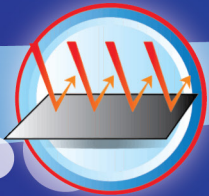


# SUN-FOIL®

## Bubble Series

New and Improved Version

Certified by CIDB



Excellent Reflectivity  
(97% on both surface)



Chicken Wire Mesh  
(Not Required)



Edge Tear Resistance  
(Resulting in Low Wastage)



Moist Barrier  
Non-Delamination  
(When Soak In Water)



Easy Installation  
(Cost Effective)



Noise Reduction

## SB250-FR

### Product Description

SUN-FOIL® SB250-FR is used as insulation against radiant heat transfer and can be used to its greatest advantage in instances where radiation is the predominant means of heat transfer.

SUN-FOIL® SB250-FR is an excellent reflector of all long wave radiant heat that strikes it - **DOUBLE SIDED REFLECTIVE OF UP TO 97%** of all radiant heat.

### Fire Attributes

SB250-FR is classified as Class "O" in accordance to fire tests on building material and structures.

- British Standard, BS 476-6 : Fire Propagation Test
- British Standard, BS 476-7 : Surface Spread of Flame Test

### Thermal Properties

SB250-FR is tested in accordance to MS 2095, ISO 8301 / MS ISO 8302 for thermal resistance, R-value 1.890 m<sup>2</sup>K/w

### Awards & Certificates

- Malaysia Standard - MS 2095, SIRIM QAS International Sdn. Bhd.
- ISO 9001: 2015, Guardian Independent Certification
- Jabatan Bomba dan Penyelamat Malaysia
- CIDB Malaysia
- Malaysia Green Building Confederation (MGBC)
- Asian Reflective Foil Association (ARFA)



CIDB PPS REG. NO:  
1160504ML0121



# BUBBLE FOIL (Fire Retardant)

**SUN-FOIL® SB250-FR** is made by double sided high reflectivity pure aluminium bonded with a layer of 10mm FR polyethylene bubble sheet. It provides excellent insulation properties and effective radiant barrier.

**SUN-FOIL® SB250-FR** is designed light-weight. It is easy to install as it does not require mesh due to high tensile strength and edge tear resistance.

**SUN-FOIL® SB250-FR** is also flame retardant, waterproof, non-toxic, bacteria free, fungus and corrosion resistant.

## TECHNICAL DATA

| Description      | Test Method | Unit             | Value                          |
|------------------|-------------|------------------|--------------------------------|
| Grammage         | In House    | g/m <sup>2</sup> | 250 ± 10                       |
| Thickness        | In House    | mm               | 4 ± 0.2                        |
| Tensile Strength | In House    | N/50mm           | MD ≥ 200 ± 50<br>CD ≥ 200 ± 50 |
| Elongation       | In House    | %                | MD ≥ 70<br>CD ≥ 12             |

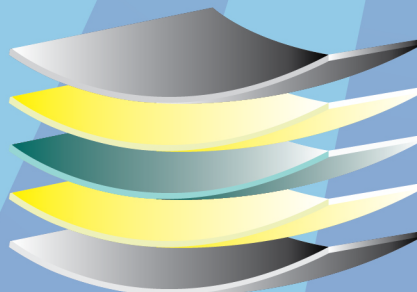
Technical Information provided represent average result of tests conducted under standard procedure and is subject to variation.  
No guarantee can be made regarding specific applications or patent rights.

## FIRE RETARDANT TEST FOR SB250-FR

| CHARACTERISTIC                                                                          | TEST METHOD     | SPECIFICATION                            |
|-----------------------------------------------------------------------------------------|-----------------|------------------------------------------|
| Fire Propagation of Material<br>Sub-Index, $i_1, i_2, i_3$<br>Overall Performance Index | BS 476 ; Part 6 | < 6<br>< 12<br>(Sirim Report 2015FE0512) |
| Surface Flame Spread Test                                                               | BS 476 ; Part 7 | Class 1<br>(Sirim Report 2015FE0513)     |
| Classification of Fire Hazard                                                           |                 | Class O                                  |

# SB250-FR

Standard Roll Size: W 1.20m x L 40m



- Pure Aluminium
- FR PE Tie Layer
- FR Bubble Sheet
- FR PE Tie Layer
- Pure Aluminium



## YH LAMINATED PRODUCTS SDN. BHD. (959828-V)

Main Office : Lot 2996, Jalan PK 6 , Kawasan Perindustrian Krubong, 75250 Melaka.  
Factory : Lot 2995, Jalan PK 11, Kawasan Perindustrian Krubong, 75250 Melaka.  
Plant 2 : Lot 3003, Jalan PK 12, Kawasan Perindustrian Krubong, 75250 Melaka.  
Plant 3 : Lot 8349, Jalan PK 8F, Kawasan Perindustrian Krubong, 75250 Melaka.  
Plant 4 : Lot 8352, Jalan PK 8E, Kawasan Perindustrian Krubong, 75250 Melaka.

Tel : +6 06-337 2170

Fax : +6 06-335 7199 (Admin) +6 06-335 7170 (Sales)

[www.yhlp.com.my](http://www.yhlp.com.my) [www.sunfoil.com.my](http://www.sunfoil.com.my)

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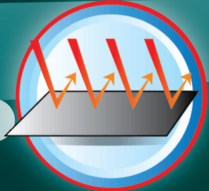


# SUN-FOIL®

## Bubble Series

*New and Improved Version*

*Certified by CIDB*



Excellent Reflectivity



Chicken Wire Mesh  
(Not Required)



Edge Tear Resistance  
(Resulting in Low Waste)



Moist Barrier  
Non-Delamination  
(When Soak In Water)



Easy Installation  
(Cost Effective)



Noise Reduction

## SB200-FR

### Product Description

SUN-FOIL® SB200-FR is used as insulation against radiant heat transfer and can be used to its greatest advantage in instances where radiation is the predominant means of heat transfer.

SUN-FOIL® SB200-FR is an excellent reflector of all long wave radiant heat that strikes it - **REFLECTIVE OF UP TO 98%** of all radiant heat.

### Fire Attributes

SB200-FR is classified as Class "O" in accordance to fire tests on building material and structures.

- British Standard, BS 476-6 : Fire Propagation Test
- British Standard, BS 476-7 : Surface Spread of Flame Test

### Thermal Properties

R-value, thermal resistance varies depending on the roof design and total roof configuration. Please contact our specialist for roof system that complying UBBL and Malaysia Standards.

### Awards & Certificates

- Malaysia Standard - MS 2095, SIRIM QAS International Sdn. Bhd.
- ISO 9001: 2015 & ISO 14001: 2015
- Jabatan Bomba dan Penyelamat Malaysia
- CIDB Malaysia
- Malaysia Green Building Confederation (MGBC)
- Asian Reflective Foil Association (ARFA)



CIDB PPS REG. NO:  
1160504/ML0121



CERTIFICATE NUMBER: JQS-23-0557, JES-23-0284



# BUBBLE FOIL (Fire Retardant)

**SUN-FOIL® SB200-FR** is double sided made by high reflectivity pure aluminium bonded with a layer of 10mm bubble diameter FR polyethylene bubble sheet and high quality reflective aluminium film by special FR bonding material. It provides excellent insulation properties and effective radiant barrier.

**SUN-FOIL® SB200-FR** is designed light-weight. It is easy to install as it does not require mesh due to high tensile strength and edge tear resistance.

**SUN-FOIL® SB200-FR** is also flame retardant, waterproof, non-toxic, bacteria free, fungus and corrosion resistant.

## TECHNICAL DATA

| Description      | Test Method      | Unit             | Value                            |
|------------------|------------------|------------------|----------------------------------|
| Grammage         | In House         | g/m <sup>2</sup> | 200 ± 10                         |
| Thickness        | In House         | mm               | 4.0 ± 1.0                        |
| Tensile Strength | AS/NZS 1301:448s | kN/m             | MD ≥ 3.0 ± 1.0<br>CD ≥ 3.0 ± 1.0 |
| Edge Tear        | TAPPI T470       | N                | MD ≥ 100 ± 20<br>CD ≥ 100 ± 20   |

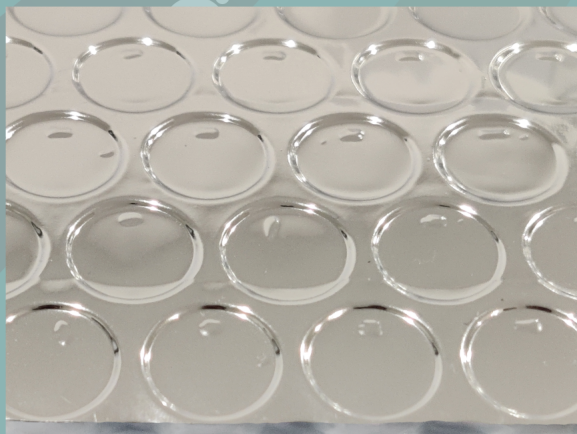
Technical Information provided represent average result of tests conducted under standard procedure and is subject to variation.  
No guarantee can be made regarding specific applications or patent rights.

## BQ SPECIFICATION

One layer of approved YH  
“SUNFOIL” SB200-FR (200g/m<sup>2</sup>)  
Double Sided Fire Retardant Bubble  
Foil fiberglass free with 4mm  
thickness and 10mm bubble  
diameter approved with MS 2095.

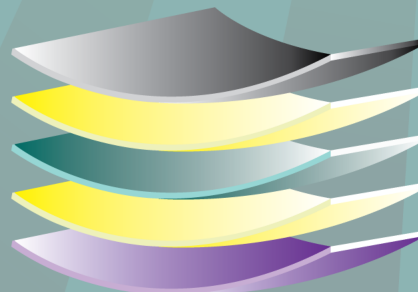
## FIRE RETARDANT TEST FOR SB200-FR

| CHARACTERISTIC                                                                                                           | TEST METHOD     | SPECIFICATION                            |
|--------------------------------------------------------------------------------------------------------------------------|-----------------|------------------------------------------|
| Fire Propagation of Material<br>Sub-Index, i <sub>1</sub> , i <sub>2</sub> , i <sub>3</sub><br>Overall Performance Index | BS 476 ; Part 6 | < 6<br>< 12<br>(Sirim Report 2018FE0657) |
| Surface Flame Spread Test                                                                                                | BS 476 ; Part 7 | Class 1<br>(Sirim Report 2018FE0656)     |
| Classification of Fire Hazard                                                                                            |                 | Class O                                  |



## SB200-FR

Standard Roll Size: W 1.20m x L 40m



- Pure Aluminium
- FR PE Tie Layer
- FR Bubble Sheet
- FR PE Tie Layer
- Aluminium Film



**YH LAMINATED PRODUCTS SDN. BHD.** (959828-V)

Main Office : Lot 2996, Jalan PK 6, Kawasan Perindustrian Krubong, 75250 Melaka.  
Sales Office : Lot 8352, Jalan PK 8E, Kawasan Perindustrian Krubong, 75250 Melaka.  
Factories : Lot 2995, Lot 8342, Lot 8343, Lot 8349, Lot 8350, Lot 8408, Kawasan Perindustrian Krubong, 75250 Melaka.

Sales Office Tel : +606-337 2170  
Fax (Sales) : +606-335 7170  
Fax (Finance) : +606-335 7199

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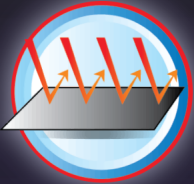




CIDB PPS REG. NO: 1160504ML0121

# SUN-FOIL®

*Premium Series*



Excellent Reflectivity  
(99% on both surface)



Chicken Wire Mesh  
(Not Required)  
Extra Heavy Duty  
Tensile Strength



Edge Tear Resistance  
(Extra Heavy Duty)



Moist Barrier  
Non-Delamination  
(When Soak In Water)



Easy Installation  
(Cost Effective)



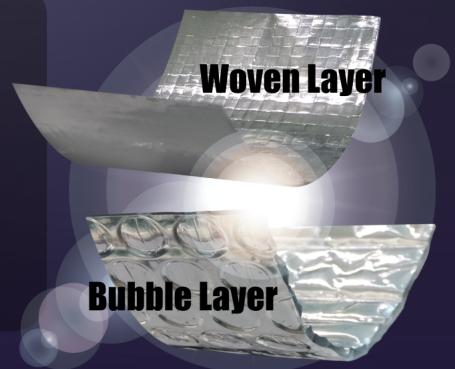
Noise Reduction

## SB250-FR+

### Product Description

SUN-FOIL® SB250-FR+ is used as insulation against radiant heat transfer and can be used to its greatest advantage in instances where radiation is the predominant means of heat transfer.

SUN-FOIL® SB250-FR+ is an excellent reflector of all long wave radiant heat that strikes it - **DOUBLE SIDED REFLECTIVE OF UP TO 99%** of all radiant heat.



### Fire Attributes

SB250-FR+ is classified as Class "O" in accordance to fire tests on building material and structures.

- i.) British Standard, BS 476-6 : Fire Propagation Test
- ii.) British Standard, BS 476-7 : Surface Spread of Flame Test

**IMPRESSIVE  
APPEARANCE**

### Thermal Properties

R-value, thermal resistance varies depending on the roof design and total roof configuration. Please contact our specialist for roof system that complying UBBL and Malaysia Standards.

### Awards & Certificates

- Malaysia Standard - MS 2095, SIRIM QAS International Sdn. Bhd.
- ISO 9001: 2015 & ISO 14001: 2015
- Jabatan Bomba dan Penyelamat Malaysia
- CIDB Malaysia
- Malaysia Green Building Confederation (MGBC)
- Asian Reflective Foil Association (ARFA)



**MAXIMIZE  
STRENGTH**



SIRIM  
ECO-LABEL



SIRIM  
MS 2095



BOMBA



ARFA



BUATAN  
MALAYSIA



malaysiaGBC



MyHP00220/22



CERTIFICATE NUMBER: JQS-23-0557, JES-23-0284



JAS-ANZ

**SUN-FOIL® SB250-FR+** is made by double sided high reflectivity pure aluminium bonded with a layer of 10mm bubble diameter FR polyethylene bubble sheet reinforced with a layer of FR HDPE woven fabric. It provides excellent insulation properties and effective radiant barrier.

**SUN-FOIL® SB250-FR+** is designed light-weight. It is easy to install as it does not require mesh due to extra high tensile strength and edge tear resistance.

**SUN-FOIL® SB250-FR+** is also flame retardant, waterproof, non-toxic, bacteria free, fungus and corrosion resistant.

TECHNICAL DATA

| Description      | Test Method      | Unit | Value                              |
|------------------|------------------|------|------------------------------------|
| Grammage         | In House         | g/m² | 300 ± 50                           |
| Thickness        | In House         | mm   | 4.0 ± 1.0                          |
| Tensile Strength | AS/NZS 1301:448s | kN/m | MD ≥ 10.0 ± 2.0<br>CD ≥ 10.0 ± 2.0 |
| Edge Tear        | TAPPI T470       | N    | MD ≥ 250 ± 50<br>CD ≥ 250 ± 50     |

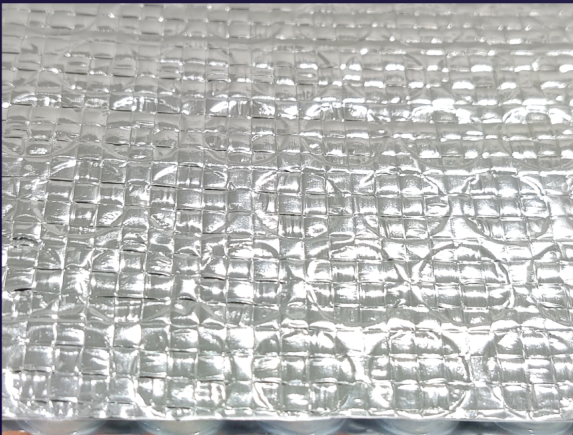
Technical Information provided represent average result of tests conducted under standard procedure and is subject to variation.  
No guarantee can be made regarding specific applications or patent rights.

BQ SPECIFICATION

One layer of approved YH “SUNFOIL” SB250-FR+ Plus (300g/m2) Double Sided Fire Retardant Pure Aluminium Bubble Foil with 4mm thickness and 10mm bubble diameter reinforced with a layer of 10 x 10 inch woven fabric approved with Sirim Eco Label (35-40% energy reduction) and MS 2095.

FIRE RETARDANT TEST FOR SB250-FR+

| CHARACTERISTIC                                                                       | TEST METHOD     | SPECIFICATION                            |
|--------------------------------------------------------------------------------------|-----------------|------------------------------------------|
| Fire Propagation of Material Sub-Index, $i_1, i_2, i_3$<br>Overall Performance Index | BS 476 ; Part 6 | < 6<br>< 12<br>(Sirim Report 2019FE0141) |
| Surface Flame Spread Test                                                            | BS 476 ; Part 7 | Class 1<br>(Sirim Report 2019FE0146)     |
| Classification of Fire Hazard                                                        |                 | Class O                                  |



**SB250-FR+** Standard Roll Size: W 1.20m x L 40m



- Pure Aluminium
- FR PE Tie Layer
- FR HDPE Woven Fabric
- FR PE Tie Layer
- FR Bubble Sheet
- FR PE Tie Layer
- Pure Aluminium



**YH LAMINATED PRODUCTS SDN. BHD.** (959828-V)

Main Office : Lot 2996, Jalan PK 6, Kawasan Perindustrian Krubong, 75250 Melaka.  
Sales Office : Lot 8352, Jalan PK 8E, Kawasan Perindustrian Krubong, 75250 Melaka.  
Factories : Lot 2995, Lot 8342, Lot 8343, Lot 8349, Lot 8350, Lot 8408, Kawasan Perindustrian Krubong, 75250 Melaka.

Sales Office Tel : +606-337 2170  
Fax (Sales) : +606-335 7170  
Fax (Finance) : +606-335 7199

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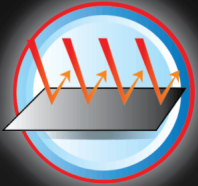


CIDB PPS REG. NO: 1160504ML0121

# SUN-FOIL®

*Premium Series*

## SB400-FR+



Excellent Reflectivity  
(99% on both surface)



Chicken Wire Mesh  
(Not Required)  
Extra Heavy Duty  
Tensile Strength



Edge Tear Resistance  
(Extra Heavy Duty)



Moist Barrier  
Non-Delamination  
(When Soak In Water)



Easy Installation  
(Cost Effective)

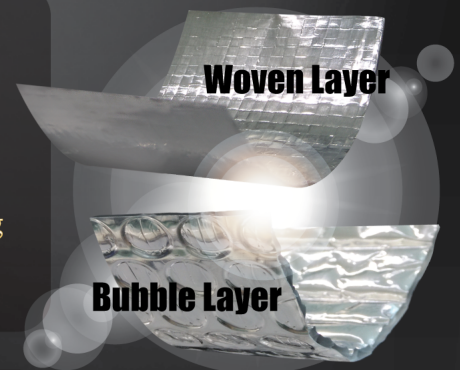


Noise Reduction

### Product Description

**SUN-FOIL® SB400-FR+** is used as insulation against radiant heat transfer and can be used to its greatest advantage in instances where radiation is the predominant means of heat transfer.

**SUN-FOIL® SB400-FR+** is an excellent reflector of all long wave radiant heat that strikes it - **DOUBLE SIDED REFLECTIVE OF UP TO 99%** of all radiant heat.



### Fire Attributes

SB400-FR+ is classified as Class "O" in accordance to fire tests on building material and structures.

- i.) British Standard, BS 476-6 : Fire Propagation Test
- ii.) British Standard, BS 476-7 : Surface Spread of Flame Test

### Thermal Properties

R-value, thermal resistance varies depending on the roof design and total roof configuration. Please contact our specialist for roof system that complying UBBL and Malaysia Standards.

### Awards & Certificates

- Malaysia Standard - MS 2095, SIRIM QAS International Sdn. Bhd.
- ISO 9001: 2015 & ISO 14001: 2015
- Jabatan Bomba dan Penyelamat Malaysia
- CIDB Malaysia
- Malaysia Green Building Confederation (MGBC)
- Asian Reflective Foil Association (ARFA)

## IMPRESSIVE APPEARANCE



## MAXIMIZE STRENGTH



MyHP00220/22

CERTIFICATE NUMBER: JQS-23-0557, JES-23-0284

**SUN-FOIL®SB400-FR+** is made by double sided high reflectivity pure aluminium bonded with a layer of 25mm bubble diameter FR polyethylene bubble sheet reinforced with a layer of FR HDPE woven fabric. It provides excellent insulation properties and effective radiant barrier.

**SUN-FOIL®SB400-FR+** is designed light-weight. It is easy to install as it does not require mesh due to extra high tensile strength and edge tear resistance.

**SUN-FOIL®SB400-FR+** is also flame retardant, waterproof, non-toxic, bacteria free, fungus and corrosion resistant.

TECHNICAL DATA

| Description      | Test Method     | Unit             | Value                              |
|------------------|-----------------|------------------|------------------------------------|
| Grammage         | In House        | g/m <sup>2</sup> | 380 ± 100                          |
| Thickness        | In House        | mm               | 9.0 ± 2.0                          |
| Tensile Strength | AS/NS 1301:448s | kN/m             | MD ≥ 10.0 ± 2.0<br>CD ≥ 10.0 ± 2.0 |
| Edge Tear        | TAPPI T470      | N                | MD ≥ 250 ± 50<br>CD ≥ 250 ± 50     |

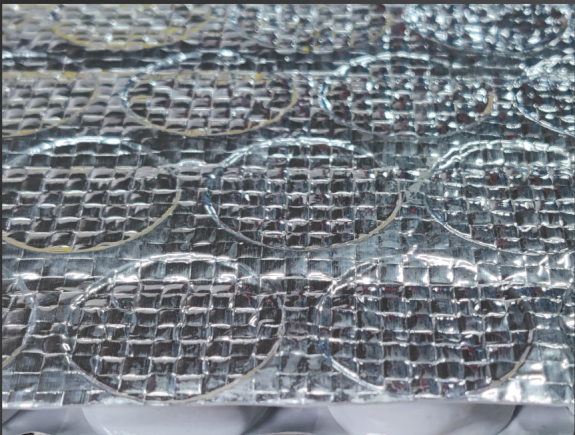
Technical Information provided represent average result of tests conducted under standard procedure and is subject to variation.  
No guarantee can be made regarding specific applications or patent rights.

BQ SPECIFICATION

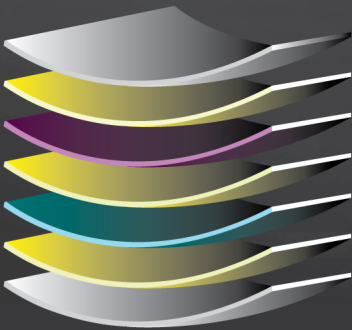
One layer of approved YH “SUNFOIL” SB400-FR+ Plus (380g/m2) Double Sided Fire Retardant Pure Aluminium Bubble Foil with 9mm thickness and 25mm bubble diameter reinforced with a layer of 10 x 10 inch woven fabric approved with Sirim Eco Label (35-40% energy reduction) and MS 2095.

FIRE RETARDANT TEST FOR SB400-FR+

| CHARACTERISTIC                                                                                                           | TEST METHOD     | SPECIFICATION                            |
|--------------------------------------------------------------------------------------------------------------------------|-----------------|------------------------------------------|
| Fire Propagation of Material<br>Sub-Index, i <sub>1</sub> , i <sub>2</sub> , i <sub>3</sub><br>Overall Performance Index | BS 476 ; Part 6 | < 6<br>< 12<br>(Sirim Report 2019FE0147) |
| Surface Flame Spread Test                                                                                                | BS 476 ; Part 7 | Class 1<br>(Sirim Report 2019FE0148)     |
| Classification of Fire Hazard                                                                                            |                 | Class O                                  |



**SB400-FR+** Standard Roll Size: W 1.20m x L 30m



- Pure Aluminium
- FR PE Tie Layer
- FR HDPE Woven Fabric
- FR PE Tie Layer
- FR Bubble Sheet
- FR PE Tie Layer
- Pure Aluminium



**YH LAMINATED PRODUCTS SDN. BHD.** (959828-V)

Main Office : Lot 2996, Jalan PK 6, Kawasan Perindustrian Krubong, 75250 Melaka.  
Sales Office : Lot 8352, Jalan PK 8E, Kawasan Perindustrian Krubong, 75250 Melaka.  
Factories : Lot 2995, Lot 8342, Lot 8343, Lot 8349, Lot 8350, Lot 8408, Kawasan Perindustrian Krubong, 75250 Melaka.

Sales Office Tel : +606-337 2170  
Fax (Sales) : +606-335 7170  
Fax (Finance) : +606-335 7199

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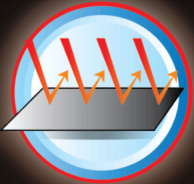


CIDB PPS REG. NO: 1160504ML0121

# SUN-FOIL®

Premium Series

## SN3-FR+



Excellent Reflectivity  
(99% on both surface)



Chicken Wire Mesh  
(Not Required)  
Extra Heavy Duty  
Tensile Strength



Edge Tear Resistance  
(Extra Heavy Duty)



Moist Barrier  
Non-Delamination  
(When Soak In Water)



Easy Installation  
(Cost Effective)



Noise Reduction

### Product Description

SUN-FOIL® SN3-FR+ is used as insulation against radiant heat transfer and can be used to its greatest advantage in instances where radiation is the predominant means of heat transfer.

SUN-FOIL® SN3-FR+ is an excellent reflector of all long wave radiant heat that strikes it - **DOUBLE SIDED REFLECTIVE OF UP TO 99%** of all radiant heat.

### Fire Attributes

SN3-FR+ is classified as Class "O" in accordance to fire tests on building material and structures.

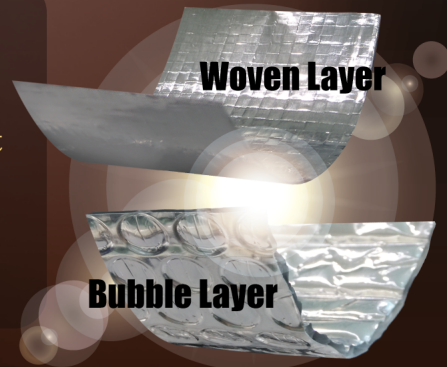
- i.) British Standard, BS 476-6 : Fire Propagation Test
- ii.) British Standard, BS 476-7 : Surface Spread of Flame Test

### Thermal Properties

R-value, thermal resistance varies depending on the roof design and total roof configuration. Please contact our specialist for roof system that complying UBBL and Malaysia Standards.

### Awards & Certificates

- Malaysia Standard - MS 2095, SIRIM QAS International Sdn. Bhd.
- ISO 9001: 2015 & ISO 14001: 2015
- Jabatan Bomba dan Penyelamat Malaysia
- CIDB Malaysia
- Malaysia Green Building Confederation (MGBC)
- Asian Reflective Foil Association (ARFA)



## IMPRESSIVE APPEARANCE



## MAXIMIZE STRENGTH



ISO 9001:2015, ISO 14001:2015  
CERTIFICATE NUMBER: JQS-23-0557, JES-23-0284

MyHP00220/22

**SUN-FOIL® SN3-FR+** is made by double sided high reflectivity pure aluminium bonded with a layer of 6mm bubble diameter FR polyethylene bubble sheet reinforced with a layer of FR HDPE woven fabric. It provides excellent insulation properties and effective radiant barrier.

**SUN-FOIL® SN3-FR+** is designed light-weight. It is easy to install as it does not require mesh due to extra high tensile strength and edge tear resistance.

**SUN-FOIL® SN3-FR+** is also flame retardant, waterproof, non-toxic, bacteria free, fungus and corrosion resistant.

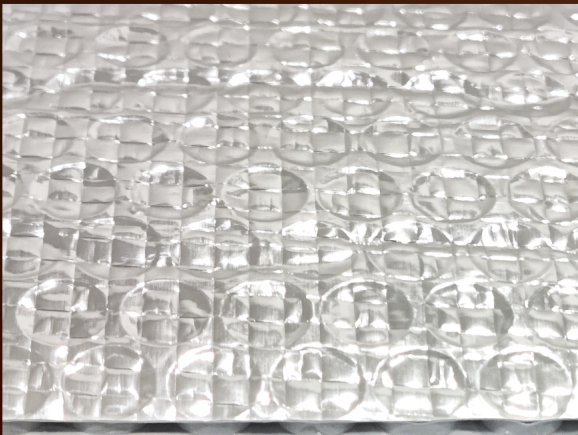
| TECHNICAL DATA   |                 |      |                                    |
|------------------|-----------------|------|------------------------------------|
| Description      | Test Method     | Unit | Value                              |
| Grammage         | In House        | g/m² | 250 ± 50                           |
| Thickness        | In House        | mm   | 2.5 ± 0.5                          |
| Tensile Strength | AS/NS 1301:448s | kN/m | MD ≥ 10.0 ± 2.0<br>CD ≥ 10.0 ± 2.0 |
| Edge Tear        | TAPPI T470      | N    | MD ≥ 250 ± 50<br>CD ≥ 250 ± 50     |

Technical Information provided represent average result of tests conducted under standard procedure and is subject to variation.  
No guarantee can be made regarding specific applications or patent rights.

BQ SPECIFICATION

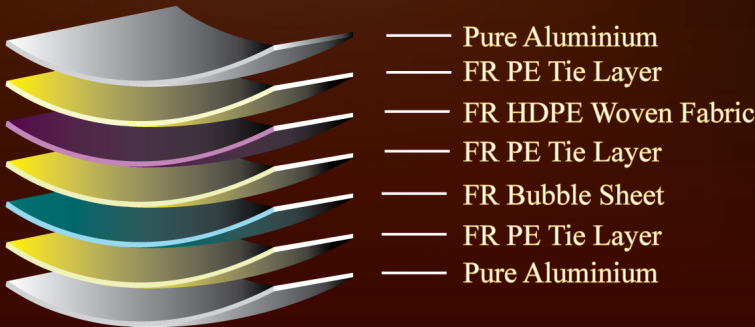
One layer of approved YH “SUNFOIL” SN3-FR+ Plus (250g/m2) Double Sided Fire Retardant Pure Aluminium Bubble Foil with 2mm thickness and 6mm bubble diameter reinforced with a layer of 10 x 10 inch woven fabric approved with Sirim Eco Label (35-40% energy reduction) and MS 2095.

| FIRE RETARDANT TEST FOR SN3-FR+                                                                                       |                 |                                          |
|-----------------------------------------------------------------------------------------------------------------------|-----------------|------------------------------------------|
| CHARACTERISTIC                                                                                                        | TEST METHOD     | SPECIFICATION                            |
| Fire Propagation of Material Sub-Index, i <sub>1</sub> , i <sub>2</sub> , i <sub>3</sub><br>Overall Performance Index | BS 476 ; Part 6 | < 6<br>< 12<br>(Sirim Report 2019FE0149) |
| Surface Flame Spread Test                                                                                             | BS 476 ; Part 7 | Class 1<br>(Sirim Report 2019FE0150)     |
| Classification of Fire Hazard                                                                                         |                 | Class O                                  |



SN3-FR+

Standard Roll Size: W 1.20m x L 50m



YH LAMINATED PRODUCTS SDN. BHD.

(959828-V)

Main Office : Lot 2996, Jalan PK 6, Kawasan Perindustrian Krubong, 75250 Melaka.

Sales Office : Lot 8352, Jalan PK SE, Kawasan Perindustrian Krubong, 75250 Melaka.

Factories : Lot 2995, Lot 8342, Lot 8343, Lot 8349, Lot 8350, Lot 8408, Kawasan Perindustrian Krubong, 75250 Melaka.

Sales Office Tel : +606-337 2170

Fax (Sales) : +606-335 7170

Fax (Finance) : +606-335 7199

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