

GAME CHANGING *kairopak* SYSTEM

Proven Kaiflex technology,
beneficial length: 1,20 m

KaiCene®-Technology

Tubes uncoated

INCERAM®-Cladding

Sheets coated



kaiflex **KK** plus s1

Uncompromising. Because safety comes first!

- Our new safety standard for busy public and commercial buildings
- Low smoke development and high flame retardancy provide additional personal safety in the event of a fire
- Active fire protection, thanks to INCERAM-Cladding (sheets coated)
- Minimizes reliably energy loss
- Effectively prevents water vapour diffusion and thus maintains the systems long-lasting insulating effect
- Easy to use, thanks to KaiCene-Technology (tubes uncoated)
- High system reliability with pipe supports, tape and glue



Kaiflex KKplus s1 Technical Data

Material		Elastomeric foam based on synthetic rubber. Flexible Elastomeric Foam (FEF) in acc. to EN 14304 Tubes uncoated (KaiCene-Technology), sheets with INCERAM-Cladding.	
Cell structure		Closed cell	
Colour		Black/Anthracite	
Upper temperature limit	Pipe Flat surfaces	+110 °C +85 °C	
Lower temperature limit		-50 °C (-200 °C)	See remark (1)
Thermal conductivity	λ_0 at -10 °C at 0 °C at +10 °C	$0,038 + 8,0 \cdot 10^{-5} \vartheta + 1,2 \cdot 10^{-7} \vartheta^2$ $\leq 0,037 \text{ W/(m}\cdot\text{K)}$ $\leq 0,038 \text{ W/(m}\cdot\text{K)}$ $\leq 0,039 \text{ W/(m}\cdot\text{K)}$	Test acc. to DIN EN ISO 8497 DIN EN 12667
Water vapour permeability	Moisture resistance factor μ	≥ 10.000	Test acc. to DIN EN 13469 DIN EN 12086
Euroclass [◊]	Tubes Sheets	B _L -s1, d0 B-s1, d0	Test acc. to DIN EN 13501-1
Practical fire behaviour		Self-extinguishing, no drips, does not support flame spread	
Fire resistance classification (DIN 4102-11) with rubber		R 90	(ABP) Nr.: P-MPA-E-14-001
Corrosion resistance		Satisfies requirements	In acc. with DIN 1988
Health aspects		Fibre free: For high hygiene requirements Heavy metal (e.g. cadmium, lead) and formaldehyde free	
Resistance to	Mould and bacteria	No growth	In acc. with VDI 6022
Other attributes	pH-Value	CE marked Neutral	
Shelf life	Self-adhesive products	1 year	Store in a dry room at a typical relative humidity (between 50 % and 70 %) and room temperature (between 0 °C and +35 °C)
Tolerances		In acc. with DIN EN 14304:2013-04	
Outdoor applications		Needs protection against UV-radiation	See remark (2)

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

Remark (2) To protect against UV-induced deterioration Kaiflex should be either painted using Kaifinish Color paint or covered with a suitable UV resistant cladding system within 1 day of being installed outdoors.

[◊] The Euroclass rating applies to metallic or solid mineral substrates.

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Kaiflex KKplus s1 Tube · uncoated (KaiCene-Technologie)



Colour: Black / Anthracite · Length: 1,2 m

Copper pipe Cu		Iron & steel pipe Fe			9 mm Insulation thickness			13 mm Insulation thickness		
OD mm	Nom width DN	Inch	OD mm	Nom width DN	Reference	Order No.	m/ carton	Reference	Order No.	m/ carton
15,0	10	1/4	13,5	8	KK+s1-09x015-1,2	4008624 *	158,4	KK+s1-13x015-1,2	4005146	108,0
18,0	15	3/8	17,2	10	KK+s1-09x018-1,2	4008625 *	144,0	KK+s1-13x018-1,2	4005147	88,8
22,0	20	1/2	21,3	15	KK+s1-09x022-1,2	4008626 *	112,8	KK+s1-13x022-1,2	4005148	80,4
28,0	25	3/4	26,9	20	KK+s1-09x028-1,2	4008627 *	90,0	KK+s1-13x028-1,2	4005149	58,8
35,0	32	1	33,7	25	KK+s1-09x035-1,2	4008628 *	69,6	KK+s1-13x035-1,2	4005150	50,4
42,0	40	1 1/4	42,4	32	KK+s1-09x042-1,2	4008629 *	57,6	KK+s1-13x042-1,2	4005151	42,0
		1 1/2	48,3	40	KK+s1-09x048-1,2	4008630 *	50,4	KK+s1-13x048-1,2	4005152	38,4
54,0	50		54,0		KK+s1-09x054-1,2	4008631 *	45,6	KK+s1-13x054-1,2	4005153	36,0
		2	60,3	50	KK+s1-09x060-1,2	4008632 *	43,2	KK+s1-13x060-1,2	4005154	28,8
64,0			63,5		KK+s1-09x064-1,2	4008633 *	43,2	KK+s1-13x064-1,2	4008639	28,8
70,0			70,0							
76,1	65	2 1/2	76,1	65	KK+s1-09x076-1,2	4008634 *	36,0	KK+s1-13x076-1,2	4005155	27,6
88,9	80	3	88,9	80	KK+s1-09x089-1,2	4008635 *	28,8	KK+s1-13x089-1,2	4005156	19,2

Copper pipe Cu		Iron & steel pipe Fe			19 mm Insulation thickness			25 mm Insulation thickness		
OD mm	Nom width DN	Inch	OD mm	Nom width DN	Reference	Order No.	m/ carton	Reference	Order No.	m/ carton
15,0	10	1/4	13,5	8	KK+s1-19x015-1,2	4005157	62,4			
18,0	15	3/8	17,2	10	KK+s1-19x018-1,2	4005158	50,4	KK+s1-25x018-1,2	4008643 *	37,2
22,0	20	1/2	21,3	15	KK+s1-19x022-1,2	4005159	49,2	KK+s1-25x022-1,2	4008644 *	30,0
28,0	25	3/4	26,9	20	KK+s1-19x028-1,2	4005160	39,6	KK+s1-25x028-1,2	4008645 *	24,0
35,0	32	1	33,7	25	KK+s1-19x035-1,2	4005161	30,0	KK+s1-25x035-1,2	4008646 *	21,6
42,0	40	1 1/4	42,4	32	KK+s1-19x042-1,2	4005162	27,6	KK+s1-25x042-1,2	4008647 *	19,2
		1 1/2	48,3	40	KK+s1-19x048-1,2	4005163	24,0	KK+s1-25x048-1,2	4008648 *	16,8
54,0	50		54,0		KK+s1-19x054-1,2	4005164	19,2	KK+s1-25x054-1,2	4008649 *	16,8
		2	60,3	50	KK+s1-19x060-1,2	4005165	19,2	KK+s1-25x060-1,2	4008650 *	15,6
64,0			63,5		KK+s1-19x064-1,2	4008642	15,6	KK+s1-25x064-1,2	4008651 *	14,4
70,0			70,0							
76,1	65	2 1/2	76,1	65	KK+s1-19x076-1,2	4005166	16,8	KK+s1-25x076-1,2	4008652 *	12,0
88,9	80	3	88,9	80	KK+s1-19x089-1,2	4005167	14,4	KK+s1-25x089-1,2	4008653 *	9,6

* No stock item, delivery time on request.

For further dimensions please contact our customer service.

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Kaiflex KKplus s1 Tube · uncoated (KaiCene-Technologie)



Colour: Black / Anthracite · Length: 1,2 m

Copper pipe Cu		Iron & steel pipe Fe			32 mm Insulation thickness					
OD mm	Nom width DN	Inch	OD mm	Nom width DN	Reference	Order No.	m/ carton			
15,0	10	1/4	13,5	8	KK+s1-32x015-1,2	4008655 *	21,6			
18,0	15	3/8	17,2	10	KK+s1-32x018-1,2	4008656 *	21,6			
22,0	20	1/2	21,3	15	KK+s1-32x022-1,2	4008657 *	21,6			
28,0	25	3/4	26,9	20	KK+s1-32x028-1,2	4008658 *	19,2			
35,0	32	1	33,7	25	KK+s1-32x035-1,2	4008659 *	16,8			
42,0	40	1 1/4	42,4	32	KK+s1-32x042-1,2	4008660 *	14,4			
		1 1/2	48,3	40	KK+s1-32x048-1,2	4008661 *	13,2			
54,0	50		54,0		KK+s1-32x054-1,2	4008662 *	12,0			
		2	60,3	50	KK+s1-32x060-1,2	4008663 *	10,8			
64,0			63,5		KK+s1-32x064-1,2	4008664 *	10,8			
70,0			70,0		KK+s1-32x070-1,2	4008665 *	9,6			
76,1	65	2 1/2	76,1	65	KK+s1-32x076-1,2	4008666 *	7,2			
88,9	80	3	88,9	80	KK+s1-32x089-1,2	4008667 *	7,2			

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GAME CHANGING *kairopak* SYSTEM

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Kaiflex KKplus s1 SK Tube · uncoated (KaiCene-Technologie) · self-adhesive · with tangential cut



Colour: Black / Anthracite · Length: 1,2 m

Copper pipe Cu		Iron & steel pipe Fe			9 mm Insulation thickness			13 mm Insulation thickness		
OD mm	Nom width DN	Inch	OD mm	Nom width DN	Reference	Order No.	m/ carton	Reference	Order No.	m/ carton
15,0	10	1/4	13,5	8	KK+s1-09x015-1,2-SK	4008672 *	158,4	KK+s1-13x015-1,2-SK	4008683 *	108,0
18,0	15	3/8	17,2	10	KK+s1-09x018-1,2-SK	4008673 *	144,0	KK+s1-13x018-1,2-SK	4008684 *	88,8
22,0	20	1/2	21,3	15	KK+s1-09x022-1,2-SK	4008674 *	102,0	KK+s1-13x022-1,2-SK	4008685 *	80,4
28,0	25	3/4	26,9	20	KK+s1-09x028-1,2-SK	4008675 *	90,0	KK+s1-13x028-1,2-SK	4008686 *	62,4
35,0	32	1	33,7	25	KK+s1-09x035-1,2-SK	4008676 *	69,6	KK+s1-13x035-1,2-SK	4008687 *	50,4
42,0	40	1 1/4	42,4	32	KK+s1-09x042-1,2-SK	4008677 *	57,6	KK+s1-13x042-1,2-SK	4008688 *	42,0
		1 1/2	48,3	40	KK+s1-09x048-1,2-SK	4008678 *	50,4	KK+s1-13x048-1,2-SK	4008689 *	38,4
54,0	50		54,0		KK+s1-09x054-1,2-SK	4008679 *	45,6	KK+s1-13x054-1,2-SK	4008690 *	36,0
		2	60,3	50	KK+s1-09x060-1,2-SK	4008680 *	43,2	KK+s1-13x060-1,2-SK	4008691 *	28,8
76,1	65	2 1/2	76,1	65	KK+s1-09x076-1,2-SK	4008681 *	36,0	KK+s1-13x076-1,2-SK	4008692 *	27,6
88,9	80	3	88,9	80	KK+s1-09x089-1,2-SK	4008682 *	28,8	KK+s1-13x089-1,2-SK	4008693 *	24,0

Copper pipe Cu		Iron & steel pipe Fe			19 mm Insulation thickness			25 mm Insulation thickness		
OD mm	Nom width DN	Inch	OD mm	Nom width DN	Reference	Order No.	m/ carton	Reference	Order No.	m/ carton
15,0	10	1/4	13,5	8	KK+s1-19x015-1,2-SK	4008694 *	67,2	KK+s1-25x015-1,2-SK	4008705 *	37,2
18,0	15	3/8	17,2	10	KK+s1-19x018-1,2-SK	4008695 *	50,4	KK+s1-25x018-1,2-SK	4008706 *	37,2
22,0	20	1/2	21,3	15	KK+s1-19x022-1,2-SK	4008696 *	49,2	KK+s1-25x022-1,2-SK	4008707 *	30,0
28,0	25	3/4	26,9	20	KK+s1-19x028-1,2-SK	4008697 *	39,6	KK+s1-25x028-1,2-SK	4008708 *	24,0
35,0	32	1	33,7	25	KK+s1-19x035-1,2-SK	4008698 *	34,8	KK+s1-25x035-1,2-SK	4008709 *	21,6
42,0	40	1 1/4	42,4	32	KK+s1-19x042-1,2-SK	4008699 *	28,8	KK+s1-25x042-1,2-SK	4008710 *	19,2
		1 1/2	48,3	40	KK+s1-19x048-1,2-SK	4008700 *	27,6	KK+s1-25x048-1,2-SK	4008711 *	16,8
54,0	50		54,0		KK+s1-19x054-1,2-SK	4008701 *	21,6	KK+s1-25x054-1,2-SK	4008712 *	16,8
		2	60,3	50	KK+s1-19x060-1,2-SK	4008702 *	21,6	KK+s1-25x060-1,2-SK	4008713 *	15,6
76,1	65	2 1/2	76,1	65	KK+s1-19x076-1,2-SK	4008703 *	16,8	KK+s1-25x076-1,2-SK	4008714 *	12,0
88,9	80	3	88,9	80	KK+s1-19x089-1,2-SK	4008704 *	16,8	KK+s1-25x089-1,2-SK	4008715 *	9,6

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For further dimensions please contact our customer service.

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Kaiflex KK_{plus} s1 Sheet · coated (INCERAM-Cladding) · continuous



Colour: Black / Anthracite

Insulation thickness mm	Sheet · continuous 1 m width			Sheet · continuous · self-adhesive 1 m width		
	Reference	Order No.	m ² /carton	Reference	Order No.	m ² /carton
6	KK+s1-06-RL	4008727 *	18	KK+s1-06-RL-SK	4008733 *	15
10	KK+s1-10-RL	4008728 *	10	KK+s1-10-RL-SK	4008734 *	10
13	KK+s1-13-RL	4008729 *	14	KK+s1-13-RL-SK	4008735 *	14
16	KK+s1-19-RL	4008730 *	10	KK+s1-19-RL-SK	4008736 *	10
19	KK+s1-25-RL	4008731 *	8	KK+s1-25-RL-SK	4008737 *	8
32	KK+s1-32-RL	4008732 *	6	KK+s1-32-RL-SK	4008738 *	6

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