



Material Application Guide

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Thermal Barrier Material

REQUIRED TEMPERATURE RANGE OF GOODS		EXTERNAL EXPOSURE TEMPERATURE	EXPOSURE DURATION						Performance Varies Based on Application
			Hrs Mins	1 60	2 120	4 240	6 360	8 480	
2°C Lower Limit 8°C Upper Limit  Chilled	less than -10°C								Performance Varies Based on Application
	-10°C to 0°C								
	0°C to 10°C	●	INSULGOLD						
	10°C to 20°C								
	20°C to 30°C		INSULPLATINUM						
15°C Lower Limit 25°C Upper Limit  Ambient	less than -10°C								Performance Varies Based on Application
	-10°C to 0°C		INSULPLATINUM						
	0°C to 10°C								
	10°C to 20°C								
	20°C to 30°C	●	INSULGOLD						
2°C Lower Limit 30°C Upper Limit	less than -10°C								Performance Varies Based on Application
	-10°C to 0°C								
	0°C to 10°C								
	10°C to 20°C	●	INSULGOLD						
	20°C to 30°C								
2°C Lower Limit 40°C Upper Limit	less than -10°C								Performance Varies Based on Application
	-10°C to 0°C								
	0°C to 10°C								
	10°C to 20°C	●	INSULGOLD						
	20°C to 30°C								

LEGEND	
Only InsulPlatinum® thermal barrier is suitable for high risk applications. InsulPlatinum® offers maximum thermal protection to high value goods.	Either InsulGold® or InsulPlatinum® thermal barrier is suitable for application. InsulGold® offers cost sensitive high level thermal protection to high value goods.
INSULPLATINUM	INSULGOLD

BACKGROUND INFORMATION ON APPLICATION ON MATERIAL SELECTION

UNDERSTANDING THE SCENARIO AND CONDITIONS

An InsulCap® thermal pallet cover contains a unit load in transport.
 Palletised load sizing is typically L 1000+ x W 1000+ x H 1200+ mm.
 An InsulCap® provides a passive insulation solution for the palletised load.
 Goods must start within the required temperature range prior to transport.
Passive insulation delays the thermal affect of external ambient temperatures.

ESTIMATES OF PERFORMANCE MEASURES

Application Table is based on indicative performance of thermal barrier under stress.
 Reference data is collected by data loggers under laboratory and actual conditions.
 Laboratory testing utilised 15ml vials of placebo to test temperature profiles.
 ● The red spot on the table references a start temperature of 5°C or 20°C.
Table is only an indicator of recommended application and material selection.

RISKS OF MATERIAL SELECTION AND THERMAL PERFORMANCE

The external temperatures which goods are exposed to are often unpredictable.
 This table is only an indication of typical thermal barrier performance.
 Information provided is indicative of previous successful application.
 Each thermal application has unique requirements which must be managed.
 Solution performance will vary based on the unique thermal mass of the custom load.
All thermal barrier solutions must be trialed and validated for application prior to use.