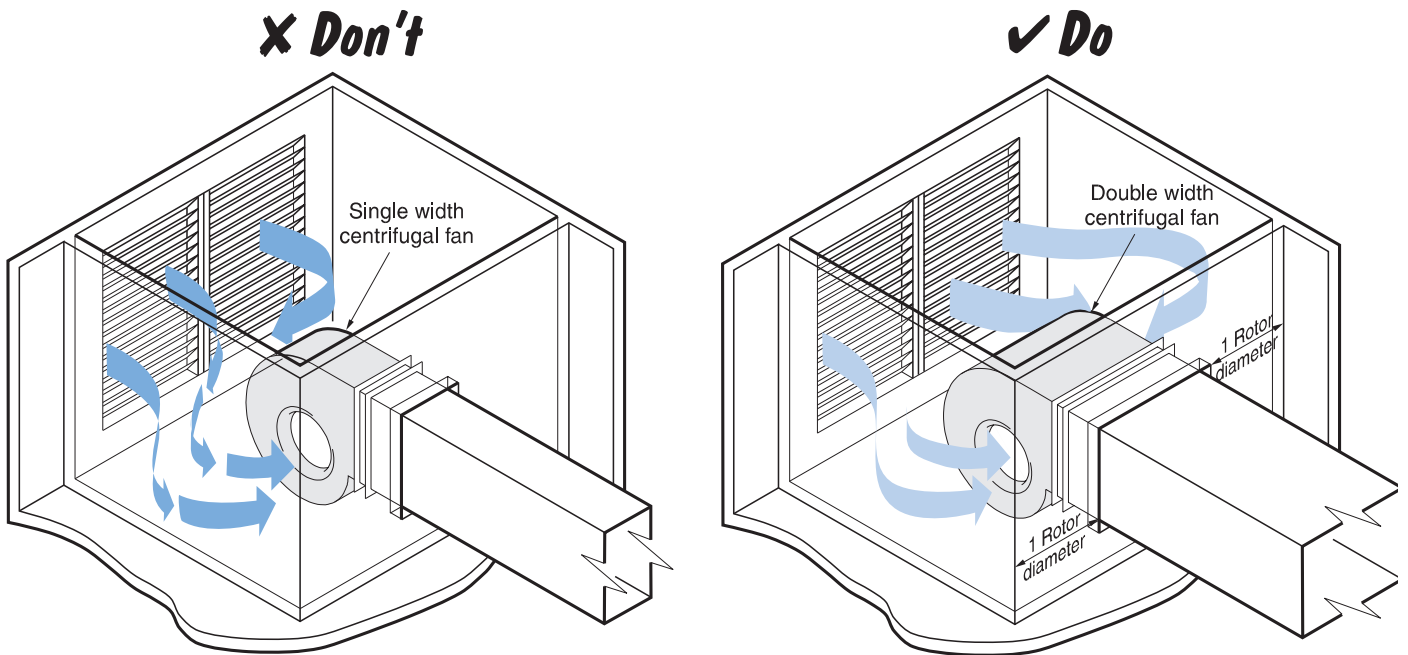


6.0 GENERAL (Cont.)

Figure 6.3. - Inlet plenums

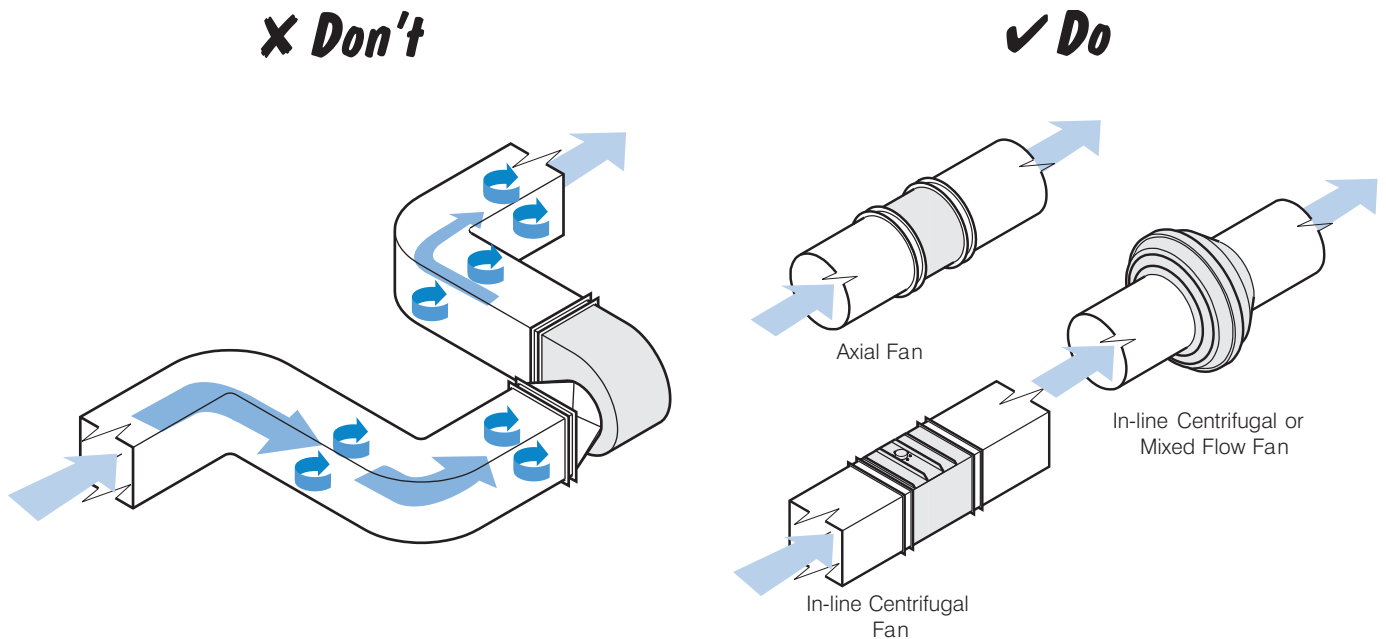
Ensure eccentric flow is not caused by inlet plenum.



With a single width fan the airflow takes a single turn to enter it; eccentric flow is created.

Selection of a double inlet fan improves airflow. Central positioning of the fan and plenum entry grille will also assist.

Figure 6.4. - The correct fan for the application



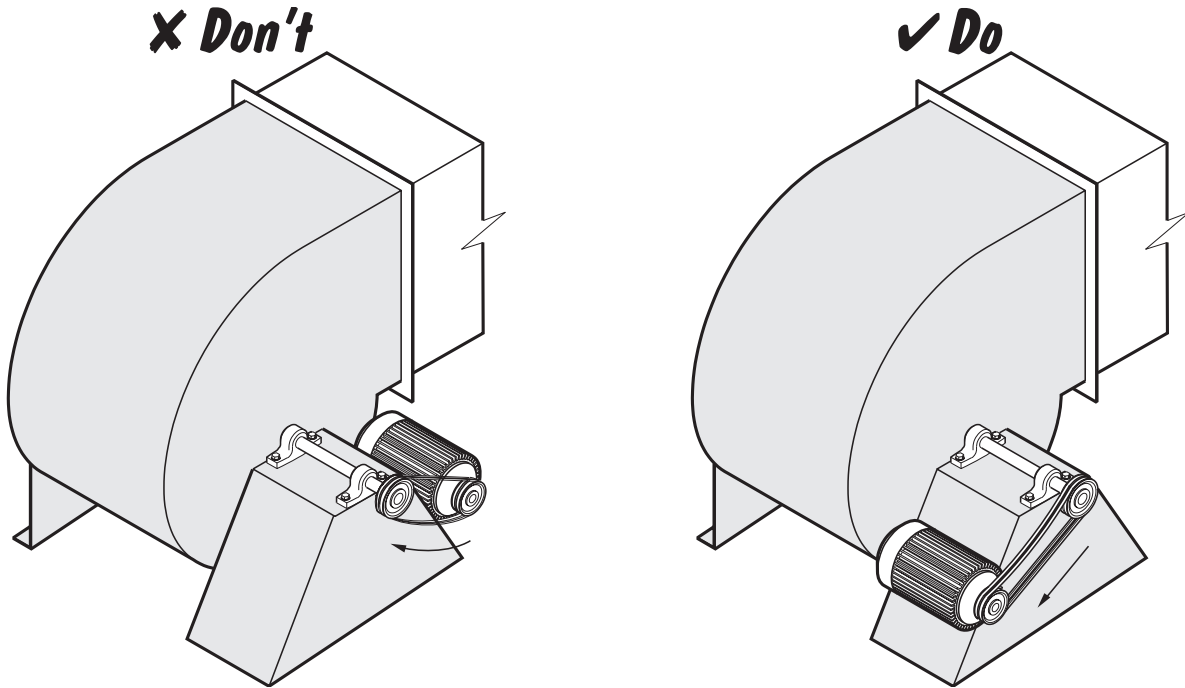
Don't use a centrifugal blower if space is at a premium and avoid unnecessary bends.

Do consider the space saving advantages of an in-line fan. It can be centrifugal, mixed flow or axial, the selection being governed by the fan duty and noise level required.

6.0 GENERAL (Cont.)

Figure 6.5. - Motor Position

Position the motor of a belt-driven fan such that the belt leaving the motor pulley is uppermost as this will increase belt arc of contact.



Belt leaving motor pulley is less taut than upper length and the slight sag will reduce arc of contact on the drive pulley.

Arrangement with the maximum arc of contact of the drive pulley where energy is applied, reduces belt squeal at start-up and improves efficiency.

Most important aspect is that the motor is accessible and to ensure belts are correctly tensioned and aligned.