

IMPORTANT INFORMATION FOR SELECTING EXTERIOR PRODUCT:

During stormy conditions and high winds, salt spray is whipped off the sea and carried inland many kilometres. New Zealand is a narrow country surrounded by ocean and consequently there are very few places which are not affected by this phenomenon. When selecting exterior lighting products, it is important to understand the limitations of different materials used in the construction of light fittings so as to avoid problems in future such as corrosion.

Aluminium is the material many light fittings are constructed from because it is relatively inexpensive to use. Aluminium has a lower melting point than other metals so can be easily cast into the various shapes required to form the body of a light fitting, yet has the ability to withstand the heat generated by incandescent, halogen and high intensity discharge lamp sources.

Unfortunately, most 'affordable' light fittings are constructed from grades of aluminium which are susceptible to salt-spray corrosion and while in many installations corrosion pre-treatments and powder coatings can protect a light fitting for many years, other installations with higher corrosive elements in the atmosphere will experience more rapid corrosion. Where screws or bolts hold the light fitting together, it is not possible to maintain powder coating inside the screw thread, consequently over time corrosion can start here and work its way out around the rest of the fitting underneath the powder coating causing it to flake off. Applying a little Vaseline to screw threads and washing the fitting down with fresh water and a car wash brush or similar will help extend the life of the painted surface by removing salt or other corrosive substances.

Stainless-steel is a fantastic composite metal which offers excellent corrosion resistance at a reasonable extra cost. It is a 'reasonable extra cost', when one compares the cost of ongoing maintenance and/or replacement of light fittings constructed of an inferior material. Unfortunately there is a common misconception about the necessity of maintenance of stainless steel products. Some uninformed people think that if they install stainless steel, then the product will forever remain new in appearance, without any need for cleaning. This is simply not correct. Stainless steel is, just that, stain-less steel, not stain-proof steel and requires cleaning from time to time in order to maintain its nice untarnished appearance. Cleaning consists of washing the surface with a soft brush like a car wash brush and fresh water with a little mild detergent (e.g. dishwashing liquid), then rinsing off with fresh water. (If you have hard water or concern about your fresh water quality then use distilled water). In the same way you wipe down your stainless steel sink at home you should wash or wipe down your stainless steel light fittings. In fact, the grade of stainless steel used to make your kitchen sink at home is likely to have a relatively low corrosion resistance and it regularly comes into contact with quite corrosive cleaners and liquids, yet it remains clean and corrosion free because it is frequently washed with fresh water and dishwashing liquid.

The frequency of cleaning required of stainless steel light fittings will differ from installation to installation and is dependent on; the level of corrosive elements in the atmosphere, the surface finish of the stainless steel, and the grade of stainless steel used. The level of corrosive elements in the atmosphere is hard to pin point. As a general rule – the closer the installation is to the sea or a harbour, the greater the corrosion problem will be. However other elements can attack stainless steel, for example, warm chloride environments such as heated pools, certain chemicals such as chloride cleaners and fertilisers used in top dressing, just to name a few. The surface finish of the stainless steel can also help prevent corrosion. If it is a polished smooth finish then there is less opportunity for corrosive elements to get stuck against the surface of the metal. If it is a scratched brushed finish (usually selected for aesthetic reasons only) then it can exacerbate corrosion by trapping corrosive elements in the microscopic scratches and prolonging their exposure to the surface of the metal.

There are two grades of stainless steel often used in the construction of light fittings, namely 304 stainless steel and 316 stainless steel. 304 grade is suitable for any installation around New Zealand, however, the higher the level of corrosive elements at the installation, the higher the frequency of cleaning required to prevent staining. On the coast this could be a matter of every few months. Inland it might be only once a year. 316 grade is nicknamed "marine grade" as it has a higher corrosion resistance than 304 grade and is frequently used for parts on boats such as railings. Inland, you may find 316 grade seldom requires cleaning, however, on the coast it might need cleaning every year or possibly every 6 months – it is entirely location specific and will differ from one location to the next. On boats, owners have to regularly maintain their 316 stainless steel to keep it from staining. There are grades of stainless steel with higher corrosion resistance, such as 2205 grade which is used for boat propeller shafts and exhaust systems where there is an extremely corrosive warm chloride environment, however, 2205 is so price prohibitive that it is not used for lighting products.

For further information on stainless steel maintenance visit: [www.estainlesssteel.com/corrosion.shtml](http://www.estainlesssteel.com/corrosion.shtml)

Copper is another excellent material for constructing lighting products. Unfortunately over recent years copper has escalated in price due to global demand. The benefit of using natural, unpolished, unlacquered copper in salt-spray environments is that it will oxidise and go brown, just like copper guttering, and will last for a life time without any cleaning. It is more likely the other components of the light fitting will perish long before there is any deterioration of the copper itself.

Brass is another excellent material for constructing lighting products, and is again often used on boats. Similar to copper, it will oxidise and discolour, but can be accepted for its natural discoloured look.

Plastic obviously has the advantage of being unaffected by corrosion. There are a variety of plastics used in the construction of certain light fittings including PC, PMMA, ABS, etc and they are ideal for use in the harsh coastal conditions around New Zealand. Plastic will photo-degrade in sunlight, but this can take many years if not decades, so is obviously not such an issue when used in lighting products. The only limitation when using plastic for lighting products is that when constructed into a compact sized, fully enclosed weatherproof design, it cannot withstand the high temperatures from some lamp sources, such as high wattage incandescent, halogen or high intensity discharge lamps. This means that some high light output fittings like spotlights, flood lights, uplighters, up/down feature lights, etc cannot be practically constructed from plastic materials.

## POLICY SUMMARY:

The following summarises the full Terms and Conditions applicable to all supplies of goods by Eurotech Lighting Limited to its customers. All sales by Eurotech Lighting Ltd are subject to our full Terms and Conditions. Please refer to the back of our pricelist, see reverse of our invoices, contact us or visit our website [www.eurotechlighting.co.nz](http://www.eurotechlighting.co.nz).

**PRICES:** All prices are subject to change without notice. Please note that the single unit wholesale price is now shown in bold in the shaded column to make it easier to read. This is the price you must use on your order and the price that will be shown on the invoice. Discounts may be taken upon payment as described below under DISCOUNTS. Although we do our best to double check pricing, Eurotech Lighting Ltd will not be liable for price discrepancies on customer orders.

**GST:** Prices shown on the pricelist are exclusive of GST. GST is added separately on the invoice.

**DISCOUNTS:** All discounts may be taken only if payment is received by the due date (20th of the following month). The prompt payment discount price is shown in the PROMPT PAYMENT DISC column. A further quantity discount may also apply as shown in the QUANTITY DISC PRICE column when ordering the quantity shown in the DISC QTY column but only if payment is received by due date.

**SPECIAL PRICING:** Where special prices are given that vary from our pricelist; they must be in writing from us to be regarded as an official quote. Written quotes are valid for thirty days from issuance unless otherwise stated.

**CATALOGUE-PRICELIST CROSS-REFERENCING:** We have carefully laid out the pricelist in the same order as the catalogue for easy cross-referencing - find the catalogue page number marked clearly on the right-hand margin of the pricelist. To further assist you we have now added a separate column showing the wholesale price of the lamp suitable for use in each fitting where available. Please note that this is a basic lamp price. Other lamp options such as long life alternatives are detailed in the lamp pages of the catalogue. Quantity discounts for lamps are also shown in more detail in the corresponding pages of the pricelist.

**FREIGHT:** Freight is free on orders with a wholesale value (excluding GST) of \$250.00 or more. On all other orders, freight is additional. Freight free applies only to single-delivery orders, does not include overnight delivery, nor delivery to rural or remote locations.

**RECEIPT OF GOODS:** Ensure you inspect all goods delivered by courier and report any hidden or visible damage to or non-receipt of product to Eurotech Lighting Ltd within the 24 HOUR Claim Period. This 24 HOUR Claim Period is becoming quite common in the transport industry, and failure to follow this procedure will abrogate any rights to claim for damage.

**RETURNS:** Goods are not accepted for return unless faulty or incorrectly supplied. If for any reason products are accepted for return by prior arrangement, a restocking fee of 15% will apply, with a minimum charge of \$10.00. An invoice number and date of purchase must accompany all goods returned. Goods will not be accepted for return after 30 days from the date of delivery docket. All goods must be returned in original condition and in unmarked original packaging.

**APPRO:** We offer an appro service, by prior arrangement only, where we send you one sample of each product for your customer's approval before sending the total quantity required. If the sample is not to your customer's liking then it can be returned and only the freight will be charged. The appro is for one week only; however, if you require the sample for longer, please phone us to arrange an extension of time. Products must be returned in original condition and unmarked packaging.

**LAMPS:** Prices for light fittings exclude lamps. Any "starter lamps" included by the manufacturer are not guaranteed. The KANDOLITE brand we sell separately is guaranteed.

**CUT-OUTS:** Due to unforeseen changes to product by the manufacturer, we do not recommend making any cut-out or construction for products without the goods on site. If carried out before receiving the products it is entirely at the purchaser's risk.

**AVAILABILITY:** We do our best to stock sufficient quantities of all products. Due to unpredictable bulk sales, at times there may be a lead time on delivery of goods. In a small number of cases, products may differ from the catalogue picture or dimensions shown. Please check these issues with our staff before specifying products.

**PARTS:** While reasonable efforts will be taken to source any parts that may be required for any repair of the goods, Eurotech Lighting Ltd cannot and does not guarantee the continued importation or availability of spare parts and does not undertake that parts or repair facilities will be available after the date of first supply in New Zealand.

**GUARANTEE:** While the Consumer Guarantees Act and Fair Trading Act provide the basis for Eurotech Lighting Ltd's guarantee policy, we often go above and beyond the expectation of these two statutory laws. Should there be a problem with a Eurotech Lighting Ltd product, we will assess each individual situation and work directly with our immediate customers to attempt to come to a resolution. Any product warranty is offered as "Return To Base" only. The product(s) must be returned to our warehouse for inspection and testing before we will repair/replace/credit as we deem necessary.

**E&OE:** Errors and Omissions Excepted.