

# FLOOD LIGHTING

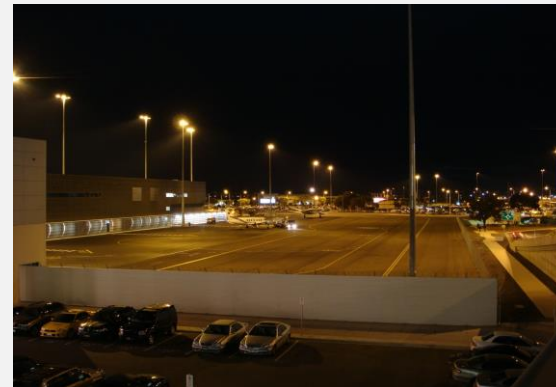
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- A **floodlight** is a broad-beamed, high-intensity artificial light.
- Flood lights commonly used where visibility and safety are important, like in schoolyards, parking plots and outdoor playing fields.
- They are often used to illuminate outdoor playing fields while an outdoor sports event is being held during low-light conditions.
- More focused kinds are often used as a stage lighting instrument in live performances such as concerts and plays.



A Flood light used on a  
Football field

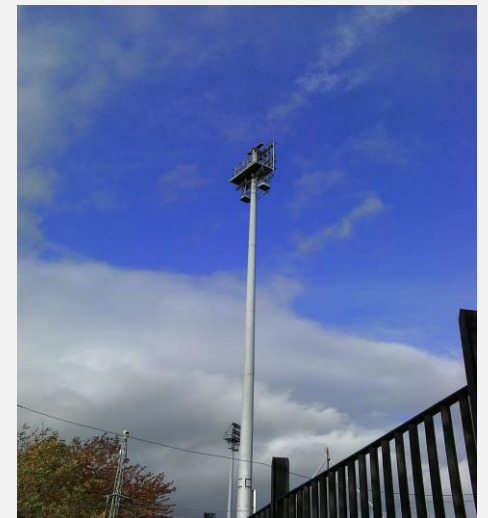


Flood light provided at an  
airport

- In the top tiers of many professional sports, it is a requirement for stadiums to have floodlights to allow games to be scheduled outside daylight hours.



- Evening or night matches may suit spectators who have work or other commitments earlier in the day, and enable television broadcasts during lucrative primetime hours.
- Some sports grounds which do not have permanent floodlights installed may make use of portable temporary ones instead.
- Many larger floodlights will have gantries for bulb changing and maintenance. These will usually be able to accommodate one or two maintenance workers.



- **TYPES OF FLOOD LIGHTINGS**

1 - METAL HALIDE LAMP

2 - SODIUM VAPOUR LAMPS

3 - LED FLOODLIGHTS

4 - HALOGEN FLOODLIGHTS

5 - ELECTRODELESS INDUCTION FLOODLIGHTS



METAL HALIDE LAMP



LED FLOODLIGHT



HALOGEN FLOODLIGHT

## 1 – METAL HALIDE LAMP

- The most common type of floodlight is the metal-halide lamp, which emits a bright white light (typically 75–100 lumens/Watt).

## 2 - SODIUM VAPOUR LAMPS

- Sodium-vapor lamps are also commonly used for sporting events, as they have a very high lumen to watt ratio (typically 80–140 lumens/Watt), making them a cost-effective choice when certain lux levels must be provided.

## 3 – LED FLOODLIGHTS

- LED floodlights are bright enough to be used for illumination purposes on large sport fields.
- The main advantages of LEDs in this application are their lower power consumption, longer life, and instant start-up
- They have replaced many metal halide floodlights.

☐ Halogen and electrodeless induction floodlights also exist.

- Sports played under floodlights are polo cricket , football , winter sports , motor sports etc
- Floodlights are good for environment because these flood lights are capable of producing bright white light even at night and are free of harmful emissions such as carbon, lead, and mercury, which make it an environmentally conscious option.

- **SELECTION CRITERIA FOR FLOODLIGHTS**

*1 – Brightness*

*2 – Durability*

*3 – Run Time*

*4 – Modes*

*5 - Reliability*

## 1 - Brightness

- If flood lights is used for security it must need to be more bright compared to other situations

## 2 - Durability

- There are two main factors in terms of durability.
- (a) water-resistant or waterproof the light is, and
- (b) whether it is dustproof.

## 3 – Run Time

- Run time refers to how long the lights are able to stay on after a complete charge.
- Usually getting a complete charge requires anywhere between 4 and 8 hours of sunlight.
- The run time can also vary depending on which setting the light is in, especially for the lights that have many modes.

## 4 – Modes

- Each of the different lights on this list has a different combination of possible modes, such as bright or dim and normal on or motion sensing

## 5 - Reliability

- Reliability refers to how long as in months, weeks and years the lights might last and can count on them to turn on every single day, no matter what.
- Often the absolute most reliable lights are the simple ones.