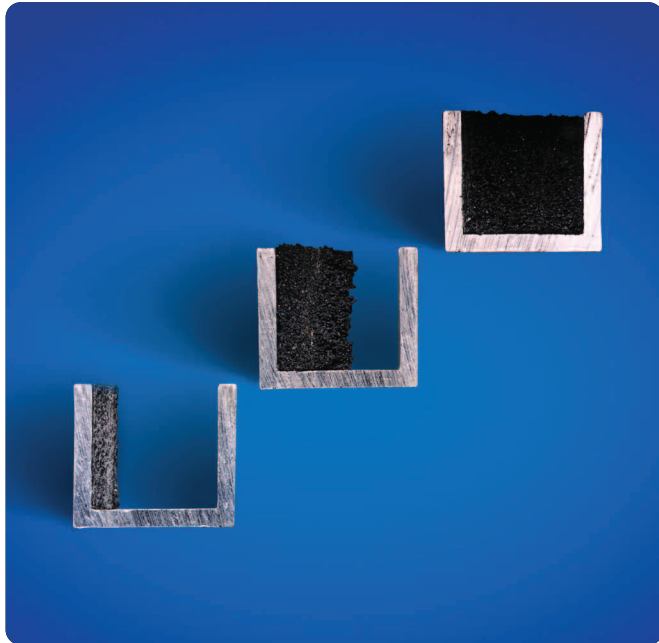


Data sheet

ENGLISH

Superwool® Plus Expanding Paper



Description

Superwool® Plus Expanding Paper is a thin, flexible material that expands on heat exposure to provide thermal insulation and fire protection when exposed to fire or heat.

The expansion ratio can be engineered within the range of: 3:1 to 12:1 to suit application requirements. The expansion property results from the use of stabilised graphite within the paper manufactured using Thermal Ceramics low biopersistence Superwool® fibres to provide a range of refractory and thermal insulation performance.

Typical activation temperature: > 190°C with a measured expansion at 450°C.

Density: Typically from 240kg/m³ to 320kg/m³ ± 10%

Features

- Products are completely flexible
- Available in rolls, sheets, narrow spools or gaskets
- Good thermal properties
- Unidirectional expansion
- Range of expansion ratio can be engineered between 3:1 to 12:1
- Thicknesses from 1mm to 3mm

Benefits

- Non toxic
- Low smoke
- Extremely stable when exposed to temperatures from ambient up to 1100°C
- The wide range of expansion ratios allows flexibility in choice of product suitable for the exact requirement of the end use application

Applications

The product is normally incorporated into engineered fire-rated components to provide a sealing function during fire exposure. Typical end-use applications are:

- Glazing screens
- Pipe wraps
- Fire doors industrial
- Fire rated services
- Fire rated grills
- Fire rated electrical boxes / down lights
- Fire rated air conditioning units

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SDS:

Data sheet

Superwool® Plus Expanding Paper

Availability and packaging

Supplied in 610mm wide or 1220 wide rolls in cartons

Non-standard widths are available

Can also be supplied in jumbo rolls, sheets, spools and cut pieces (gaskets)

Thickness mm	Grade			
	ISW 3	ISW 6	ISW 8	ISW 12
1.0	✓	✓	✓	✓
2.0	✓	✓	✓	✓
3.0	✓	✓	✓	

Expansion ratio by product			
ISW 3	ISW 6	ISW 8	ISW 12
3:1	6:1	8:1	12:1

Typical density kg/m ³ by product			
ISW 3	ISW 6	ISW 8	ISW 12
240	265	290	320

The following tests on a 3mm ISW 8 Superwool Expanding Paper have been carried out in accordance with: EN 13501 – I

EN ISO 13823 Spread of flame (B1-s1,d0)

EN 11925-2 Ignitibility (B1-s1,d0) IMO MSC 307 (88) Annex Part 2 Smoke and Toxicity

For further information, please contact your local sales office

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Whilst the values and application information in this datasheet are typical, they are given for guidance only. The values and the information given are subject to normal manufacturing variation and may be subject to change without notice. Morgan Advanced Materials – Thermal Ceramics makes no guarantees and gives no warranties about the suitability of a product and you should seek advice to confirm the product's suitability for use with Morgan Advanced Materials - Thermal Ceramics.

SUPERWOOL® is a patented technology for high temperature insulation wools which have been developed to have a low bio persistence (information upon request). **SUPERWOOL®** products may be covered by one or more of the following patents, or their foreign equivalents:

SUPERWOOL® PLUS and **SUPERWOOL® HT** products are covered by patent numbers: US5714421 and US7470641, US7651965, US7875566, EP1544177 and EP1725503 respectively.

A list of foreign patent numbers is available upon request to Morgan Advanced Materials plc.

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