

EMERGENCY SHUT DOWN OF REFRIGERATION EQUIPMENT

ISSUE:

ANSI/ASHRAE emergency shut down requirements for refrigeration equipment in case of equipment breakdown or refrigerant leak.

DISCUSSION:

ASHRAE standard 15-1994, Safety Code for Mechanical Refrigeration, requires:

1. *“Remote control of the mechanical equipment in the refrigerating machinery room shall be provided immediately outside the machinery room door solely for the purpose of shutting down the equipment in an emergency. Ventilation fans shall be on a separate electrical circuit and have a control switch located immediately outside the machinery room door.”*

2. *“It shall be the duty of the person in charge of the premises on which a refrigerating system containing more than 55 lb. (25 kg) of refrigerant is installed to provide a schematic drawing or panel giving directions for the operation of the system at a location that is convenient to the operators of the equipment. Emergency shut down procedures, including precautions to be observed in case of a breakdown or leak, shall be displayed on a conspicuous card located as near as possible to the refrigerant compressor. These precautions shall address:*
 - a. *Instructions for shutting down the system in case of emergency;*
 - b. *the name, address, and day and night telephone numbers for obtaining service; and*
 - c. *the names, addresses, and telephone numbers of all corporate, local, state, and federal agencies to be contacted as required in the event of a reportable incident;*

When a refrigerating machinery room is used, the emergency procedures shall be posted outside the room, immediately adjacent to each door.”

RECOMMENDATIONS:

1. All projects under design or construction employing refrigeration equipment should include above safety features.

2. Ensure emergency shut down is done through a monitoring device and appropriate control sequence and control circuits recommended by the refrigeration equipment manufacturer.

FOR ADDITIONAL INFORMATION:

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