

## Case Study

Historic development at Celtic Football Club makes fans proud



# A Thorn Lighting scheme is putting the spotlight on Celtic Way, the iconic new thoroughfare that leads to the main entrance of Celtic Park – the home of Celtic Football Club.

Fans of Celtic Football Club have many reasons to be proud of their club. The team has won the Scottish League Championship on no fewer than 45 occasions, and were the first British club to win the European Cup in 1967. More recently, Celtic FC has won the Scottish League Championship and participated in the UEFA Champions League for the last three years running. On top of all that, Celtic Park is one of Europe's biggest and best attended stadia, with capacity for more than 60,000 fans.

To give supporters one more reason to be proud of their club, Celtic FC has completely transformed 'Celtic Way', the 150 metre thoroughfare that connects London Road to the main entrance of Celtic Park. Taking just nine months to complete, the new Celtic Way covers around 13,000 square metres – the size of two football pitches – and boasts a supporters' meeting area in the form of a four-leaf Kerrydale clover. It also features an iconic 7.5-metre-wide Celtic Crest made of highly polished Scottish whinstone.

To do justice to this high-profile development of Celtic Way, Celtic FC and its lead contractor Waterman Group needed an iconic lighting scheme. Eddie Murphy, Senior Electrical Engineer at Waterman Group, says, "We wanted lighting that would add to the dramatic features of the new Celtic Way and focus fans' attention on the attractions of the main boulevard. At the same time, we needed striking bespoke columns that reflect the success of the club – all in Celtic green of course."

Additional requirements were to light new car park areas to safe levels and to meet Celtic FC's requirement to hang banner ads from lighting columns. The lights also had to be highly reliable, as well as cost-effective and easy to maintain for years to come.

## The Waterman Group and Thorn Lighting Solution

To provide the iconic lighting scheme Celtic FC needed, Waterman Group partnered with trusted lighting supplier Thorn Lighting. "We have worked with Thorn on several street lighting projects around the UK and we knew they had both the products and design capabilities we needed," says Eddie Murphy.

Once briefed on Celtic FC's requirements, the Thorn team proposed a solution based on sleek, eight-metre, brushed aluminium columns with illuminated green tips called 'finials'. The bespoke columns are equipped with striking, energy-efficient luminaires from Thorn's Dyana range, with in-built attachments strong enough to hang three-metre banner ads.

To illuminate the new car park areas to safe levels without taking attention away from the main boulevard, Thorn proposed a solution based on six-metre columns equipped with Isaro LED luminaires. "The Thorn Isaro luminaires are highly energy efficient and don't detract fans' attention from the main Celtic Way boulevard," says Eddie Murphy. "The six-metre columns we've used in the car park areas still have finials, but they aren't illuminated at night, ensuring that the main boulevard has a unique atmosphere."





The Thorn design team used complex models to optimise the efficiency of the lighting scheme. "By optimising the distance between columns, the number of LEDs per luminaire and the driver current, the Thorn Design team helped us optimise the efficiency of the lighting scheme for Celtic FC," says Eddie Murphy. "The combination of great Thorn products and unique design expertise has helped to make the project a huge success."

The Thorn products used for Celtic Way were delivered by Thorn reseller MacLean Electrical and on-site installation was managed by local electrical contractor Pegasus Power & Communications. "All the project partners worked together seamlessly to ensure that the project was delivered successfully, on time and to budget," says Eddie Murphy.

### Making fans proud

In partnership with Thorn, Waterman Group has delivered an iconic thoroughfare for Celtic FC and its fans. The newly opened Celtic Way made a huge splash at the opening ceremony of the 2014 Commonwealth Games, which was hosted at Celtic Park, providing a focal point for TV coverage and presenting an excellent image of the club to viewers around the world.

"Thorn has helped us deliver a hugely impressive, visually stunning lighting scheme that reflects Celtic FC's past glory, current success and future aspirations," says Eddie Murphy. "Celtic Way is now much more than the approach to Celtic Park – it's an attraction in its own right and we frequently see local people and fans stopping to take pictures and admire the Thorn columns and light fittings that line the central boulevard."

Celtic FC is delighted with the new lighting scheme, which enhances Celtic Way and its attractions. Robin Buchanan, Stadium General Manager of Celtic FC says, "Celtic Way is a stunning new public area for our supporters and Thorn's lighting scheme helps to show it to its best advantage. We will continue to progress and develop Celtic FC in the right direction to show that we are one of the world's leading football clubs and give our fans a club they can be proud of."

### Energy efficient lighting

By using latest-generation LED technology, the Thorn Lighting solution maximises energy efficiency and minimises operating costs for Celtic FC. "We needed to get a big punch of light from fittings in the central boulevard, so it was important to use the most energy efficient luminaires available," says Eddie Murphy. "The Thorn DYANA LED fittings give us the same output as metal halide lamps while consuming just a small fraction of the energy, minimising energy costs and carbon emissions for Celtic FC."

### Major maintenance savings

Celtic FC needed a highly reliable lighting scheme that would deliver week after week, with little or no maintenance required. The fact that Thorn Dyana LED and Isaro LED lanterns need almost no maintenance for many years made them an excellent choice for the football club.

"The Thorn products give us 50,000 hours of operation before we have to do anything, and we expect them to need virtually no maintenance for as long as 20 years," says Eddie Murphy. "Even if a component should fail, we can replace it easily with no need to replace the entire light fitting, which minimises costs for Celtic FC and extends the life of lighting investments."

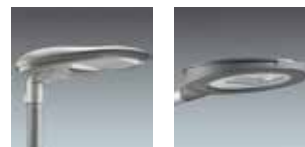
### High-quality products

Thorn combines the best components with strict manufacturing standards to provide high quality light fittings. "Thorn products are extremely high quality, reliable and durable, and provide the lighting levels they say they will," says Eddie Murphy. "We know they work because we've used them in the past, and we've been impressed once again with the quality and consistency of Thorn luminaires on the Celtic Way project."

### Success in partnership with Thorn

The close working relationship between Waterman Group and Thorn helped to make the Celtic Way project a success. "We worked closely with Derick Ramsay at Thorn," says Eddie Murphy. "He gave us tremendous confidence that the solution he was proposing would deliver the greatest possible visual impact for Celtic FC, as well as providing optimal energy efficiency, long-term reliability and excellent value. With Thorn, we get the expertise and support we need to help us and our clients succeed."

### Product used



Isaro LED

Dyana LED

**eControl** From Thorn's 15 ways to save energy, the following are key to minimising energy consumption at Celtic Way:



### Zoning of lighting

Lighting in Celtic Way is zoned according to area use, with the iconic central boulevard lit with eight-metre columns and Thorn Dyana LED fittings, and car park areas lit with six-metre columns equipped with Thorn Isaro LED.



### System efficacy

Thorn's LED products are highly energy efficient, helping to reduce ongoing energy costs and carbon emissions for Celtic FC.



### Maintenance schedule

The Thorn Lighting scheme will require virtually no maintenance for the first six years, helping to minimise operational costs for Celtic FC.



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**Publication Date: 08/14**