# KISB · BUBBLE FOIL

Lamination of bubble pack with reflective insulation material. Insulation material either is **PURE ALUMINIUM FOIL** (>98% reflectivity) or **ALUMINIUM FILM** / **MPET / METALIZED FOIL** (<65% reflectivity).

Lamination with **Polyethylene (PE)** layer comes with SUPERIOR moisture and vapor barrier properties. It improved the product flexibility, impermeable to moisture and vapor even when is creased.

	UV light transmittance	Moisture penetration
Aluminium Foil, 7µ	0 %	0 g/m².day
Metalized PET, 12μ	5 %	0.8 g/m².day
PE Transparent, 20μ	95 %	3.7 g/m <sup>2</sup> .day
PE Opaque, 20μ	30 %	3.7 g/m <sup>2</sup> .day
PET Film, 13μ	91 %	31 g/m <sup>2</sup> .day
PVC Film, 250μ	-	3.0 g/m <sup>2</sup> .day
ΡΡ, 300μ	-	0.2 g/m².day

(Data sourced from internet)

# **Product Features:**

- ✓ Waterproof, no fungal, mold or bacterial growth
- ✓ High R value, can reflect up to 97% of solar radiation heat
- ✓ Save energy, protect the environment, reflect solar radiation heat.
- ✓ Helps prevent condensation problems
- ✓ Eco friendly, no crumbling or itchy material used
- ✓ Non-Toxic / Non-carcinogenic.
- ✓ Light weight, ease for transportation and during installation
- ✓ Widely used for thermal insulation of roofs, walls and floors
- ✓ Reduce handling, storage and transportation costs.

# Fire Retardant (FR)

Bubble Foil / Foil (FR)
Bubble Foil / Film (FR)

# Double-Sided (D/S)

Bubble Foil / Foil Bubble Foil / Film Bubble Film / Film

# Single-Sided (S/S)

Bubble Foil Bubble Film

### **British Standard**

BS 476 **Part 6** - Fire Propagation BS 476 **Part 7** - Surface Spread of Flame

(Class 1) BS 476 Part 7 (Class 0) BS 476 Part 6 & 7

Testing Body: SIRIM | PSB TUV SINGAPORE

Certification: SIRIM | PSB TUV SINGAPORE | BOMBA

### Malaysia Standard 2095

BS 476 **Part 6** - Fire Propagation BS 476 **Part 7** - Surface Spread of Flame

(Class 0) BS 476 Part 6 & 7

Testing Body: SIRIM | PSB TUV SINGAPORE Certification: SIRIM | BOMBA | CIDB

SARKING MEMBRANE | VAPOR BARRIER | HEAT INSULATION | ENERGY EFFICIENCY
COST EFFECTIVE | LOW MAINTENANCE FEE | DURABLE | ECO FRIENDLY
LIGHT IN WEIGHT | EASY INSTALLATION | TRANSPORTABILITY

# KISB · BUBBLE FOIL · DOUBLE SIDED

Double lamination of reflective insulation material on both side of the transparent air bubble packed.

BUBBLE FOIL / FOIL : >98% reflectivity --> Pure Aluminium Foil >98% reflectivity --> Pure Aluminium Foil

**BUBBLE FOIL / FILM**: >98% reflectivity --> Pure Aluminium Foil

K796 <65% reflectivity --> Aluminium Film / MPET / Metalized Foil

**BUBBLE FILM / FILM**: <65% reflectivity --> Aluminium Film / MPET / Metalized Foil <65% reflectivity --> Aluminium Film / MPET / Metalized Foil

# **Application (E.g.):**

- Commodity insulation

Protecting heat sensitive goods (pallet / box / IBC / etc) from heat loss or heat penetration during transit.

Protecting moisture sensitive goods (pallet / box / IBC / etc) from rain, act as a water vapor barrier layer.

- Attic thermal insulation

Prohibit unwanted heat from entering the house by installing foil bubbles in the attic.

- Wall insulation

Installation of aluminum foil bubble products on the wall ensures indoor comfort and efficient use of energy.

- Roof insulation

Unaffected by moisture and humidity. The aluminum foil with a purity of 99% on the surface of the polyethylene bubble reflects 95% of the heat, effectively preventing the spread of radiant heat.

- Concrete steel structure and floor insulation
Aluminum foil bubbles can protect the steel structure from corrosion by other substances.

Brand	Product Code	Product Description	
	K790	Double Sided Reflective Vapour Barrier Aluminium Bubble Foil (5 layers)	
	K796	Double Sided Reflective Vapour Barrier Aluminium Bubble Foil / Film (5 layers)	
701	K690	Double Sided Reflective Vapour Barrier Metalized Bubble Film (5 layers)	





# **KISB** • **K796**

# DOUBLE SIDED REFLECTIVE ALUMINIUM BUBBLE FOIL / FILM

- Double Sided 5 Layers Aluminium Bubble Foil / Film.
- 99% Pure Aluminium with high reflectivity (>0.97) and low emissivity (<0.03) surface.
- Metalized Film for water vapor resistant.
- Bubble thickness to cushion for external force (Industry packaging).
- Bubble packed assist for heat resistant in term of conduction & convection (Building insulation).

#### SIZE AVAILABILITY

Customise size are available upon request within machine limits.

Width(m)	Length(m)	Optimum packing	
1.20 ± 1%	40 ± 1%	8 Rolls / Pallet 280 Rolls / 40ft	
1.20 ± 1%	50 ± 1%	6 Rolls / Pallet 270 Rolls / 40ft	









#### TECHNICAL DATA

PROPERTIES	DATA
BUBBLE THICKNESS	4 mm (+/- 0.2)
BUBBLE RADIUS	10 mm
BUBBLE COLOR	Transparent
GRAMMAGE	200 - 210 gsm
THICKNESS	3.5 – 4.0 micron
TENSILE STRENGTH (MPa)	MD: 13 – 14 XD: 14 – 15
CORROSION / DELAMIANTION 95% RH @ 50 °c, 30 days	None
Delamination	
PERMEABILITY / WVTR (ASTM E96-80)	Max 0.01 g/h/m <sup>2</sup>
TEAR RESISTANT	Excellent
VAPOR BARRIER	Excellent
WATER RESISTANT	No Lamination

Technical information provided in this data sheet are typical laboratory averages and are used subject to variation. While the information is believed to be reliable and correct. No guarantee or warranty (expressed or implied) can be made regarding specific applications or patent rights. Product specifications are subject to change without prior notice.

# K INNOVATION SDN BHD

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