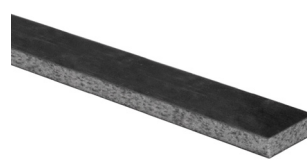


# ZERO INTUMESCENT FOR OEM USE

ZERO's approach to intumescent products and solutions is different from other manufacturers. Where other companies market one product for all purposes, we concluded from our own R&D that one size really does not fit all needs - not if you want best performance in every case. Recognising that optimum performance is application specific, we engineered separate products using different formulations and materials to meet specific needs and conditions. We manufacture all these products at our manufacturing facility in Indianapolis, USA. One of our two specialised intumescent materials will most likely give you exactly the performance you need. The primary characteristics that distinguish different formulations are:

- Activation temperature
- Expansion - volume and force
- Capacity for continued expansion (stable char)



**FS3003**



**FS4004**

## MATERIAL DEFINITIONS AND PHYSICAL PROPERTIES

	<b>FS3003</b>	<b>FS4004</b>
Activation temperature	350°F (176°C)	550°F (288°C)
Expansion volume	16-18 X	80 X
Expansion pressure	27 PSI (.0187 N/mm <sup>2</sup> )	131PSI (.09 N/mm <sup>2</sup> )
Multi or controlled directional	✓	✓
Stability after expansion	Very Good	Poor
Char	Soft & Fluffy	Soft & Fluffy
Flame-resistant	✓	✓
Moisture-resistant	✓	✓
Chemically inert/paintable	✓	✓
Non-carcinogenic	✓	✓
Long-life (no deterioration)	✓	✓
Odour-free	✓	✓
Colour-standard	Black	Red

### FS3003 SOFT PUFF™

The FS3003 has been developed specifically for doors. This rubber matrix material begins intumescenting at relatively low temperatures. It expands gradually to fill all gaps with moderate force that will not unlatch the door, and has sufficient reservoir capacity to continue intumescenting if escape doors are closed again. FS3003 also stands up well to the stringent requirements for protecting fire doors on oil rigs, which are subject to especially intense heat and flames.

### FS4004

The FS4004 is a graphite-based material formulated to expand to approximately 80 times its original volume. This expansion rate works very well for filling lock-side top corner gaps typical of metal doors exposed to extreme heat. FS4004 is used extensively in our FBL Fire Block Louvre System, and to line door aperture cut-outs. WF Report No 190621/A Issue 4 dated 17.09.2018 refers.

All intumescent products are non-carcinogenic and asbestos-free. Unlike other products available in the marketplace that require special sheathing because of short shelf life, FS3003 is a very stable material. Intumescent products are rubber-like in texture and are easy to cut and glue, whereas other products tend to be brittle and more difficult to handle. And we offer our product in a variety of convenient standard sizes.

		<b>FS3003 REF</b>	<b>FS4004 REF</b>
<b>1.6MM THICK</b>	1.6mm x 9.5mm x 2438mm	3062375PSA*	4062375PSA*
	1.6mm x 12.7mm x 2438mm	3062500PSA*	4062500PSA*
	1.6mm x 19.1mm x 2438mm	3062750PSA*	4062750PSA*
	1.6mm x 25.4mm x 2438mm	30621000PSA*	40621000PSA*
	1.6mm x 44.0mm x 2438mm	30621750PSA*	<b>40621750PSA</b>
	1.6mm x 50.8mm x 2438mm	30622000PSA*	40622000PSA*
	1.6mm x 54.0mm x 2438mm	30622125PSA*	<b>40622125PSA</b>
	<b>3.2MM THICK</b>	3.2mm x 9.5mm x 2438mm	3125375PSA*
3.2mm x 12.7mm x 2438mm		3125500PSA*	4125500PSA*
3.2mm x 19.1mm x 2438mm		3125750PSA*	4125750PSA*
3.2mm x 25.4mm x 2438mm		31251000PSA*	41251000PSA*
3.2mm x 38.1mm x 2438mm		<b>31251500PSA</b>	41251500PSA*
3.2mm x 50.8mm x 2438mm		31252000PSA*	41252000PSA*
3.2mm x 54.0mm x 2438mm		31252125PSA*	41252125PSA*
<b>6.4MM THICK</b>	6.4mm x 9.5mm x 2438mm	3250375PSA*	4250375PSA*
	6.4mm x 12.7mm x 2438mm	<b>3250500PSA</b>	4250500PSA*
	6.4mm x 19.1mm x 2438mm	3250750PSA*	4250750PSA*
	6.4mm x 25.4mm x 2438mm	32501000PSA*	42501000PSA*
	6.4mm x 50.8mm x 2438mm	32502000PSA*	42502000PSA*
	6.4mm x 54.0mm x 2438mm	32502125PSA*	42502125PSA*

Minimum order quantities may apply. Standard products in bold above, other sizes to order. Standard length 2438mm. Available without PSA tape.

FS1001 and FS2002 were discontinued in 2017 but some stock may still be available. Please call.

All products usually available ex-stock except those marked with \*. Call for lead time.  
 Additional manufacturers carriage charges may apply for \* items.  
 No charge for split boxes, but please try to order boxed quantity multiples where possible.