

COURT: **Supreme Court of Victoria**

ARCHITECT: **Billard Leece Partnership**

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Tradition and Future

The Supreme Court of Victoria Upgrade is the first wholesale upgrade of the building since its construction circa 1870. The program required, amongst other works, the upgrade and restoration of six major historic courtrooms to improve their functional performance with minimal perceived modern day intervention. The retention and conservation of the significant fabric of the building was of paramount importance. New and additional works aimed at improving the facilities were carefully assessed to determine their affect. The upgrade can be broadly categorised into the areas: acoustics, lighting, cooling and ventilation.

Acoustics and vision is fundamental to the understanding of law courts as a building type. An extensive design research determined the installation of line array loudspeaker systems to improve an aging sound system and echo resulting from the three storey high ceilings and the predominance of ornate hard surfaces. Multiple speakers within the column were aimed at different areas of the courtroom using specialised software to provide an even spread of intelligible sound.

The large high level windows occupying the upper half of the courtroom wall originally provided daylight into the rooms. Attempts to cut out glare from the sun had resulted in almost total daylight block out, leaving a low level artificial lighting as the main light source. To establish acceptable ambient lighting levels, the high level windows were re-glazed with translucent glass. The introduction of remote operable block out blinds allowed flexible glare control and were custom made to fit the arched window reveals. This ambient light was supplemented with simple modern linear task lighting on the benches.

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The improved lighting conditions allowed the use of large plasma screens without contrast. The under floor space of the building — formed by inverted brick arches and cast iron piers supporting the timber floor — was utilised to install an extensive fibre network to transfer data and remote control audio and video. The equipment was hidden away in cupboards built into existing alcoves and niche rooms formed by the thickness of the load bearing masonry walls and the building's double skin. This double masonry skin is an early example of the environmentally sustainable design contemporary principles.

The separation of floor structure from the walls allows niches to be provided between the external walls and some of the walls bounding courtroom interiors. The lath and plaster ceilings within the courtrooms were interspersed with perforated cast iron roses to exhaust hot air into the roof space. In reinstating this natural ventilation system, a balance had to be struck between insulating from traffic noise on the streets while drawing in sufficient fresh air. The stack intakes were fitted with motorised dampers and the natural ventilation was supplemented with a new air conditioning system.

By using the existing niche rooms, alcoves and strategically placing false walls, a tight, functional and acoustically attenuated ductwork system was woven into the 19th century fabric. The conservation management plan recognized the importance of the continuation of the Court's intended use, so remaining as the centrepiece of the Victorian justice system. ■







