ON 25, 30, 40, 50, 60 AND 75)
- ④ INTEGRAL COOLING TOWER WITH DIRECT DRIVE PROP FAN.
- ⑤ HINGED, SUPPLY AIR INLET LOUVER FOR FILTER ACCESS.
- ⑥ SEISMIC RATED, SPRING ISOLATION.
- ⑦ UNIT BASE.
- ⑧ FLEX CONNECTION.
- ⑨ INDIRECT COOLING COIL.
- ⑩ ELECTRICAL CONTROL BOX.
- ⑪ STAINLESS STEEL DIRECT EVAPORATIVE COOLING SECTION.
- ⑫ MIXING SECTION (OPTIONAL).
- ⑬ ACCESS PANEL TO DIRECT DRIVE PLENUM FAN ASSEMBLY.
- ⑭ DRAIN CONNECTION.
- ⑮ ACCESS DOOR TO DIRECT COOLING SECTION.
- ⑯ INDIRECT-GAS FIRED BURNER.
- ⑰ BURNER CONTROL PANEL ACCESS DOOR.



		Model										
		ASC-5	ASC-7	ASC-10	ASC-15	ASC-20	ASC-25	ASC-30	ASC-40	ASC-50	ASC-60	ASC-75
Unit Shipping Weight (lbs)	1A01	NA	NA	NA	5805	7340	8795	9475	11,890	14,420	15,355	17,430
	2A11	NA	NA	NA	6115	7720	9225	9910	12,420	15,010	16,020	18,165
Unit Operating Weight (lbs)	1A01	NA	NA	NA	6435	8070	9630	10,440	13,245	16,160	17,150	19,405
	2A11	NA	NA	NA	6970	8750	10,400	11,245	14,230	17,300	18,400	20,790

# DIMENSIONAL DATA FOR COOLING/HEATING UNITS WITH FAN ARRAY AND DOWN DISCHARGE

MODEL	FURNACE SIZE	DIMENSIONS										
		A	B	C	D	E	G	H	I	J	K	L
ASC-15	IFD-320	311-5/16	71	66-1/2	8	58-1/2	54	8-1/2	52	27-7/8	22-13/16	43-1/2
ASC-15	IFD-480	311-5/16	71	66-1/2	8	58-1/2	54	8-1/2	52	27-7/8	22-13/16	43-1/2
ASC-20	IFD-320	331-5/16	84	66-1/2	8	58-1/2	54	15	52	16-7/8	26	49-1/2
ASC-20	IFD-480	331-5/16	84	66-1/2	8	58-1/2	54	15	52	16-7/8	26	49-1/2
ASC-25	IFD-480	354-5/16	89	74-1/2	8	66-1/2	70	9-1/2	59	23	29-1/2	49-1/2
ASC-25	IFD-800	354-5/16	89	74-1/2	8	66-1/2	70	9-1/2	59	23	29-1/2	49-1/2
ASC-30	IFD-480	360-3/8	92	80-1/2	8	72-1/2	70	11	59	21-1/2	32-1/2	53-1/2
ASC-30	IFD-800	360-3/8	92	80-1/2	8	72-1/2	70	11	59	21-1/2	32-1/2	53-1/2
ASC-40	IFD-800	399	106	92-1/2	8	84-1/2	79	13-1/2	69	20-5/8	35-1/2	65-1/2
ASC-40	IFD-1120	399	106	92-1/2	8	84-1/2	79	13-1/2	69	20-5/8	35-1/2	65-1/2
ASC-50	IFD-1120	413-13/16	123	92-1/2	8	84-1/2	82	20-1/2	69	12-1/8	42-3/8	88
ASC-60	IFD-1120	419-13/16	123	107-1/2	8	99-1/2	82	20-1/2	69	12-1/8	42-3/8	88
ASC-75	IFD-1120	449-7/8	123	125-1/2	8	117-1/2	82	20-1/2	69	12-1/8	46	88

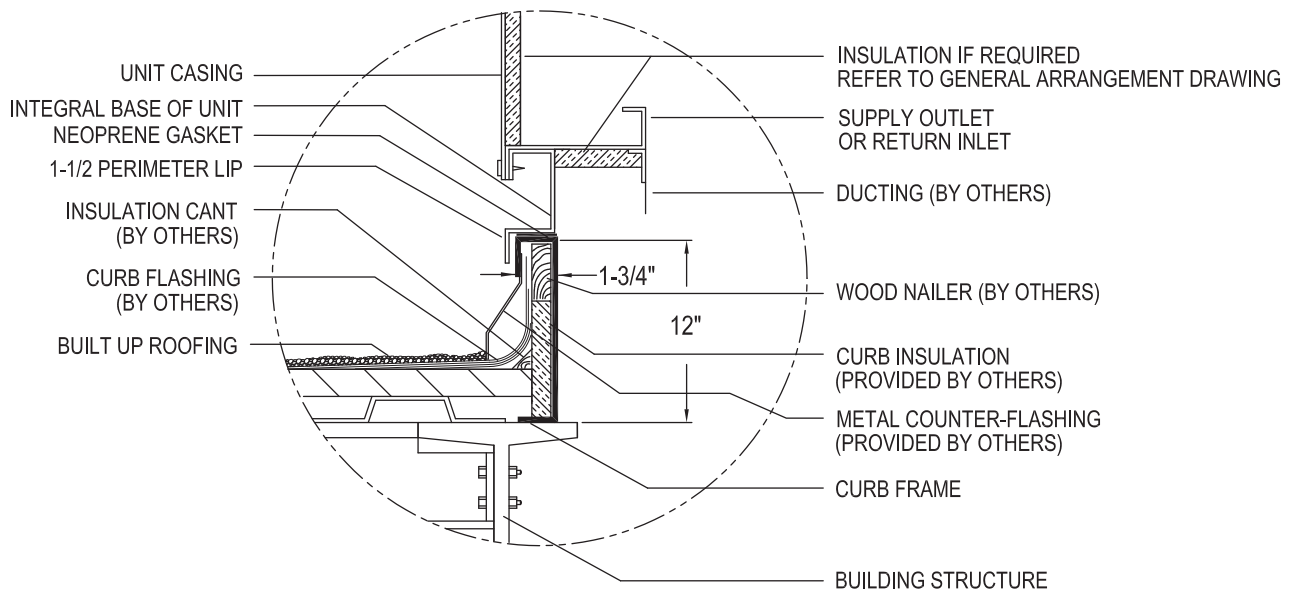
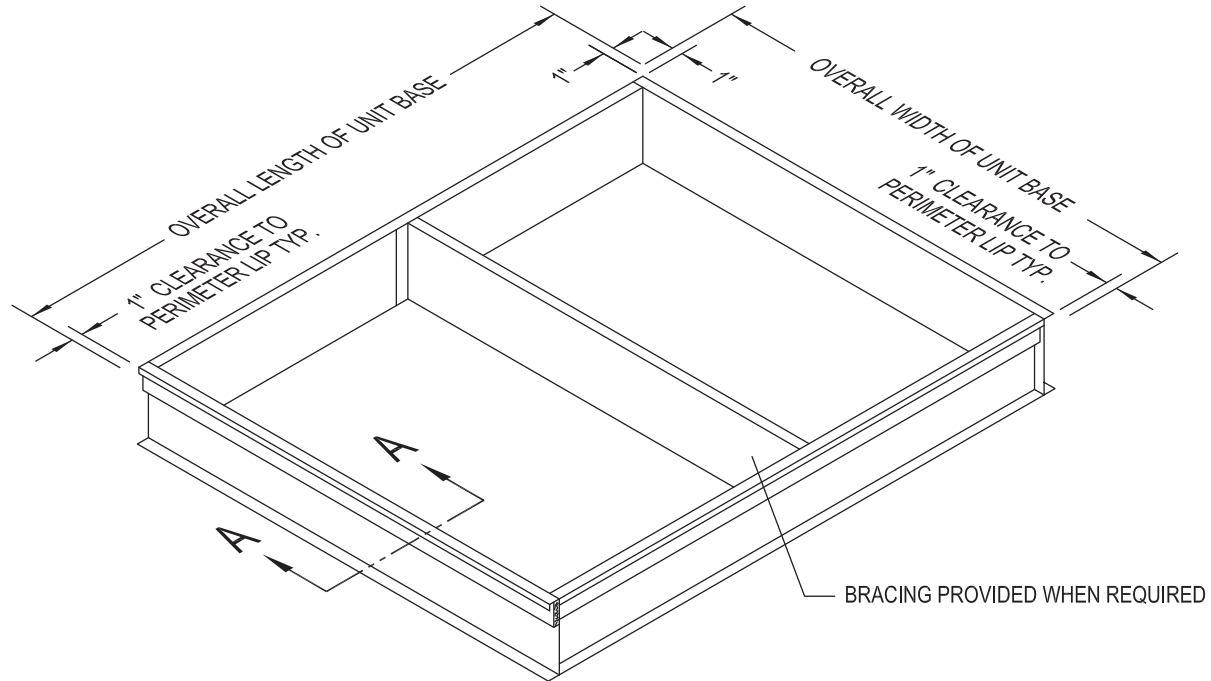
  

MODEL	FURNACE SIZE	DIMENSIONS										
		M	N	O	P	Q	S	T	U	V	W	X
ASC-15	IFD-320	13-3/4	50	20	27-7/8	98-7/8	48-1/2	52	73-7/8	59-3/8	49-3/8	34
ASC-15	IFD-480	13-3/4	50	20	27-7/8	98-7/8	48-1/2	52	73-7/8	59-3/8	49-3/8	34
ASC-20	IFD-320	17-1/4	50	24	16-7/8	100-7/8	48-1/2	68	73-7/8	59-3/8	49-3/8	38
ASC-20	IFD-480	17-1/4	50	24	16-7/8	100-7/8	48-1/2	68	73-7/8	59-3/8	49-3/8	38
ASC-25	IFD-480	19-3/4	50	30	23	112	48-1/2	77	73-7/8	60-1/2	49-3/8	45
ASC-25	IFD-800	19-3/4	50	30	23	112	48-1/2	77	73-7/8	60-1/2	49-3/8	45
ASC-30	IFD-480	19-1/4	50	33	21-1/2	113-1/2	60-1/2	80	75	60-1/2	49-3/8	47
ASC-30	IFD-800	19-1/4	50	33	21-1/2	113-1/2	60-1/2	80	75	60-1/2	49-3/8	47
ASC-40	IFD-800	20-1/4	62	36	20-5/8	126-5/8	60-1/2	88	75	72-1/2	55	50
ASC-40	IFD-1120	20-1/4	62	36	20-5/8	126-5/8	60-1/2	88	75	72-1/2	55	50
ASC-50	IFD-1120	17-1/2	66	38	12-1/8	135-1/8	72-1/2	93	78-13/16	81-13/16	55	52
ASC-60	IFD-1120	17-1/2	72	38	12-1/8	135-1/8	72-1/2	93	78-13/16	81-13/16	55	52
ASC-75	IFD-1120	17-1/2	78	48	12-1/8	135-1/8	84-1/2	104-3/4	78-13/16	90-1/2	57-3/8	62

# DIMENSIONAL DATA

## Roof Curb

C000525

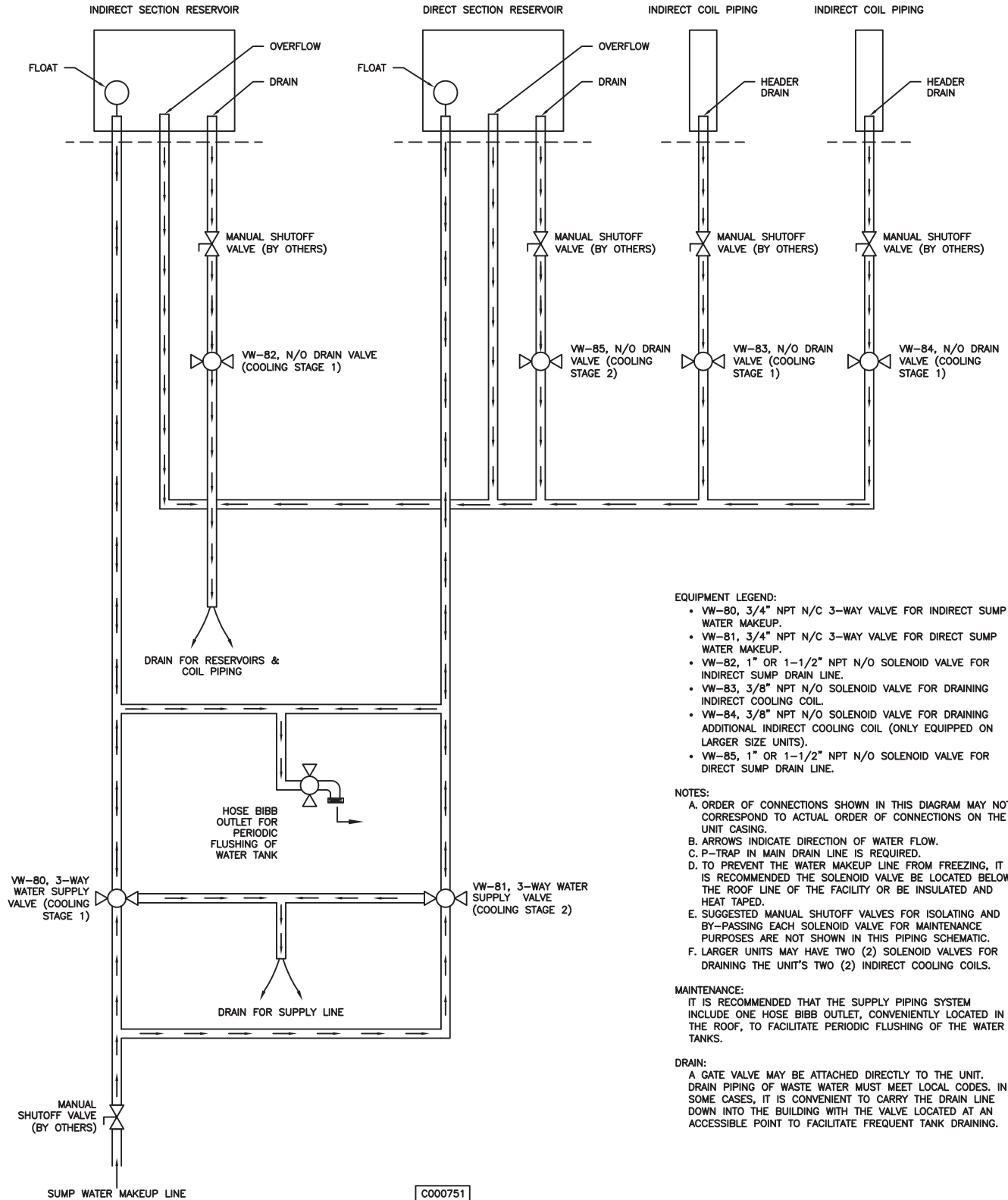


ROOF CURB DETAIL

C000525

## Typical Piping

C000751



C000751

## MDT Expert

C000740

**Application:**

Modulating Discharge Temperature Control with BACview controller allowing after hours unit enable, operating feedback, and monitoring of alarm status.

**Includes:**

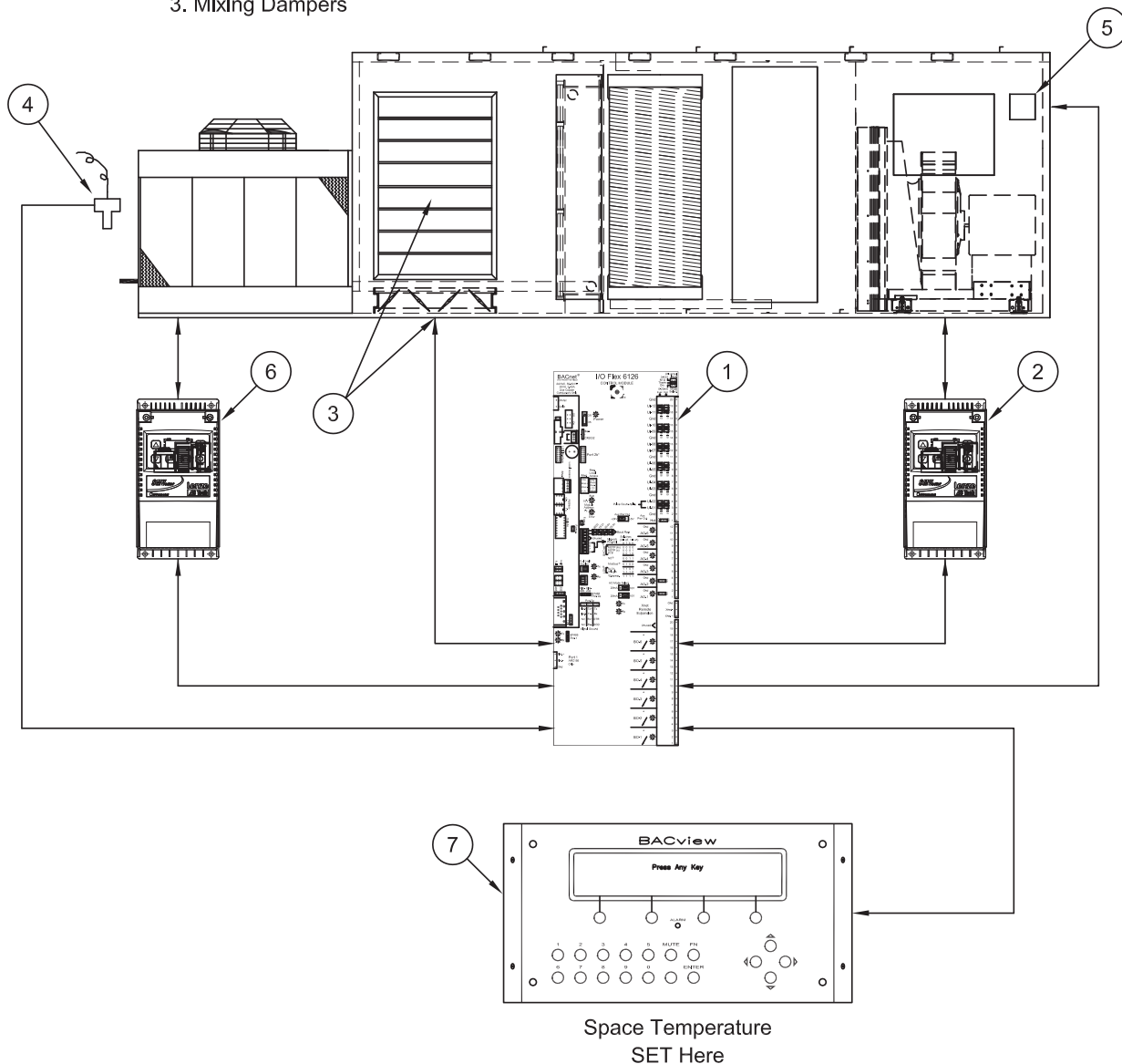
Discharge air sensor (5) and mounted in unit discharge and inlet air sensor (4) mounted in unit inlet with remote mounted BACview controller (7) to set space temperature, operation schedules, and optional damper control setpoints. Service information, operating feedback and alarm status can also be monitored. Unit DDC controller (1) modulates unit airflow via supply fan variable frequency drive (2). Shown with optional DDC-controlled mixing dampers (3) for building pressure or manual control and optional DDC-controlled cooling tower VFD (6).

**COMPONENT I.D.**

- 1. Unit DDC Controller
- 2. Supply Fan VFD
- 3. Mixing Dampers

- 4. Inlet Air Sensor
- 5. Discharge Air Sensor

- 6. Cooling Tower VFD
- 7. BACview Interface



## MRT Expert

C000739

**Application:**

Modulating Room Temperature Control with BACview controller allowing after hours unit enable, room setpoint adjustment, operating feedback, monitoring of alarm status and digital temperature readout with RS-std room sensor.

**Includes:**

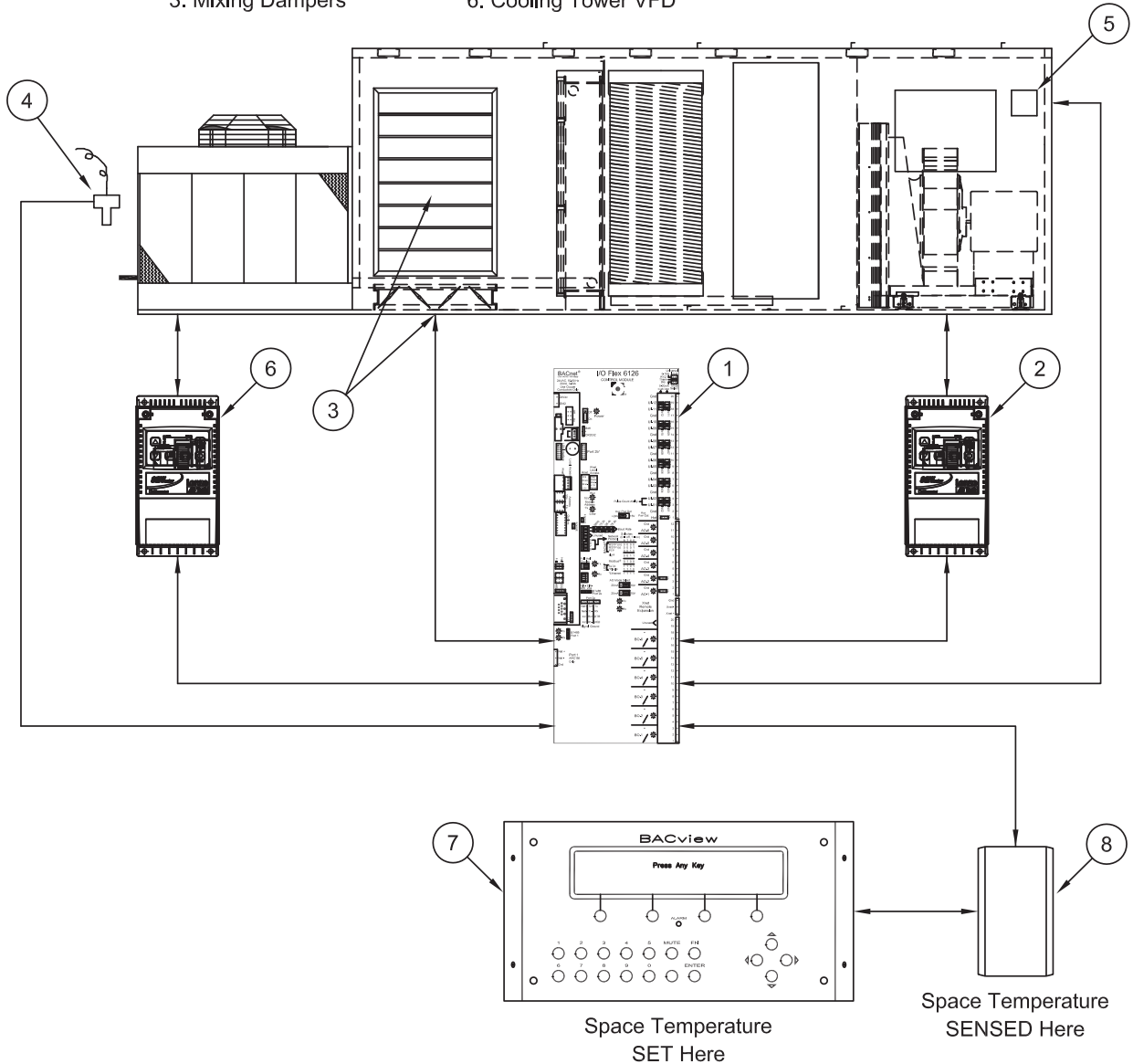
Discharge air sensor (5) and mounted in unit discharge and inlet air sensor (4) mounted in unit inlet with remote mounted BACview controller (7) to set space temperature, operation schedules, and optional damper control setpoints. Service information, operating feedback and alarm status can also be monitored. Unit DDC controller (1) modulates unit airflow via supply fan VFD (2). Also includes an RS-std room sensor (8). Shown with optional DDC-controlled mixing dampers (3) for mixed air, building pressure, or manual control and optional DDC-controlled cooling tower VFD (6).

**COMPONENT I.D.**

- 1. Unit DDC Controller
- 2. Supply Fan VFD
- 3. Mixing Dampers

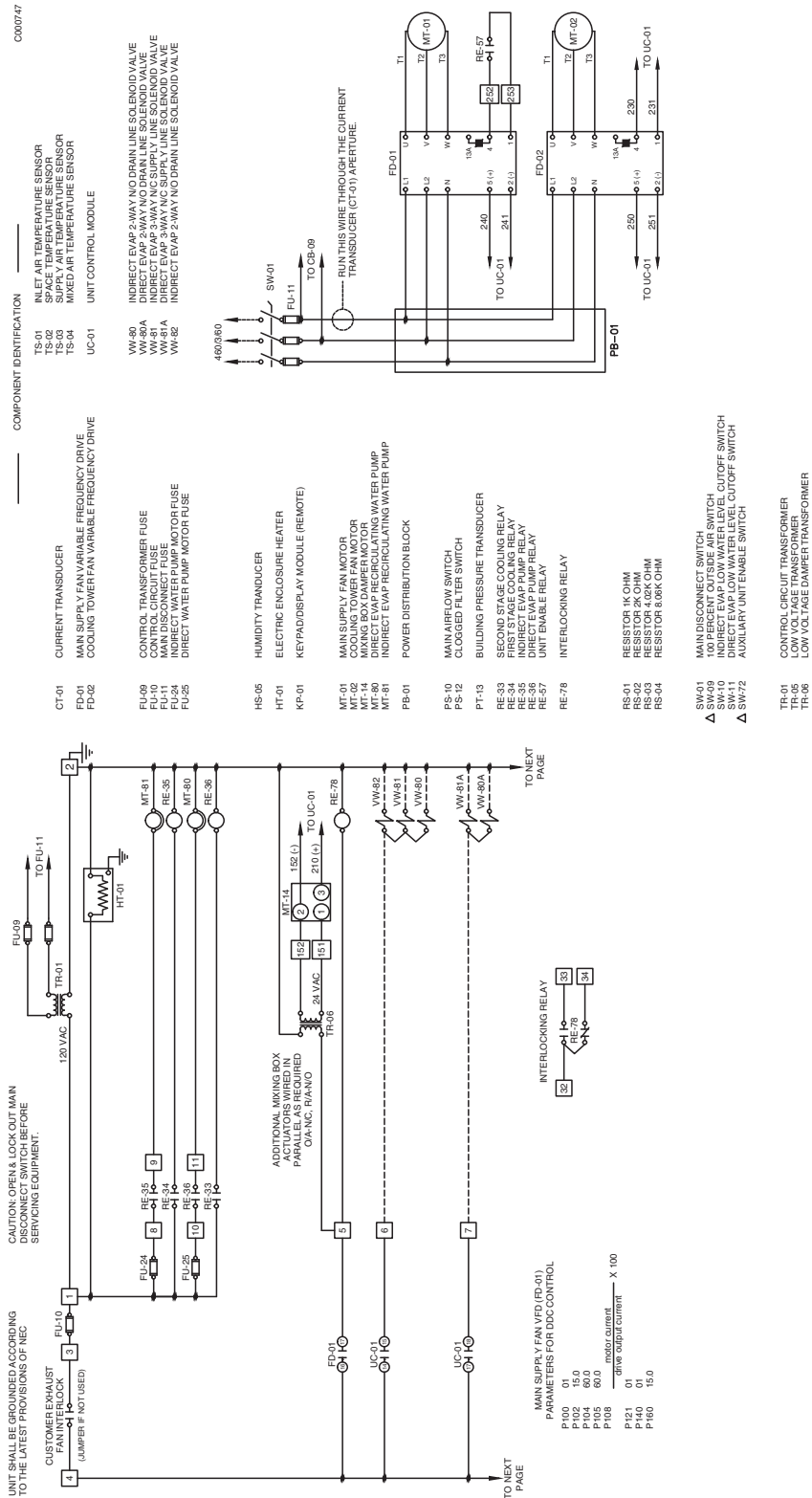
- 4. Inlet Air Sensor
- 5. Discharge Air Sensor
- 6. Cooling Tower VFD

- 7. BACview Interface
- 8. Room Thermostat



## Typical Wiring Cooling Only Unit (Pg 1 of 2)

C000747

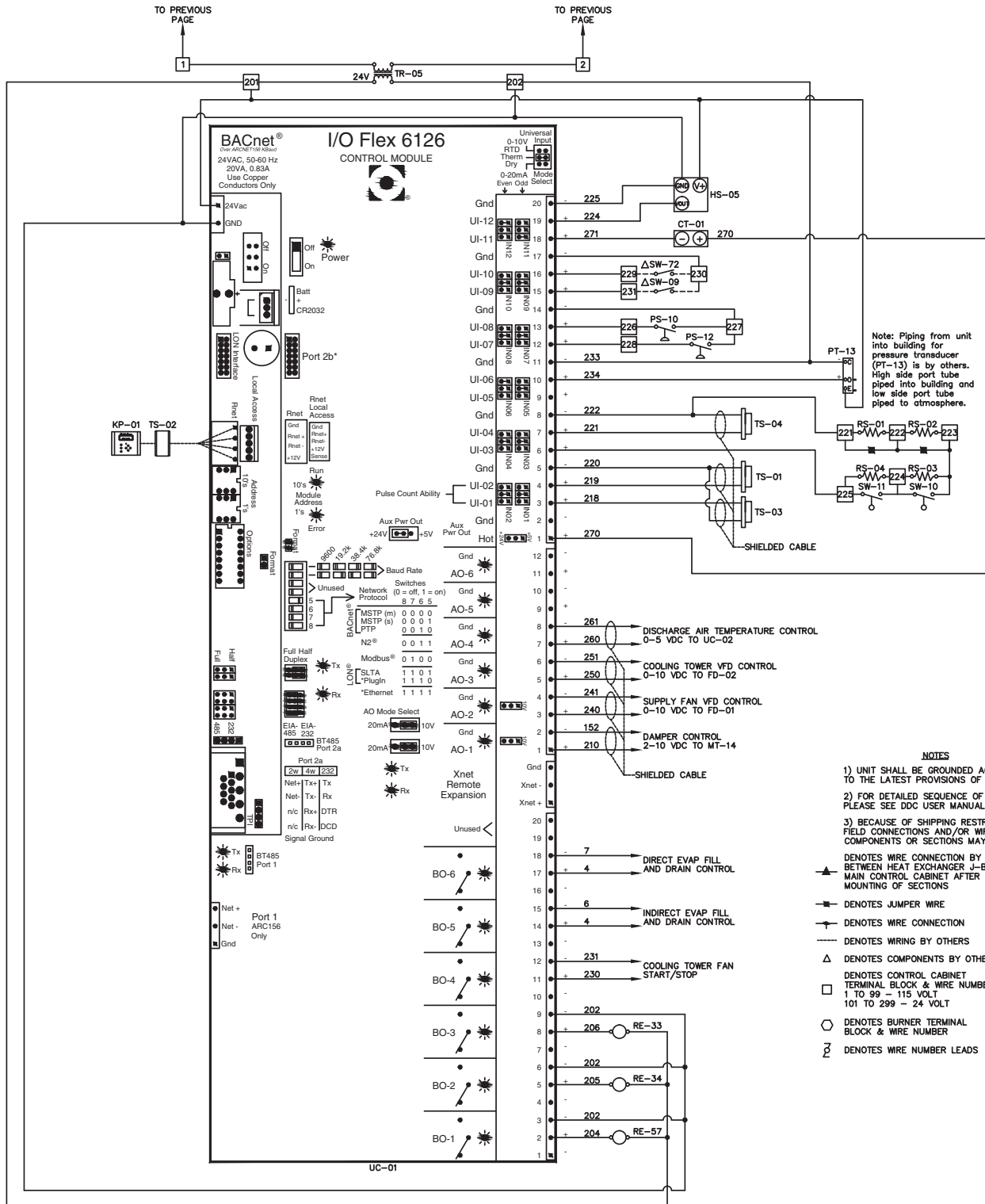


For complete summary of DDC Program, go to:  
<http://mesteksa.com/fileuploads/Literature/AltonAztec/AI%20PProducts/Aztec%20DDC%20Summary.pdf>



## Typical Wiring Cooling Only Unit (Pg 2 of 2)

C000748

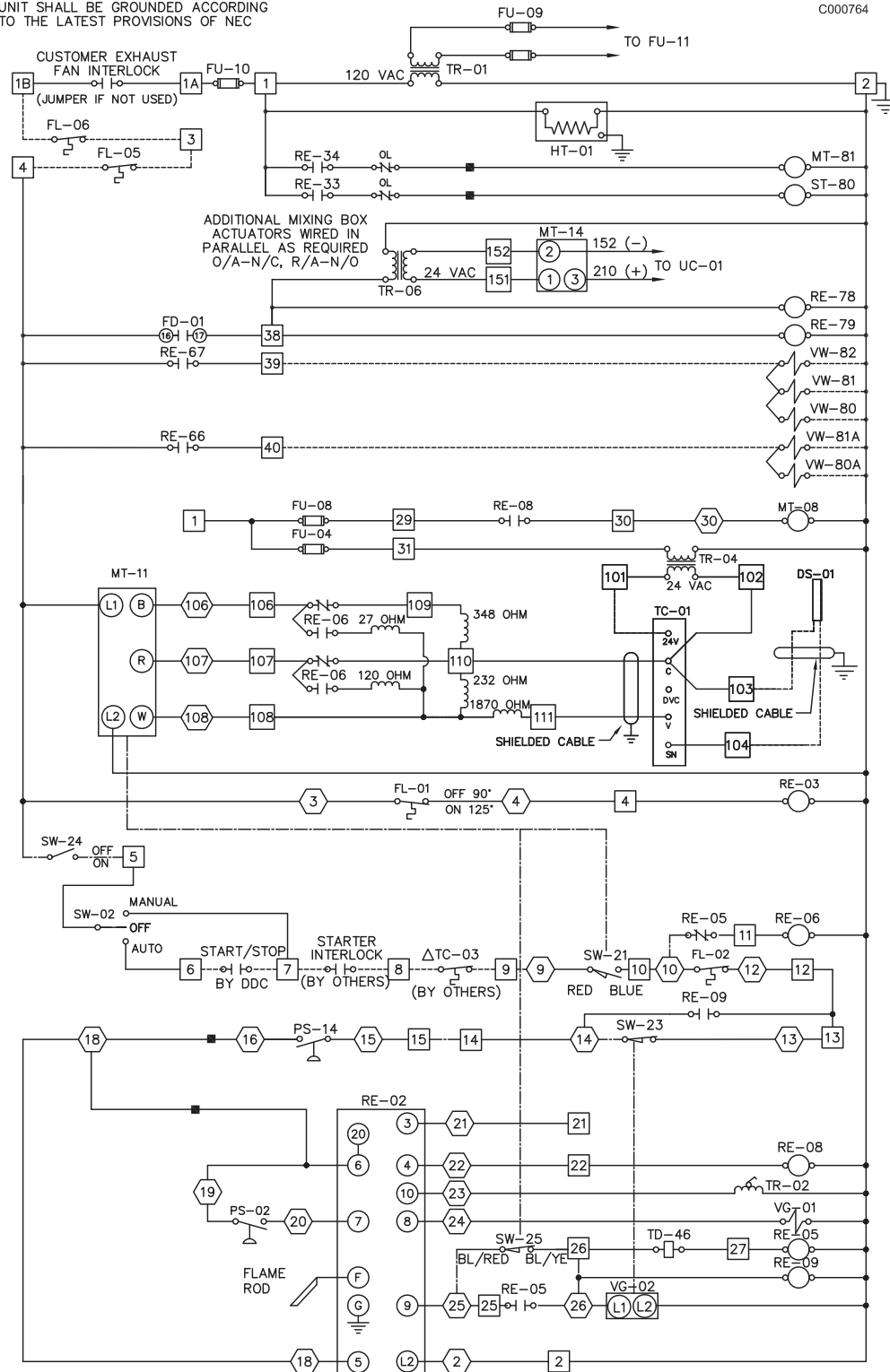


## Typical Wiring Cooling/Heating Unit (Pg 1 of 3)

C000764

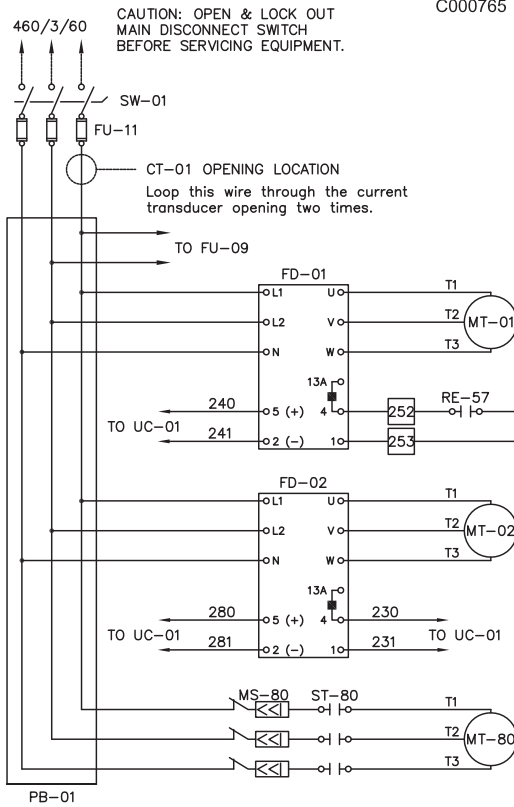
UNIT SHALL BE GROUNDED ACCORDING TO THE LATEST PROVISIONS OF NEC

C000764



## Typical Wiring Cooling/Heating Unit (Pg 2 of 3)

C000765



C000765

### COMPONENT IDENTIFICATION CONTINUED

MT-01	MAIN SUPPLY FAN MOTOR
MT-02	COOLING TOWER FAN MOTOR
MT-08	BURNER MOTOR
MT-11	MODULATING GAS VALVE
MT-14	MIXING BOX DAMPER MOTOR
MT-80	DIRECT EVAP RECIRCULATING WATER PUMP
MT-81	INDIRECT EVAP RECIRCULATING WATER PUMP
PB-01	POWER DISTRIBUTION BLOCK
PS-02	BURNER AIRFLOW PROVING SWITCH
PS-10	MAIN AIRFLOW SWITCH
PS-11	AIRFLOW PROVING SWITCH
PS-12	CLOGGED FILTER SWITCH
PS-14	SUPPLY FAN PROVING SWITCH
PT-13	BUILDING PRESSURE TRANSDUCER
RE-02	FLAME SAFEGUARD RELAY
RE-03	FAN RELAY
RE-05	LOW FIRE RELAY
RE-06	LOW FIRE HOLDING RELAY
RE-08	BURNER MOTOR RELAY
RE-09	PROOF OF CLOSURE RELAY
RE-28	BURNER ENABLE RELAY
RE-33	SECOND STAGE COOLING RELAY
RE-34	FIRST STAGE COOLING RELAY
RE-56	SAFETY CIRCUIT STATUS RELAY
RE-57	UNIT ENABLE RELAY
RE-66	SECOND STAGE COOLING FILL AND DRAIN RELAY
RE-67	FIRST STAGE COOLING FILL AND DRAIN RELAY
RE-78	INTERLOCKING RELAY
RE-79	EXHAUST FAN INTERLOCK RELAY
RS-01	RESISTOR 1K OHM
RS-02	RESISTOR 2K OHM
RS-03	RESISTOR 4.02K OHM
RS-04	RESISTOR 8.06K OHM
RS-05	RESISTOR 2K OHM
RS-11	RESISTOR 10 OHM
ST-80	DIRECT EVAP PUMP MOTOR STARTER
SW-01	MAIN DISCONNECT SWITCH
SW-02	BURNER MANUAL OFF AUTO SWITCH
SW-09	100 PERCENT OUTSIDE AIR SWITCH
SW-10	INDIRECT EVAP LOW WATER LEVEL CUTOFF SWITCH
SW-11	DIRECT EVAP LOW WATER LEVEL CUTOFF SWITCH
SW-21	BURNER CYCLING SWITCH
SW-23	PROOF OF CLOSURE SWITCH
SW-24	ON OFF SERVICE SWITCH
SW-25	LOW FIRE START SWITCH
SW-72	AUXILIARY UNIT ENABLE SWITCH
TC-01	DISCHARGE AIR THERMOSTAT(SENSOR SHIP LOOSE)
TC-03	ON-OFF INLET DUCTSTAT
TD-46	TIME DELAY SET @ 10 SECONDS
TR-01	CONTROL CIRCUIT TRANSFORMER
TR-02	IGNITION TRANSFORMER
TR-04	CONTROL LOW VOLTAGE CIRCUIT TRANSFORMER
TR-05	LOW VOLTAGE TRANSFORMER
TR-06	LOW VOLTAGE DAMPER TRANSFORMER
TR-09	LOW VOLTAGE TRANSFORMER
TS-01	INLET AIR TEMPERATURE SENSOR
TS-03	SUPPLY AIR TEMPERATURE SENSOR
TS-05	SUPPLY AIR TEMPERATURE SENSOR
UC-01	UNIT CONTROL MODULE
UC-02	UNIT CONTROL MODULE
VG-01	PILOT GAS VALVE
VG-02	MAIN GAS VALVE
VW-80	INDIRECT EVAP 2-WAY N/O DRAIN LINE SOLENOID VALVE
VW-80A	DIRECT EVAP 2-WAY N/O DRAIN LINE SOLENOID VALVE
VW-81	INDIRECT EVAP 3-WAY N/C SUPPLY LINE SOLENOID VALVE
VW-81A	DIRECT EVAP 3-WAY N/C SUPPLY LINE SOLENOID VALVE
VW-82	INDIRECT EVAP 2-WAY N/O DRAIN LINE SOLENOID VALVE

### COMPONENT IDENTIFICATION

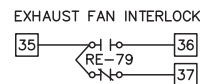
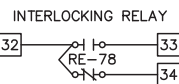
CT-01	CURRENT TRANSDUCER
DS-01	DISCHARGE AIR SENSOR
FD-01	MAIN SUPPLY FAN VARIABLE FREQUENCY DRIVE
FD-02	COOLING TOWER FAN VARIABLE FREQUENCY DRIVE
FL-01	FAN SWITCH
FL-02	HIGH TEMPERATURE LIMIT SWITCH
FL-05	RETURN FIRESTAT
FL-06	SUPPLY FIRESTAT
FU-04	CONTROL LOW VOLTAGE FUSE
FU-08	BURNER MOTOR FUSE
FU-09	CONTROL TRANSFORMER FUSE
FU-10	CONTROL CIRCUIT FUSE
FU-11	MAIN DISCONNECT FUSE
FU-12	CONTROL CIRCUIT FUSE
HS-05	HUMIDITY TRANSDUCER
HT-01	ELECTRIC ENCLOSURE HEATER
LV-01	LINE VOLTAGE MONITOR
MS-80	DIRECT EVAP PUMP MANUAL MOTOR PROTECTOR

#### MAIN SUPPLY FAN VFD (FD-01) PARAMETERS FOR DDC CONTROL

P100	01
P102	15.0
P104	60.0
P105	60.0
P108	motor current
	drive output current X100
P121	01
P140	01
P160	15.0
P300	01

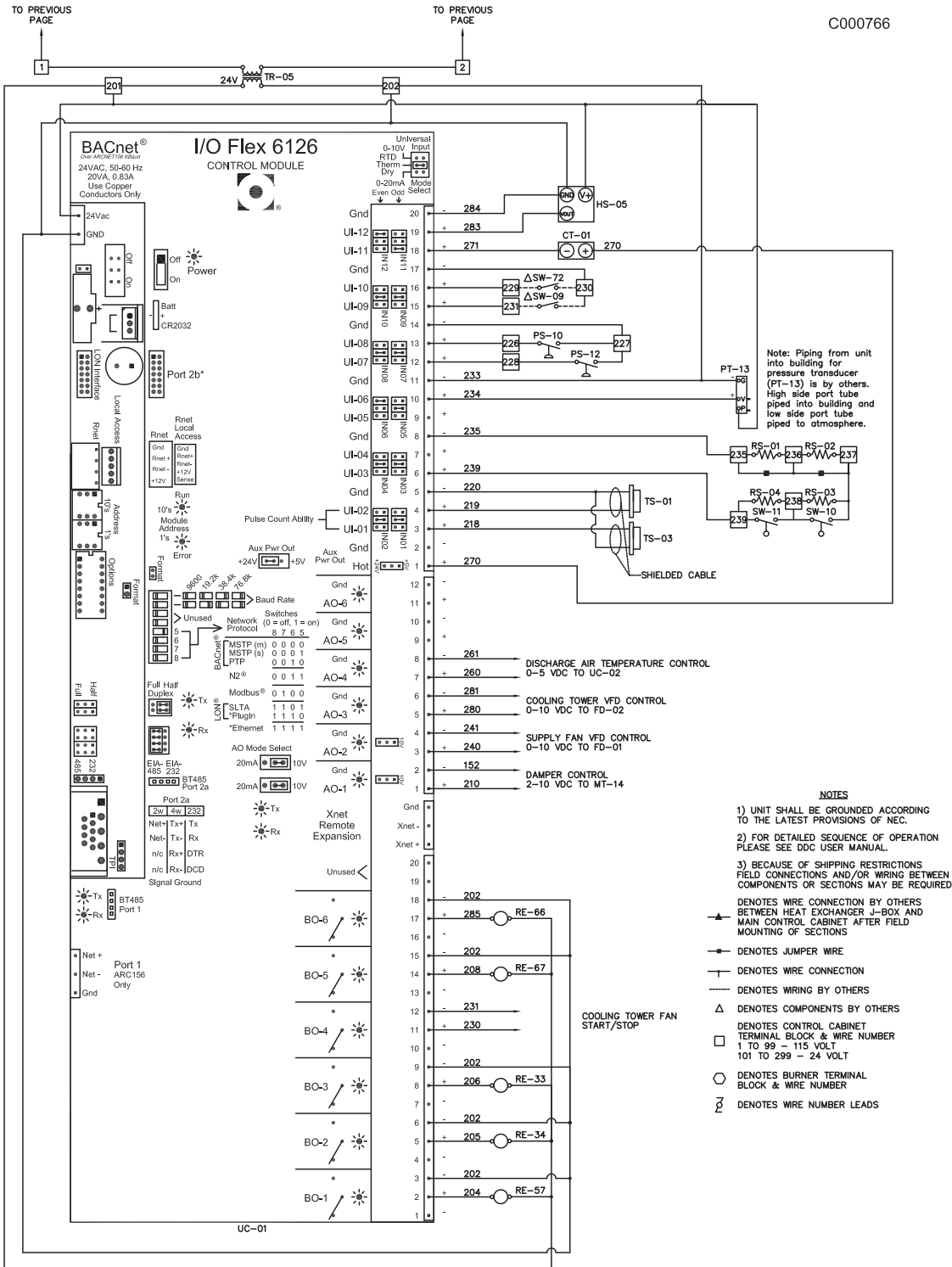
#### COOLING TOWER FAN VFD (FD-02) PARAMETERS FOR SUPPLY AIR TEMPERATURE CONTROL

P100	01
P102	30.0
P104	60.0
P105	60.0
P108	motor current
	drive output current X100
P121	01
P140	01
P160	30.0
P300	01



## Typical Wiring Cooling/Heating Unit (Pg 3 of 3)

C000766



# AZTEC ASC TYPICAL SPECIFICATIONS

## 1.0 GENERAL

### 1.1 (Choose one)

Furnish and install a "1A01" Series Aztec ASC-\_\_\_\_\_-1A01 Packaged Indirect HVAC unit complete with blower section, direct drive motor/blower, flat bank filter section, integral cooling tower, indirect cooling coil section, and inlet louver with birdscreen. The entire unit is to be manufactured by Aztec Sensible Cooling, Dallas, Texas or an approved equal. The unit shall include all components and accessories as set forth herein.

Furnish and install a "2A11" Series Aztec ASC-\_\_\_\_\_-2A11 Packaged Indirect/Direct Evaporative HVAC unit complete with blower section, direct drive motor/blower, flat bank filter section, integral cooling tower, indirect cooling coil section, direct evaporative cooling section and inlet louver with birdscreen. The entire unit is to be manufactured by Aztec Sensible Cooling, Dallas, Texas or an approved equal. The unit shall include all components and accessories as set forth herein.

- 1.2 Unit shall be designed to insure against air stratification across filters and evaporative cooling media. Air velocities across filters and evaporative cooling media shall not exceed 500 FPM.
- 1.3 Complete unit shall be ETL listed. All units shall be built up with orientation and connection locations as indicated on drawings.
- 1.4 Capacities shall be as scheduled on drawings and/or equipment schedule.

## 2.0 CABINET

- 2.1 The unit shall consist of sections required to incorporate the components indicated on the plans and schedule.
- 2.2 The wall and roof panels of the unit shall be fabricated of heavy gauge galvanized steel formed members. The walls and roof structure shall accommodate up to 1" of insulation.
- 2.3 The wall panels shall form a self-framing casing with no additional structural support required. All panels shall be sealed airtight with a sealant.
- 2.4 The floor panels will be built with 1" interlocking standing seam and be suitably reinforced with framing members as required to support the internal components of the unit and be both water and airtight.
- 2.5 Access doors shall be of the double wall, insulated type and provided with live neoprene bulb gaskets, hinges, and latches capable of applying additional sealing as required.
- 2.6 The roof of the unit shall have a minimum 1 1/2" interlocking standing seam construction. All seams will be caulked and sealed to be weathertight and airtight.
- 2.7 All exterior surfaces shall be cleaned to prepare the galvanized surface before applying a specially formulated corrosion resistant combination prime and finish coating of durable 500 hour salt spray resistant, dark tan, acrylic enamel.

## 3.0 STRUCTURAL BASE

- 3.1 Unit or individual unit section shall be fabricated with either a rigidly formed 12 gauge galvanized steel or structural steel base frame electrically welded to form a rigid chassis suitably reinforced and braced to permit the loading, shipping, unloading, rigging, and general handling of the completed sections without damage to assembled components due to normal handling techniques. If fabricated in sections, they shall be joined together by bolting. Structural components shall be of such design as to provide adequate support for each section and the complete assembly when the unit is supported around its base perimeter.

- 3.2 Lifting lugs shall be provided as required for each section.
- 3.3 Base frame of each section shall be designed to accept full perimeter roof curb as shown in drawings. Base frame and outside casing shall be specifically designed to shed water away from all curb penetrations.

## 4.0 INSULATION

- 4.1 Wall panels, roof, and floor shall be insulated with 1" thick, 1-1/2# density mat faced fiberglass insulation.
- 4.2 Insulation shall meet the requirements of the following codes and specifications:

NFPA 90A and NFPA 90B	ASTM C 1071 Type II
TIMA Standard AHC-101	HH-I-545B Type II

Insulation will be tested in accordance with ASTM E-84, UL 723, and NFPA-255 and will not exceed:  
25 Flame spread  
50 Smoke Developed

- 4.3 Insulation shall be held in place with adhesive and mechanical fasteners. The mechanical fasteners shall be spaced in accordance with the latest edition of SMACNA "HVAC Duct Construction standards".

## 5.0 SUPPLY AIR BLOWER SECTION

- 5.1 The blower section shall include centrifugal, backward airfoil SWSI plenum type blower and shall be complete with direct drive motor. The blower in accordance with AMCA (Air Movement and Control Association) Standard 210. The blowers shall be designed to operate without conventional scroll housing. All blower wheels shall have tapered and spun wheel cones or shrouds providing stable flow and high rigidity. The wheels shall be non-overloading type. The blades shall be continuously welded, airfoil type, designed for maximum efficiency and quiet operation. All air ratings are based on delivery against the external static pressure specified with all optional equipment in place and operating. All blowers will be dynamically balanced on precision electronic vibration amplifying equipment to insure quiet, smooth running, trouble free operation. Flexible ducting shall be provided between blower inlet and unit casing.
- 5.2 Blower motor shall be designed to suit the characteristics of the available electric service shown on drawings. Motor will be (energy efficient ODP).
- 5.3 Motor and blower assembly shall be mounted on a common structural steel base under which vibration isolators shall be anchored to the floor. Vibration isolators shall be spring type with seismic restraint to restrict vertical and horizontal motion. The isolation base shall be complete with hold down bolts and wood blocking to maintain the isolation base in rigid position for shipping.
- 5.4 Supply fan motor shall be controlled by Variable Frequency Drive (VFD). The DDC control system will modulate the VFD to maximize system efficiency and performance based on sensed environmental conditions. The VFD shall be mounted inside cabinet suitable for rooftop applications.

# AZTEC ASC TYPICAL SPECIFICATIONS

## 6.0 INDIRECT EVAPORATIVE COOLING SECTION

6.1 The indirect evaporative cooling section of the unit shall consist of an indirect cooling coil [A] and an integral cooling tower [B] as described below:

A. INDIRECT COOLING COIL: The indirect cooling coil in the unit shall be of the drainable, counterflow type. The coil's finning material shall be of corrugated type and mechanically bonded to the coil's tubing. The coil shall be equipped with both a drain and vent connection.

The header and the supply and return coil connection of the indirect coil shall be copper, located on one end of the coil and internally plumbed at the factory to the recirculating pump provided with the unit's integral cooling tower.

The unit's indirect coil drain connection or the chilled water supply line from the cooling tower in the unit, whichever has the lowest drain point, shall be plumbed to the exterior of the unit's housing and provided with a manually operated drain valve.

B. INTEGRAL COOLING TOWER: The unit's integral cooling tower shall be provided with the following factory pre-assembled components: 2" aluminum mesh, washable type intake air filters; welded stainless steel sump construction; stainless steel housing construction; propeller type, corrosion coated, direct or belt driven exhaust fan; evaporative cooling media; cooling tower cooling media water distribution header or headers; recirculating pump manifold assembly; factory set, calibrated butterfly or ball type brass water balancing valve, factory adjusted, brass lever control valve with a plastic float ball; sump drain connection; sump overflow connection; sump water fill and make-up line connection; adjustable brass water bleed valve with the copper bleed tubing plumbed to the cooling tower's overflow stand pipe; recirculating pump low sump water lever shutoff switch; submersible type recirculating pump.

## 7.0 DIRECT EVAPORATIVE SECTION (2A11 Series only)

- 7.1 The evaporative section(s) shall have a 5 $\frac{1}{2}$ " deep sump with welded seams and corners. The sump shall be constructed of 304 stainless steel and will be factory leak tested prior to shipment. The remainder of the direct evaporative cooling section shall also be constructed of 304 stainless steel.
- 7.2 The cooling media shall be 12" deep fluted Turbodek, high efficiency evaporative media, impregnated with an insoluble antirot chemical. The face velocity shall be equal to or less than that shown on the air handler schedule, in no case shall the face velocity exceed 500 FPM.
- 7.3 The evaporative cooling section shall include a submersible pump with U.L. listed, hermetically sealed, dielectric oil-filled motor and Buna-N seal. Horsepower rating of the pump shall not be less than 1/6 HP. Pump to be centrifugal type.
- 7.4 The water distribution system shall be constructed of PVC plumbing and include, but not be limited to, the following items: pump riser; factory installed water regulator valve to permit field adjustment of water flow over media; 1" drain connection; 1 $\frac{1}{2}$ " overflow line;  $\frac{3}{4}$ " water control valve; adjustable bleed valve to allow continuous bleed off, thus minimizing the build up of minerals and salts; cleanable water distribution header over the complete width of media.

## 8.0 CONTROLS

- 8.1 The Aztec DDC system shall include a controller that features 12 universal inputs, 6 analog inputs, and 6 binary outputs. Controller shall have full BACnet compatibility with selectable switch to convert to N2 or Modbus protocols. Manufacturer will include optional LonTalk conversion where required.
- 8.2 The control program shall be configurable for either a Indirect or a Indirect/Direct Evaporative Cooling System for either zone or supply air temperature control. The unit can be set to run in either a unoccupied or occupied mode.
- 8.3 The supply fan will be enabled, and initialize all other unit functions by: (choose one) (Via an auxiliary unit enable contact provide by the user)(Via a contact closure induced by a BACnet/Modbus/N2/LonWorks protocol signal sent over the network from the user's building automation system to the DDC controller)(Via a user-programmed time-of-day schedule in the WebCTRL interface or the remote BACview keypad) (Via a manual override in the program through the WebCTRL interface)
- 8.4 The control functions will include, but not be limited to: Electrical Demand and Total Electrical Usage, Supply Fan Operation, Cooling Tower Operation, Fill and Drain Valve Operation, Clogged Filter Indication and Damper Control.
- 8.5 Upon sensing non-ideal operating conditions, the controller will alert the user to an alarm condition that can be monitored via BACview, WecCTRL, or a 3rd part BAS. The alarms will include, but not be limited to: Room Sensor Failure, Supply Air sensor Failure, Supply Fan Failure, Freezestat, Clogged Filter, Cooling Stage 1 Maintenance, Cooling Stage 2 Maintenance, Cooling Stage 1 Water Level Failure, Cooling Stage 2 Water Level Failure, and Point Locked.
- 8.6 Unit will be controls will be set for: (choose one) MDT-Expert Control System for Modulating Discharge Temperature Control with BACview controller. MRT-Expert Control System for Modulating Room Temperature Control with BACview controller.

## 9.0 OUTSIDE AIR INLET LOUVER

- 9.1 Louver frame and blades shall be galvanized steel with riveted or welded construction.
- 9.2 Louver shall include galvanized birdscreen.
- 9.3 Louver design shall be of the drainable type and be tested to AMCA Standard 500 and licensed to bear the AMCA seal.
- 9.4 Louver shall be hinged for service and filter access on all 100% outside air units.

## 10.0 FILTER SECTION

- 10.1 Flat filter rack shall be designed for 2" thick filters of size and quantity as shown on drawings. Filter rack shall be of the front access type. Filters shall be mounted in galvanized steel frames.
- 10.2 Filter media shall be nominal 2" thick, Merv 8 disposable type design. All filters shall be listed by Underwriters Laboratories as Class 2.

## 11.0 GAS FIRED HEATING SECTION (OPTIONAL)

- 11.1 The gas fired duct furnace shall be ETL listed for safe and efficient performance. The duct furnace shall be suitable for operation on natural gas or L.P.



# AZTEC ASC TYPICAL SPECIFICATIONS

11.2 Heat exchanger shall consist of 16 gauge primary drum and 18 gauge secondary tubes. Complete heat exchanger material shall be type 409 stainless steel. The flue gas travel shall be of two-pass design, with internal baffles in the secondary tubes.

11.3 (Choose one)

**Furnace Models IFD-160, IFD-320, and IFD-480**

The Digital High Turndown burner shall be of the modulating power type gas burner (pat. 2,709,802) with individual controlled variable speed combustion air blower motor and motorized gas valve for linkageless design. The variable speed combustion air blower and motorized gas valve shall be independently controlled by the AdaptAire DDC control module to insure a proper gas/air mixture throughout the complete range of operation.

**Furnace Models IFD-800 and IFD-1120**

The gas burner shall be of the modulating power type gas burner complete with integral combustion air blower and motor, combustion air proving switch, and removable pilot assembly. Burner shall be complete with an observation window to view the flame. The combustion air damper shall be interlocked with the gas control valve to insure a proper gas/air mixture throughout the complete range of operation.

11.4 Burner and controls shall be capable of delivering \_\_\_\_\_ MBH output firing on (natural gas)(propane) at an inlet pressure of \_\_\_\_\_(inches water column)(PSIG). The ETL listed unit will meet ANSI, FM, and IRI requirements. Burner and controls shall be arranged for full modulation with low fire start and a \_\_\_\_\_:1 turndown ratio. Burner combustion shall be on-ratio throughout the complete range.

11.5 The venting system shall be an integral part of the air handler and shall not be altered in the field. Weatherproof enclosure shall include louvered panels sized to allow proper amount of combustion air.

11.6 The gas train and safety controls shall consist of not less than the following: high temperature limit switch, control circuit transformer, low pressure appliance regulator, motorized gas control valve, main manual test firing shut-off valve, main automatic shut-off valve(s), pilot manual shut-off valve (Models 480 and larger), pilot pressure regulator (Models 480 and larger), pilot automatic shut-off valve (Models 480 and larger), and pilot manual test firing shut-off valve (Models 480 and larger), and electronic flame relay.

## OPTIONAL EQUIPMENT

- 2" Fiberglass insulation
- Double wall and roof cabinet construction
- TEFC motors
- Mixing section with return air and outside air dampers
- 12" or 18" high full perimeter roof curb
- Direct drive centrifugal, backward airfoil, SWSI plenum type fan arrays
- Fiberdek media meeting UL Class 2 rating
- MERV 11 and MERV 14 supply air filters
- Direct expansion or chilled water cooling coil
- Variable frequency drive on cooling tower fan
- Smoke detector
- Firestat
- Copper plumbing
- UL labeled control panel

Check out our other Mestex products and literature: [www.mestex.com](http://www.mestex.com)

In the interest of product improvement the factory reserves the right to make changes without notice.



Mestex, Ltd 4830 Transport Drive, Dallas TX 75247 Phone: 214-638-6010