

## CONFIDENTIAL REPORT



1066

Date: 04 December 2000

Our Ref: 27502/11/00

Your Ref:

Client: Newcastle Insulation Services Ltd  
Tundry Way  
Chainbridge Road  
Blaydon  
Tyne and Wear  
NE21 5SW

Job Title: Fire Tests on Panels

Client's order no: 06271/C2509

Date of receipt: 09/11/00

Description of sample(s): One sample of panel labelled ref. 0.5mm Acou-stick add on damper

Work requested: BS 476:Part 7:1987  
BS 476:Part 6:1989



## UKAS ACCREDITATION

Our laboratories are UKAS accredited. However, it should be noted that:

- a) any opinion, interpretation or comments expressed in this report are outside the scope of UKAS accreditation.
- b) tests marked 'Not UKAS accredited' in this report are not included in the UKAS Accreditation Schedule for our laboratory, either due to the work not conforming fully to the standard (e.g. reduced number of specimens) or to it being outside the scope of our accreditation, or subcontracted.
- c) constructional carpet tests to BS4223:1989 are not UKAS accredited in cases where the sample size is less than 1m<sup>2</sup>.
- d) any carpet test carried out where it was not possible to adopt the sampling procedure for selection of test specimens as described in BS 4664:1985 is not UKAS accredited.

## TESTING ATMOSPHERE

Unless otherwise specified the sample has been conditioned and tested, where appropriate, in the standard atmosphere for conditioning and testing textiles (BS EN20139:1992) of 65±2% r.h. and 20±2°C.

## TERMS AND CONDITIONS

All test reports are confidential to the client and will not be issued by us to any third party without the client's written authorization.

Clients wishing to copy any report must obtain written permission from us on each occasion. Only complete reports can be copied and passed to third parties. No omissions or additions are allowed. Results supplied in our reports shall not be used in advertising or promotional literature without our express permission.

The client shall always inform us at the outset if the work is known to be required for the purpose of litigation. If the presence of our staff will be required at a court hearing, or the report required as evidence in a dispute, ample advance notification is required in order to provide time for discussion between expert witness and legal representative and/or for consideration of all relevant documentation. We must be shown full particulars of any claim which is to be pursued or defended.

Results quoted on reports refer only to the samples submitted and the client is advised to ensure that a sufficiently representative and sufficiently large sample, securely packaged and identified, is sent for examination. Samples will be retained by the laboratory for not more than 6 months from the date of issue of the final report, unless otherwise expressly instructed by the client.

We shall not be liable for any subsequent loss or damage incurred by the client as a result of information supplied.

Prices are based either on the normal member and non-member rates of charge currently in operation, or on agreed fixed charges, or in the case of investigational work on an agreed hourly rate. Quoted prices are strictly net and payment is due within 30 days of date of invoice.

A copy of our full terms of business is printed in the BTTG Testing and Analytical Services Handbook and additional copies are available on request.

Our ref: 27502/11/00

Your ref:

Newcastle Insulation Services Ltd  
Tyne and Wear

Date of Test: 17/11/00

**1. FIRE TESTS ACCORDING TO BS 476:PART 7:1987 (AS AMENDED)**  
(Method for classification of the surface spread of flame of products)**Procedure**

The face sides of the specimens were tested.

The following were recorded:-

- a) the time at which the flame front crosses each vertical reference line;
- b) the maximum extent of flame spread during the first 1.5min from the start of the test;
- c) the maximum extent of flame spread during the whole test i.e. 10 min or less (if applicable)
- d) the time (and distance) at which maximum flame spread is reached.

The flame spread at 1.5min and the final flame spread results were compared with the standard class limits and a classification was assigned.

**Requirements**

The class limits for flamespread, detailed in BS 476:Part 7: are set out below.

	<u>Flame spread at 1.5 min (mm)</u>	<u>Final flame spread (mm)</u>
Class 1	165 (+ 25)	165 (+ 25)
Class 2	215 (+ 25)	455 (+ 45)
Class 3	265 (+ 25)	710 (+ 75)
Class 4	Exceeding Class 3 limits.	

A definitive classification is based on a sample of six specimens and the figure in brackets gives the tolerance by which only one specimen in six may exceed the class limit assigned.

**Results**

The following 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.

They also only relate to the materials tested. They do not guarantee to represent the performance of production materials.

This report is incomplete without all the pages specified above.

Wira House, West Park Ring Road, Leeds LS16 6QL, England  
Tel: +44 (0)113 259 1999 Fax: +44 (0)113 278 0306 Email: Wiratec@bttg.co.uk

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	Time for flame Spread to reach (S) (mm)					Flame spread at 1.5 min (mm)	Maximum Flame spread (mm)	Time to reach Maximum Flame Spread (s)
	165	215	265	455	710			
-	-	-	-	-	-	60	60	60
-	-	-	-	-	-	60	60	60
-	-	-	-	-	-	60	60	60
-	-	-	-	-	-	60	60	60
-	-	-	-	-	-	60	60	60
-	-	-	-	-	-	60	60	60

**Classification - Class 1****Observations and Comments**

The material was sampled in accordance with the BTTG Internal Flammability Procedure F1.

**2. FIRE TESTS ACCORDING TO BS 476:PART 6:1989****Fire tests on building materials and structures.****(Method of test for fire propagation for products)****Date of Test: 31/11/00****Procedure**

The test was carried out on the face side of the specimens. Each specimen was individually placed in the combustion chamber of the apparatus. Temperatures of the flue gases were measured to the nearest degree centigrade at the time intervals and periods set out below, taking zero time as the moment of ignition of the gas supply. The relevant temperature-time indices were calculated.

<u>Interval (min)</u>	<u>Period (min)</u>	<u>Index</u>
0.5	0.5 - 3	i <sub>1</sub>
1	4 - 10	i <sub>2</sub>
2	12 - 20	i <sub>3</sub>

$$\text{Total I} = i_1 + i_2 + i_3$$

A definitive classification is based on a sample of at least three specimens.

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UK Building Regulations 1991 Approved Document B Appendix A12(b) states a Class 0 performance is achieved if:-

a Class 1 material has a fire propagation Index (I) of not more than 12 and sub index (i<sub>1</sub>) of not more than 6.

The following 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.

They also only relate to the materials tested. They do not guarantee to represent the performance of production materials.

### Results

Number of specimens tested.	3			
	Sub-index	Sub-index	Sub-index	Total Fire propagation index
	i <sub>1</sub>	i <sub>2</sub>	i <sub>3</sub>	I
	0	0	0	0

### Observations and Comments

The i values quoted are the means of all individual S values.

The sample met the class 0 performance requirements.

The material was sampled in accordance with the BTTG Internal Flammability Procedure F1.

The BS 476 Part 6 testing was carried out by:

BRE  
Melrose Avenue  
Borehamwood  
Hertfordshire  
WD6 2BJ

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The information contained on page no's 1/5 of this certificate is hereby certified to be a correct statement of the tests and investigations carried out by Wira Testing Services on the materials referred to.

Signed..........Date.....4/12/00.....

D. Hird  
Section Leader  
Fire Testing

Signed..........Date.....4.12.00.....

Dr C Graham  
Laboratory Head

DH  
275021100rep

Enquiries concerning the technical content of this report should be addressed to the Head of the reporting laboratory named above.

Terms and conditions applying to the operations of Wiratec are printed on the back of the cover page of this report.

This report is incomplete without all the pages specified above.

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