

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 : PLYTECH INTERNATIONAL LIMITED
PO BOX 51-603
PAKURANGA AUCKLAND
NEW ZEALAND

TEST NUMBER : 7-594662-CO
ISSUE DATE : 15/11/2013
PRINT DATE : 15/11/2013

SAMPLE DESCRIPTION Clients Ref: "Plytech Futura HPL"
Laminate faced plywood
Colour: White
Nominal Composition: European birch, high pressure laminate

ISO 5660.1-2002 Reaction to Fire Tests - Heat Release Smoke Production
and Mass Loss Rate
Part 1: Heat Release Rate (Cone Calorimeter Method)

RESULTS:-

	1	Specimen 2	3	Mean	
Average Heat Release Rate at 50kW/m2	89.6	90.5	84.7	88.3	kW/m2

Group Number Classification (In Accordance with New Zealand Building Code
Verification Method C/VM2 Appendix A)

	3	3	3	
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Average Specific Extinction Area (According to ISO 5660.2-2002)	27.8	26.9	15.5	23.4	m2/kg
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Test orientation: Horizontal

	1	Specimen 2	3	Mean	
Irradiance	50	50	50	50	kW/m2
Exhaust flow rate	24	24	24	24	l/s
Time to sustained flaming	58	59	56	58	s
Test duration	1858	1859	1856	1858	s

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

Peak heat release after ignition	276.0	277.0	224.3	259.1	kW/m2
Average heat at 60s	100.5	90.3	117.9	102.9	kW/m2
Release rate at 180s	118.1	120.9	118.7	119.2	kW/m2
After ignition at 300s	117.5	121.4	117.4	118.8	kW/m2
Total heat released	162.4	163.4	152.9	159.6	MJ/m2
Average effective heat of combustion	12.1	12.1	11.5	11.9	MJ/kg

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results relate only to the sample or samples tested. The above test results are designed to provide THE
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content and format of the advertisement have been approved in advance by the Managing Director of
AWTA Ltd.



[Signature]

[Signature]
MICHAEL A. JACKSON B.Sc.(Hons)
MANAGING DIRECTOR

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Initial thickness	18.0	18.0	18.0	18.0	mm
Initial mass	143.1	143.3	142.9	143.1	g
Mass remaining	33.5	32.2	33.5	33.1	g
Mass percentage pyrolysed	76.6	77.5	76.6	76.9	%
Mass loss	109.6	111.1	109.4	110.0	g
Average rate of mass loss	7.4	7.5	7.4	7.4	g/m2.s

Note: All calculations are based on ignition +30 minutes

Tests were conducted with a wire grid placed over the sample during testing
This was done to contain intumescent sample within the sample holder

Observations:

"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"

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(END OF REPORT)

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TEST REPORT

CLIENT : PLYTECH INTERNATIONAL LIMITED
PO BOX 51-603
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NEW ZEALAND

TEST NUMBER : 7-594658-CO
ISSUE DATE : 15/11/2013
PRINT DATE : 15/11/2013

SAMPLE DESCRIPTION Clients Ref: "Plytech Futura HPL"
Laminate faced plywood
Colour: White
Nominal Composition: European birch, high pressure laminate

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

Results:-

	1	Specimen 2	3	Mean	
Average Heat Release Rate	60.6	60.8	54.3	58.6	kW/m2

Average Specific extinction area (according to Specification C1.10 of the Building Code of Australia)	19.5	19.2	9.8	16.1	m2/kg
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Test orientation: Horizontal

	1	Specimen 2	3	Mean	
Irradiance	50	50	50	50	kW/m2
Exhaust flow rate	24	24	24	24	l/s
Time to sustained flaming	58	59	56	58	s
Test duration	3600	3600	3600	3600	s

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

Peak heat release after ignition	276.0	277.0	224.3	259.1	kW/m2
Average heat at 60s	100.5	90.3	117.9	102.9	kW/m2
Release rate at 180s	118.1	120.9	118.7	119.2	kW/m2
After ignition at 300s	117.5	121.4	117.4	118.8	kW/m2
Total heat released	215.5	215.7	192.7	208.0	MJ/m2
Average effective heat of combustion	14.8	14.5	13.3	14.2	MJ/kg

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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

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J. Jackson

Michael A. Jackson
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Initial mass	143.1	143.3	142.9	143.1	g
Mass remaining	23.7	21.3	24.3	23.1	g
Mass percentage pyrolysed	83.4	85.1	83.0	83.9	%
Mass loss	119.4	122.0	118.6	120.0	g
Average rate of mass loss	4.1	4.2	4.1	4.1	g/m2.s

The formulae given in the Building Code of Australia have been shown to give inaccuracies in determination of Group Number for certain materials. Due to this AWTA Product Testing no longer 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

Tests were conducted with a wire grid placed over the sample during testing
This was done to contain intumescent sample within the sample holder

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