

Thermal Conductivity of Retrofoam Samples carried out by Paul Baker, GCU
 Measured using Lasercomp FOX304 Instrument Serial Number: 1044

Retrofoam Sample No.	Sample Thickness mm	Test Date	Mean Temp °C	Thermal Conductivity W/mK
#1	85.36	20/04/2015	10.01	0.031
#2	82.80	22/204/015	10.01	0.033
#3	83.47	23/04/2015	10.01	0.034
#4	83.01	23/04/2015	10.01	0.031
#5	81.35	28/04/2015	10.01	0.031
#6	83.00	29/04/2015	10.01	0.032

Minimum	0.031
Maximum	0.034
Average Thermal Conductivity W/mK	0.032
Standard Deviation W/mK	0.001
Standard Deviation %	4.5%
Hot Plate Temperature °C	15
Cold Plate Temperature °C	5
Mean Temperature °C	10

Reference Sample measured before and after tests on Retrofoam

Date	Sample Thickness as measured by thermal conductivity apparatus mm	Thermal Conductivity W/mK
17/06/2014	24.63	0.0317
02/04/2015	24.64	0.0316
08/04/2015	24.64	0.0316
14/04/2015	24.64	0.0316
20/04/2015	24.66	0.0317
22/04/2015	24.61	0.0317
22/04/2015	24.61	0.0316
23/04/2015	24.61	0.0316
28/04/2015	24.64	0.0316
29/04/2015	24.63	0.0316
30/04/2015	24.61	0.0315
Average	24.63	0.0316
Standard Deviation	0.02	0.0001
Standard Deviation %	0.07%	0.2%