INSTALLATION DO'S AND DON'TS

3.0 ROOF UNITS

Figure 3.1. - Roof ventilator short-circuiting of air

Ensure the roof ventilator base has an airtight seal.



If the unit does not have an airtight seal between the base and the upstand, short-circuiting of outside air can occur thereby reducing the amount of air being exhausted from the building.



An airtight seal between the upstand and fan base prevents short-circuiting of outside air ensuring the fan is exhausting from the designated space.

Figure 3.2. - Mounting of Roof Units to ductwork



Don't connect to the 'eye' of the base as this increases pressure losses on the intake.



Size inlet duct to fit roof unit overflashing.

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INSTALLATION DO'S AND DON'TS

3.0 ROOF UNITS (Cont.)







✓ Do

Don't mount the fan on an upstand or curb with an angle greater than 30° .

Do ensure the upstand, and therefore fan, is at an angle less than $30^\circ\!.$

Some fans may require an angle less than 30° or a completely horizontal upstand - refer to the relevant product page.

Figure 3.4. - Backdraft shutters

Butterfly back-draft shutters on a roof unit should be installed so gravitational effect on each leaf is the same.



Don't have shutters at 90° to roof fall. The lower shutter must overcome a greater gravitational effect for even air flow. Also the top damper may go over top dead centre and not close.

Each leaf has the same gravitational effect when shutters are parallel with roof fall.

INSTALLATION DO'S AND DON'TS

3.0 ROOF UNITS (Cont.)

Figure 3.5. - Prevailing winds

Mechanical roof ventilator units perform best if influence of prevailing wind is minimal.



Unit above ridge is exposed to crosswinds. Exhaust capacity may be reduced due to back-pressure effects.

Roof unit relatively sheltered from prevailing winds suffers less from back-pressure effects.

V Do

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