

# COMMERCIAL

UNIQUE  
WINDOW SERVICES



## NEWCASTLE CATHEDRAL

At 10.27 am on Thursday 28th December 1989, Newcastle was struck by the first significant earthquake to affect an Australian urban area. The earthquake, registering 5.6 on the Richter scale, had an epi-centre approximately 14 km south west of the Cathedral. During the earthquake high set stone crosses and other decorations fell to the ground and flying buttresses were dislodged; cracking occurred in all walls and windows were broken and dislodged.

Since then the Cathedral has undergone some major structural improvements each time to maintain the integrity of this landmark. This last round of improvements saw the brass framed casement windows in the bell tower refurbished with new hinges and an entirely new electric control system.

Work on a building such as Christ Church Cathedral is governed by State heritage legislation which invokes the principles of the ICOMOS "Burra Charter".

So the engineer was very particular on both the look of the actuator but even more so on their performance.

Due to close proximity of the Pacific Ocean a normal type of actuator did not pass the stringent criteria for salt degradation so a completely submersible actuator was required.

With an IP rating of 87 the 32 Linco S400 24 volt linear actuators coupled with a rain sensor and switches both at ground level and in the bell tower our system surpassed all requirements .

### Products used

- Linco S400
- Rain Sensor

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