
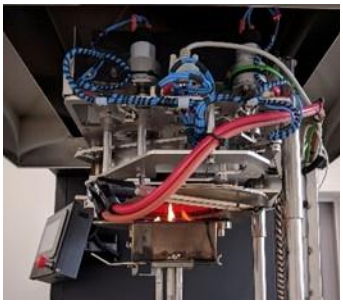


FIRE ASSESSMENT REPORT

FAR 4659-01-4

ASSESSMENT REPORT ON FIRE PERFORMANCE OF SINIAT PLASTERBOARD LINING PRODUCTS

CLIENT

Etex Australia Pty Ltd
31 Military Road
Matraville NSW 2036
Australia

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ASSESSMENT OBJECTIVE

This report gives the BRANZ assessment of the group number classification in accordance with AS 5637.1:2015 Determination of Fire Hazard Properties, for a range of plasterboard products tested in accordance with AS/NZS 3837:1998 and ISO 5660.

CLIENT

Etex Australia Pty Ltd
31 Military Road
Matraville NSW 2036
Australia

PRODUCT

Various Etex Australia Pty Ltd products as detailed in Table 1.

CONCLUSION

For the purposes of compliance with the National Construction Code (NCC) 2022 Volume One Specification 7 Clause S7C4 determined in accordance with AS 5637.1:2015, the following classifications are considered applicable to the systems as summarised in detail in the table below.

Report Number	Description	Group Number Classification	Average Specific Extinction Area (m^2/kg)
FH 3398	Siniat Mastashield	1	Less than 250
FH 3399	Siniat Spanshield	1	Less than 250
FH 3406	Siniat Watershield	1	Less than 250
FH 3407	Siniat Soundshield	1	Less than 250
FH 3478	Siniat Fireshield	1	Less than 250
FH 3479	Siniat Multishield	1	Less than 250
FH 4277	Siniat Impactshield	1	Less than 250
FH 5397	Siniat Opal	1	Less than 250
FH 5398	Siniat Trurock	1	Less than 250
FH 10759-1	Siniat Shaft Liner	1	Less than 250
FH 10759-1	Siniat Intershield	1	Less than 250
FH 13970	Siniat Creason & Siniat Createx	1	Less than 250
FH18598-01-1	Siniat Weather Defence	1	Less than 250

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LIMITATION

This report is subject to the accuracy and completeness of the information supplied.

BRANZ reserves the right to amend or withdraw this assessment if information becomes available which indicates the stated fire performance may not be achieved.

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DOCUMENT REVISION STATUS

ISSUE NO.	DATE ISSUED	AUTHOR	REVIEWER	DESCRIPTION
04	30 May 2024	LFH	LQG	Additional products added. Outdated products removed.
03	24 February 2022	JRS	LFH	Additional products added. Outdated products removed. Sponsor and product name changed.
02	21 March 2019	LFH	PCRC	Additional products added.
01	31 March 2017	LFH	PCRC	Initial Issue

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1. INTRODUCTION

This report gives the BRANZ assessment of the Group Number Classification in accordance with AS 5637.1:2015 "Determination of Fire Hazard Properties", for products tested in accordance with AS/NZS 3837 and ISO 5660.

2. BACKGROUND

In BRANZ Test Reports as listed in Table 1, a range of plasterboard products were subjected to testing in accordance with AS/NZS 3837 and ISO 5660 and Group Number Classification numbers were determined for each in accordance with NCC 2022 Volume One Specification 7 Clause S7C4 in accordance with AS 5637.1:2015.

3. TESTS SUMMARY

Many of the reports referenced in Table 1 were issued under Lafarge or Knauf Product names. In some cases, Etex have rebranded the products and these are used in this report.

Table 1: Summary of test specimens and their reported results

Report number	Product name	Group Number Classification	Average Specific Extinction Area (m^2/kg)
FH 3398	Siniat Mastashield	1	9.3
FH 3399	Siniat Spanshield	1	14.6
FH 3406	Siniat Watershield	1	13.2
FH 3407	Siniat Soundshield	1	15.0
FH 3478	Siniat Fireshield	1	19.5
FH 3479	Siniat Multishield	1	27.8
FH 4277	Siniat Impactshield	1	17.1
FH 5397	Siniat Opal	1	16.7
FH 5398	Siniat Trurock	1	17.6
FH 10759-1	Siniat Shaft Liner	1	27.7
FH 10759-1	Siniat Intershield	1	38.8
FH 13970	Siniat Creason & Siniat Createx	1	21.5
FH18598	Siniat Weather Defence	1	4.0

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4. DISCUSSION

The objective of AS 5637.1:2015 is to provide means for the determination of specimen suitability for testing in accordance with AS/NZS 3837 and ISO 5660, and the group number, smoke growth rate index ($SMOGRA_{RC}$) and, where required, average specific extinction area (ASEA) as required by the National Construction Code (NCC) of Australia.

4.1 Specimen suitability

Only materials for which there are correlations between cone calorimeter results and room test results shall be tested in the cone calorimeter for the purpose of determining a group number.

Unsuitable materials

The empirical correlations shall not be used for products or assemblies –

a) With profiled facings not allowed by AS/NZS 3837 and ISO 5660;
b) That contain materials that melt or shrink away from a flame;
c) With joints or openings; and
d) With a reflective surface

Suitable materials

Materials for which the correlation is permitted include –

a) Painted or unpainted paper-faced gypsum plasterboard;
b) Solid timber and wood products such as particleboard and plywood; and
c) Rigid non-thermoplastic foams such as polyurethane.

In the above tests listed in Table 1, the specimens comprised a variety of different plasterboard linings. In the specimens being considered in this assessment, the combustible components are the paper, vinyl and plastic facings. None of the tested specimen were observed to melt away from a 50 kW heat source during the test procedure and would be considered suitable for Group Number prediction in accordance with AS 5637.1:2015.

4.2 Determination of Group Number Classification by prediction

The procedure for determining the Group Number Classification, as documented in AS 5637.1:2015, is identical to the procedure used for Group Number prediction in the test reports listed in Table 1. Therefore, Group Numbers as determined in previous test reports are valid to the assessed products within this report and are provided in Table 2.

4.3 Determination of Average Specific Extinction Area

The procedure for determining the average specific extinction area in accordance with AS 5637.1:2015 is identical to that of AS/NZS 3837:1998. The average specific extinction area was calculated in accordance with AS 5637.1:2015 for all products listed in Table 2.

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5. CONCLUSION

It is considered that for the purposes of compliance with the National Construction Code (NCC) of Australia, the following classifications in Table 2 are considered applicable to the systems as described in Section 1.

Table 2: Summary of assessed performance in accordance with AS 5637.1:2015

Report number	Product name	Group Number Classification	Average Specific Extinction Area (m^2/kg)
FH 3398	Siniat Mastashield	1	Less than 250
FH 3399	Siniat Spanshield	1	Less than 250
FH 3406	Siniat Watershield	1	Less than 250
FH 3407	Siniat Soundshield	1	Less than 250
FH 3478	Siniat Fireshield	1	Less than 250
FH 3479	Siniat Multishield	1	Less than 250
FH 4277	Siniat Impactshield	1	Less than 250
FH 5397	Siniat Opal	1	Less than 250
FH 5398	Siniat Trurock	1	Less than 250
FH 10759-1	Siniat Shaft Liner	1	Less than 250
FH 10759-1	Siniat Intershield	1	Less than 250
FH 13970	Siniat Creason & Siniat Createx	1	Less than 250
FH18598-01-1	Siniat Weather Defence	1	Less than 250

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