Zoning

Zoning refers to the practice of dividing a building into distinct areas or “zones” that can be independently controlled for various functions, such as ventilation, heating, and cooling. This approach allows for more efficient energy use and improved comfort levels within different parts of a building.

In modern smart homes, zoning is particularly beneficial for managing ventilation and temperature. For example, a home may have separate zones for living areas, bedrooms, and bathrooms, each equipped with its own controls. This enables homeowners to programme extraction systems based on the specific needs of each zone, such as increased ventilation in kitchens during cooking or reduced heating in unused bedrooms.

Consider a three-bedroom house where the living room, kitchen, and bedrooms are zoned for independent control. The kitchen zone could be equipped with an advanced mechanical ventilation system that increases air extraction during cooking hours, while the bedroom zones could be set to maintain a cooler temperature at night for better sleep quality. This zoning not only enhances comfort but also optimises energy efficiency by reducing unnecessary heating or cooling in unoccupied spaces.

In the UK, many new build homes are designed with open-plan living spaces that can benefit from zoning. For instance, a homeowner might use smart thermostats and ventilation controls to create a comfortable environment in the living area while ensuring that bedrooms remain quietly ventilated at night. This approach aligns with the UK’s emphasis on energy efficiency and sustainability in housing, as outlined in the Building Regulations.