

RE-R1: Lighting Compliance

Intent To reduce the energy consumption and carbon emissions associated with public realm lighting.

Credit Requirements

GENERAL

Efficient Lighting

Demonstrate that all public realm lighting has been designed and installed in accordance with the following standard:

- DMA Abu Dhabi Lighting Manual, Issue 1

Lighting Controls

Demonstrate that all of the following have been achieved:

- All lighting designated for dusk-to-dawn operation must be controlled by an astronomical time switch or photocell;
- All lighting not designated for dusk-to-dawn operation must be controlled by either a combination of a photocell and a time switch, or an astronomical time switch;
- All time switches, including astronomical types, must be capable of retaining programming and time settings during loss of power for a minimum period of 72 hours;
- Essential and non-essential lighting must be controlled separately. This includes lighting for sports areas and other amenity areas where operating times may vary; and
- Pathway/transitional lighting circuits must be controlled separately from accent/landscaping lighting circuits on different time settings and specific to the area and project requirements.

ADDITIONAL REQUIREMENT/CLARIFICATIONS

Carriageway lighting and traffic lights are excluded from the requirements of this credit.

Credit Submission: Design Rating

Efficient Lighting:

- ☐ Narrative describing the lighting design strategy, including written confirmation of compliance with the DMA Lighting Manual; and
- ☐ External lighting Drawings, Specifications and Calculations confirming the lighting power densities of all roadway, pathway and amenity lighting.

Lighting Controls:

- ☐ Narrative describing the lighting control strategy and demonstrating that all external lighting shall be controlled as required, detailing the method to retain programming for 72 hours during periods of loss of power; and
- ☐ Specifications of all control measures: photocell, time switch or astronomical time switch as required.

Credit Submission: Construction Rating

Efficient Lighting:

- ☐ Updated narrative describing the installed lighting design strategy, including written confirmation of compliance with the DMA Lighting Manual; and
- ☐ As-built external lighting drawings, photographs and manufacturer's data confirming the lighting power densities of all roadway, pathway and amenity lighting.

Lighting Controls:

- ☐ Updated Narrative describing the lighting control strategy and demonstrating that all external lighting shall be controlled as required, and detailing the method to retain programming for 72 hours during periods of loss of power;