



NIRMA
UNIVERSITY

INSTITUTE OF TECHNOLOGY

No. : NU/IT/MECH/NAFETIC/2012_07/1195

National Laboratory for Testing and Development of Thermal Insulations

A Project under the National Facilities in Engineering and Technology with Industrial Collaboration (NAFETIC) Scheme of AICTE

TEST CERTIFICATE

Name of client/company : M/s GBC India,
A/408, Neelkanth Palace, 100 Ft., Satellite, Ahmedabad-380015
Kind Attn: Mr Sandeep Vidwans

Test type : Determination of thermal conductivity of insulation material

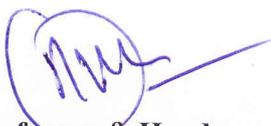
Specimen details : *User defined Name:* Nodular-Light Expansive Clay Aggregates
Moisture content: Negligible (Sample preheated at 100 °C in oven for 24 hours before testing for thermal conductivity)
Dimensions: 300 mm x 300 mm.
Average sample thickness (as tested): 49 mm.
Density (as tested) = 544.2 kg/m³.

Test method : Guarded Hot Plate Method as per ASTM C177

Experimental Uncertainty : Maximum ±4% for the observed thermal conductivity value.

Test Result : The thermal conductivity of the sample was found to be **0.118 W/m.K** at the mean specimen temperature of 10°C.
The corresponding value of the thermal resistance of the sample of thickness 49 mm was observed to be 0.415 m².K/W.


Investigators


**Professor & Head,
Mechanical Engineering Deptt.**


**Director
Institute of Technology**



Date: 23/7/2012

Institute of Technology, Nirma University