

Figure 14.4 Body-building system integration.

In the human body the amount of heat that can be exchanged by conduction across moist interfaces depends on the area exposed; the respiratory surface can be increased tremendously by extensive folding of the surface. Similarly in air handling units the coil surface area is increased by folding more rows and adding fins. Once the air has passed across the respiratory surface, efficiency of distribution is increased greatly if the respiratory surface is amply supplied with blood. The same applies to flow in coils inside air handling units.

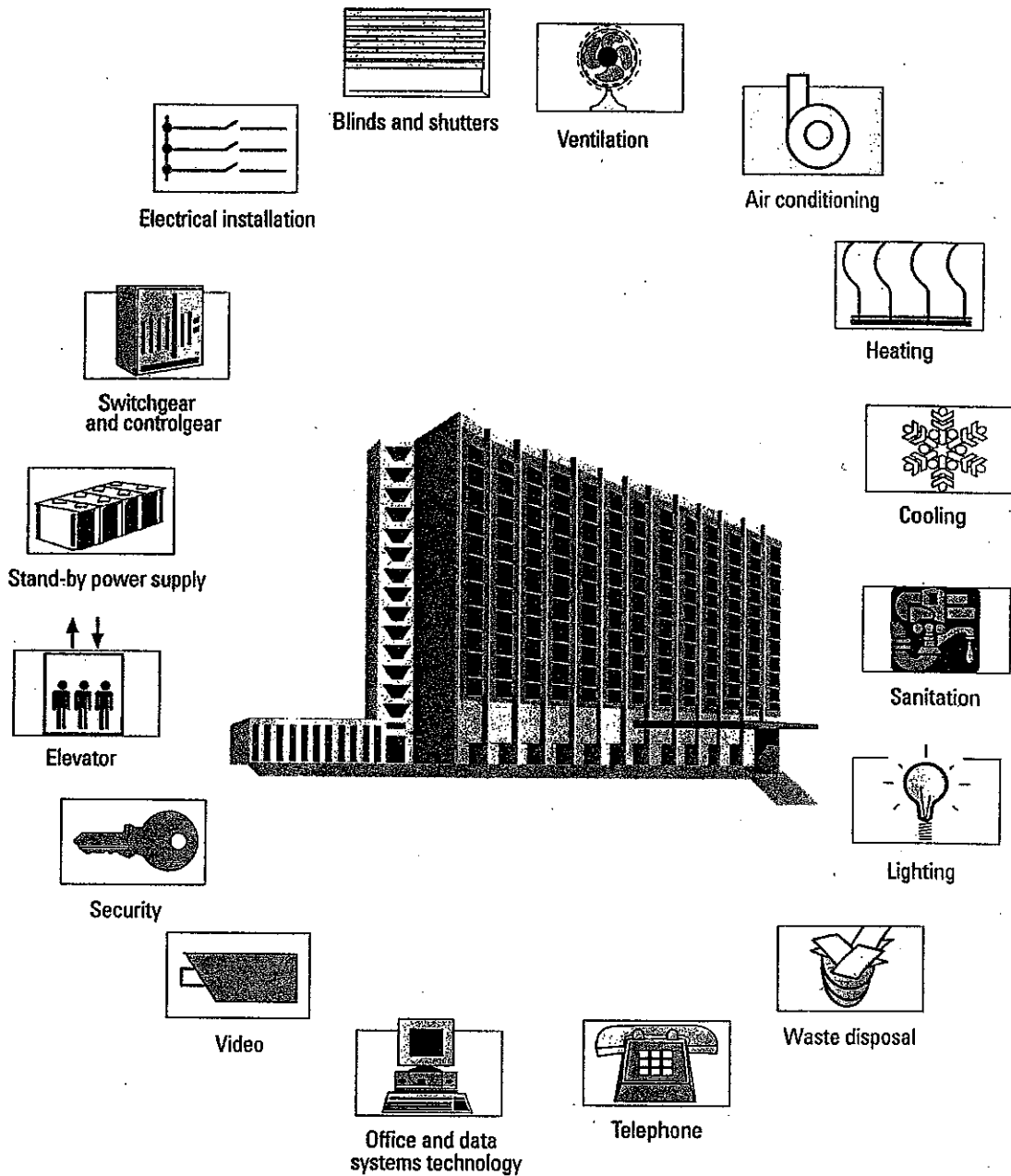


Fig. 6.1/1 Building services systems

optimizing (i.e. running the building and its systems using the lowest possible amount of energy) the building services systems, recording and representing energy requirements and all other consumption values in the form of statistics, displaying operating states and technical faults at a central location, as well as providing centralized control and intervention during normal operation or if a fault occurs.

Due to the considerable size of the building systems that have to be monitored, building control systems are structured in the form of a hierarchy. These systems were formerly divided into the following levels:

- ▷ control rooms,
- ▷ sub-control rooms,
- ▷ substations.