

ICEHQ - CASE STUDY

July 2019

WHAT WAS THE CHALLENGE?

challenge.



The indoor ice sports facility, iceHQ required indoor air temperature to remain at a constant, stable level to mitigate risk of the ice melting.

iceHQ also aimed to reduce energy consumption, utilising a system designed for high thermal performance while maintaining high acoustic performance.

The building was existing and therefore it required a unique design. The original specification was problematic for installation. Designinc Architect, Kieran Leong commented: "A lot of consideration was given to how to practically retrofit the insulation to the underside of the existing roof, while sticking to a budget."

WHAT PRODUCTS WERE USED?

create



The entire ceiling was battened to create a cavity for the insulation. Earthwool® ceiling batt, R5.0 was installed in combination with a pliable building membrane to achieve high thermal performance, low emissivity and a highly durable finish. The walls required a particularly high R-Value of R4.0, this is 38% higher than the minimum standard of insulation used in external walls in Melbourne (standard is R2.5).

Installing Earthwool® insulation resulted in the desired thermal performance being achieved for iceHQ. Ross Fisher, Director of iceHQ, said: "On 40 degree days the indoor air temperature is still cold enough to ensure the ice remains frozen. On the hottest summer's day, our interior temperature did not exceed 18°C."

WHAT WAS THE RESULT?

care



The increased thermal performance of the existing building will ensure iceHQ saves money on energy bills, as the superior thermal performance of the building envelope will drastically reduce the overall heat gain, all while using a sustainable, Global GreenTag Level A rated product.

Earthwool® delivers a superior acoustic performance and is non-combustible, giving designers, developers and contractor's confidence when specifying and installing Earthwool®.

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