

Proiect: Melbourne Aquarium Stage 2.

Architect: Peddle Thorp

Builder: PROBUILD Constructions (Aust.) Pty. Ltd. **Client:** Melbourne Underwater World Pty. Ltd. Cnr. King & Flinders Street, Melbourne CBD. **Location: Project Scope:** Supply and install Freezer, Coolrooms, Food

Preparation areas, Staff facilities, Corridors, Air locks, Storage zones and Plenums.

Includes:

Stainless steel doors, windows, hatches and approx. 1500m² of 150, 100 & 50mm thick

KS 1200CS FM Approved Panel.

Project completed in July 2008. **Status: Project Value:** TO SUPPLY & INSTALL PANEL

Contract value and approved variations to date is approx. \$715,000 including GST. This supply and install project specified a polyisocyanurate (PIR) panel system, as it required an FM Approval to meet insurance demands. Panel had specific criteria: to form a fire-proof barrier; have good levels of insulation; sound accoustic performance and to be food-safe. The project raised several issues:

A confined workplace: tight access with limited storage for panel. Number of trades on site: each reliant on the other's performance. **CBD** location: under a railway viaduct, parking, traffic. Uneven floor surface: concrete formwork for pools and tunnels.

curved walls and angled planes. Architectural design:

Antarctica is a \$28 million expansion of the existing Melbourne Aguarium and is a new home for King and Gentoo penguins, on view to the public. The extension is forecast to attract an additional 200,000 visitors in the first year. It recreates a sub-zero environment: snow-covered ice, salt water plunge pools at 7°C and caves for protection from snow blowers with a light cycle that changes to replicate the sub-Antarctic seasons. Covering an area of approximately 3,000 square metres, **Antarctica** includes "back of house" facilities for staff and penguin keepers, food preparation and storage areas, AQIS quarantine and inspection rooms, water purification and refrigeration plants. The walls and ceilings are a mass of penetrations for suspension of plant, pool filtration pipes and data cables. The isolated structure housing **Antarctica** is situated beneath a viaduct, forming part of the suburban rail city-loop and so is subject to constant vibration, dust and traffic noise.

Photo of Melbourne Aquarium courtesy of National Library of Australia.