

Product name	S-Line® Fire Pillow
Product Code	S100/S250/S800
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Revision number	02
UIC	SLINE



INTRODUCTION

The purpose of this document is to give guidance to approved contractors and suppliers who are engaged in the fire stopping of service penetrations in walls and floors using the S-Line Fire Pillows.

All service holes through floors and compartment walls must be fire stopped to prevent the passage of fire, smoke and hot gases.

The result of this work will: -

- Prevent the spread of fire, smoke and hot gases through a building by containing it in the compartment of origin.
- Allow for mechanical movement of the structure.
- Maintain the integrity of escape routes from the building
- Reduce loss or damage to a property from the effect of fire and smoke.
- Maintain pressure differential between compartments and ventilation channels.



TRAINING

The S-Line fire pillows are filled with organic fillers and intumescent additives in a water proof, flexible glass cloth bag on the outside. Various pillow sizes enable a temporary or permanent seal to be achieved for most aperture sizes, accommodating service penetrations.









S-Line Fire Pillows are designed to accommodate services, which need to remain flexible or have a need to be removed from the aperture on a regular basis.

The S-LINE Fire Pillow System

- EN1366-3 EI 120 - Fire Resistance - Cables, Metallic Pipes, Trunkings and Cable Trays.
- IET (IEE) 17th Edition Fire Stop Compliant to Regulation 527.1-3 - Electrical Installations.
- EN13501-2 - Fire Classification.
- BS 7671-2008 Chapter 42 & 52 - Electrical Installations Fire Resistance.
- BS476 - 4 hours fire resistance.
- EN10140 Acoustic Reduction - 46 dB.
- Certificate CF514 3rd Party Accreditation.
- EN1026 Air Permeability - 420Pa.



TOOLS AND EQUIPMENT

	Steel Tape Measure - 2 Metre minimum
	Carpenter's Pencil & Straight Edge
	All Purpose Saw
	Hand Brush & Dust Pan
	Bread Knife
	Plastic Sheeting
	Pointing Trowel
	Pallet Knife



INSTALLATION - WALL SEALS

Three sizes of S-Line fire pillow are available; ensure that the correct pillow is installed to suit the opening size. See tables 1 & 2.

Shake the pillows to give an even distribution of the in fill material before installation.

Lay pillows in to the opening with the shortest span (Header Bond) across the width of the opening, so that they are in a brick format. Ensuring that the lower layer is overlap by the top layer.

Pack pillows in to the opening around the services to the required quantity, adding smaller pillows where necessary to fill all small voids.

All cable/electrical trunkings are to be filled using the S-Line



INSTALLATION - FLOOR SEALS

Install galvanized steel mesh 50mm x 50mm x 5mm to the underside of the void with a 100mm overlap of the floor slab. Fix the mesh in to place using 50mm steel strap or 50mm steel angle, securing with 8mm Raw bolts or similar.

Three sizes of S-Line fire pillow are available; ensure that the correct pillow is installed to suit the opening size. See tables 1, 2 & 3.

Shake the pillows to give an even distribution of the in fill material before installation.

Lay pillows flat in to the opening around the services to the required quantity having a minimum depth of 150mm, adding smaller pillows where necessary to fill all small voids.

Pillows to be laid in brick form allowing the top pillows to overlap the lower layer of pillows.

Fill all cable/electrical trunkings using the S-Line sausage pillow.




LARGE S-LINE FIRE PILLOW USAGE TABLE
**Table 1 - Large Pillow Usage - 10% allowance
for penetration included in calculation**

Width mm	Seal Type	length mm							
		100	300	500	700	900	1 mtr	1.4 mtr	1.8 mtr
200	Wall Floor	3	8	13	18	23	25	35	45
400	Wall Floor	5	15	25	35	35	24	70	90
600	Wall Floor	8	23	38	53	53	68	105	123
800	Wall Floor	10	30	50	70	70	90	140	180
1 mtr	Wall Floor	13	38	63	88	88	113	175	225
1.3 mtr	Wall Floor	16	49	81	114	114	146	228	293
1.8 mtr	Wall Floor	23	68	113	158	158	203	315	405


SMALL S-LINE FIRE PILLOW USAGE TABLE
**Table 2 - Small Pillow Usage - 10% allowance
for penetration included in calculation**

Width mm	Seal Type	length mm							
		100	300	500	700	900	1 mtr	1.4 mtr	1.8 mtr
200	Wall Floor	4	11	18	25	33	36	51	65
400	Wall Floor	7	22	36	51	65	72	101	130
600	Wall Floor	11	23	54	76	76	108	152	195
800	Wall Floor	15	44	72	101	130	144	202	260
1 mtr	Wall Floor	18	54	90	126	162	180	254	324
1.3 mtr	Wall Floor	23	70	117	164	211	234	328	422
1.8 mtr	Wall Floor	33	97	135	227	272	324	454	583


SAUSAGE S-LINE FIRE PILLOW USAGE TABLE
**Table 3 - Sausage Pillow Usage - 10% allowance
for penetration included in calculation**

Trunking mm	Seal Type	Trunking mm			
		50	100	200	300
50	Wall Floor	2	4	8	12
100	Wall Floor	2	8	16	24
200	Wall Floor	6	12	24	26
300	Wall Floor	8	16	32	48