15.4 Approaches to lighting quasi-domestic buildings

15.4.1 Entrances

The first requirement for anyone approaching a building is the ability to identify the entrance. This can be ensured by lighting the entrance so that the doors and any sign identifying the building can be seen from a distance. The second is to move safely up to the entrance. For this purpose, the illuminance on the ground should be increased close to the entrance to the same level as that inside so as to provide a smooth transition zone between the exterior and the interior. This is particularly important for buildings where the elderly may be found because it allows more time for visual adaptation to occur. Where there are steps on the approach to the building, these should be lit after dark using column mounted urban area luminaires or bollards. Floodlights mounted low on the building should not be used as they tend to produce severe glare to those approaching the building.

At the entrance, lighting should be provided both outside and inside. The purpose of such lighting is to make whoever is outside visible to the person opening the door and vice versa. For this to happen, there has to be a window or wide-angle viewer fitted in the door. As for the lighting, downlights mounted above the door should be avoided as they create shadows on the face that make identification difficult. A better approach is to use low luminance diffuse lighting placed on both sides of the door.

The entrance hall gives the visitor a first impression of the building and provides important information about where to go. This information may be gained from display boards or from a reception desk. Display boards should have their own dedicated lighting. Reception desks should be lit to a higher illuminance than the rest of the space and the lighting should be designed to provide good vertical illuminances so that the faces of the receptionist and the visitor are clear.

15.4.2 Corridors and stairs

In corridors, the aim of the lighting should be to light the walls as well as the floor. If linear light sources are used, the long axis should be oriented along the corridor. If the corridor is narrow, an alternative approach is to use cove lighting along one side of the corridor. The illuminance provided in a corridor should be at least 100 lx in daytime where there is no significant daylight contribution. After dark, but when people are still about, this can be reduced to 50 lx. Late at night, when most people are asleep a minimum of 5 lx is required provided there is some means to restore the illuminance to 50 lx on demand. Stairs should be lit so that there is a flow of light from top to bottom. This means that the treads will be illuminated but the risers will not. Figure 15.1 suggests what locations should and should not be used for luminaires. In addition to lighting, contrasting markings on the nosing of each tread are a useful safety feature.

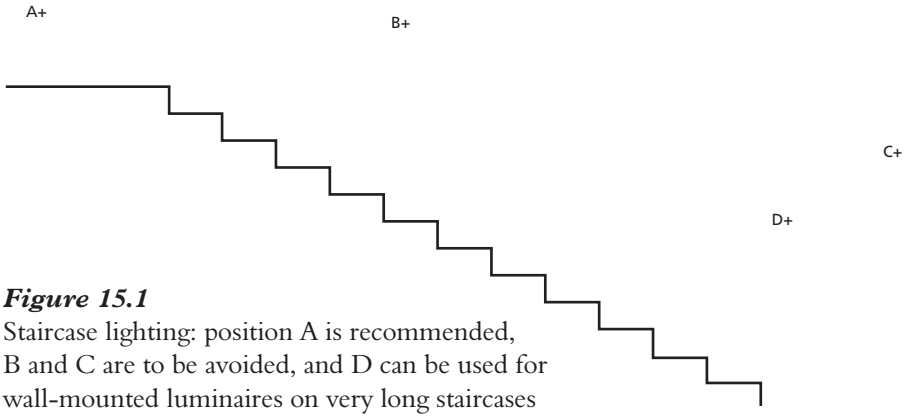

Figure 15.1
Staircase lighting: position A is recommended, B and C are to be avoided, and D can be used for wall-mounted luminaires on very long staircases