# Case Study Parliament Buildings



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Stormont Parliament Buildings, Belfast was built between 1927 and 1932. Designed by Arnold Thornley it is a Portland Limestone and Mourne Granite structure. The impressive B+ Listed building is a Neo Classical four storey building with a basement and Portico. The ground floor has square rusticated columns supporting six giant iconic columns and a pediment which covers office accommodation.

Location Northern Ireland Client
Tracey Bros Ltd & N.I Assembly

Completed September 2014

Structure Parliament Buildings (Seat of N.Ireland Assembly)



## The Problem Identified

The steel reinforced roof of the pediment had been allowing water ingress for some time and as result the steel had been corroding and causing cracking and spalling in the concrete.



## The Solution Developed

As the Parliament Buildings were in constant use, consideration had to be given to the disruption potential of carrying out major concrete repairs, so a design requiring minimum concrete removal and noise generation was essential. Following a condition survey, the use of DuoGuard<sup>™</sup> hybrid anodes was recommended and a repair and long term protection scheme designed. Using an external power source, an impressed current was applied to stop active corrosion and render the steel passive. The DuoGuard anodes were then disconnected from the power source to self-generate a galvanic current, sufficient to maintain steel passivity and control corrosion.

The repair work was carried out quickly and efficiently and the building was handed back to the main contractor on time and ready for internal fit out.

## The Benefits Provided

Corrosion related deterioration of the Parliament Buildings has been halted. After the initial power up period using an external power source the DuoGuard system is self-powered thus minimising future maintenance requirements and associated life costs.



Northern Ireland Assembly Building works

## **CPT Products Used**





Concrete Preservation Technologies