

### 15.4.3 Study bedrooms

Study bedrooms require lighting that is flexible to enable the residents to have some individual control over what is essentially the only private space available to them. Sufficient flexibility can be provided by using adjustable local lighting on the desk and dimming of the main room light (Figure 15.2). The main room light should provide diffuse light of at least 100 lx at desk height. This will be easier to achieve if the room surfaces are of medium to high reflectance. Lighting of the en-suite facilities has to conform to the requirements for bathrooms and should be centred on the washbasin and mirror.



**Figure 15.2**

Lighting of study bedrooms for flexibility

### 15.4.4 Kitchens and utility rooms

In many quasi-domestic buildings, kitchens and utility rooms are communal facilities. The lighting of these areas is utilitarian and should provide an average illuminance of 150 lx at the cooker/washing machine level. The luminaires used should be capable of withstanding water splashes (IP44). Light sources used in kitchens should have good colour rendering (CRI > 80).

Bare light sources should not be used. Rather, enclosed luminaires that are easily cleaned and which ensure that if a light source breaks pieces of glass do not fall into the food are preferred. Luminaires with a diffuse light distribution and medium to high reflectance surfaces are required if people using the cooker or washing machine are not to be in their own shadow (Figure 15.3). As kitchens and utilities may be left unoccupied for some time, occupancy sensors should be fitted to avoid wasting energy.



**Figure 15.3**

Lighting of kitchens designed to avoid shadows