



Australian War Memorial

AUSTRALIAN WAR MEMORIAL

Redevelopment of Post 1945 Conflicts Galleries and Discovery Room

**ADDITIONAL EVIDENCE TO THE PARLIAMENTARY STANDING
COMMITTEE ON PUBLIC WORKS**

January 2006



ENERGY CONSERVATION

Architectural

- 1 The thick walls of the Memorial building provides a degree of the thermal stability for the internal environment.
- 2 Windows in the external walls will be fitted with insulated blackout panels .

Mechanical

- 3 The following concepts are proposed in the design of Mechanical Services to minimise energy consumption:
 - Air quality sensors minimising outside air to only the quantity needed for actual occupancy.
 - Closing outside air dampers overnight and during unoccupied periods to reduce energy of heating, cooling and humidification.
 - Outside air economy cycle for comfort quality air conditioning system i.e. for Discovery Room and Schools Orientation area. This economy cycle is not suitable for Gallery or Collection Areas which need to have close tolerance of humidity control to ensure protection of the collections.
 - Switching off comfort quality air conditioning systems overnight and during unoccupied periods.
 - Quick morning warm up of comfort quality air conditioning systems, closing outside air dampers until occupancy time.
 - Early morning pre-cooling of comfort quality air conditioning systems during summer, utilising cool outside air.
 - New chilled and heating water pumps for new Post 1945 Conflicts galleries and existing WW1 galleries having variable speed drives to reduce pump energy consumption during part load conditions.