

Peerless Unit Ventilation Company, Inc.

"PEERVENT" Heating and Ventilating Units—"PEERHEAT" Units

Bridgeport, Connecticut

Sales Representatives from Coast to Coast

Products

"PEERVENT" Heating and Ventilating Units, for schools, hospitals, libraries, churches, dormitories, club-rooms, theaters, banks, offices, auditoriums, and other buildings where many people congregate.

"PEERHEAT" Units, floor, wall and suspended types for industrial buildings, factories, garages and other spaces where large volumes of heated air are required.

Ratings and Engineering Data

Ratings and engineering data in accordance with *American Society of Heating and Ventilating Engineers* code, adopted January, 1930.

"PEERHEAT" Units have all been tested and rated according to the Standard Code for Testing and Rating Steam Unit Heaters of the *American Society of Heating and Ventilating Engineers and Industrial Unit Heater Association*, adopted January, 1930.



This edition of THE GUIDE went to press too early to include herein the ratings and engineering data in accordance with the above mentioned code, but complete information with full details, drawings, dimensions and engineering data may be obtained from the nearest sales office or from the Home Office at Bridgeport, Connecticut.

Features of the Improved "PEERVENT" Unit

The "PEERVENT" Unit of today has many important improvements, including the new "PEERFIN" radiator. This radiator consists of two large copper alloy tubes, each surrounded by a series of closely

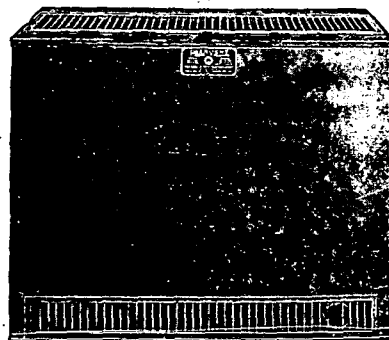
PEERVENT

spaced fins, also of copper alloy. The fins are embedded tightly in the tubes so that under any conditions of expansion and contraction the fins and tubes are in perfect contact and there can be no loss of efficiency in the transfer of heat from tube to fin. The tubes are expanded into malleable iron headers, in the same manner that boiler tubes are expanded into the tube sheets, and the radiator assembly does not contain a single soldered, welded, braised or gasketed joint. Test pressure, 150 lb.; operating pressure, 100 lb.

Another improvement in the new "PEERVENT" Unit is the noiseless alternating-current motor. This motor is of a design which has been developed after years of research and experimentation. It is mounted by means of a specially designed spring suspension, which precludes the possibility of noise caused by the transmission of phase vibrations.

This motor is equipped with an auto-transformer, an integral part of the motor, for providing speed regulation within limits obtainable with direct-current motors. This feature saves power, as less current is consumed at low speeds.

The new "PEERVENT" motor improvements are the final step in placing the unit system on a strictly unit basis. The motor-generator outfit is eliminated. The unit motors operate independently and there is



"PeerVent" Heating and Ventilating Unit

absolutely no expense for current except for the unit or units that are actually in service. A single room can be ventilated without the operation of any apparatus other than the "PEERVENT" Unit. There is also a considerable saving in the elimination of the first cost and operating cost of the motor-generator equipment.

Other improvements in the new "PEERVENT" Unit include a single-leaf inlet damper which takes the place of the former interconnected fresh air and recirculation dampers, eliminating mechanical linkage. There are no midway positions of this damper; either the full volume of fresh air enters the unit or there is a complete recirculation of the air in the room. This damper, as well as the mixing damper, has improved bearings. The mixing damper can be equipped with any type of automatic temperature control.

New fan housings have been designed, providing large discharge capacity at considerably lower tip speeds.

The mixing damper, radiator, motor and fan assembly, base assembly and air filter are all easily removable without the use of tools. The air filter, which is not included as part of the standard unit-equipment, can be of any make preferred and can be installed after the unit has been erected, without any changes in the unit. The filter rests upon supports below the motor and

fan assembly, sliding in and out of the unit like the drawer of a desk. With the filter in this position the air is cleaned before it reaches the fans, radiator, etc., and the dirt therefore does not reach these parts.

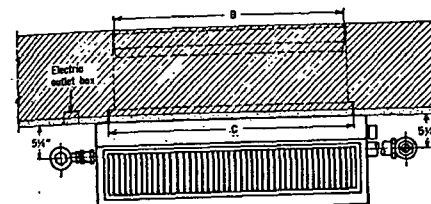
The new "PEERVENT" Unit can be equipped with a positive-action "PEERTHERM" Control, which automatically prevents the intake of cold air at any time when the room temperature falls below 65° (or any other predetermined temperature within a range of 15°).

Several types of "PEERVENT" Units have now been standardized, and one or another of them will meet practically any architectural requirement, including installations in existing buildings. Six different types of control have also been standardized, including automatic control throughout, hand control throughout, and various combinations of hand and automatic regulation.

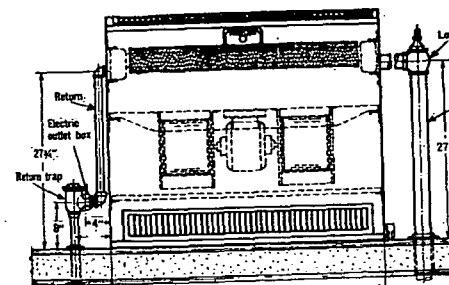
"PEERVENT" Drawings

The accompanying drawings show the standard "PEERVENT" heating and ventilating unit. The unit illustrated on this page is equipped for thermostatic control of the mixing damper for controlling the room temperature automatically, and with pneumatic control of the recirculation damper. Hand controls can be provided if preferred.

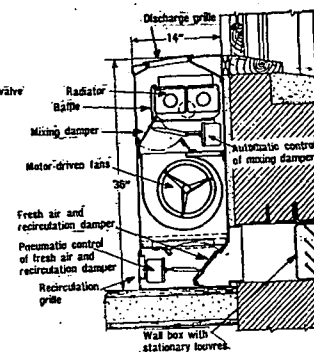
Adaptations of this unit can be furnished. Units can be provided for installation at the ceiling, also concealed and semi-concealed types, and other arrangements for special architectural requirements.



Plan View of Standard "PeerVent" Unit



Front Elevation of Standard "PeerVent" Unit



Cross-Section of Standard "PeerVent" Unit