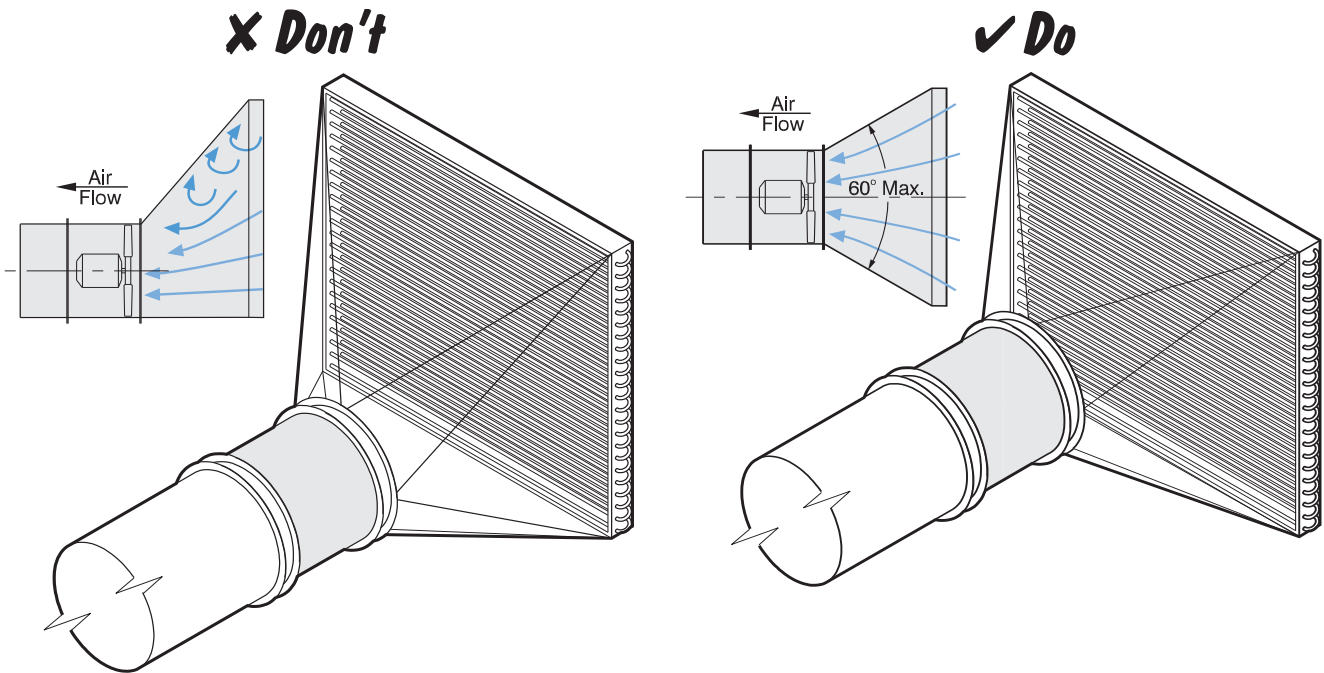


INSTALLATION DO'S AND DON'TS

6.0 GENERAL

Figure 6.1. - Transitions

Ensure symmetrical transitions from duct equipment to fan inlet.

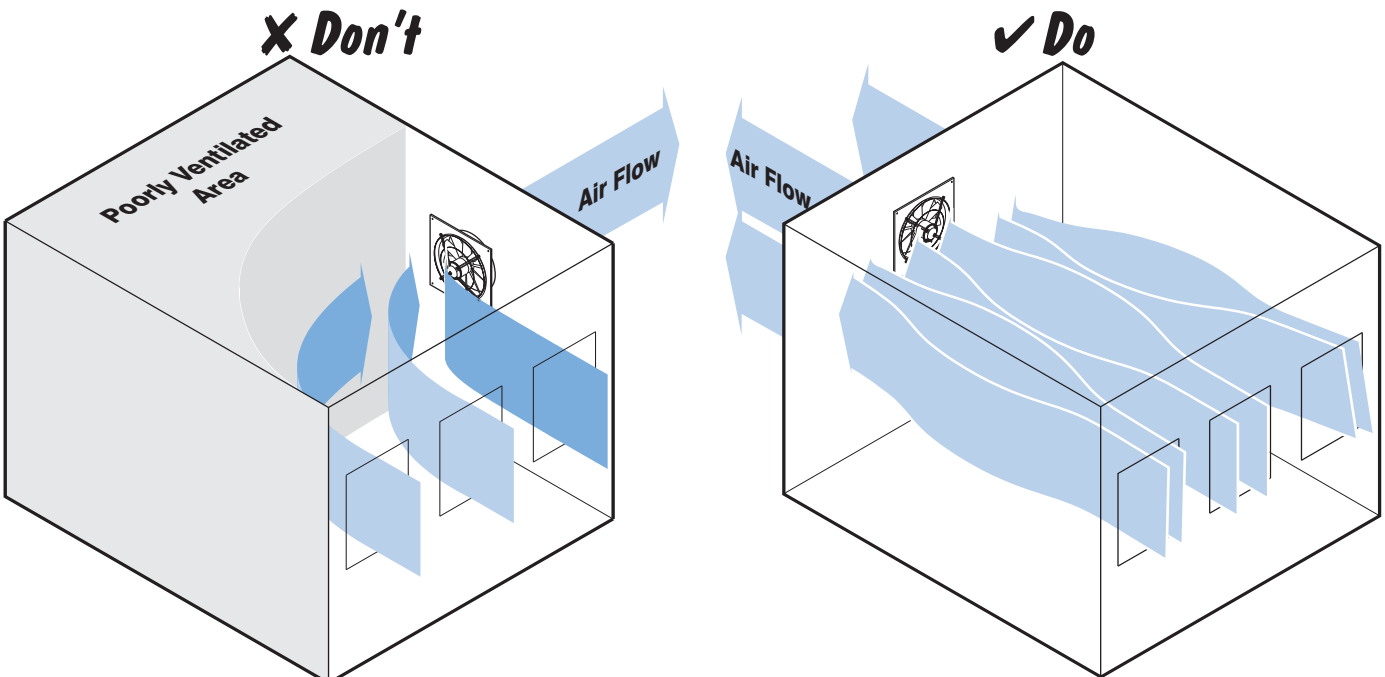


Poor airflow - little or no airflow through top of coil.

Centralise the fan to ensure uniform airflow through the coil

Figure 6.2. - Air flow dead zones

Unducted air extract fans require careful location to obtain an even airflow across the room



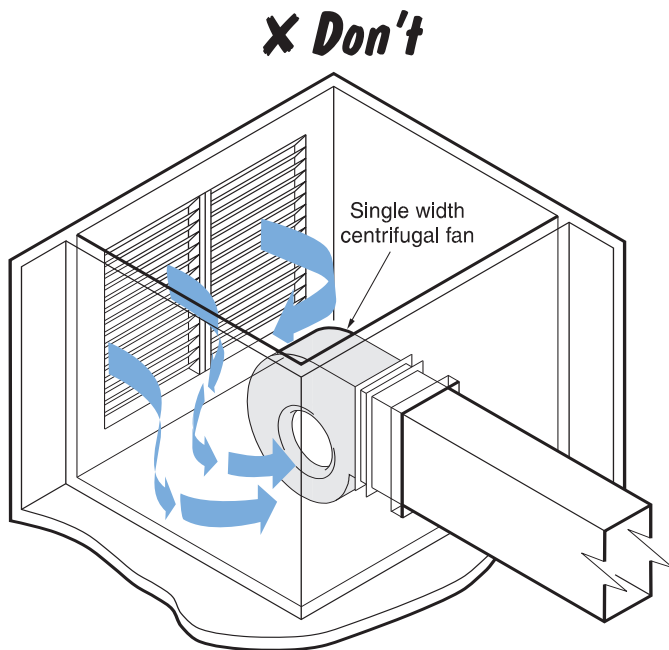
Part of room is starved of ventilation air.

Because of cross-flow ventilation air circulation and quality of ventilation is optimised.

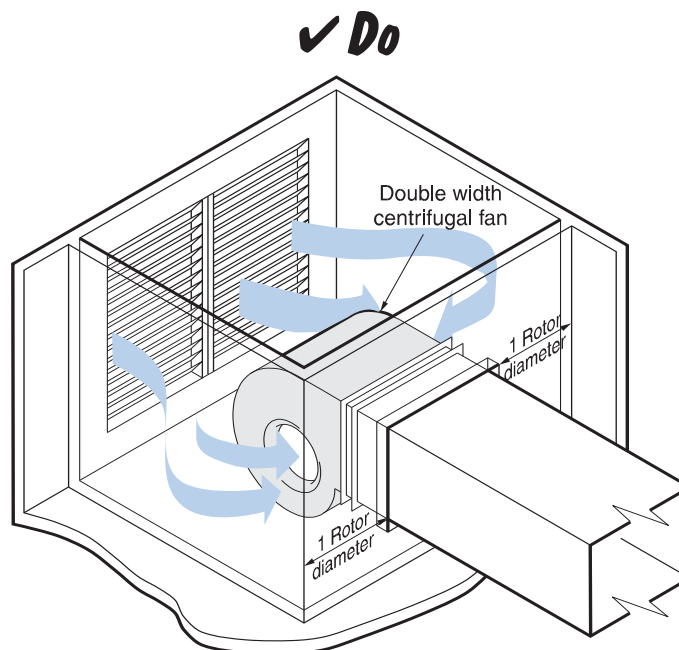
6.0 GENERAL (Cont.)

Figure 6.3. - Inlet plenums

Ensure eccentric flow is not caused by inlet plenum.

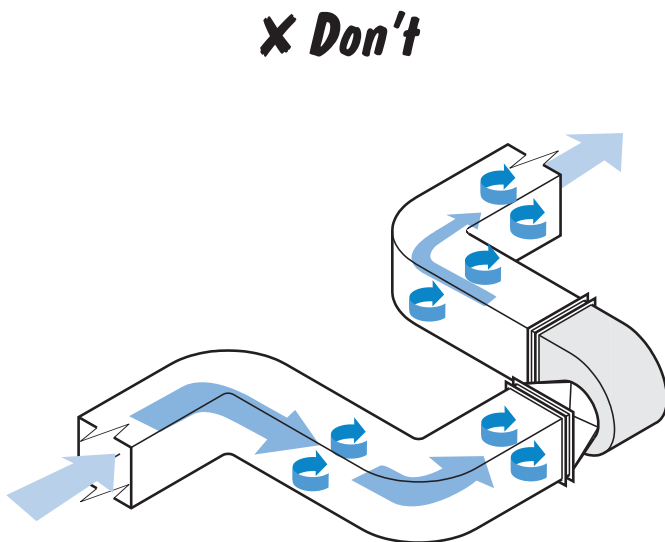


With a single width fan the airflow takes a single turn to enter it; eccentric flow is created.

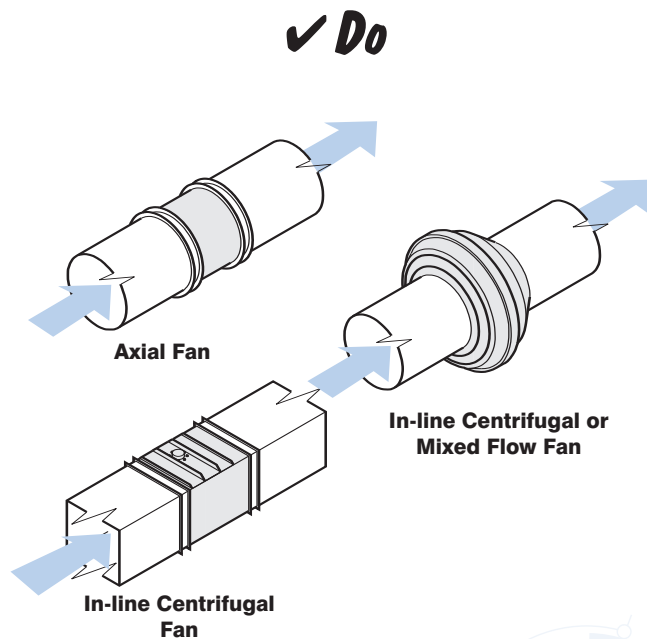


Selection of a double inlet fan improves airflow. Central positioning of the fan and plenum entry grille will also assist.

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.

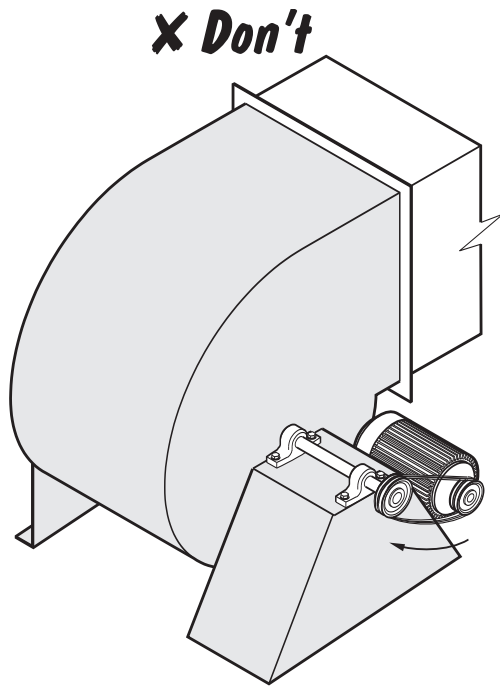


Do consider the space saving advantages of an in-line fan. It can be centrifugal, mixed flow or axial, the selection being governed by the fan duty and noise level required.

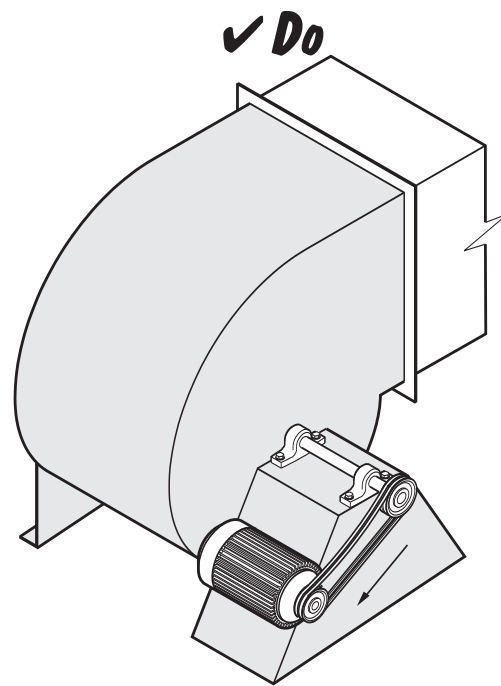
6.0 GENERAL (Cont.)

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.