# AEROFOAM®-XLPE

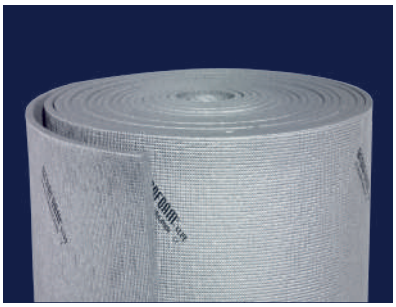
## *Cross-Linked Closed Cell Polyolefin Thermal Insulation Foam*

ASTM E84 CLASS 0

www.aerofoamusa.com

# 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 that cause mold and prevent energy losses in cooling and heating systems.



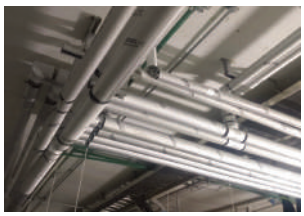
Aerofoam® XLPE is suitable for such applications like duct and pipe insulation for air conditioning, cold water, chilled water, hot water and refrigeration as well as within OEM applications.

Designed for indoor and outdoor conditions, 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
- Easy to install
- Suitable for low temperature applications
- Suitable for coastal area applications
- Environment friendly foam
- Ozone Resistant
- Resistant to mold & mildew growth
- Suitable for cooling & heating systems

## APPLICATIONS





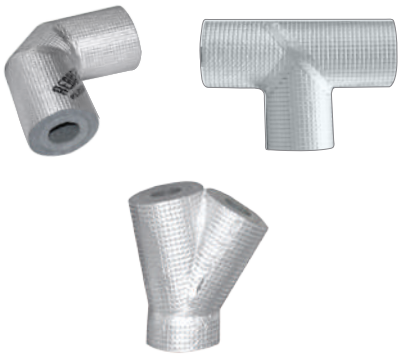




Different colors of foil facer are available upon request (e.g. black, blue etc.). Contact Aerofoam® Local Representative for more details.

## AERO-FITTINGS

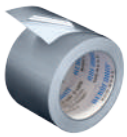
Pre-fabricated Aero-fittings are made in different shapes such as 45 and 90 degrees Elbows, Tees and Y-Branches.



## AEROFOAM® TAPES

Aerofoam® N Clad Tape

Aerofoam® XLPE Foam Tape



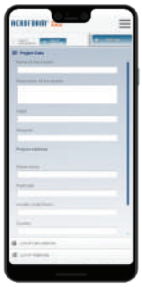
Aerofoam® Aluminum/Alupet Tape

## AEROFOAM® XLPE GLUE


## AEROCALC

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

Visit our website: **aerofoamusa.com**



Scan QR code to download desktop app

# AEROFOAM® XLPE TUBES - R-VALUES

| Inner Diameter | Thermal Insulation Thickness | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Inch | 3/8" | 1/2" | 5/8" | 3/4" | 1" | 1-1/5" | 1-3/5" | 2" | 2-3/8" |
| 1/4" | 2.8 | 4 | 5.4 | 6.8 | 9.9 | 12.5 | 18.1 | 24.1 | 30.4 |
| 3/8" | 2.5 | 3.6 | 4.8 | 6 | 8.8 | 11.1 | 16.1 | 21.5 | 27.2 |
| 1/2" | 2.3 | 3.5 | 4.4 | 5.5 | 8 | 10.2 | 14.8 | 19.8 | 25.1 |
| 5/8" | 2.2 | 3.1 | 4.1 | 5.2 | 7.5 | 9.5 | 13.9 | 18.5 | 23.1 |
| | 2.1 | 3 | 3.9 | 4.9 | 7.1 | 9 | 13.1 | 17.5 | 21.9 |
| 3/4" | 2.1 | 2.9 | 3.9 | 4.9 | 7 | 8.9 | 12.9 | 17.2 | 21.6 |
| 7/8" | 2 | 2.9 | 3.8 | 4.7 | 6.8 | 8.6 | 12.5 | 16.7 | 21 |
| 1" | 2 | 2.8 | 3.6 | 4.6 | 6.6 | 8.3 | 12.1 | 16.1 | 20.2 |
| 1-1/8" | 1.9 | 2.7 | 3.5 | 4.4 | 6.4 | 8.1 | 11.6 | 15.5 | 19.5 |
| 1-1/4" | 1.9 | 2.6 | 3.5 | 4.3 | 6.2 | 7.8 | 11.3 | 15.1 | 18.8 |
| 1-3/8" | 1.9 | 2.6 | 3.4 | 4.2 | 6.1 | 7.6 | 11 | 14.7 | 18.3 |
| 1-1/2" | 1.8 | 2.5 | 3.3 | 4.1 | 5.8 | 7.3 | 10.5 | 14 | 17.6 |
| 1-5/8" | 1.8 | 2.5 | 3.3 | 1 | 5.8 | 7.3 | 10.5 | 14 | 17.2 |
| 2" | 1.8 | 2.4 | 3.2 | 3.9 | 5.5 | 6.9 | 9.9 | 13.2 | 16.5 |
| 2-3/8" | 1.7 | 2.4 | 3.1 | 3.8 | 5.3 | 6.7 | 9.5 | 12.6 | 15.7 |
| 3" | 1.7 | 2.3 | 3 | 3.6 | 5.1 | 6.3 | 9 | 11.9 | 14.8 |
| | 1.7 | 2.3 | 2.9 | 3.6 | 5.1 | 6.3 | 8.9 | 11.8 | 14.7 |
| 3-1/2" | 1.7 | 2.3 | 2.9 | 3.6 | 5 | 6.2 | 8.7 | 11.4 | 14.1 |
| 4-1/4" | 1.6 | 2.2 | 2.8 | 3.5 | 4.8 | 6 | 8.4 | 10.9 | 13.5 |
| 4-1/2" | 1.6 | 2.2 | 2.8 | 3.5 | 4.8 | 5.9 | 8.3 | 10.8 | 13.3 |
| 5" | 1.6 | 2.2 | 2.8 | 3.4 | 4.7 | 5.8 | 8.1 | 10.6 | 13.1 |
| | 1.6 | 2.2 | 2.8 | 3.4 | 4.6 | 5.7 | 8 | 10.3 | 12.8 |
| | 1.6 | 2.1 | 2.7 | 3.3 | 4.6 | 5.6 | 7.8 | 10.1 | 12.5 |
| 6" | 1.6 | 2.2 | 2.7 | 3.3 | 4.6 | 5.7 | 7.9 | 10.2 | 12.4 |
| 8" | 1.6 | 2.1 | 2.7 | 3.3 | 4.5 | 5.5 | 7.5 | 9.7 | 11.8 |
| 10" | 1.6 | 2.1 | 2.7 | 3.2 | 4.4 | 5.3 | 7.3 | 9.4 | 11.4 |
| 12" | 1.5 | 2.1 | 2.6 | 3.2 | 4.3 | 5.3 | 7.2 | 9.2 | 11.1 |
| 16" | 1.5 | 2.1 | 2.6 | 3.1 | 4.2 | 5.1 | 7 | 8.9 | 11.4 |
| 18" | 1.5 | 2.1 | 2.6 | 3.1 | 4.2 | 5.1 | 6.9 | 8.8 | 11.1 |

# AEROFOAM® XLPE SHEETS & ROLLS - R-VALUES

| Thickness | 1/8" | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" | 1-3/8" | 1-1/2" | 2" |
|---|---|---|---|---|---|---|---|---|---|---|
| R-Value | 0.5 | 1 | 1.5 | 2 | 2.5 | 3 | 4 | 5.5 | 6 | 8 |

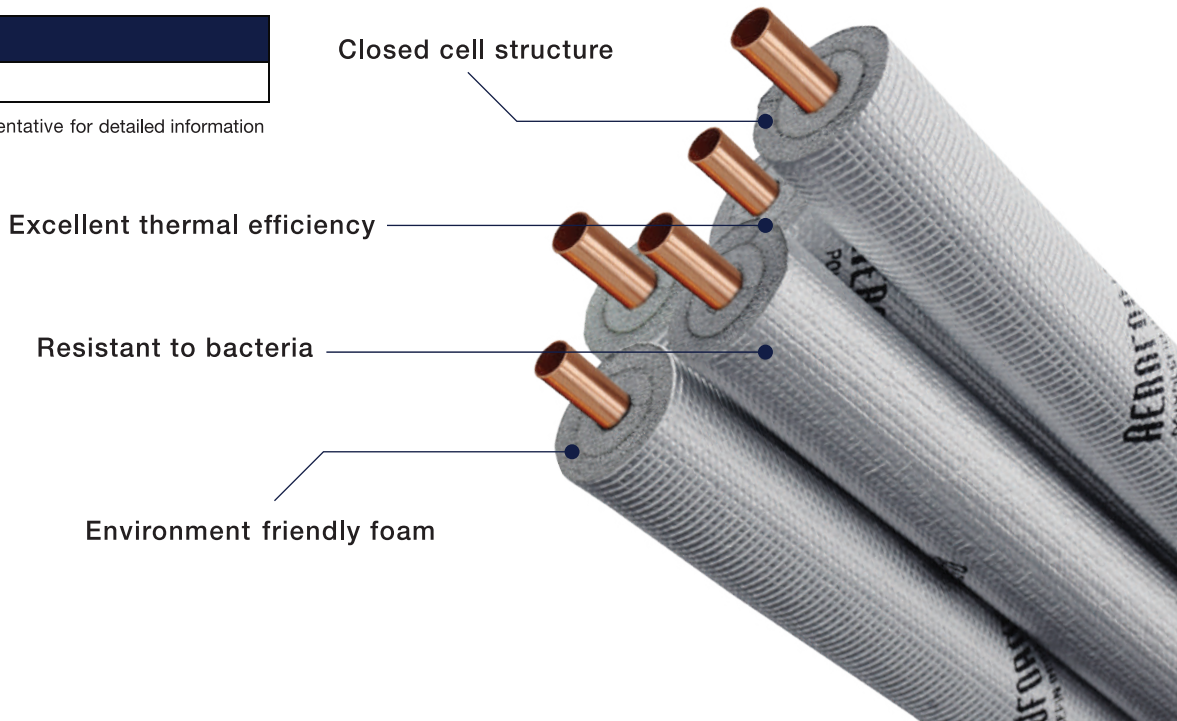
**Note:** These specifications are based on the measurement methods employed by Hira Industries LLC. Other methods may not result in the same values and cannot be used to determine if the product is within the given tolerance.

# SIZE AVAILABILITY

| Tubes | |
|---|---|
| ID | Thickness |
| 1/4" to 5" | 3/8" to 5/8" |
| 1/4" to 28" | 3/4" to 1-1/2" |
| 1/2" to 28" | 2" to 2-3/8" |

| Sheets & Rolls | |
|---|---|
| Thickness | 1/8" to 2" |

Please contact Aerofoam® Local Representative for detailed information about sizes with different facings.



# 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: |
|---|---|---|
| **Thermal conductivity**<br>At 75 °F<br>At 95 °F | <br>0.24 BTU-in/hr-ft²<br>0.25 BTU-in/hr-ft² | <br>ASTM C518 |
| **Temperature range**<br>Max. line temperature<br>Min. line temperature<br>*Aerofoam® Technical Team should be consulted for applications with temperature below -40 °F.* | <br>+220 °F (+176 °F with PSA*)<br>-112 °F (-22 °F with PSA*) | <br>DIN EN 14706<br>ASTM C411 |
| **Density of foam core** | 1.56 lbs/ft³ | |
| **Water vapor diffusion resistance factor** | μ>54700 | BS EN 12086 |
| **Water vapor permeance** | <0.01 perm-inch | ASTM E96 |
| **Water absorption** | 0.000018 oz/in² | JIS K6767 |
| **Reaction to fire** | 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 |
| **Smoke and toxicity**<br>Smoke toxicity levels<br>Toxic smoke | <br>Passed<br>Comply | <br>IMO MSC 61(67); A.1, P.2 & P.5<br>BS 6853 |
| **Resistance to corrosion** | Excellent | ASTM B117 |
| **Chemical analysis (Leachable ions)** | Very low | ASTM C871 |
| **Compression set** | 35.77% (for 1")<br>34.22% (for 1-1/4") | ASTM D3574 |
| **Resistance to fungi** | Zero growth | ASTM G21 |
| **Resistance to bacteria** | Zero growth | ISO 22196 |
| **VOC evaluation**<br>Emission<br><br>Contents | <br><0.5 mg/m³<br><br>Comply | <br>CDPH V1.2/US<br>EPA methods TO17<br>CDPH V1.2/US<br>EPA methods TO17 |
| **Environment friendly**<br>Ozone Depletion Potential<br>Global Warming Potential<br>CFC, HCFC, dust, fibers & asbestos | <br>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



**Corporate Office:**
Hira Industries L.L.C
P.O. Box 50673,
Dubai Investments Park 2,
Dubai, United Arab Emirates.
www.rhira.com

**AEROFOAM USA L.L.C**
43 Commerce Drive
Abbeville, SC 29620
United States of America
enquiry@aerofoamusa.com
www.aerofoamusa.com

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