

TAC-810

Single-sided aluminium foil reinforced with polyester yarn

TAC-810 is a four (4) layer fire retardant single-sided radiant barrier. It is an excellent thermal insulation foil either used on its own or laminated onto other insulation materials. It has superior radiant heat reflective properties by reflecting ~95% of radiant heat.

TAC-810 is an environmental friendly green product recognised through Green Building Index (GBI) by MGBC.

TAC-810 is a lamination of pure aluminium foil and high quality kraft paper reinforced with polyester yarn. The property of pure aluminium enhances the reflective index. The polyester yarn and high quality kraft paper increases its tensile strength.

TAC-810 is lightweight, heavy duty in performance and does an excellent job at providing thermal insulation.

APPLICATIONS

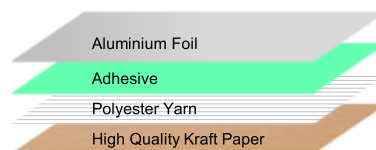
- As a radiant barrier under all types of roof coverings in commercial, industrial and residential building.
- Can be used simultaneously with mineral wool in the form of felts, lamella mats, plain slabs, facing to ceiling boards and duct insulation for air-conditioning.



FRONT



BACK



SPECIFICATION		STANDARD	UNIT	RANGE
Grammage		Electronic scale	GSM	100 - 110
Thickness		Digital caliper	micron	140 - 170
Water Vapor Transmission		ASTM E96	g/m ² /day	-
Water Barrier		ASTM F 1249-06	g/m ² /day	21.6 - 22.9
Reflectivity / Emissivity		Supplier's Specification	%	95% / 5%
Tensile Strength	Machine direction	ASTM D882 - 02	N/25mm	130 - 150
	Cross direction	ASTM D882 - 02	N/25mm	50 - 70
Elongation	Machine direction	ASTM D882 - 02	%	2 - 3
	Cross direction	ASTM D882 - 02	%	1.5 - 2.5
Tear Strength	Machine direction	ASTM D1004	N	9 - 12
	Cross direction	ASTM D1004	N	20 - 24
Puncture Resistance		ASTM F 1306 - 90	N	9 - 11
Classification of Fire Hazard		BS 476	Class	-

* Technical information provided represents average result of tests conducted under standard procedure and is subject to variation.

* No guarantee can be made regarding specific applications or patent rights.

Revision 1

TAC-828FR CLASS 'O'



DESCRIPTION

Fire retardant double-sided aluminium foil / film reinforced with polyester yarn

TAC-828FR CLASS 'O' is a premium six (6) layer fire retardant double-sided radiant barrier, lamination with pure aluminium foil and aluminium film on high quality kraft paper reinforced with polyester yarn.

TAC-828FR CLASS 'O' is classified as fire retardant foil. It is lightweight, light tensile strength and does an excellent job at providing thermal insulation for roofing systems.

FIRE PROPERTY

TAC-828FR CLASS 'O' is classified as **CLASS 'O'** in accordance to fire tests on building material and structures.

- British Standard, BS 476-6: Fire Propagation
- British Standard, BS 476-7: Surface spread of flame

AWARD

- Malaysian Standard, MS 2095:2014
- Jabatan Bomba Dan Penyelamat Malaysia
- SIRIM
- CIDB (Perakuan Pematuhan Standard (PPS))

THERMAL PROPERTY

TAC-828FR CLASS 'O' is tested in accordance to **ISO 8301 / MS ISO 8302**.

- Thermal resistance, R-value: 1.045 m²K/W
- Thermal transmittance, U-value: 0.957 W/m²K
- Thermal conductivity, K-value: 0.096 W/mK

BQ SPECIFICATION

To supply and install **TAC-FOIL TAC-828FR CLASS 'O'** under **MS2095:2014** and **CIDB** certified double-sided aluminium foil/film as described.

Go GREEN

- Environmental friendly green product recognized through
- Green Building Index (GBI) by MGBC

APPLICATION

- As a radiant barrier under all types of roof coverings in commercial, industrial and residential building.
- Its inflammable materials meet the requirement for pipe work and ducting insulation such as air-conditioning, petro-pipe, steam pipe and others.

INSTALLATION GUIDELINE

- Users are advised to install this product by an air space of at least 2" (5.0 cm) below the roof to maximize the effectiveness of this product.
- Recommended to use with bulk insulation in the form of felts, lamella mats and plain slab.

TAC-FOIL, TAC-828FR CLASS 'O' (MS 2095 : 2014)

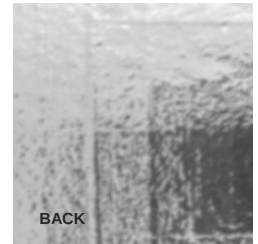
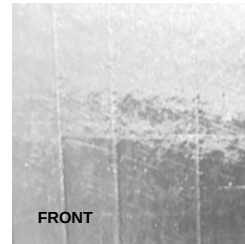
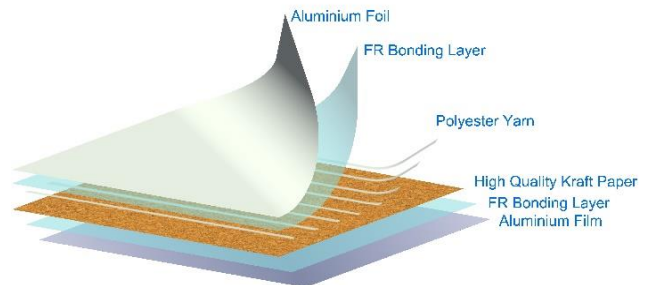
Reflectivity / Emissivity	ASTM C1371	≥ 95% / ≤ 5%	
Tensile Strength (MD)	AS/NZ 1301.448s	≥ 7.5 kN/m	Light
Tensile Strength (CD)	AS/NZ 1301.448s	≥ 4.5 kN/m	Light
Edge Tear Resistance (MD)	TAPPI T470	≥ 90 N	Extra Heavy
Edge Tear Resistance (CD)	TAPPI T470	≥ 90 N	Extra Heavy
Vapor Barrier (WVTR)	ASTM E96	>7, < 450 MN.s/g	Medium
Surface Water Absorbency	AS/NZS 4201.6	≥ 100 g/m ²	High
Resistance to Dry Delamination	AS/NZS 4201.1	No Delamination	Passed
Resistance to Wet Delamination	AS/NZS 4201.2	No Delamination	Passed
Shrinkage	AS/NZS 4201.3	< 0.5 %	Passed
Folding Endurance	AS/NZS 1301.423rp	MD >2.0 log 100 CD >1.7 log 50	Passed
Grammage	Electronic scale	105 - 180 GSM	
Thickness	Digital caliper	≤ 0.5 mm	

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Standard Size: 1.24m (Width) X 50m (Length)

TAC-828FR Class 'O'



FOIL LAMINATE INDUSTRIES SDN BHD (343587-X)

Factory / HQ: 1139, Lorong Perindustrian Bukit Minyak 11, Taman Perindustrian Bukit Minyak, 14100 Simpang Ampat, Penang, Malaysia.

Tel: 604-5011999

Fax: 604-5011991

Email: ask@foil-laminate.com

Branch Office: 11 (1st Floor), Jalan PJS 9/5, Bandar Sunway, 46150 Petaling Jaya, Selangor, Malaysia

Tel: 603-56214868

Fax: 603-56214878

Email: ask@foil-laminate.com



TAC-880BS



DESCRIPTION

Fire retardant double-sided aluminium foil reinforced with glass fibre scrim

TAC-880BS is a premium six (6) layer fire retardant double-sided radiant barrier, lamination of both sides pure aluminium foil and high quality kraft paper reinforced with glass fibre scrim. It is a superior FM Approved product.

TAC-880BS is almost inflammable properties can either be used on its own or laminated onto other insulation materials. It is lightweight, light tensile strength and does an excellent job at providing thermal insulation for roofing systems.

FIRE PROPERTY

TAC-880BS is classified as **CLASS 'O'** in accordance to fire tests on building material and structures.

- British Standard, BS 476-6: Fire Propagation for products
- British Standard, BS 476-7: Surface spread of flame test

AWARD

- Malaysian Standard, MS 2095:2014
- TUV SUD PSB Singapore
- Jabatan Bomba Dan Penyelamat Malaysia
- SIRIM
- CIDB (Perakuan Pematuhan Standard (PPS))

THERMAL PROPERTY

TAC-880BS is tested in accordance to ISO 8301 / MS ISO 8302.

- Thermal resistance, R-value: 1.756 m²K/W
- Thermal transmittance, U-value: 0.569 W/m²K
- Thermal conductivity, K-value: 0.057 W/mK

BQ SPECIFICATION

To supply and install TAC-FOIL TAC-880BS under MS2095:2014 and CIDB certified double-sided aluminium foil as described.

Go GREEN

- Environmental friendly green product recognized through
- Green Building Index (GBI) by MGB

APPLICATION

- As a radiant barrier under all types of roof coverings in commercial, industrial and residential building.
- Its inflammable materials meet the requirement for pipe work and ducting insulation such as air-conditioning, petro-pipe, steam pipe and others.

INSTALLATION GUIDELINE

- Users are advised to install this product by an air space of at least 2" (5.0 cm) below the roof to maximize the effectiveness of this product.
- Recommended to use with bulk insulation in the form of felts, lamella mats and plain slab.

TAC-FOIL, TAC-880BS (MS 2095 : 2014)

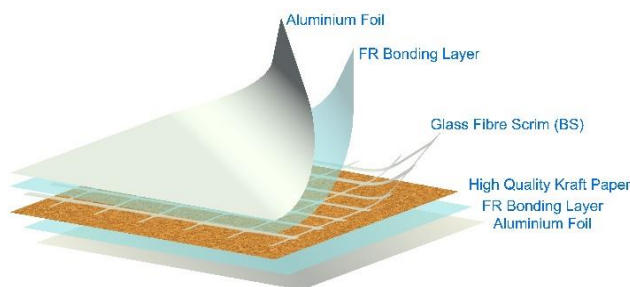
Reflectivity / Emissivity	ASTM C1371	≥ 95 % / ≤ 5 %	
Tensile Strength (MD)	AS/NZ 1301.448s	≥ 7.5 kN/m	Light
Tensile Strength (CD)	AS/NZ 1301.448s	≥ 4.5 kN/m	Light
Edge Tear Resistance (MD)	TAPPI T470	≥ 30 N	Extra Light
Edge Tear Resistance (CD)	TAPPI T470	≥ 30 N	Extra Light
Vapor Barrier (WVTR)	ASTM E96	>7, < 450 MN.s/g	Medium
Surface Water Absorbency	AS/NZS 4201.6	≥ 100 g/m ²	High
Resistance to Dry Delamination	AS/NZS 4201.1	No Delamination	Passed
Resistance to Wet Delamination	AS/NZS 4201.2	No Delamination	Passed
Shrinkage	AS/NZS 4201.3	< 0.5 %	Passed
Folding Endurance	AS/NZS 1301.423rp	MD >2.0 log 100 CD >1.7 log 50	Passed
Grammage	Electronic scale	115 - 190 GSM	
Thickness	Digital caliper	≤ 0.5 mm	

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Standard Size: 1.24m (Width) X 50m (Length)

TAC-880BS



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TAC-999BS CLASS O

Self-supporting fire retardant double-sided aluminium foil / film reinforced with fibreglass scrim

TAC-999BS CLASS O is a six (6) layer self-supporting fire retardant double-sided radiant barrier. It is designed with good fire retardant performance and tensile strength which eliminates the usage and extra cost of wire mesh. It has superior radiant heat reflective properties by reflecting $\geq 95\%$ radiant heat. **TAC-999BS CLASS O** is a TUV certified product under certificate of conformity (COC) in accordance to British Standard (BS) 476 Part 6 and Part 7 for Fire Safety Hazards Requirement.

TAC-999BS CLASS O is lamination of aluminium foil, aluminium film and high quality kraft paper with fibreglass scrim. The property of pure aluminium enhance the reflective index, good on fire retardancy while the aluminium film acts as a vapor barrier, improvising on tear and puncture resistance. Fibreglass scrim, a product of fibreglass filament provides fire retardancy and greater supporting on tensile strength. It is flexible and lightweight make installation become easy.

Applications

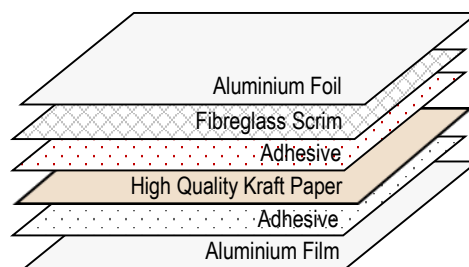
- As radiant barrier under all types of roof coverings in commercial, industrial and residential building
- No wire netting is required for support



Front



Back



SPECIFICATION	STANDARD	UNIT	RANGE
Grammage	Electronic Scale	GSM	160 - 200
Thickness	Digital Caliper	micron	200 - 250
Water Vapor Transmission (WVTR)	ASTM F1249-06	g/m ² /day	1.1 - 1.2
Reflectivity / Emissivity	Supplier specification	%	$\geq 95\%$ / 5%
Tensile Strength			
Machine Direction	ASTM D882	N/25mm	180 - 230
Cross Direction	ASTM D882	N/25mm	110 - 150
Elongation			
Machine Direction	ASTM D882	%	85 - 95
Cross Direction	ASTM D882	%	90 - 100
Tear Strength			
Machine Direction	ASTM D1004	N	20 - 30
Cross Direction	ASTM D1004	N	35 - 45
Puncture Resistance	ASTM F1306	N	70 - 75
Classification of Fire Hazard	BS 476 Part 6 & Part 7	Class	O

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