

Test Type: Heat Conductance Test (% Reflectance Testing and Heat-Up Rate Testing are performed and recorded simultaneously)

Method: JIC-HR Internal

Scope: This system provides a controlled environment which produces relative thermal reflectance and heat-up information for specimens of metals and coated metals exposed in a given test chamber similar to that of a conventional oven.

Procedure: A cube shaped cell is placed (suspended to expose all six sides) inside the accelerated heating chamber at an internal and external temperature of 72°. Thermal recording begins of both the interior and exterior of the cell through an IR Thermal Temperature Probe. The chamber environment is then heated to 100° and all reactions recorded.

Results: Not part of GM or ASTM Testing Standards - See table below for actual accredited internal results.

TEST MATERIAL DESCRIPTION			HEAT CONDUCTANCE TESTING			
			Heat-up Rate	Outside Temp	Internal Temp	%Reflectance ²
Material	Color	Technology	7.21	100°	94°	49.6%
Control - Solvent Based (Client)	Blue	1k-Solvent	6.93	100°	95°	47.3%
Control - Solvent Based	Blue	1k-Solvent	5.03	100°	86°	63.2%
Control - Water Based	Blue	1k-Water	6.11	100°	81°	59.6%
Silver	Silver	1k-Water	5.21	100°	79°	55.3%
Silver w/ Enhancing Additive	Silver	1k-Water Advance	4.74	100°	70°	71.1%

Note 1: Amount of time it takes to reach a specific temperature in controlled conditions (Lower Heat-Up Rate = longer delays in the progression of heat transfer flux)

Note 2: Specific amount of heat flux applied on 1 sq. inch of substrate and percentage reflectance from face of panel measured (Higher % Reflectance = higher decrease of internal temperature)