

kaiflex[®] ST Class 0



Designed to prevent condensation and energy losses

Flexible closed cell rubber insulation, Kaiflex ST Class 0 reliably prevents condensation and reduces energy loss. By incorporating a water vapour barrier into the insulation cell structure Kaiflex ST Class 0 can effectively eliminate water vapour migration and retains outstanding performance over the entire system life.

By combining anti-microbial resistance into a UK Class 0, European Class Bs3 fire rated, closed cell rubber that is completely dust and fibre free, Kaiflex ST Class 0 can be used in any kind of public, commercial or industrial building without impacting on health or the quality of air.

Available in tube, coils and sheets for use on air-conditioning, refrigeration, chilled water, heating and hot water pipes and air-distribution ductwork, Kaiflex ST Class 0 is versatile insulation with consistent and reliable technical values.

- Closed cell structure with in-built water vapour barrier
- Inherent moisture resistance with long lasting protection against corrosion
- Excellent thermal values minimise energy loss
- Flexible, dust and fibre free, nature allows for ease of installation
- In-built anti-microbial resistance



Kaiflex ST Class 0 Technical Specification

Polymer		NBR blend	
Cell Structure		Closed Cell	
Colour		Black	
Upper Temperature Limit	pipe flat surface	+110°C +90°C	
Lower Temperature Limit		-50°C (-200°C)	see remark (1)
Thermal Conductivity	at -30°C at -20°C at -0°C at +10°C at +20°C at +40°C at +70°C	0.031 W/(m·K) 0.032 W/(m·K) 0.034 W/(m·K) 0.035 W/(m·K) 0.036 W/(m·K) 0.038 W/(m·K) 0.041 W/(m·K)	Test acc. to - EN ISO 8497 - EN ISO 12667
Water Vapour Barrier		In-built	
Water Vapour Resistance	Moisture Resistance Factor μ	$\geq 10\,000$	Test acc. to - EN ISO 13469 - EN ISO 12086
Surface Spread of Flame		Class 1	Test acc. to BS 476 Part 7 1997
Fire Propagation	Total index of performance	less than 12	Test acc. to BS 476 Part 6 1989
	Sub index	less than 6	
Fire Performance acc. to Building Regulations		Class 0	see remark (2)
EuroClass	tubes (≤ 25 mm)	B _L -s3, d0	Test acc. to EN 13501-1
	sheet / rolls (10 mm to 32 mm)	B-s3, d0	
Reaction to Fire		Self-extinguishing, does not drip	
Environmental Aspects		ODP zero GWP zero Cadmium free	
Health Aspects		Dust & Fibre free Formaldehyde free	
Resistance to ...	Mould	Excellent	
Other attributes	PH-value	Neutral	
Other Certificates / Approvals		UL-approved (UL94)	Test in acc. with UL94
		FM approved	
		DNV, Lloyd's Register, See BG	
Outdoor applications		Needs protection against UV- radiation	see remark (3)

Remark (1) For temperatures between -50°C and -200°C please contact our Technical Support Team for advice.

Remark (2) Test results for surface spread of flame and fire propagation meets Class 0 fire performance as defined in UK building regulations

Remark (3) Kaiflex ST Class 0 needs protection against UV-radiation. Please paint with Kaiflex KaiFinish to the recommended thickness within 3 days.

Kaiflex ST Class 0 tolerances: thickness & length

Insulation thickness mm	6	9	10	13	19	25	≥ 32	Length all thicknesses	Width all thicknesses
Tubes	± 1.0 mm	± 1.5 mm	± 1.5 mm	± 1.5 mm	± 2.5 mm	± 2.5 mm	± 3.0 mm	$\pm 1.5\%$	
Sheet	± 1.0 mm	-	± 1.5 mm	± 1.5 mm	± 1.5 mm	± 2.0	± 2.0	$\pm 1.5\%$	$\pm 2.0\%$
Rolls	± 1.0 mm	-	± 1.5 mm	± 1.5 mm	± 1.5 mm	± 2.0	± 2.0	+ 5.0% / - 1.5%	$\pm 2.0\%$

Kaiflex ST Class 0 tubes

Colour: black; Length: 2 m											
Copper Pipe Cu			Iron & Steel pipe Fe		Min ID mm	6 mm Insulation Thickness			9 mm Insulation Thickness		
NB inch	Nom OD inch	Nom OD mm	NB inch	Nom OD mm		Reference	m / carton		Reference	m / carton	
	1/4	6			7.0	ST-06x006	600		ST-09x006	360	
	3/8	10			11.0	ST-06x010	430		ST-09x010	320	
3/8	1/2	12			13.0	ST-06x012	350		ST-09x012	280	
1/2	5/8	15			16.0	ST-06x015	300		ST-09x015	240	
5/8	3/4				21.0	ST-06x020	250		ST-09x020	160	
3/4	7/8	22	1/2	21.3	23.0	ST-06x022	216		ST-09x022	156	
1	1 1/8	28	3/4	26.9	29.0	ST-06x028 ◊	150		ST-09x028	124	
1 1/4	1 3/8	35	1	33.7	36.0				ST-09x035	92	
1 1/2	1 5/8	42	1 1/4	42.4	43.5				ST-09x042	70	
			1 1/2	48.3	49.5				ST-09x048	60	
2	2 1/8	54			55.0				ST-09x054	60	
			2	60.3	61.5				ST-09x060	60	

Copper Pipe Cu			Iron & Steel pipe Fe		Min ID mm	13 mm Insulation Thickness			19 mm Insulation Thickness		
NB inch	Nom OD inch	Nom OD mm	NB inch	Nom OD mm		Reference	m / carton		Reference	m / carton	
	1/4	6			7.0	ST-13x006	240				
	3/8	10			11.0	ST-13x010	190		ST-19x010	106	
3/8	1/2	12			13.0	ST-13x012	172		ST-19x012	100	
1/2	5/8	15			16.0	ST-13x015	154		ST-19x015	86	
5/8	3/4				21.0	ST-13x020	120		ST-19x020	76	
3/4	7/8	22	1/2	21.3	23.0	ST-13x022	110		ST-19x022	74	
1	1 1/8	28	3/4	26.9	29.0	ST-13x028	86		ST-19x028	58	
1 1/4	1 3/8	35	1	33.7	36.0	ST-13x035	76		ST-19x035	48	
1 1/2	1 5/8	42	1 1/4	42.4	43.5	ST-13x042	56		ST-19x042	40	
			1 1/2	48.3	49.5	ST-13x048	48		ST-19x048	30	
2	2 1/8	54			55.0	ST-13x054	46		ST-19x054	30	
			2	60.3	61.5	ST-13x060	40		ST-19x060	28	
2 1/2	2 5/8	67			68.5	ST-13x067	40		ST-19x067	28	
2 13/16	3	76.1	2 1/2	76.1	77.0	ST-13x076	34		ST-19x076	28	
3	3 1/8	80			81.0	ST-13x080 ◊	30		ST-19x080 ◊	26	
			3	88.9	90.5	ST-13x089 ◊	30		ST-19x089 ◊	22	
3 1/2	3 2/3	93			94.5						
4	4 1/4	108			109.5	ST-13x108 ◊	28		ST-19x108 ◊	20	
			4	114.3	116.0	ST-13x114 ◊	28		ST-19x114 ◊	18	

- 9 mm tubes are available upon request for the pipe dimensions: 9x64; 9x70; 9x76; 9x80; 9x89; 9x102; 9x108; 9x114; 9x125; 9x133; 9x140; 9x160.
- 13 mm tubes are available upon request for the pipe dimensions: 13x125; 13x133; 13x140; 13x160.
- 19 mm tubes are available upon request for the pipe dimensions: 19x125; 19x133; 19x140; 19x160.
- All Kaiflex ST Class 0 tubes are available as slit items. Additional 5 p/m net after discount has been applied. For ordering slit items add -SLIT to the codes above. (example: ST-13x076-SLIT)
- Items marked with ◊ delivery quoted on request.

Kaiflex ST Class 0 tubes

Colour: black; Length: 2 m											
Copper Pipe Cu			Iron & Steel pipe Fe		Min ID mm	25 mm Insulation Thickness			32 mm Insulation Thickness		
NB inch	Nom OD inch	Nom OD mm	NB inch	Nom OD mm		Reference	m / carton		Reference	m / carton	
3/8	1/2	12			13.0	ST-25x012	60				
1/2	5/8	15			16.0	ST-25x015	60		ST-32x015	32	
5/8	3/4				21.0	ST-25x020	50				
3/4	7/8	22	1/2	21.3	23.0	ST-25x022	42		ST-32x022	32	
1	1 1/8	28	3/4	26.9	29.0	ST-25x028	40		ST-32x028	24	
1 1/4	1 3/8	35	1	33.7	36.0	ST-25x035	32		ST-32x035	24	
1 1/2	1 5/8	42	1 1/4	42.4	43.5	ST-25x042	24		ST-32x042	22	
			1 1/2	48.3	49.5	ST-25x048	24		ST-32x048	18	
2	2 1/8	54			55.0	ST-25x054	22		ST-32x054	18	
			2	60.3	61.5	ST-25x060	22		ST-32x060	16	
2 1/2	2 5/8	67			68.5	ST-25x067	18		ST-32x067	14	
2 13/16	3	76.1	2 1/2	76.1	77.0	ST-25x076	18		ST-32x076	12	
3	3 1/8	80			81.0						
			3	88.9	90.5	ST-25x089 ◊	14		ST-32x089	10	
3 1/2	3 2/3	93			94.5						
4	4 1/4	108			109.5	ST-25x108 ◊	10		ST-32x108	8	
			4	114.3	116.0	ST-25x114 ◊	10		ST-32x114	8	

Copper Pipe Cu			Iron & Steel pipe Fe		Min ID mm	40 mm Insulation Thickness			50 mm Insulation Thickness		
NB inch	Nom OD inch	Nom OD mm	NB inch	Nom OD mm		Reference	m / carton		Reference	m / carton	
3/4	7/8	22	1/2	21.3	23.0	ST-40x022	22		ST-50x022 ◊	14	
1	1 1/8	28	3/4	26.9	29.0	ST-40x028	16		ST-50x028 ◊	10	
1 1/4	1 3/8	35	1	33.7	36.0	ST-40x035	16		ST-50x035 ◊	8	
1 1/2	1 5/8	42	1 1/4	42.4	43.5	ST-40x042	16		ST-50x042 ◊	8	
			1 1/2	48.3	49.5	ST-40x048	12		ST-50x048 ◊	8	
2	2 1/8	54			55.0	ST-40x054	10		ST-50x054 ◊	8	
			2	60.3	61.5	ST-40x060	10		ST-50x060 ◊	8	
2 1/2	2 5/8	67			68.5						
2 13/16	3	76.1	2 1/2	76.1	77.0	ST-40x076	10		ST-50x076 ◊	6	
3	3 1/8	80			81.0						
			3	88.9	90.5	ST-40x089	10		ST-50x089 ◊	6	
3 1/2	3 2/3	93			94.5						
4	4 1/4	108			109.5	ST-40x108	6		ST-50x108 ◊	4	
			4	114.3	116.0	ST-40x114	6		ST-50x114 ◊	4	

- 25 mm tubes are available upon request for the pipe dimensions: 25x140.
- 32 mm tubes are available upon request for the pipe dimensions: 32x133; 32x140; 32x160.
- 40 mm and 50 mm tubes are available upon request for the pipe dimensions: 40x140; 40x160; 40x168; 50x140; 50x160; 40x168.
- All Kaiflex ST Class 0 tubes are available as slit items. Additional 5 p/m net after discount has been applied. For ordering slit items add -SLIT to the codes above. (example: ST-13x076-SLIT)
- Items marked with ◊ delivery quoted on request.

Kaiflex Connect for large diameter pipework



Sheet pre-cut to insulate large diameter industrial pipework; Colour: black; Length: 1 m

Copper Pipe Cu			Iron & Steel pipe Fe		13 mm Insulation Thickness			19 mm Insulation Thickness		
NB inch	Nom OD inch	Nom OD mm	NB inch	Nom OD mm	Reference	m / carton		Reference	m / carton	
			4	114.3	CONNECT-13x114	25		CONNECT-19x114	18	
				125.0	CONNECT-13x125	25		CONNECT-19x125	18	
		133			CONNECT-13x133	25		CONNECT-19x133	18	
			5	139.7	CONNECT-13x140	25		CONNECT-19x140	18	
		159			CONNECT-13x160	25		CONNECT-19x160	18	
				168.3	CONNECT-13x168	25		CONNECT-19x168	18	
		219		219.1	CONNECT-13x219	25		CONNECT-19x219	18	
				273.0	CONNECT-13x273	25		CONNECT-19x273	18	

Copper Pipe Cu			Iron & Steel pipe Fe		25 mm Insulation Thickness			32 mm Insulation Thickness		
NB inch	Nom OD inch	Nom OD mm	NB inch	Nom OD mm	Reference	m / carton		Reference	m / carton	
			4	114.3	CONNECT-25x114	13		CONNECT-32x114	11	
				125.0	CONNECT-25x125	13		CONNECT-32x125	11	
		133			CONNECT-25x133	13		CONNECT-32x133	11	
			5	139.7	CONNECT-25x140	13		CONNECT-32x140	11	
		159			CONNECT-25x160	13		CONNECT-32x160	11	
				168.3	CONNECT-25x168	13		CONNECT-32x168	11	
		219		219.1	CONNECT-25x219	13		CONNECT-32x219	11	
				273.0	CONNECT-25x273	13		CONNECT-32x273	11	

Kaiflex ST Class 0 continuous sheet

Colour: black; Width: 1m;

			Continuous Sheet			Continuous Sheet with self-adhesive backing		
Insulation Thickness mm	Width m	Length m	Reference	m ² / carton		Reference	m ² / carton	
3	1	30	ST-03-E	30		ST-03-A-E	30	
6	1	30	ST-06-E	30		ST-06-A-E	30	
10	1	20	ST-10-E	20		ST-10-A-E	20	
13	1	14	ST-13-E	14		ST-13-A-E	14	
19	1	10	ST-19-E	10		ST-19-A-E	10	
25	1	8	ST-25-E	8		ST-25-A-E	8	
32	1	6	ST-32-E	6		ST-32-A-E	6	
40	1	8	ST-40-E	8		ST-40-A-E	8	

- Other sizes of Kaiflex Connect are available upon request.
- Kaiflex Connect products delivery quoted on request



Kaiflex ST Class 0 flat sheet wide (2m x 1m)

Colour: black; Length: 2m; Width: 1m;								
Insulation Thickness mm	Width m	Length m	Flat Sheet Wide			Flat Sheet Wide with self-adhesive backing		
			Reference	m ² / carton		Reference	m ² / carton	
6	1	2	ST-06-1.0	48		ST-06-1.0-A	48	
10	1	2	ST-10-1.0	32		ST-10-1.0-A	32	
13	1	2	ST-13-1.0	24		ST-13-1.0-A	24	
19	1	2	ST-19-1.0	16		ST-19-1.0-A	16	
25	1	2	ST-25-1.0	12		ST-25-1.0-A	12	
32	1	2	ST-32-1.0	10		ST-32-1.0-A	10	
50	1	2	ST-50-1.0	6		ST-50-1.0-A	6	

Kaiflex ST Class 0 flat sheet (2m x 0.5m)

Colour: black; Length: 2m; Width: 0.5m;								
Insulation Thickness mm	Width m	Length m	Flat Sheet 2m x 0.5m			Flat Sheet 2m x 0.5m with self-adhesive backing		
			Reference	m ² / carton		Reference	m ² / carton	
6	0.5	2	ST-06-0.5	24		ST-06-0.5-A	24	
10	0.5	2	ST-10-0.5	16		ST-10-0.5-A	16	
13	0.5	2	ST-13-0.5	12		ST-13-0.5-A	12	
19	0.5	2	ST-19-0.5	8		ST-19-0.5-A	8	
25	0.5	2	ST-25-0.5	6		ST-25-0.5-A	6	
32	0.5	2	ST-32-0.5	5		ST-32-0.5-A	5	

Kaiflex ST Class 0 self-adhesive tape

Colour: black;					
Insulation Thickness mm	Width mm	Length m	Reference	rolls / carton	
3	50	15	ST-TAPE	12	



KAIMANN
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