



# WATER TIGHT

## INGRESS PROTECTION UNWRAPPED



When it comes to external light fittings, the IP rating is a crucial factor that designers ignore at their peril, says **Robert Webber**

The number of environmental factors affecting exterior lighting is vast and these often get overlooked when specifying a certain type of light fitting in a certain position. Sunlight, sea air and rain are the main factors to consider, along with positioning in shade, where fittings don't have the same chance to dry out.

Some light fittings by well known manufacturers are designed for use in specific environments. It's not as easy as a one size fits all solution. Invariably when we design our lighting schemes we specify the correct light for the correct environment. The Ingress Protection rating is a good place to start with the specification.

We recently completed a very large lighting installation in London in which the interior architect carried out the exterior lighting design. It was a good design by most standards except for one



thing; the light fittings had a low IP rating, despite costing twice as much as most that we fit.

At the end of the garden was a woodland area, where discreet bollards had been specified to wash light across the path as it wound its way through to the garden room at the end. It looked great when we finished, and then the rain came, and my phone rang.

The issue was the IP rating of the specified fittings. They were IP44, which is quite low for

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any external fitting. When you factor this into the position they were placed in, a shady wooded area that never really dried out, it was a recipe for constant tripping of the circuit and fast degradation of the fitting itself.

Lucky for us, we had flagged the issue at tender stage but were told that this was the specified fitting and it wouldn't be changed. Sometimes you just have to let others learn from their mistakes. Ultimately it'll be the client who pays and the installer who looks bad when the designer specifies the wrong type of light.

Understanding IP ratings isn't voodoo. It's simple. Never specify or fit any light lower than IP55 externally. Then take particular note of its position in the garden. It's always best to look at the IP rating and then specify a light much higher than you think you'll need. For



### IP RATINGS: HOW THEY WORK

- IP ratings consist of **two numbers**. The **first** relates to the protection against solid objects such as fingers or dust particles.
- The **second** number relates to protection against liquids, for example rain, jet washing or submersion. Sometimes you have an X instead of a number. This normally relates to items that need fitting indoors or with other IP rated housings. So, always think about the position of the light as well as its exposure to sunlight and other specific environmental influences. Sea air is one we come across often.



As the designer, your name will be on the certificate so if in doubt, consult a specialist exterior lighting company.

instance, we always specify IP68 submersible lighting within paving or in wooded areas. That way, whatever the weather throws, the lights will continue to be enjoyed. That's another benefit of using a professional installer. Experience always trumps price.

### ABOUT ROBERT WEBBER

Robert Webber is the founder of Scenic Lighting, a specialist exterior lighting company based in Berkshire. He designs and installs garden lighting throughout the UK and internationally. Robert can be contacted on [rob@sceniclighting.com](mailto:rob@sceniclighting.com) or via his mobile on 07766 051000. [www.sceniclighting.com](http://www.sceniclighting.com)