AWTA PRODUCT TESTING

Australian Wool Testing Authority Ltd - trading as AWTA Product Testing
A.B.N. 43 006 014 106
1st Floor, 191 Racecourse Road, Flemington, Victoria 3031
P.O. Box 240, North Melbourne, Victoria 3051
Phone (03) 9371 2400 Fax (03) 9371 2499

TEST REPORT

CLIENT : NRG BUILDING SYSTEMS
4/32-38 DOVER DRIVE
WEST BURLEIGH QLD 4220

TEST NUMBER : 7-566170-CQ
ISSUE DATE : 04/05/2009
PRINT DATE : 05/05/2009

SAMPLE DESCRIPTION Clients Ref: "NRG Greenboard"
Rigid foam
Colour: Green
Approx mass: 1350g/m2
End use: Insulation

THESE RESULTS MUST BE CONSIDERED IN CONJUNCTION
WITH THE COMMENTS ON THE FOLLOWING PAGE(S)

Material Specification provided by client:
Nominal composition: Expaned polystyrene foam
Nominal thickness: 75mm

AS/NZS 1530.3 - 1999 — Simultaneous determination of Ignitability, Flame Propagation, Heat Release and Smoke Release

RESULTS: Face tested: Face

Date tested: 01/05/2009

	Mean		Standard Error
Ignition time	13.79	min	0.18
Flame propagation time	Nil	s	Nil
Heat release integral	29.1	kJ/m2	4.0
Smoke release, log d	-1.1063		0.0372
Optical density, d	0.0796	/m	

Number of specimens ignited: 6

Number of specimens tested: 6

REGULATORY INDICES:		
Ignitability Index	6	Range 0-20
Spread of Flame Index	0	Range 0-10
Heat Evolved Index	1	Range 0-10
Smoke Developed Index	4	Range 0-10

Comments:

These results only apply to the specimen mounted, as described in this report.

The results of this fire test may be used to directly assess fire hazard, but it should be recognized that a single test method will not provide a full assessment of fire hazard under all fire conditions.

Each test specimen had an unattached backing of 4.5mm thick fibre reinforced cement board.

NATA

This Laboratory is accredited by the National Association of Testing Authorities, Australia, for:
-Chemical Testing of Textiles & Related Products : Accreditation No. 983
-Mechanical Testing of Textiles & Related Products : Accreditation No. 985
-Heat & Temperature Measurement : Accreditation No. 1356

AWTA LIMITED

0204/11/06

APPROVED SIGNATORY

MICHAEL A. JACKSON B.Sc.(Hons)
MANAGING DIRECTOR

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TEST REPORT

CLIENT : NRG BUILDING SYSTEMS
PO BOX 2405
BURLEIGH MDC QLD 4220

TEST NUMBER : 7-586446-CQ
ISSUE DATE : 08/08/2012
PRINT DATE : 08/08/2012

SAMPLE DESCRIPTION: Clients Ref: "NRG Green Board"
Polymer modified render with 180 g/m2 fibreglass reinforcement on EPS with an acrylic render finish
Nominal Thickness: 38mm Sample
Colour: Natural with green EPS
End Use: Wall assemblies

AS/NZS 3837:1998 Method of Test for Heat and Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter

Results:-

	Specimen 1	2	3	Mean	
Average Heat Release Rate	38.7	43.9	37.8	40.1	kW/m2
Average Specific extinction area (according to Specification C1.10 of the Building Code of Australia)	75.2	111.6	190.5	125.7	m2/kg

Test orientation: Horizontal

	Specimen 1	2	3	Mean	
Irradiance	50	50	50	50	kW/m2
Exhaust flow rate	24	24	24	24	l/s
Time to sustained flaming	77	76	80	78	s
Test duration	484	464	972	640	s

Heat release rate curve on the 9 attached sheets which form part of this report

Peak heat release after ignition	91.8	104.5	100.7	99.0	kW/m2
Average heat at 60s	65.9	62.8	65.9	64.9	kW/m2
Release rate at 180s	68.6	73.5	70.7	70.9	kW/m2
After ignition at 300s	49.8	54.1	53.1	52.3	kW/m2
Total heat released	15.7	17.1	33.7	22.2	MJ/m2
Average effective heat of combustion	17.5	18.6	23.9	20.0	MJ/kg

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Initial thickness	38.0	38.0	38.0	38.0	mm
Initial mass	122.6	123.9	123.3	123.3	g
Mass remaining	113.4	114.7	109.6	112.6	g
Mass percentage pyrolysed	7.5	7.4	11.1	8.7	%
Mass loss	9.2	9.2	13.7	10.7	g
Average rate of mass loss	2.2	2.4	1.6	2.1	g/m2.s

The formulae given in the Building Code of Austalia have been shown to give inaccuracies in determination of Group Number for certain materials. Due to this AWTA Product Testing no long reports Group Numbers. The formulae for calculation of Group Number is available from the website of the Australian Building Codes Board. Group Number calculation based on the results described in this report can be undertaken at the clients discretion

These test results relate only to the behaviour of the product under the conditions of the test, they are not intended to be the sole criterion for the assessment of performance under real fire conditions

195485 (END OF REPORT)

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