

REPORT PREPARED BY

Egle

E Whyle Senior Test Technician

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

DATE OF ISSUE 29 January 2013

SERIAL NUMBER 50770THG

TEST REPORT

ISSUED BY British Board of Agrément

©British Board of Agrément 2013

AUTHORISED BY

J Holdsworth Test Operations Manager

JOB No: T950770

CLIENT: NUDURA Corporation 27 Hooper Rd Unit No 10 Barrie Ontario Canada L4N 9SE

1 INTRODUCTION

The test specimen was supplied by the client and described as Insulated concrete formwork system Lot# 286339 0248 of 0500, production date 10-Jun-12. It was delivered in the form of 430 x 165 x 55mm blocks.

2 METHOD

Heat Flow Meter Method of ISO 8301 : 1991 and BS EN 12667 : 2001 using the BBA single specimen symmetric test facility designated K9. Edge guarding is provided by an independently heated zone at the perimeter of each plate and thermal insulation with a resistance in excess of 3 m²K/W. Specimen thickness was measured in accordance with BS EN ISO 12667.

3 SPECIMEN PREPARATION

The test specimen was assigned the BBA designation number T950770/7 and stored in a well-ventilated position in an air-conditioned room at $23 \pm 2^{\circ}$ C, $50 \pm 5\%$ rh until it was tested.

4 MEASURED PROPERTIES

Thermal conductivity	Thermal resistance	Density	Mean temperature
W/(m⋅K)	m²·K/W	kg/m ³	(°C)
0.035 ± 2.5%	1.42 ± 2.5%	20.9	10.0

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

5 RESULTS

Test details

Cold face temperature	20.02 °C
Hot face temperature	0.02 °C
Average temperature difference across specimen	20.00 K
Relative mass change during test	0.15%
Average imposed specimen thickness	49.7 mm
Mean heat flux	14 W/m ²
Direction of heat flux	Upwards
Interface medium	None
Applied load	43 kPa
Cold face emissivity	0.89
Hot face emissivity	0.89
Duration of test (hh:mm)	2:29
Duration of steady state (hh:mm)	2:30
Date of test completion	16 January 2013
Angle of orientation	0 °
Calibration details	
Date of last verification	Jan-13
Certified reference material	Mineral wool

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

None

TEST REPORT

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 specified tests and 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 or indicate any approval, certification or endorsement of the product/system.