Chamber Installation Guide

Required Utilities

All models will require electrical power and to be placed in an area that is able to handle the load of the chamber or shaker. Depending on the chamber, it may require compressed air, cooling water for the condenser, and purified water for the humidity system. Your Thermotron Application Engineer will be happy to assist you with the specific requirements.

Heat Load

Be sure the new location is able to handle the heat dissipation from the chambers. If the chamber is air-cooled it will dissipate between 12,000 and 15,000 BTUs per hour multiplied by the high stage compressor horsepower into the room. Example: an air-cooled SE-300 -3-3 will dissipate approximately 36,000 BTUs per hour into the room. If the same chamber was water-cooled it will dissipate 200 BTUs per hour multiplied by the total horsepower into the room, or 1,200 BTUs.

Service Access

Allow 30-inches of space on all sides of chambers and associated equipment for servicing.

Chamber Placement

Air cooled chambers require a high volume of air flow and should be placed no closer than 3 inches from a wall or other obstructions. It is also very important that chambers are not placed in a manner in which the warm air exiting the condenser is drawn into the chamber. This will cause high refrigeration system pressures and test profile shut downs.

Remote Refrigeration or Remote Air-Cooled Condenser

If the chamber has a remote refrigeration section or remote air-cooled condenser, determine where these components will be located. Is there unobstructed space for interconnect routing? Routing of refrigeration and electrical interconnect above drop ceilings and through an obstructed area increases installation costs and decreases efficiency. Try to locate the equipment in an area with open access for interconnecting the components.

Panel Walk-In Chambers

Floor quality is very important when installing a panel Walk-In Chamber. The floor must be level to a standard of 1/8” per 10 feet or better in any direction. If the floor the chamber is to be built on has high and low points it will not properly support the chamber structure. It also makes it very difficult to assemble to structure squarely. This creates problems with the structure remaining sealed properly and will reduce the life of the panels.

THERMOTRON®
291 Kollen Park Drive • Holland, Michigan 49423
(616) 393-4580 • info@thermotron.com
www.thermotron.com