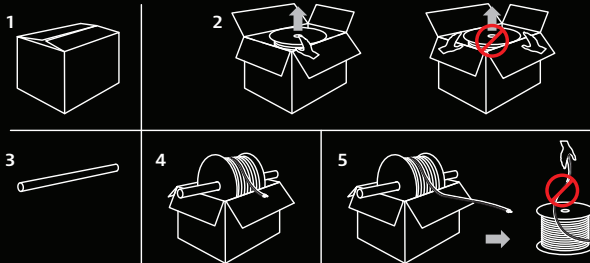




Read me

AQS Neon Flex Installation Guide



Serviceability

The product must be installed in a manner that is serviceable. The service component of the Aqualux warranty is dependant upon reasonable serviceability standards being met and is limited to the skilled labour required to perform the replacement only and any allowances (e.g for access equipment rental) detailed above. The service component of this warranty does not cover the removal or replacement of buildings materials (tiles, marble, sealed glass etc) required to access the product.

Replacement Warranty

Under our standard and extended replacement warranty, Aqualux undertakes to provide free-of-charge a replacement for the failed product. The replacement may be either new or refurbished at our discretion. The replaced product will carry our standard warranty terms or the original product extended warranty, whichever is greater. Our replacement warranty is limited to provision of product only and does not cover service or installation costs.

Declaration of Fit-for-Purpose

Aqualux endorses the use of AQS Neon Flex for general lighting applications in environments up to and including IP68 (1M depth). This declaration is dependant upon professional installation methods being followed and all joins and cable splices being suitable for the installation environment. In IP68 installations, all joins & splices must be IP68 rated.

AQS Neon Flex Neon Flex Installation

All supplied installation instructions must be adhered to. Careful handling of the LED Flex during installation is critical. Issues such as intermittent failures and cracked solder joints can arise from improper / careless handling during installation and lead to failures

Installation Test Procedure

Prior to commissioning and removal of access equipment, AQS Neon Flex Neon Flex should be tested to verify correct operation and that no damage has occurred during transport and installation. We recommend a period of 2-3 hrs to allow the product to reach thermal equilibrium and for any electrical faults to become apparent.

Whilst AQS Neon Flex is tested multiple times during manufacture and before supply, this final test is strongly suggested for all installations to allow any damage during transport and handling to be rectified before the site is cleared and the project commissioned.



AQS Neon Flex Installation Guide

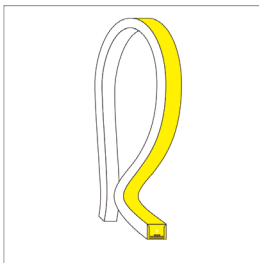
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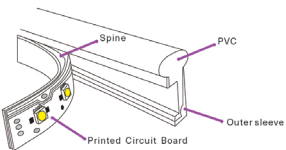
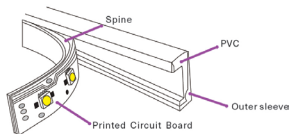
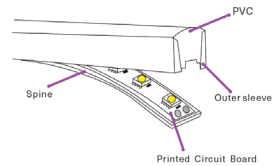
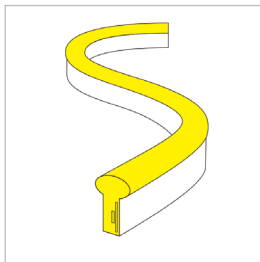
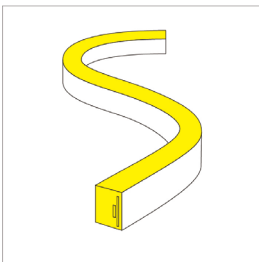
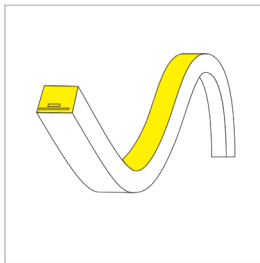
1. Introduction

Traditional glass neon has been the mainstay of commercial lighting for decades, providing a rich, vibrant source of light for commercial buildings and signs. Despite its attractive features it has numerous drawbacks, including the large amount of energy it requires, the extremely high voltage power supplies, and being hand drawn glass it is extremely fragile. LED neon flex overcomes all of these drawbacks by combining the energy efficiency of high output SMD LEDs encased in a UV and chemical resistant PVC that acts to diffuse the light mimicking the effect of neon.

Unlike neon, however, LED Neon Flex can be shaped and bent by anyone without the need for special tools or skills, the low voltage 24V DC alternative can be cut every 50 - 130mm (depending on model) and can operate off a plug in power supply. Unlike traditional neon - It is not just available in mono colours, with RGB Neon Flex cable of producing up to 16 million colour variations and the new Dynamic DMX version expands further on this and allows for exciting colour chasing effects. LED neon flex can be provided in different bending direction between horizontal & vertical, also the shape and emitting beam angle are not the same.



Horizontal Bending



This user guide is intended to cover as much detail as possible for this product, and great care has been taken to ensure this and the accuracy of the information contained within, however should additional information or clarification be required that is not covered within this guide or associated data sheets, or if there are any uncertainties regarding the installation and operation of this product, Aqualux MUST be contacted before any work is carried out on the fixture or associated products.

Failure to comply with this guide and local electrical and construction regulations may result in serious injury or even death - always isolate power before working on electrical products and ensure adequate measures are taken to mechanically support fixtures at all times.

2. Installation Guide

This product left the place of manufacture fully tested and operated.

In order to maintain this condition and for safe operation, the user must always follow the instructions and safety warnings described in this user Guide.

Safety Warning!

General

- This product must be installed by a qualified and competent professional.
- When working on the fixture, heat resistant gloves should be worn to provide adequate user protection.
- Do not work on the product with wet hands.
- Always disconnect the power supply before attempting to maintain or service the equipment.
- Always operate the equipment as described in this user guide.
- Do not stare directly into the LED light source.
- Make sure that all parts of the equipment are kept clean and free of dust which should be carried out as part of a maintenance cycle that's appropriate for the installation location of the product.
- The product (LED) should be changed if it has become damaged or thermally deformed.

Installation

- A minimum distance of 0.5m must be maintained between the equipment and any combustible surface. The mounting surface must not be combustible/hot.
- Always ensure the supporting structure is a solid surface and can support the weight of the product and any additional wind or shear force. The supporting structure must be capable for the installation of luminaires, and advice must be taken from an appropriately qualified and competent person to verify proposed mounting positions and surfaces.
- Always make sure that the equipment is installed securely and ensure all safety anchors are installed.
- The product must be installed within serviceable areas.
- The Earth wire MUST ALWAYS be connected.
- Local electrical and building regulations must be followed. If in doubt, please contact distributor support.
- Avoid shaking or strong impacts to any part of the equipment.
- Always make sure that the power and data connections are connected correctly and securely. If there is any malfunction of the equipment, contact your local distributor immediately.
- This fixture should not be buried.

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Caution, risk of electric shock.

The light source and other electronic components contained in this luminaire shall only be replaced by your distributor or an approved service agent.

Specific Installation

- Although this product does not generate a great amount of heat, it is recommended that you do not cover or conceal it.
- Do not route the product through walls, doors, windows, or building structures.
- Do not roll out the product onto rough surfaces or over sharp corners. This will scratch the PVC optics and damage the finish of the product.
 - Do not use the product if:
 - The outer PVC jacket is damaged
 - There are loose electrical connections
 - The wires are visible without insulation.
- Do not secure the product with staples, nails, or alike that might damage the insulation or PVC material.
- Do not install the product on/in places where it is subject to continuous flexing.
- Do not operate/run the product in temperatures exceeding 45C or 113F.
- Do not operate the product over the specified voltage or LED life degradation will be greatly increased.
- Do not leave any part of the product unsecured.
- Constant movement over time from weather can cause damage.
- Do not reverse polarity when connecting from both ends. This will damage the internal PCB. Always test connections with a multi-meter before applying power.
- Do not energise the product whilst in packaging.
- The product can be cut only where marked. Look for the "Dotted Line" or "Scissor Mark". A cut section must have the appropriate flex IP rated cap accessory to maintain IP ratings.
- Cutting outside of the specified mark will damage the light.
- Do not cut while the LED flex neon is connected to power.
- Do not install in human inhabited pools.
- Must always be used with an electrical isolation transformer providing SELV (safety extra low voltage).
- Do not cut off the cable wire between the waterproof treatment and connector.

This user guide is intended to cover as much detail as possible for this product, and great care has been taken to ensure this and the accuracy of the information contained within, however should additional information or clarification be required that is not covered within this guide or associated data sheets, or if there are any uncertainties regarding the installation and operation of this product, Aqualux MUST be contacted before any work is carried out on the fixture or associated products.

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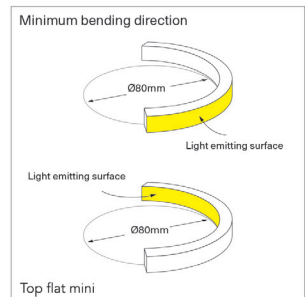
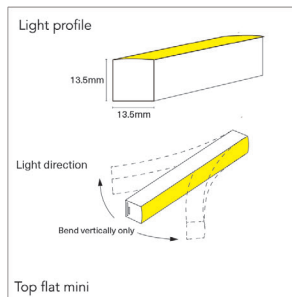
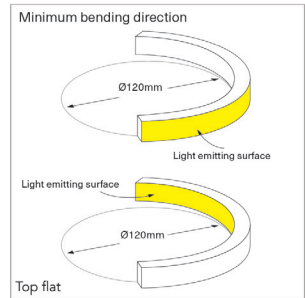
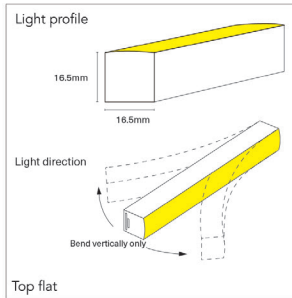
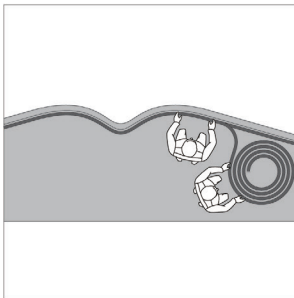
3. Mounting Product

LED neon flex is a highly durable product but must be installed in accordance with the pictures shown below, which indicate the minimum bending parameters as well as the correct bending direction for each specific variant of model.

LED neon flex must be installed by at least 2 people, who can support the product in various locations as shown. During installation, care should be taken to ensure the bending radius of ex is not exceeded.

NOTE: Drawings for illustration purposes only. For specific information please refer to your datasheet.

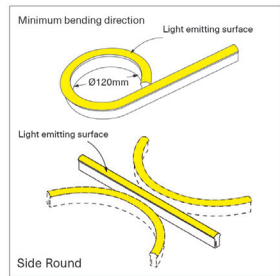
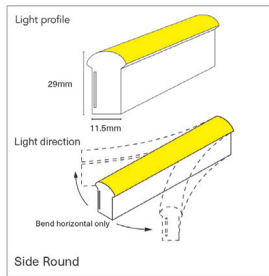
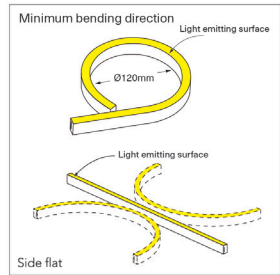
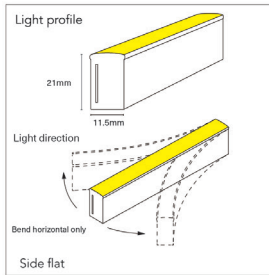
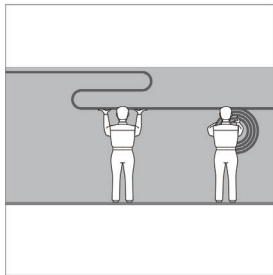
AQS Neon Flex



LED Neon flex is a highly durable product but must be installed in accordance with the pictures shown below, which indicate the minimum bending parameters as well as the correct bending direction for each specific variant of model.

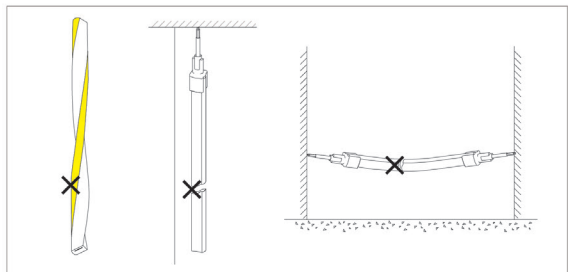
LED neon ex must be installed by at least 2 people, who can support the product in various locations as shown. During installation, care should be taken to ensure the bending radius of Neon Flex is not exceeded.

NOTE: Drawings for illustration purposes only. For specific information please refer to your datasheet.



General DO NOTS

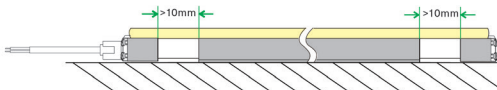
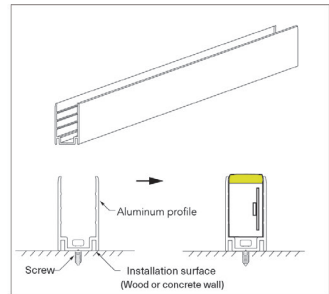
The images give indication as to what is not acceptable as an intended installation or during installation of other fixing methods.



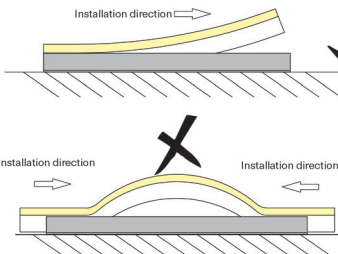
General Mounting

LED neon flex can be fastened to surfaces using appropriate accessories available from Aqualux. Please refer to data sheets or contact technical support for a copy.

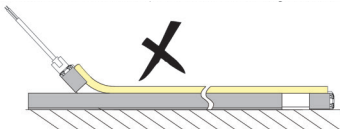
The use of glues and resins as fixing agents should be avoided. If the use of a glue or adhesive compound cannot be avoided, a neutral pH silicone-based compound is suggested. High VOC, Epoxy-based resins, cyanoacrylate or other adhesives will void the warranty. If unsure call Aqualux to discuss. Use of glues and resins may invalidate the warranty of the product, unless its use is agreed in writing by Aqualux as part of a detailed project specification. The images indicate one type of fixing available in the accessories range. The different fixings serve different purposes, however when in doubt technical support should be contacted. Quantities of accessories and fixings are dependent on the type and its effect on the variant Neon Flex it's being used with. Care should be taken to ensure drooping is avoided, and to ensure that neon flex is fastened adequately to avoid stresses on product itself. The aluminium mounting piece of IP67 front connector and end cap should keep at least 10mm space apart from aluminium channel when making installation.



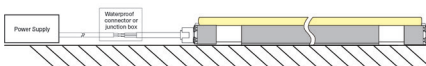
Press the flex light into mounted aluminium channel in one direction.



Incorrect installation like below picture could lead to light failure.



Mount the cable junction in hermetic enclosure like waterproof junction box in outdoor application.



Do not bend against light terminals; otherwise it will lead to failure of connector waterproof.

Ensure the feeding cable not bear force, keep the head 10mm in natural loose.

