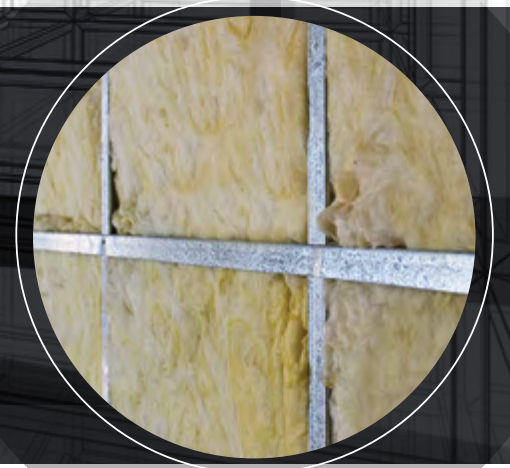


Case Study

Application: Non-Combustible External Walls and Common walls requiring an FRL

Product: Bradford Acoustigard™

Performance: Fire Resistance, Sound Transmission Resistance and Thermal Resistance



Insulation for Non-Combustible Walls

Application Overview

Beyond structural performance, fire, acoustics and thermal – are perhaps the key elements of wall system performance and specification. Whether on a boundary or in a facade of high-rise apartments, external walls require non-combustible insulation to reduce fire risk, while delivering peaceful acoustics and thermal performance for occupant comfort.

Similarly, many internal walls in commercial and multi-residential buildings require enhanced acoustic and fire separation, while some also require a thermal rating.



Non-Combustible Acoustic & Thermal Insulation

Non-Combustible External Walls

The use of non-combustible components in high-rise external facades is critical in preventing the vertical spread of fire, this includes insulation. If combustible insulation is used, fire could potentially spread within a façade cavity unnoticed.

Additionally, with increasing construction near transport corridors, external wall acoustic performance is becoming standard in project specifications. Add this to NCC thermal performance requirements and increased stringency in fire performance, designers, engineers and builders are looking for standardised solutions for fire, acoustics and thermal insulation.



External Non-Combustible Walls



Internal FRL Walls

FRL Internal Walls



Many internal walls in commercial and multi-res buildings are required to provide fire and acoustic separation for occupant safety and comfort. Non-combustible insulation within separating walls provides much needed acoustic performance while reducing the risk of noxious gasses spreading in the event of a fire and increases the chance of survival for evacuating occupants and first responders. Some internal walls may also separate conditioned spaces from non-conditioned spaces, therefore requiring thermal separation between these spaces.

Non-Combustible Acoustic and Thermal Insulation

Bradford Acoustigard™ presents the ideal non-combustible insulation solution for external and internal walls, delivering enhanced fire, acoustics and thermal performance.

Acoustigard™ is a non-combustible, glasswool fibre insulation specifically engineered to reduce mid to high range acoustic transmission in walls (and ceilings). Manufactured in varying densities the acoustic and thermal performance can be tuned to suit project requirements.

Acoustigard™ can be supplied in varying thicknesses up to 90mm and densities up to 32 kg/m³, delivering up to R2.7 added insulation to the total wall thermal performance.

Unlike some other products, Acoustigard™ retains its form and won't slump in the cavity, ensuring the risk of voids in walls are eliminated and maintaining the acoustic and thermal performance well beyond building handover to owners and tenants.

Technical Project Support

Bradford's DesignSmart team has a wealth of construction experience and utilise industry-leading building science research for acoustic, thermal and fire performance. As the experts in building insulation they can assist with:

- > Project-specific support – system selection
- > Value engineering challenges
- > Specification documentation
- > System design detailing
- > Product installation and certification

Call the DesignSmart team on **1800 354 044** or visit **BradfordDesignSmart.com.au**