

**designplan**  
L I G H T I N G

TRANSPORT

**CROSSRAIL**

**ILLUMINATING THE PLATFORMS**

**FARRINGTON CROSSRAIL STATION, LONDON**



## WORKING WITH CROSSRAIL TO ILLUMINATE THE PLATFORMS

Crossrail is one of the largest infrastructure projects of its kind currently being undertaken in Europe. It is building 42km of tunnels, 10 new stations and improving 30 more. The finished railway, which will be named the Elizabeth line when it opens in central London, will be an accessible route of 40 stations from Reading and Heathrow in the west to Shenfield and Abbey Wood in the east.

Designplan have supplied lighting solutions to several Elizabeth line stations including Canary Wharf, Bond Street, Liverpool Street, Tottenham Court Road, Whitechapel and Farringdon.

“Many considerations had to be taken into account by Designplan for a project of this scale” says James Coma, Project Manager at Designplan Lighting. “This includes accessibility and the requirement for architecturally pleasing lighting”.

Designplan were asked to look at the platform lighting in 2013. “The architect had a specific vision of how the platforms should be lit” says James. “To achieve this we designed a light box to illuminate the platform edges”.

Each light box is 1.5 metre wide by 1 metre high, weighing about 90 kilos with a design life of 30 years. They produce an output of over 6,000 lumens, whilst consuming the energy of a 60 watt household lamp!

Approximately 150 light boxes are required for a platform, so a key consideration was to make maintenance quick and hassle free.

“For easy maintenance we designed a hinged LED array system to provide access from below” explains James. “Using LEDs also provides significant energy savings, as they last up to five times longer than traditional fluorescent lamps, reducing the overall cost of ownership”.

## MEETING HIGH STANDARDS



“The regulations affecting all luminaires specified by Crossrail, are contained in a document practically an inch thick” explains James. “Accordingly all our light boxes are designed in accordance with the Fire Precautions (Subsurface Railway Stations - England) Regulations 2009, commonly known as section 12, and comply with London Underground’s subsurface standard 1-085.

The light boxes were rigorously blast and fire tested, assessed for electro-magnetic field interference and impact, ingress and safety tested”. In addition, our removable gear trays enable easy adoption of upgrades in technology, further extending the life and performance of our luminaires.

## CANARY WHARF

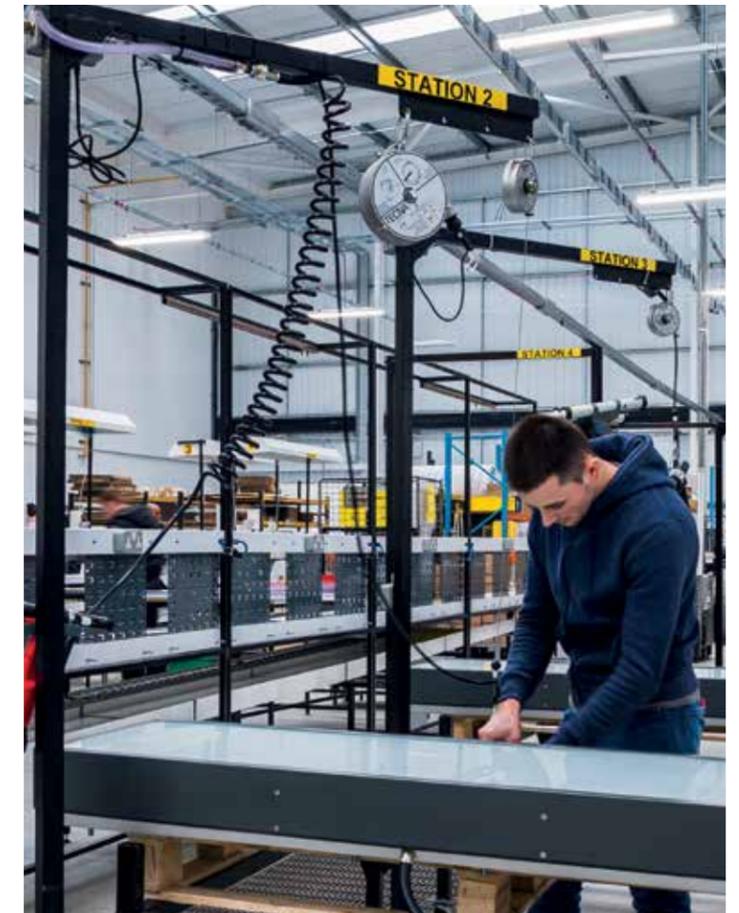


## ADAPTING TO THE NEEDS OF THE PROJECT

“Having our manufacturing facility and design team on site enabled us to adapt to the needs of the Crossrail project” explains James.

“For example, we collaboratively developed the brackets for the light boxes as well as a method for mounting them. This was tested at our factory to ensure ease of installation prior to being installed on site.”

In addition, a new production line was created and a reusable metal packaging system was designed for securely delivering the light boxes and minimising waste”.



# DESIGNPLAN LIGHTING

DESIGNED TO LAST



## LUMINAIRES FOR DEMANDING APPLICATIONS

Our luminaires are designed for applications that require robustly constructed, reliable and easy to install and maintain lighting. Our market sectors include transport, social housing, custodial, secure healthcare and urban.

Transport

Social Housing

Custodial

Secure Healthcare

Urban

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