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### **Promat DURASTEEL® barriers protect external energy transformers**

Critical fire and blast protection barriers for new electrical transformers have been provided by passive fire protection specialist DunbarWallace Fire Protection for a leading energy provider using Promat DURASTEEL®.

The infrastructure programme has seen the installation of new transformers on a compact site situated outside key healthcare buildings. Transformers are a critical part of electrical distribution; however, they often contain oil as an insulator and coolant, fire and blast protection is required in the unlikely event of a malfunction. Due to the configuration of numerous transformers located in very close proximity, high performance barriers were required between each transformer to contain damage and prevent cascading failures.

DunbarWallace, who are one of the UK's leading passive fire protection contractors, installed the DURASTEEL® E240 system from Promat UK. They were ideally placed to work with main contractor Marshdale Construction – a specialist in delivering complex construction projects within critical environments – on the most effective way to achieve assured 'fit and forget' protection.

It was a project that included the off-site assembly of the Promat DURASTEEL® system to accommodate the limited space availability and need to minimise disruption. Once on site, the panels were lifted into their positions immediately adjacent to the transformers and secured into the transformers' concrete bases using heavy duty fixing bolts. This off-site manufacture approach significantly reduced the installation time from several days to less than five hours, which reduced disruption within the grounds of a hospital and kept road closures to an absolute minimum.

Promat DURASTEEL® is a fully certified composite system of fibre-reinforced cement with punched steel sheets mechanically bonded to both outer surfaces. This delivers the strength and resistance required to withstand high impact and blast pressures, maintain structural integrity and provides up to four hours fire protection. It is an extremely durable design with high energy absorption which has passed numerous tests, including a recent test for jet fire resistance.

Steve Farr, Commercial Manager, at DunbarWallace said: "DURASTEEL® provided the ideal fire and blast protection solution at Birmingham Children's Hospital and we are really pleased to have worked closely with Promat UK to deliver this safety solution. Fire and blast resistance barriers were required to provide separation between the new transformers. In the event of a transformer blowing out, or

exploding, the barrier ensures the damage is contained and minimises the risk of a ‘domino effect’ chain of explosions and power outage.”

The Promat DURASTEEL® range has been providing assured fire and blast protection in projects across the world since the 1930s in sectors including power generation and supply, offshore oil and gas, renewable energy and petrochemicals.

To find out more about Promat UK’s full range of fire and blast resistant solutions visit [www.promat-industry.co.uk/](http://www.promat-industry.co.uk/)

### Pictures show

Installation of the Promat DURASTEEL critical fire and blast protection barriers for new electrical transformers by passive fire protection specialist DunbarWallace Fire Protection.

