



TEST REPORT

ISSUED BY **British Board of Agrément**
DATE OF ISSUE **22 November 2010**
SERIAL NUMBER **47230TH**



REPORT PREPARED BY

L Fonterigo
Test Technician

Bucknalls Lane, Garston
Watford, Herts WD25 9BA
Tel: 01923 665300
Fax: 01923 665301
e-mail: mail@bba.star.co.uk
<http://www.bbacerts.co.uk>

©British Board of Agrément 2010

AUTHORISED BY

J Holdsworth
Test Unit Leader

CLIENT: Effective Energy Solutions Ltd.,
The Turbine,
Coach Close,
Worksop,
Nottinghamshire.
S81 8AP

JOB No: T1/47230

1 INTRODUCTION

The test specimen was supplied by the client and described as Effective Energy Solutions Wallrock thermal liner. It was delivered in the form of a 10000mm x 750mm x 3mm roll. The tested sample consisted of ten layers of this material with a thickness of 31.50mm so each layer had an average individual thickness of 3.15mm

2 METHOD

Heat Flow Meter Method of ISO 8301 : 1991 and BS EN 12667 : 2001 using the BBA single specimen symmetric test facility designated K4. Edge guarding is provided by an independently heated zone at the perimeter of each plate and apparatus wall temperatures controlled to match the mean specimen temperature. Specimen thickness was measured in accordance with BS EN 823.

3 SPECIMEN PREPARATION

The test specimen was assigned the BBA designation number T1/47230/1 and stored in a well-ventilated position in an air-conditioned room at $23 \pm 2^\circ\text{C}$, $50 \pm 5\%$ rh until it was tested.

4 MEASURED PROPERTIES

Thermal resistance per layer $\text{m}^2 \cdot \text{K/W}$	Density kg/m^3	Mean temperature ($^\circ\text{C}$)
$0.0821 \pm 2.5\%$	174	10.1

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor $k=2$, providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with ISO/IEC 17025:2005.

This report provides traceability of measurement to recognised national standards, and to the units of measurement realised at the National Physical Laboratory or other recognised national standards laboratories. This report may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

TEST REPORT

UKAS ACCREDITED TESTING LABORATORY No 0357

SERIAL NUMBER 47230TH

5 RESULTS

Test details

Relative mass change during conditioning	-0.10%
Cold face temperature	0.04 °C
Hot face temperature	20.13 °C
Average temperature difference across specimen	20.09 K
Relative mass change during test	0.00%
Average imposed specimen thickness	31.5 mm
Mean heat flux	24.5 W/m ²
Direction of heat flux	Upwards
Interface medium	None
Applied load	~ 50 Pa
Cold face emissivity	0.89
Hot face emissivity	0.89
Duration of test (hh:mm)	9:47
Duration of steady state (hh:mm)	2:30
Date of test completion	16 November 2010
Angle of orientation	0 °

Calibration details

Date of last verification	Nov-10
Certified reference material	IRMM-440

6 CE MARKING

The BBA has been notified as an approved testing laboratory (notification number 0836). Within the context of 89/106/EEC Construction Products Directive this data can contribute to the Attestation of Conformity requirements for CE Marking, if it can be shown that the test specimen has been taken from the same sample as described in the relevant product standard.

7 COMMENTS

The measured thickness of ten sheets of the sample was 31.50mm at 50Pa to BS EN 823 and was tested at this thickness.

TEST REPORT

UKAS ACCREDITED TESTING LABORATORY No 0357

SERIAL NUMBER **47230TH**

8 REPORT CONDITIONS

8.1 This Report:

- relates only to the product/system and sample/specimen thereof named and described herein
- relates only to the test conditions described herein
- is issued only to the company, firm, organisation or person named herein — no other company, firm, organisation or person may hold this Report or claim that it has been issued to them
- has to be read, considered and used as a whole document — it may be misleading and will be incomplete to be selective
- is copyright of the BBA
- is subject to English Law.

8.2 No verification of any of the materials, samples, specimens, information, data or documents supplied to the BBA has been made, except where otherwise stated.

8.3 Publications, documents, specifications and similar matter that are referred to herein, are those that were current at the date of issue of this Report, except where otherwise stated.

8.4 The BBA has used due skill, care and diligence in preparing this Report, but no warranty is given or implied.

8.5 In issuing this Report, the BBA is not responsible; and is excluded from any liability to any company, firm, organisation or person; for any matters arising directly or indirectly from:

- the presence or absence of any patent, intellectual property or similar rights subsisting in the product/system
- individual installations of the product/system, including their nature, design, methods, performance, workmanship and maintenance
- any works and constructions in which the product/system is installed, including their nature, design, methods, performance, workmanship and maintenance
- any loss or damage, including personal injury, howsoever caused by the product/system, including its manufacture, supply, installation, use, maintenance and removal.

8.6 This Report does not constitute an approval or endorsement of the product/system.