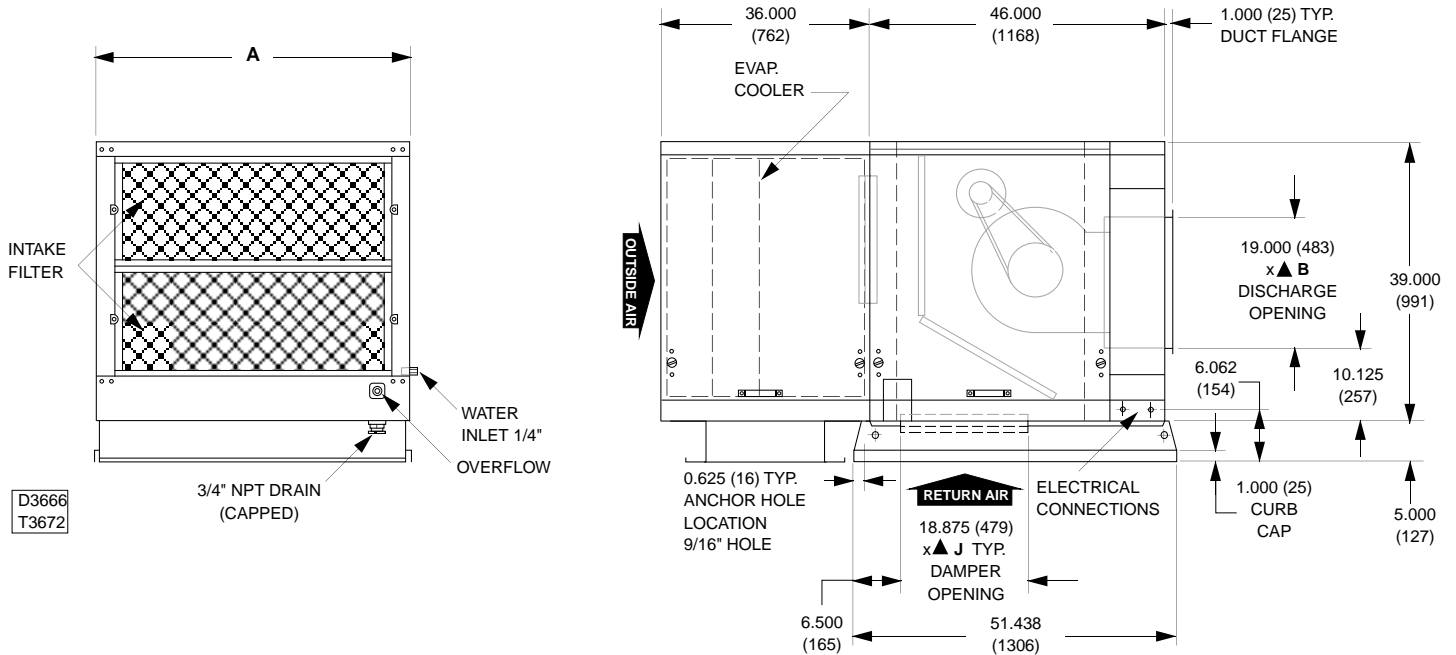


# ENGINEERED PRODUCTS



## Model - AH(20, 40) (0) (0) P

Unit Type (UT) - AH, Standard Air Handler with Evaporative Cooler  
 Capacity (CA) - 20 or 40 (200 or 400 mBTU)  
 Furnace Type/Access Side (FT) - A, Right Hand or B, Left Hand  
 Furnace Construction Material (FM) - 0, None  
 Rooftop Arrangement (RA) - P, Standard Air Handler



CAPACITY	A	B	C	G	▲J
<input type="checkbox"/> 20	43.875 (1114)	23.812 (605)	21.938 (557)	42.062 (1068)	35.000 (889)
<input type="checkbox"/> 40	60.375 (1534)	45.812 (1164)	30.188 (767)	58.562 (1487)	51.500 (1308)

NOTE:  
 DIMENSIONS ARE IN INCHES, DIMENSIONS IN PARENTHESIS ARE IN MILLIMETERS.  
 ▲ "J" DIMENSION IS AN OUTSIDE DIMENSION FOR RETURN AIR DAMPERS.

Project: \_\_\_\_\_

Unit Tag: \_\_\_\_\_

260 NORTH ELM ST. WESTFIELD, MA 01085  
 (413) 564-5540 • FAX: (413) 562-5311  
 www.sterlinghvac.com A MESTEK COMPANY

The above dimensional drawing includes options that might not pertain to the unit being submitted for approval. Please note that the following items checked below are **not included** with the unit being submitted:

Outside Air Opening / Dampers       Outside Air Hood

Return Air Openings / Dampers

# ENGINEERED PRODUCTS

## AH(20, 40) (0) (0) P Performance Table

Capacity		TOTAL EXTERNAL STATIC PRESSURE (INCHES OF WATER)															
		0.2		0.4		0.6		0.8		1		1.2		1.4		1.6	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
20	1,500	395	0.12	530	0.19	645	0.27	750	0.35	845	0.44	930	0.54	1010	0.65	1085	0.76
	2,000	435	0.22	550	0.30	655	0.40	750	0.49	835	0.59	915	0.70	995	0.81	1065	0.93
	3,000	555	0.61	630	0.71	710	0.83	790	0.96	865	1.09	935	1.23	1000	1.37	1065	1.51
	4,000	700	1.33	750	1.47	805	1.61	865	1.75	930	1.90	990	2.07	1045	2.25	1105	2.43
	5,000	855	2.51	890	2.68	930	2.85	975	3.02	1020	3.19	1070	3.37	1120	3.55	1170	3.75
	5,500	935	3.30	965	3.49	1000	3.67	1040	3.86	1080	4.05	1120	4.24	1165	4.43	1210	4.63
	6,000	1015	4.25	1040	4.45	1075	4.65	1105	4.85								
40	4,000	450	0.46	565	0.64	670	0.82	760	1.01	845	1.22	930	1.43	1005	1.66	1075	1.90
	5,000	510	0.79	605	0.99	700	1.21	785	1.44	860	1.67	935	1.91	1005	2.16	1070	2.42
	6,000	575	1.28	655	1.49	740	1.73	815	2.00	885	2.28	955	2.56	1020	2.84	1085	3.12
	7,000	650	1.95	715	2.19	785	2.44	855	2.73	920	3.04	985	3.36	1045	3.68	1105	4.00
	8,000	725	2.83	780	3.10	840	3.38	905	3.67	965	3.99	1025	4.34	1080	4.71		

Capacity		TOTAL EXTERNAL STATIC PRESSURE (INCHES OF WATER)													
		1.8		2		2.2		2.4		2.6		2.8		3	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
20	2,000	1135	1.06												
	3,000	1125	1.66	1180	1.81	1240	1.96	1295	2.12	1350	2.28	1405	2.45	1455	2.62
	4,000	1160	2.61	1210	2.80	1260	2.98	1310	3.17	1360	3.35	1405	3.54	1455	3.74
	5,000	1220	3.96	1265	4.18	1310	4.40	1360	4.63	1400	4.86				
	5,500	1255	4.84												
40	4,000	1140	2.15	1205	2.42										
	5,000	1135	2.69	1200	2.97										
	6,000	1140	3.41	1200	3.71	1255	4.02	1315	4.34	1365	4.67	1420	5.00		
	7,000	1160	4.33	1215	4.66	1270	4.99								

**NOTES:** The pressure drop for Accessories from the following table, must be allowed for when using the above Performance table.

Unless otherwise specified, the following conversions may be used for calculating SI units.

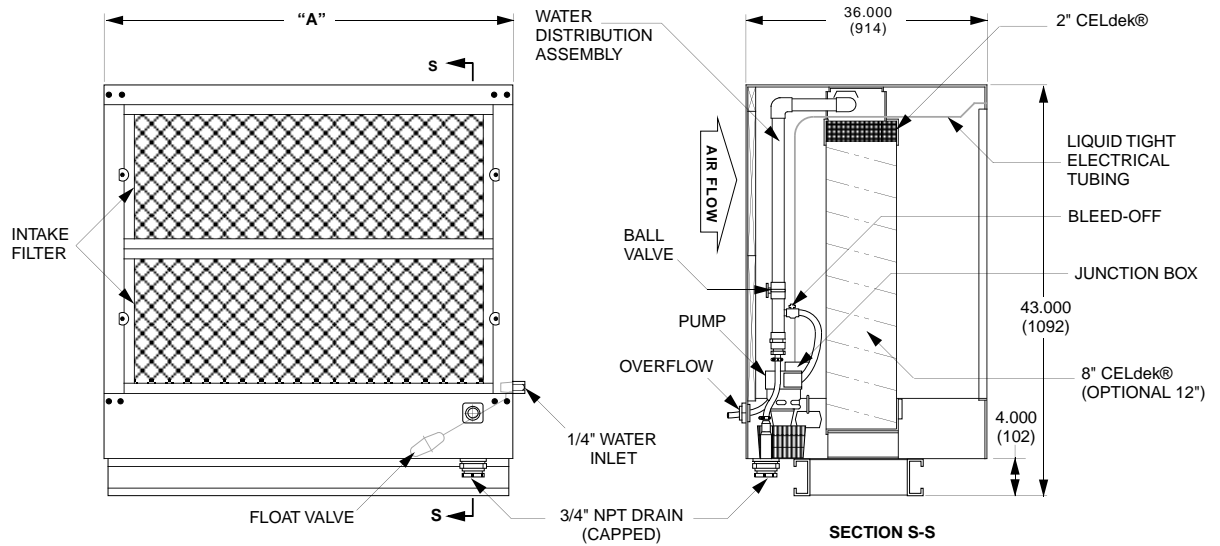
1 Cu. Ft. = 0.028m<sup>3</sup>, 1 ft. = 0.305m, 1 in. = 25.4mm, 1 psig = 6.894 kPa, 1000 Btu per hr. = 0.293 kW, 1 in. water column = 0.249 kPa, 1 gallon = 3.785 L, 1000 Btu/Cu. Ft. = 37.5 MJ/m<sup>3</sup>, 1 lb. = 0.453 kg.

## AH(20, 40) (0) (0) P Accessories Pressure Drop Table

MODEL		PRESSURE LOSS (INCHES OF WATER)											RETURN DAMPER
		RAINHOOD WITH SCREEN		ELIM		FILTERS					EVAP. PAD		
						THROWAWAY	WASHABLE		PLEATED				
						2"	1"	2"	1"	2"			
20	1,600	.02	.02	.05	<.01	.01	.06	.03	.02	.03	.03	.03	
	1,800	.02	.03	.06	<.01	.01	.07	.04	.02	.03	.03	.03	
	2,000	.02	.03	.07	.01	.02	.08	.04	.03	.03	.04	.04	
	2,200	.03	.04	.08	.01	.02	.09	.05	.03	.03	.05	.05	
	2,400	.03	.05	.09	.02	.02	.11	.06	.04	.06	.05	.05	
	2,500	.04	.05	.09	.02	.03	.12	.07	.04	.07	.06	.06	
	3,000	.05	.07	.12	.03	.04	.16	.09	.06	.10	.08	.08	
	4,000	.09	.13	.17	.05	.07	.26	.16	.11	.17	.15	.15	
	5,000	.15	.20	—	.07	.11	.38	.23	.18	.27	.23	.23	
	5,500	.18	.25	—	.09	.13	.44	.28	.22	.32	.28	.28	
40	4,000	.04	.06	.10	.02	.03	.13	.07	.06	.09	.07	.07	
	4,400	.05	.07	.11	.03	.04	.15	.09	.07	.11	.08	.08	
	4,800	.06	.09	.13	.03	.04	.18	.10	.09	.13	.10	.10	
	5,000	.07	.10	.13	.03	.05	.19	.11	.09	.14	.10	.10	
	6,000	.10	.14	.17	.05	.07	.26	.16	.14	.20	.15	.15	
	7,000	.13	.19	—	.07	.09	.33	.21	.18	.27	.20	.20	
	8,000	.17	.24	—	.09	.12	.42	.26	.24	.36	.26	.26	

## AH(20, 40) (0) (0) P Evaporative Cooler Specifications

MODEL	A
20	43.875 (1114)
40	60.375 (1534)

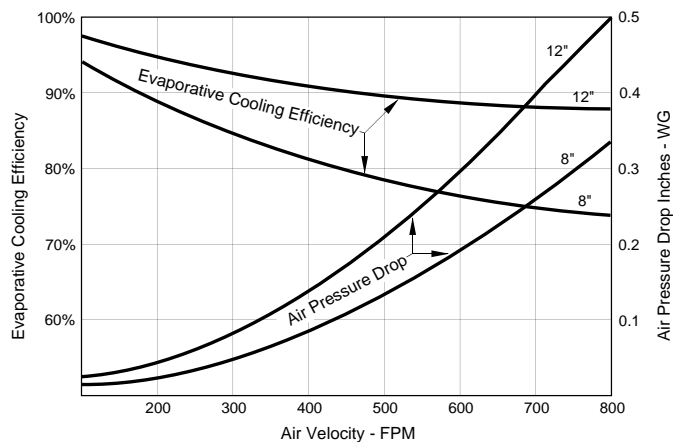


### Performance and Dimensional Data

Capacity 20, 40	CFM		8" Saturation Efficiency Range		12" Saturation Efficiency Range		8" or 12" Media Face Area		Pressure Drop in W.C. (kPa)		"A" Unit Width	Shipping Wt.	Operating Wt.
	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	Ft.2	in. (mm)	MIN.	MAX.	in. (mm)	lb. (kg)	lb. (kg)
□ 20	1,600 (0.755)	5,500 (2.596)	77	88	88	92	9.38 (0.87)	31 x 43-9/16 (787 x 1106)	0.03 (0.01)	0.20 (0.05)	43-3/4 (1111)	166 (75)	386 (175)
□ 40	3,200 (1.510)	8,500 (4.012)	77	86	87	92	1292 (1.20)	31 x 60 (787 x 1524)	0.07 (0.02)	0.28 (0.07)	60-1/4 (1530)	206 (93)	509 (231)

#### CELdek® EVAPORATIVE MEDIA

The Sterling Evaporative Cooler utilizes high efficiency CELdek® media. CELdek® is made from a special cellulose paper, impregnated with insoluble anti-rot salts and rigidifying saturants. The cross fluted design of the pads induces highly-turbulent mixing of air and water for optimum heat and moisture transfer. Sterling Evaporative Coolers utilize 8 inch CELdek® as standard equipment. Optional 12 inch CELdek®, 8 and 12 inch GLASdek® are also available. A 2 inch distribution pad is used to disperse the water evenly over the media.



**EVAPORATIVE COOLER EFFICIENCY/A.P.D. CHART**

## AH(20, 40) (0) (0) P Weights, Filter Data & Roof Openings

### Unit Weights

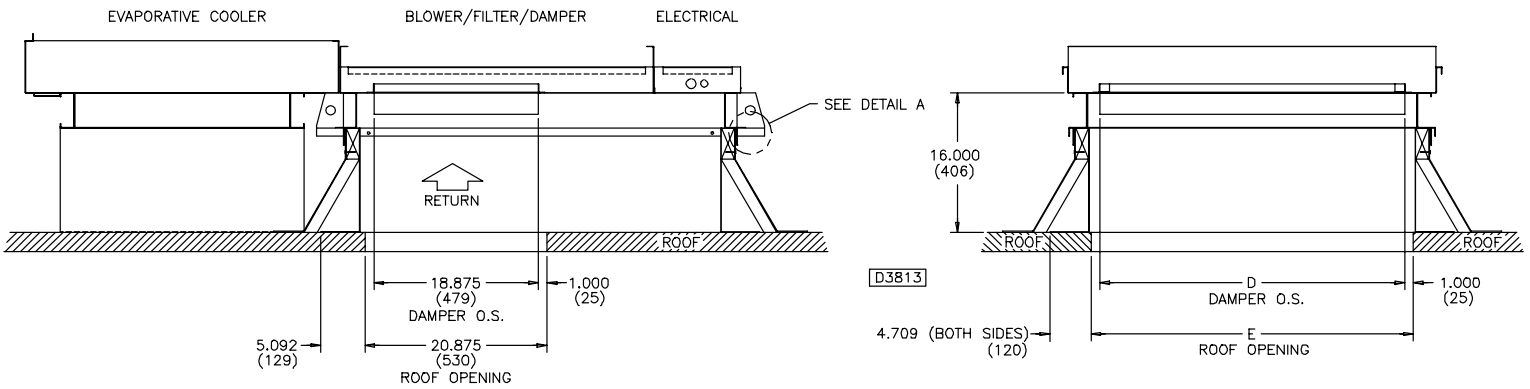
Approximate weights for Arrangement "P"		
Unit Type	Net Wt.	Ship Wt.
Capacity	(Lb.)	(Lb.)
AH20	612	725
AH40	785	909

See motor spec #MDS-1 for motor weight/adder & amperage.

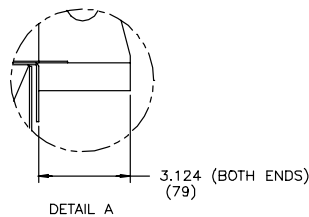
### Filter Data

Capacity	(Quantity) Filter Size
20	(4) 20 x 20
40	(6) 20 x 20

### Roof Openings



### ROOF CURB KIT #RC012



CAPACITY (CA)	D	E
20	35.000 (889)	37.000 (940)
40	51.500 (1,308)	53.500 (1,359)

### MODEL NUMBER

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	+
(EXX)	A	H	*	*	0	0	P										

\*DIGITS 3 & 4 = (CA) CAPACITY  
REFER TO CATALOG FOR MODEL NUMBER DESCRIPTION.