



GEO THERM INC.

email: geotherm@geotherm.net

P.O. Box: 742
Aurora, Ontario
CANADA
L4G 4J9
Tel: 905-727-6448
Fax: 905-727-4325

October 5, 2010

Carolina Stalite Company

P.O. box: 186

Gold Hill, NC 28071

Attn: Chuck Friedrich, RLA, ASLA, GRP

Re: Thermal Analysis of Expanded Shale Aggregate

The following are the results of thermal conductivity measurement conducted on the 'Light-weight Aggregate -1/2' sample you sent.

Test Procedure and Equipment: Per your request, thermal conductivity measurement was made on the material in totally dry condition and compacted in a 0.5 ft³ container; in 3 layers, 25 blows per layer with a 5.5 lb rammer with 12" drop. A field-type thermal probe was installed central and vertical in the sample and the test was conducted in accordance with the IEEE Standard 442. The result is tabulated below.

Compaction	Thermal Conductivity		Dry Density (lb/ft ³)
	(W/°K.m)	(BTU/ft.hr.°F)	
Standard compaction energy	0.106	0.062	53.1

Comments: We understand the specifications call for the thermal conductivity of this material in totally dry condition to be **no higher than 0.09 BTU/ft.hr.°F**. **This material satisfies this requirement.**

Please contact us if you have any questions or if we can be of further assistance.

Geotherm Inc.

Deepak Parmar
President