

Flood and Area Lighting

Things to Know

Lighting fixtures cannot be chosen on appearance alone. Considerations are safety, vandal resistance, security, light pollution, glare avoidance, operating cost, convenience and effectiveness. Luminaires can be mounted on buildings, poles or the ground; often special brackets or structures have to be made.

Types of Light Distribution

Symmetric Light is distributed uniformly below a luminaire such as a bollard.

Asymmetric Light is concentrated uniformly to one side of the fixture such as signage lights.

Directional light is projected in a defined direction e.g. flood lights.

Multi Directional Light is distributed equally in all directions, such as pole mounted globes.

Light Sources

Incandescent and Halogen are low cost and have good colour performance but are less energy efficient and require more maintenance due to short lamp life.

Discharge Lamps - Mercury, Metal Halide and Sodium share varying degrees of higher energy efficiency, longer life and differing colour rendering and are the norm for lighting large outdoor areas.

Area Lighting

A lot of light can be 'lost' so a high utilisation factor cannot be expected. There will also be a much greater variation in uniformity (compared to interior lighting) often up to 15:1 over the lit area. Spacing to pole height ratios is typically 3:1 or 4:1.

Typical Lux Levels Achieved:

1 – 10 LUX Storage areas and car parks

10 – 50 LUX Industrial yards, work areas

50 – 150 LUX Devanning areas, petrol stations

Lumen output of the lamp and photometric data of fittings enable accurate lux level calculations for an area. Solutions will vary from flood lights for non obstructed areas such as sports fields to post top lights for areas such as car parks where poles can be uniformly spaced.

Light pollution - sky glow and nuisance light spill or glare for neighbouring properties are common problems to avoid.



Refer to outdoor lighting things to know page (184) For material selection and maintenance guidance