Integrated Building Science Technology & ESD Initiatives

GBCA Greenstar Rating

KSD-2 project is registered under the GBCA Greenstar Program and will target a 5-Star rating.

Green Star Number	Project Name	Location	Status	Rating Tool	Tool Version
7382	KSD-2	Hamilton Q4007	Registered	Design & As-Built	1.3

NaBERS Rating

KSD-2 will target a 5-Star NaBERS rating for energy efficiency of base-building and tenancy areas.

Energy Generation

SOLAR - A significant Solar Photovoltaic Cell Panel array is proposed on the Rooftop producing significant energy. Over a 30-year life of the building the feed in power generated or stored could potentially save in excess of one million tonnes of CO-2 gas from the atmosphere.

Building Technology

Mechanical: Night Purge **-** the building is designed to have "night purge" sequence automatically flushing out hot stale air at night and drawing in cooler evening air.

Mechanical: Indoor Air Quality **–** will be well above standards with fresh outside air provided at the rate of _50% greater_ than AS1668.2 and CO-2 concentrations will be kept to below 800ppm.

Mechanical: Economy Mode **-** when ambient outdoor air temperatures are within an acceptable nominated band, the building systems will switch to provide 100% Outside Fresh Air.

Water Usage

Fittings: 5-Star and above WELS-rated taps, shower-heads, wc's and all fittings will dramatically reduce water consumption in the building.

Irrigation Tanks: The building will be fitted with 60,000 litre rainwater storage facility in order to irrigate the on-site green landscape.

Façade Composition & Shading

Compared to Standard Un-shaded Full-height Glass: utilising an insulated spandrel and a 600mm shading blade at appropriate position as proposed in the amended typical cross section, depending on final U-value and SHGC, the building will reduce energy consumption and save between 190,000 and 220,000 kg's of CO-2 over a 30-year life span of the building.