FI20183-01-2-C1
GROUP NUMBER CLASSIFICATION

This is to certify that the specimen described below was tested by BRANZ in accordance with AS ISO 9705:2003 (R2016) and ISO 9705:1993.

Test Sponsor

Kingspan Insulation NZ Ltd
11 Turin Place
Otara
Auckland, 2013
New Zealand

Date of test

22 November 2024

Reference BRANZ Test Report

FI20183-01-2 – issued 27 March 2025

Test specimen as described by the sponsor

Kingspan Kooltherm K17 Insulated Plasterboard – a composite panel with total thickness of 100 mm and module width of 1,200 mm. The panels consist of a nominally 90 mm thick Kooltherm K10 G2 Soffit Board laminated to a 10 mm thick paper-faced plasterboard with a density of 700 kg/m³. The Kooltherm K10 G2 Soffit Board consists of nominally 90 mm thick thermoset phenolic foam core with a BRANZ measured nominally 50 micron thick reinforced foil facing and a BRANZ measured nominally 400 micron thick glass fibre tissue facing adhered to the back. The plasterboard is bonded to the reinforced foil face. The Kooltherm K10 G2 Soffit Board including the thermoset phenolic foam and facers has a client stated nominal density of 52 kg/m³. The BRANZ measured density of the thermoset phenolic foam core only is 41.5 kg/m³, this does not include the facers.

Installation method of the test specimen

The panels were oriented with the paper-faced plasterboard face exposed and were screw fixed to the steel framework. Wall panels were adhered to the plasterboard substrate with construction adhesive. Perforated paper tape was applied to all panel joints as well as applications of plaster compound. Refer to report FI20183-01-2 for further installation details.

Classification in Accordance with New Zealand Building Code (NZBC)

Calculations were carried out in accordance with NZBC Verification Method C/VM2 Appendix A. The group number classification and smoke production rate for the test specimen are presented in the table below.

Classification in Accordance with National Construction Code (NCC) Australia

Calculations were carried out in accordance with AS 5637.1:2015. The test specimen covered three walls and the ceiling. The group number classification and $SMOGRA_{RC}$ for the specimen were evaluated in accordance with the requirements of AS 5637.1 and are presented in the table below.

Regulatory authorities are advised to examine test reports before approving any product.

Building Code Document	Classification
NZBC Verification Method C/VM2 Appendix A	**Group Number 1-S** Average Smoke Production Rate was 0.4 m^2/s and therefore within the 5 m^2/s limit
NCC 2022 Volume One, Specification 7, Clause S7C4, determined in accordance with AS 5637.1:2015	**Group 1** The $SMOGRA_{RC}$ was 1.4 m^2/s^2 x 1000 and therefore within the 100 m^2/s^2 x 1000 limit

Issued by

L. Q. Greive
Fire Testing Engineer

Reviewed and approved for release by

L. F. Hersche
Fire Testing Engineer

Issue Date
27 March 2025