

- *Double Inlet*

Double Inlet/Single Fan-Industrial Class Evaporative Cooling Equipment with capacities of 30,000 CFM to 88,000 CFM and up to 1.5" ESP as standard or higher

Why?

Cel-Air® units are high capacity, high efficiency evaporative cooling equipment. With over 120 cataloged units and sizes ranging from 6,000 CFM to over 100,000 CFM, United Metal Products gives the engineer, contractor, or owner the choice and options they want.

Benefits:

- 120 cataloged sizes
- 2" double wall or single wall construction
- Galvanized, aluminum, stainless steel
- 6,000–100,000 CFM and above
- Evaporative cooling
- Forward curve, airfoil, or backward inclined wheels
- ETL labeling available
- Powder coated
- ABS reservoir available

Applications:

- Aircraft hangars
- Clean room M.U.A.
- Food processing plants
- Gymnasiums
- Hospitals
- Kitchens
- Make up air requirement
- Manufacturing facilities
- Military bases
- Mining industry
- Municipalities
- Prisons
- Process cooling
- Schools
- Textile industries
- Turbine inlet cooling
- Waste water treatment facility
- Warehouses

Resources Available for This Product

- Catalog By Mail
- Catalog Online

United Metal Products

1920 E Encanto Drive Tempe, AZ 85281
T 480.968.9550
F 480.968.9555
www.unitedmetal.com



Standard Features

- 16ga pre-painted steel single skin casing
- All fans can be ordered for up, down, or horizontal discharge
- Powder coated fan housing
- Heavy duty L-50 200,000 hour bearings
- Fan belts & pulleys—fully installed, aligned and tensioned
- 460v/3ph/60Hz ODP standard efficiency motors
- Adjustable motor slide base
- 1" deflection spring anti-vibration mounts with seismic restraints
- Flexible connector at fan discharges
- Double-wall hinged access doors for fan and evaporative media access
- Fully welded and painted G-90 galvanized sump and media support
- 12" thick CELdek® evaporative cooling media (not available with ETL label)
- Heavy duty evaporative cooler pumps with adjustable water flow and bleed lines
- Copper water distribution pipework with end cleanouts
- Fully weatherproof
- 4" double drainable weather louver with bird screen
- Fan door mechanical safety locks
- Pre-wired motors and pumps to a single external junction box

Optional Features

- 16ga G-90 galvanized single skin casing with tough powder coated finish to casing—baked at 375°F
- 2" throwaway panel or 2" washable panel filters (side access)
- Filter pressure differential gauge or switch
- 12" thick 90% efficient GLASdek® UL900 Class 2 evaporative media for ETL labeled units per UL 1995 standard
- Premium efficiency ODP or TEFC motors
- Extended fan bearing lubrication lines
- Fan bearings upgraded to L-10 200,000 hours
- Fan belt guards
- Safety door screens
- 2" deflection spring anti-vibration mounts with seismic restraints
- Stainless steel evaporative media holding rack
- Stainless steel sump
- Stainless steel pumps
- Aluminum cabinet (for reduced operating weight)
- Stainless steel cabinet
- 2" double wall construction
- Smooth or perforated inner liners
- 1" or 2", 1.5# or 3# insulation on internal walls
- Single point power connection
- Electrical transformers & magnetic motor starters
- Internal lights with weatherproof switch
- GFI receptacle
- Fan door safety disconnect switches
- Automatic flush kit with timer
- Automatic drain-down with timer
- Automatic drain-down & freeze protection with timer
- Roof curb—flat or pitched, insulated or uninsulated

Typical Applications

- Aircraft hangers
- Clean room M.U.A.
- Food processing plants
- Gymnasiums
- Hospitals
- Kitchens
- Make up air requirements
- Manufacturing facilities
- Military bases
- Mining industry
- Municipalities
- Prisons
- Process cooling
- Schools
- Textile industries
- Turbine inlet cooling
- Waste water treatment facility
- Warehouses



MODEL (note discharge prefix) E=End D=Down U=Up Discharge	VOLUME CFM	External Static Pressure ("WG) (Not including Filter Pd*)												FAN Model / Size	MOTOR (460v/3ph/60Hz)			EVAPORATIVE MEDIA				
		0.25 HP RPM		0.50 HP RPM		0.75 HP RPM		1.00 HP RPM		1.25 HP RPM		1.50 HP RPM			Efficiency	Amps FLA SA	NEMA	Area Ft2	Velocity FPM			
E/D/U363000	30,000	10	274	15	299	15	322	15	345							DWDI FC / 36 DWDI FC / 36 DWDI FC / 36	90.2% 90.2% 91.7%	14.3 22.0 25.0	87.0 130.2 175.0	256T 284T 256T	60 60 60	500 500 500
E/D/U363200	32,000	15	277	15	302	15	325			20	347	20	368	20	388	DWDI FC / 36 DWDI FC / 36	90.2% 91.7%	22.0 25.0	130.2 175.0	284T 256T	72 72	444 444
E/D/U363600	36,000	15	299	20	323	20	345	20	366			25	385	25	404	DWDI FC / 36 DWDI FC / 36 DWDI FC / 36	90.2% 91.0% 91.7%	22.0 25.1 29.5	130.2 157.0 189.0	284T 286T 284T	72 72 72	500 500 500
E/D/U363900	39,000	20	313	20	336	25	358	25	378	25	396			30	414	DWDI FC / 36 DWDI FC / 36 DWDI FC / 36	91.0% 91.7% 92.4%	25.1 29.5 35.5	157.0 189.0 230.0	286T 284T 286T	78 78 78	500 500 500
E/D/U444200	42,000	10	528	15	548	15	569			20	589	20	609	20	629	DWDI AF / 44 DWDI AF / 44 DWDI AF / 44	89.5% 91.0% 91.7%	14.0 20.3 25.0	90.0 150.5 175.0	215T 254T 256T	84 84 84	500 500 500
E/D/U444550	45,500	15	562	15	582	20	601	20	619	20	638			25	656	DWDI AF / 44 DWDI AF / 44 DWDI AF / 44	91.0% 91.7% 91.7%	20.3 25.0 29.5	150.5 175.0 189.0	254T 256T 284T	91 91 91	500 500 500
E/D/U444900	49,000	15	597	20	616	20	634	20	651	20	668			25	686	DWDI AF / 44 DWDI AF / 44 DWDI AF / 44	91.0% 91.7% 91.7%	20.3 25.0 29.5	150.5 175.0 189.0	254T 256T 284T	98 98 98	500 500 500
E/D/U495600	56,000	15	517	20	534	20	551			25	568	25	585		601	DWDI AF / 49 DWDI AF / 49 DWDI AF / 49 DWDI AF / 49	91.0% 91.7% 91.7% 92.4%	20.3 25.0 29.5 35.5	150.5 175.0 189.0 230.0	254T 256T 284T 286T	112 112 112 112	500 500 500 500
E/D/U496400	64,000	20	577	25	593	25	608			30	623	30	638		653	DWDI AF / 49 DWDI AF / 49 DWDI AF / 49 DWDI AF / 49	91.7% 91.7% 92.4% 93.0%	25.0 29.5 35.5 47.8	175.0 189.0 230.0 315.0	256T 284T 286T 324T	128 128 128 128	500 500 500 500
E/D/U497200	72,000	30	638	30	653	40	667	40	681	40	694	40	708			DWDI AF / 49 DWDI AF / 49	92.4% 93.0%	35.5 47.8	230.0 315.0	286T 324T	144 144	500 500
E/D/U498000	80,000	40	699	40	713	40	727			50	740	50	752	50	764	DWDI AF / 49 DWDI AF / 49	93.0% 93.0%	47.8 60.0	315.0 355.0	324T 326T	160 160	500 500
E/D/U498800	88,000	50	761	50	775	50	787			60	800	60	811	60	823	DWDI AF / 49 DWDI AF / 49	93.0% 93.6%	60.0 71.0	355.0 525.0	326T 364T	176 176	500 500

Please specify the fan discharge location when ordering these units:

**E=End Discharge
D=Down Discharge
U=Up Discharge**

Standard Evaporative Cooler Pump Data				
Model	Volts	HP	Amp	GPH @ 10'
A	115	1/6	5	1,000
B	115	3/10	5	2,560

Alternative Evaporative Cooler Pump Data				
Model	Volts	HP	Amp	GPH @ 10'
A	230	1/6	2.5	1,000
B	230	3/10	5	1,750



MODEL	PUMPS		FILTER *		DOUBLE INLET / SINGLE FAN EVAPORATIVE COOLER DIMENSIONS - See Drawing									WEIGHTS	
	E=End D=Down U=Up Discharge	Model Qty	Area Ft2	Velocity FPM	WIDTH "	HEIGHT "	LENGTH "	A "	B "	C "	D "	E "	F "	Ship lb	Operate lb
E/D/U363000	A	2	60	500	90	93	171	6	22.81	42.75	42.94	64.13	30.81	4,400	5,000
	A	2	60	500	90	93	171	6	22.81	42.75	42.94	64.13	30.81	4,500	5,100
	A	2	60	500	90	93	171	6	22.81	42.75	42.94	64.13	30.81	4,500	5,100
E/D/U363200	A	2	72	444	90	93	171	6	22.81	42.75	42.94	64.13	30.81	4,500	5,200
	A	2	72	444	90	93	171	6	22.81	42.75	42.94	64.13	30.81	4,500	5,200
E/D/U363600	A	2	72	500	96	93	171	6	22.81	42.75	42.94	64.13	30.81	4,500	5,200
	A	2	72	500	96	93	171	6	22.81	42.75	42.94	64.13	30.81	4,500	5,200
	A	2	72	500	96	93	171	6	22.81	42.75	42.94	64.13	30.81	4,800	5,500
E/D/U363900	A	2	84	464	96	99	171	6	22.81	42.75	42.94	64.13	30.81	4,700	5,300
	A	2	84	464	96	99	171	6	22.81	42.75	42.94	64.13	30.81	4,900	5,500
	A	2	84	464	96	99	171	6	22.81	42.75	42.94	64.13	30.81	5,000	5,700
E/D/U444200	B	2	84	500	114	105	196	6	41.25	60.00	49.63	68.00	50.00	7,100	8,000
	B	2	84	500	114	105	196	6	41.25	60.00	49.63	68.00	50.00	7,300	8,200
	B	2	84	500	114	105	196	6	41.25	60.00	49.63	68.00	50.00	7,300	8,200
E/D/U444550	B	2	96	474	120	105	196	6	41.25	60.00	49.63	68.00	50.00	7,300	8,200
	B	2	96	474	120	105	196	6	41.25	60.00	49.63	68.00	50.00	7,300	8,200
	B	2	96	474	120	105	196	6	41.25	60.00	49.63	68.00	50.00	7,500	8,400
E/D/U444900	B	2	96	510	120	105	196	6	41.25	60.00	49.63	68.00	50.00	7,400	8,300
	B	2	96	510	120	105	196	6	41.25	60.00	49.63	68.00	50.00	7,400	8,300
	B	2	96	510	120	105	196	6	41.25	60.00	49.63	68.00	50.00	7,600	8,500
E/D/U495600	B	2	112	500	132	117	208	6	44.88	66.13	54.63	70.94	53.88	8,800	9,800
	B	2	112	500	132	117	208	6	44.88	66.13	54.63	70.94	53.88	8,800	9,800
	B	2	112	500	132	117	208	6	44.88	66.13	54.63	70.94	53.88	9,000	10,000
	B	2	112	500	132	117	208	6	44.88	66.13	54.63	70.94	53.88	9,100	10,100
E/D/U496400	B	2	128	500	132	117	208	6	44.88	66.13	54.63	70.94	53.88	8,900	9,900
	B	2	128	500	132	117	208	6	44.88	66.13	54.63	70.94	53.88	9,100	10,100
	B	2	128	500	132	117	208	6	44.88	66.13	54.63	70.94	53.88	9,200	10,200
	B	2	128	500	132	117	208	6	44.88	66.13	54.63	70.94	53.88	9,300	10,300
E/D/U497200	B	2	144	500	132	117	208	6	44.88	66.13	54.63	70.94	53.88	9,300	10,300
	B	2	144	500	132	117	208	6	44.88	66.13	54.63	70.94	53.88	9,400	10,400
E/D/U498000	B	2	160	500	132	117	208	6	44.88	66.13	54.63	70.94	53.88	9,800	11,000
	B	2	160	500	132	117	208	6	44.88	66.13	54.63	70.94	53.88	9,900	11,100
E/D/U498800	B	2	176	500	144	117	208	6	44.88	66.13	54.63	70.94	53.88	10,300	11,600
	B	2	176	500	144	117	208	6	44.88	66.13	54.63	70.94	53.88	10,600	11,900

Data is based on the maximum output of each unit size. Intermediate volumes will be achieved by reducing the fan speed.

* The filter is an option. When adding filters, add the filter pressure drop to the unit ESP and use that total to select the motor HP.

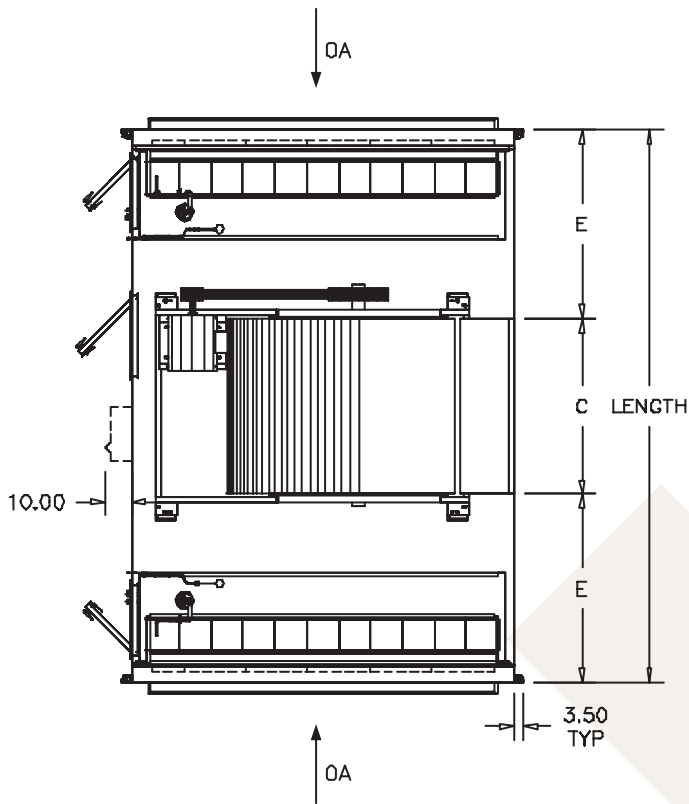
All these units can operate at higher static pressures with fan or motor changes. Please contact the factory with your requirements.

Data shown is based at sea level. HP and performance may be effected at high altitudes.

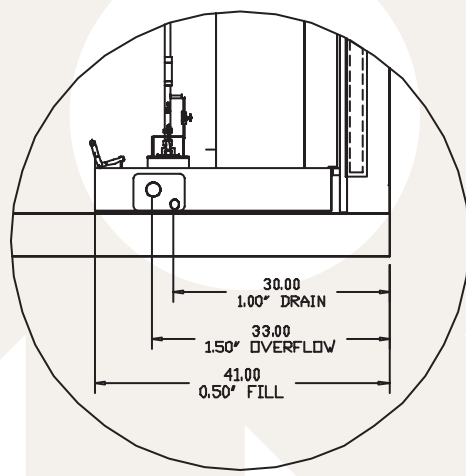
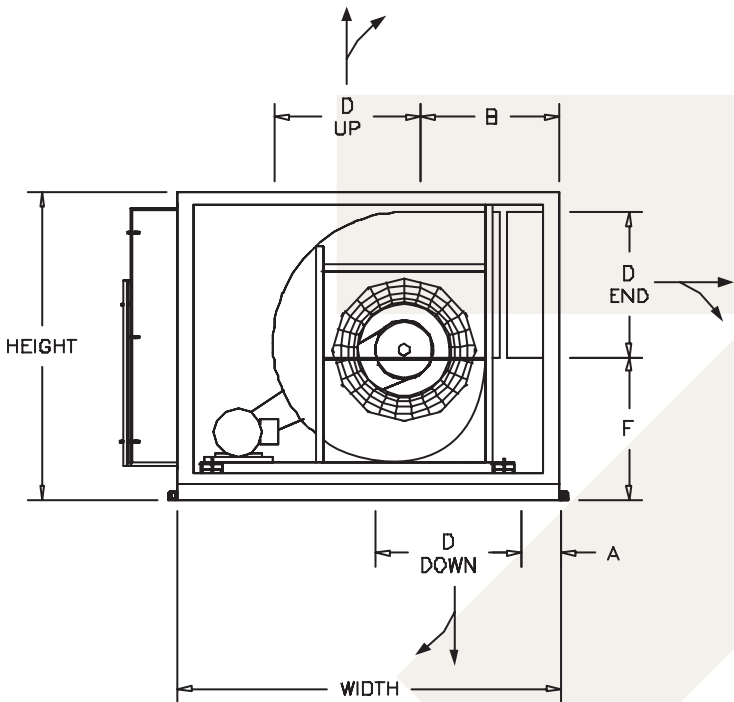
Unit height shown above does not include the standing roof seam. All these units are over 72" wide and therefore have a 3" high standing roof seam.

We recommend a minimum incoming water line pressure of 50 psi. Under no circumstances should the incoming water line pressure exceed 125psi.

Due to continued product development, all data is subject to change without notice. Full details will be provided with submittals.



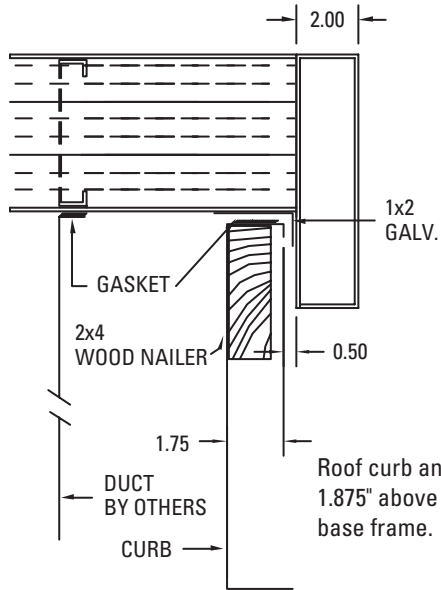
OUTSIDE CURB DIMENSIONS
 Deduct 5.0" from the O.D. of the baseframe to obtain the O.D. of the roof curb. Please check submittal drawings to verify exact O.D. of the baseframe before the roof curb is built.



COPPER PLUMBING LOCATION DETAIL



Roof Curb Detail

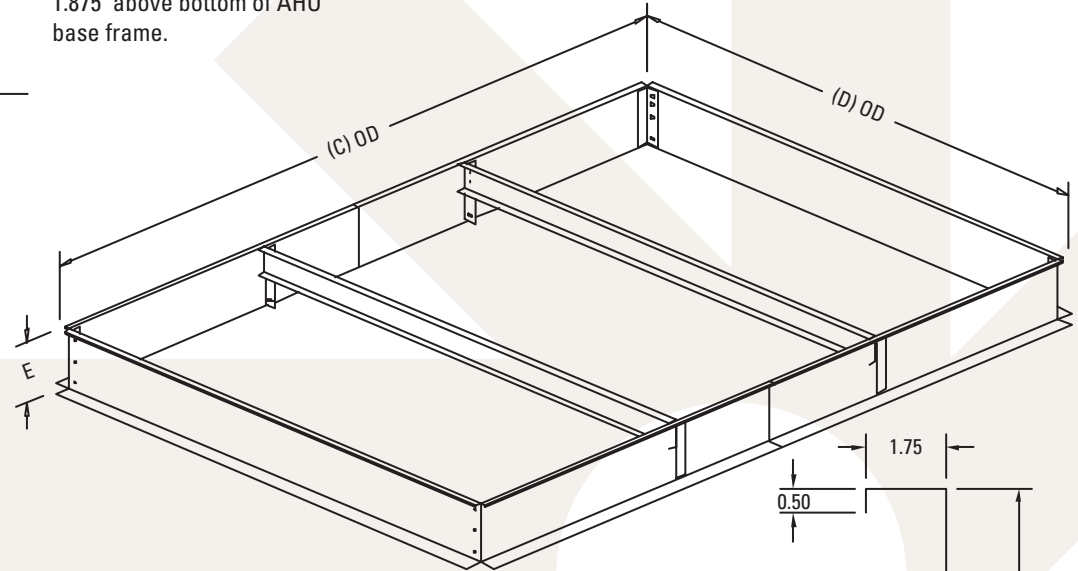


Roof curb and duct extend 1.875" above bottom of AHU base frame.

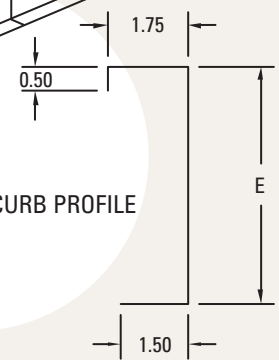
CURB DIMENSIONS

TAG	C"	D"	E	GAUGE

$CURB\ OD\ (C\ \&\ D) = UNIT\ OD - 5.00"$



CURB PROFILE



14GA G-90 Galvanized steel is standard. 12GA G-90 available when specified.

Knock down curbs are optional built up curbs are standard and shipped from the factory fully assembled.

Contact factory for pitched curb requirements.