FH13137-002 **GROUP NUMBER CLASSIFICATION**



This is to certify that the specimens described below were tested by BRANZ for determination of Group Number Classification and Average Specific Extinction Area in accordance with ISO 5660 Parts 1 and 2.

Test Sponsor

Armstrong Ceiling Solutions (Australia) Pty Ltd Unit 4, 1 Basalt Road Pemulwuy, NSW 2145 Australia

8 May 2018, 15 May 2018, and 19 July 2018 **Reference BRANZ Test Report** FH13137-001 - 25 August 2020

Date of tests

Test specimens as described by the client

Armstrong Ceiling Solutions Ceiling Tiles

Mineral fibre ceiling tiles in types Ultima OP Black, Ultima OP, Dune, Bioquard Acoustic, Bioquard Acoustic OP RH100, Fine Fissured, Ultima dB, and Ultima OP dB.

Specimen Reference	Product Reference	Mass (g)	Thickness (mm)	Apparent Density (kg/m³)	Colour
FH6339-1-50-1	Ultima OP Black	33.1	19.2	172	Black
FH6339-2-50-1	Ultima OP	28.2	15.0	188	White
FH6339-3-50-1	Dune	38.2	15.2	251	White
FH6339-4-50-1	Bioguard Acoustic	42.7	18.8	227	White
FH6339-5-50-1	Bioguard Acoustic OP RH100	53.2	18.9	282	White
FH6339-6-50-1	Fine Fissured	35.5	14.6	243	White
FH6339-7-50-1	Ultima dB	104.4	30.3	345	White
FH6339-8-50-1	Ultima OP dB	106.9	42.3	253	White

Discussion

Indicative testing

No significant variations were detected in the indicative testing of Armstrong Ceiling Solutions mineral fibre ceiling tiles "Ultima OP Black", "Ultima OP", "Dune", "Bioguard Acoustic", "Bioguard Acoustic OP RH100", "Fine Fissured", "Ultima dB", and "Ultima OP dB". Each indicative sample tested was designated a Group 1-S classification. Armstrong Ceiling Solutions ceiling tiles which maintain the following parameters of equivalency, are deemed to achieve equivalent group number classification.

Perforations

Armstrong Ceiling Solutions ceiling tile types "Fine Fissured", "Casa", "Classic" and "Classic Lite" vary from tested range of tiles in perforation patterns only. "Fine Fissured", "Casa", "Classic" and "Classic Lite" ceiling panels are deemed to achieve equivalent group number classification within the parameters of equivalency.

Thickness

Armstrong Ceiling Solutions ceiling tile types Ultima OP, Ultima dB and Ultima OP dB may vary from the tested range of tiles in thickness and density only. Fine Fissured High NRC and Dune Max tiles are deemed to achieve equivalent group number classification within the parameters of equivalency.

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Parameters of equivalency						
Product type	Product reference	Colour	Nominal thickness (mm)	Nominal density (kg/m³)		
Fine Fissured or Perforated	Fine Fissured	White	15 – 19	≥300		
with / without sand texture	Classic*					
	Dune					
	Dune Max*					
Ultima and Bioguard	Ultima	White	15 - 43	≥160		
Acoustic Range with Fleece Surface	Ultima OP*					
	Bioguard Acoustic					
	Ultima dB					
	Ultima OP dB					
	Biogurad Acoustic OP RH100					
Ultima and Bioguard Acoustic Range with coloured Fleece Surface	Ultima OP*	Black	15 – 19	≥150		

Note: *product variation as detailed in Discussion.

Group Number Classification in accordance with the New Zealand Building Code

Calculations were carried out according to NZBC Verification Method C/VM2 Appendix A. The classification for the sample as described above is given in the table below.

Group Number Classification in accordance with NCC Australia

Calculations were carried out according to AS 5637.1:2015. The Group Number Classification and Average Smoke Extinction Area for the sample as described above is given in the table below.

Determination of Fire Hazard Properties

The specimen was deemed suitable for testing in accordance with AS 5637.1:2015 and testing was performed in accordance with ISO 5660 for the purposes of Group Number Classification as specified in the NCC Volume One Specification C1.10 Clause 4.

Building Code Document	Group Number Classification		
NZBC Verification Method C/VM2 Appendix A	1-S		
NCC Volume One Specification C1.10 Clause 4 determined in accordance with AS 5637.1:2015	1 The average specific extinction area was less than the 250 m2/kg limit		

Issued by

L. F. Hersche Fire Testing Engineer **BRANZ**

Reviewed by

E. Soja IANZ Approved Signatory

Issue Date Expiry Date 25 August 2020 25 August 2025

Senior Fire Safety Engineer

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



All tests and procedures reported herein, unless indicated, have been performed in accordance with the laboratory's scope of accreditation