

No. 1171421.9

(Please quote this number in all correspondence)

CLIENT:

SAMPLE RECEIVED FROM:

At Work

At Work

PO Box 37 378

Date: 21.2.17

Parnel, Auckland

SAMPLE DESCRIPTION:

Fabric name - Patina, 69% Wool 22% Flax 8%

Attn.:

Polyamide 1% Viscose, 240gsm. End use - panel & upholstery

Client Order No.:

Client Reference:

1 of 8

ISO 5660.1-2015

Reaction to Fire Tests - Heat release Smoke Production and Mass Loss Rate Part 1: Heat Release Rate (Cone Calorimeter Method) and Smoke Production Rate (Dynamic Measurement)

Specimens 1 3 2 Mean Average Heat Release 7.1 7.5 7.6 7.4 kW/m² **Group Number Classification*** 2S 2S **2S** (* In Accordance with the New Zealand Building Code Verification Method C/VM2 Appendix A) Average Specific Extinction Area* 31.7 29.2 15.6 25.5 m²/kg (* According to ISO 5660.2-2002)

Test Orientation: Horizontal

	1	2	3	Mean
Irradiance	50	50	50	50 kW/m ²
Exhaust Flow Rate	24	24	24	24 L/sec.
Time to Sustained Flaming	12	11	11	11 sec.
Test Duration	1812	1811	1811	1811 sec.

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L A Greer Signatory

Signatory

02/03/2017

New Zealand Wool Testing Authority Ltd

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		Specimens		
	1	2	3	Mean
Peak Heat Release After Ignition	139.0	179.2	165.9	161.4 kW/m ²
Average Heat at 60 s	63.2	67.2	71.9	67.4 kW/m ²
Average Heat at 180 s	23.7	25.0	26.9	25.2 kW/m ²
Average Heat at 300 s	17.2	18.6	19.6	18.5 kW/m ²
Total Heat Released	12.8	13.6	13.7	13.4 MJ/m ²
Ave. Effective Heat of Combustion	6.2	6.4	6.4	6.3 MJ/kg
Initial Thickness	6.6	6.6	6.6	6.6 mm
Initial Mass	86.4	85.8	85.5	85.9 g
Mass Remaining	69.2	68.5	67.6	68.4 g
Mass Percentage Pyrolysed	19.9	20.2	20.9	20.4%
Mass Loss	17.2	17.3	17.9	17.5 g
Average Rate of Mass Loss	1.2	1.2	1.2	1.2 g/m ² .s

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

Samples were loose laid onto a substrate of 6mm thick cement sheeting prior to testing.

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

Note: All calculations are based on ignition + 30 minutes.

This test was carried out by a sub-contracted laboratory.

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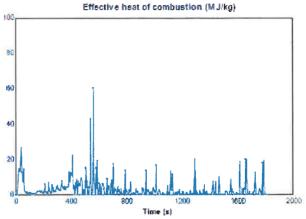
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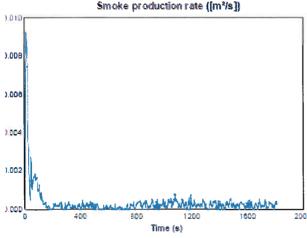
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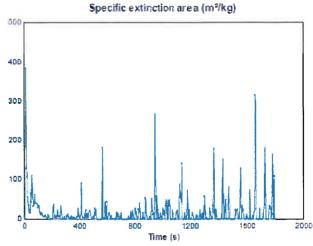
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Specimen: 1 Heat release rate (kW/m²) 120 200 Smoke production rate ([m²/s])







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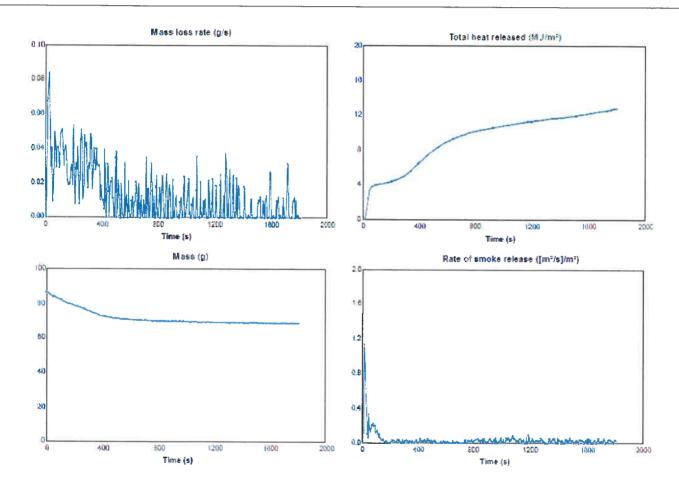
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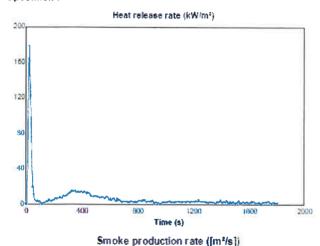
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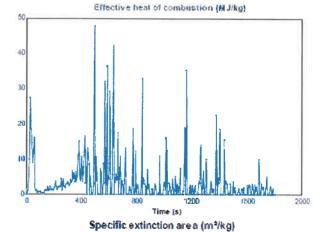
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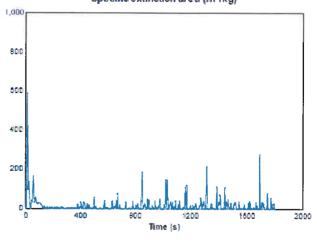
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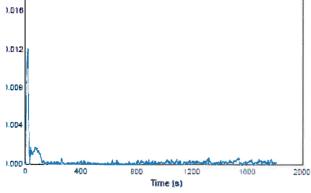












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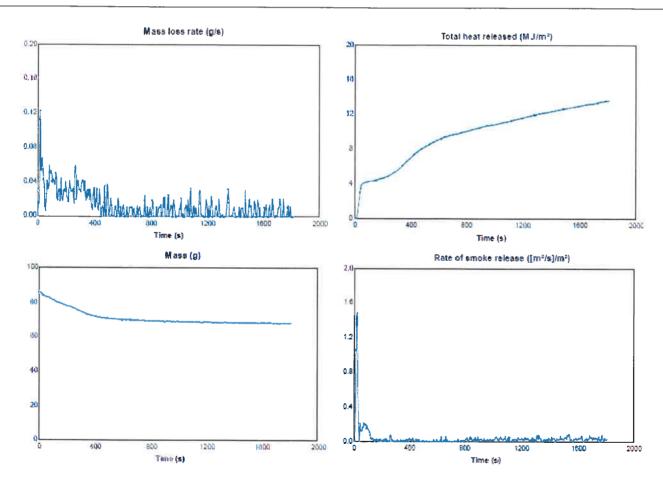
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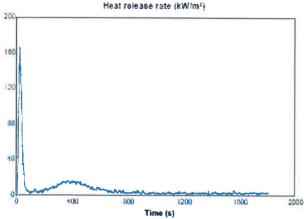
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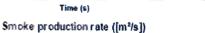
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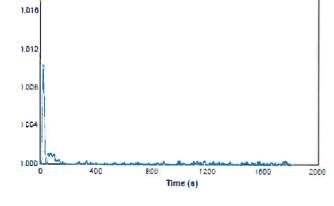
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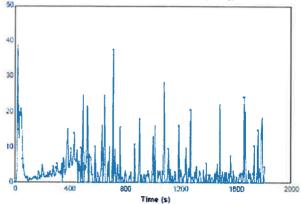




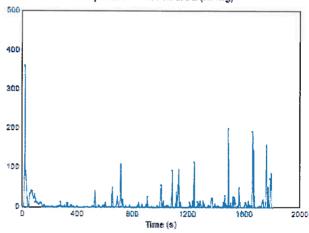




Effective heat of combustion (MJ/kg)



Specific extinction area (m²/kg)



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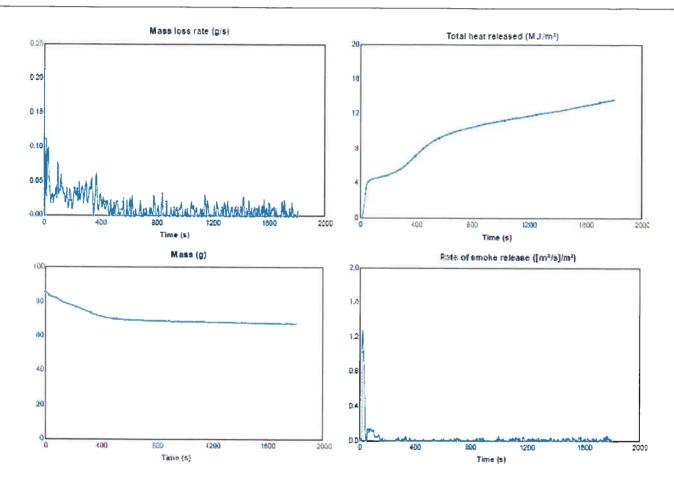
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