

- *Single Inlet*

Single Inlet/Single Fan—Industrial Class Evaporative Cooling Equipment with Capacities of 6,000 CFM to 29,250 CFM and up to 1.5" ESP or higher if required

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

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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 VOLUME Discharge CFM	External Static Pressure ("WG) (Not including Filter Pd*)												FAN Model / Size	MOTOR (460v/3ph/60Hz)			EVAPORATIVE MEDIA		PUMP				
	0.25		0.50		0.75		1.00		1.25		1.50			Efficiency	Amps FLA SA	NEMA	Area Ft2	Velocity FPM	Model	Qty			
	HP	RPM	HP	RPM	HP	RPM	HP	RPM	HP	RPM	HP	RPM											
E/D/U18600 6,000	2	524											DWDI FC / 18	84.0%	2.8	21.0	145T	12	500	A	1		
			3	590	3	651	3	707			5	760	5	810	DWDI FC / 18	86.5%	4.0	32.3	182T	12	500	A	1
															DWDI FC / 18	87.5%	6.6	45.5	184T	12	500	A	1
E/D/U18750 7,500	3	553											DWDI FC / 18	86.5%	4.0	32.3	182T	16	470	A	1		
			5	613	5	669	5	721	5	771	5	819	DWDI FC / 18	87.5%	6.6	45.5	184T	16	470	A	1		
E/D/U18800 8,000	5	575	5	632	5	686	5	737					DWDI FC / 18	87.5%	6.6	45.5	184T	16	500	A	1		
									7.5	786	7.5	832	DWDI FC / 18	89.5%	10.8	74.2	213T	16	500	A	1		
E/D/U201000 10,000	5	495	5	540	5	582	5	737	5	622			DWDI FC / 20	87.5%	6.6	45.5	184T	20	500	A	1		
											7.5	662	DWDI FC / 20	89.5%	10.8	74.2	213T	20	500	A	1		
E/D/U201250 12,500	7.5	559	7.5	598	7.5	635							DWDI FC / 20	89.5%	10.8	74.2	213T	25	500	A	1		
							10	670	10	704	10	737	DWDI FC / 20	89.5%	14.0	90.0	215T	25	500	A	1		
E/D/U251500 15,000	5	367											DWDI FC / 25	87.5%	6.6	45.5	184T	30	500	A	1		
			7.5	406	7.5	443	7.5	478					DWDI FC / 25	89.5%	10.8	74.2	213T	30	500	A	1		
									10	512	10	545	DWDI FC / 25	89.5%	14.0	90.0	215T	30	500	A	1		
E/D/U251650 16,500	7.5	377	7.5	415	7.5	450							DWDI FC / 25	89.5%	10.8	74.2	213T	36	460	A	1		
							10	483	10	515	10	546	DWDI FC / 25	89.5%	14.0	90.0	215T	36	460	A	1		
E/D/U251800 18,000	7.5	398	7.5	433									DWDI FC / 25	89.5%	10.8	74.2	213T	36	500	A	1		
					10	467	10	498					DWDI FC / 25	89.5%	14.0	90.0	215T	36	500	A	1		
									15	529	15	558	DWDI FC / 25	91.0%	20.3	150.5	254T	36	500	A	1		
E/D/U251950 19,500	10	414	10	448	10	480							DWDI FC / 25	89.5%	14.0	90.0	215T	39	500	A	1		
							15	511	15	540	15	568	DWDI FC / 25	91.0%	20.3	150.5	254T	39	500	A	1		
E/D/U302100 21,000	7.5	297	7.5	330									DWDI FC / 30	88.5%	11.1	59.5	254T	42	500	A	1		
					10	361	10	391					DWDI FC / 30	89.5%	14.0	90.0	215T	42	500	A	1		
									15	420	15	448	DWDI FC / 30	91.0%	20.3	150.5	254T	42	500	A	1		
E/D/U302275 22,750	7.5	306											DWDI FC / 30	88.5%	11.1	59.5	254T	45.5	500	A	1		
			10	338	10	368							DWDI FC / 30	89.5%	14.0	90.0	215T	45.5	500	A	1		
							15	396	15	424	15	450	DWDI FC / 30	91.0%	20.3	150.5	254T	45.5	500	A	1		
E/D/U302600 26,000	10	325											DWDI FC / 30	90.2%	14.3	87.0	256T	52	500	B	1		
			15	355	15	382	15	408	15	434			DWDI FC / 30	91.0%	20.3	150.5	254T	52	500	B	1		
											20	458	DWDI FC / 30	91.7%	25.0	175.0	256T	52	500	B	1		
E/D/U302925 29,250	15	346	15	373	15	399							DWDI FC / 30	91.0%	20.3	150.5	254T	58.5	500	B	1		
							20	424	20	447	20	470	DWDI FC / 30	91.7%	25.0	175.0	256T	58.5	500	B	1		

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	FILTER *		SINGLE INLET / SINGLE FAN EVAPORATIVE COOLER DIMENSIONS - See Drawing										WEIGHTS	
	Area Ft2	Velocity FPM	WIDTH "	HEIGHT "	LENGTH "	A "	B "	C "	D "	E1 "	E2 "	F "	Ship lb	Operate lb
E/D/U18600	12	500	60	57	89	6	16.56	21.88	18.88	24.00	14.13	25.56	1,700	2,100
	12	500	60	57	89	6	16.56	21.88	18.88	24.00	14.13	25.56	1,750	2,150
	12	500	60	57	89	6	16.56	21.88	18.88	24.00	14.13	25.56	1,800	2,200
E/D/U18750	16	470	60	69	89	6	16.56	21.88	18.88	24.00	14.13	25.56	1,800	2,200
	16	470	60	69	89	6	16.56	21.88	18.88	24.00	14.13	25.56	1,850	2,250
E/D/U18800	16	500	60	69	89	6	16.56	21.88	18.88	24.00	14.13	25.56	1,850	2,250
	16	500	60	69	89	6	16.56	21.88	18.88	24.00	14.13	25.56	1,900	2,300
E/D/U201000	20	500	72	69	97	6	17.25	24.75	24.75	25.25	22.00	27.25	1,950	2,450
	20	500	72	69	97	6	17.25	24.75	24.75	25.25	22.00	27.25	2,000	2,500
E/D/U201250	24	520	72	81	97	6	17.25	24.75	24.75	25.25	22.00	27.25	2,050	2,600
	24	520	72	81	97	6	17.25	24.75	24.75	25.25	22.00	27.25	2,100	2,650
E/D/U251500	30	500	84	81	108	6	19.50	31.25	31.25	29.63	23.13	29.50	2,300	2,900
	30	500	84	81	108	6	19.50	31.25	31.25	29.63	23.13	29.50	2,350	2,950
	30	500	84	81	108	6	19.50	31.25	31.25	29.63	23.13	29.50	2,400	3,000
E/D/U251650	36	460	84	93	108	6	19.50	31.25	31.25	29.63	23.13	29.50	2,500	3,200
	36	460	84	93	108	6	19.50	31.25	31.25	29.63	23.13	29.50	2,550	3,250
E/D/U251800	36	500	84	93	108	6	19.50	31.25	31.25	29.63	23.13	29.50	2,500	3,200
	36	500	84	93	108	6	19.50	31.25	31.25	29.63	23.13	29.50	2,550	3,250
	36	500	84	93	108	6	19.50	31.25	31.25	29.63	23.13	29.50	2,700	3,400
E/D/U251950	42	460	84	99	108	6	19.50	31.25	31.25	29.63	23.13	29.50	2,600	3,250
	42	460	84	99	108	6	19.50	31.25	31.25	29.63	23.13	29.50	2,750	3,400
E/D/U302100	42	500	96	93	117	6	22.75	36.75	36.75	29.63	29.63	32.75	2,950	3,750
	42	500	96	93	117	6	22.75	36.75	36.75	29.63	29.63	32.75	3,000	3,800
	42	500	96	93	117	6	22.75	36.75	36.75	29.63	29.63	32.75	3,150	3,950
E/D/U302275	48	475	96	99	117	6	22.75	36.75	36.75	29.63	29.63	32.75	3,000	3,800
	48	475	96	99	117	6	22.75	36.75	36.75	29.63	29.63	32.75	3,050	3,850
	48	475	96	99	117	6	22.75	36.75	36.75	29.63	29.63	32.75	3,200	4,000
E/D/U302600	56	460	108	99	117	6	22.75	36.75	36.75	35.63	35.63	32.75	3,200	4,100
	56	460	108	99	117	6	22.75	36.75	36.75	35.63	35.63	32.75	3,350	4,250
	56	460	108	99	117	6	22.75	36.75	36.75	35.63	35.63	32.75	3,350	4,250
E/D/U302925	62	470	120	99	117	6	22.75	36.75	36.75	41.63	41.63	32.75	3,550	4,550
	62	470	120	99	117	6	22.75	36.75	36.75	41.63	41.63	32.75	3,550	4,550

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.

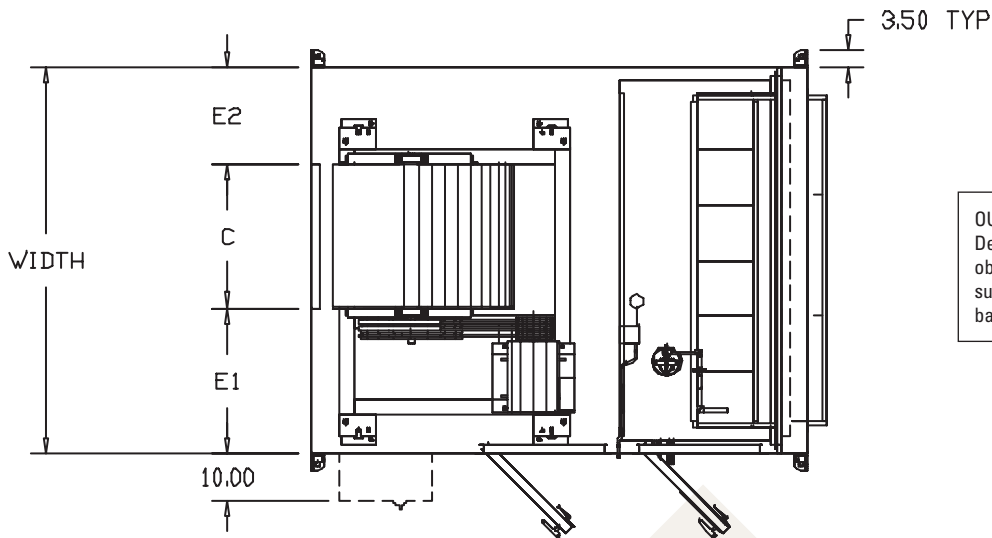
Data shown is based at sea level. HP and performance may be effected at high altitudes.

Unit height shown above does not include the standing roof seam. Add 2" for units <= 72" wide. Add 3" for units >72" wide.

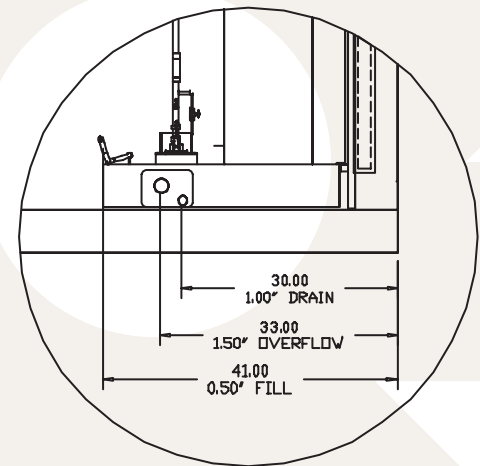
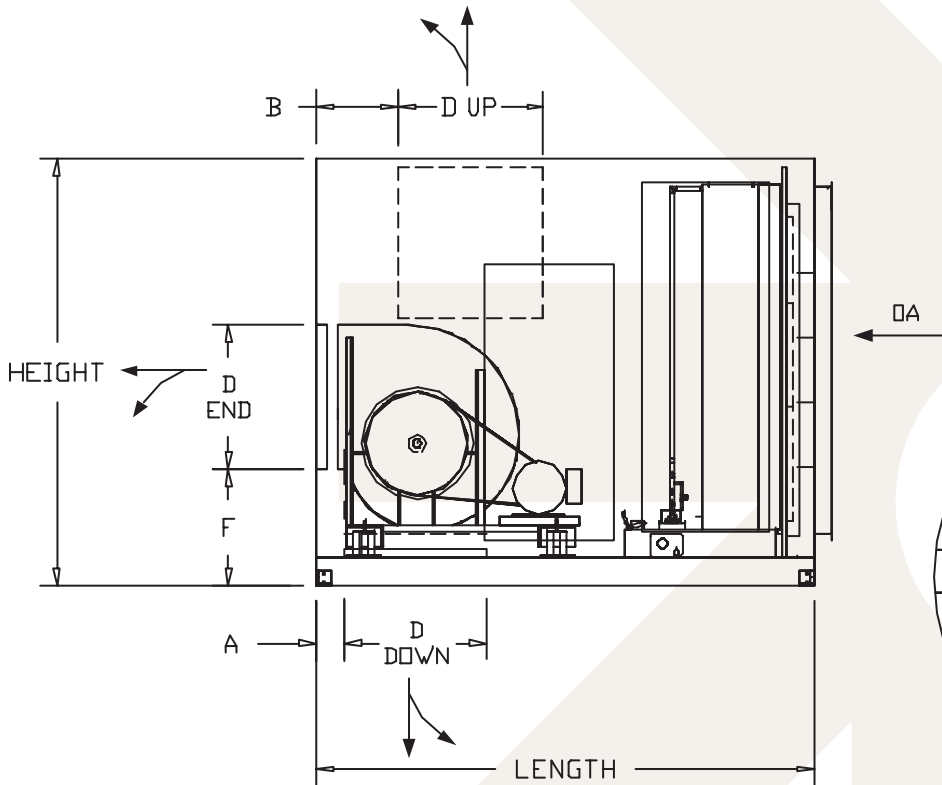
Standard Evaporative Media access panels require (2) persons to lift on units over 72" high. Consider upgrading to hinged access doors on tall units.

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.



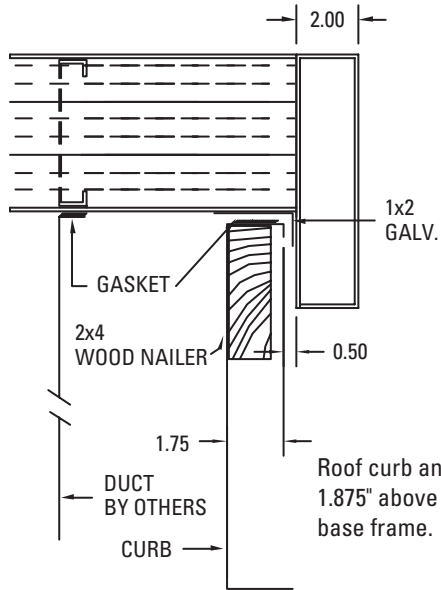
OUTSIDE CURB DIMENSIONS
 Deduct 5.0" from the O.D. of the baseframe to obtain the O.D. of the roof curb. Please check submittal drawings to verify exact O.D. of the baseframe before the roof curb is built.



COPPER PLUMBING LOCATION DETAIL



Roof Curb Detail

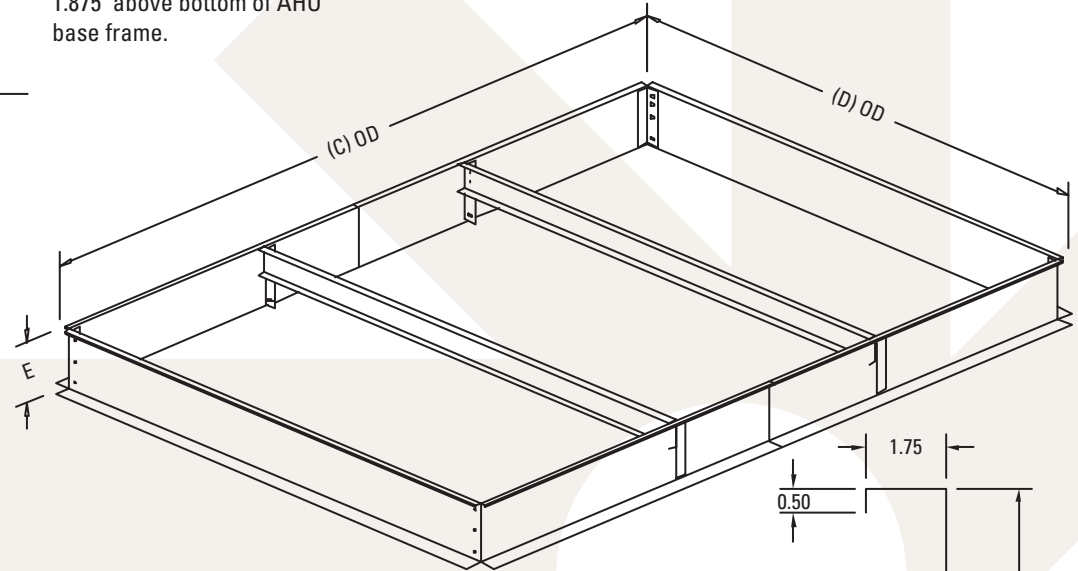


Roof curb and duct extend 1.875" above bottom of AHU base frame.

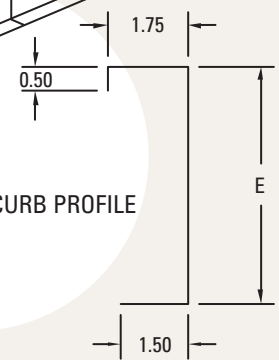
CURB DIMENSIONS

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.