SCAN HERE

ALUEXCEL

Premium aluminium landscape edging with the clean, contemporary appeal of architectural detail.

Manufactured from high-grade aluminium, AluExcel is precision milled to create a distinct finish, delivering exceptional strength and a contemporary edge profile for a wide range of landscape applications.

- Cost-effective alternative to traditional pin kerbs
- Premium recyclable aluminium
- Versatility of Design
- Easy installation
- Quality & Durability

NBS Source PARTNER

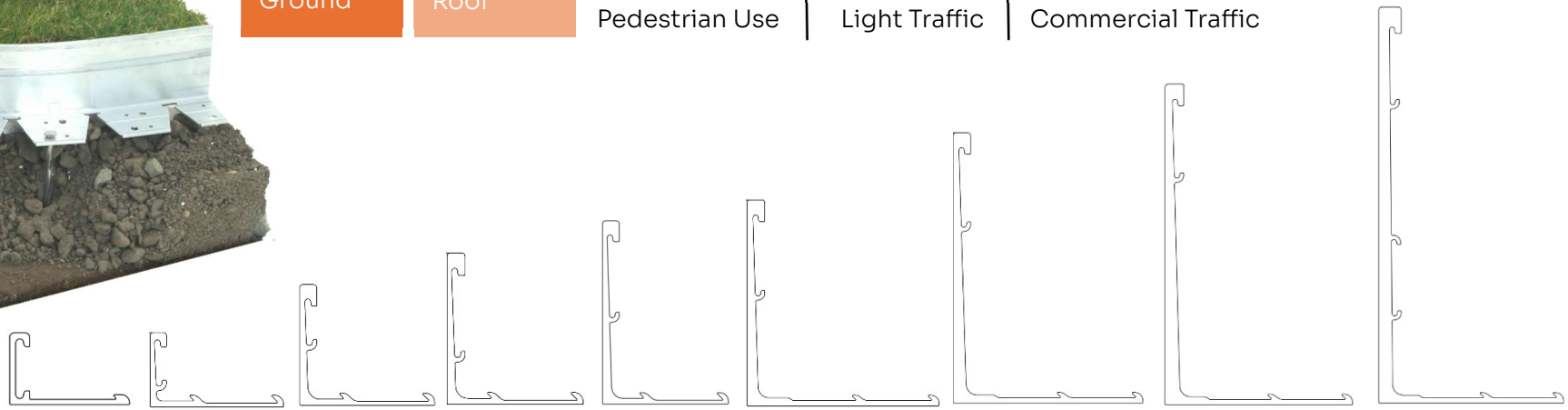
MADE IN BRITAIN

MF Mill Finish

G Ground

R Roof

Pedestrian Use | Light Traffic | Commercial Traffic



18mm x30mm | 25mm x 45mm | 40mm x 45mm | 50mm x 45mm | 65mm x 45mm | 75mm x 70mm | 100mm x 70mm | 120mm x 70mm | 150mm x 70mm

Specification

Product Type	Grade 6005A Aluminium angle edging for urban landscaping
Manufactured to Product Type	Designed and Manufactured in the UK BS EN 755/9
Edging Finish	Mill Finish (power-coating, anodised and brushed finishes available to order)
Edging Heights	18mm, 20mm, 25mm, 40mm, 50mm, 75mm, 100mm, 125mm, 150mm, 200mm
Edging Thickness (top bead)	5.5-8.5mm (depending on profile view below)
Edging Length	2500mm
Edging Foot Width	30mm (18-20mm heights), 45mm (25-65mm heights), 70mm (75-150mm heights)
Chamfer	Tapered top edge for stability and refined design
Fixings	250mm spiral fixing spikes
Weights (kg)	0.58kg, 1.36kg, 1.52kg, 1.85kg, 2.88kg, 3.65kg, 4.66kg, 6.15kg
Tightest radius by hand	1500mm
Minimum radius in factory	25-100mm high = 250mm / 120-150mm = 350mm
Applications	Blocks & pavers, asphalt/tarmac, wet-pour rubber safety surfacing, resin-bound gravel
Preform Corners	90˚
Durability	Non-corrosive; withstands hot asphalt up to 200˚C
Fire Resistance	Class 1A
Recycled Content	≥ 80% recycled aluminium, 100% recyclable
Environmental Impact	Aluminium is endlessly recyclable; low whole-life cost
Installation	Bed on compacted sub-base with dry-mix bedding; fix at 500mm centres
Stability	Strong base, tapered top edge, resistant to weathering & corrosion
Packaging	Securely packed in boxes, palletised where required
Carbon Footprint	Lowered through recycled aluminium use

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AluExcel

Aluminium angle edging for hard landscaping.

L-profile aluminium edge restraint for hard landscape surfaces available in either Flexible or Rigid lengths in various heights and thicknesses.

Power coat finishes available on request.

Benefits:

- Highest quality, durable aluminium alloy won't rust
- Create clean curves or straight lines by hand
- Fast, simple installation saves times and money
- Strong base with tapered top edge gives stability to a refined design
- Works between all hard/soft surface types
- 6005A Grade Aluminium
- 6063 Grade Aluminium – 18-20mm

Suitable for:

- Blocks and pavers
- Asphalt and tarmac
- Wet-pour rubber safety surfacing
- Resin bound gravel
- High traffic locations
- Public realm
- Developments

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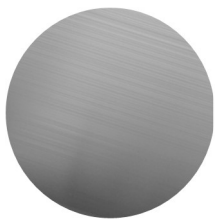
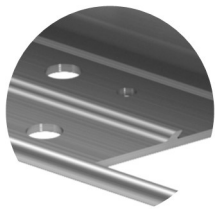
Stock

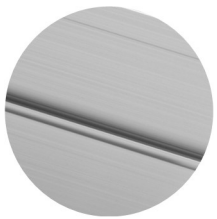
Edging Height	Thickness (top bead)	Edging Length	Edging Foot Width	Minimum Radius by Hand	Minimum Radius by Factory	Weight (kg)	Material Specification	Finishes	Recycled Content	Flexible	Rigid
18mm	5mm	2500mm	30mm	1000mm	200mm	0.57kg	6063 T6	Mill Finish	Part-Recycled/100 % Recyclable	AE10FLE018T050L2500S	AE10RIG018T050L2500S
20mm	5mm		30mm	1000mm	200mm	0.59kg				AE10FLE020T050L2500S	AE10RIG020T050L2500S
25mm	5.5mm		45mm	1500mm	250mm	0.98kg	6005 AT6			AE10FLE025T055L2500S	AE10RIG025T055L2500S
40mm	6mm		45mm	1500mm	250mm	1.36kg				AE10FLE040T060L2500S	AE10RIG040T060L2500S
50mm	6mm		45mm	1500mm	250mm	1.52kg				AE10FLE050T060L2500S	AE10RIG050T060L2500S
65mm	6mm		45mm	1500mm	250mm	1.85kg				AE10FLE065T060L2500S	AE10RIG065T060L2500S
75mm	6.5mm		70mm	1500mm	250mm	2.88kg				AE10FLE075T065L2500S	AE10RIG075T065L2500S
100mm	6.5mm		70mm	1500mm	250mm	3.62kg				AE10FLE100T065L2500S	AE10RIG100T065L2500S
120mm	7mm		70mm	1500mm	350mm	4.76kg				AE10FLE120T070L2500S	AE10RIG120T070L2500S
150mm	8.5mm		70mm	1500mm	350mm	6.15kg				AE10FLE150T085L2500S	AE10RIG150T085L2500S
200mm	8.5mm		70mm	1500mm	350mm	7.72kg				AE10FLE200T085L2500R	AE10RIG200T085L2500R

Product	Product Description	Weight (kg)	Pack Qty	Qty required per 1m length	Item Code
Small Connectors	18-40mm connector	0.5kg	50	1	AE10CON050T018L0000S
Large Connectors	50-150mm connector	0.8kg	50	1	AE10CON050T050L0000S
Spiral Spikes	for type one subbase	10kg	100	5	AE10FIX300T000L0000S
Concrete fixings	Used to install onto concrete	1.3kg	100	5	SC80FIX070T075L0000S

**Powder Coating, Anodising and Brushed Finish options available to order*







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Product & Installation Guide

Tools Required

- Mallet
- Hacksaw / Angle Grinder
- Level
- Tape Measure
- Spray Paint
- String Light
- Shovel / Spade

Fixings Included

- 250mm Spiral Fixing Stake
- Strip Connector

1. Sub-base & set out

Lay suitable sub-base to required depth (to engineer's specification). Thorough compaction of the sub-base is essential to ensure a successful installation. Ensure sub-base extends 100-150mm beyond the prepared edge restraint line.

2. Laying the edging

Lay a thin dry mix bedding layer (e.g. sharp sand and cement) beneath the edging foot to approximately 10mm. This thickness can be varied to adjust levels as required. This also ensures continuous support under the foot of the edging. The edging should not require a wet concrete haunch unless in non-standard applications.

Place the edge restraint and set to correct position.

Fix the Spiral Fixing Stakes through edging foot in the pre-punched holes, at a maximum of 500mm centres. Ensure the nails are firmly secured in the ground and down to the foot of the edging.

Alternative fixing method: Use concrete screws if fixing into a cured concrete foundation. Contact the technical team for more information

Note: Additional staking is recommended when laying curves or the area is subject to heavy traffic.

3. Laying the edging

Use the Strip Connector (provided) to link lengths of AluExcel together. Slide halfway into channel on inside of the edge restraint and connect with other length leave 3-4mm expansion gaps between connecting lengths.

IMPORTANT: When laying hot surfacing material (i.e. tarmacadam) leave a 3-4mm gap between each 2500mm length to allow for thermal expansion.

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Product & Installation Guide

Handling & Hazards

CORNERS & EDGES
Wear gloves

BE SAFE! Wear gloves high visibility clothing, hard hats and any other PPE

HEAVY SEGMENTS! Requires two persons to lift each segment – or mechanical lifting device.

HEAVY ITEMS! Wear steel toe protection

DISCLAIMER

These instructions are for guidance only and the installer is responsible to use their discretion to install the products in the best possible way for their respective application. Kinley Systems will not be held liable for product failure or poor performance because of poor quality installation. If any errors are found in this guide, please email us at **sales@kinley.co.uk**

SUPPORTING DOCUMENTS

More information on the AluExcel products can be found at www.kinley.co.uk in the Resource Centre. Look for the CAD Drawings, Data Sheet (DS-AE-0916) and the Edging Book (BR-EB-0116).

4. Laying surfaces

The next stage is to lay the surfacing.

When more than one layer is required, the base course should be properly applied and compacted before proceeding to the final wearing course. Take care not to damage the edge restraint with the compaction equipment.

Lay final surface.

Ensure top of edge restraint sits just below level of top surfaces, especially if top surface is to be compacted (i.e. tarmacadam).

Backfill behind edging or lay additional hard surface as required.

5. Hot laying surfacing

Only in relation to hot rolled surface applications.

Compact surfacing with roller. Ensure first pass with roller is 50mm clear of AluExcel, with vibrating function turned off.

Final pass should be made as close to the edge as possible.

On the final wearing course, and where applicable, roller should be run over edge of AluExcel to ensure full compaction and a neat finish.

Note: Hot lay surfacing e.g. tarmacadam, should not exceed 180°C.

[View Installation Guide Here]

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Product & Installation Guide

Applications

To edge or demarcate asphalt, rubber coating and other hard landscape surfaces. Suitable for parks, playgrounds and around building perimeters. AluExcel uses Aluminium Alloy 6005A T6 which is a high-performance alloy with a high natural resistance to corrosive conditions in normal environments. It also has a higher resistance to heat than other aluminium alloys making it suitable for use with hot asphalt or tarmacadam surfacing up to 200°C.

Installation information

18mm profile: By mounting on bitmac basecourse using proprietary masonry fixings.

All others: By mounting on compacted substrate (e.g. MOT Type 1) using 250mm steel Spiral Fixing Stakes. Other sub-base materials can be used – please contact our technical team to discuss. A bedding layer of dry mix 5:1 sharp sand / cement is recommended to ensure continual support of the edge restraint. When mounting on existing asphalt or concrete, use masonry nails or screw and plug fixings.

Lengths can be joined using a Strip Connector fitted onto the inside face of the product, except for the reversed profile where the Strip Connector is used on the rear of the product (in situations where the outside surface is higher than the inside surface, leaving the inside face visible).

Storage & Handling

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. Depending on the size / weight of the consignment this may be palletised.

Whilst there are 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.

Fire Protection

AluExcel is made using Aluminium Alloy 6063 T6 & 6005A T6 which does not burn and is not a fire hazard.

The following guidelines may be useful:

Each person should be fully trained in manual handling techniques.

The use of handling aids such as a trolley, folk-lift, pallet truck or conveyor should be used if moving large volumes of cartons.

Break up large consignments into more manageable loads.

Ensure that the product is stored at a reasonable height, so avoiding the lifting of cartons from floor level or above shoulder height.

Reduce carrying distances of cartons.

Protective Equipment

We recommend that PPE (Personal Protective Equipment) is used when installing AluExcel:

Good strong safety boots/shoes to protect the feet.

Protective eyewear such as safety glasses.

Strong gloves to protect the hands.

If using loud cutting equipment, then ear plugs or defenders should be worn.

First Aid

The Health and Safety Regulations 1981 require all construction sites to have the following:

A first aid box with enough equipment to cope with the number of workers on site.

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. Appointed Persons do not need first aid training.

A First Aider who has undertaken training and holds an HSE approved qualification to administer first aid. 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

Emergency first aid at work (EFAW) issued by a training organisation approved by HSE

A recognised Awarding body of Ofqual/Scottish Qualifications Authority.

The number of first aiders will depend on the site.

Information should be clearly displayed on site telling workers the name of the Appointed Person(s) or First Aider(s) and where to find them.

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Stability

Aluminium Alloy 6005A T6 grade alloy is a high-performance alloy. It has a higher degree of strength, durability and resistance to heat than the less robust 6005A grade alloy.

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 and is self-repairing if damaged.

In its unprotected 'Mill Finish' form aluminium is used very successfully for long-life everyday products making AluExcel exceptionally suitable for use as a commercial landscape edging system.

Environmental Issues

AluExcel is manufactured from recycled aluminium (80% recycled content minimum) and is 100% recyclable. As a result, the whole life cost of aluminium edging is excellent as it is sold for recycling not paid disposal. The 20% virgin aluminium is blended with the recycled content to help achieve the proper chemical content for the alloy specification, which gives the specified mechanical properties for strength. Scrap aluminium is a valuable resource and can be recycled repeatedly.

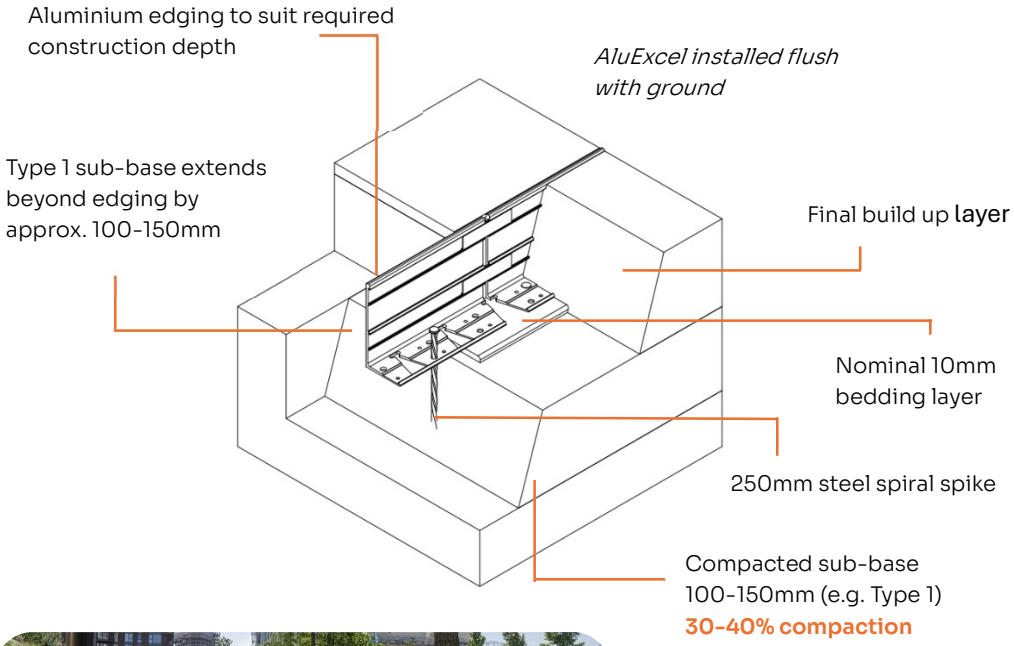
There are plenty of raw materials to produce aluminium. In a variety of forms, aluminium compounds make up a full 8% of the Earth's crust. Bauxite is the main starting point in the production of aluminium and given current rates of production there is enough bauxite to last another 200 to 400 years, this based upon no increases in the use of recycled aluminium and no further discoveries of bauxite. Furthermore, the volume of aluminium being recycled is at a level where the requirement for virgin alumina is decreasing – further lessening the environmental impact.

Supporting Documents

More information on the AluExcel products can be found at www.kinley.co.uk in the Resource Centre. Look for the CAD Drawings, Installation Guide and Edging Book.

Loading Analysis

Loading analysis was undertaken on the AluExcel 75mm edging using Finite Element Analysis. The analysis was based on a distributed load of 500mm directly down on to the top of the edging. On the distributed load test, failure occurred once loading reached 28500N. More information on the Finite Element Analysis testing is available on request.



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