

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 : Greenlam Asia Pacific Pte Ltd.
11 Sungei Kadut Crescent
728683 Singapore
Singapore

Test Number : 16-005465
Issue Date : 03/11/2016
Print Date : 16/11/2016

Replacement of Report dated :04/11/2016

Sample Description

Clients Ref : "Greenlam Compact Laminate 13mm"
Paper and Resin Composite Board
Colour : White face
End Use : Toilet and Shower Partitions
Nominal Composition : Paper/Resin composite
Nominal Mass per Unit Area/Density : 20kg/m2
Nominal Thickness : 13mm

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)

Specimen

	1	2	3	Mean	
Average Heat Release Rate	67.9	65.6	71.5	68.3	kW/m ²
Group Number Classification	3	3	3		

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

Average Specific extinction area	2.2	11.0	8.4	7.2	m ² /kg
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Test orientation : Horizontal

Specimen

	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	39	42	42	41	sec
Test duration	1839	1842	1842	1841	sec

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Page 1 of 11

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Peak heat release after ignition	183.9	188.2	169.2	180.4	kW/m ²
Average heat at 60 s	114.2	118.7	111.4	114.8	kW/m ²
Average heat at 180 s	90.2	87.4	89.1	88.9	kW/m ²
Average heat at 300 s	80.4	77.4	78.6	78.8	kW/m ²
Total heat released	122.1	117.9	128.6	122.9	MJ/m ²
Average effective heat of combustion	9.7	9.4	10.2	9.8	MJ/kg
Initial thickness	13.0	13.0	13.0	13.0	mm
Initial mass	187.1	186.9	186.7	186.9	g
Mass remaining	85.0	84.8	84.2	84.6	g
Mass percentage pyrolysed	54.6	54.6	54.9	54.7	%
Mass loss	102.1	102.1	102.5	102.3	g
Average rate of mass loss	7.0	7.0	7.0	7.0	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 the sole criterion for assessment of performance under real fire conditions.

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

Tests were conducted with a simulated airgap, consisting of the sample resting on a 12mm spacer.

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

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APPROVED SIGNATORY

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

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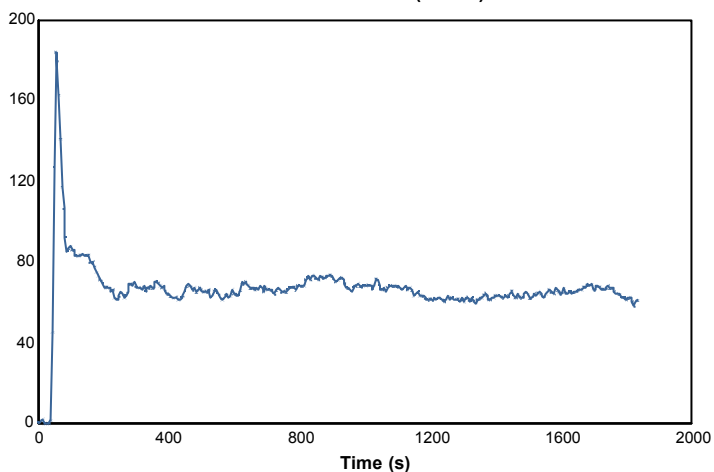
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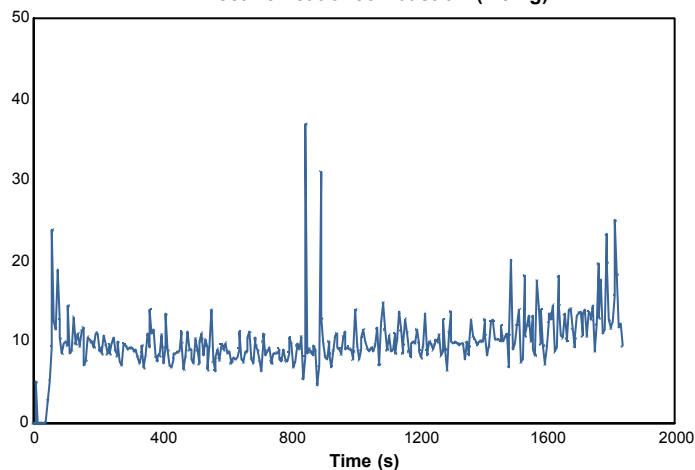
Replacement of Report dated :04/11/2016

Specimen : 1

Heat release rate (kW/m²)



Effective heat of combustion (MJ/kg)



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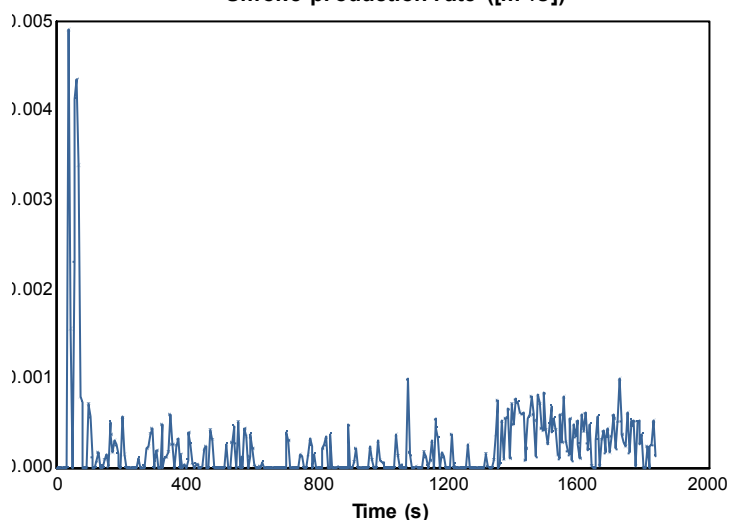
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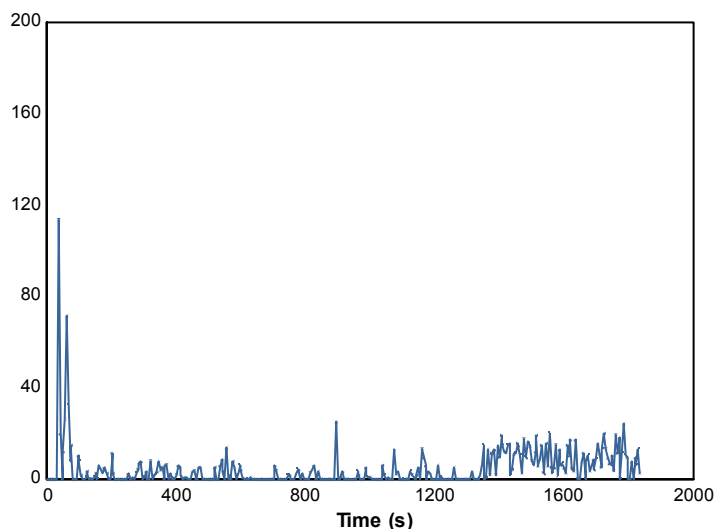
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Smoke production rate ([m²/s])



Specific extinction area (m²/kg)



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Page 4 of 11

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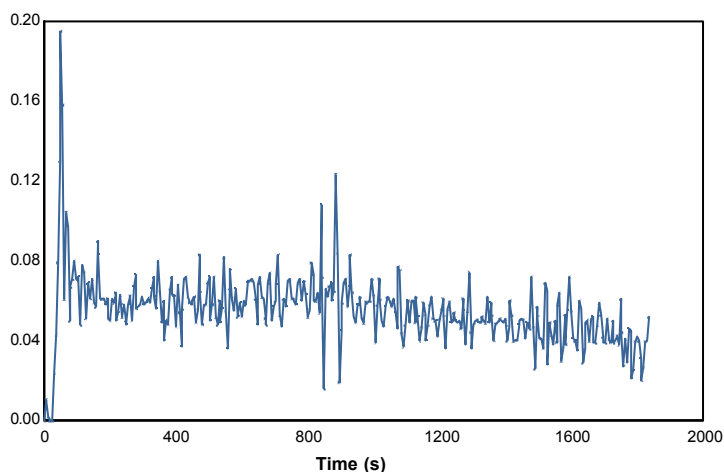
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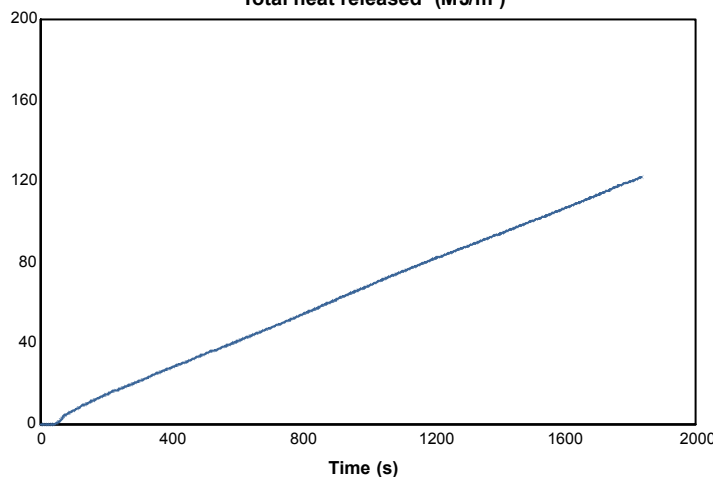
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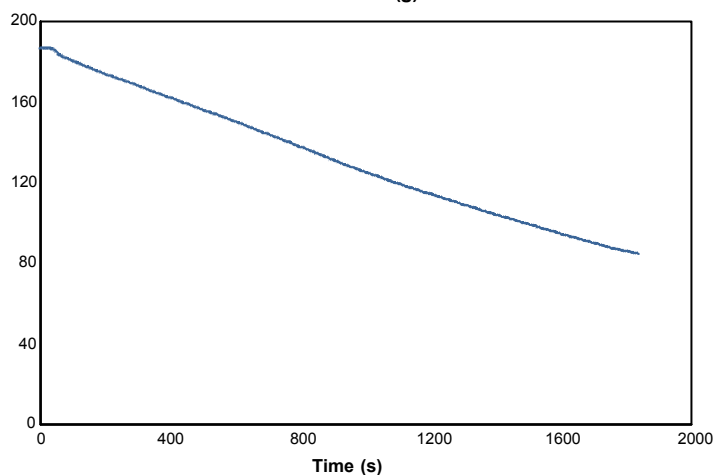
Mass loss rate (g/s)



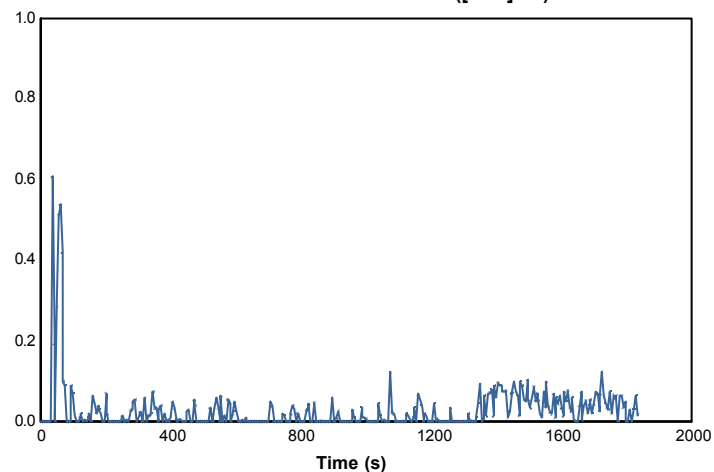
Total heat released (MJ/m²)



Mass (g)



Rate of smoke release ([m²/s]/m²)



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Page 5 of 11

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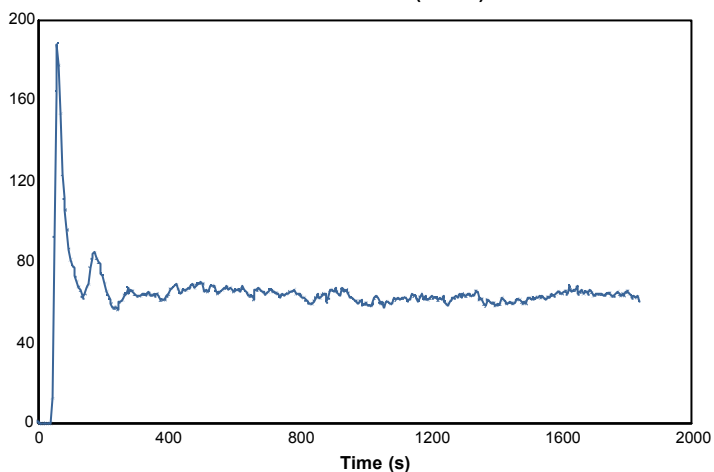
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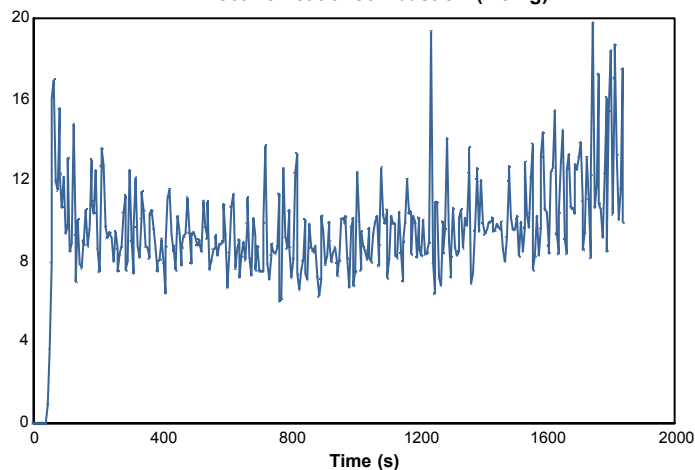
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Specimen : 2

Heat release rate (kW/m²)



Effective heat of combustion (MJ/kg)



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Page 6 of 11

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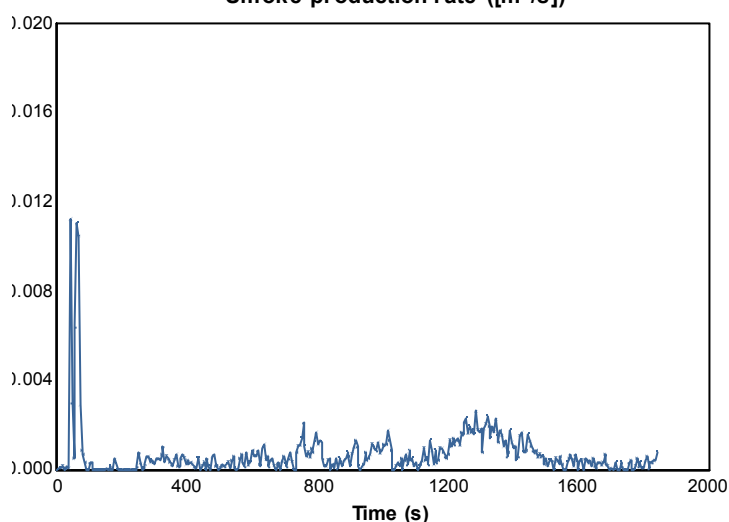
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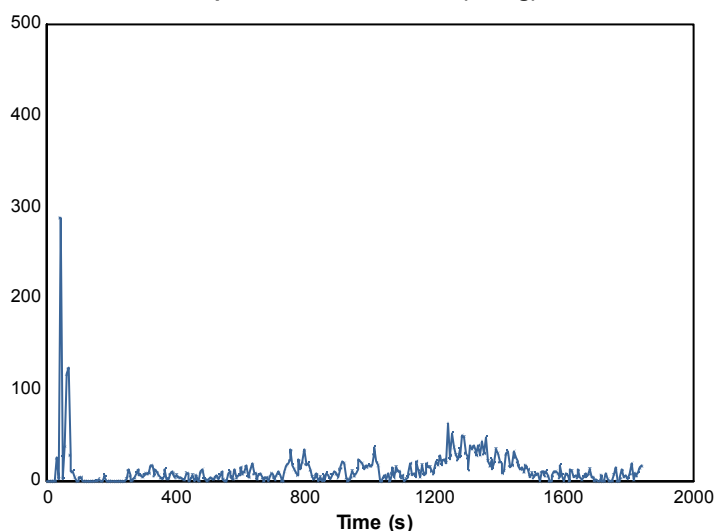
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Smoke production rate ([m²/s])



Specific extinction area (m²/kg)



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Page 7 of 11

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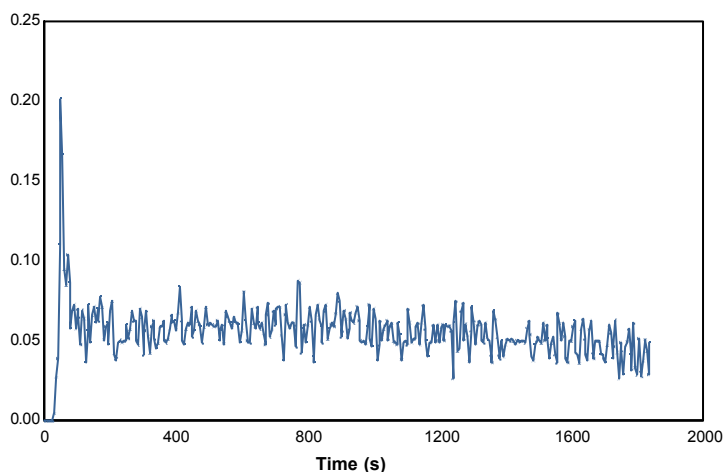
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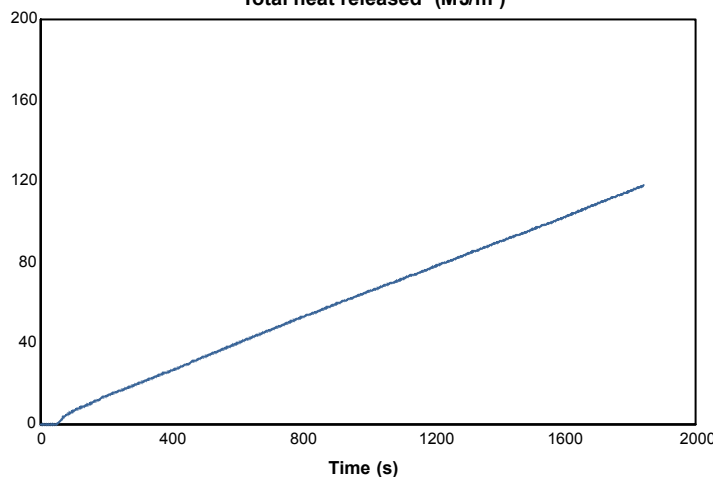
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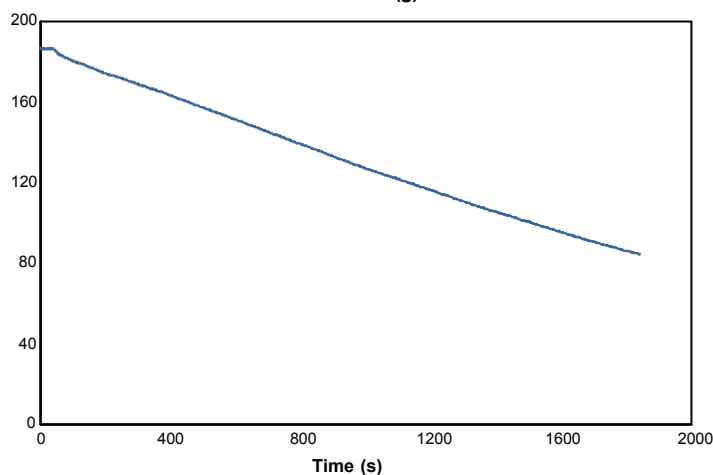
Mass loss rate (g/s)



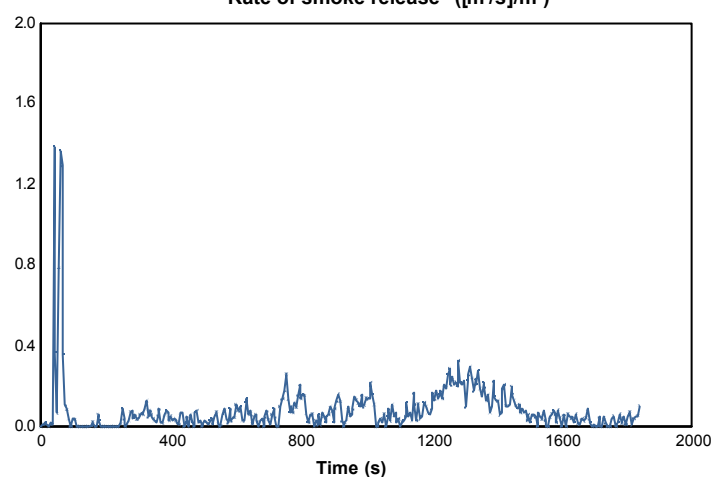
Total heat released (MJ/m²)



Mass (g)



Rate of smoke release ([m²/s]/m²)



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Page 8 of 11

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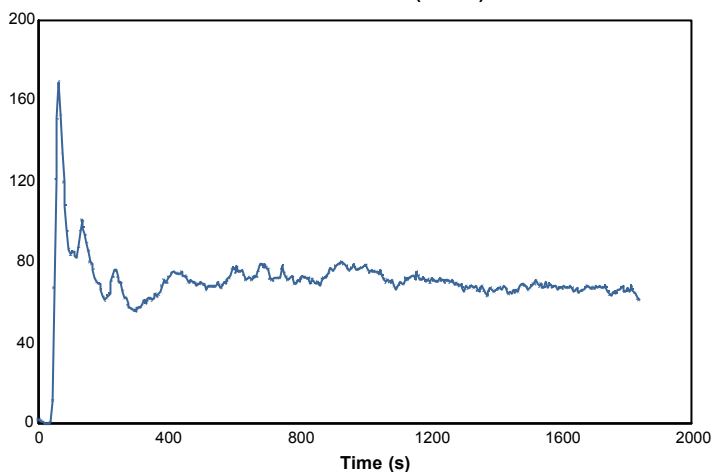
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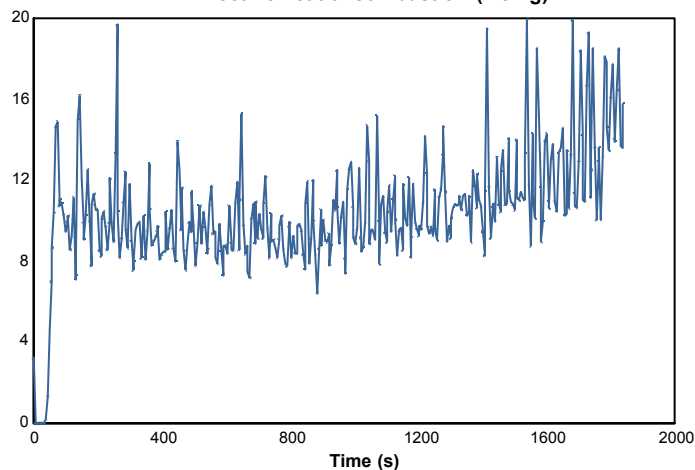
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Specimen : 3

Heat release rate (kW/m²)



Effective heat of combustion (MJ/kg)



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Page 9 of 11

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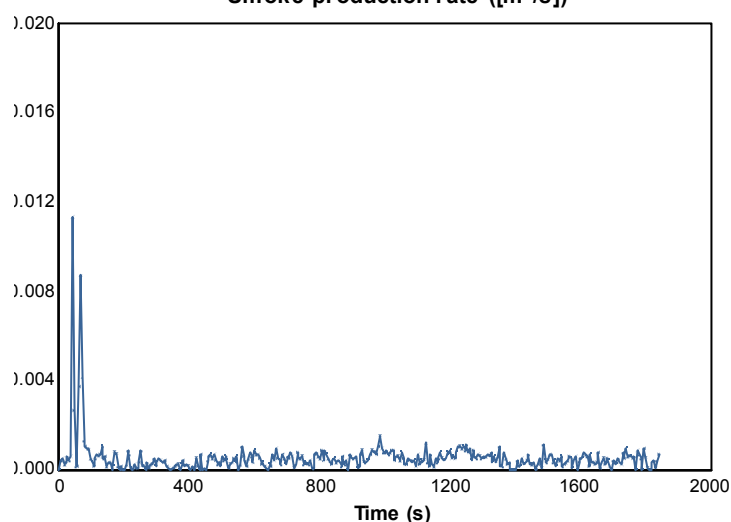
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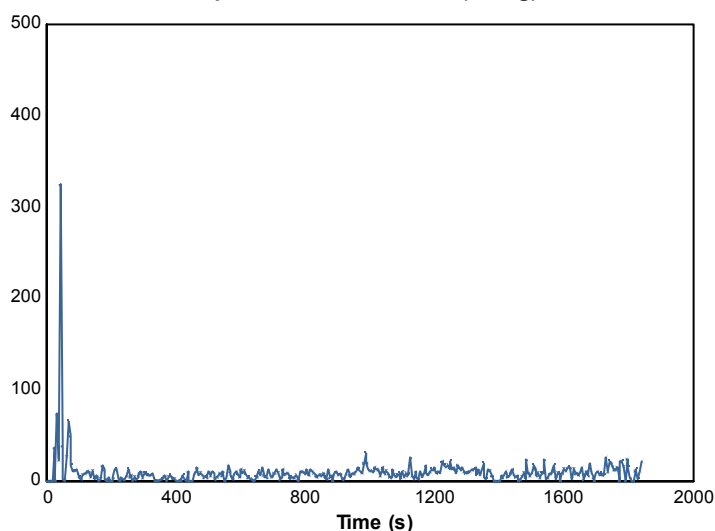
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Smoke production rate ([m²/s])



Specific extinction area (m²/kg)



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Page 10 of 11

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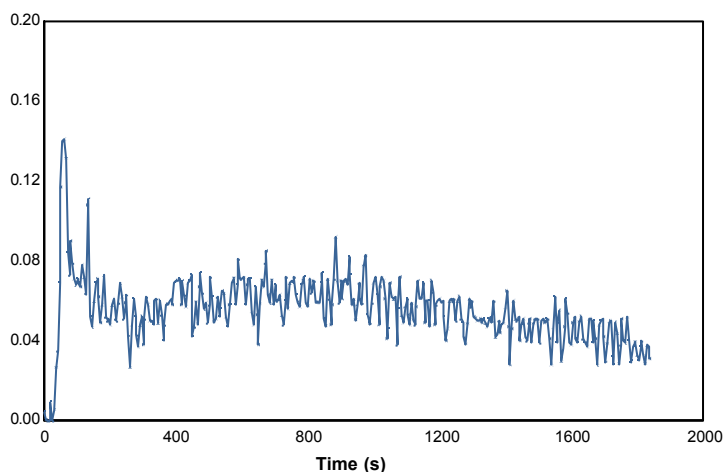
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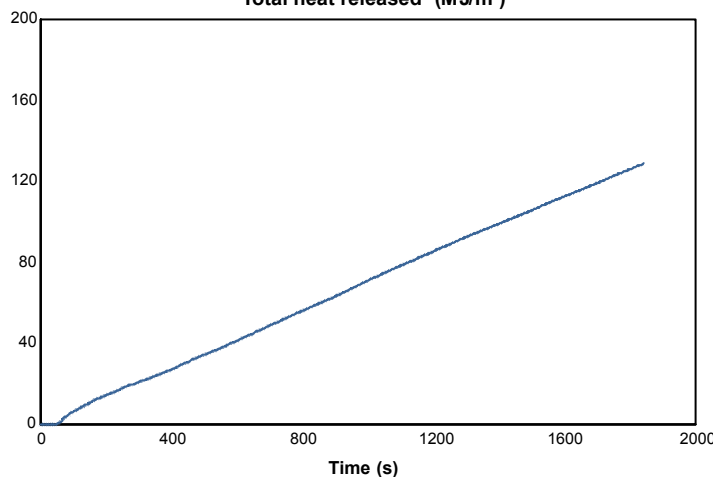
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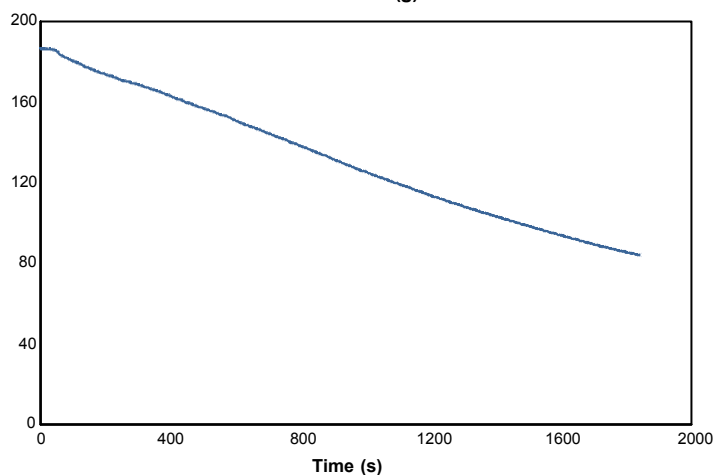
Mass loss rate (g/s)



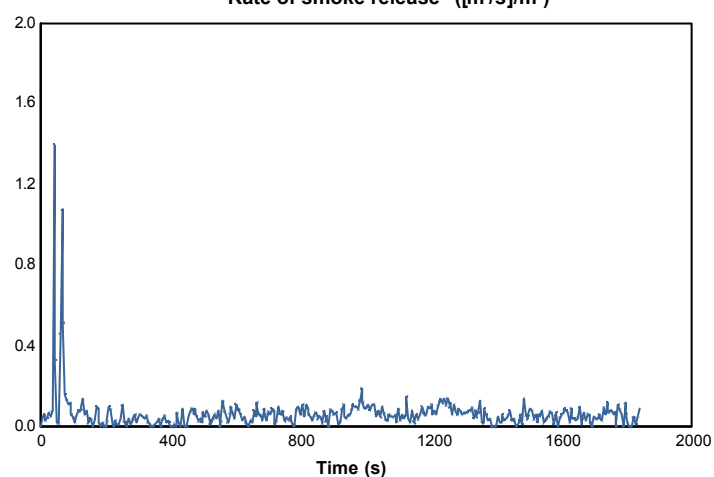
Total heat released (MJ/m²)



Mass (g)



Rate of smoke release ([m²/s]/m²)



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