SUMMARY

SONY -- KODA

RESULTS: KW (Power) USAGE INSIDE A SPECIFIC BUILDING

MAY		JUNE
1994	3767KW	5647 KW Before SUPER THERM
1995	519 KW	1869 KW After SUPER THERM applied
		SAVINGS 3248 KW - 3778 KW

2. HITACHI ELECTRIC

RESULTS: TEMPERATURE RECORDED ON UNDERSIDE OF ROOFING

UNCOATED:	82C
COATED WITH SUPER THERM:	47C
REDUCTION OF HEAT:	35C/63F

3. SEKISUT

RESULTS: REDUCING ROOM TEMPERATURE

AMBIENT TEMPERATURE:	33C
ROOM TEMPERATURE:	43C
ROOM TEMPERATURE after applying SUPER THERM:	31 C
REDUCTION OF ROOM TEMPERATURE:	12C/22F

4. YOKOHAMA TIRE-RUBBER

RESULTS: REDUCED ROOM TEMPERATURE

UNCOATED:	47C
COATED WITH SUPER THERM:	28C
REDUCTION TN ROOM TEMPERATURE.	19C/34F

5. KIRIN BREWERY (Fukuoka) 52% share of beer business in Japan

RESULTS: REDUCED ROOM TEMPERATURE

UNCOATED:	63C
COATED WITH SUPER THERM:	48C
REDUCTION IN ROOM TEMIPERATURE:	15C/27F

6. MITSUBISHI MATERIAL

RESULTS: REDUCED METAL SURFACE TEMPERATURE

UNCOATED:	54C
COATED WITH SUPER THERM.	28C
REDUCTION IN SURFACE TEMPERATURE:	26C/47F

7. SUMITOMO LIGHT METAL INDUSTRY

RESULTS: REDUCED ROOM TEMPERATURE

UNCOATED:	52C
ROOF COATED WITH SUPER THERM:	35C
REDUCTION IN ROOM TEMPERATURE:	17C/31F

8. PANASONIC - MATSUSHITA ELECTRIC

RESULTS: SURFACE TEMPERATURE ROOF:

UNCOATED SURFACE:	70C
SUPER THERM COATED SURFACE:	46C
REDUCTION IN SURFACE TEMPERATURE:	24C/43F

RESULTS: UNDERNEATH SIDE OF ROOF SURFACE

UNCOATED SURFACE:	59C
SUPER THERM COATED SURFACE:	43C
REDUCTION IN UNDERSIDE TEMPERATURE:	16C/29F
AMBIENT TEMPERATURE:	39C/70F

TESTING PERFORMED IN CONJUNCTION WITH:
DAIKO SHOKAI CO., LTD. (largest roofing/paint construction company in Japan)

ENERGY REPORT - USING OMEGA 05-652 ENERGY METER (BTU GUN)
Date: June 30, 1998 Time/Location: Pelham, Alabama -12 noon; lltomewoo4, Alabama-1:PM

The measurements taken make a comparison of the amount of heat transfer (BTU) that is taking place in the roof area (attic), walls and coolers that face the outside sun all day or are located under the roof

The following study was based upon two (2) different roof systems:

(A) Jacks Family Restaurant - H6mewood
Roof- 3,000 sq.ft.
Black rubber membrane
Cooler Roof Area - 162 sq.ft.
Cooler Wall Area- 360 sq.ft.

(B) Jacks Family Restaurant - Pelham
Roof- 3,000 sq.ft.
SuperBase, SuperTherm & Enamo Grip
Cooler Roof Area - 162 sq.ft.
Cooler Wall Area- 360 sq.ft.

BTU DATA (B)

Jacks Family Restaurant - Homewood
Ambient Temperature - 95F
Outside Air Temperature on Roof- 120F
Surface Temperature of Roof- 152F
Attic Temperature - 102F
Inside Kitchen Area Temperature - 85F

Jacks Family Restaurant - Pelham
Ambient Temperature - 95F
Outside Air Temperature on Roof- 105F
Surface Temperature of Roof- l01F
Attic Temperature - 80F
Inside Kitchen Area Temperature - 75F

BTUs per square foot I per hour

attic- 174	**attic-159**
wall- 148	**wall- 137**
cooler exposed to outside wall - 123	**cooler exposed to outside wall -94**
cooler exposed to roof- 121	**cooler exposed to roof- 84**

CALCULATIONS - ROOF*

Difference: 174 -159 = 15 BTU/sq.ft/hour x 3,000 sq.ft. = 45,000 BTU/sq.ft./hour
Convert to Kilowatts: 45,000 xO.000293 = 13.2 kilowatts
Electricity cost: $0.067 981KW/HR (Alabama Power); $0.063 7 (B.C. Hydro)
Roofs estimated to exposed to heat by radiation for 6 hours each day and HVAC is approximately 30% efficient (MAX.) at reducing temperature
Calculation: (13.2KW) x ($0.06798) x (6 his/day) /30% = $17.95 US Dollars per day x 30 days
Equals 538.50 US Dollars PER MONTH SAVINGS

CALCULATIONS - COOLERS*

Difference Roof	**121-84 = 37 BTU/sq.ft./hour x 162 sq.ft. 5,994 BTU/sq.ft/hour**
Difference Wall	**123-94 = 29 BTU/sq.ft /hour x 360 sq.ft = 10,440 BTU/sq.ft/hour**
Total Difference:	**5,994 + 10,440 = 16,434 BTU/sq.ft/hour x 0.000293 =4.82KW**
Calculation:	**(4.82KW) x ($0.06798) x (6 hrs/day) / 30% = $6.55 USD per day x 30 days = $196.59 US Dollars PER MONTH SAVINGS**

R-VALUE USING BTU GUN

(A) Temperature difference inside & out + 30F
Net heat flow (BTU/sq.ft/hour) = 6 Pt. Duff.
Reading Difference = 10
Result: Less than R8

(B) Temperature difference inside & out +30F
Net heat flow (BTU/sq.ft/hour) = 3 Pt. Duff
Reading Difference =44
Result: R17 - R18

NOTE: Calculations are based on lab studies by Purdue University and V-Tech Labs

PERIMETER

INDUSTRIES, INC.

230 OXMOOR CIRCLE, SUITE 1113 BIRMINGHAM, ALABAMA 35209

Project: Wal-Mart
Location: Sanger, TX
Date: April 15th, 2001
Contractor: Hanson-Rice
Sub-Contractor: Perimeter Industries, Inc.

Temperature Readings & Measuring Heat Flow (BTU) BTU's were measured with the Omega 05652 Energy Meter
Temperatures were measured using the Omega 05520 Hand-held Infrared thermometer

Temperature Reading #1

Maintenance Shop Roof: SUPERTHERM & Enamo Grip
Time of Reading: 11:00 A.M.
Ambient Temperature: 74 degrees F
Conditions: Sunny

The underside of the roof was measured on the second floor of the maintenance office. A step ladder was used to reach the area beyond the drop ceiling.

Underside Temperature Reading: 73 degrees F
BTU Reading: 138 BTU's/Square Foot! Per Hour
(*20 degrees F better than competition)

Pump Room: LOW-E
(This building adjoins the Maintenance Shop Building)
Time of Reading: 11:00 AM
Ambient Temperature: 74 degrees F
Conditions: Sunny
Underside Temperature Reading: 93 degrees F
BTU Reading: 154 BTUs/Square Foot/Per Hour

Temperature Reading #2

Maintenance Shop Roof: SUPERTHERM & Enamo Grip
Time of Reading: 1:30 PM
Ambient Temperature: 78 degrees F
Conditions: Sunny
Underside Temperature Reading: 73 degrees F
BTU Reading: 143 BTU's/Square Foot/Per Hour
*25 degrees F better than competitions and 35 degrees F better than the non-coated metal roof

Pump Room: LOW-E
Time of Reading: 1:30 PM
Ambient Temperature: 78 degrees F
Conditions: Sunny
Underside Temperature Reading: 98 degrees F
BTU Reading: 172 BTUs/Square Foot/Per Hour

Non-insulated Awning: Metal Roof "Non-Coated"

Time of Reading: 1:30 PM
Ambient Temperature: 78 degrees F
Conditions: Sunny
Underside Temperature Reading: "108 degrees F"
BTU Reading: "179 BTU's/Square Foot/Per Hour"