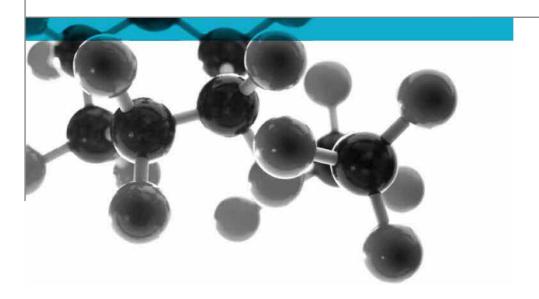
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# **TS 62: Issue 8 24<sup>th</sup> November 2021**



Reaction To Fire Performance Requirements: Materials, Either Sheet Or Net, Used To Clad Scaffolding (With Optional Strength, Light Transmission And Permeability Requirements)

A Report To: MediaCo Ltd

Document Reference: 526496

Date: 16th March 2023

Issue No.: 1

Page 1

# **Executive Summary**

# **Objective**

To determine the performance of the following product when tested in accordance with TS 62: Issue 8 24th November 2021 'Reaction To Fire Performance Requirements: Materials, Either Sheet Or Net, Used To Clad Scaffolding (With Optional Strength, Light Transmission And Permeability Requirements)

Generic Description	Product reference	Thickness	Weight per unit area or density	
Building wrap with photocatalytic coating and stitching	"Ecoflex with EAPP"	0.25mm*	275g/m <sup>2</sup> *	
Individual components used to manufacture composite:				
Aqueous solution of titanium "EAPP Coat" <50nm 12ml/m² dioxide				
PVC free fabric with stitching	"ECOTEX"	Unable to provide	270g/m <sup>2</sup>	
*determined by Warringtonfire				
Please see page 6 of this test report for the full description of the product tested				

Test Sponsor MediaCo Ltd, Chrchill Point, Churchill Way, Trafford Park, Manchester, M17 1BS

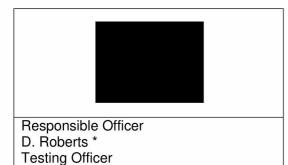
Test Results: When tested and assessed in accordance with the requirements of TS 62:

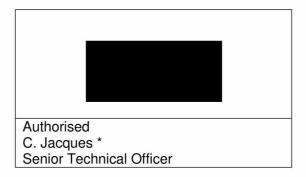
Issue 8 24th November 2021, Sections 5.3.3.1 (small flame test), 5.3.3.2 (medium flame test) and 5.3.3.3 (flammable liquid test) the material satisfies

the requirements.

Date of Test 27th February & 1st March 2023

# **Signatories**





<sup>\*</sup> For and on behalf of Warringtonfire.

Report Issued: 16th March 2023

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# **Test Details**

## **Purpose of test**

To determine the performance of the following product when tested in accordance with TS 62: Issue 8 24th November 2021 'Reaction To Fire Performance Requirements: Materials, Either Sheet Or Net, Used To Clad Scaffolding (With Optional Strength, Light Transmission And Permeability Requirements)

## Scope of test

TS 62: Issue 8 24th November 2021 specifies the following methods of tests to determine the flammability performance of scaffold cladding materials, such as sheeting and netting used externally during construction, refurbishment or demolition of buildings:

TS 62: Issue 8 24th November 2021 : 5.3.3.1 – "Small flame test"
TS 62: Issue 8 24th November 2021 : 5.3.3.2 – "Medium flame test"
TS 62: Issue 8 24th November 2021 : 5.3.3.3 – "Flammable liquid test"

The standard does not cover internal protective coverings for floors, walls and furnishings used during construction or refurbishment of buildings.

# Fire test study group/EGOLF

Certain aspects of some fire test specifications are open to different interpretations. The Fire Test Study Group and EGOLF have identified a number of such areas and has agreed Resolutions which define common agreement of interpretations between fire test laboratories which are members of the Groups. Where such Resolutions are applicable to this test they have been followed.

### **Test procedure**

The tests were performed in accordance with the procedure specified in TS 62: Issue 8 24th November 2021 and this report should be read in conjunction with that technical schedule. The product was tested in accordance with the "small flame test" procedure, the "medium flame test" procedure and the "flammable liquid test" procedure as specified in 5.3 of the technical schedule..

The "small flame test" procedure is based on the procedures defined in BS 476: Part 12: 1991, 'Fire tests on building materials and structures, method of test for ignitability of products by direct flame impingement', and utilises ignition source "C" of that Standard applied for a period of 5, 10 and 20 seconds.

The "medium flame test" procedure is also based on the procedure defined in BS 476:Part 12:1991, and utilises ignition source "G" of that standard applied for a period of 20, 40 and 60 seconds.

The "flammable liquid test" procedure is defined in TS 62: Issue 8 24th November 2021 clause 5.3.3.3 is large ignition source, for example when a flammable liquid is encountered.

## Instruction to test

The test was conducted on the 27th February & 1st March 2023 at the request of MediaCo Ltd, the sponsor of the test.

# Provision of test specimens

The specimens were sampled and selected by a representative of Warringtonfire during an audit visit on the 1 December 2022 and then supplied by the sponsor of the test.

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Conditioning of specimens

The specimens were received on the 14th December 2022.

Prior to test, the specimens were conditioned to constant mass at a

temperature of 23  $\pm$  2°C and a relative humidity of 50  $\pm$  10%.

**Exposed face** 

The outer face of each specimen was exposed to the igniting flame.

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# **Description of Test Specimens**

The description of the specimens given below has been prepared from information provided by the sponsor of the test. This information has not been independently verified by Warringtonfire. All values quoted are nominal, unless tolerances are given.

General description		Building wrap with photocatalytic coating and stitching	
Product reference of overall composite		"Ecoflex with EAPP"	
Name of manufacturer of overall composite		MediaCo (Ultima and PURETi)	
Thickness of overall composite		0.25mm (determined by Warringtonfire)	
	a of overall composite	275g/m² (determined by Warringtonfire)	
vvoignt por anit area	Generic type	Aqueous solution of titanium dioxide	
	Product reference	"EAPP Coat"	
	Name of manufacturer	PURETi Group, LLC	
	Colour	Opaque pale yellow	
	Number of coats	2 passes cross hatch	
Coating	Application rate per coat	12ml/m <sup>2</sup>	
(Front face)	Application thickness	<50nm	
	Weight per unit area	0.0024g/m <sup>2</sup> (dry)	
	Specific gravity	1	
	Application method	Electrostatic spray	
	Curing process per coat	Air dry	
	Flame retardant details	See Note 1 below	
	Generic type	Polyester fabric	
	Product reference	"ECOTEX"	
	Name of manufacturer	Heytex	
	Composition details (% of	100% polyester	
	wool, nylon, polyester etc)		
	Weight per unit area	270g/m <sup>2</sup>	
Fabric	Thickness	0.31mm	
	Colour	White	
	Type of weave	See Note 2 below	
	Thread count or threads per	See Note 2 below	
	inch (TPI)		
	Yarn count	8/7 thread/cm	
	Flame retardant details	See Note 2 below	
Brief description of manufacturing process		The base fabric is woven on weaving machines.	
		A liquid paste is applied to the fabric by means of	
		a spreading process (knife coating) and then	
		dried in a drying channel	

Note 1: The sponsor of the test has confirmed that no flame retardant additives were utilised in the production of the component.

Note 2: The sponsor was unable to provide this information.

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# **Test Results**

# Expression of test results

The test results for each of the tests which were conducted are shown below, together with observations on the behaviour of the specimens during the test. The test result is expressed as I, N T or W, where:

- I = Sustained ignition, defined as `after withdrawal of the ignition source, the inception of a flame on the surface of the specimen that persists for at least 10 seconds'
- T = Transient ignition, defined as `after withdrawal of the ignition source, the appearance of flashes or flames which are not sustained for a continuous 10 seconds'
- N = No sustained ignition or transient ignition.

W = Flaming or glowing to edge during application of ignition source or within 10s of its removal.

### 5.3.3.1 Small flame test

None.

Ignition source	Арј	olication	Result – I, T, N or W. When applicable the duration of flaming is indicated in brackets.		
	Position	Time (Seconds)	Specimen 1	Specimen 2	Specimen 3
Surface	5	N	N	T (2)	
	Surface	10	T (1)	T (2)	T (1)
		20	T (2)	T (1)	N
C	Edge	5	N	T (1)	N
Edge		10	T (1)	N	T (1)
	20	N	N	N	
Observations:			<u> </u>		

Performance requirement given in TS 62: Issue 8 24th November 2021 clause 5.3.3.3	Result
Transient ignition: maximum of 10 seconds flaming after flame removal.	Pass
No flaming droplets or flaming debris 10 seconds after flame removal.	Pass
No flame reaching any edge of the specimen during application of the ignition source.	Pass
Spread of flame not to reach the edge of the specimen at any point within the 10 seconds of the end of flame application time.	Pass

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### 5.3.3.2 Medium flame test

Ignition source	Application		Result – I, T, N or W. When applicable the duration of flaming is indicated in brackets.		
Source	Position	Time (Seconds)	Specimen 1	Specimen 2	Specimen 3
Surface  G  Edge	20	N	T (3)	N	
	Surface	40	N	N	N
		60	N	N	N
		20	N	N	N
	Edge	40	N	N	N
		60	N	N	N

Observations:

None.

Performance requirement given in TS 62: Issue 8 24th November 2021 clause 5.3.3.3	Result
Transient ignition zero: no flaming after 10 seconds from flame removal.	Pass
No flaming droplets or flaming debris 10 seconds after flame removal.	Pass
No flame reaching any edge of the specimen during application of the ignition source.	Pass
Spread of flame not to reach the edge of the specimen at any point within the 10 seconds of the end of flame application time.	Pass

# 5.3.3.3 Flammable liquid test

#### **Observations:**

Fuel source fully consumed (flaming extinguished) at a time of 310 seconds Test ended at a time of 310 seconds

Performance requirement given in TS 62: Issue 8 24th November 2021 clause 5.3.3.3	Result
Transient ignition: maximum of 10 seconds flaming after heptane stops burning.	Pass
No flaming droplets or flaming debris 10 seconds after heptane stops burning.	Pass
No flame reaching any edge of the specimen during application of the ignition source.	Pass
Spread of flame not to reach the edge of the specimen at any point within 10 seconds of the end of flame application time.	Pass

# Conclusion

When tested and assessed in accordance with the requirements of TS 62: Issue 8 24th November 2021, Sections 5.3.3.1 (small flame test), 5.3.3.2 (medium flame test) and 5.3.3.3 (flammable liquid test) the material satisfies the requirements.

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# Applicability of test results

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

The test results relate only to the specimens of the product in the form in which they were tested. Small differences in the composition or thickness of the product may significantly affect the performance during the test and may therefore invalidate the test results. Care should be taken to ensure that any product which is supplied or used is fully represented by the specimens which were tested.

### **Validity**

The specification and interpretation of fire test methods are the subject of ongoing development and refinement. Changes in associated legislation may also occur. For these reasons it is recommended that the relevance of test reports over five years old should be considered by the user. The laboratory that issued the report will be able to offer, on behalf of the legal owner, a review of the procedures adopted for a particular test to ensure that they are consistent with current practices, and if required may endorse the test report.

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# **Revision History**

Issue No:	Re-issue Date:
Revised By:	Approved By:
Reason for Revision:	

Issue No:	Re-issue Date:
Revised By:	Approved By:
Reason for Revision:	

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