

LED ILLUMINATED HANDRAIL SYSTEMS

WORKING IN COLLABORATION WITH



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EDUCATION



SPORTS/LEISURE



TRANSPORT



PUBLIC REALM



COMMERCIAL



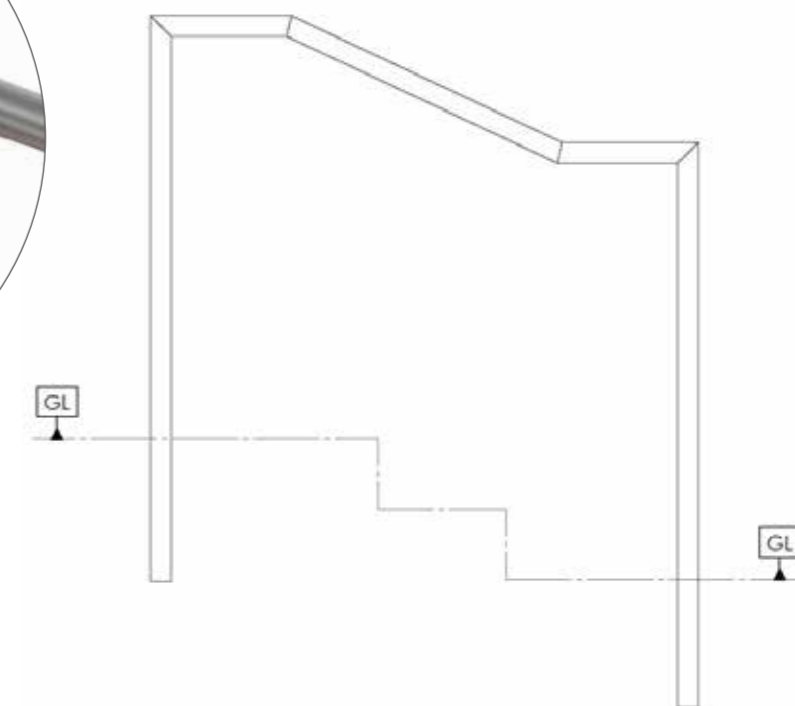
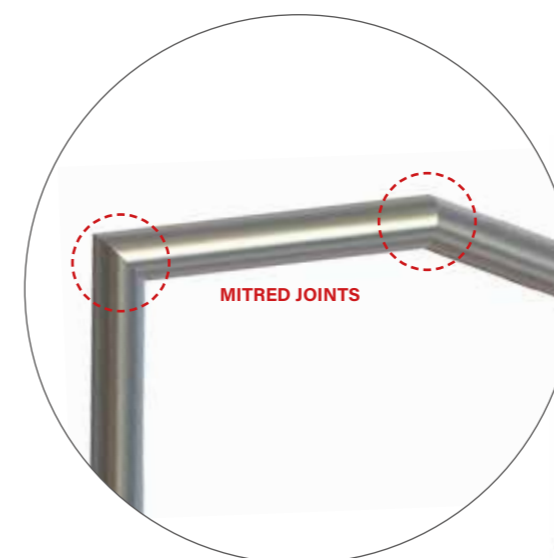
RESIDENTIAL

LED HANDRAILS MITRED LED HANDRAIL

The Mitred LED Handrail is a symmetrical designed handrail ideal in areas which have edged surfaces throughout the design.

Crisp, fully mitred and polished transitions to our site measurements and CAD layout drawings. Bespoke stainless steel fabrication and metal finishing is a key speciality. There are a variety of installation solutions.

For more information see pages 18-19.



BENEFITS/ ADVANTAGES

- ✓ Fully symmetrical design
 - ✓ Simple installation
- ✓ Fully welded and polished, no joint lines visible
- ✓ Manufactured in stainless steel
 - ✓ 48.3mm dia x 2mm tube

LED MODULES AVAILABLE			
F48	F300	Spot	Continulux

See more on pages 14 -15

FINISHES				
Satin/brushed	Bead blasted	Electro polished	Any RAL powder coats	Bespoke finishes on request



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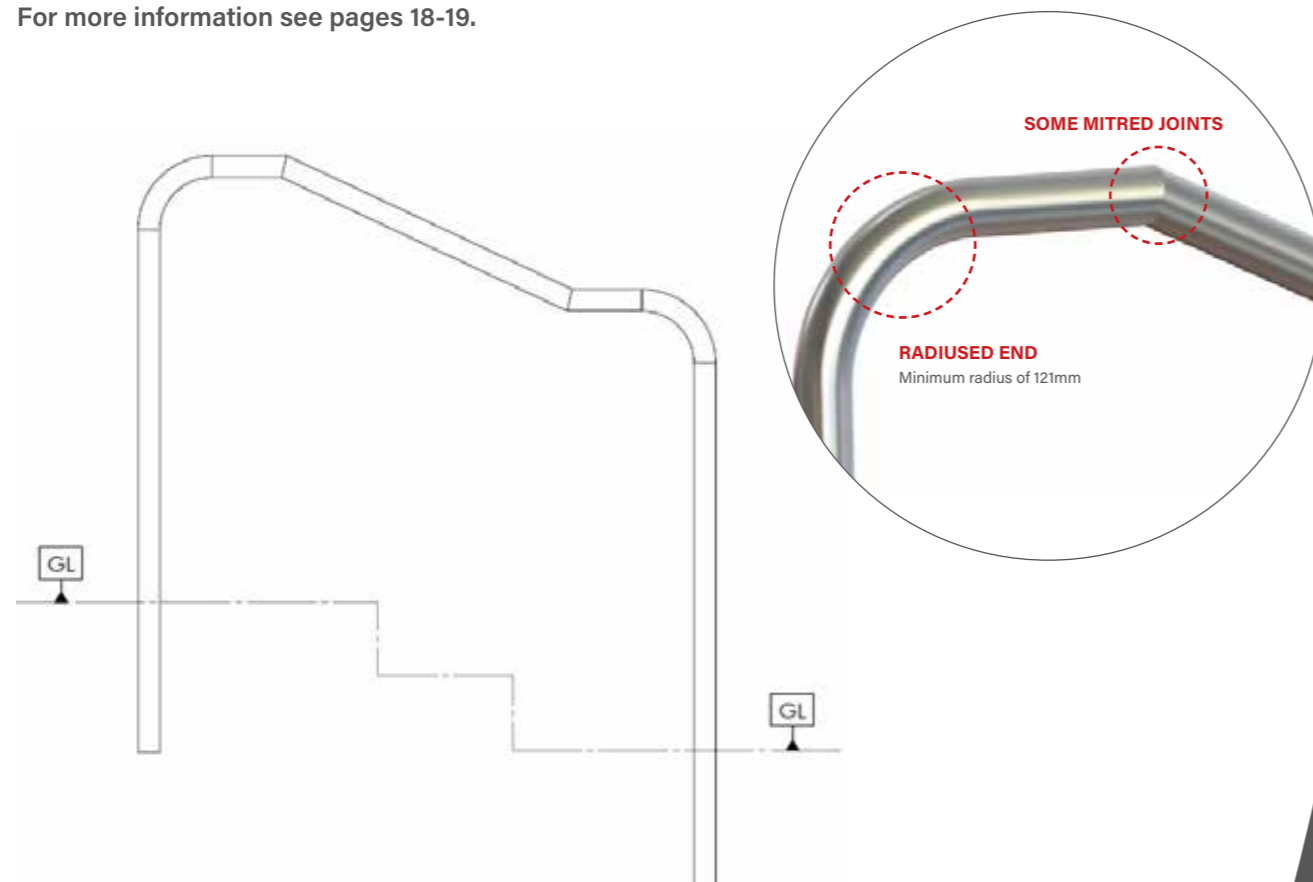
LED HANDRAILS

RADIUSED LED HANDRAIL

The Radiused LED Handrail is similar to the mitred version but with the added smooth transition from the upright to top rail.

Our British made CNC mandrel tube bender ensures the inner tube face is free from unsightly corrugation or distortion. Complete semi-circle or partial bends to a 121mm minimum radius gives endless possibilities with a flawless finish. There are a variety of installation solutions.

For more information see pages 18-19.



LED MODULES AVAILABLE			
F48	F300	Spot	Continulux

See more on pages 14 -15

FINISHES				
Satin/brushed	Bead blasted	Electro polished	Any RAL powder coats	Bespoke finishes on request

BENEFITS/ADVANTAGES

- ✓ Smooth transition to top rail
- ✓ In-house CNC mandrel bending
- ✓ Fully welded and polished, no joint lines visible
- ✓ Manufactured in stainless steel
- ✓ 48.3mm dia x 2mm tube



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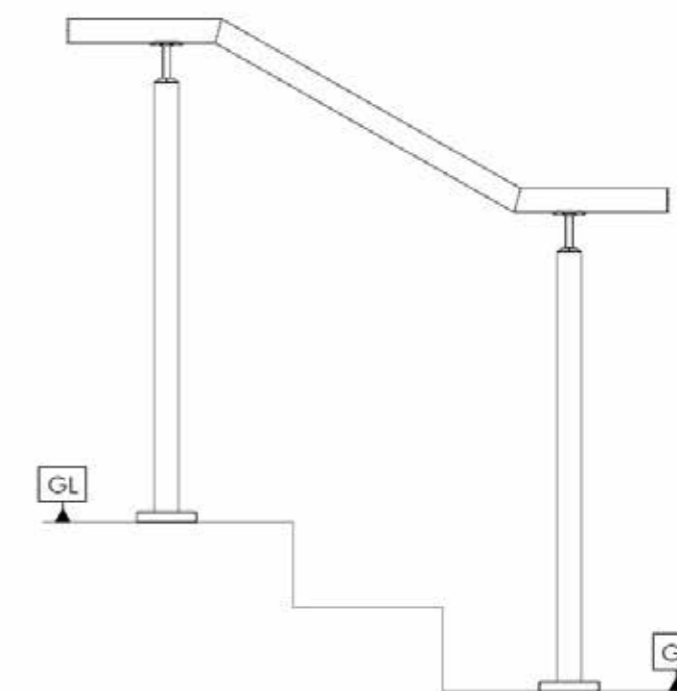
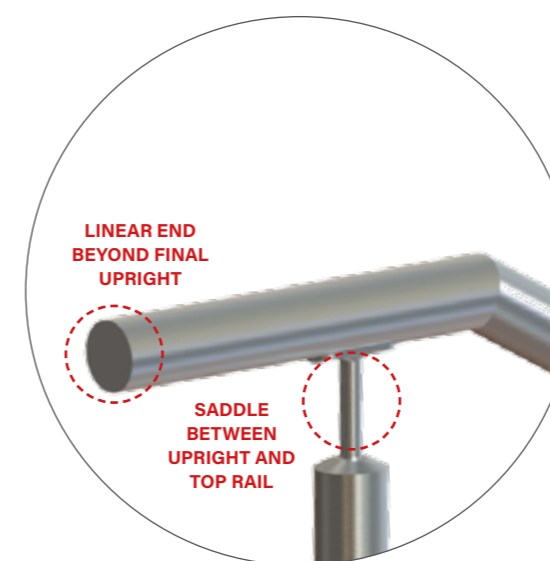
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LED HANDRAILS LINEAR LED HANDRAIL

The Linear LED Handrail is for a clean, simply designed handrail. It suits any area, giving a strong directional focus for the handrail.

The horizontal fixing for the post spigot and cradle is before the mitred handrail transition. Always finished on our automatic polishing line for satin polish grain consistency. There are a variety of installation solutions.

For more information see pages 18-19.



BENEFITS/ ADVANTAGES

- ✓ Elegant design
- ✓ Simple construction
- ✓ Manufactured in stainless steel
- ✓ 48.3mm dia x 2mm tube

LED MODULES AVAILABLE			
F48	F300	Spot	Continlux

See more on pages 14 -15

FINISHES				
Satin/brushed	Bead blasted	Electro polished	Any RAL powder coats	Bespoke finishes on request



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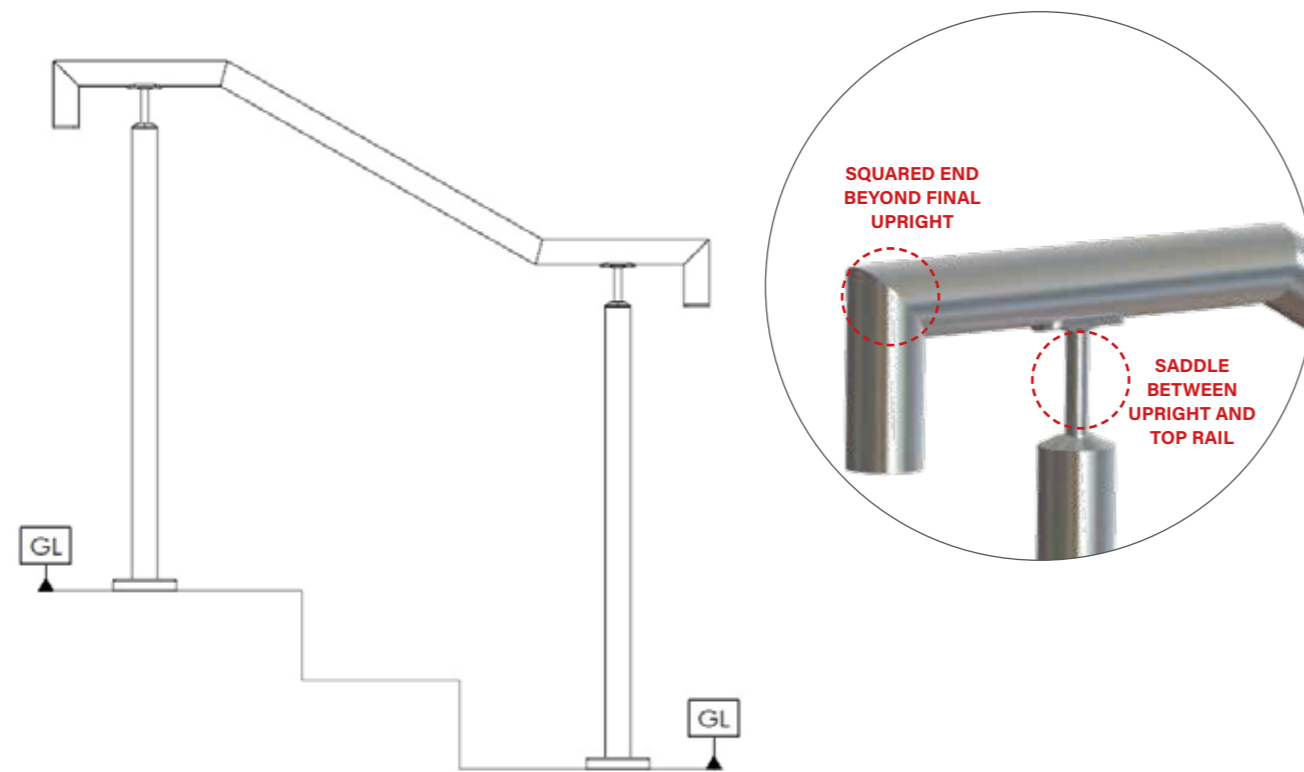
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LED HANDRAILS SQUARED LED HANDRAIL

The Squared LED Handrail is a symmetrical designed handrail working well in areas that have sharp edges throughout the project.

Beside visual impact, the squared end detail is a safety feature against the snagging of straps and garments. This feature can be extended to floor level with base fixings and cover plates. There are a variety of installation solutions.

For more information see pages 18-19.



LED MODULES AVAILABLE			
F48	F300	Spot	Continulux

See more on pages 14 -15

FINISHES				
Satin/brushed	Bead blasted	Electro polished	Any RAL powder coats	Bespoke finishes on request

BENEFITS/ ADVANTAGES

- ✓ Fully symmetrical design
- ✓ Mitred ends fully welded and polished, no joint lines visible
- ✓ Manufactured in stainless steel
- ✓ 48.3mm dia x 2mm tube



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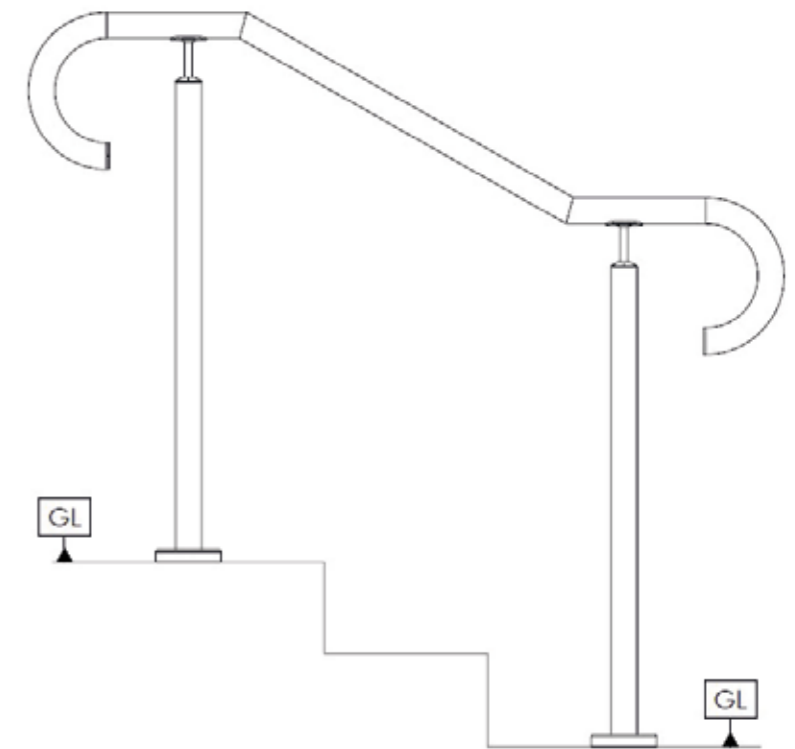
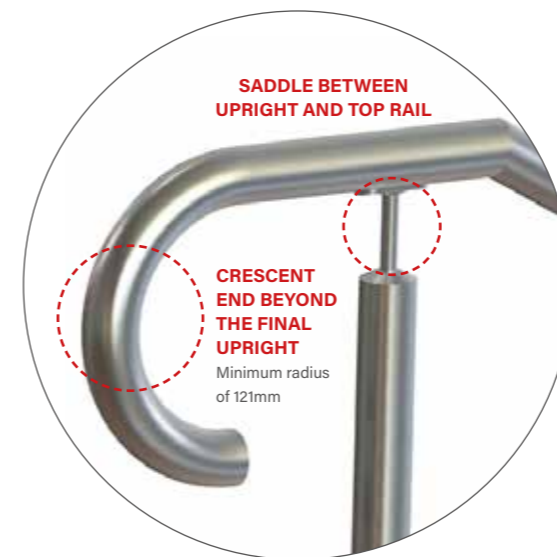
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LED HANDRAILS CRESCENT LED HANDRAIL

The Crescent LED Handrail has similar benefits to the squared handrail but with a fully radiused end giving it a crescent-like shape.

Using our CNC mandrel bender, this perfect full radius is free from any distortion, creating a dramatic yet simple safety solution that leads onto the handrail. Our automatic polishing line removes any evidence of die tool discoloration for a perfect satin polished finish. There are a variety of installation solutions. There are a variety of installation solutions.

For more information see pages 18-19.



BENEFITS/ ADVANTAGES

- ✓ Full smooth radius
- ✓ Simple construction
- ✓ In-house CNC mandrel bending
- ✓ Manufactured in stainless steel
- ✓ 48.3mm dia x 2mm tube

LED MODULES AVAILABLE			
F48	F300	Spot	Continulux

See more on pages 14 -15

FINISHES				
Satin/brushed	Bead blasted	Electro polished	Any RAL powder coats	Bespoke finishes on request



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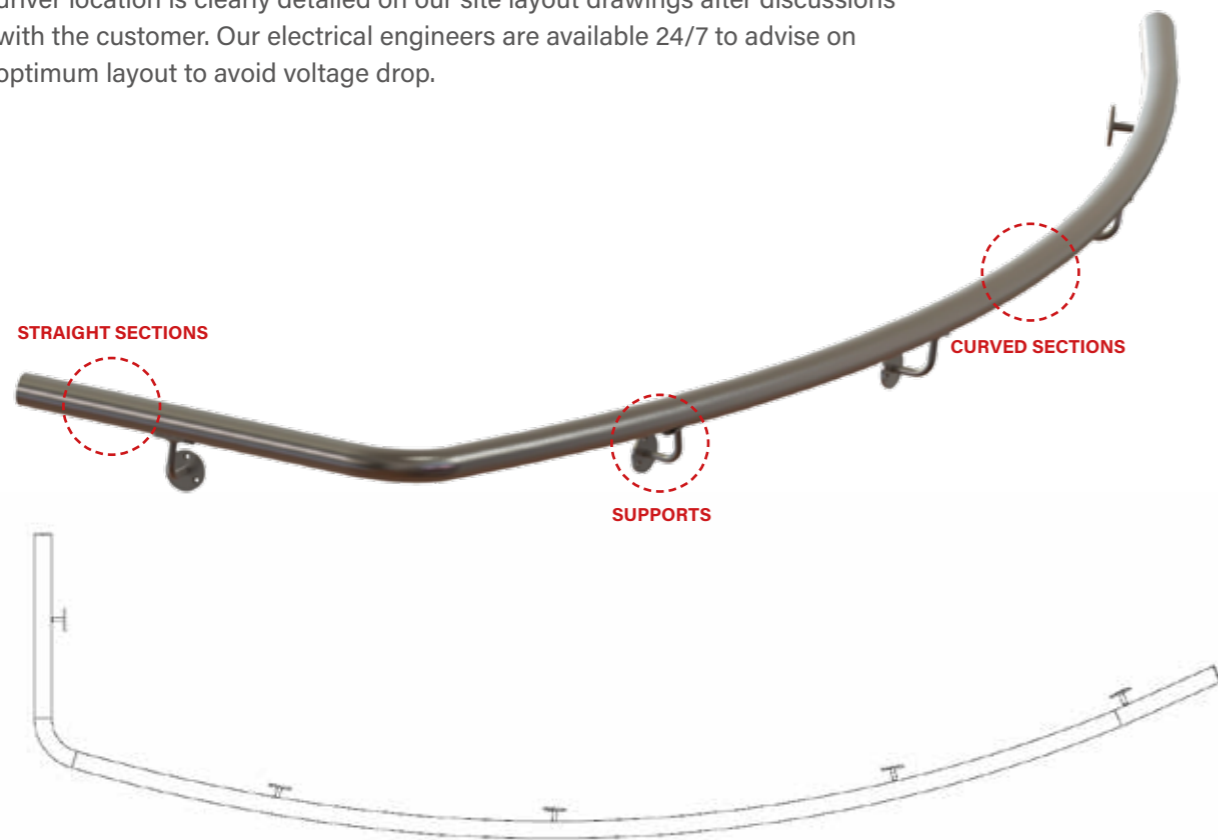


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LED HANDRAILS WALL MOUNTED LED HANDRAIL

The Wall Mounted LED Handrail can combine many of the end designs of the previous handrails all whilst being mounted on a vertical surface.

All handrails go through our polishing line to eliminate any assembly marks. Cables to the LED luminaires are through the bespoke support brackets and driver location is clearly detailed on our site layout drawings after discussions with the customer. Our electrical engineers are available 24/7 to advise on optimum layout to avoid voltage drop.



LED MODULES AVAILABLE			
F48	F300	Spot	Continulux*

See more on pages 14 -15

FINISHES				
Satin/brushed	Bead blasted	Electro polished	Any RAL powder coats	Bespoke finishes on request

*not on curved runs

BENEFITS/ ADVANTAGES

- ✓ No uprights required if cabling can be fixed through wall/surface
- ✓ In-house CNC mandrel bending
- ✓ Manufactured in stainless steel
- ✓ Any curve can be replicated
- ✓ 48.3mm dia x 2mm tube

LED MODULES

F48



FEATURES

- Vandal resistant - IK10 & IP66
- Multiple lighting controls - DALI, on/off , etc
- Average lux levels 150+
- Parallel connection - if one fails the others remain on
- 5W output
- LIA certified

ADVANTAGES

- Simple maintenance and replacement
- Small size with high lumen output
- 5 year warranty
- Emergency feature/3hr battery backup



LED MODULES

F300



FEATURES

- Vandal resistant - IK10 & IP66
- Multiple lighting controls - DALI, on/off , etc
- Average lux levels 240+
- Parallel connection - if one fails the others remain on
- 8W output
- LIA certified

ADVANTAGES

- Simple maintenance and replacement
- High lumen output values meaning less modules required
- 5 year warranty
- Emergency feature/3hr battery backup

LED MODULES

SPOT



FEATURES

- Vandal resistant - IK10 & IP66
- Multiple lighting controls - DALI, on/off , etc
- Average lux levels 40+
- Parallel connection - if one fails the others remain on
- 2.5W output

ADVANTAGES

- Simple maintenance and replacement
- Smaller light source
- 5 year warranty
- Emergency feature/3hr battery backup



LED MODULES

CONTINULUX



FEATURES

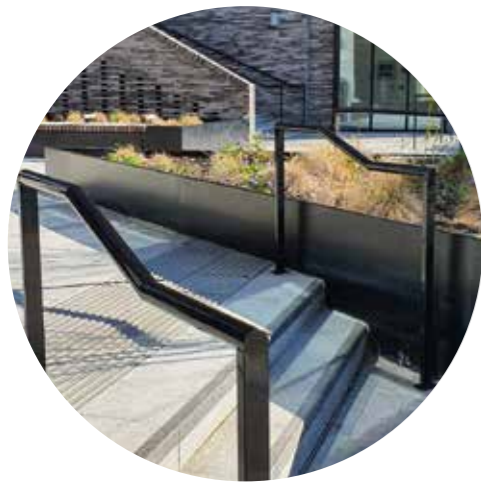
- Vandal resistant - IK10 & IP66
- Multiple lighting controls - DALI, on/off , etc
- Average lux levels 240+
- Parallel connection - if one fails the others remain on
- 5W output
- LIA certified

ADVANTAGES

- Simple maintenance and replacement
- Gives a linear light from end to end
- Maximum failure gap 300mm
- 5 year warranty
- Emergency feature/3hr battery backup

BESPOKE HANDRAIL DESIGNS

CAMLEY STREET, LONDON



FEATURES

- Slimline rectangular hollow section uprights with circular tube top rail
- F48, F300 and Continulux modules used throughout this project to ensure a constant output of light
- Long section handrails were supplied with an on-site hidden push fit connection
- Post mechanically fixed to handrail by hidden connections

BESPOKE HANDRAIL DESIGNS

UNIVERSITY OF SOUTHAMPTON, SOUTHAMPTON



FEATURES

- Bespoke end with curve and extended vertical all done by in-house CNC mandrel bender
- Uprights mounted into side of concrete steps using bespoke fixing solution
- Symmetrical LEDs only on central handrail to prevent light spill into the adjacent foliage

BESPOKE HANDRAIL DESIGNS

TWIN SAILS, POOLE

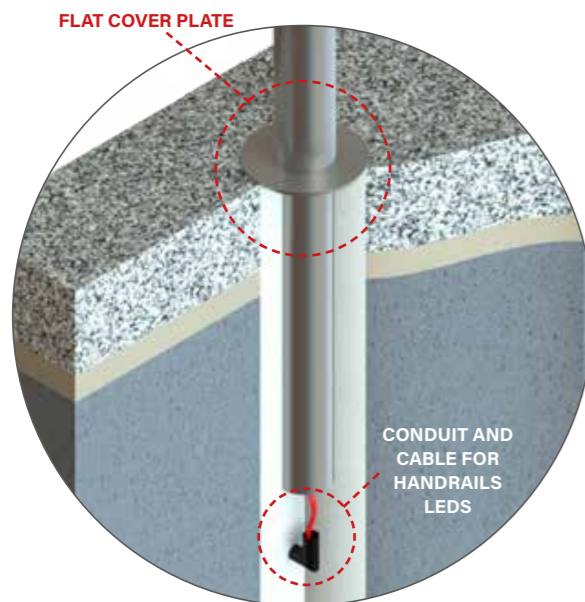


FEATURES

- Individually controlled RGB modules means that when the bridge is raised lights turn red in a sweeping action
- Handrail is controlled by an error detection system, notifying the user which module may be at fault
- Handrail and balustrade all manufactured in-house
- Using the F48 module 150 average lux was achieved

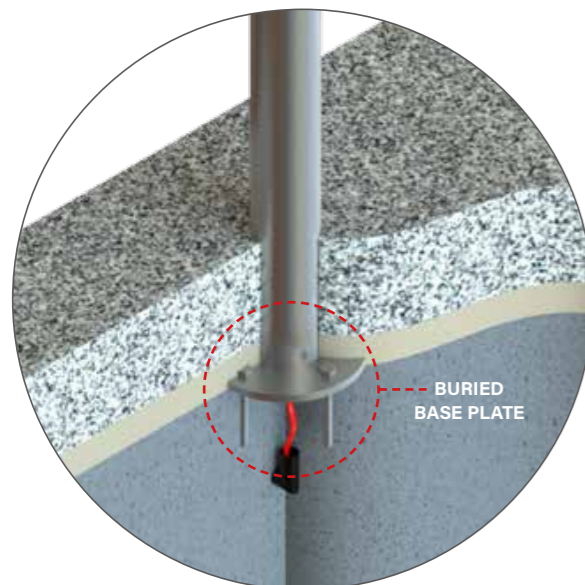


INSTALLATION OF LED HANDRAILS



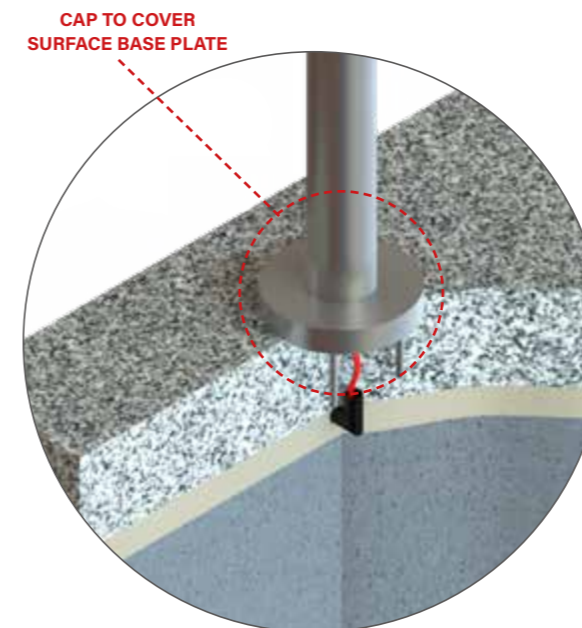
CORE DRILLED/CAST IN

- Once handrail is on site, mark up locations of uprights making sure to conform with part M/K building regulations.
- Core drill a hole at least 150mm deeper than the post length below GL (typically 300mm) and at least double the width of the tube dia.
- Insert handrail and fill with approved filler.
- Finish with a flat cover plate to hide core drilled hole.



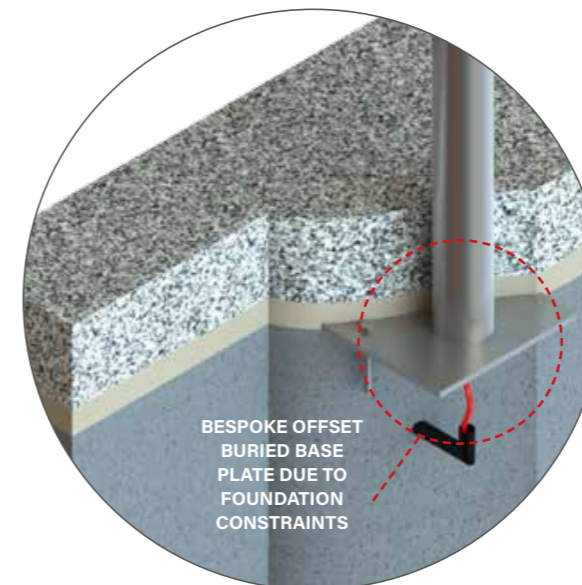
BURIED BASE PLATE

- Once handrail is on site, mark up locations of uprights making sure to conform with part M/K building regulations.
- Insert handrail and fix base plate to foundation (fixings not included).
- Finally add sand and cut paving to fit perfectly around handrail.



SURFACE BASE PLATE

- Once handrail is on site, mark up locations of uprights making sure to conform with part M/K building regulations.
- Insert handrail and fix base plate to paving. Making sure fixings are deep enough to penetrate the below foundation (fixings not included).
- Finally fix cap to cover and hide the surface base plate.



BESPOKE FIXINGS SOLUTIONS AVAILABLE

- Bespoke fixings are structurally calculated to suit on site conditions.
- Many different fixings can be manufactured if the site requires a different approach.



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