

PREMIER INDUSTRIES, INC.

STANDARD COMMERCIAL EVAPORATIVE COOLER SIZES AND SPECIFICATIONS



(Media and Blower compartment access panels removed to show more internal detail)

Premier manufactures Commercial Evaporative Coolers from 2000 CFM to 16,000 CFM. This line of coolers is a more economical cooling solution for commercial applications. Manufactured from 304 stainless steel housing, 12" rigid cooling media and heavy duty components.

When selecting a cooler, the major considerations are, air volume, expressed as **Cubic Feet per Minute (CFM)**, **External Static Pressure (ESP)**, air velocity, measured in **Feet Per Minute (FPM)**, cooling media thickness (to determine expected cooling efficiency) and expected overall performance of the cooler. Housing material is very important. Stainless Steel, grade 304 or equal will provide lifetime use while Galvanized, Painted or Coated Steel will rust through in a few years. The somewhat higher initial purchase cost is more than offset by reduced maintenance, vastly greater service life and greater efficiency. Other considerations are which accessories would improve the performance, reduce maintenance or extend useful life. As an example, Premier Industries designs the water distribution system so as to actually increase the useful life of the cooling media. Considerations for type of blower, special accessories, size constraints, application restrictions also enter into the selection of an Evaporative Cooler.

All Premier Industries Standard Commercial Evaporative Coolers include the following features:

Housing: The standard housing, including wet and dry sections, is constructed from Stainless Steel, grade 304. Metal gauge (thickness) varies according to unit size, generally being 18 gauge. Housing construction meets SMACNA standards.

Blower: The blower is centrifugal type forward curve, double width, double intake, mounted in arrangement 3 configuration.

Motor: The motor is open face, drip proof (or totally enclosed, fan cooled when specified) mounted on an adjustable mount. Motor drive is variable to provide for adjustment of blower speed to fine tune air volume delivered. Motors have thermal overload protection. Electrical supply is tri-voltage 208-230/460/3/60 unless otherwise specified.

Evaporative Cooling Module: The "wet section" contains Glacier-COR, or equal, Rigid Media, 12" thick unless otherwise specified. Standard plumbing includes a float valve and recirculating pump as well as distribution piping. All metal used in the wet section is Stainless Steel, grade 304.

Configuration: All Premier Commercial Evaporative Coolers are standard side-draft configuration. Optional updraft or downdraft configurations are available. Blower and media access panels, plumbing connections and optional electrical control panels can be on either side of the unit. Model 160 has side media access panel; other models have lift off top cover for media access.

The CFM range listed for our coolers reflects actual air delivery, not inflated "industry standard ratings" as are used by many evaporative cooler manufacturers.

Model	CFM Range	Blower Motor HP Range	Blower Size (inches)	Pump HP	Dry Weight (lbs)	Operating Weight (lbs)
PCEC-40	2000 - 4500	0.5 - 3	15	1/60	375	420
PCEC-60	4500 - 6500	1 - 5	18	1/60	520	575
PCEC-80	6500 - 9500	1.5 - 7.5	20	1/40	770	975
PCEC-120	9500 - 12500	2 - 10	22	1/40	920	1175
PCEC-160	12500 - 16000	3 - 10	25	1/40	1145	1480

OVERALL DIMENSIONS:

CFM Range	Overall dimensions (inches)		
	Width	Height	Depth
2000 - 4500	42	36	50
4500 - 6500	52	44	54
6500 - 9500	52	53	60
9500 - 12500	62	60	64
12500 - 16000	68	67	72

Note: Standard sizes and all pertinent data are subject to change without notice.

Note: Add 6" to height for downdraft models. Contact Factory for specific detail and cost.

Note: Undercarriage frame required for down-draft configuration.

Don't see what you need? Premier Standard Size units are designed to fill the majority of applications. We also specialize in custom designed units to meet virtually any need. Coolers can be manufactured to match the size of your existing equipment for most applications where a direct replacement is desired to fit existing roof curbs, ductwork, etc.

It is easy to incorporate a wide range of accessories into our Industrial Coolers depending on your exact needs:

- . • Face Louvers
- . • Weather Hoods
- . • Birdscreen
- . • Electrical Controls
- . • Automated Flush / Drain systems
- . • Total Dissolved Solid (TDS) sensors
- . • Interior Lights
- . • Intake Air Filters
- . • Freeze Protection Systems
- . • Magnehelic Differential Pressure Gauges

Premier Industries has the ability to custom design and manufacture almost any type of evaporative cooling or air handling equipment. Call us with your requirements; our design specialists will be happy to recommend the proper equipment for your application.

Premier Industries, Inc.

11050 N. 22nd Ave. Phoenix, AZ 85029 602-997-8754 • 800-254-8989 • Fax 602-997-5998
www.piec.com • premier@piec.com