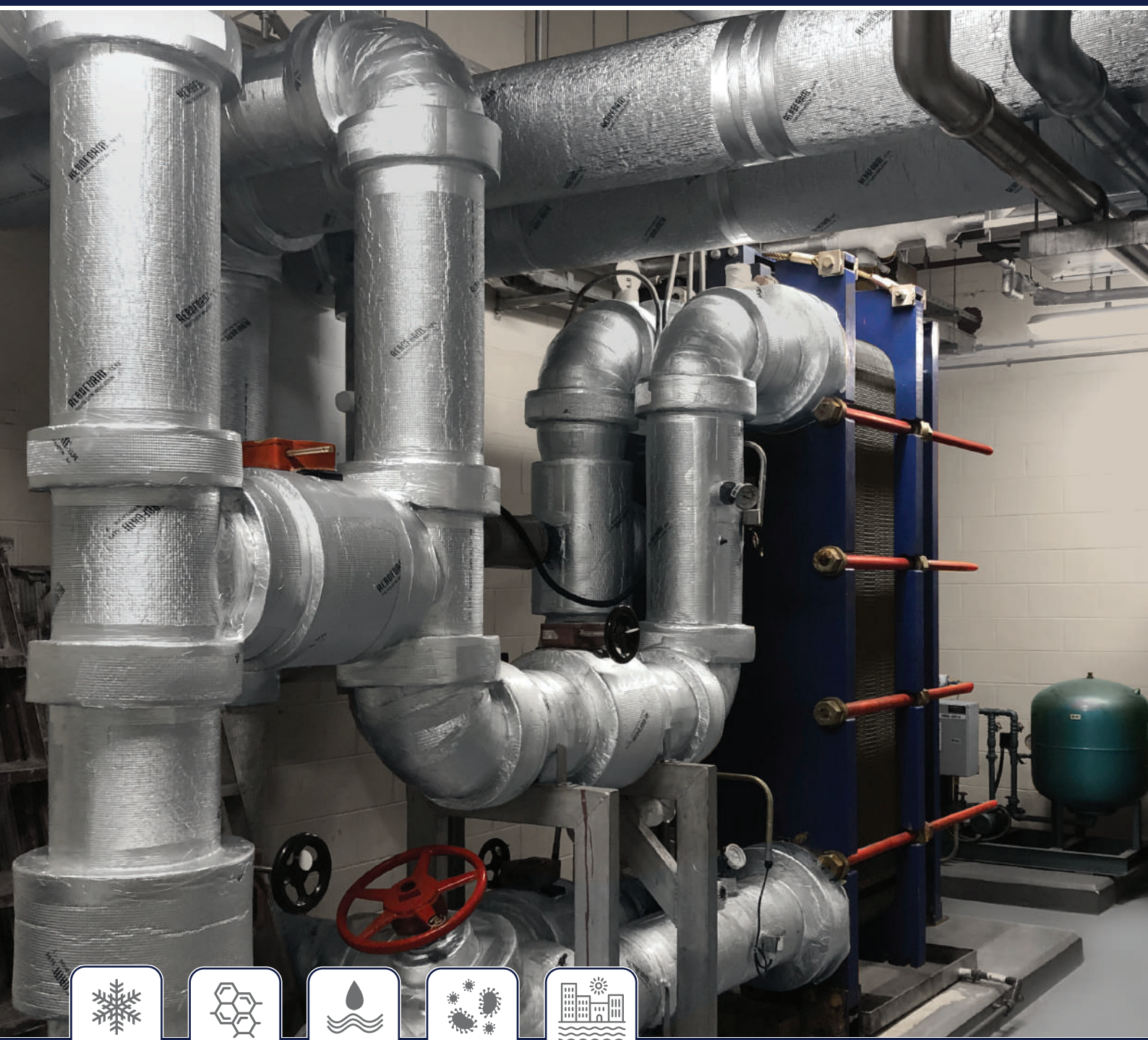


# AEROFOAM<sup>®</sup>-XLPE



## *Cross-Linked Closed Cell Polyolefin Thermal Insulation Foam*

ASTM E84

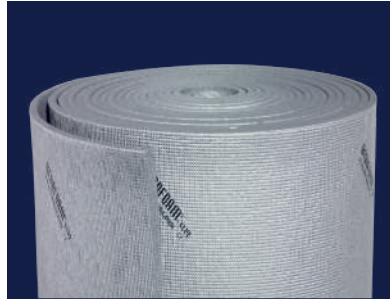
CLASS 0



 [www.aerofoam.ae](http://www.aerofoam.ae)

## AEROFOAM® XLPE TUBES, ROLLS & SHEETS

Aerofoam® XLPE rolls, sheets and tubular shapes are made of cross-linked closed cell polyolefin thermal insulation foam with factory applied aluminum foil for mechanical protection designed to control condensation and energy losses in cooling and heating systems.



It is suitable for such applications like duct and pipe insulation for air conditioning, cold water, chilled water, hot water and refrigeration as well as within OEM applications.

Designed for indoor and outdoor applications, however outdoor applications need additional protection against weather conditions and UV radiation.

## FEATURES



Closed cell structure



Resistant to bacteria



Prevent condensation



High mechanical strength



Excellent thermal efficiency



Flexible foam easy to install



Suitable for low temperature applications



Suitable for coastal area applications



Environmental friendly foam



Ozone Resistant

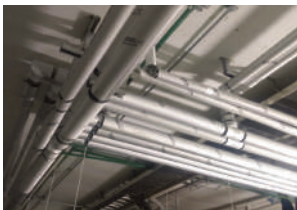


Resistant to mold & mildew growth



Suitable for cooling & heating systems

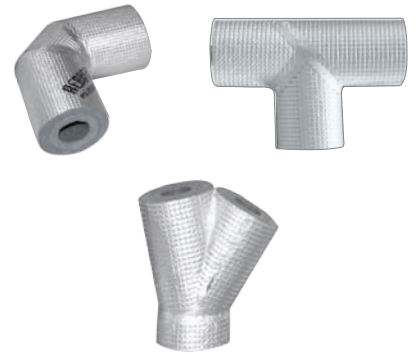
## APPLICATIONS



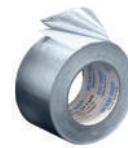
Different colors of foil facer are available upon request (e.g. black, blue etc.) Contact Aerofoam® Technical Support for further details.

## AERO-FITTINGS

Pre-fabricated Aero-fittings are made in different shapes such as 90 and 45 degrees Elbows, Tees and Y-Branches.



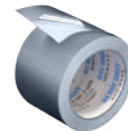
## AEROFOAM® TAPES



Aerofoam® N Clad Tape



Aerofoam® XLPE Foam Tape



Aerofoam® Aluminum/Alupet Tape

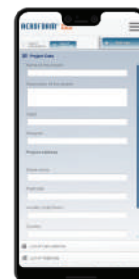
## AEROFOAM® XLPE GLUE



## AEROCALC

**AEROCALC** software is an excellent tool for calculating the most optimal thicknesses of insulation. Available as **Desktop**, **iOS** and **Android** applications.

Visit our website: [aerofoam.ae](http://aerofoam.ae)



Scan QR code to download desktop app



AEROFOAM® XLPE TUBES - SIZE RANGE

| ID      |     | Thickness    |              |              |              |            |                |                |                |                |            |                |  |
|---------|-----|--------------|--------------|--------------|--------------|------------|----------------|----------------|----------------|----------------|------------|----------------|--|
| Inch    | mm  | 10 mm (3/8") | 12 mm (1/2") | 15 mm (5/8") | 20 mm (3/4") | 25 mm (1") | 30 mm (1-1/6") | 32 mm (1-1/4") | 35 mm (1-3/8") | 40 mm (1-1/2") | 50 mm (2") | 60 mm (2-3/8") |  |
| 1/4"    | 06  | 10x06        | 12x06        | 15x06        | 20x06        | 25x06      | 30x06          | 32x06          | 35x06          | 40x06          |            |                |  |
| 3/8"    | 09  | 10x09        | 12x09        | 15x09        | 20x09        | 25x09      | 30x09          | 32x09          | 35x09          | 40x09          |            |                |  |
| 1/2"    | 12  | 10x12        | 12x12        | 15x12        | 20x12        | 25x12      | 30x12          | 32x12          | 35x12          | 40x12          | 50x12      | 60x12          |  |
|         | 13  | 10x13        | 12x13        | 15x13        | 20x13        | 25x13      | 30x13          | 32x13          | 35x13          | 40x13          | 50x13      | 60x13          |  |
| 5/8"    | 16  | 10x16        | 12x16        | 15x16        | 20x16        | 25x16      | 30x16          | 32x16          | 35x16          | 40x16          | 50x16      | 60x16          |  |
|         | 19  | 10x19        | 12x19        | 15x19        | 20x19        | 25x19      | 30x19          | 32x19          | 35x19          | 40x19          | 50x19      | 60x19          |  |
| 3/4"    | 20  | 10x20        | 12x20        | 15x20        | 20x20        | 25x20      | 30x20          | 32x20          | 35x20          | 40x20          | 50x20      | 60x20          |  |
|         | 21  | 10x21        | 12x21        | 15x21        | 20x21        | 25x21      | 30x21          | 32x21          | 35x21          | 40x21          | 50x21      | 60x21          |  |
| 7/8"    | 22  | 10x22        | 12x22        | 15x22        | 20x22        | 25x22      | 30x22          | 32x22          | 35x22          | 40x22          | 50x22      | 60x22          |  |
| 1"      | 25  | 10x25        | 12x25        | 15x25        | 20x25        | 25x25      | 30x25          | 32x25          | 35x25          | 40x25          | 50x25      | 60x25          |  |
|         | 27  | 10x27        | 12x27        | 15x27        | 20x27        | 25x27      | 30x27          | 32x27          | 35x27          | 40x27          | 50x27      | 60x27          |  |
| 1-1/8"  | 28  | 10x28        | 12x28        | 15x28        | 20x28        | 25x28      | 30x28          | 32x28          | 35x28          | 40x28          | 50x28      | 60x28          |  |
| 1-1/4"  | 32  | 10x32        | 12x32        | 15x32        | 20x32        | 25x32      | 30x32          | 32x32          | 35x32          | 40x32          | 50x32      | 60x32          |  |
| 1-1/3"  | 33  | 10x33        | 12x33        | 15x33        | 20x33        | 25x33      | 30x33          | 32x33          | 35x33          | 40x33          | 50x33      | 60x33          |  |
| 1-3/8"  | 35  | 10x35        | 12x35        | 15x35        | 20x35        | 25x35      | 30x35          | 32x35          | 35x35          | 40x35          | 50x35      | 60x35          |  |
|         | 38  | 10x38        | 12x38        | 15x38        | 20x38        | 25x38      | 30x38          | 32x38          | 35x38          | 40x38          | 50x38      | 60x38          |  |
| 1-1/2"  | 40  | 10x40        | 12x40        | 15x40        | 20x40        | 25x40      | 30x40          | 32x40          | 35x40          | 40x40          | 50x40      | 60x40          |  |
|         | 42  | 10x42        | 12x42        | 15x42        | 20x42        | 25x42      | 30x42          | 32x42          | 35x42          | 40x42          | 50x42      | 60x42          |  |
| 1-2/3"  | 43  | 10x43        | 12x43        | 15x43        | 20x43        | 25x43      | 30x43          | 32x43          | 35x43          | 40x43          | 50x43      | 60x43          |  |
|         | 48  | 10x48        | 12x48        | 15x48        | 20x48        | 25x48      | 30x48          | 32x48          | 35x48          | 40x48          | 50x48      | 60x48          |  |
| 2"      | 50  | 10x50        | 12x50        | 15x50        | 20x50        | 25x50      | 30x50          | 32x50          | 35x50          | 40x50          | 50x50      | 60x50          |  |
| 2-1/8"  | 54  | 10x54        | 12x54        | 15x54        | 20x54        | 25x54      | 30x54          | 32x54          | 35x54          | 40x54          | 50x54      | 60x54          |  |
| 2-1/3"  | 60  | 10x60        | 12x60        | 15x60        | 20x60        | 25x60      | 30x60          | 32x60          | 35x60          | 40x60          | 50x60      | 60x60          |  |
| 2-1/2"  | 63  | 10x63        | 12x63        | 15x63        | 20x63        | 25x63      | 30x63          | 32x63          | 35x63          | 40x63          | 50x63      | 60x63          |  |
|         | 65  | 10x65        | 12x65        | 15x65        | 20x65        | 25x65      | 30x65          | 32x65          | 35x65          | 40x65          | 50x65      | 60x65          |  |
| 3"      | 75  | 10x75        | 12x75        | 15x75        | 20x75        | 25x75      | 30x75          | 32x75          | 35x75          | 40x75          | 50x75      | 60x75          |  |
|         | 76  | 10x76        | 12x76        | 15x76        | 20x76        | 25x76      | 30x76          | 32x76          | 35x76          | 40x76          | 50x76      | 60x76          |  |
|         | 77  | 10x77        | 12x77        | 15x77        | 20x77        | 25x77      | 30x77          | 32x77          | 35x77          | 40x77          | 50x77      | 60x77          |  |
|         | 80  | 10x80        | 12x80        | 15x80        | 20x80        | 25x80      | 30x80          | 32x80          | 35x80          | 40x80          | 50x80      | 60x80          |  |
| 3-1/2"  | 90  | 10x90        | 12x90        | 15x90        | 20x90        | 25x90      | 30x90          | 32x90          | 35x90          | 40x90          | 50x90      | 60x90          |  |
| 4"      | 102 | 10x102       | 12x102       | 15x102       | 20x102       | 25x102     | 30x102         | 32x102         | 35x102         | 40x102         | 50x102     | 60x102         |  |
| 4-1/3"  | 110 | 10x110       | 12x110       | 15x110       | 20x110       | 25x110     | 30x110         | 32x110         | 35x110         | 40x110         | 50x110     | 60x110         |  |
| 4-1/2"  | 115 | 10x115       | 12x115       | 15x115       | 20x115       | 25x115     | 30x115         | 32x115         | 35x115         | 40x115         | 50x115     | 60x115         |  |
| 5"      | 125 | 10x125       | 12x125       | 15x125       | 20x125       | 25x125     | 30x125         | 32x125         | 35x125         | 40x125         | 50x125     | 60x125         |  |
|         | 140 |              |              |              | 20x140       | 25x140     | 30x140         | 32x140         | 35x140         | 40x140         | 50x140     | 60x140         |  |
|         | 160 |              |              |              | 20x160       | 25x160     | 30x160         | 32x160         | 35x160         | 40x160         | 50x160     | 60x160         |  |
| 6-1/2"  | 166 |              |              |              | 20x166       | 25x166     | 30x166         | 32x166         | 35x166         | 40x166         | 50x166     | 60x166         |  |
|         | 168 |              |              |              | 20x168       | 25x168     | 30x168         | 32x168         | 35x168         | 40x168         | 50x168     | 60x168         |  |
| 8"      | 200 |              |              |              | 20x200       | 25x200     | 30x200         | 32x200         | 35x200         | 40x200         | 50x200     | 60x200         |  |
|         | 220 |              |              |              | 20x220       | 25x220     | 30x220         | 32x220         | 35x220         | 40x220         | 50x220     | 60x220         |  |
| 8-3/4"  | 220 |              |              |              | 20x220       | 25x220     | 30x220         | 32x220         | 35x220         | 40x220         | 50x220     | 60x220         |  |
| 11"     | 273 |              |              |              | 20x273       | 25x273     | 30x273         | 32x273         | 35x273         | 40x273         | 50x273     | 60x273         |  |
| 12"     | 300 |              |              |              | 20x300       | 25x300     | 30x300         | 32x300         | 35x300         | 40x300         | 50x300     | 60x300         |  |
| 13"     | 323 |              |              |              | 20x323       | 25x323     | 30x323         | 32x323         | 35x323         | 40x323         | 50x323     | 60x323         |  |
| 14"     | 356 |              |              |              | 20x356       | 25x356     | 30x356         | 32x356         | 35x356         | 40x356         | 50x356     | 60x356         |  |
| 16"     | 406 |              |              |              | 20x406       | 25x406     | 30x406         | 32x406         | 35x406         | 40x406         | 50x406     | 60x406         |  |
| 18"     | 457 |              |              |              | 20x457       | 25x457     | 30x457         | 32x457         | 35x457         | 40x457         | 50x457     | 60x457         |  |
| 23-5/8" | 600 |              |              |              | 20x600       | 25x600     | 30x600         | 32x600         | 35x600         | 40x600         | 50x600     | 60x600         |  |
| 24"     | 609 |              |              |              | 20x609       | 25x609     | 30x609         | 32x609         | 35x609         | 40x609         | 50x609     | 60x609         |  |
| 28"     | 711 |              |              |              | 20x711       | 25x711     | 30x711         | 32x711         | 35x711         | 40x711         | 50x711     | 60x711         |  |

Note: Length of tubes: 1.5 m or 1.8 m for ID up to 160 mm, 1.2 m for ID above 160 mm

AEROFOAM® XLPE ROLLS & SHEETS

| Thickness           |                             | Product Range |                    |       |            | ACCESSORIES                                                                                                                                                                                                                                                                                                                                                                                |  | Unit      |                     |                         |                             |                         |           |                     |                          |        |         |
|---------------------|-----------------------------|---------------|--------------------|-------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------|---------------------|-------------------------|-----------------------------|-------------------------|-----------|---------------------|--------------------------|--------|---------|
| Inch                | mm                          | Size          | Surface            | Type  | XLPE SA-AL | Aerofoam® Tape - XLPE Foam                                                                                                                                                                                                                                                                                                                                                                 |  | roll      |                     |                         |                             |                         |           |                     |                          |        |         |
| 1/8"                | 3                           | 1.2mx20m      | 24m <sup>2</sup>   | Roll  | 3 SA-AL    | Aerofoam® Tape - Aluminum/Alupet                                                                                                                                                                                                                                                                                                                                                           |  | roll      |                     |                         |                             |                         |           |                     |                          |        |         |
| 1/4"                | 5                           | 1.2mx20m      | 24m <sup>2</sup>   | Roll  | 5 SA-AL    | Aerofoam® Tape - N Clad                                                                                                                                                                                                                                                                                                                                                                    |  | roll      |                     |                         |                             |                         |           |                     |                          |        |         |
| 3/8"                | 10                          | 1.2mx20m      | 24m <sup>2</sup>   | Roll  | 10 SA-AL   | Aerofoam® XLPE Glue                                                                                                                                                                                                                                                                                                                                                                        |  | 2.5 litre |                     |                         |                             |                         |           |                     |                          |        |         |
| 1/2"                | 12                          | 1.2mx20m      | 24m <sup>2</sup>   | Roll  | 12 SA-AL   | <div>Tolerances - Tubes (foam core only)</div> <table><tr><td rowspan="3">Inner Diameter (ID)</td><td>≤6-50 mm: -1 mm, 1.5 mm</td></tr><tr><td>54-160 mm: -1.5 mm, +2.5 mm</td></tr><tr><td>≥160 mm: -2 mm, +3.5 mm</td></tr><tr><td rowspan="2">Thickness</td><td>≤10-25 mm: ± 1.5 mm</td></tr><tr><td>30-50 mm: -2 mm, +3.5 mm</td></tr><tr><td>Length</td><td>± 20 mm</td></tr></table> |  |           | Inner Diameter (ID) | ≤6-50 mm: -1 mm, 1.5 mm | 54-160 mm: -1.5 mm, +2.5 mm | ≥160 mm: -2 mm, +3.5 mm | Thickness | ≤10-25 mm: ± 1.5 mm | 30-50 mm: -2 mm, +3.5 mm | Length | ± 20 mm |
| Inner Diameter (ID) | ≤6-50 mm: -1 mm, 1.5 mm     |               |                    |       |            |                                                                                                                                                                                                                                                                                                                                                                                            |  |           |                     |                         |                             |                         |           |                     |                          |        |         |
|                     | 54-160 mm: -1.5 mm, +2.5 mm |               |                    |       |            |                                                                                                                                                                                                                                                                                                                                                                                            |  |           |                     |                         |                             |                         |           |                     |                          |        |         |
|                     | ≥160 mm: -2 mm, +3.5 mm     |               |                    |       |            |                                                                                                                                                                                                                                                                                                                                                                                            |  |           |                     |                         |                             |                         |           |                     |                          |        |         |
| Thickness           | ≤10-25 mm: ± 1.5 mm         |               |                    |       |            |                                                                                                                                                                                                                                                                                                                                                                                            |  |           |                     |                         |                             |                         |           |                     |                          |        |         |
|                     | 30-50 mm: -2 mm, +3.5 mm    |               |                    |       |            |                                                                                                                                                                                                                                                                                                                                                                                            |  |           |                     |                         |                             |                         |           |                     |                          |        |         |
| Length              | ± 20 mm                     |               |                    |       |            |                                                                                                                                                                                                                                                                                                                                                                                            |  |           |                     |                         |                             |                         |           |                     |                          |        |         |
| 5/8"                | 15                          | 1.2mx20m      | 24m <sup>2</sup>   | Roll  | 15 SA-AL   |                                                                                                                                                                                                                                                                                                                                                                                            |  |           |                     |                         |                             |                         |           |                     |                          |        |         |
| 3/4"                | 20                          | 1.2mx20m      | 24m <sup>2</sup>   | Roll  | 20 SA-AL   |                                                                                                                                                                                                                                                                                                                                                                                            |  |           |                     |                         |                             |                         |           |                     |                          |        |         |
| 1"                  | 25                          | 1.2mx2.4m     | 2.88m <sup>2</sup> | Sheet | 25 SA-AL   |                                                                                                                                                                                                                                                                                                                                                                                            |  |           |                     |                         |                             |                         |           |                     |                          |        |         |
| 1-1/6"              | 30                          | 1.2mx2.4m     | 2.88m <sup>2</sup> | Sheet | 30 SA-AL   |                                                                                                                                                                                                                                                                                                                                                                                            |  |           |                     |                         |                             |                         |           |                     |                          |        |         |
| 1-3/8"              | 35                          | 1.2mx2.4m     | 2.88m <sup>2</sup> | Sheet | 35 SA-AL   |                                                                                                                                                                                                                                                                                                                                                                                            |  |           |                     |                         |                             |                         |           |                     |                          |        |         |
| 1-1/2"              | 40                          | 1.2mx2.4m     | 2.88m <sup>2</sup> | Sheet | 40 SA-AL   |                                                                                                                                                                                                                                                                                                                                                                                            |  |           |                     |                         |                             |                         |           |                     |                          |        |         |
| 2"                  | 50                          | 1.2mx2.4m     | 2.88m <sup>2</sup> | Sheet | 50 SA-AL   |                                                                                                                                                                                                                                                                                                                                                                                            |  |           |                     |                         |                             |                         |           |                     |                          |        |         |

Different colors of aluminum foil and foam are available upon special request

| Tolerances - Rolls & Sheets |                     |                  |                 |
|-----------------------------|---------------------|------------------|-----------------|
| Thickness                   | Thickness tolerance | Length tolerance | Width tolerance |
| < 25 mm                     | ± 1.5 mm            | ±20 mm (Sheets)  | ±20 mm          |
| ≥ 25 mm                     | -2 mm, +3.5 mm      | ±50 mm (Rolls)   |                 |

Different colors of aluminum foil and foam are available upon special request.

Other sizes are available upon request. Please contact our technical team or local representative for further information about technical features, special sizes and customized products.

# TECHNICAL DATA

**Description:** Aerofoam® XLPE is a light or dark grey, cross-linked closed-cell polyolefin thermal insulation foam with factory applied aluminum foil for mechanical protection, mainly designed to control condensation and energy losses.

| Property                                                                                                                                                                          | Value/ Assessment                                                                                  | Tested acc. to:                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------|
| <b>Thermal conductivity</b><br>At 23 °C - 45 °C                                                                                                                                   | 0.032-0.035 W/m·K                                                                                  | ASTM C518                                 |
| <b>Temperature range</b><br>Max. line temperature<br>Min. line temperature<br><i>Aerofoam® Technical Team should be consulted for applications with temperature below -40 °C.</i> | +105 °C (+80 °C with PSA*)<br>-80 °C (-30 °C with PSA*)                                            | DIN EN 14706<br>ASTM C411                 |
| <b>Density of foam core</b>                                                                                                                                                       | 25 kg/m³ (±3 kg/m³)                                                                                |                                           |
| <b>Water vapor diffusion resistance factor</b>                                                                                                                                    | μ>54700                                                                                            | BS EN 12086                               |
| <b>Water vapor permeance</b>                                                                                                                                                      | 2.15x10 <sup>-10</sup> g/m².s.Pa                                                                   | ASTM E96                                  |
| <b>Water absorption</b>                                                                                                                                                           | 0.05 kg/m²<br>0.00008 g/cm²                                                                        | BS EN 12087<br>JIS K6767                  |
| <b>Reaction to fire</b>                                                                                                                                                           | FSI<25, SDI<50                                                                                     | ASTM E84                                  |
|                                                                                                                                                                                   | Class 0                                                                                            | BS 476 part 6&7                           |
|                                                                                                                                                                                   | Ignitability Index 0<br>Spread of Flame Index 0<br>Heat Evolved Index 0<br>Smoke Developed Index 1 | AS/NZ 1530.3                              |
|                                                                                                                                                                                   |                                                                                                    |                                           |
| <b>Smoke and toxicity</b><br>Smoke toxicity levels<br>Toxic smoke                                                                                                                 | Passed<br>Comply                                                                                   | IMO MSC 61(67); A.1, P.2 & P.5<br>BS 6853 |
| <b>Resistance to corrosion</b>                                                                                                                                                    | Excellent                                                                                          | ASTM B117                                 |
| <b>Chemical analysis (Leachable ions)</b>                                                                                                                                         | Very low                                                                                           | ASTM C871                                 |
| <b>Compression set</b>                                                                                                                                                            | 35.77% (for 25 mm)<br>34.22% (for 32 mm)                                                           | ASTM D3574                                |
| <b>Resistance to fungi</b>                                                                                                                                                        | Zero growth                                                                                        | ASTM G21                                  |
| <b>Resistance to bacteria</b>                                                                                                                                                     | Zero growth                                                                                        | ISO 22196                                 |
| <b>VOC evaluation</b><br>Emission                                                                                                                                                 | <0.5 mg/m³                                                                                         | CDPH V1.2/US<br>EPA methods TO17          |
| Contents                                                                                                                                                                          | Comply                                                                                             | CDPH V1.2/US<br>EPA methods TO17          |
| <b>Environment friendly</b><br>Ozone Depletion Potential<br>Global Warming Potential<br>CFC, HCFC, dust, fibers & asbestos                                                        | 0<br><5<br>Free                                                                                    |                                           |

## Storage life

Can be stored for 24 months (12 months with PSA\*) from manufacturing date in a dry, clean, dust free room at normal humidity and ambient temperature.

**Note:** All outdoor applications of Aerofoam® XLPE need to be protected by Aerofoam® approved coating or weather resistant cladding. It is recommended to use Aerofoam® XLPE N Clad for all outdoor applications.

\*PSA - Pressure Sensitive Adhesive

**Disclaimer:** This information on Hira Industries products is presented to the best of our knowledge. All product data is based on average values and is for guidance only. As these products are subject to constant research and development, we reserve the right to update the contents without notice.