



**EFC Trident Park Facility - Cardiff**

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**Contractor**

Lagan Construction

Caunton Engineering completed the erection of an architectural steel flue stack support for the £180 million energy from waste (EfW) plant at Trident Park, Cardiff.

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**Steelwork Design**

Tata Steel Projects

The steelwork wraps around the flue, which formed an independent 90 metres high structure. Caunton erected the steel in five sections, with each one trail erected at Caunton's fabrication yard. This was to ensure the bolted connection were plumb before being delivered to site.

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**Engineer**

Westmuckett Hawkes

The initial four steel section varied in height from 15.2 metres up to 26 metres and consisted of three, 813mm diameter CHS columns, which weighed up to 15 tonnes each, connected by a curved ring beam and steel bracings. The fifth and final section consisted of a single 14.8 metres high continuation of one of the columns, which formed an architectural pinnacle to the structure.

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**Steel Tonnage**

180 tonnes

The erection process took three weeks, with the initial section taking one week, as it was the largest section. Two mobile cranes used for the job and one MEWP with a 90 metres long reach.

Main contractor for the project is Lagan Construction, while Tata Steel Projects was the lead designer.

This project contributed to the UK Government's commitment to be carbon neutral by 2050 by means of zero carbon energy production.

