

# Stormont Wharf Belfast



Stormont Wharf, with a maximum quay length of 715m, is the longest deep- water facility in Ireland and provides a critical docking facility for visiting cruise ships.

Location  
**Belfast, Northern Ireland**

Client  
**Doran Consulting**

Completed  
**2019**

Structure  
**1970's Concrete Wharf**



## The Problem Identified

Due to many years of exposure in a hostile marine environment, and the subsequent ingress of chloride ions, the reinforcement was corroding causing steel section loss and spalling of the soffit concrete cover.



## The Solution Developed

The inclusion of 12,000 No CPT Patchguard™ sacrificial zinc anodes at a spacing of 400mm c/c, as an integral part of the concrete repair specification, ensured that sufficient galvanic current will be delivered to the reinforcing bars to maintain steel passivity and deliver long-term protection. PatchGuard anodes are designed to sit within the host concrete at the perimeter of patch repairs rather than the traditional approach of embedding the sacrificial anodes within the repair mortar.

This innovative approach delivers superior protective current to the steel reinforcement most at risk of corrosion.



## The Benefits Provided

A proven, durable 20-year solution, which does not require a live power source, was applied without any major disruption to the day to day work at the wharf and, in addition, there is no need for expensive on-going monitoring.



Spalling found on the soffit concrete



Corrosion on the structural steel reinforcement

## CPT Products Used

