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The Hey Group

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1st May 2019 Reference Number CIM 438 Thermal Conductivity r0

Determination of the Thermal Conductivity of RZ-Ecoseal

Introduction

The Centre for Infrastructure Management (CIM) at Sheffield Hallam University was requested by The Hey Group (from now on referred to as the client) to determine the Thermal Conductivity of RZ-Ecoseal.

Experiment

The test specimen, manufactured by the client, consisted of a RZ-Ecoseal sheet measuring approximately $305 \times 305 \times 3.5$ mm (Figure 1). An HFM300/1 heat flow meter from Linseis (Figure 2) was used to carry out the test according to BS EN 1266:2001. The temperatures of the bottom and top plate of the meter were set at 10°C and 20°C, respectively (mean test temperature ≈ 10 °C). The thermal conductivity was automatically calculated using the HFM300/1 software (displayed as shown in Figure 2).



Figure 1 Test specimen



Figure 2 HFM1 heat flow meter

Results

The results of the tests are as below.

Sample	Thermal conductivity (W/mK)
1	0.15207

Project Manager:

Date: 01 May 2019

& Report Author

Dr V. Starinieri

Checked by:

Date: 01 May 2019

Prof F. O'Flaherty

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