



Restoration and conservation of national monument

Project in brief

Saint Patrick's Cathedral is both a protected structure and a national monument. Although it is one of Dublin's most treasured landmarks and popular tourist attractions, it is foremost a thriving place of worship and has had to keep pace with the demands of modern usage by its congregation and visitors alike.

At LeeMcCullough we are proud of our long association as technical advisors to the Cathedral Architect, and we have successfully carried out numerous contracts large and small to maintain the fabric of this splendid structure.

Key projects

- Structural assessment of the existing Organ Blower Room floor
- Reinstatement of the gilt bronze-cased iron Cross on the Minot Tower
- Repair of the stone Cross on the South Transept Gable

- Installation of new water tanks to store nine thousand litres of water on customised structural steel cradles in the belfry
- Fire compartmentation of the Main Roof using eight metres high stud partitions and protected walkways whilst conserving the existing structure
- Renovation of the Belfry ceiling
- Replacement of the Skywalk linking the Main Roof parapet and the Minot Tower
- Review of the scaffolds to repair the South Transept, West Window, North Transept and Minot Tower. The scaffold for the lattermost was a record twelve storeys high!
- Structural assessment of the Jones Memorial (1619)
- Replacement of the basement Boiler House roof slab to carry Dublin's heaviest fire engine



LeeMcCullough
Consulting Engineers

Project 3819: Monument - Restoration

St. Patrick's Cathedral

Client: St. Patrick's Cathedral

Architects: Benjamin + Beauchamp

Value: €1.5m (2008)

LeeMcCullough team:

Lorcan O'Flannery

Project scope:

- *Restoration of historic structure*
- *Repair and renovation for modern use (present and future)*

Historical Renovation

At LeeMcCullough we have exceptional experience of revitalising existing buildings, which is often more complex than the structural engineering of new buildings.

Over many projects we have addressed and resolved a wide range of issues, including:

- Strengthening historical joists and beams to carry increased loading
- Masonry Decay/Delamination
- Threading modern services into old structures

At LeeMcCullough we always seek to identify and resolve issues early, innovatively address demanding building difficulties and deliver our solutions on time and cost efficiently.

When it comes to renovation and refurbishment, anticipating and resolving engineering issues effectively is the key to a successful outcome.