

STAR CASINO - CASE STUDY

January 2021

WHAT WAS THE CHALLENGE?

challenge.



Due to the fixed height and closely adjoining occupancy units, acoustic and fire performance of the internal walls was paramount for both comfort and safety of tenants. This demanded the application of highly efficient products to meet these strict specifications.

Intertenancy walls separating sole occupancy units for hotels and apartment buildings require an acoustic performance of a minimum of $R_{\rm w}$ + Ctr 50. These walls also require a fire rated level (FRL) of 60 / 60 for non-load bearing walls and FRL of 90 / 90 / 90 for load bearing walls, a key part of achieving compliance was dependent on the building having very high thermal properties based on bulk insulation installed within the ceiling and wall cavities.

WHAT PRODUCTS WERE USED?

create



Knauf Insulation was engaged to provide products, which would help to meet or exceed the acoustic and fire-resistant requirements for this project. Knauf Insulation Acoustic batt 14kg/m³ was installed to double stud metal framed walls, in addition to fire rated plasterboard to achieve high performance outcomes and help create a sealed intertenancy envelope.

Acoustic insulation was also required for the shaft wall systems. Knauf Insulation Acoustic roll $24 kg/m^3$ was installed, enhancing the acoustic performance of the system to achieve required $R_{\rm w}$ 50, complying with the National Construction Code of Australia and improving the comfort levels of hotel guests and building occupants.

As part of the installed systems, Knauf Insulation products were tested and deemed non-combustible in accordance to AS 1530.1.

WHAT WAS THE RESULT?

care



The installation of Knauf Insulation products has helped to meet the stringent requirements for acoustic and fire performance for The Star Gold Coast project. This enormous commercial and residential development, flooded with natural light through its glass exterior, will benefit from the product's ability to help achieve a high performing internal envelope. The product selection also contributes significantly to the safety and comfort of future guests and occupants.

Luke Erich of Scooter Group, the plastering contractors for stage one of the project, commented on their onsite preference for installing Knauf Insulations products. "The insulation is much softer and is easier to install compared to other glasswool products in Australia. I've found Knauf Insulation to be a really good product and I'll continue to use it on future projects."

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