



The \$560 million rejuvenation of the area will fuse an energy efficient office space with a large public domain. World class environmental initiatives will transform the long dormant position into a refreshed Darling Harbour.

The project is expected to raise visitor and tourist numbers to the site and also represents a significant boost to the economy, with over 7,000 people being employed during construction.

Commonwealth Bank Place

Each element of Darling Walk illustrates significant thought processes and this is most obvious in the project centre piece – Commonwealth Bank Place, the name given to the two office buildings.

Commonwealth Bank will occupy these buildings for the next thirteen years. Rather than one high rise building, two low-lying, campus style structures were selected to encourage pedestrian flow through to the public precinct of Darling Quarter. The office design is targeting a 6 Star Green Star rating and delivering a number of new initiatives.

Water treatment

High up on the list of energy saving devices is the recycled water plant in the buildings, which utilise sewer mining for self sustaining water supply for non-potable uses in the building. This makes water use more energy efficient with less environmental impact. Rainwater harvesting is another initiative of Darling Walk, where a significant reduction of up to 90% of water usage will be achieved, as compared to standard commercial developments.

Exterior

The exterior of the building has been designed to utilise natural energy to maximise energy efficiency. Natural light flows into the building, simultaneously reducing lighting costs and inviting the outdoors in. A huge atrium in the middle of both buildings will also make use of this space and contribute to the open plan style of the offices. High performance glass is used to reduce excess heat accumulation, and automated timber blinds were installed to reduce glare and provide sun shading.

Heat Recovery Systems

Four Air Change Rooftop Packaged Units have been installed in Commonwealth Bank Place to supply 100% outdoor air to breakout areas in the building. In order to achieve the most efficient system of supplying fresh air, two different types of units were specified by Arup. The first was a 52 kilowatt displacement Rooftop Packaged Unit, which was chosen to de-humidify air and supply it to the building between 18 to 24 degrees Celsius, at low level.

The additional units chosen were multi mode Rooftop Packaged Units with VSD compressors. These units provide variable operation by using economy cycle, heat recovery and CO₂ sensors, automatically selecting the most efficient mode. The consultants for the project were Arup, with Optimus installing the four Air Change units specified above.

Air Change 100% outdoor air Rooftop Packaged and Air Handling Units have been used in many recent Green Star Rated buildings including Investa's ARK building in North Sydney and Grocon's Pixel building in Melbourne.

Activity Based Working

The new Commonwealth Bank offices will also be at the forefront of a new way to work in an office. Rather than the traditional way of each worker having their own permanent desk, after a successful trial in the bank's Martin Place branch, they will introduce 'hot-desking' or 'activity based working'. This places less pressure on the buildings' resources and works on the principle that the building is never really filled to capacity, due to out of office meetings; sicknesses; off site visits, etc. This requires each desk to be left clean at the end of each working day and allows each part of the building to be used. It is also useful for group or team exercises, as space is abundant. Lockers allow equipment and personal belongings to be kept at the premises long term.

Darling Quarter

The public precinct of the area will be renamed 'Darling Quarter', with its main attraction being the 4000m² playground. The central features include an active water play space as well as a youth theatre. Combined with a further 5000m² of ground level retail space, this will seek to populate the area and restore a sense of community. An underground car park will also be constructed, however the improved pedestrian links between the city and Darling Quarter will try to stamp out unnecessary use and encourage public transportation. Designated bicycle spaces echo the 'green' ethos of the new area and provide further energy saving measure.

Darling Quarter is an exemplary achievement on the path towards sustainability and energy efficient Design in the twenty first century. The high performance buildings in conjunction with the public area certainly set the standard for other new designs to follow suit.

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