

Better Exterior Home Security Lighting

The ready availability of effective and economic LED exterior home security lighting has done much to safeguard our night-time domestic life. But, if luminaires are not properly selected, positioned and installed, the resulting glare, obtrusive light and sky glow can cause serious problems.

GLARE

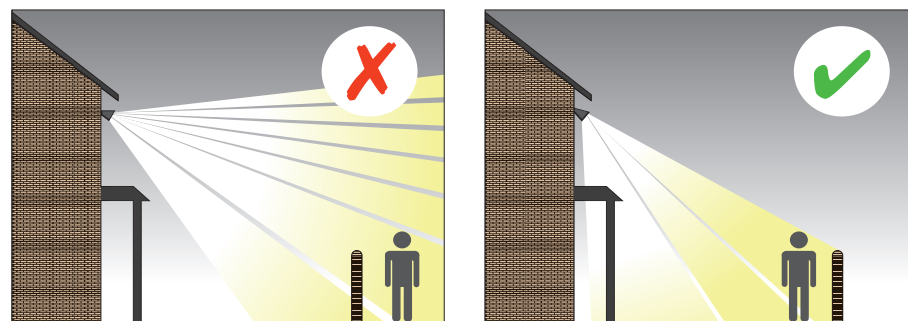
Floodlight luminaires need to be carefully positioned and aimed to avoid generating disturbing discomfort glare for homeowners or their neighbours. Glare is caused by light emitted from luminaires at angles between 80 to 100 degrees, measured from the downward vertical axis. Floodlight luminaires should always be installed downwards oriented with the intention of lighting surfaces (walls, decks, pathways, driveways) as light directed into human eyes is worse than useless.

OBTRUSIVE LIGHT

Obtrusive light is light spill beyond the boundaries of a property, which causes nuisance to neighbours. Most regions have bylaws for neighbourhood nuisance from lighting usually citing AS/NZS 4282:2018 *Control of the obtrusive effects of outdoor lighting*. This standard provides guidance for ensuring outdoor lighting installations provide a non-obtrusive lit environment.

SKY GLOW

Sky glow is the diffuse light glow that is visible above large cities. It is predominantly caused by light emitted from luminaires at angles above the horizontal plane, between 90 to 100+ degrees. This waste light is scattered into the atmosphere and harms the visibility of the night sky and is damaging to astronomical observation and for eco-tourism.



GOOD APPLICATION PRACTICE

More light is not better, and warmer 3000K light is a much more appealing choice than cooler 4000-5000K. The goal is for the minimum level of illumination to provide adequate visibility for movement, to minimise shadows as criminal hiding places, and to avoid neighbouring properties. More light than necessary only creates more glare and relatively darker shadows. Some luminaires provide poor optical control and minimal glare shielding, so seek out better products for more precise light beam control and lightspill cut-off.

PRESENCE SENSORS

Some floodlights are fitted with all-in-one integrated presence sensors for the detection of human movement. These can be very convenient if they are correctly configured and aimed to avoid glare zone viewing angles for humans, however the use of remotely mounted presence sensors, installed at optimised site positions, usually provides more effective lighting and consequently greater user satisfaction.

Lighting Council New Zealand is the industry association for lighting manufacturing, importing, and distribution companies in New Zealand, and associated lighting industry participants. www.lightingcouncil.org.nz

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