VENTILATION

Generator sets reject considerable heat during operation which must be removed by proper ventilation. Outdoor installations rely on natural air circulation, but enclosed installations need properly-sized, properly-positioned inlet and outlet vents for required airflow.

Ventilation systems are designed and based on the presence or absence of a fan and radiator. With a radiator, the engine-pusher fan is sized to provide adequate airflow to remove all heat rejected by the engine, generator, and a few feet (metre or so) of uninsulated exhaust pipe *(Heat Loss From Uninsulated Exhaust Pipe and Mufflers)*. Generator set radiator cooling system airflow, radiator area, and coolant capacity are listed *(Cooling System Capacity Radiator Area and Airflow)*. Restrictive ducting or heat sources other than the generator set requires the use of auxiliary fans to increase airflow.

Page 28 gives an index of all the tables.

With other cooling options, ventilation fans are required to provide adequate ventilation. Size the fans to remove all heat rejected in the room by the generator set, uninsulated exhaust pipes and other heat producing equipment. Maintaining a temperature differential of 20° to 30° F (11° to 17° C) is usually satisfactory.

VENTS AND DUCTS

Locate vents so cool, incoming air passes through the immediate area of the installation before exhausting. Install the air outlet higher than the air inlet to allow for convection air movement. See Figure 5.

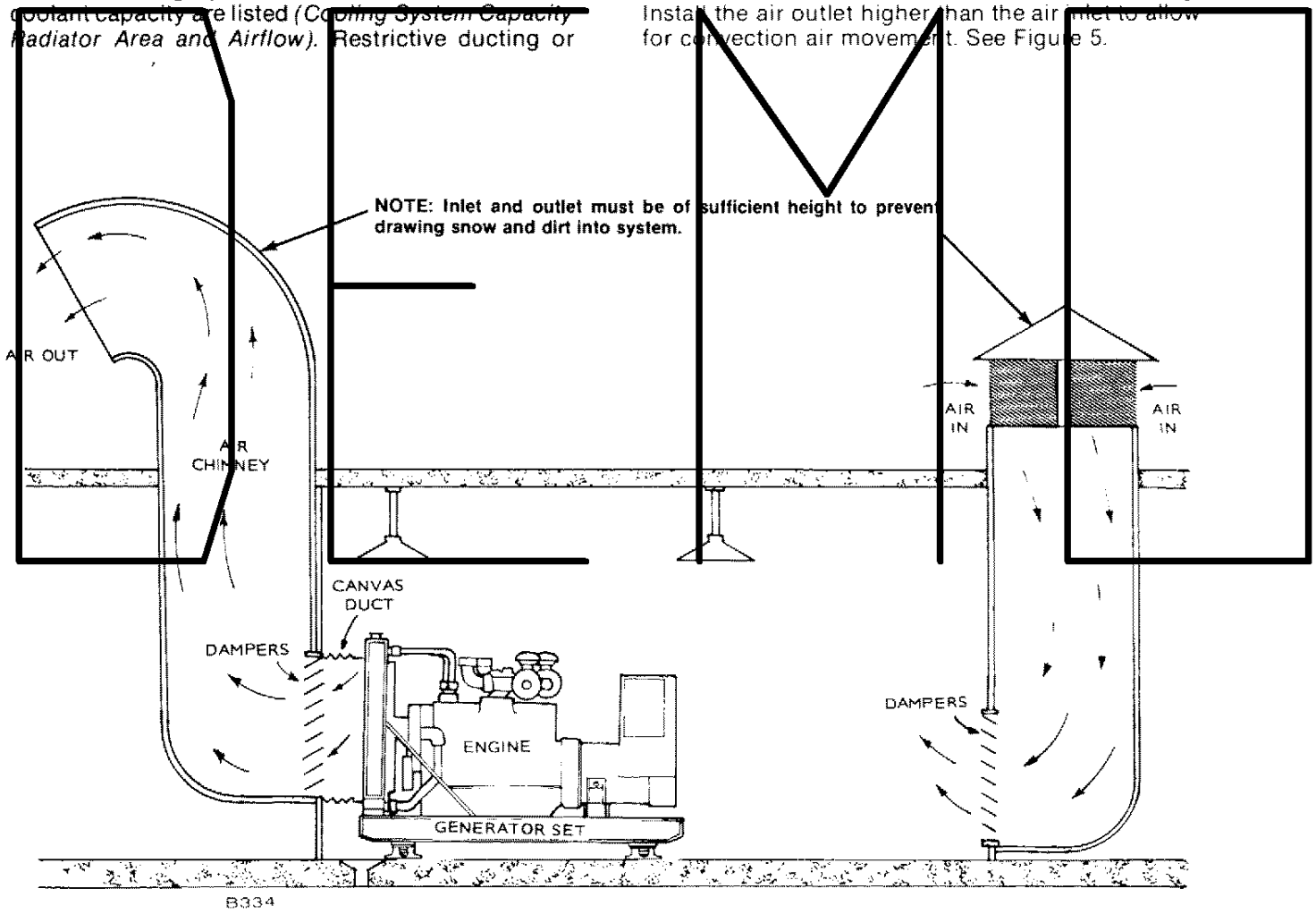

FIGURE 5. TYPICAL DUCT INSTALLATION WITH ROOFTOP AIR INLET AND OUTLET