Institute for Marine and Antarctic Studies (IMAS)

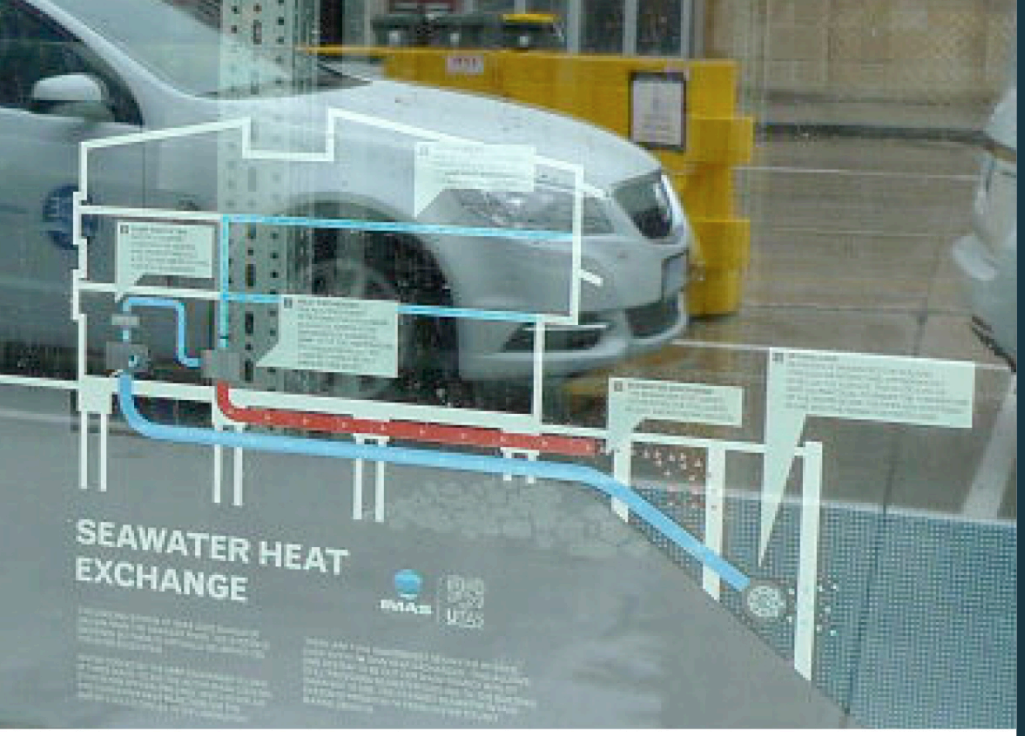
UNIVERSITY of TASMANIA

The IMAS building provides teaching, research and support facilities for staff and students, to bring together much of Tasmania's considerable strengths in marine and Antarctic studies in one precinct.

- **Project cost: $49 million**
- **7130 m²**
- **Project commenced: 2010**
- **Construction completed: November 2013**

Belying its apparent simple treatment, the building envelope is carefully configured to mediate climatic conditions. Sun shades protect the glazing to the north whilst maintaining views across the cove. A continuous strand of windows allows the ingress of natural light and fresh air, with blinds allowing occupants to manage their local environment. Glass louvers across the western façade mitigate temperature extremes.

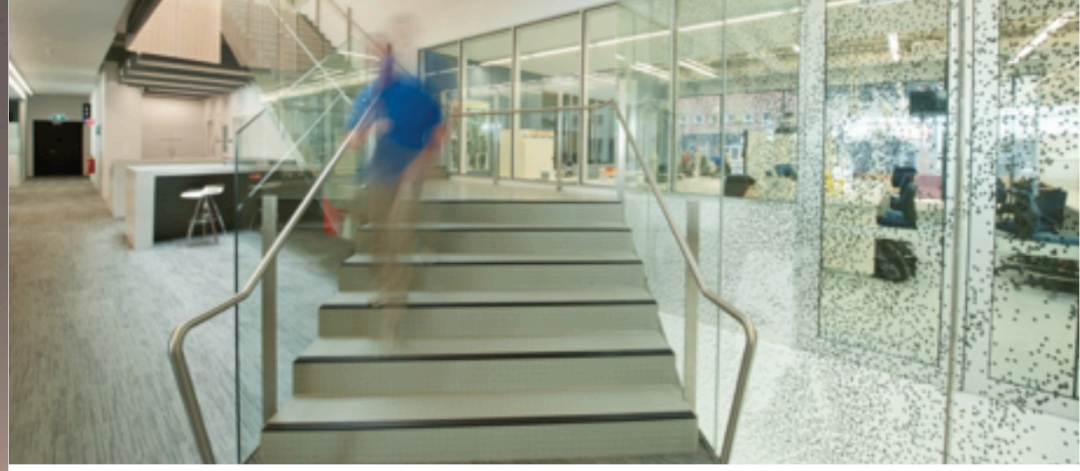
Located to the south side of the building, the laboratories are protected from undue heat load and benefit from diffused natural daylight. The centre of the building is punctuated with skylights and central voids that allow warm air to ventilate at roof level and natural daylight to penetrate deeply into the interior.



The location of the building on the Derwent River provides the opportunity for it to be heated and cooled by circulating sea water through a closed loop heat exchanger. For a good portion of the year the only energy to condition water to the required temperature is that required to operate a small pump. Like most of the building, the pump equipment is transparent to the street to engage the public with the building and its operation.

The building utilises active mass, circulating the conditioned water through the concrete floor slabs. Fresh air is supplied to the laboratories through circular fabric ductwork and chilled beams moderate the air temperature of the office areas.

The building's layout, orientation, façade treatment, material selection, and building servicing helped it achieve a 5-Star Green Star design rating.



Other sustainability initiatives include:

- flexible and free span spaces to allow for future adaptability and change in both the laboratory and work environments;
- sourcing of appropriately managed timber supplies;
- significant bicycle storage and cyclist support facilities, conveniently located, under cover and secure, to encourage alternative transport;
- natural ventilation to effect cooling and air change;
- indoor/outdoor staff lounge/lunchroom; and
- efficient and inspiring design to promote internal and external public interaction. The building's design is sympathetic to the important history of its locale and its former and current maritime uses.

2 separate, open stairs invite occupants to ignore the lift

The IMAS facility received the following awards in the 2014 Australian Institute of Architects, Tasmanian Chapter Awards:

- Alan C Walker Award for Public Architecture.
- Alexander North Award for Interior Architecture
- Dirk Bolt Award for Urban Design.
- Tasmanian Chapter Award for Sustainable Architecture.
- Colorbond Award for Steel Architecture.

Major designers and contractors:

- John Wardle architects + Terroir, in association
- John Holland + Fairbrother, joint venture partners, Managing Contractor
- Umow Lai & Associates, ESD

Photos by Jonathan Wherrett and Leigh Woolley