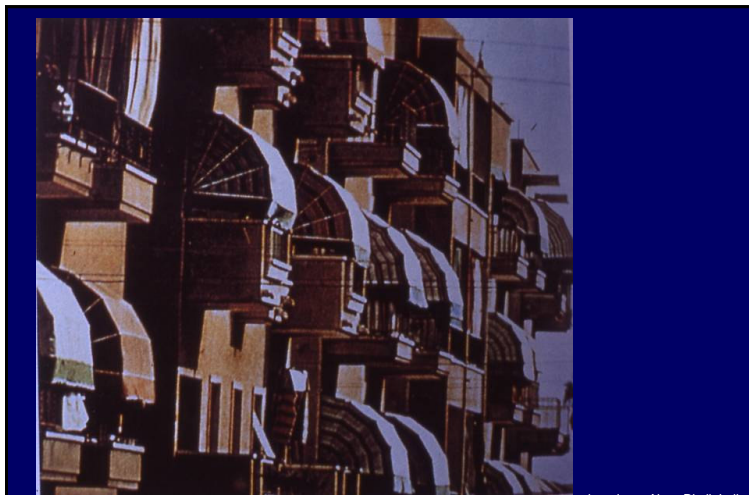
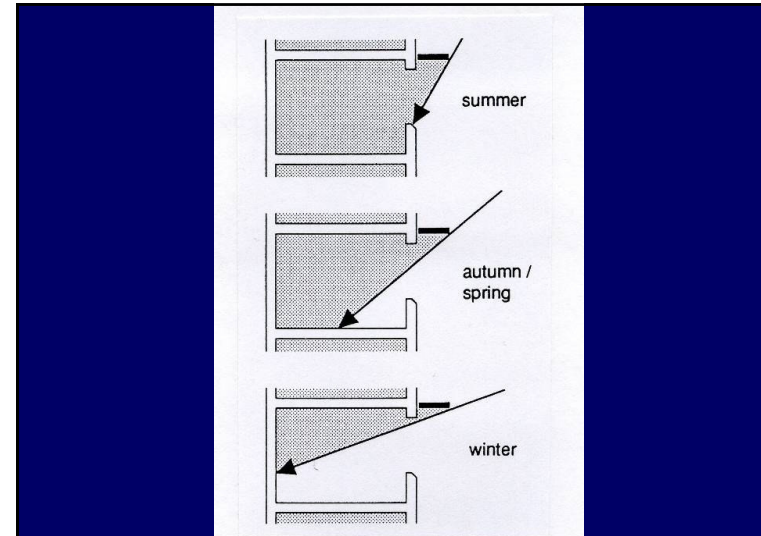
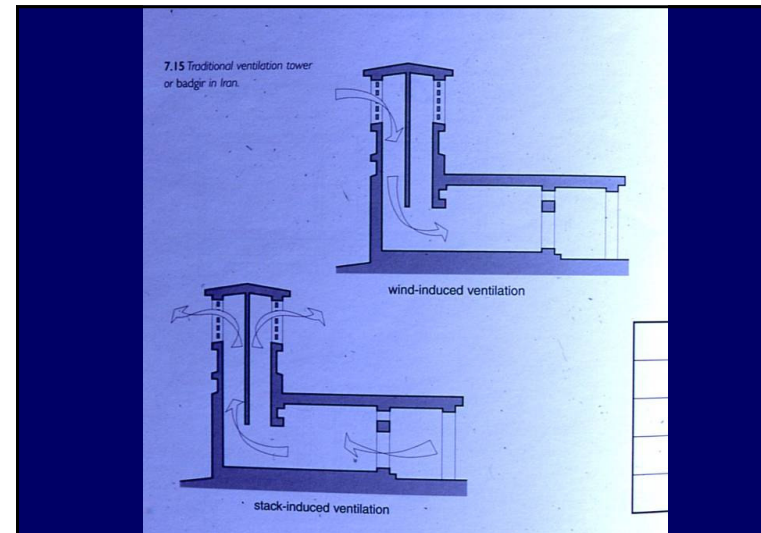
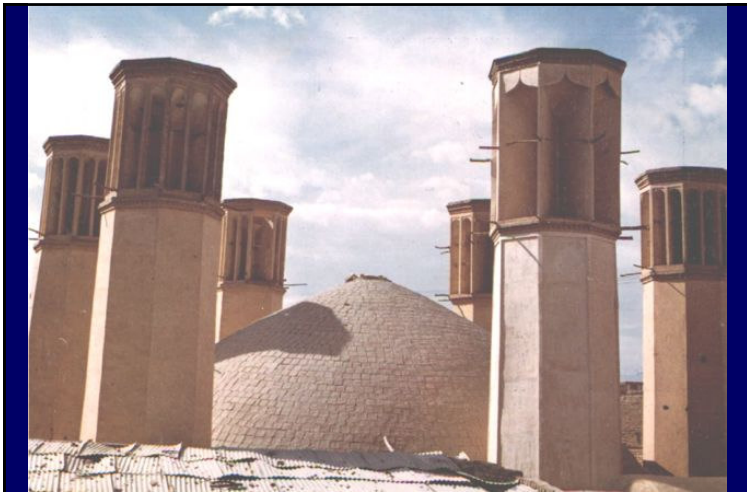


Fig. 62: Options for air-flow paths for night and daytime ventilation (from Baker, 1994)



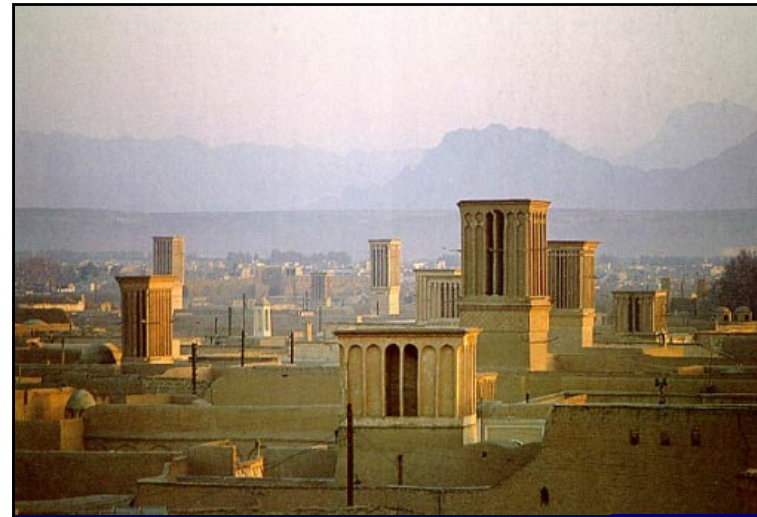
sombreadores, Nova Dhehi, India





Chaminés "stack", Índia

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Chaminés stack, Paquistão

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BRE, UK, 1992

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ventilation. Consequently, they are sized simply to satisfy the pressure drop requirements. They can be in the form of a single linear chimney or several smaller chimneys distributed around the building to suit the required ventilation flowpath. For example, if the building faces a busy road, it would be possible to place the inlets on the facade away from the noise and pollution source with the chimneys on the road side. An example of chimney ventilation is shown in Figure 3.10, based on the De Montfort University case study in section 6.

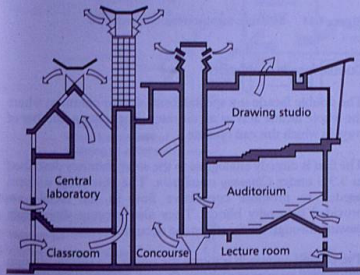


Figure 3.10 Chimney ventilation at De Montfort University (see 6.4)

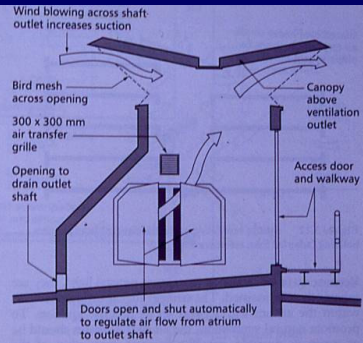


Figure 3.11 Detail from the Ionica extract shaft (see 6.7)

To provide adequate ventilation on very hot and still days, an extract fan can be installed in the shaft to pull air through the building. This should be designed so that the fan does not provide a significant resistance to air flow when the chimney is operating in its natural draught mode.



Michael Hopkins, Inland Revenue Offices, Nottingham, 1995

NATURAL VENTILATION IN NON-DOMESTIC BUILDINGS

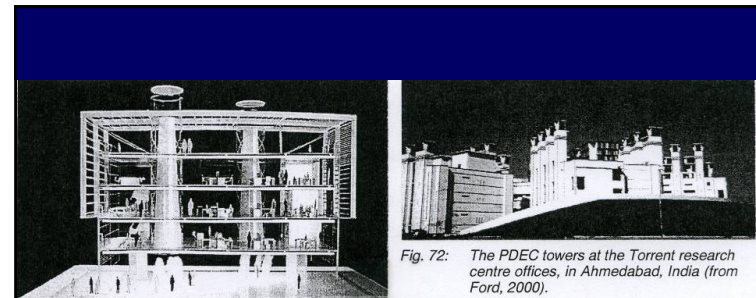
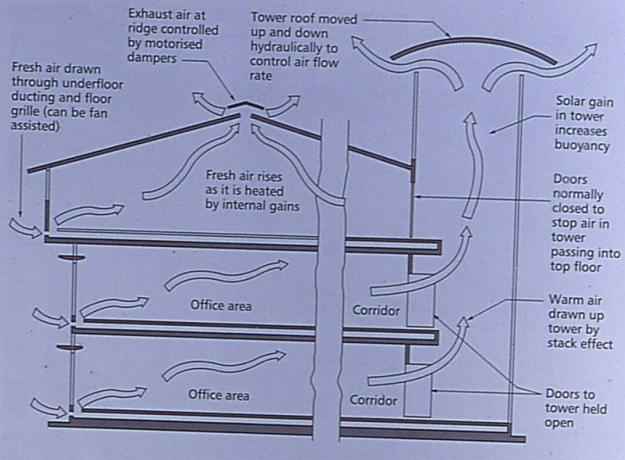
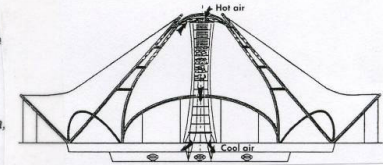
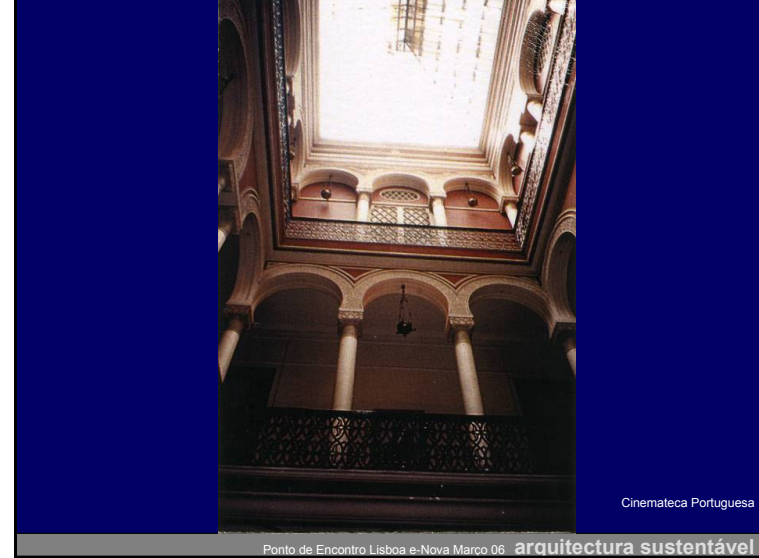


Fig. 71: Above, left: 1:50 scale model of the PDEC system used in the office building in Catania (southern Italy), showing the evaporative cooling towers across the office interior. These have controllable openings to regulate the provision of humidified air coming to the office (from Francis, 2000)

Fig. 72: The PDEC towers at the Torrent research centre offices, in Ahmedabad, India (from Ford, 2000).

Fig. 73: Right: Givoni's evaporative cooling tower; section of the tent of the Bioclimatic Rotunda, with its own cool tower, in the Expo 92 in Seville (from Givoni, 1994).





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