

Small Details, Big Results

Landscape Lighting

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Images courtesy of Light Cibles



OPPOSITE Gros Caillou, Lyon, France.
(For more information, visit www.light-cibles.com)

Have you ever felt a pleasant sensation upon entering a place? Have you ever been surrounded by an environment where you felt especially comfortable? Have you enjoyed a place so much, just by seeing a collage of images, contrasts and colours? These are the effects of good lighting. One cannot see the light but can see what the light illuminates and accentuates. Light does not have mass but it can pass through space until an object reflects it. It travels directly and takes the shortest way to where it is projected.

Light is not only used to illuminate, it is also designed to feel, protect, see and transform. With light, we can make someone feel, experience and re-live an old time, a good moment or a past sensation. We can illuminate to avoid accidents or to alert someone, we can allow objects to be seen in their real colours or change them. With light, objects appear and colours exist.

When we light up a space, we are not just giving the possibility to see something, but we reveal information, depending on how we illuminate the objects, plants or trees: frontal plain lighting, lateral from one side or both sides, with the same or different intensity from different points, hard zenithal or backlit. In whichever case, whether we are transmitting different messages or perceptions to people, we must know our intention. We cannot simply position a lighting fixture in a space as an afterthought, where there is no other choice of place.

It is important to know the reason why we want to light a space. Is it just to make it nicer, to beautify it or is there a function we need to accomplish? There are various reasons for lighting up a space: for security, for confidence, to integrate that area within the building or with the city, perhaps even simply for decoration, to practice sports and play, to feel romantic or to socialise, to relax or to stimulate our senses.

My intention here is not only to remind readers about some benefits, functions or possibilities of light, but also to remark on some aspects about light and lighting design, which at times have been overlooked.

Nowadays, design sells, and sometimes it sells even more than quality. But having good design and quality at the same time often leans towards the expensive, which may not be affordable to all pockets.

Translating this premise into construction and landscape, we could also say that now everyone looks for good design; it sells better, and lighting is part of that design. This can be seen in many property advertisements found in the press, magazines and on television with nice renderings of night views and well-lit swimming pools. These press adverts show amazing lighting details on the façade and landscape, all highlighting the impact of thoughtful landscape lighting design, which though affordable, is not so easy to maintain.

It often appears that landscape lighting may be less daunting a task than lighting an interior or a façade. In the task of lighting a façade or the interior of a building, there are many elements and constraints to take into consideration during its design, and especially during installation. On the other hand, for landscape lighting, there is greater flexibility in choice and in making adjustments to fixture locations right up to the final stages.

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ABOVE Clifford Peer, Singapore. Enhancement of trunks and leaves and the reflection of light on them is a nice way to lit an area without needing direct light from poles. (Photos: Light Cibles)

OPPOSITE, ALL Maintenance of landscape needs to be done to keep the lighting design. Junction boxes should be set away from public sight and access. (Photos: Light Cibles)



obvious to say that lighting requires maintenance: lamps need to be replaced and drivers need to be changed. In spite of the reduction in frequency of bulb replacement, due to the introduction of the LED technology, there still needs to be scheduled maintenance services. Lighting design and its maintenance extends beyond “planting” lights to illuminate something. To keep that “visual image” or picture that captured our attention and brought us some excitement when we bought that apartment, house or project, we must care and draw up periodic maintenance to keep that design and improve it.

In countries with four seasons, landscape, trees and plants grow very slowly throughout the different seasons. Lighting will enhance them in different ways and colours depending on the time of year. However, in tropical countries, following a few showers of rain, plants will start to grow so fast that in few months, they will be double or triple in size and their growth cover may be quite extensive. That is a challenge for lighting designers; we cannot forecast the development of the plants and in short periods of time, the lighting design can be distorted with lighting fixtures disappearing under the plants.

There are several key points to a good lighting design: do not improvise it, choose a good quality fixture and carry out proper maintenance. These three points may seem quite obvious, yet it is not uncommon to find that majority of the projects do not follow through with all three.

As plants are often dismissed as a design element, any lighting enhancement accorded to them would easily produce pleasant lighting outcomes. It is important to make the appropriate selections of wattage and distance and to decide where best to place the lighting fixture in order not to “burn” the plant with too much light or heat. It is also essential to have a good spread of light projected and to decide the amount and type of shadows created as a result of lighting. Whether shadows are cast over a wall or ceiling and on the floor or to generate some pattern are all important factors to consider.

It can be quite affordable to have a nice and simple lighting design for any landscape, but it may not always be easy to maintain. Often, maintenance is neglected shortly after acquiring the property which had appeared so good in picture or rendering in that magazine. It is quite

Not to improvise means that the design and consideration for lighting should be done through a lighting specialist in tandem with the architect and landscape consultant. Discussions between all parties are to be carried out regarding the type of plants, trees, floors and materials which would be used in the project. It means to choose correctly the best position for the fixture to light the trunk or the canopy. It means to develop and adapt with the architect throughout the project as it changes, keeping the design and intent to the end. It means to provide proper drainage for the fixtures where required. It is important to have a good installer who understands the design intent and installs the lighting fixtures instead of just “planting” them in the soil. This means to position the fixture at the correct distance from the plant and to adjust, aim and set the programming of the fixtures individually, because each plant is different and the conditions in each location changes.

BELOW, TOP TO BOTTOM Tasik Perdana City Park, Kuala Lumpur, Malaysia — Customised poles with uplighters integrated at the top light the canopy of the trees; Mont Saint Michel, France — The village is set up in warm light with disorganized beams while at the top they straighten up to sky with colder lights; Centre d'Épuration, Fromainville, France. (Photos: Light Cibles)



Choosing a good fixture does not mean buying an expensive one but to select the one most appropriate for the location and environmental conditions where the fixture is to be installed. Selections include the type of bulb, the colour of the light, which depends on the type of plant to be lit, and taking into account the surface where it will be installed, the correct paint and protection finish of the fixture, which prevents rust and decolourisation. To choose a suitable fixture involves future projections of who is going to see it, use it and maintain it.

Appropriate maintenance requires more than periodical lamp replacement. Trimming of plants around the fixtures help prevent branches and leaves from blocking the light beam. Glass covers of light fixtures need to be removed and cleared of soil, leaves and fertilisers. All these elements, when in contact with the fixtures and coupled with water, will damage the paint and provoke corrosion. Fixtures should be repositioned and readjusted according to the growth of the plants. During bulb replacement, keep to the same wattage, colour and temperature as the bulb before. At the same time, rubber gaskets should also be changed.

Plants and gardens are taken care of daily, but hardly are landscape lighting fixtures cleaned or maintained as regularly. The same care and diligence should be made for landscape lighting as for plants. Lighting maintenance basically requires constancy and can be carried out by workers with some basic training. We must remember that in countries around the Equator line, we need artificial lighting for one fifth of our time each day over the year. It's an important amount of time to be considered when lighting takes the lead in showing what we want others to see. Landscape and façade lighting can enhance or harm the viewing of properties and they could be considered as the presentation card.

There are some other aspects of good lighting design relating to the installation and electrical components of a fixture that also require attention. These are important details to consider in finishing a lighting design well. They can become the last key to a successful design.

Selective information would give us indications of the lux level required, the voltage and the protection of the fixture, as well as the heat produced by the fixture, the wiring and the junction boxes; but not much information is given regarding the design of the housing, the drainage provisions, which most outdoor lighting fixtures would require, or the location of junction boxes. All of this information form an important part of the installation as they will either enhance or damage the lighting design. An adequate housing with a proper drainage will prevent fixtures from sinking into the soil and subsequent damage after exposure to rain. Correct wire selection and circuiting will prevent drop in brightness and intensity of light. The heat on the surface of the fixtures can be reduced with cool touch accessories as they can become really hot due to the wattage and the type of lamp used. We should isolate them from public access as they can become really harmful to children or adults if contacted. Much of the printed information available only gives a minimum standard, and by following it we are merely in the right direction, but a good lighting designer should go one step further and think how to improve it.

When we select a clean, well designed lighting fixture for our garden, we should make sure that the selection of the junction box, its position and its fixation are not selected by chance. These junction boxes should not become a risk due to its shape, its setting out in the garden or its method of fixing. There are various types of junction boxes: square, round, big, small, surface mount or buried. These would be selected according to the location. They can be fixed to a metal, plastic or wooden stick. The fixing position can also be selected: to be close to the fixture or far away, exposed or hidden under some plants or even under a fake rock. Do not leave these decisions till the end, when a decision is based on whatever is available at stock, common practice or follow strictly the information provided, with little consideration for appearance or design.

Darkness is unwelcoming, although sometimes necessary. Lighting can be stimulating, especially when details are considered and care is taken. When these details are overlooked and the exterior appearance is unattended to, it will then reveal something else hidden beneath. **CG**