

rainbow
professional



shaping your environment

RITE-L-EDGE

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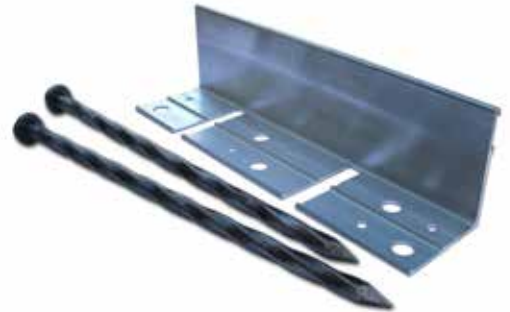
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Aluminium 'L' Shaped Landscape Edging

General Product Information

Suitable for use in public and private areas including playgrounds, parks and surrounding areas to landscapes and buildings. Flexible aluminium edge restraint 'L' shaped for additional strength provides an unobtrusive edging solution for hard landscape surfaces. Can be used for edging or segregating resin bonded, resin bound, gravel and various other hard landscaping surfaces.



Product Specification

| | |
|-------------------------|-------------------|
| Product code | C579 |
| Material | Aluminium |
| Aluminium Specification | 6063 T-6 Hardness |
| Finish | Mill |
| Profile Height | 150mm |
| Profile Width (Foot) | 70mm |
| Piece Length | 2.438m |
| Pieces per pack | 8 |
| Linear Metres per pack | 17.066m |
| Thickness | 3mm |
| Visible Thickness | 8mm |
| Piece Weight | 3.80kg |
| Fixing Method* | Steel Pins |
| Joining Method | Connector Strip |

* Steel fixing pins are used at 30cm spacing for compacted surfaces and 50cm for non-compacted surfaces.

Rainbow Professional Limited as part of its continual improvement process reserve the right to change the properties listed on this data sheet without prior notice.

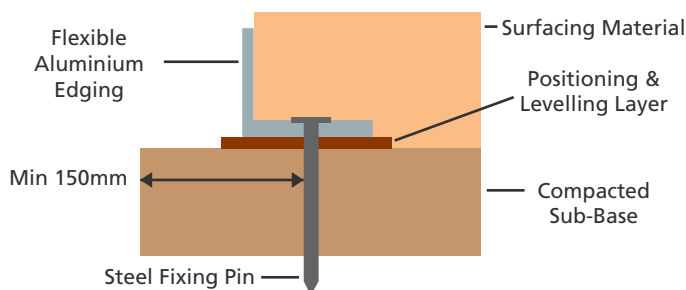


General Installation Information

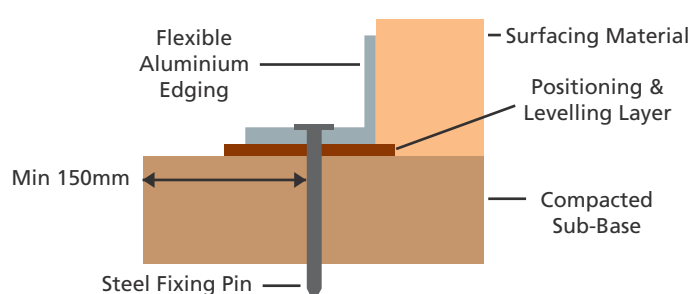
Installation should be on a suitably compacted sub base constructed typically from a MOT Type 1 material. A bedding layer may also be preferable to enable positioning and levelling which can be of a dry mix (3:1 sharp sand and cement) or a 10-15mm binding layer of fines or sand. The base of the 'L' shaped section should be fixed to the sub base with steel fixing pins (10mm dia x 250mm long) at 30cm spacing for compacted surfaces and 50cm for non-compacted surfaces. When fixing to existing concrete or asphalt it is recommended to use a proprietary masonry fixing system utilising screws/plugs or nails. (See separate Rite-L-Edge Installation Information sheet for more details)

Basic Installation Steps

- Excavate site
- Install sub-base to required depth
- Lay levelling layer
- Fix landscape edging
- Install top surface



INSIDE FIXING



OUTSIDE FIXING

The above notes are intended as a guide only and professional opinion should be obtained before work is commissioned. Rainbow Professional Limited accepts no responsibility for any damage or loss as a result of using the information in these guidelines. We will be happy to engage in any discussion regarding the site in question.

Storage and Handling

Rite L Edge uses Aluminium Alloy 6063 T6 which is one of the easiest materials to keep in good condition. It has a high natural resistance to corrosive conditions normally encountered during shipment and storage. The product is securely packed in a single flute cardboard carton to ensure no movement of the product in transit and each carton is sealed with a fibre tape.

Each carton of Rite L Edge will have the weight clearly shown at the end of carton. Whilst there is no specific weight restrictions on what is or is not safe to lift in manual handling, an assessment of the health and safety risks should be undertaken and measures taken to reduce the risk of injury so far as reasonably practicable.

- a) Each person should be fully trained in manual handling techniques.
- b) The use of handling aids such as a trolley, folk-lift, pallet truck or conveyor should be used if moving large volumes of cartons.
- c) Breaking up large consignments into more manageable loads.
- d) Ensure that the product is stored at a reasonable height, so avoiding the lifting of cartons from floor level or above shoulder height.
- e) Reduce carrying distances of cartons.

Protective Equipment

We would recommend that personal protective equipment (PPE) is used when installing Rite L Edge.

- a) Good strong safety boots/shoes to protect the feet from cutting blades, heavy equipment and dropped landscape product.
- b) Protective eyewear such as safety glasses when cutting product to protect eyes from flying objects.
- c) Strong gloves to protect the hands from blisters, scratches and cuts from tools etc.
- d) If using loud cutting equipment then ear plugs or ear muffs should be worn to protect hearing.
- e) When using a chainsaw, chaps to be worn.

First Aid

The Health and Safety (First Aid) Regulations 1981 require all construction sites to have –

- a) A first aid box with enough equipment to cope with the numbers of workers on site.
- b) An appointed person to take charge of first-aid arrangements. The appointed person looks after first-aid equipment and facilities and calls the emergency services when required. They can also provide emergency cover where a first-aider is unexpectedly absent (annual leave does not count). Appointed persons do not need first aid training.
- c) A first-aider is someone who has undertaken training and has a qualification that HSE approves. This means that they must hold a valid certificate of competence in either:
 - first aid at work (FAW) issued by a training organisation approved by HSE, or
 - emergency first aid at work (EFAW) issued by a training organisation approved by HSE or a recognised Awarding Body of Ofqual/Scottish Qualifications Authority.
- d) The number of first-aiders will depend on the site:

| Number of employees | First aiders |
|---------------------|---|
| Fewer than 5 | At least one appointed person |
| 5-50 | At least one first-aider trained in EFAW or FAW, depending on the type of injuries that may occur |
| More than 50 | At least one first-aider trained in FAW for every 50 people employed (or part of 50) |

- e) Information should be clearly displayed on site telling workers the name of the appointed person or first aider and where to find them. A notice in the site hut is a good way of doing this.

Fire Protection

Rite L Edges uses Aluminium Alloy 6063 T6 which does not burn and is not a fire hazard. Each year hundreds of thousands of tonnes of aluminium scrap are fed into re-melt furnaces and heated up to and beyond the melting point (660.3 °C). The aluminium melts when the temperature exceeds the melting point, it does not burn. If it did, the recycling of aluminium would not be possible.

However, the cardboard packaging that is used to transport Rite L Edge will burn if exposed to a naked flame.

Physical Properties

Rite L Edge uses Aluminium Alloy 6063 T6. This is a medium strength alloy commonly referred to as an architectural alloy. It is normally used in intricate extrusions. It has a good surface finish, high corrosion resistance and is readily suited to welding and can be easily anodised.

The physical properties of 6063 T6 are:

| Physical Properties | Value |
|------------------------|------------------------------|
| Density | 2.70 g/cm ³ |
| Melting Point | 660.3 °C |
| Thermal Expansion | 23.5 x 10 ⁻⁶ /K |
| Modulus of Elasticity | 69.5 GPa |
| Thermal Conductivity | 200 W/m.K |
| Electrical Resistivity | 0.035 x 10 ⁻⁶ Ω.m |

Resistance to Chemicals

Thanks to the protective properties of the natural oxide layer, aluminium shows good resistance to many chemicals. However, low or high pH values (less than 4 and more than 9) lead to the oxide layer dissolving and, consequently, rapid corrosion of the aluminium. Inorganic acids and strong alkaline solutions are thus very corrosive for aluminium.

Exceptions to the above are concentrated nitric acid and solutions of ammonia. These do not attack aluminium.

In moderately alkaline water solutions, corrosion can be hindered by using silicates as inhibitors. Such kinds of inhibitors are normally included in dishwasher detergents.

Most inorganic salts are not markedly corrosive for aluminium. Heavy metal salts form an exception here. These can give rise to serious galvanic corrosion due to the reduction of heavy metals (e.g. copper and mercury) on aluminium surfaces.

Aluminium has very good resistance to many organic compounds. Aluminium equipment is used in the production and storage of many chemicals.

Stability

Rite L Edge uses Aluminium Alloy 6063 T6. This is a medium strength alloy commonly referred to as an architectural alloy. In the building industry aluminium is now a first choice wherever durability coupled with minimal maintenance are prime considerations.

All building materials are eventually degraded by weathering, corrosion, rot and decay. Aluminium's natural ability to resist these influences better than many materials is one of its most widely appreciated features. Aluminium reacts with the oxygen in the air to form an extremely thin layer of oxide, this layer is dense and provides excellent corrosion protection, the layer is also self-repairing if damaged.

In its unprotected 'mill finish' form aluminium is used very successfully for long-life everyday products making Rite L Edge more than suitable for its application as a landscape edging system.

Rite L Edge is the first choice in metal landscape edgings for specifiers and contractors due to its versatility, strength, speed of installation and cost effectiveness. Available in a variety of depths the use of Rite L Edge aluminium landscape edgings will enhance any project.

Environmental Issues

All Rite L Edge aluminium products can be recycled 100%. If the product is no longer required it can be removed from the ground and recycled and the area returned back to its natural state.

Rite L Edge has a recycled content of aluminium which is derived from two sources, 60% post industrial and 10% post consumer and the balance of 30% is virgin aluminium. The 30% virgin is blended in with the recycled content to help achieve the proper alloy specification for chemical content which in turn helps achieve the specified mechanical properties for strength.

Scrap aluminium is a valuable resource and can be recycled over and over again into a new generation of products. Furthermore, recycling requires only 5% of the original input.

There are plenty of raw materials for the production of aluminium. In a variety of forms, aluminium compounds make up a full 8% of the Earth's crust. Bauxite is the main starting point in the production of aluminium and given current rates of production there is enough bauxite to last another 200 to 400 years, this based upon no increases in the use of recycled aluminium and no further discoveries of bauxite.

Packaging considerations – Rite L Edge is packed in a single flute cardboard carton of which 75% of the cardboard has been manufactured using recycled material. The cardboard can be recycled and disposed of in the normal manner.

For more information visit our web site www.rite-edge.com
or telephone our technical helpline on 01482 616861