



**CHILLKING®**  
Chiller Systems

## COOLING SYSTEM SIZING CHART

**HOW TO USE THE SIZING CHART:** Fill in the blanks on the left, multiply by the BTU's indicated, and then add them up for a total heat load. On the reverse side, you will find cooling system packages to match various BTU loads.

For More Information, Please Visit Our Site: [www.hydroinnovations.com](http://www.hydroinnovations.com)

How many 1000 watt HID bulbs inside the garden?  X 4,000 BTU =  BTU

How many 1000 watt magnetic ballasts inside the garden?  X 3,500 BTU =  BTU

How many 1000 watt digital ballasts inside the garden?  X 2,500 BTU =  BTU

How many 600 watt HID bulbs inside the garden?  X 2,400 BTU =  BTU

How many 600 watt magnetic ballasts are inside the garden?  X 2,100 BTU =  BTU

How many 600 watt digital ballasts are inside the garden?  X 1,500 BTU =  BTU

If using a CO2 generator, enter room cu. ft. (L x W x H)  X 2.4 BTU =  BTU

**Dehumidification:** Air handlers offer dehumidification but additional dehumidification may be necessary. For extremely high humidity, excessive venting, or when only using Ice Boxes for cooling (Ice Boxes are not intended to dehumidify), a dehumidifier should be considered.

If using a dehumidifier, how many pints per day is it rated for?  X 30 BTU =  BTU

BTU's required for room with no equipment running (See chart on right)  BTU

**SCROLL DOWN** for recommended water-cooled system sizing.

**GRAND TOTAL =**  BTU

### Suggested Cooling BTU's Before Adding Equipment

ROOM DIMENSIONS (SQUARE FEET)	RECOMMENDED A/C BTU
5'x5' (25 sq. ft.)	2,500
5'x10' (50 sq. ft.)	3,100
10'x10' (100 sq. ft.)	4,200
10'x15' (150 sq. ft.)	5,300
10'x20' (200 sq. ft.)	6,500
10'x25' (250 sq. ft.)	7,500
15'x20' (300 sq. ft.)	8,700
15'x25' (375 sq. ft.)	10,400
20'x20' (400 sq. ft.)	11,000
20'x25' (500 sq. ft.)	13,100
20'x30' (600 sq. ft.)	15,400
30'x30' (900 sq. ft.)	22,000

**ASSUMPTIONS FOR THIS CHART ARE AS FOLLOWS:**

- 8' ceilings.
- Sealed environment.
- Adequate insulation at least 3 ½" thick.
- Highest ambient temperature of 100 degrees.
- The condensers are outdoors with proper clearance to allow adequate air flow.
- Generator is using no more than .003 cubic feet per cubic foot of room space (i.e. 2.5 cubic feet per hour of CO2 for 10'x10'x8' room).

Factors like high ceilings, poor insulation, constant venting, incorrect condenser placement, higher than 100 degree ambient outdoor temperature, or running dehumidifiers will in some cases drastically change the cooling BTU needs. For more specific sizing for Hydro Innovations and ChillKing equipment please call the office at 512-321-7575.

