

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 : Embelton & Co Pty Ltd
PO Box 207
Coburg VIC 3058

Test Number : 17-005394
Issue Date : 23/10/2017
Print Date : 24/10/2017

Replacement of Report dated :16/10/2017

Sample Description Clients Ref : "CF642-29 French Grey Engineered (HM)"
Engineered floor boards
Colour : Grey Oak
Nominal Composition : Oak Plywood

AS/NZS 3837-1998

Method of Test for Heat and Smoke Release Rates for Materials and Products using an Oxygen Consumption Calorimeter

	Specimen			Mean	
	1	2	3		
Average Heat Release Rate	62.4	63.4	62.7	62.8	kW/m ²
Average Specific extinction area	33.5	47.0	48.9	43.1	m ² /kg

(according to Specification C1.10 of the Building Code of Australia)

Test orientation : Horizontal

	Specimen			Mean	
	1	2	3		
Irradiance	50	50	50	50	kW/m ²
Exhaust flow rate	24	24	24	24	L/sec
Time to sustained flaming	35	36	49	40	sec
Test duration	1730	1797	1885	1804	sec
Peak heat release after ignition	210.8	261.6	236.3	236.2	kW/m ²
Average heat at 60 s	153.6	128.2	133.2	138.3	kW/m ²
Average heat at 180 s	140.9	131.3	136.4	136.2	kW/m ²
Average heat at 300 s	134.7	128.6	135.6	133.0	kW/m ²
Total heat released	105.8	111.5	115.0	110.8	MJ/m ²
Average effective heat of combustion	12.8	13.6	13.8	13.4	MJ/kg

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APPROVED SIGNATORY

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

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Initial thickness	12.0	12.0	12.0	12.0	mm
Initial mass	78.9	79.8	80.3	79.7	g
Mass remaining	11.0	12.7	11.7	11.8	g
Mass percentage pyrolysed	86.1	84.1	85.5	85.2	%
Mass loss	67.9	67.1	68.6	67.9	g
Average rate of mass loss	4.8	4.7	4.5	4.7	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.

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

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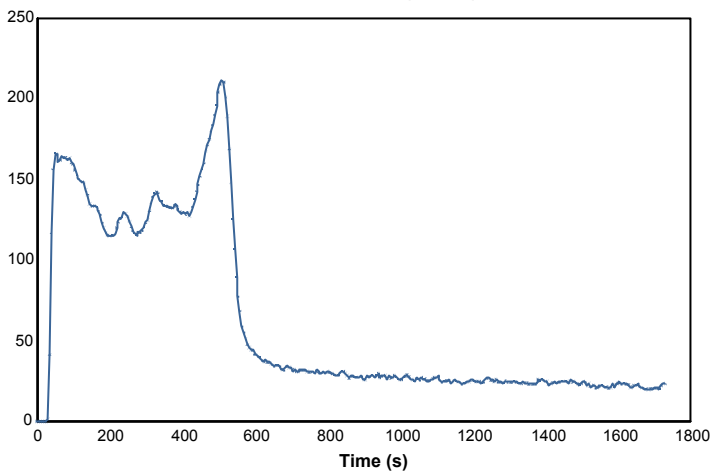
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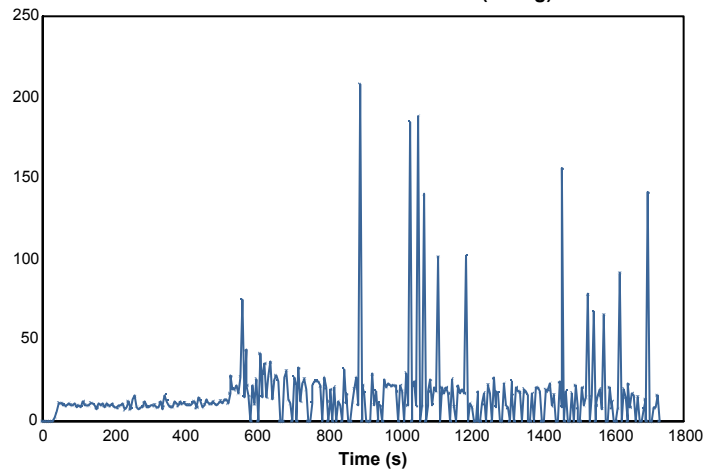
Replacement of Report dated :16/10/2017

Specimen : 1

Heat release rate (kW/m²)



Effective heat of combustion (MJ/kg)



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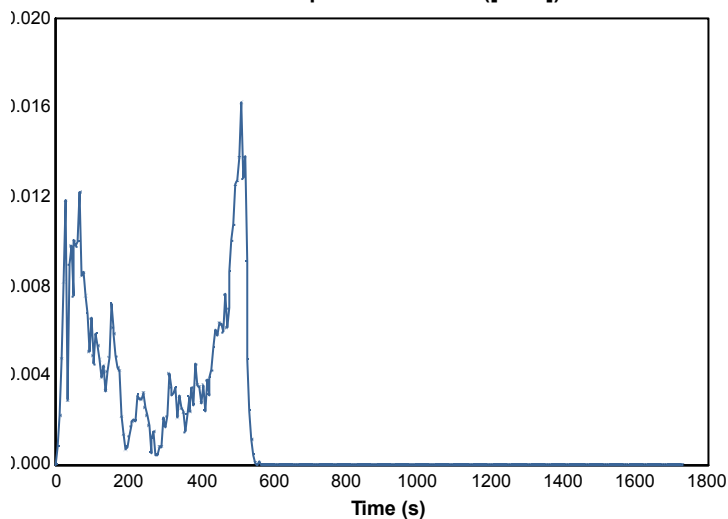
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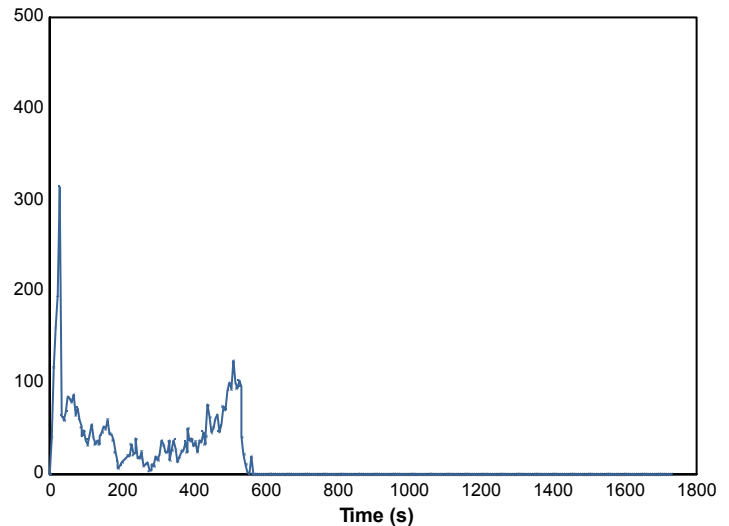
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Smoke production rate (m^2/s)



Specific extinction area (m^2/kg)



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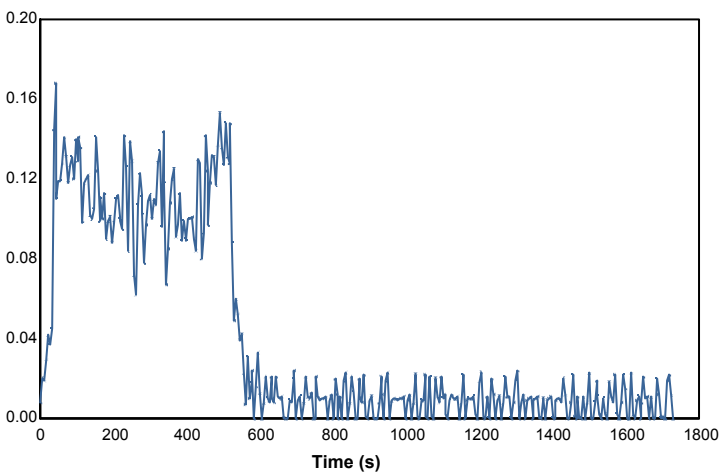
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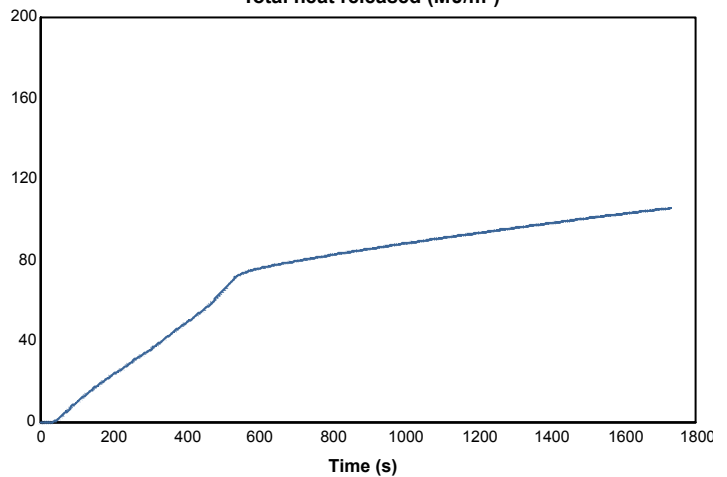
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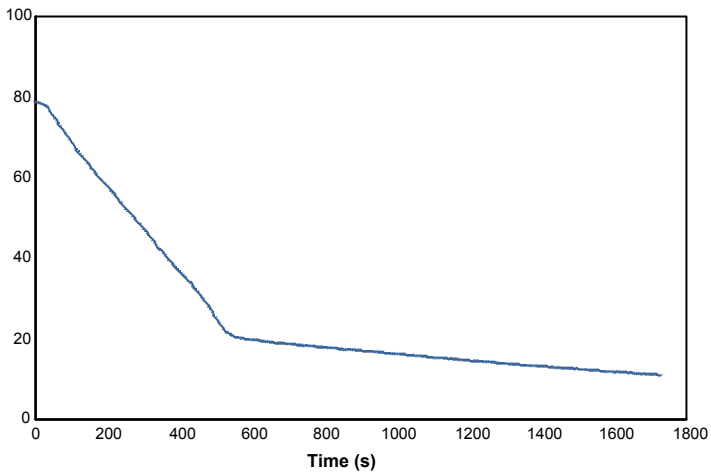
Mass loss rate (g/s)



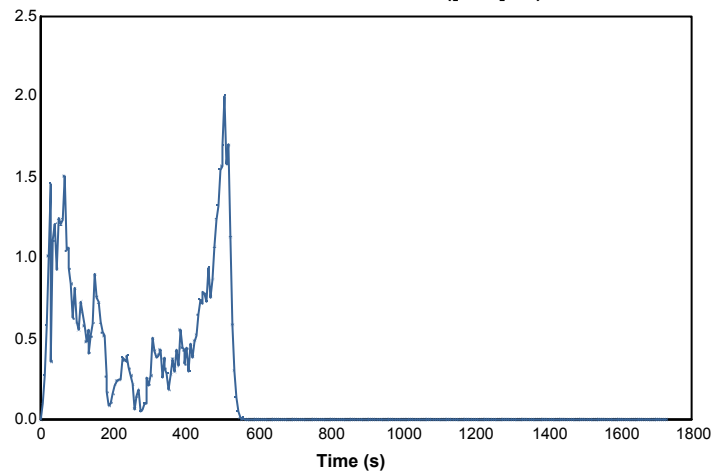
Total heat released (MJ/m²)



Mass (g)



Rate of smoke release ([m²/s]/m²)



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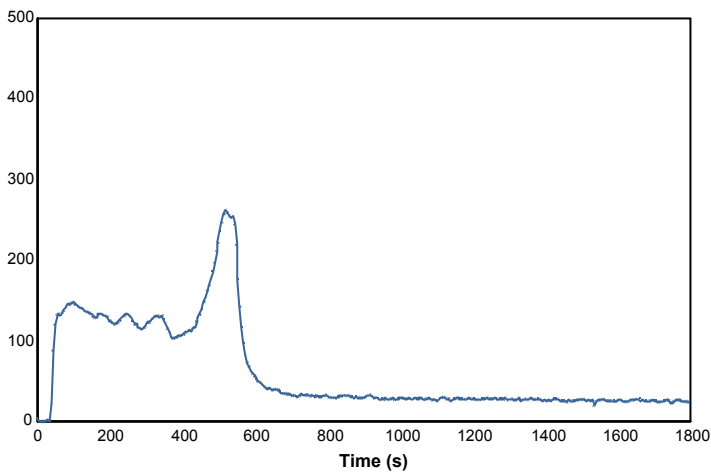
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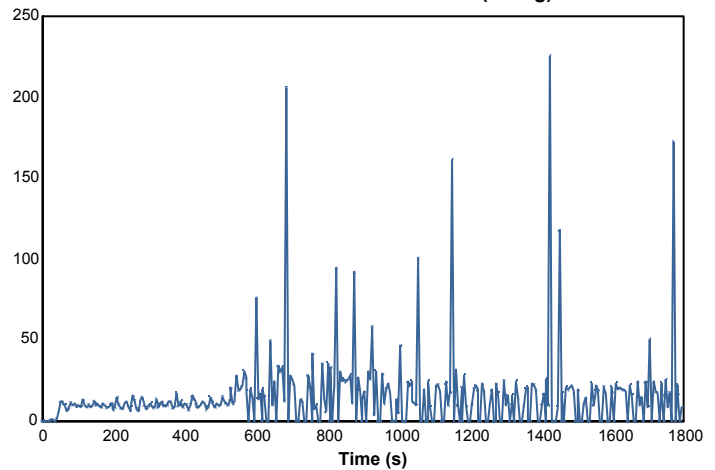
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Specimen : 2

Heat release rate (kW/m²)



Effective heat of combustion (MJ/kg)



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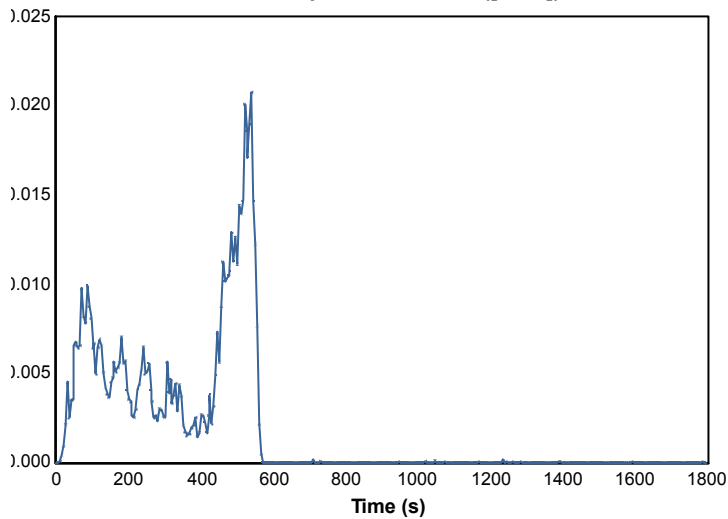
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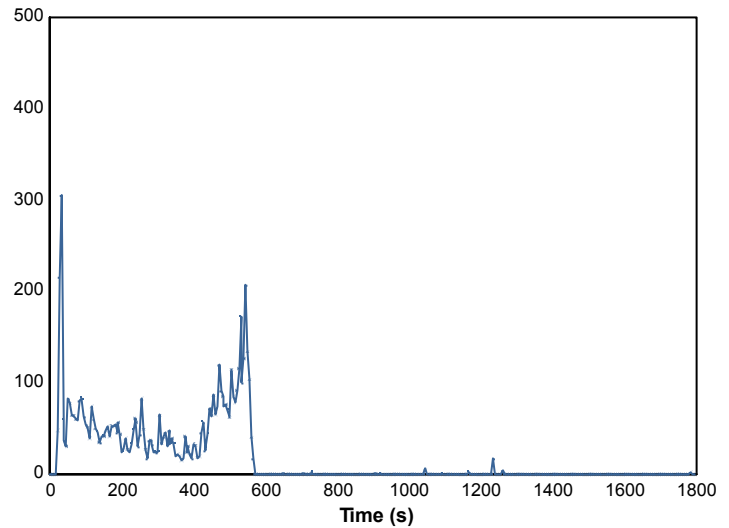
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Smoke production rate ([m²/s])



Specific extinction area (m²/kg)



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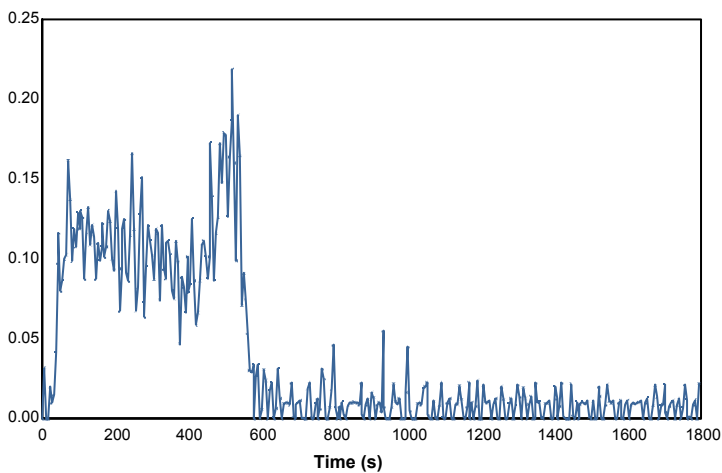
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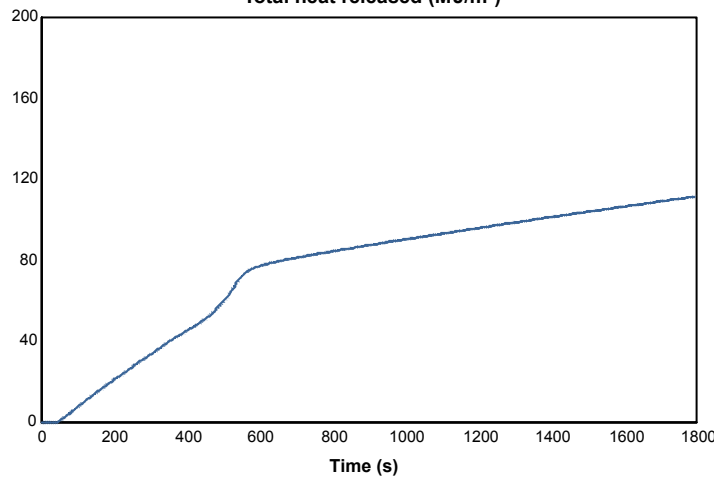
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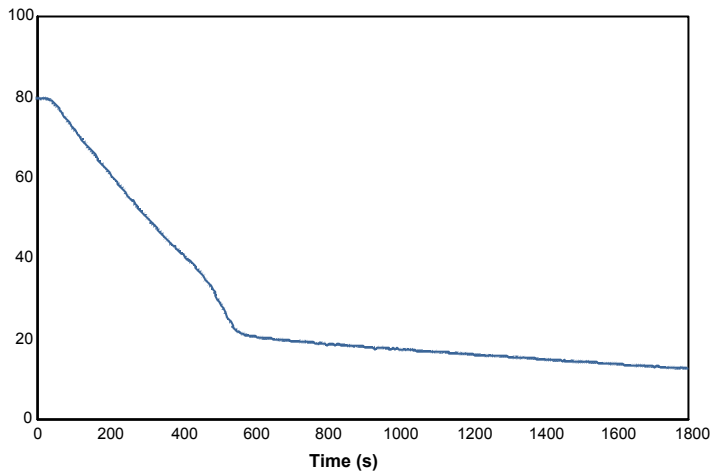
Mass loss rate (g/s)



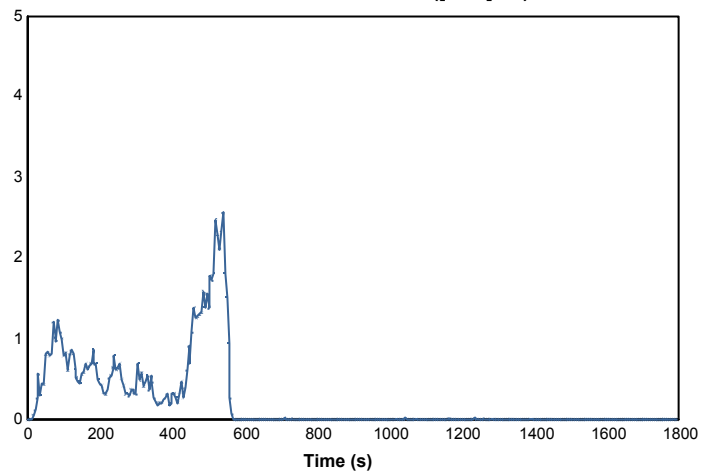
Total heat released (MJ/m²)



Mass (g)



Rate of smoke release ([m²/s]/m²)



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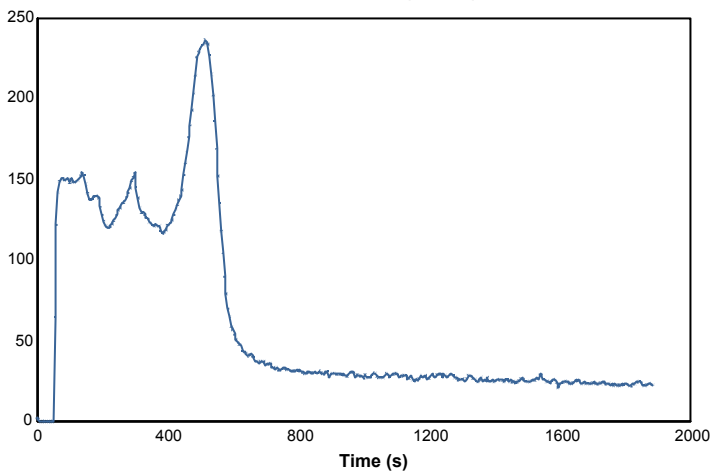
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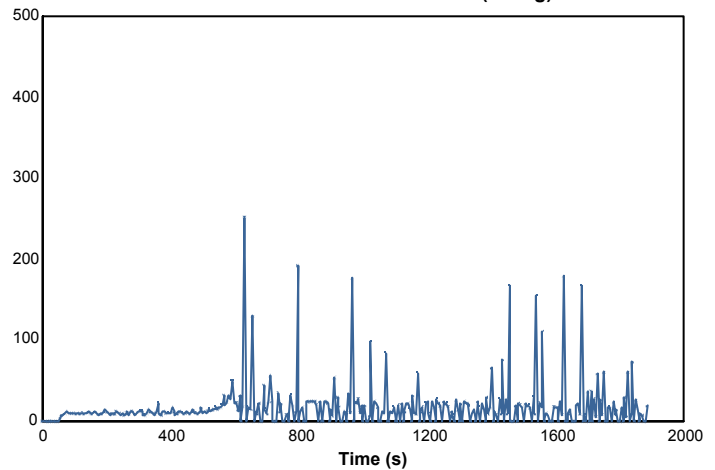
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Specimen : 3

Heat release rate (kW/m²)



Effective heat of combustion (MJ/kg)



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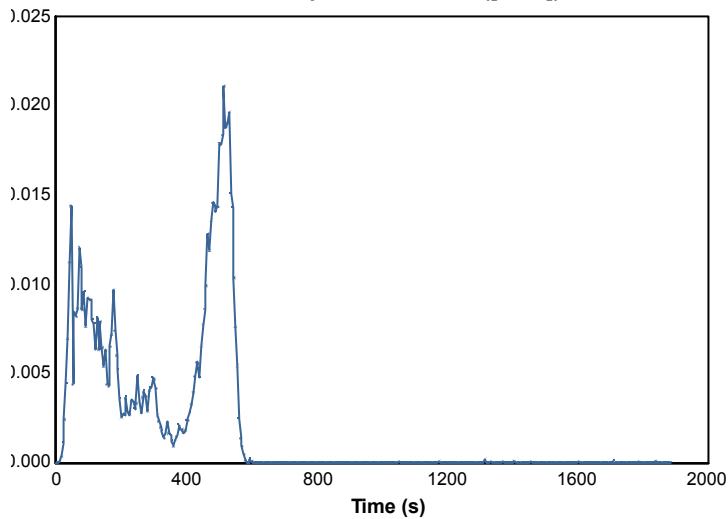
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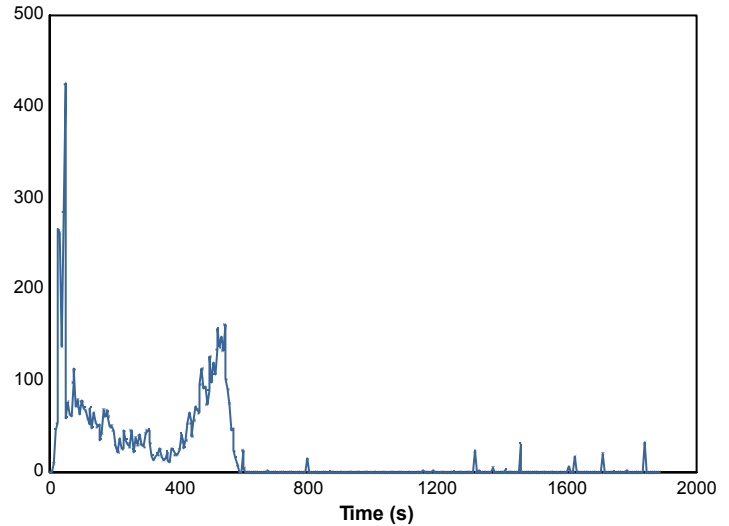
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Smoke production rate ([m²/s])



Specific extinction area (m²/kg)



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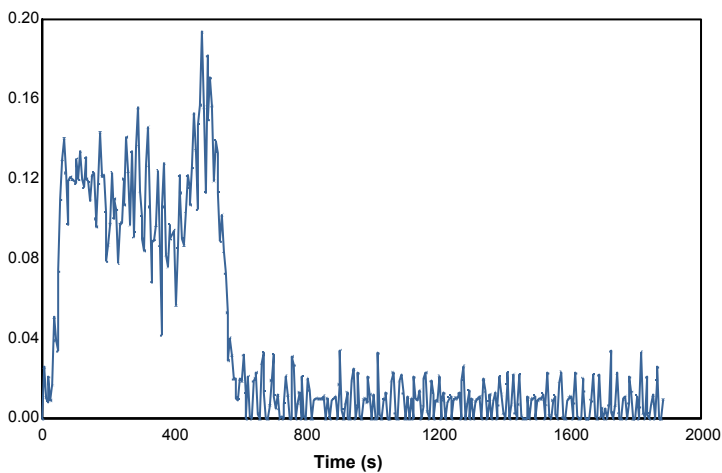
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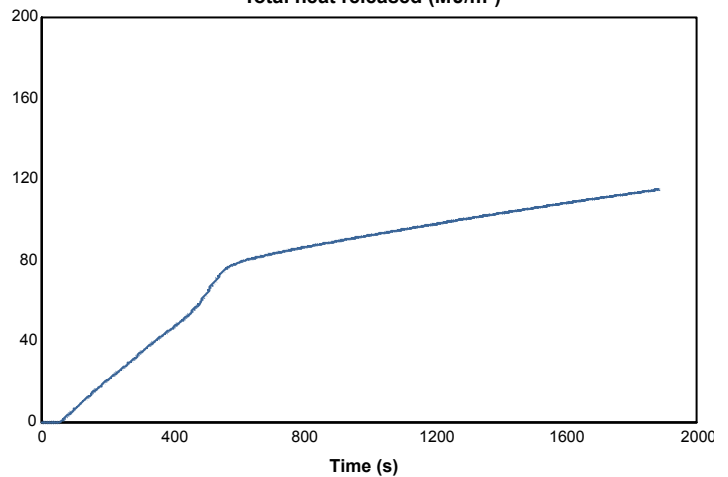
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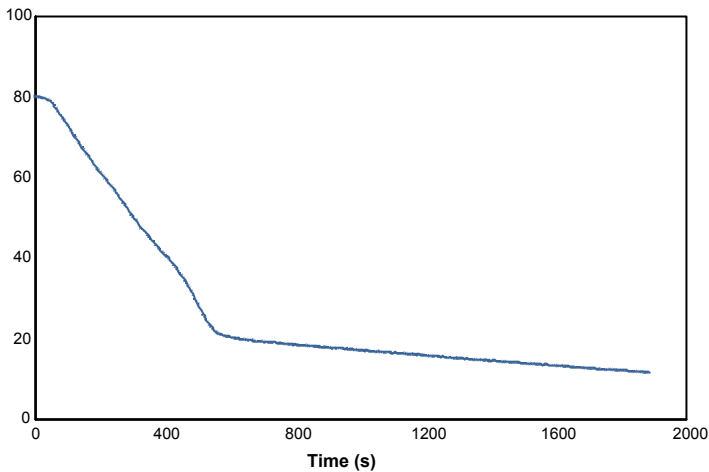
Mass loss rate (g/s)



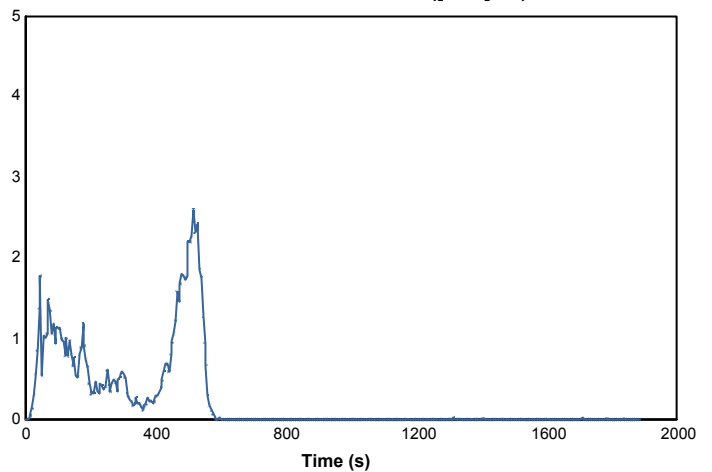
Total heat released (MJ/m²)



Mass (g)



Rate of smoke release ([m²/s]/m²)



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