

tightness of building construction, and the operation of exhaust fans or other devices which affect the static pressure in a building.

Because of the number of variables involved in establishing air requirements, and the variations in building construction and arrangement, there is no universally accepted rule for providing ventilating openings. However the importance of providing proper ventilation should not be underestimated, and a failure to do so may result in erratic or even dangerous operating conditions for equipment.

Rules for providing air supply openings are found in technical standards^{24, 25}, in state and municipal building codes, and in service and installa-

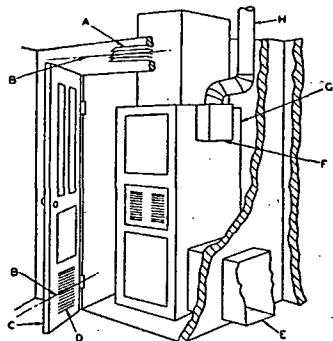


FIG. 7. ILLUSTRATION SHOWING AIR OPENINGS NECESSARY TO SUPPLY AIR FOR COMBUSTION WHEN APPLIANCE IS INSTALLED IN CONFINED SPACE

A. Ventilating air outlet register for furnace room, 1 sq in. free area for each 1000 Btu per hr furnace input located above relief opening of draft hood. Register must not be blocked by drapes or other furnishings.

B. Both registers must either face same large ventilated interior space or extend to such space by means of ducts. Vertical distance C/L to C/L of registers should be not less than 3½ ft.

C. Suggest room access door be not less than 6 ft high by a width sufficient to provide for installation or removal of furnace. At least 2 ft horizontal clearance should be provided in front of furnace when closet door is open, or 18 in. when door is closed.

D. Combustion and ventilation air inlet register for furnace room, 1 sq in. free area for each 1000 Btu per hr furnace input, located at or below combustion air inlet to furnace. Register must not be blocked by drapes or other furnishings.

E. Air circulated by furnace must be handled by ducts which are sealed to furnace casing and are entirely separate from means provided for supplying combustion and ventilation air.

F. Spacing between draft hood and wall at least 6 in. (unless approved for closer spacing). If flue products may be directed toward wall, 12 in. spacing recommended.

G. No part of furnace casing closer than 6 in. to wall (unless approved for closer spacing).

H. Flue should terminate above peak of roof and above nearby walls to assure satisfactory flue performance.

tion bulletins published by various manufacturers of fuel burning appliances. Table 11 is a compilation of reasonably consistent data taken from a number of these sources, and should be used only as an aid to independent judgment for any particular installation.

Ventilating air requirements are particularly critical for residential type appliances in closely confined rooms. Fig. 7 illustrates minimum requirements for this type of installation.

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