The lighting will be most effective if the luminance of the fence is lower than the luminance of the area on the side being viewed through the fence (Boyce, 1979). This objective can be achieved by using a low-reflectance fence material such as black or dark green-coated chain-link. If galvanised chain link is used, care should be taken with the aiming of the luminaires to reduce the illuminance directly onto the fence.

Lighting designed to deliberately produce disability glare to people outside a fence can be used for perimeter fences enclosing large areas, in remote locations where there is no other site lighting (Lyons, 1980). In this system, a line of high-luminance luminaires is mounted at eye level and aimed outward from the secure area. For glare lighting to be effective, the secure area should not be otherwise illuminated, any fence material should be of low reflectance and the luminaires should be closely spaced. Further, patrol roads or paths should be located within the perimeter fence, behind the line of the glare lighting luminaires.

Care should be taken to locate the luminaires far enough inside any perimeter fence line to guarantee that the intruder cannot get between the luminaire locations and still view the secure area from outside the fence. This approach should be used with caution because of the likelihood of light trespass to nearby residents and visual discomfort to passers-by.

Entrances and gatehouses: access to a secure area is usually controlled by security personnel whose duty is to stop and inspect people and vehicles entering and leaving the site. At most exposed locations, a gatehouse will be provided. The entrance should be equipped with multiple luminaires so the loss of any one luminaire will not seriously degrade the lighting available to the guard on duty (Leslie and Rodgers, 1996).

All vehicle entrances should have luminaires located so as to facilitate complete inspection of vehicles and their contents. Lights should be located to illuminate the vehicle license plate. Where on-coming vehicles approach the guardhouse, signs may be appropriate instructing drivers to turn off headlamps. In high security areas, some luminaires should be mounted at or near ground level to facilitate inspection of the underside of the vehicle.

These luminaires can be controlled with a manual switch or remote sensing device. Having a concrete road surface to increase the reflected light will help in the inspection of the underside of vehicles. Consideration should be given to providing back-up power supplies for use during electrical outages.

Care should be taken to provide good vertical illuminance so as to allow for facial identification, inspection of credentials, and packages without use of auxiliary hand-held devices such as flashlights.

Illumination inside the guardhouse should be limited to the minimum required for the completion of assigned tasks, such as report writing and equipment use. The ability to reduce the illuminance is necessary to allow the guard to see clearly through the windows at night and to limit the ability of someone approaching the gatehouse to see what the guard is doing inside. Well-shielded task luminaires are essential to avoid reflections on any surveillance monitors and the windows of the gatehouse. Fitting the gatehouse with specular-reflecting, low-transmission glass at a tilted angle, painting the inside of the gatehouse in dark colours and ensuring that illumination can be dimmed will all help limit the view into the gatehouse (Lyons, 1980).