

# SIDERISE® LAMACELL THERMAL INSULATION

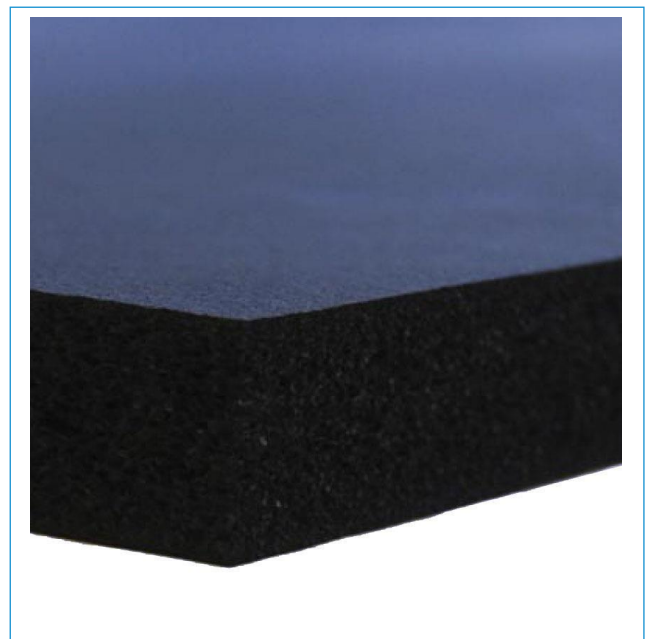
A high quality flexible closed cell material that offers excellent isolating qualities and is fire resistive, for use in a wide variety of applications.

## Application

**SIDERISE® Lamacell thermal insulation** is a high quality flexible closed cell material offering excellent isolating qualities.

The product is used in many varied applications and industries including construction, marine, automotive, HVAC and OEM.

Common applications include: pipe lagging, duct insulation, thermal insulation for chilled services, heating ducts and pipes. Can be used as resilient spacing layer or as fixed gasket.



## Benefits

- Class '0' and UL94 – V0 fire rated
- Built in vapour barrier preventing condensation
- Reduces energy loss by up to 87%
- Lightweight and flexible: ease and speed of installation
- Excellent resistance to the effects of ozone, oil, chemicals

**Product description**

**SIDERISE® Lamacell thermal insulation** is an elastomeric rubber; black in colour with a smooth tough outer skin and due to its flexibility is easily applied to curved surfaces or deformed to fit complex shapes.

The material has the additional benefit of being exceptionally fire resistive, meeting the requirements of Class ‘0’ to Building Regulations.

**Installation**

The material is normally adhered to the background surface using a separate adhesive or by means of the optional pressure-sensitive adhesive backing (contact our technical team for a specification sheet on pressure-sensitive adhesive films for properties and limitations).

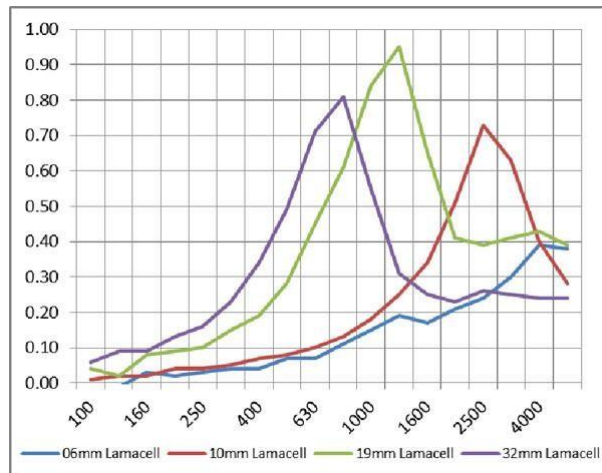
Additionally the product can be mechanically fixed (using large headed fixings or spreader washers). Our insulation support pins and non-return washers represent a suitable fixing.

Please contact our technical team for advice on suitable adhesives and mechanical fixings.

**Acoustic Performance**

**Acoustic performance: Lamacell Thermal Insulation**

Thickness (mm)	Sound Absorption Coefficients					
	100Hz	250Hz	500Hz	1kHz	2kHz	4kHz
6	-0.01	0.03	0.07	0.15	0.21	0.39
10	0.02	0.04	0.08	0.18	0.51	0.40
19	0.02	0.10	0.28	0.84	0.41	0.43
32	0.09	0.16	0.49	0.55	0.23	0.24



Random incidence sound absorption to BS EN ISO 354:2003

**Fire Performance**

**Fire performance: Lamacell thermal insulation**

		BS476, Part 6: I<12, i1<6 BS476, Part 7: Class 1 Class 0 to Building Regulations UL94: V0			
BS476-6/7	Fire propagation index Surface spread of flame				
ISO 5658-1	Critical flux at extinguishment	1	CFE	43,32	HL3
ISO 565902: kW/Wm <sup>2</sup> without pilot flame	Specific optical density at 4 minutes	3	D <sub>s</sub> (4)	196,3	HL2
	Cumulative value of optical density of smoke in the first 4 minutes of the test	2	VOF4	380,65	HL2
	Conventional index of toxicity, General products	2	CIT <sub>g</sub>	0,04	HL3
ISO 5660-1: 50kW/m <sup>2</sup>	Maximum average rate of heat emission	1	MARHE	18,6	HL3
EN ISO 11925-2: Surface Exposure, 30s	Flame spread within 60s	F <sub>s</sub> >/=150mm		NO	Official Rating
	Flaming droplets	Ignition of filter paper		none	HL1/HL2

**Technical specification**

Form supplied (mm)	Roll width: 1000 nominal Other forms: Linear 3D sections and die-cut parts
Standard thickness (mm)	3, 6, 9, 13, 19, 25, 32 Other thickness may be available on request.
Colour	Black foamed nitrile rubber
Working Temp range	-50 to +150 °C
Density	50 kg/m <sup>3</sup> ±10%
Elongation (ASTM D 412-06ae2)	106%
Hardness (AST D 1056-07 PARA. 17-22)	4.7psi deflection (specimens deflected at 0.5 in/min)
Thermal conductivity	0 °C: 0.034w/mK +20 °C: 0.036w/mK +40 °C: 0.038w/mK
Water vapour permeability (EN ISO 9346)	Resistance: 7,000 Permeability: 2.79 x 10
Water absorption (ASTM C 209)	0.2% by volume
Water vapour resistance (EN ISO 13469; EN ISO 12086)	Moisture Resistance Factor μ ≥ 10,000
Salt spray	Superficial damage over 5 days exposure
Reaction to fire	Class '0' to Building Regulations

**Additional options**

The following options are available:

- Can be supplied with high performance acrylic pressure-sensitive adhesive (PSA) backing

**Additional information**

The following information is available upon request or via download from our website:

- Please contact the technical team for thermal insulation / performance advice
- Safety Data Sheet

**Environmental**

**SIDERISE® Lamacell thermal insulation** is environmentally friendly.

- It contains no Volatile Organic Compounds (VOCs) and no very Volatile Organic Compounds (vVOCs)
- Zero Ozone Depleting Potential
- Global Warming Potential of less than 5
- Recyclable

**Technical support**

For further information please contact our technical team at the address below.

# Further information

## Available CPDs

Contact SIDERISE® for further information on our CPDs:

- Internal Treatment of HVAC elements - Absorption
- External Treatment of HVAC elements – Sound break out
- Sound Energy / Acoustic Principles

## Sales & Technical

### SALES SUPPORT

#### Internal Sales Team

T: +44(0)1473 827695

E: sales.sspl@siderise.com

#### Ordering and Customer Service

M: +44(0)1473 827695

E: service.sspl@siderise.com

#### Technical Support

T: +44(0)1473 827695

E: technical.sspl@siderise.com