

Clayworks

FIRE CERTIFICATES

FIRE RATINGS OF CLAYWORKS CLAY PLASTERS

Clayworks Rustic & Smooth topcoat clay plasters have been tested by BRE to produce BRE Global Test Reports.

SUMMARY OF BRE GLOBAL TEST REPORTS:

BS 476: Part 7: 1997 Surface spread of flame: Rustic topcoat (8mm) - achieved Class 1 Smooth topcoat (2mm) - achieved Class 1

BS 476: Part 6: 1989 + A1: 2009 Fire Propagation test: Rustic topcoat (8mm): fire propagation index I=0.0, i1 = 0.0 Smooth topcoat (2mm): fire propagation index I=0.5, i1 = 0.0

The results confirm that the plasters fulfil the following:

UK Building Regulations: Class 0

Class 0 is defined as: BS 476-7 Surface spread of flame Class 1, and BS 476-6 Fire propagation index test (I < 12, i1 < 6)

WE UNDERSTAND THAT THE UK (ENGLAND & WALES) BUILDING REGULATIONS CLASS 0 EQUATES TO:

FRANCE: M1 (in accordance with Arrete du 21 Novembre 2002)

GERMANY: B1 (In accordance with Bauregellisten, 26th March 2012)

ITALY: Class 1 or 2 (In accordance with Decreto del Ministero dell'interno 15 Marzo 2005)

NETHERLANDS: Class 1 or 2 (In accordance with Bouwbesluit, 2012)

SWEDEN: B (Class 1 surface lining prior to 1st Jan 2012) (In accordance with Regelssamling for byggande, BBR: 2012 and EN 13501-1)

EUROCLASS: B (In accordance with EN 13501-1 + A1: 2009)



BS 476-7 SURFACE SPREAD (RUSTIC) Page 3



BS 476-7 SURFACE SPREAD (SMOOTH)
Page 13



BS 476-6 FIRE PROPAGATION (RUSTIC)
Page 23



BS 476-6 FIRE PROPAGATION (SMOOTH)
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BRE Global Test Report

BS 476-7: 1997 Surface spread of flame test on Clayworks – Rustic Plaster (heavy aggregate clay plaster)

 Prepared for:
 Clayworks

 Date:
 15 October 2019

 Report Number:
 Q100912-1000 Issue 1

BRE Global Ltd Watford, Herts WD25 9XX

Customer Services 0333 321 8811

From outside the UK: T + 44 (0) 1923 664000 F + 44 (0) 1923 664010 E <u>enquiries@bre.co.uk</u> www.bre.co.uk Prepared for: Clayworks, Unit 5 Higher Bocyhm, Cury Cross lanes, Helston, Cornwall TR12 7AZ





Report Number: Q100912-1000: Issue 1



Prepared by

Name B Gohil

Position Technician

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Position Chemist

Date 15 October 2019

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Surface spread of flame test to BS 476: Part 7: 1997

Report Number: Q100912-1000: Issue 1



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1 Objective

To classify the surface spread of flame characteristics of the sample described in Section 2 using the test method and criteria specified in British Standard 476: Part 7: 1997¹.

2 Sample

2.1 Traceability

The test samples were supplied by the test sponsor. BRE Global were not involved in the sample selection process and therefore cannot comment upon the relationship between samples supplied for test and the product supplied to market.

2.2 Description of sample and test format

Unless otherwise stated all measurements are nominal.

Test Sponsor	Clayworks, Unit 5 Higher Bocyhm, Cury Cross lanes, Helston, Cornwall TR12 7AZ.
Manufacturer of sample	As above.
Sample name/reference	Clayworks – Rustic Plaster.
Sample description (as provided by test sponsor/manufacturer)	Clayworks – Rustic Plaster (heavy aggregate clay plaster) Full product description of the sample provided by the test sponsor is given in Appendix A.
Description of sample (as received by BRE Global)	Rough finished greenish/yellowish plaster like coating on plasterboard. E12210-1 approximate thickness Total 21.8, plasterboard 12.6. The calculated coating thickness was approximately 9 mm. Photographs of the sample are given in Appendix B.
Mean sample weight per unit area (kg/m²)	23.96
Sample thickness (mm)	21.69
Sample receipt date	16 August 2019 (BRE Ref E12210)
Test face	Rough face
Test format	The specimens were tested with 12mm calcium silicate boards behind.
Date of test	06 September 2019

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3 Conditioning

The specimens were conditioned as required by the standard.

4 Results

4.1 Flame spread data

Table 1 shows the observed spread of flame for each specimen at $1.5 \, \mathrm{minutes}$, $10 \, \mathrm{minutes}$ and time to reach maximum flame spread distance.

Table 2 shows the time it takes to reach each reference point in minutes and seconds if applicable.

Table 1

Specimen	Flame spread distance at 1.5 minutes (mm)	Flame spread distance at 10 minutes (mm)	Time to reach maximum flame spread distance (minutes : seconds)
5	0	0	N/A
6	0	0	N/A
7	0	0	N/A
8	0	0	N/A
9	0	0	N/A
10	0	0	N/A

Table 2

Specimen		Time to reach each reference point (mm) in minutes : seconds												
	75	165	190	215	240	265	290	375	455	500	525	600	675	710
5	-													
6	-													
7	-													
8	-													
9	-													
10	-													

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4.2 Observations

Specimen	Observations					
5 No visible flaming.						
6 No visible flaming.						
7	No visible flaming.					
8	No visible flaming.					
9	No visible flaming.					
10 No visible flaming.						
For all specimens some discoloration at the hot end was observed						

For all specimens some discoloration at the hot end was observed.

5 Classification

Exposed surfaces of materials used as linings for walls and ceilings are classified in Section 11 of the standard according to the rate and distance of spread of flame as shown in Table 3.

Table 3

Classification	Spread	of flame at 1.5min	Final spread of flame				
	Limit	Limit for one specimen in sample	Limit	Limit for one specimen in sample			
	mm	mm	mm	mm			
Class 1	165	165 + 25	165	165 + 25			
Class 2	215	215 + 25	455	455 + 45			
Class 3	265	265 + 25	710	710 + 75			
Class 4	Exceeding the limits of Class 3						

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6 Conclusion

The results show that the sample described in Section 2 of this report, when tested and classified in accordance with BS 476: Part 7: 1997, achieved Class 1.

7 Validity

The test results relate only to behaviour of the test specimens of the product under the particular conditions of test, they are not intended to be the sole criteria for assessing the potential fire hazard of the product in use.

8 Reference

British Standard 476: Part 7: 1997. Fire tests on building materials and structures. Part 7 Method of test to determine the classification of the surface spread of flame of products. British Standards Institution, London 2014.

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Appendix A Product description provided by the test sponsor

Test sponsor (Company name and address): Clayworks – Clayworks, Unit 5 Higher Bocyhm, Cury						
Cross lanes He	Iston Cornwall TR127AZ					
Parameter		Details (if applicable)				
Trade name		Rustic				
General descript		8mm heavy aggregate clay plaster				
Name and addre	ess of manufacturer of product	Clayworks, Unit 5 Higher Bocyhm, Cury Cross lanes, Helston, Cornwall TR12 7AZ				
Place of manufa	cture	Cornwall UK				
Product reference	ce/number	Rustic				
Thickness		8mm				
Density		Note 1				
Mass per unit ar	ea	Note 1				
Generic type of		Clay Plaster				
content limited d give details	treatment added or organic uring production (yes/no), if yes	No				
System No. if ap		NA				
	e product standard, if applicable	NA				
Interior facing 1		Rustic Clay Plaster				
(test face)	 Product reference 	Clayworks				
	- Manufacturer	8mm thickness				
	- Thickness	Buff Colour				
	- Mass per unit area/ density	1722 kg/m³				
	- Colour reference	Note 1				
	- Trade name flame retardant	No flame retardant				
	- Generic type flame retardant	N/A				
Cubatasta	- Amount flame retardant	N/A				
Substrate	- Generic type	12.5 mm Plasterboard				
(if applicable)	- Product standard	Knauf				
	 Product name/reference Manufacturer 	Note 1 Note 1				
	- Manufacturer - Thickness	Note 1 Note 1				
		Note 1				
	 Density or mass per unit area Class (EN 13501-1) 	Note 1				
Face to be teste	,	Plastered side				
		NA				
Orientation aspe	ication Reference	NA NA				
Additional inform		Note 1				
Additional inform	18UON.	Note 1				

Note 1: This information was not provided by the test sponsor.

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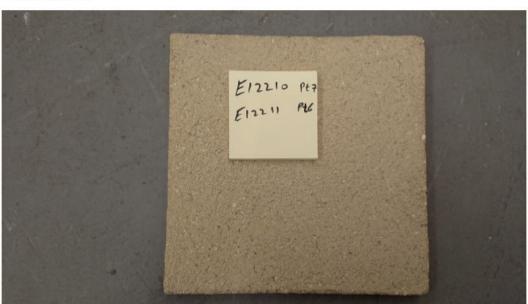
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Appendix B Sample photographs

Photos are of specimen provided for BS476-6. The specimens for BS476-7 were of same construction, but different dimensions.

Front (Test face)





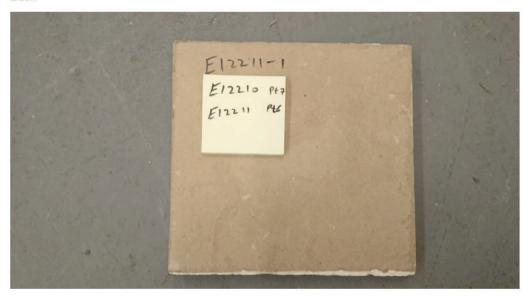


Surface spread of flame test to BS 476: Part 7: 1997

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Report Ends





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BRE Global Test Report

BS 476-7: 1997 Surface spread of flame test on Clayworks – Smooth Topcoat (smooth clay plaster)

 Prepared for:
 Clayworks

 Date:
 15 October 2019

 Report Number:
 Q100912-1003 Issue 1

BRE Global Ltd Watford, Herts WD25 9XX

Customer Services 0333 321 8811

From outside the UK: T + 44 (0) 1923 664000 F + 44 (0) 1923 664010 E <u>enquiries@bre.co.uk</u> www.bre.co.uk Prepared for: Clayworks, Unit 5 Higher Bocyhm, Cury Cross lanes, Helston, Cornwall TR12 7AZ





Report Number: Q100912-1003: Issue 1



Prepared by

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Position Technician

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Position Chemist

Date 15 October 2019

Signature Month

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Clayworks BS 476-7 | Surface spread of flames test (Smooth)

Surface spread of flame test to BS 476: Part 7: 1997

Report Number: Q100912-1003: Issue 1



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Report Number: Q100912-1003: Issue 1



1 Objective

To classify the surface spread of flame characteristics of the sample described in Section 2 using the test method and criteria specified in British Standard 476: Part 7: 1997¹.

2 Sample

2.1 Traceability

The test samples were supplied by the test sponsor. BRE Global were not involved in the sample selection process and therefore cannot comment upon the relationship between samples supplied for test and the product supplied to market.

2.2 Description of sample and test format

Unless otherwise stated all measurements are nominal.

Test Sponsor	Clayworks, Unit 5 Higher Bocyhm, Cury Cross lanes, Helston, Cornwall TR12 7AZ.			
Manufacturer of sample	As above.			
Sample name/reference	Clayworks – Smooth Topcoat			
Sample description (as provided by test sponsor/manufacturer)	Clayworks – Smooth Topcoat (smooth clay plaster) Full product description of the sample provided by the test sponsor is given in Appendix A.			
Description of sample (as received by BRE Global)	White/off-white smooth plaster like coating on plasterboard. E12212-10 approximate thickness Total 14.2, plasterboard 12.4. The calculated coating thickness was approximately 2 mm. Photographs of the sample are given in Appendix B.			
Mean sample weight per unit area (kg/m²)	12.25			
Sample thickness (mm)	14.71			
Sample receipt date	16 August 2019 (BRE Ref E12212)			
Test face	Smooth face			
Test format	The specimens were tested with 12mm calcium silicate boards behind.			
Date of test	06 September 2019			

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Report Number: Q100912-1003: Issue 1



3 Conditioning

The specimens were conditioned as required by the standard.

4 Results

4.1 Flame spread data

Table 1 shows the observed spread of flame for each specimen at 1.5 minutes, 10 minutes and time to reach maximum flame spread distance.

Table 2 shows the time it takes to reach each reference point in minutes and seconds if applicable.

Table 1

Specimen	Flame spread distance at 1.5 minutes (mm)	Flame spread distance at 10 minutes (mm)	Time to reach maximum flame spread distance (minutes : seconds)
1	60	60	0:38
2	60	60	0:32
3	60	60	0:35
4	60	60	0:38
5	60	60	0:32
6	60	60	0:38

Table 2

Specimen		Time to reach each reference point (mm) in minutes : seconds												
	7 5	165	190	215	240	265	290	375	455	500	525	600	675	710
1	-													
2	-													
3	-													
4	-													
5	-													
6	-													



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4.2 Observations

Specimen	Observations						
1 Flaming ceased at 1:00 min:sec. No significant observation.							
2 Flaming ceased at 1:00 min:sec. No significant observation.							
3	Flaming ceased at 1:00 min:sec. No significant observation.						
4	Flaming ceased at 1:00 min:sec. No significant observation.						
5	Flaming ceased at 1:00 min:sec. No significant observation.						
6	Flaming ceased at 1:00 min:sec. No significant observation.						
For all specimens some discoloration at the hot end was observed.							

5 Classification

Exposed surfaces of materials used as linings for walls and ceilings are classified in Section 11 of the standard according to the rate and distance of spread of flame as shown in Table 3.

Table 3

Classification	Spread of flame at 1.5min		Final spread of flame		
	Limit for one specimen in sample		Limit	Limit for one specimen in sample	
	mm	mm	mm	mm	
Class 1	165	165 + 25	165	165 + 25	
Class 2	215	215 + 25	455	455 + 45	
Class 3	265	265 + 25	710	710 + 75	
Class 4	Exceeding the limits of Class 3				

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6 Conclusion

The results show that the sample described in Section 2 of this report, when tested and classified in accordance with BS 476: Part 7: 1997, achieved Class 1.

7 Validity

The test results relate only to behaviour of the test specimens of the product under the particular conditions of test, they are not intended to be the sole criteria for assessing the potential fire hazard of the product in use.

8 Reference

British Standard 476: Part 7: 1997. Fire tests on building materials and structures. Part 7 Method of test to determine the classification of the surface spread of flame of products. British Standards Institution, London 2014.

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Report Number: Q100912-1003: Issue 1



Appendix A Product description provided by the test sponsor

Test sponsor (C	Test sponsor (Company name and address): Clayworks – Clayworks, Unit 5 Higher Bocyhm, Cury			
Cross Janes Hel	Cross lanes Helston Cornwall TR127AZ			
Cross laries rie	Stoff Coffiwall TRIZIAZ			
Parameter		Details (if applicable)		
Trade name		Smooth Topcoat		
General descript	ion	2 mm smooth clay plaster		
Name and addre	ss of manufacturer of product	Clayworks, Unit 5 Higher Bocyhm, Cury Cross lanes		
	·	Helston Cornwall TR127AZ		
Place of manufac	cture	Cornwall UK		
Product reference	e/number	Smooth topcoat		
Thickness		2mm		
Density		Note 1		
Mass per unit are	ea	Note 1		
Generic type of p	product	Clay Plaster		
	treatment added or organic	No		
content limited de	uring production (yes/no), if yes			
give details				
Harmonised EN	product standard, and AVCP	NA		
System No. if ap				
Industry/in-house	product standard, if applicable	NA		
Interior facing 1	- Generic type	Smooth Topcoat plaster		
(test face)	 Product reference 	Clayworks		
	 Manufacturer 	2mm thickness		
	- Thickness	Buff Colour		
	 Mass per unit area/ density 	1600 kg/m ³		
	- Colour reference	Note 1		
	 Trade name flame retardant 	No flame retardant		
	- Generic type flame retardant	N/A		
	- Amount flame retardant	N/A		
Substrate	- Generic type	12.5 mm Plasterboard		
(if applicable)	- Product standard	Knauf		
	- Product name/reference	Note 1		
	- Manufacturer	Note 1		
	- Thickness	Note 1		
	- Density or mass per unit area	Note 1		
- Class (EN 13501-1)		Note 1		
Face to be tested		Plastered side		
Orientation aspects Sampling Identification Reference		NA NA		
		NA Nata 4		
Additional information:		Note 1		

Note 1: This information was not provided by the test sponsor.

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Clayworks BS 476-7 | Surface spread of flames test (Smooth)

Surface spread of flame test to BS 476: Part 7: 1997

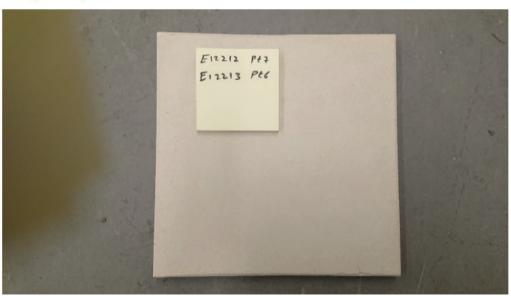
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Appendix B Sample photographs

Photos are of specimen provided for BS476-6. The specimens for BS476-7 were of same construction, but different dimensions.

Front (Test face)







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Clayworks BS 476-7 | Surface spread of flames test (Smooth)

Surface spread of flame test to BS 476: Part 7: 1997

Report Number: Q100912-1003: Issue 1



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BRE Global Test Report

BS 476-6: 1989 + A1: 2009 Fire propagation test on Clayworks – Rustic Plaster (heavy aggregate clay plaster)

Prepared for: Clayworks

Date: 15 October 2019

Report Number: Q100912-1001 Issue 1

BRE Global Ltd Watford, Herts WD25 9XX

Customer Services 0333 321 8811

From outside the UK: T + 44 (0) 1923 664000 F + 44 (0) 1923 664010 E enquiries@bre.co.uk www.bre.co.uk Prepared for: Clayworks, Unit 5 Higher Bocyhm, Cury Cross lanes, Helston, Cornwall TR12 7AZ





Report Number: Q100912-1001: Issue 1



Prepared by

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Authorised by

Name M Walford

Position Chemist

Date 15 October 2019

Signature Monay

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Fire propagation test to BS 476-6: 1989 + A1: 2009

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Report Number: Q100912-1001: Issue 1



1 Objective

To determine the fire propagation index of the sample specified in Section 2 using the test method specified in British Standard 476: Part 6: 1989 + A1: 20091.

2 Sample

2.1 Traceability

The test samples were supplied by the test sponsor. BRE Global were not involved in the sample selection process and therefore cannot comment upon the relationship between the samples supplied for test and the product supplied to market.

2.2 Description of sample and test format.

Unless otherwise stated all measurements are nominal.

Test Sponsor	Clayworks, Unit 5 Higher Bocyhm, Cury Cross lanes, Helston, Cornwall TR12 7AZ.
Manufacturer of sample	As above.
Sample name/reference	Clayworks – Rustic Plaster.
Sample description (as provided by test sponsor/manufacturer)	Clayworks – Rustic Plaster (heavy aggregate clay plaster) Full product description of the sample provided by the test sponsor is given in Appendix A.
Description of sample (as received by BRE Global)	Rough finished greenish/yellowish plaster like coating on plasterboard. E12211-5 approximate thickness. Total 21.4, plasterboard 12.7. The calculated coating thickness was approximately 9 mm. Photographs of the sample are given in Appendix B.
Mean weight per unit area (kg/m²)	20.66
Mean thickness (mm)	20.06
Sample receipt date	16 August 2019 (BRE Ref E12211)
Test face	Rough face
Test format	No air gap
Date of test	26 September 2019

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Table 2 Index of performance

Specimen	S	S ₁	S ₂	S ₃
a	0.0	0.0	0.0	0.0
b	0.0	0.0	0.0	0.0
С	0.0	0.0	0.0	0.0

4.2 Observations

No intumescence or deformation of any specimen occurred that affected the required gas input.

No melting or slumping occurred that prevented the material from being exposed to the heating conditions.

Air flow through the apparatus was not restricted by fallen material or by soot accumulation in the chimney.

5 Conclusions

A sample as described in this report, when tested in accordance with BS 476: Part 6: 1989 + A1: 2009, achieved:

 $\begin{array}{lll} \text{fire propagation index} & I = & 0.0 \\ \text{sub-indices} & i_1 = & 0.0 \\ & i_2 = & 0.0 \\ & i_3 = & 0.0 \end{array}$

BS 476: Part 6: 1989 + A1: 2009 does not contain acceptance criteria and therefore this test report does not indicate a pass or fail of the product.

6 Validity

The test results relate only to behaviour of the test specimens of the product under the particular conditions of test, they are not intended to be the sole criteria for assessing the potential fire hazard of the product in use.

7 Reference

British Standard 476: Part 6: 1989 + A1: 2009 Fire tests on building materials and structures. Part 6. Incorporating Corrigendum No 1:2014. Fire propagation test for products. British Standards Institution, London 2009.

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Appendix A Product description provided by the test sponsor

Test sponsor (Company name and address): Clayworks – Clayworks, Unit 5 Higher Bocyhm, Cury			
Cross lanes Helston Cornwall TR127AZ			
Parameter		Details (if applicable)	
Trade name		Rustic	
General descripti		8mm heavy aggregate clay plaster	
Name and addre	ss of manufacturer of product	Clayworks, Unit 5 Higher Bocyhm, Cury Cross lanes,	
		Helston, Cornwall TR12 7AZ	
Place of manufac	cture	Cornwall UK	
Product reference	e/number	Rustic	
Thickness		8mm	
Density		Note 1	
Mass per unit are	ea	Note 1	
Generic type of p		Clay Plaster	
Flame retardant t	treatment added or organic	No	
content limited du	uring production (yes/no), if yes		
give details			
	product standard, and AVCP	NA	
System No. if app			
Industry/in-house	product standard, if applicable	NA	
Interior facing 1 - Generic type		Rustic Clay Plaster	
(test face)	 Product reference 	Clayworks	
	 Manufacturer 	8mm thickness	
	- Thickness	Buff Colour	
	 Mass per unit area/ density 	1722 kg/m ³	
	- Colour reference	Note 1	
	 Trade name flame retardant 	No flame retardant	
	 Generic type flame retardant 	N/A	
	- Amount flame retardant	N/A	
Substrate	- Generic type	12.5 mm Plasterboard	
(if applicable)	- Product standard	Knauf	
	- Product name/reference	Note 1	
	- Manufacturer	Note 1	
	- Thickness	Note 1 Note 1	
	- Density or mass per unit area	Note 1 Note 1	
- Class (EN 13501-1) Face to be tested		Plastered side	
Orientation aspec		NA	
	cation Reference	NA NA	
		Note 1	
Additional information:		NOTE 1	

Note 1: This information was not provided by the test sponsor.

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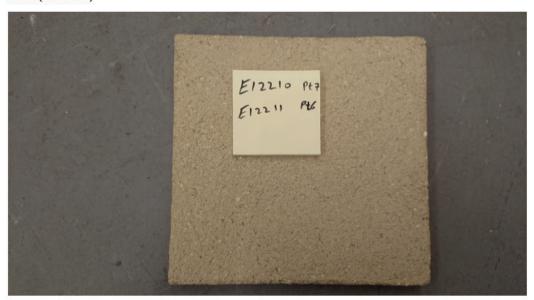
Fire propagation test to BS 476-6: 1989 + A1: 2009

Report Number: Q100912-1001: Issue 1

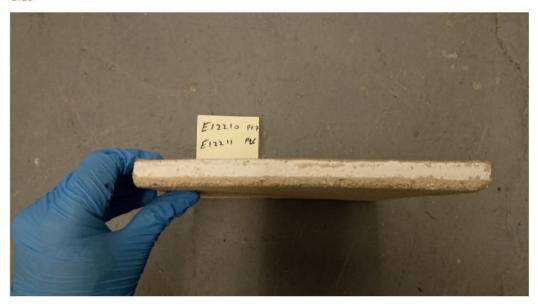


Appendix B Sample photographs

Front (Test face)



Side



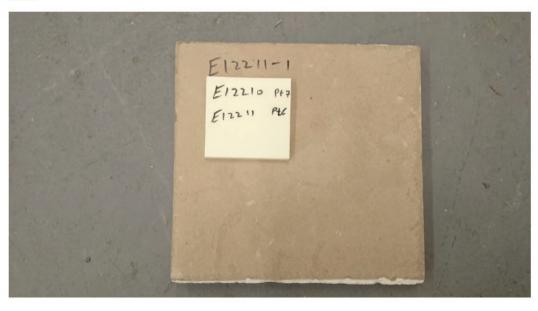
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BRE Global Test Report

BS 476-6: 1989 + A1: 2009 Fire propagation test on Clayworks – Smooth Topcoat (smooth clay plaster)

Prepared for: Clayworks

Date: 15 October 2019

Report Number: Q100912-1004 Issue 1

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Date 15 October 2019

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Appendix B	Appendix B. Sample photographs			

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1 Objective

To determine the fire propagation index of the sample specified in Section 2 using the test method specified in British Standard 476: Part 6: 1989 + A1: 2009^{1} .

2 Sample

2.1 Traceability

The test samples were supplied by the test sponsor. BRE Global were not involved in the sample selection process and therefore cannot comment upon the relationship between the samples supplied for test and the product supplied to market.

2.2 Description of sample and test format.

Unless otherwise stated all measurements are nominal.

Test Sponsor	Clayworks, Unit 5 Higher Bocyhm, Cury Cross lanes, Helston, Cornwall TR12 7AZ.		
Manufacturer of sample	As above.		
Sample name/reference	Clayworks – Smooth Topcoat		
Sample description (as provided by test sponsor/manufacturer)	Clayworks – Smooth Topcoat (smooth clay plaster) Full product description of the sample provided by the test sponsor is given in Appendix A.		
Description of sample (as received by BRE Global)	White/off-white smooth plaster like coating on plasterboard. E12213-2 approximate thickness Total 14.3, plasterboard 12.3. The Calculated coating thickness was approximately 2 mm. Photographs of the sample are given in Appendix B.		
Mean weight per unit area (kg/m²)	10.90		
Mean thickness (mm)	14.01		
Sample receipt date	16 August 2019 (BRE Ref E12213)		
Test face	Smooth face		
Test format	No air gap		
Date of test	02 October 2019		

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3 Conditioning

The specimens were conditioned as required by the standard.

4 Results

4.1 Temperature measurement

Table 1 shows the Temperature rise for calibration sheet and specimens

Table 2 shows the Index of performance for each specimen

Table 1 - temperature rise

Time	Temperature rise - °C			
t	Calibration		Specimens	
min	sheet	а	b	С
0.5	13.4	12.1	11.3	12.1
1	19.6	16.7	16.4	17.7
1.5	24.1	21.2	21.2	22.4
2	28.1	25.0	25.7	26.1
2.5	31.2	27.5	29.3	30.9
3	33.8	31.1	32.6	34.0
4	66.3	60.7	65.5	68.3
5	104.9	93.2	101.8	101.8
6	130.0	124.4	126.1	132.6
7	151.9	147.5	147.7	154.4
8	166.9	167.2	167.7	172.0
9	180.2	181.7	180.3	185.4
10	190.2	193.2	194.4	197.4
12	203.2	212.8	208.3	214.0
14	215.7	223.8	220.1	224.8
16	223.0	229.8	231.0	236.6
18	228.0	238.1	241.9	242.9
20	234.8	242.8	245.7	250.5

t - time in minutes from the time at which the gas jets were ignited.

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a, b and c - represent individual specimens giving valid test results.



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Table 2 Index of performance

Specimen	S	S ₁	S ₂	S ₃
a	0.4	0.0	0.1	0.3
b	0.4	0.0	0.1	0.3
С	0.7	0.0	0.3	0.4

4.2 Observations

No intumescence or deformation of any specimen occurred that affected the required gas input.

No melting or slumping occurred that prevented the material from being exposed to the heating conditions

Air flow through the apparatus was not restricted by fallen material or by soot accumulation in the chimney.

5 Conclusions

A sample as described in this report, when tested in accordance with BS 476: Part 6: 1989 + A1: 2009, achieved:

 $\begin{array}{lll} \text{fire propagation index} & I = & 0.5 \\ \text{sub-indices} & i_1 = & 0.0 \\ & i_2 = & 0.2 \\ & i_3 = & 0.3 \end{array}$

BS 476: Part 6: 1989 + A1: 2009 does not contain acceptance criteria and therefore this test report does not indicate a pass or fail of the product.

6 Validity

The test results relate only to behaviour of the test specimens of the product under the particular conditions of test, they are not intended to be the sole criteria for assessing the potential fire hazard of the product in use.

7 Reference

British Standard 476: Part 6: 1989 + A1: 2009 Fire tests on building materials and structures. Part 6. Incorporating Corrigendum No 1:2014. Fire propagation test for products. British Standards Institution, London 2009.

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Appendix A Product description provided by the test sponsor

Test sponsor (Company name and address): Clayworks – Clayworks, Unit 5 Higher Bocyhm, Cury Cross lanes Helston Cornwall TR127AZ				
Parameter		Details (if applicable)		
Trade name		Smooth Topcoat		
General descript	tion	2 mm smooth clay plaster		
Name and addre	ess of manufacturer of product	Clayworks, Unit 5 Higher Bocyhm, Cury Cross lanes Helston Cornwall TR127AZ		
Place of manufa		Cornwall UK		
Product reference	ce/number	Smooth topcoat		
Thickness		2mm		
Density		Note 1		
Mass per unit ar	ea	Note 1		
Generic type of	product	Clay Plaster		
content limited d give details	treatment added or organic luring production (yes/no), if yes	No		
System No. if ap		NA		
Industry/in-hous	e product standard, if applicable	NA		
Interior facing 1 - Generic type		Smooth Topcoat plaster		
(test face)	 Product reference 	Clayworks		
	- Manufacturer	2mm thickness		
	- Thickness	Buff Colour		
	- Mass per unit area/ density	1600 kg/m ³		
	- Colour reference	Note 1		
	- Trade name flame retardant	No flame retardant		
	- Generic type flame retardant	N/A		
0.1.4.4	- Amount flame retardant	N/A		
Substrate	- Generic type	12.5 mm Plasterboard		
(if applicable)	- Product standard	Knauf		
	- Product name/reference	Note 1		
	- Manufacturer	Note 1		
	- Thickness	Note 1		
	- Density or mass per unit area	Note 1		
- Class (EN 13501-1) Face to be tested		Note 1 Plastered side		
		NA		
Orientation aspects Sampling Identification Reference		NA NA		
		NA Note 1		
Additional information:		Note 1		

Note 1: This information was not provided by the test sponsor.

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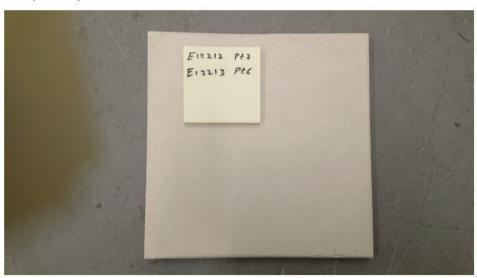
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Appendix B Sample photographs

Front (Test face)



Side



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National classification system tests for reaction to fire

- to achieve Class 1 (best) to 4 (worst) BS 476-7 Surface spread of flame test
 - to achieve Class 0 BS 476-7 Surface spread of flame Class 1, and BS 476-6 Fire propagation index test (I < 12, i_1 < 6)



Nine specimens 885 mm (+0/-5 mm) x 270 mm (+0/-5 mm) x not more than 50 mm thick



Notes:

Specimens to be prepared by the client, must be flat and if applicable, applied to a substrate representative of end use.

"Class 0" is defined in the $\underline{\mbox{Building Regulations}}$ not in the British Standard.

To achieve "Non-combustible" or "Limited combustibility" (also acceptable where Class 0 materials are specified) tests to BS 476-4 or BS 476-11 are required.

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