

# 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

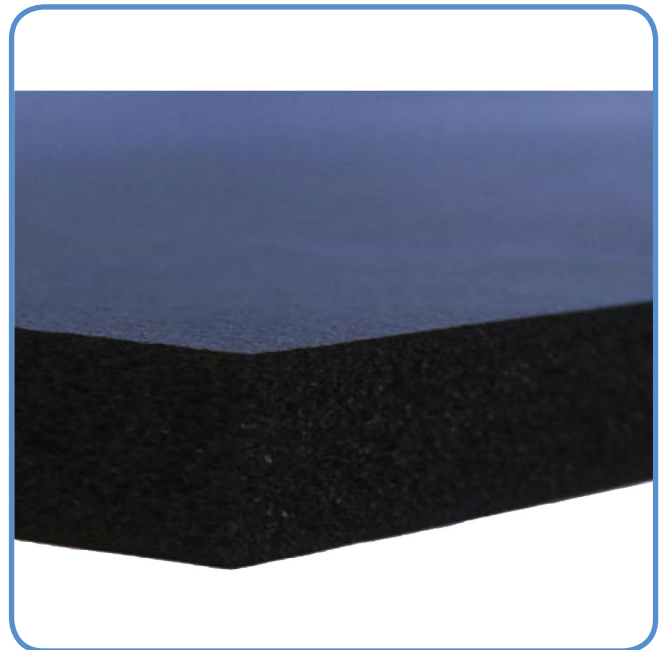
**SIDERISE Lamacell thermal insulation** is a high quality flexible closed cell material offering excellent isolating qualities.

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 'O' and UL94 - VO 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



**Acoustic, fire and thermal  
insulation specialists**

## 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 'O' to Building Regulations.

## Installation

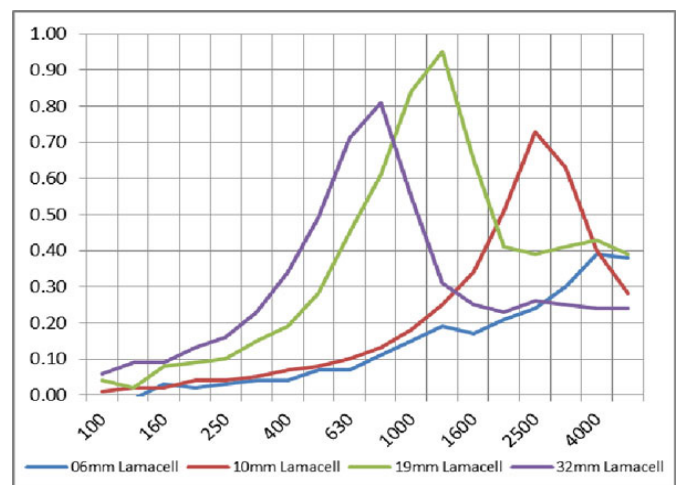
The material is normally adhered to the background surface using a separate adhesive or by means of the optional self-adhesive backing (contact our technical team for a specification sheet on self-adhesive films for properties and limitations).

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 Conversion technical team for advice on suitable adhesives and mechanical fixings.

## Acoustic performance

Acoustic performance: Lamacell thermal insulation						
Thickness (mm)	Sound Absorption Coefficients					
	125Hz	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	0.4
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					
BS476-6/7	Fire propagation index Surface spread of flame	BS476, Part 6: K12, i1k6 BS476, Part 7: Class 1 Class 0 to Building Regulations UL94: V0			
ISO 5658-2	Critical flux at extinguishment	1	CFE	43,32	HL3
ISO 5659-2: 50 kW/m <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	Fs>=150mm		NO	Official Rating: HL1/HL2
	Flaming droplets	Ignition of filter paper		none	

## 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 thicknesses may be available on request.
Colour	Black foamed nitrile rubber
Working temp range	-50°C ~ +105°C
Density	60kg/m <sup>3</sup>
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 $\mu$ $\geq 10\ 000$
Salt spray	Superficial damage over 5 days exposure
Reaction to fire	Class 'O' 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 the 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 Conversion technical team at the address below.

**Developing insulation solutions  
for over 40 years**

