PRODUCT DATA SHEET ENERGY "Q"TM REFLECTIVE INSULATION

ENERGY "O"TM EXCEL

PRODUCT: Five layers laminate made up of two layers of 99% pure aluminum foil bonded by film to reinforced high density polyethylene

woven fabric.

WEIGHT: 31.8 lb m/sf FLAME SPREAD: 25*

SMOKE DEVELOPMENT: 35*

TENSILE STRENGTH:

Machine Direction: 73 psi

THICKNESS: 1.4 mil

CONTACT TEMPERATURE RANGE: -60 to 180 degrees F THERMAL PROPERTIES:

Emisivity 0.03%** Reflectivity 0.97**

(Reflects 0.97% of Infrared Energy)

FIRE RATING: Class A / Class 1 WATER VAPOR TRANSMISSION:

Perforated: 2.84 (gr/ft²·h·(in.hg)) Solid: Impermeable 0.001

PUNCTURE RESISTANCE: 52 lbs. / sq. ft.

ENERGY "Q"TM DOUBLE BUBBLE

PRODUCT: Two layers heavy duty polyethylene bubble film sandwiched between two layers of 99% pure aluminum.

THICKNESS: 5/16" Nominal

WATER VAPOR TRANSMISSION: 0.02 PUNCTURE RESISTANCE: 66 lbs./psi

WEIGHT: 1-1/4 oz./sq. ft. **FLAME SPREAD: 20***

SMOKE DEVELOPMENT: 30* CONTACT TEMPERATURE RANGE: -60 to 180 degrees F THERMAL PROPERTIES:

Emisivity 0.03%** Reflectivity 0.97**

(Reflects 0.97% of Infrared Energy)

FIRE RATING: Class A / Class 1 LINEAR SHRINKAGE: None

HUD/FHA PROJECTS: Meets HHI-1252B

CALIFORNIA LICENSE: TF1213

CALIFORNIA REGISTRY: CAT213 (NJ)

THERMAL VALUE CHART FOR ENERGY "O"TM DOUBLE BUBBLE

DOUBLE BUBBLE	UP	DOWN	HORIZONTAL
R-VALUE	5.4	15	7.31
U-VALUE	0.139	0.082	0.119

These values are obtained in a C-236 Hot Box test and represents the R-value of the cavity that includes the surrounding air spaces. The measurements were made in a nominal 2" x 4" cavity.

Energy "Q"TM products are clean, lightweight, non-toxic and unaffected by changes in humidity. Does not shrink and once installed require no maintenance. Energy "Q"TM installs easily in either existing or new construction, requiring no special tools or protective clothing. It can reduce heating and cooling cost and it's appropriate for wide range of applications. Energy "Q"TM meets California Quality Standards.

^{*}United States Testing Company, Inc. ASTM E-84-84, UBC Class 1 / NFPA 255 /UBC 42-1

^{**}ASTM C 1371, ASTM D 828, ASTM D 4833