

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

TEST REPORT

Client : Forbo Flooring Systems Pty Ltd
23 Ormsby Place
Wetherill Park NSW 2164

Test Number : 19-007312
Issue Date : 11/02/2020
Print Date : 11/02/2020
Order Number : DJB2019 12

Sample Description Clients Ref : "Furniture Linoleum"
Homogeneous wood based lining material adhered to cement sheet
Colour : Black
End Use : Pin board material for work stations and walls
Nominal Composition : Homogenous compressed mix of timber flour, calcium carbonate, linseed and gum rosin including pigments
Nominal Mass per Unit Area/Density : 2.1kg per 2m
Nominal Thickness : 2.0mm

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

Date Tested 05/02/2020
Operator AWTA Test Operator 9
Face Tested Face

	Specimen				
	1	2	3	Mean	
Average Heat Release Rate	88.5	53.4	67.0	69.6	kW/m ²
Average Specific extinction area	74.7	47.6	20.9	47.7	m ² /kg

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

Test orientation : Horizontal

	Specimen				
	1	2	3	Mean	
Irradiance	50	50	50	50	kW/m ²
Exhaust flow rate	0.024	0.024	0.024	0.024	m ³ /s
Time to sustained flaming	30	25	25	27	sec
Test duration	982	924	942	949	sec
Peak heat release after ignition	251.3	342.6	343.4	312.4	kW/m ²
Average heat at 60 s	184.6	239.4	260.3	228.1	kW/m ²

119844

41197

Page 1 of 8

© Australian Wool Testing Authority Ltd
Copyright - All Rights Reserved



Accredited for compliance with ISO/IEC 17025 - Testing
- Chemical Testing
- Mechanical Testing
- Performance & Approvals Testing

: Accreditation No. 983
: Accreditation No. 985
: Accreditation No. 1356



Samples and their identifying descriptions have been provided by the client unless otherwise stated. AWTA Ltd makes no warranty, implied or otherwise, as to the source of the tested samples. The above test results relate only to the sample or samples tested. This document shall not be reproduced except in full and shall be rendered void if amended or altered. This document, the names AWTA Product Testing and AWTA Ltd may be used in advertising providing the content and format of the advertisement have been approved by the Managing Director of AWTA Ltd.

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

TEST REPORT

Client : Forbo Flooring Systems Pty Ltd
23 Ormsby Place
Wetherill Park NSW 2164

Test Number : 19-007312
Issue Date : 11/02/2020
Print Date : 11/02/2020
Order Number : DJB2019 12

Average heat at 180 s	137.3	136.5	144.9	139.6	kW/m ²
Average heat at 300 s	123.0	109.5	122.2	118.3	kW/m ²
Total heat released	84.3	48.0	61.6	64.6	MJ/m ²
Average effective heat of combustion	23.3	13.4	16.8	17.8	MJ/kg
Initial thickness	7	7	7	7.0	mm
Initial mass	99.8	96.8	96.3	97.6	g
Mass at sustained flaming	99.5	96.8	96.0	97.4	g
Mass remaining	70.5	67.7	66.6	68.3	g
Mass percentage pyrolysed	29.3	30.1	30.8	30.1	%
Mass loss	3.6	3.6	3.7	3.6	kg/m ²
Average rate of mass loss	3.8	4.0	4.0	3.9	g/m ² .s
Additional Observations	None				
Difficulties Encountered during Testing	None				

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.

Samples were tested as assembled and supplied by client.

119844

41197

Page 2 of 8

© Australian Wool Testing Authority Ltd
Copyright - All Rights Reserved



Accredited for compliance with ISO/IEC 17025 - Testing
- Chemical Testing
- Mechanical Testing
- Performance & Approvals Testing

: Accreditation No. 983
: Accreditation No. 985
: Accreditation No. 1356



Samples and their identifying descriptions have been provided by the client unless otherwise stated. AWTA Ltd makes no warranty, implied or otherwise, as to the source of the tested samples. The above test results relate only to the sample or samples tested. This document shall not be reproduced except in full and shall be rendered void if amended or altered. This document, the names AWTA Product Testing and AWTA Ltd may be used in advertising providing the content and format of the advertisement have been approved by the Managing Director of AWTA Ltd.

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

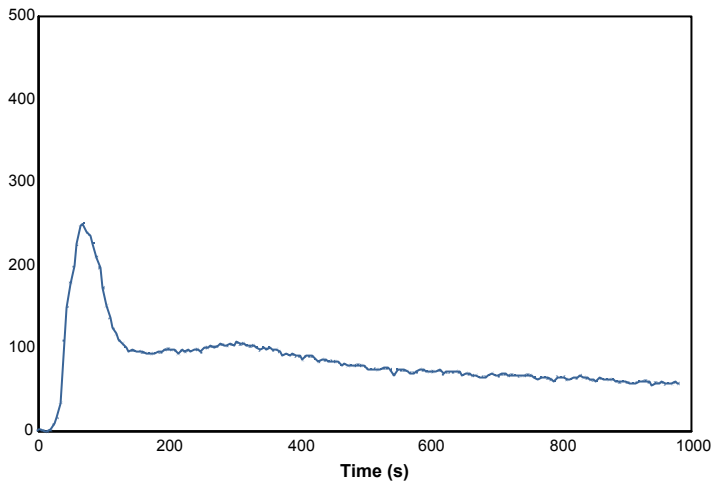
TEST REPORT

Client : Forbo Flooring Systems Pty Ltd
23 Ormsby Place
Wetherill Park NSW 2164

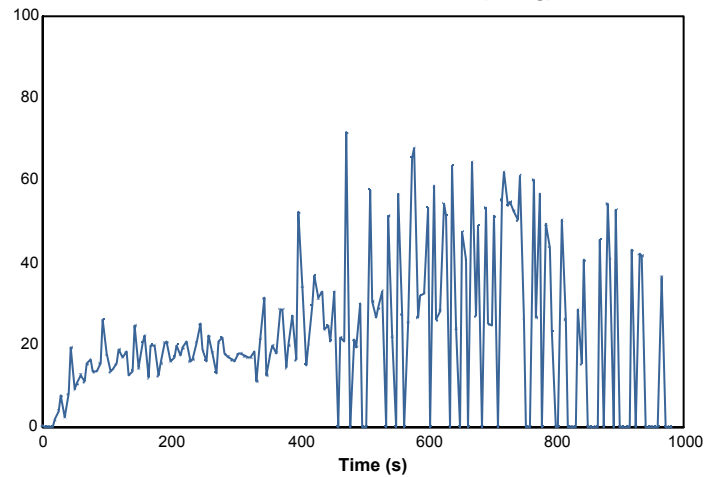
Test Number : 19-007312
Issue Date : 11/02/2020
Print Date : 11/02/2020
Order Number : DJB2019 12

Specimen : 1

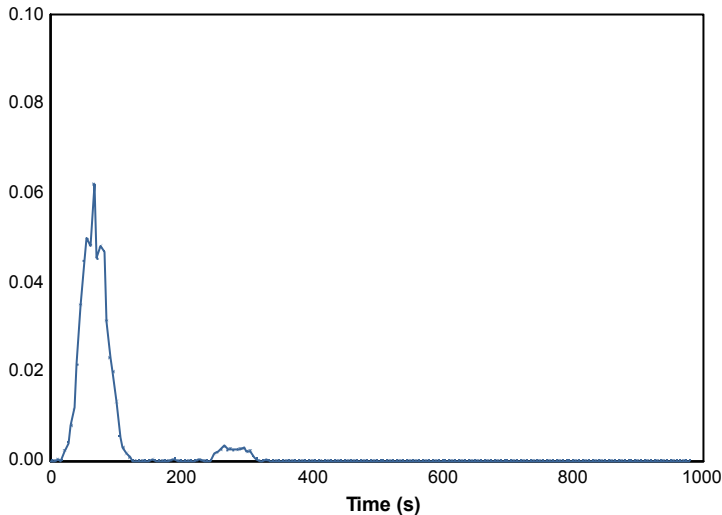
Heat release rate (kW/m²)



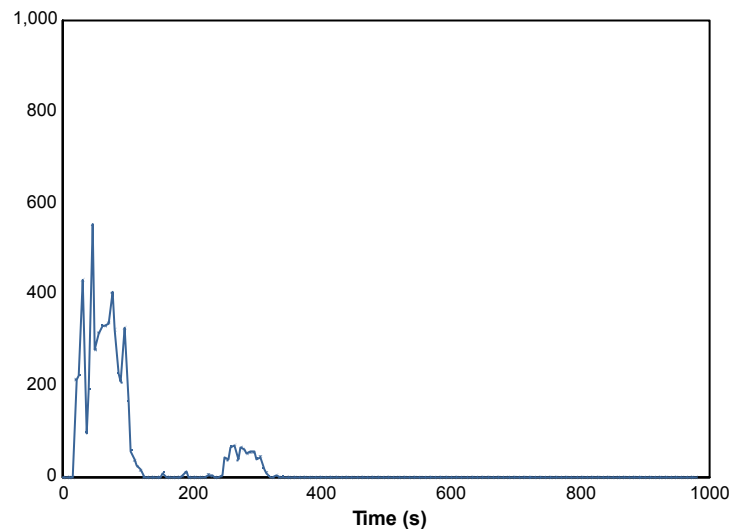
Effective heat of combustion (MJ/kg)



Smoke production rate (l/m²/s)



Specific extinction area (m²/kg)



119844

41197

Page 3 of 8

© Australian Wool Testing Authority Ltd
Copyright - All Rights Reserved



Accredited for compliance with ISO/IEC 17025 - Testing

- Chemical Testing
- Mechanical Testing
- Performance & Approvals Testing

: Accreditation No. 983
: Accreditation No. 985
: Accreditation No. 1356



Samples and their identifying descriptions have been provided by the client unless otherwise stated. AWTA Ltd makes no warranty, implied or otherwise, as to the source of the tested samples. The above test results relate only to the sample or samples tested. This document shall not be reproduced except in full and shall be rendered void if amended or altered. This document, the names AWTA Product Testing and AWTA Ltd may be used in advertising providing the content and format of the advertisement have been approved by the Managing Director of AWTA Ltd.

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

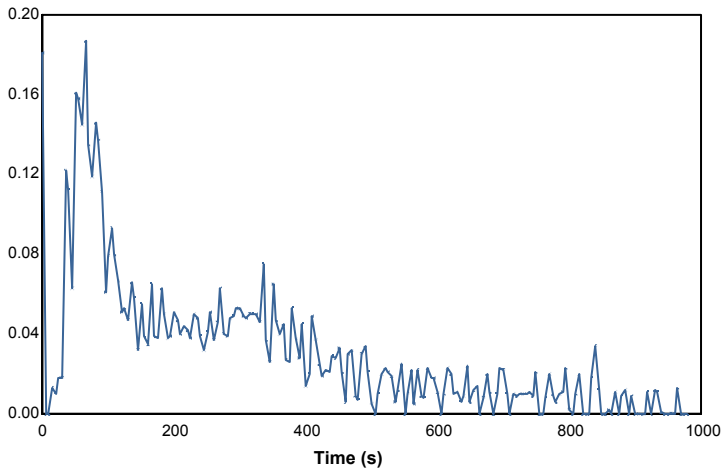
Phone (03) 9371 2400

TEST REPORT

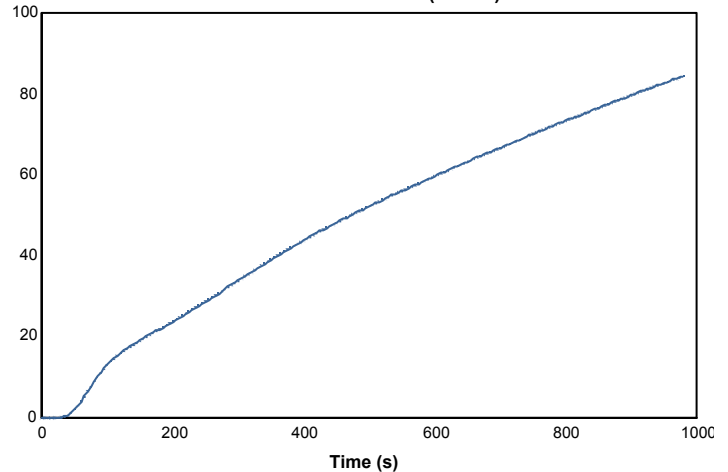
Client : Forbo Flooring Systems Pty Ltd
23 Ormsby Place
Wetherill Park NSW 2164

Test Number : 19-007312
Issue Date : 11/02/2020
Print Date : 11/02/2020
Order Number : DJB2019 12

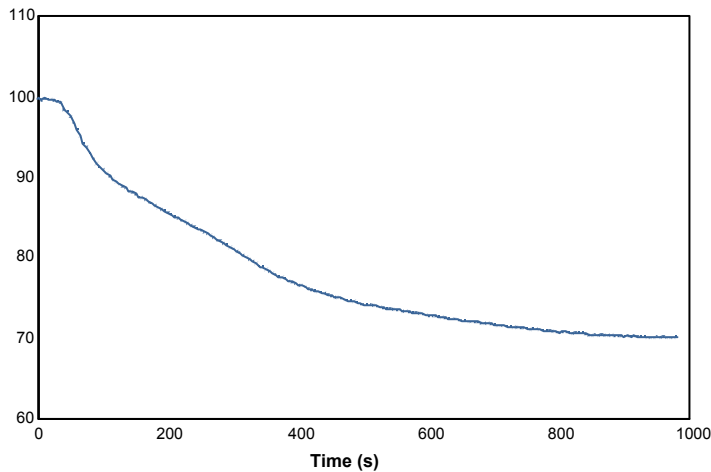
Mass loss rate (g/s)



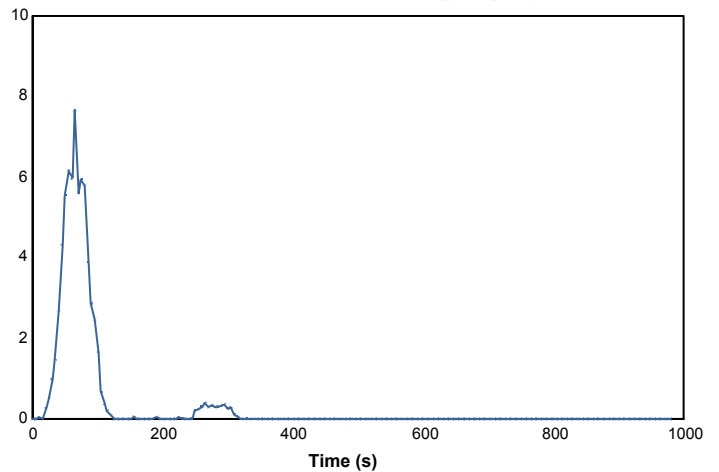
Total heat released (MJ/m²)



Mass (g)



Rate of smoke release ([m²/s]/m²)



119844

41197

Page 4 of 8

© Australian Wool Testing Authority Ltd
Copyright - All Rights Reserved



Accredited for compliance with ISO/IEC 17025 - Testing

- Chemical Testing
- Mechanical Testing
- Performance & Approvals Testing

: Accreditation No. 983
: Accreditation No. 985
: Accreditation No. 1356



Samples and their identifying descriptions have been provided by the client unless otherwise stated. AWTA Ltd makes no warranty, implied or otherwise, as to the source of the tested samples. The above test results relate only to the sample or samples tested. This document shall not be reproduced except in full and shall be rendered void if amended or altered. This document, the names AWTA Product Testing and AWTA Ltd may be used in advertising providing the content and format of the advertisement have been approved by the Managing Director of AWTA Ltd.

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

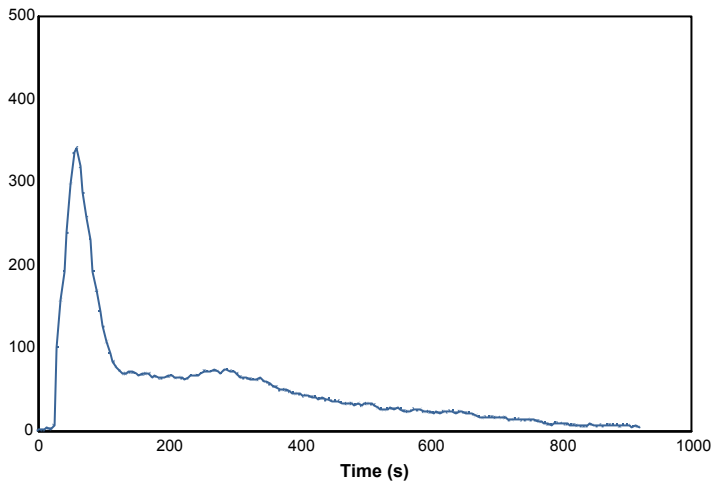
TEST REPORT

Client : Forbo Flooring Systems Pty Ltd
23 Ormsby Place
Wetherill Park NSW 2164

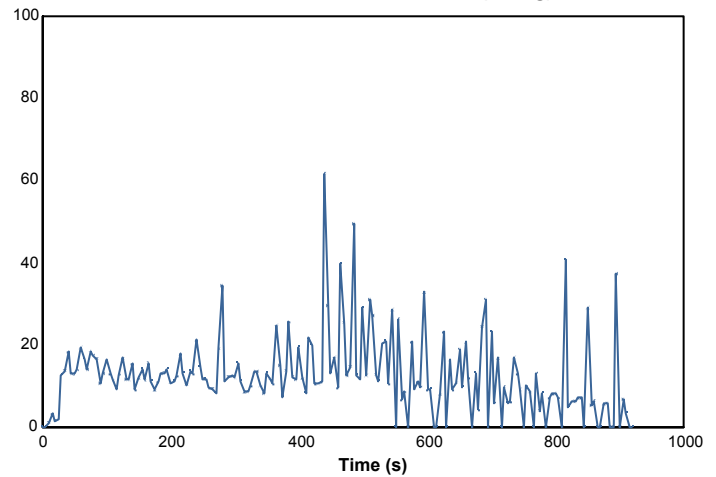
Test Number : 19-007312
Issue Date : 11/02/2020
Print Date : 11/02/2020
Order Number : DJB2019 12

Specimen : 2

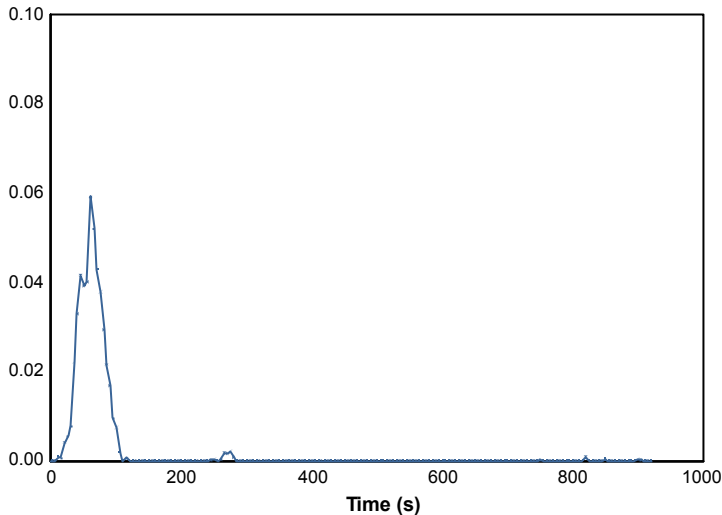
Heat release rate (kW/m²)



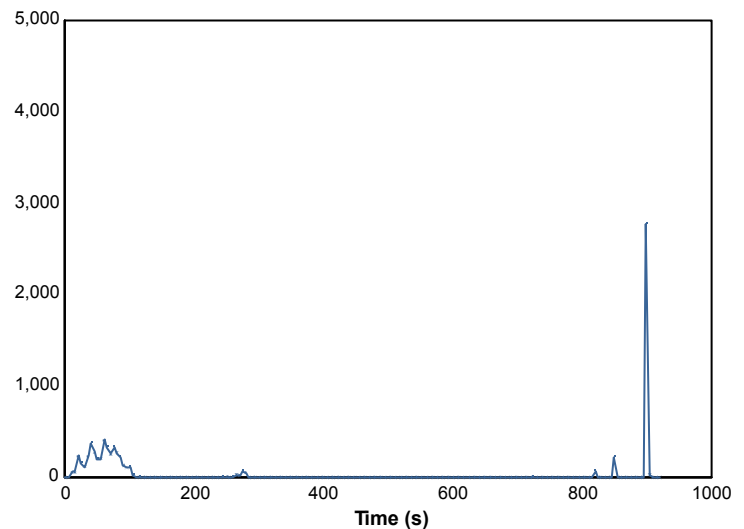
Effective heat of combustion (MJ/kg)



Smoke production rate ([m²/s])



Specific extinction area (m²/kg)



119844

41197

Page 5 of 8

© Australian Wool Testing Authority Ltd
Copyright - All Rights Reserved



Accredited for compliance with ISO/IEC 17025 - Testing

- Chemical Testing
- Mechanical Testing
- Performance & Approvals Testing

: Accreditation No. 983
: Accreditation No. 985
: Accreditation No. 1356



Samples and their identifying descriptions have been provided by the client unless otherwise stated. AWTA Ltd makes no warranty, implied or otherwise, as to the source of the tested samples. The above test results relate only to the sample or samples tested. This document shall not be reproduced except in full and shall be rendered void if amended or altered. This document, the names AWTA Product Testing and AWTA Ltd may be used in advertising providing the content and format of the advertisement have been approved by the Managing Director of AWTA Ltd.

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

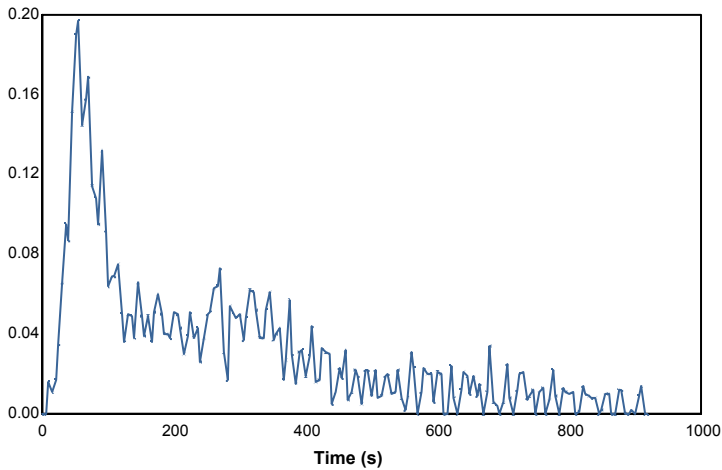
Phone (03) 9371 2400

TEST REPORT

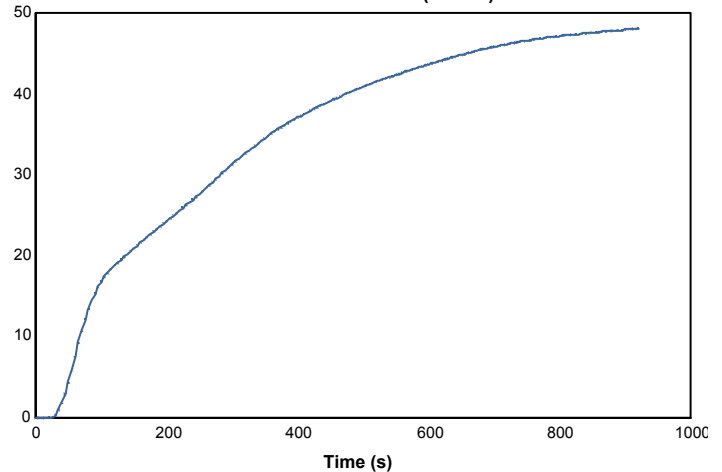
Client : Forbo Flooring Systems Pty Ltd
23 Ormsby Place
Wetherill Park NSW 2164

Test Number : 19-007312
Issue Date : 11/02/2020
Print Date : 11/02/2020
Order Number : DJB2019 12

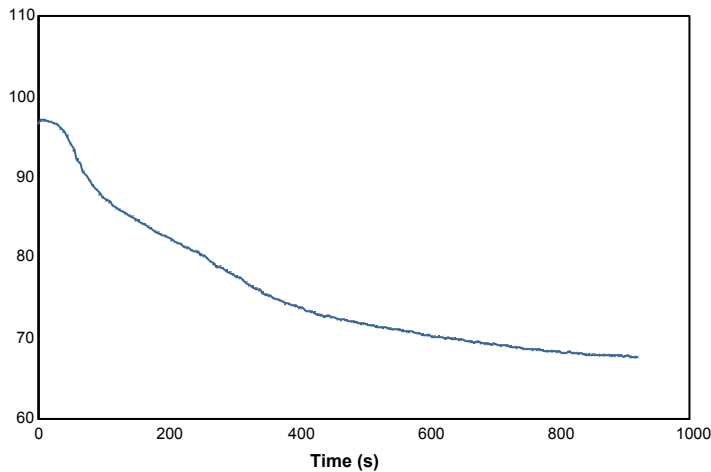
Mass loss rate (g/s)



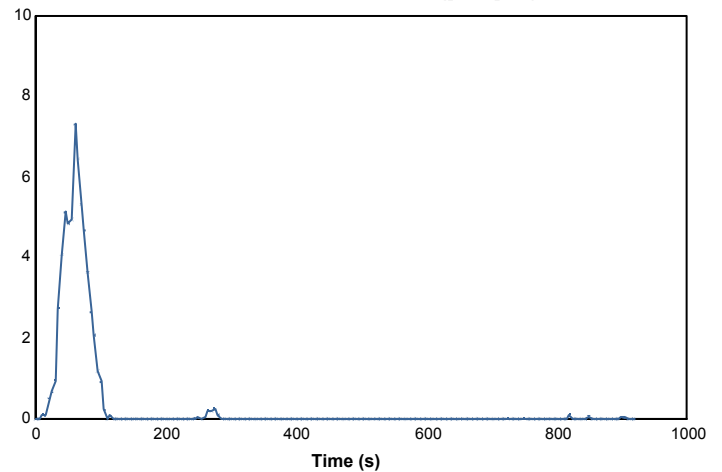
Total heat released (MJ/m²)



Mass (g)



Rate of smoke release ([m²/s)/m²)



119844

41197

Page 6 of 8

© Australian Wool Testing Authority Ltd
Copyright - All Rights Reserved



Accredited for compliance with ISO/IEC 17025 - Testing

- Chemical Testing
- Mechanical Testing
- Performance & Approvals Testing

: Accreditation No. 983
: Accreditation No. 985
: Accreditation No. 1356



Samples and their identifying descriptions have been provided by the client unless otherwise stated. AWTA Ltd makes no warranty, implied or otherwise, as to the source of the tested samples. The above test results relate only to the sample or samples tested. This document shall not be reproduced except in full and shall be rendered void if amended or altered. This document, the names AWTA Product Testing and AWTA Ltd may be used in advertising providing the content and format of the advertisement have been approved by the Managing Director of AWTA Ltd.

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

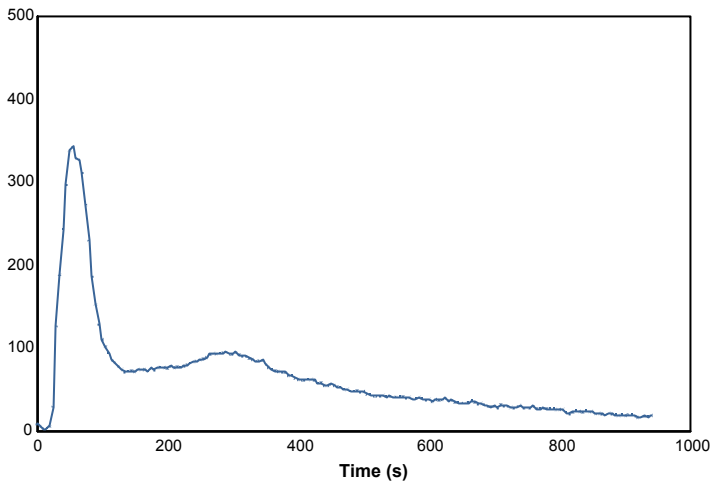
TEST REPORT

Client : Forbo Flooring Systems Pty Ltd
23 Ormsby Place
Wetherill Park NSW 2164

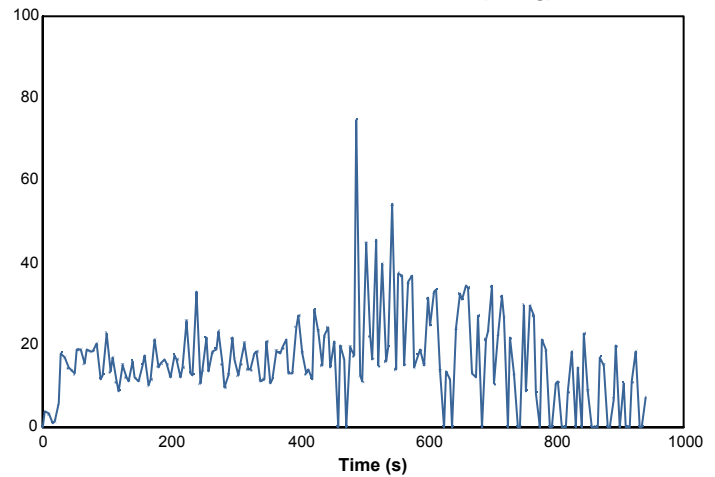
Test Number : 19-007312
Issue Date : 11/02/2020
Print Date : 11/02/2020
Order Number : DJB2019 12

Specimen : 3

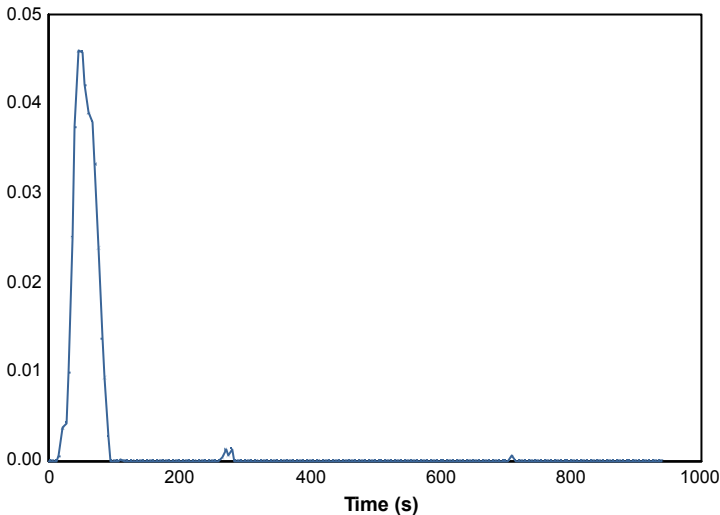
Heat release rate (kW/m²)



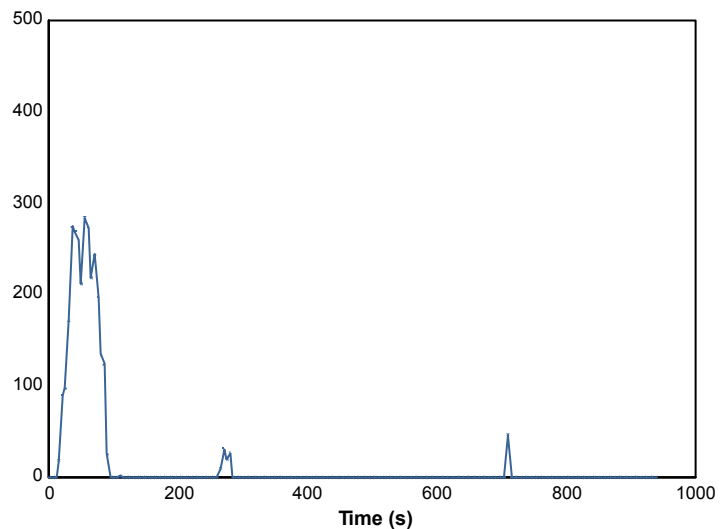
Effective heat of combustion (MJ/kg)



Smoke production rate ([m²/s])



Specific extinction area (m²/kg)



119844

41197

Page 7 of 8

© Australian Wool Testing Authority Ltd
Copyright - All Rights Reserved



Accredited for compliance with ISO/IEC 17025 - Testing

- Chemical Testing
- Mechanical Testing
- Performance & Approvals Testing

: Accreditation No. 983
: Accreditation No. 985
: Accreditation No. 1356



Samples and their identifying descriptions have been provided by the client unless otherwise stated. AWTA Ltd makes no warranty, implied or otherwise, as to the source of the tested samples. The above test results relate only to the sample or samples tested. This document shall not be reproduced except in full and shall be rendered void if amended or altered. This document, the names AWTA Product Testing and AWTA Ltd may be used in advertising providing the content and format of the advertisement have been approved by the Managing Director of AWTA Ltd.

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

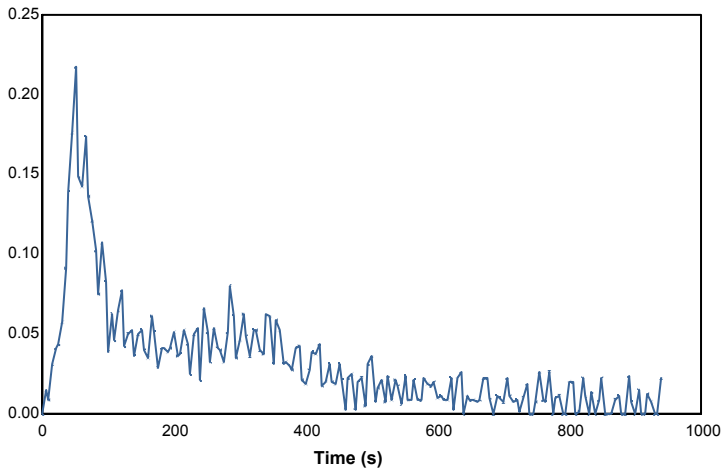
Phone (03) 9371 2400

TEST REPORT

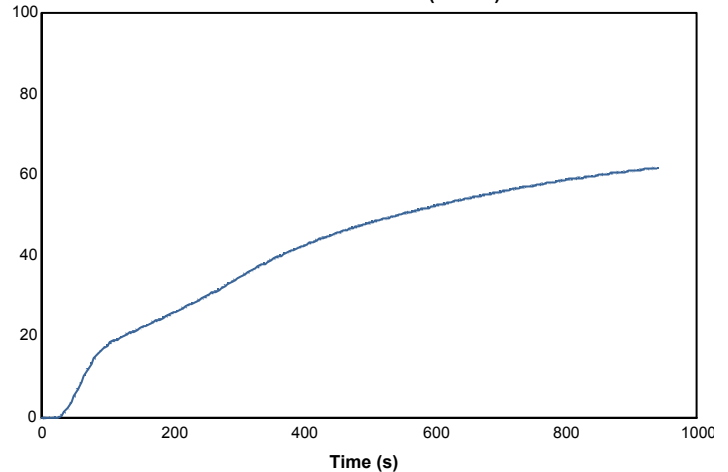
Client : Forbo Flooring Systems Pty Ltd
23 Ormsby Place
Wetherill Park NSW 2164

Test Number : 19-007312
Issue Date : 11/02/2020
Print Date : 11/02/2020
Order Number : DJB2019 12

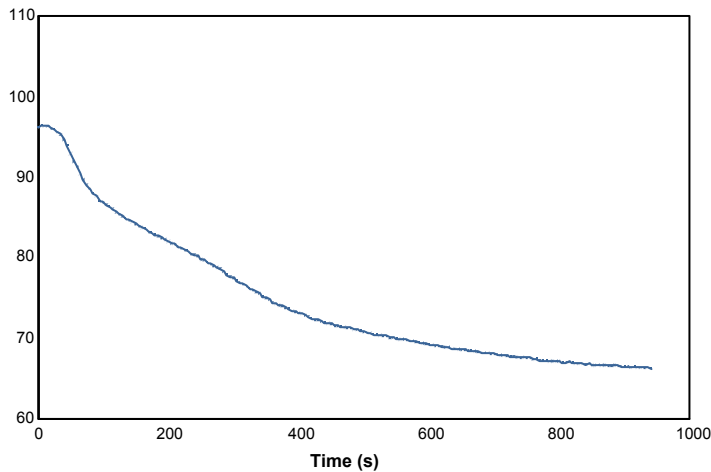
Mass loss rate (g/s)



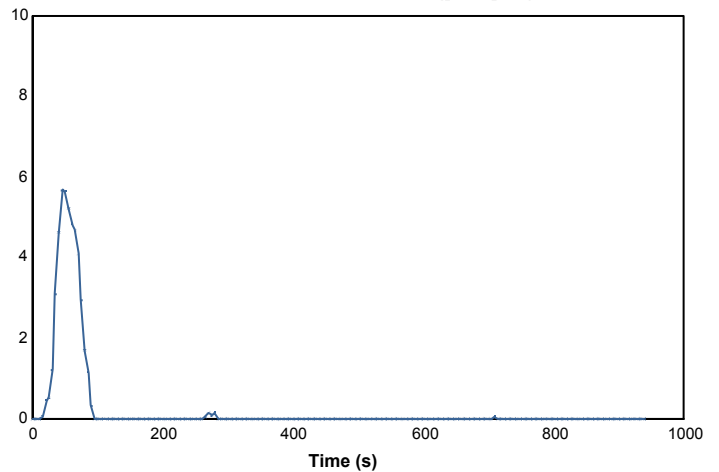
Total heat released (MJ/m²)



Mass (g)



Rate of smoke release ([m²/s]/m²)



119844

41197

Page 8 of 8

© Australian Wool Testing Authority Ltd
Copyright - All Rights Reserved



Accredited for compliance with ISO/IEC 17025 - Testing

- Chemical Testing
- Mechanical Testing
- Performance & Approvals Testing

: Accreditation No. 983
: Accreditation No. 985
: Accreditation No. 1356



Samples and their identifying descriptions have been provided by the client unless otherwise stated. AWTA Ltd makes no warranty, implied or otherwise, as to the source of the tested samples. The above test results relate only to the sample or samples tested. This document shall not be reproduced except in full and shall be rendered void if amended or altered. This document, the names AWTA Product Testing and AWTA Ltd may be used in advertising providing the content and format of the advertisement have been approved by the Managing Director of AWTA Ltd.