

Intertek ETL SEMKO  
ASTM C 518-04  
Project No. 3104683SAT-002

**Conessione Scientific, Inc.**  
Modified ASTM E 162 Radiant Thermal Resistivity  
Project No. 76JS963-ENV

**THERMO-TEK Test Results**

SUMMARY

Tests conducted by ETL defined thermal conductivity of the product as a raw number. Tests conducted by Conessione Scientific compared the effects of a radiant heat source on a 0.015 inch aluminum substrate coated with Thermo-Tek and standard six-inch insulation with a rating of R19.

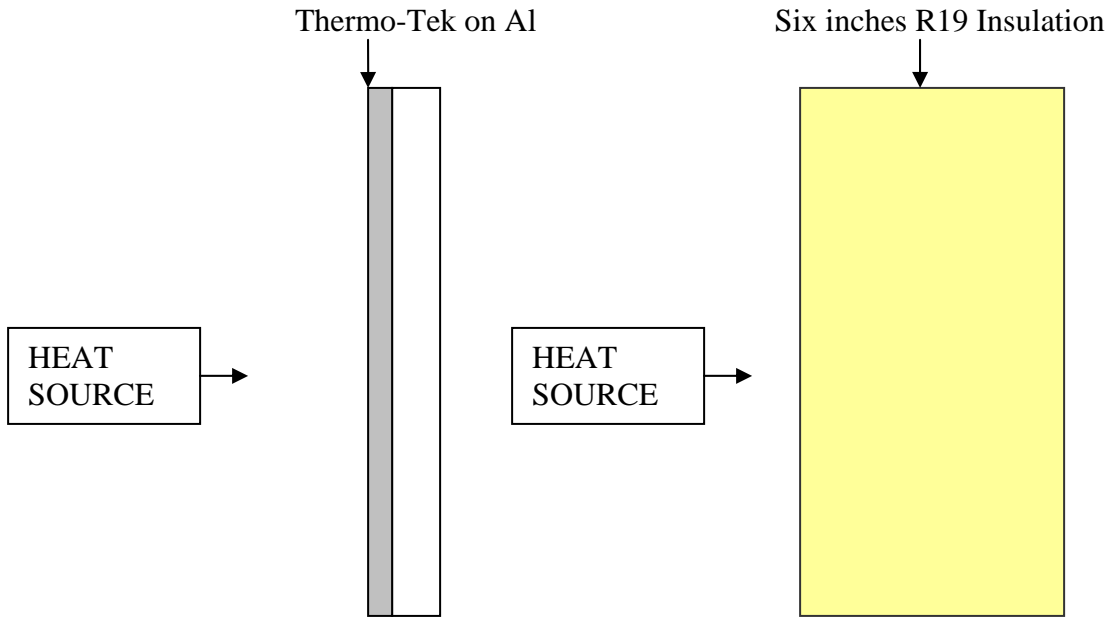
RESULTS

The thermal conductivity test expressed thermal conductivity of Thermo-Tek as 0.14 W/(m\*K). Heat was applied directly to the substrate with a hot plate.

The comparison of Thermo-Tek to standard six-inch insulation was as follows:

<b>Time, minutes</b>	<b>R19 insulation Temp 1, °F</b>	<b>R19 insulation Temp 2, °F</b>	<b>Thermo-Tek Temp 1, °F</b>	<b>Thermo-Tek Temp 2, °F</b>
15	180	90	200	102
30	220	120	220	121
40	240	132	220	127
45	240	137	220	127

1. Radiant heat source was located six inches from test specimen.
2. Temp 1 on heat side / Temp 2 on “cool” side



## CONCLUSIONS

1. Temperatures on heat side of specimens reached steady state in 30 minutes for Thermo-Tek and 40 minutes for insulation.
2. Temperature on “cool” side of specimens showed Thermo-Tek temperature rise to be faster initially but ran cooler after steady state reached.

## NOTE:

The results simply show that—from a radiant heat source—Thermo-Tek has less heat penetration when compared to raw six-inch insulation rated R19 even when the Thermo-Tek substrate is a high heat conductive material.

For further detailed test data and certifications, please e-mail [ThermoTekLtd@aol.com](mailto:ThermoTekLtd@aol.com)