Edition **2018**

K-FLEX®

K-FLEX® Catalogue

Products & Accessories

K-FLEX
www.kflex.com

A new **Generation** of Insulation materials

THE NEW OUT-OF-THE-BOX PIPE INSULATION FOR EXTREME APPLICATIONS.

In the US, this product innovation is already enjoying unprecedented successes. In 2018, **K-FLEX® TITAN** will now also enter the European market. **K-FLEX® TITAN** is a unique combination of best **K-FLEX®** elastomeric insulation products, coated with an ultra-resistant and still very flexible surface. A product designed exclusively according to the wishes of the customer. The material needs no extra protection and is extremely easy to install. “All-in-one” meets “out-of-the-box”. A dream.

- **Supreme flexibility**: The newly developed copolymer coating provides an unprecedentedly flexible all-in-one product.
- **High mechanical strength**: K-FLEX® TITAN is resistant to tearing and mechanical stress. Above that it is UV and weather-resistant. The finish also makes it impermeable to water vapor.
- **Excellent insulation values**: K-FLEX® TITAN combines the well-known benefits of K-FLEX® elastomeric insulating products with excellent mechanical properties and controls an above-average temperature range.

K-FLEX® TITAN represents a groundbreaking advance in the protection of plants.

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All information is correct at the time of publication and subject to our terms and conditions.
This price list supersedes all previous editions. Errors & omissions excepted.

1989
Year of foundation
Roncello Italy

2.500
Employees
worldwide

50.000+
Customers
worldwide

63
Countries
with K-FLEX®
subsidiaries

5
Continents
with
Logistics centers

12
Plants
Worldwide

K-FLEX® ▸ THE COMPANY

K-FLEX® is an Italian manufacturing company specialised in the production of thermal and acoustic flexible elastomeric insulation materials.

K-FLEX® has production facilities and subsidiary networks around the globe in order to supply their products to a worldwide customer base. Its diversified products range provides solutions for various market sectors, including building, transportation, petrochemical and renewable energy.

K-FLEX® is a worldwide market leader thanks to its focus on technological innovation and the quality of its products that play an essential role in energy consumption control and reduction of the greenhouse gas emission.

K-FLEX® is an example of a successful Italian company that has established itself worldwide. The company is present in 63 countries, with production facilities in all continents and more than 2500 employees. In addition, the company has commercial distribution branches, located all over the world, for the efficient and effective global distribution process of its products.

The original manufacturing plant, located in Roncello (north of Milan), was founded in 1989 and today it is the largest in the world for the production of elastomeric insulation.

UNI EN ISO 9001:2015 and ISO 14001 certified, the company offers a wide range of products that ensure quality, reliability and compliance with market standards.

K-FLEX® products also play a very important role in conserving the environment by improving the relationship between energy consumption and pollutant emissions, controlling energy consumption and reducing the release of greenhouse gas in the atmosphere.

"Twenty-five years of History: synonymous with quality, professionalism and passion"

K-FLEX® ▸ THE STORY

K-FLEX® was founded in 1989 in Roncello, located north of Milan, Italy, with the first production plant of elastomeric materials for thermal insulation.

K-FLEX® quickly developed its presence in the market and grew rapidly. In 1993, **K-FLEX®** had already established a significant market share in Italy.
It subsequently expanded into other European markets such as France and Spain, opening in Barcelona in 1995 and in Madrid in 1998.

Almost ten years after its foundation, **K-FLEX®** began its expansion outside Europe starting up **K-FLEX®** China. Based in Guangzhou was the first of two manufacturing plants with a second plant built in Suzhou, which opened in 2009.

The Company built further production facilities in the US, in Russia in 2005, in Malaysia, Poland, India and Dubai.

In order to expand its commercial footprint, the Company opened distribution branches and various other distribution / sales companies in Germany (2000), Scandinavia (2005), United Kingdom (2006), Romania (2008), Japan (2008), Ukraine (2009), South Korea (2009).

In the 2008 another strategic activity was the 100% share acquisition of BevEx Ltd. BevEx offers an important diversification opportunity for **K-FLEX®** through its presence in the Food & Beverage sector.

At the end of 2009, **K-FLEX®** opened its headquarter in Roncello, housing a 50,000 sq. meter production facility.

In the last few years **K-FLEX®** has been expanding the production facilities in Russia, Poland, India and USA in order to better answer to the local market request.

In June 2014, the company changed its legal form from limited liability company (S.r.l.) to joint stock company (S.p.A.).

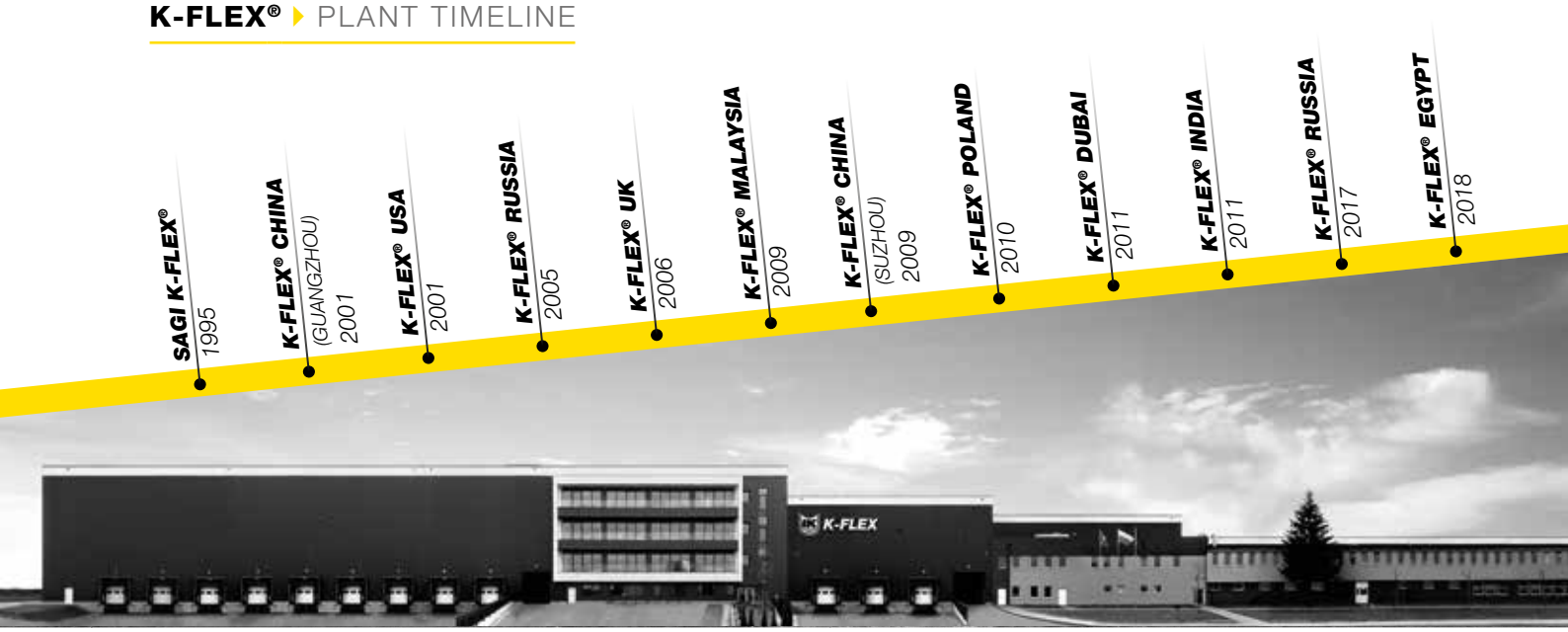
In 2017, the plant in the USA was extended towards the biggest and most modern plant worldwide.

Also the Polish plant was extended in 2017 and represents the biggest and most modern plant in Europe.

In 2018, a new production site in Egypt will be finalized.

In 2018, the new **K-FLEX®** logistics center "**K-FLEX®** Logistikzentrum Leipzig-Halle" in Germany will be opened. It will be the biggest distribution center for elastomeric foams in whole Europe.

K-FLEX® ▸ PLANT TIMELINE



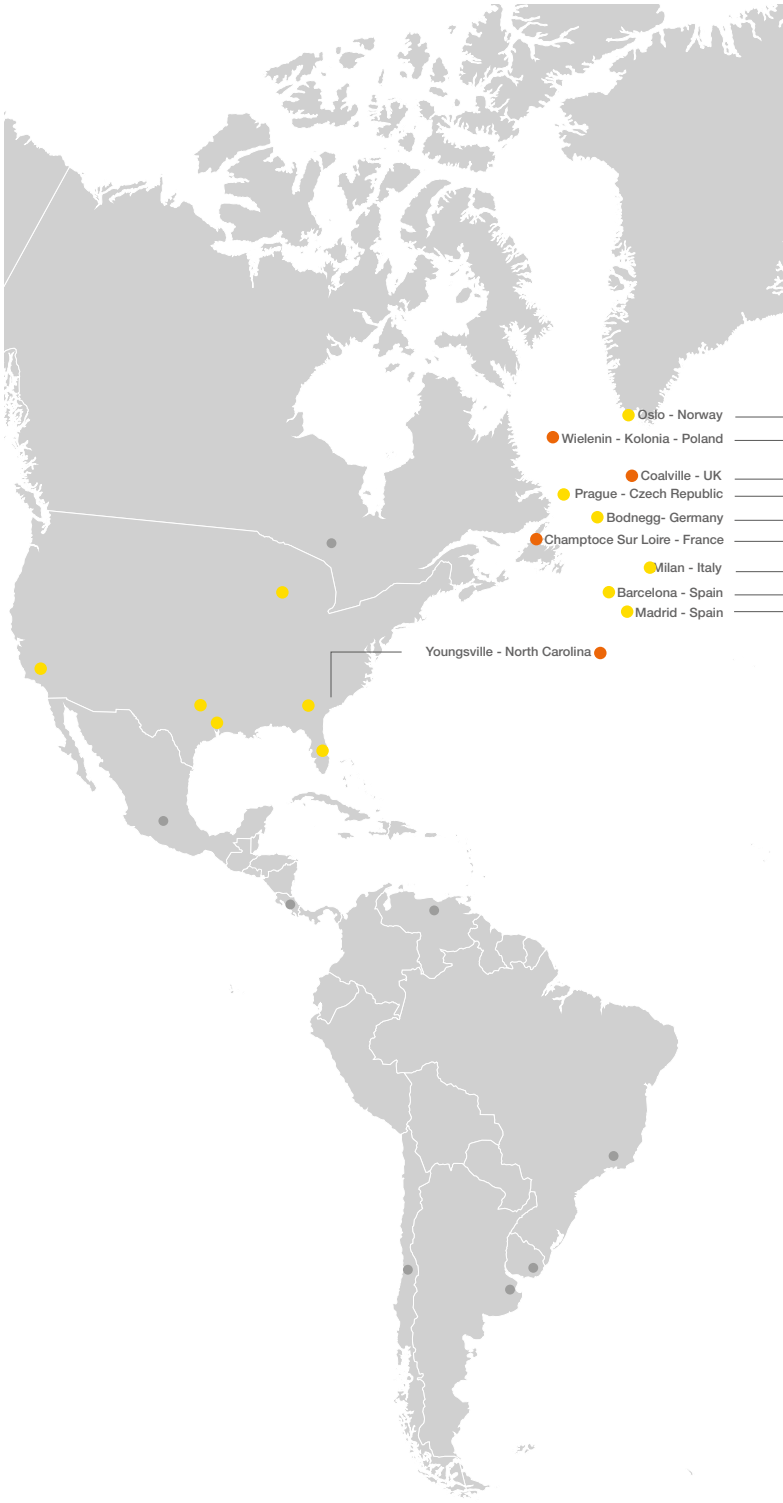
K-FLEX® ▸ IN THE WORLD

K-FLEX® distributes products to over 63 countries. As part of its business strategy, **K-FLEX®** will continue to seek to expand its sales and market share in various international markets, particularly in emerging regions.

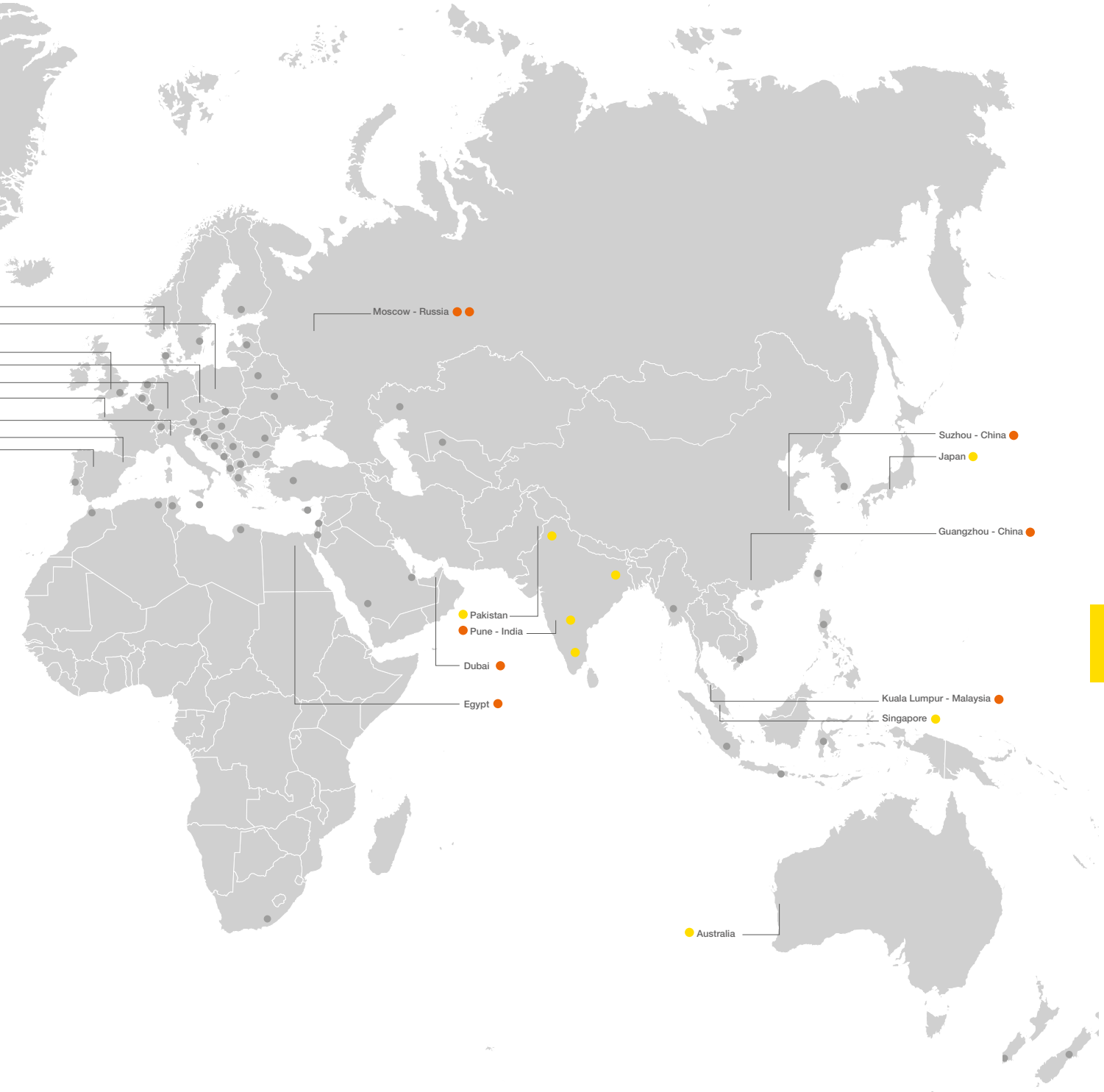
K-FLEX®'s international production network is in response to a rapidly expanding insulation market. Unlike other markets, K-FLEX® does not globalize as a strategy to decrease labour costs, but instead, is expanding in order to more efficiently reach local markets. Thermal insulation materials are high volume products and shipping costs have a strong impact on pricing. Maintaining a close vicinity to the local market and reducing transportation costs are, therefore, important strategic factors in this industry. A close proximity to customers provides **K-FLEX®** with the flexibility to adapt in this global market that is constantly evolving.

One of the strengths of **K-FLEX®** is the ability to effectively answer the specific needs of its customers through a particularly flexible production structure, that enables inventory updates based on their sales forecasts. This flexibility allows for a better level of service to the customer.

Further Expansion
K-FLEX® is focused on continuing to utilize its internationa presence in order to strengthen penetration in the high growth emerging markets. **K-FLEX®** Group has recently completed a significant capital injection for expansion which has provided the Group with the capability to capitalize on growing demand. **K-FLEX®** is particularly focused on pursuing attractive growth opportunities in Asia Pacific, the Middle East, Eastern Europe and North America. The aim of **K-FLEX®** is to continue expanding its market share in key end markets by further developing its product offer for these markets and by growing relationships with existing and new customers globally.



“Local Centres for worldwide distribution”



K-FLEX® ▸ MISSION

To be the **market leader** in the **production** of **insulation materials** and to effectively answer the specific needs of its customers and markets, while providing advanced **technological solutions** and **innovative insulation systems**.

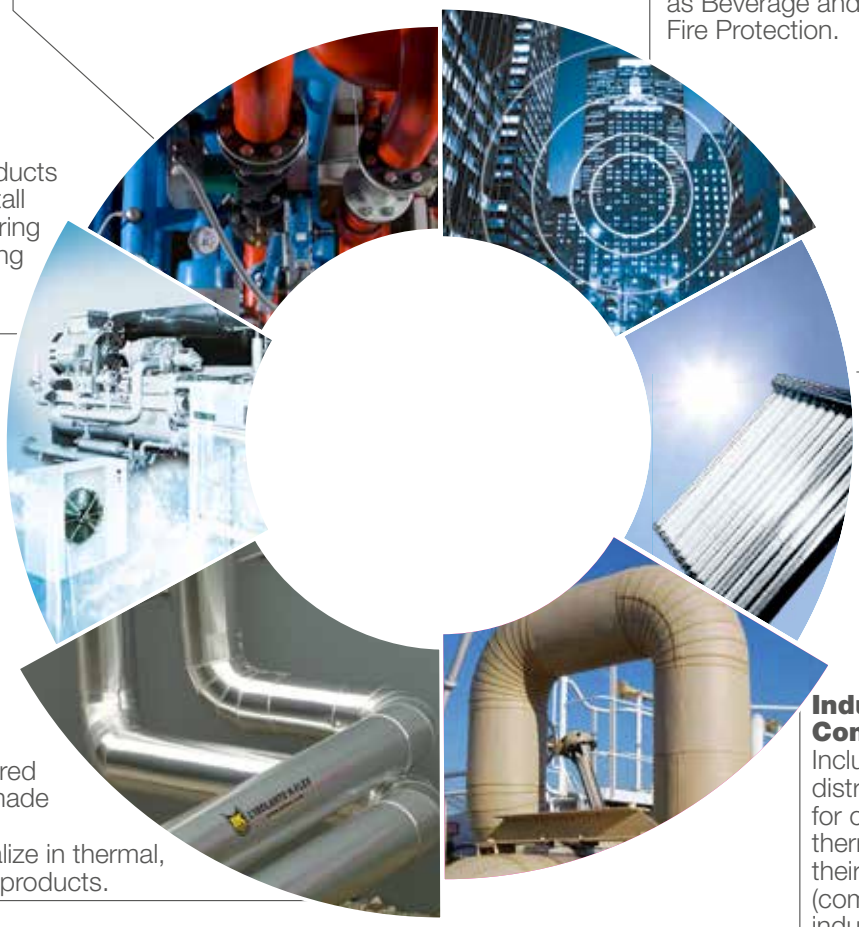
K-FLEX® ▸ BUSINESS AREA

K-FLEX® is a reference point for excellence in the insulation market through the quality of its processes and products and the continuous search for innovative solutions.
K-FLEX® offers a wide range of products to meet the needs of the following areee market:

Air Conditioning and Refrigeration:
Thermal insulation of the machinery (facilities) and pipework (distribution) of air conditioning and refrigeration units.

Acoustics and other Markets:
K-FLEX® supplies specialised products and solutions to the acoustic markets, as well as other niche markets such as Beverage and Passive Fire Protection.

O. E. M.:
K-FLEX® supplies products to customers who install them in equipment during their own manufacturing processes.



Solar Thermal Market:
Materials are used for the hydraulic connections from vessels or tanks to the solar panels.

Heating and Plumbing:
Sold through a structured distribution network, made up of large distribution companies that specialize in thermal, hydraulic and sanitary products.

Industrial and Commercial:
Includes both the distribution sales network for companies that make thermal insulation materials their core business (commercial) and specific industrial segments, which consist of the markets for Oil and Petrochemical (Oil & Gas), Rail and Ship Building, Pharmaceutical and other industrial processes.

K-FLEX® ▸ LOGISTIC AND DISTRIBUTION

The high flexibility of our production structure allows us to up-date our stock rotation based on sales forecasts. Being able to give comprehensive answers to any request is one of **L'ISOLANTE K-FLEX**'s strong points.

The production capacity of the new plant is 120 million meters of insulation pipes per year (equivalent to 3 times around the Earth) and 10 million square meters of sheet insulation.

The **K-FLEX®** automated warehouse enables high performance in terms of speed, handling some 4,000 different products with a fast turnover.

Our warehouse has a dedicated goods despatch area, especially designed with ergonomics and organisation in mind. This area has been constructed on different levels with lifts to facilitate easy pallet handling.

Through these actions the shipping area is able to prepare and load a quantity of materials equal to 60 complete trucks per day and more than 18000 complete trucks per year.

THERMAL INSULATION

K-FLEX® ▸ THERMAL INSULATION

The K-FLEX® range of thermal insulation products offers everything necessary to meet the technical insulation demands of both civil and industrial installations, to reduce energy consumption and prevent condensation and corrosion under insulation.

K-FLEX® products cover a range of temperature for applications including cryogenic plants to chilled water systems, and from domestic hot water systems to solar thermal plants. Their high resistance to water vapour diffusion is a key feature of all K-FLEX® closed cell elastomeric insulation materials.

Typical applications include: refrigeration and air-conditioning systems; plumbing, industrial, chemical and pharmaceutical plant engineering; insulation of pipes, fittings and other equipment; insulation of tanks, solar systems and all OEM applications requiring thermal insulation.

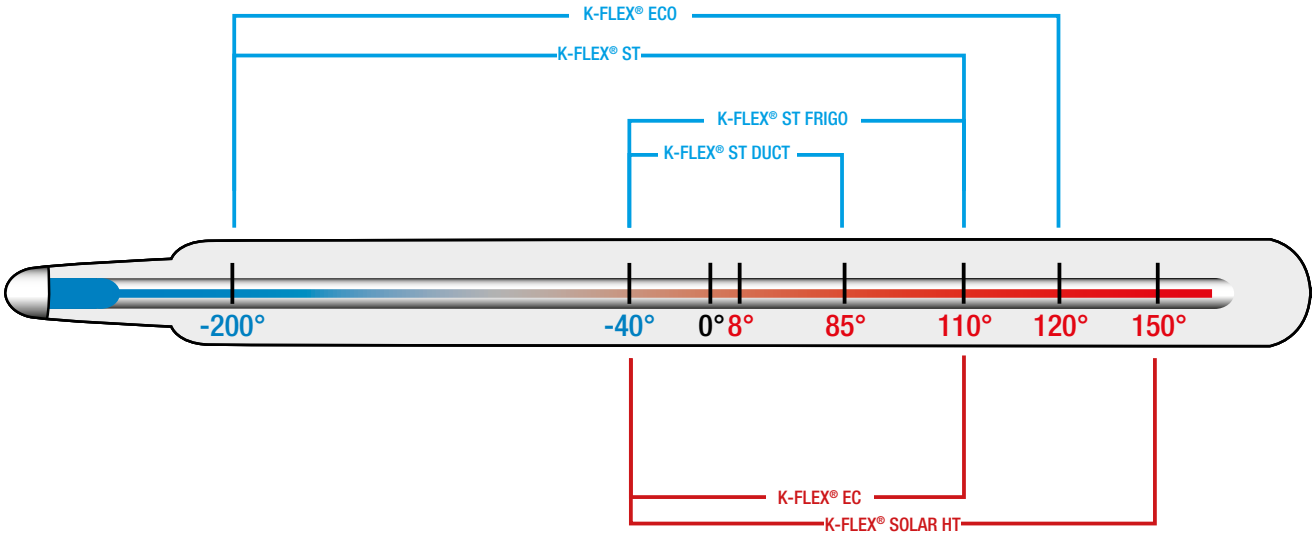
The product range for the civil sector already complies with the current European testing for fire resistance of building elements.

For more specific areas such as marine, rail, oil &gas, K-FLEX® products already have the most important and relevant international approvals and certification in their field. The final choice of a suitable coating completes the insulation system.
The different finishes (cladding) available for K-FLEX® systems conform to industry standards and offer UV protection, mechanical and chemical protection and an aesthetic finish.

K-FLEX® ▸ PRODUCTS AND APPLICATIONS

	Heating	Air Conditioning/ Ventilation	Refrigeration	Solar	Industrial	Oil & Gas	Ship building and train	Halogen Free	UV Resistant
K-FLEX® ST	●	●	●		●	●	●		
K-FLEX® ST DUCT	●	●	●						
K-FLEX® ST FRIGO		●	●						
K-FLEX® EC	●	●							
K-FLEX® ECO	●	●	●		●	●	●	●	
K-FLEX® SOLAR HT	●			●	●	●			●
K-FLEX® SRC	●	●	●					●	
K-FLEX® AL CLAD SYSTEM	●	●	●		●				●
K-FLEX® COLOR SYSTEM	●	●	●						●
K-FLEX® IN CLAD SYSTEM					●	●	●		●
K-FLEX® IC CLAD SYSTEM					●	●	●		

Special requirements	K-FLEX® solutions
UV / weather protection	K-FLEX® AL CLAD SYSTEM K-FLEX® IN CLAD SYSTEM K-FLEX® COLOR SYSTEM
Colour coding	K-FLEX® COLOR SYSTEM
Aesthetic design	K-FLEX® COLOR SYSTEM K-FLEX® AL CLAD SYSTEM
Easy to clean	All K-FLEX® SYSTEM
High resistance to chemical attack	K-FLEX® IN CLAD SYSTEM
Shock resistance (mechanical)	K-FLEX® AL CLAD SYSTEM K-FLEX® IN CLAD SYSTEM K-FLEX® IC CLAD SYSTEM
Resistance to water vapour diffusion	K-FLEX® AL CLAD SYSTEM K-FLEX® IN CLAD SYSTEM
Quick and easy assembly	All K-FLEX® SYSTEM



For applications below -40 °C please contact our technical department.
Test certificates, approvals and supervision for different work stations (shipbuilding, rail, chemical, pharmaceutical, oil & gas, etc ...) are available in the download section of our website: www.K-FLEX.com

APPLICATION TEMPERATURE RANGE		
Product	Min °C	Max °C
K-FLEX® **ST**	-200	+110
K-FLEX® **ST DUCT**	-40	+85
K-FLEX® **ST FRIGO**	-40	+110
K-FLEX® **EC**	-40	+110
K-FLEX® **ECO**	-200	+120
K-FLEX® **SOLAR HT**	-40	+150
K-FLEX® **SRC**	-40	+85
K-FLEX® **AL CLAD SYSTEM**	-40	+110
K-FLEX® **COLOR SYSTEM**	-40	+110
K-FLEX® **IN CLAD SYSTEM**	-200	+120
K-FLEX® **IC CLAD SYSTEM**	-40	+110

The temperature ranges given are intended as a guideline. For the minimum and maximum temperatures of use refer to the technical data of each product.

K-FLEX® ▸ PACKAGING

Cartons	Products	Carton dimensions (cm)			Cartons/ Pallet	Pallet dimensions (cm)			Pallet/ Truck	Pallet**
		Length	Width	Height	Quantity*	Length	Width	Height	Quantity	
	**Sheets 1m:** K-FLEX® **ST** K-FLEX® **ECO** K-FLEX® **SOLAR HT** K-FLEX® **SRC** K-FLEX® **SRC ECO** K-FLEX® **AL CLAD** K-FLEX® **COLOR** K-FLEX® **IC CLAD** K-FLEX® **IN CLAD**	105	55	55	16	210	120	235	12	
	**Sheets 2x0,5m:**	215,5	55	16,5	20	210	120	180		
	**Sheets 1,5m in sack:** K-FLEX® **ST** K-FLEX® **ST DUCT**	•	•	•	20	210	120	265***		

* Maximum number per pallet
** Images for illustration purposes only, the amount of cartons/pallet may differ from that shown.
*** maximum height = 265 cm Depending on the thickness of the insulation sheet packing can vary in size, which may affect the overall height.

NB: transport volumes are calculated for full loads. This may change according to the size of the truck. Please check with our customer service department on transport volumes valid for the particular job.

K-FLEX® ▸ PACKAGING

Cartons	Products	Carton dimensions (cm)			Cartons/ Pallet	Pallet dimensions (cm)			Pallet/ Truck	Pallet**
		Length	Width	Height	Quantity*	Length	Width	Height	Quantity	
	**Tubes 2m:** K-FLEX® **ST** K-FLEX® **EC** K-FLEX® **EC AD** K-FLEX® **ECO**	210	39	32	21 18	210 210	120 120	239 207	12	
	**Tubes 2m:** K-FLEX® **SOLAR HT**	210	39	32	21 18	210 210	120 120	239 207	12	
	**Tubes 2m:** K-FLEX® **COLOR**	210	39	32	15	210	120	245	12	
	**Tubes 1m:** K-FLEX® **COLOR**	108	39	39	30	210	120	245	12	
	**Tubes 1m:** K-FLEX® **IC CLAD** K-FLEX® **IN CLAD**	108	39	39	30	210	120	245	12	
	**Tubes 1m:** K-FLEX® **AL CLAD**	108	39	39	30	210	120	245	12	
	**Tube in rolls:** K-FLEX® **SOLAR HT**	59	59	40	36 16 30 12	210 120 210 120	120 80 120 80	255 251 215 192	12	
	**Tube in rolls:** K-FLEX® **EC-H ROLLS**	52	59	26	62	210	120	250	12	
	**Tube in rolls (industrial carton):** K-FLEX® **ST FRIGO**	80	80	40	18	210	120	255	12	
	**Tube in rolls:** K-FLEX® **ST FRIGO**	51,5	50	21	88 32 72 36	210 120 210 120	120 80 120 80	246 246 204 220	12	

Maximum number per pallet
** Images for illustration purposes only, the amount of cartons/pallet may differ from that shown.
*** maximum height = 265 cm Depending on the thickness of the insulation sheet packing can vary in size, which may affect the overall height.

K-FLEX® ST

K-FLEX® ST

- ELASTOMERIC INSULATION FOR ALL CIVIL AND INDUSTRIAL APPLICATIONS
- HIGH PERFORMANCE FOR ALL APPLICATIONS IN A TEMPERATURE RANGE FROM -200 °C TO +110 °C
- PREVENTS THE RISK OF CONDENSATION AND IMPROVES ENERGY SAVING
- CLASS OF REACTION TO FIRE EUROCLASS BL-S2, D0
- VERY FINE CLOSED CELLULAR STRUCTURE AND HIGH TECHNICAL PERFORMANCE
- RESISTANT TO MOULD, FUNGI AND BACTERIA
- LIGHT AND FLEXIBLE

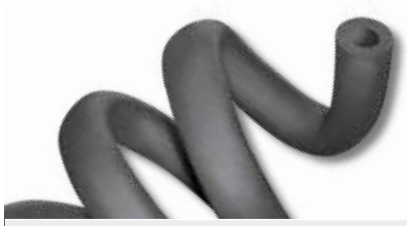
> Site <

> Video <

> App. Manual <

K-FLEX® ▸ ST

TECHNICAL DATA ▸ K-FLEX® ST TUBES



Property	Value		Test method
Temperature range	K-FLEX® ST Tubes: from -165 °C* to +110 °C K-FLEX® ST/SK: from -40 °C to +85 °C		EN 14706 EN 14707
Thermal conductivity λ W/(m•K)	Thicknesses ≤ 25mm -20 °C = 0,031 0 °C = 0,033 +20 °C = 0,035 +40 °C = 0,037	Thicknesses > 25mm -20 °C = 0,034 0 °C = 0,036 +20 °C = 0,038 +40 °C = 0,040	EN 13787 EN ISO 8497
Corrosion prevention	pH neutral (7±0,5)		EN 13468
Permeability μ	≥ 10000	≥ 7000	EN 12086
Fire rating	K-FLEX® ST Tubes Thickness up to 50 mm: Euroclass B_L-s2, d0 Thickness over 50 mm: Euroclass B_L-s3, d0 K-FLEX® ST/SK: Euroclass B_L-s2, d0 Class 0		EN 13501-1 EN 13501-1 EN 13501-1 BS 476 Part 6/7

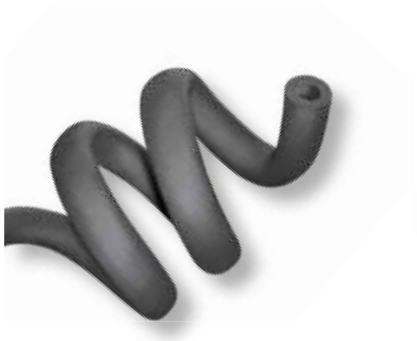
* For industrial applications, product can be applied down to -198°C; for applications below -40°C please contact our technical department.

TECHNICAL DATA ▸ K-FLEX® ST SHEETS

Property	Value		Test method
Temperature range	K-FLEX® ST Sheets: from -165 °C* to +85 °C		EN 14706 EN 14707
Thermal conductivity λ W/(m•K)	Thicknesses ≤ 25mm -20 °C = 0,031 0 °C = 0,033 +20 °C = 0,035 +40 °C = 0,037	Thicknesses > 25mm -20 °C = 0,034 0 °C = 0,036 +20 °C = 0,038 +40 °C = 0,040	EN 13787 EN 12667
Corrosion prevention	pH neutral (7±0,5)		EN 13468
Permeability μ	≥ 10000	≥ 7000	EN 12086
Fire rating	K-FLEX® ST Sheets: Euroclass B-s3, d0 Class 0		EN 13501-1 BS 476 Part 6/7

* For industrial applications, product can be applied down to -198°C; for applications below -40°C please contact our technical department.

INFO K-FLEX® ST



K-FLEX® ST TUBES

K-FLEX® ST products meet all the requirements demanded by civil and industrial refrigeration, air conditioning, plumbing, insulation of tanks, fittings, water pipes and all other applications that need thermal insulation.

K-FLEX® ST/SK TUBES
K-FLEX® ST/SK TUBES with overlap

K-FLEX® ST/SK is a cut-to-length self-seal elastomeric insulation. This innovative technology includes adhesive tapes which are quick and easy to use for the installer. This new system has been developed to save on installation time and reduce the use of other adhesives to improve working conditions at the construction site. Also available as version with overlap - **K-FLEX® ST/SK** with overlap.

K-FLEX® ST SHEETS are ideal for sheet metal ducts and large size pipes. The height of 1000/1500 mm minimises segmentation of the coating and simplifies installation, greatly reducing time and labour cost.
Available in standard and adhesive.

RANGE K-FLEX® ST

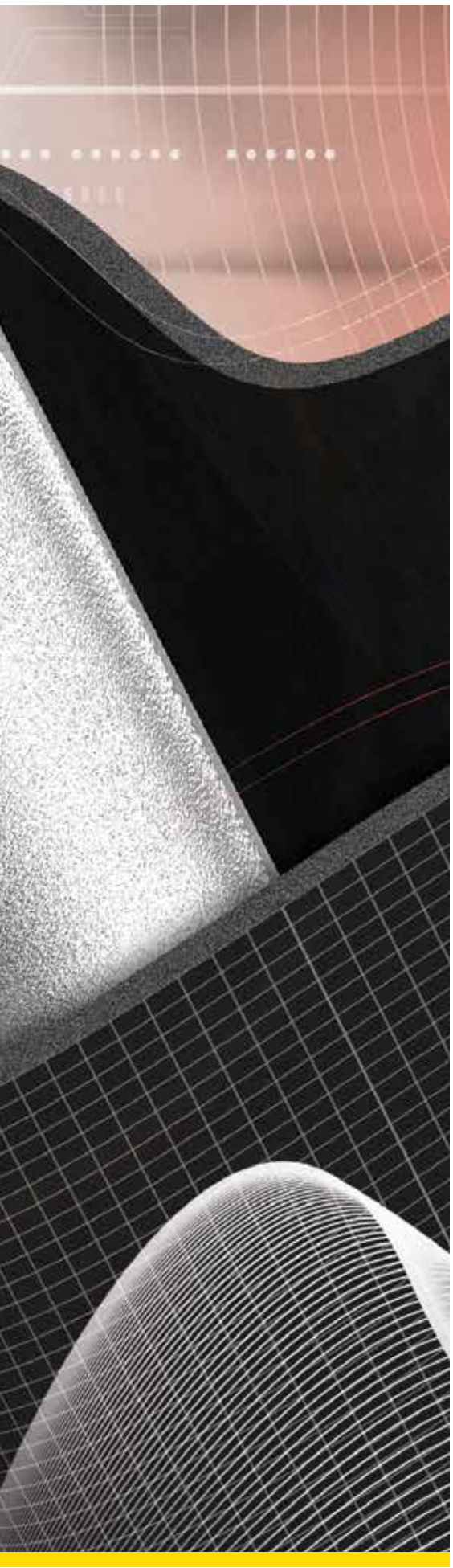
	LENGTH	THICKNESSES	DIAMETERS
K-FLEX® ST - Tubes	2 m	6-9-13-19-25-32 40-50-60 mm	from 6 to 210 mm
K-FLEX® ST/SK - Adhesive tubes	2 m	9-13-19-25-32 mm	from 12 to 114 mm

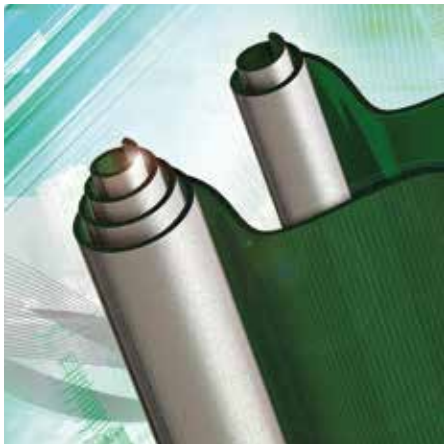
	THICKNESSES	HEIGHT
K-FLEX® ST - Sheets	3-6-10-13-16-19-25-32-40-50-60 mm	1000/1500 mm
K-FLEX® ST - Adhesive sheets	3-6-10-13-16-19-25-32-40-50 mm	1000/1500 mm

PROJECTS K-FLEX® ST

Germany

K-FLEX® SRC
K-FLEX® SRC ECO





K-FLEX® SRC - SRC ECO

- SHEETS WITH REACTION TO FIRE EUROCLASS B-s2, d0
- LOW SMOKE EMISSION IN CASE OF FIRE
- EXCELLENT THERMAL CONDUCTIVITY
- HIGH RESISTANCE TO WATER VAPOUR DIFFUSION
- APPLICATION TEMPERATURES FROM -40 °C TO 85 °C

> Site <

> Brochure <

> App. Manual <

TECHNICAL DATA ▸ K-FLEX® SRC

Property	Value	Test method
Temperature range	From -40 °C* to +85 °C	EN 14706
Thermal conductivity λ W/(m•K)	-20 °C = 0,031 0 °C = 0,033 +20 °C = 0,035 +40 °C = 0,037	EN 13787 EN 12667
Corrosion prevention	pH neutral (7±0,5)	EN 13468
Water permeability	WS < 0.1%	EN 13472
Permeability μ	≥ 10000	EN 12086
Fire rating	B-s2,d0	EN 13501-1
Leacheable chloride	< 500 ppm	EN 13468

* For applications below -40 °C please contact our Technical Department

TECHNICAL DATA ▸ K-FLEX® SRC ECO

Property	Value	Test method
Temperature range	From -40 °C* to +85 °C	EN 14706
Thermal conductivity λ W/(m•K)	-20 °C = 0,036 0 °C = 0,038 +20 °C = 0,040 +40 °C = 0,042	EN 13787 EN 12667
Corrosion prevention	pH neutral (7±0,5)	EN 13468
Water permeability	WS < 0.1%	EN 13472
Permeability μ	≥ 3000	EN 12086
Fire rating	B-s2,d0	EN 13501-1
Leacheable chloride	< 500 ppm	EN 13468
Ecological data	Without halogens, PVC, CFCs, HCFCs and Formaldehyde	

* For applications below -40 °C please contact our Technical Department

INFO ▸ K-FLEX® SRC

Insulation sheets with reduced smoke emission.

Description
K-FLEX® SRC's innovative design combines the high thermal performance of a rubber based flexible elastomeric foam with a reduced smoke emission coating.

Applications
K-FLEX® SRC sheet is ideal for thermal insulation of pipes, ducting and technical systems in public buildings.

Classification
K-FLEX® SRC sheet has been tested according to the current European Standard EN 13501-1 for fire classification of construction products, and is classified B-s2, d0.

The main advantages of K-FLEX® SRC are:
- Retarded ignition of the flame
- Reduced flame propagation.
- Low thermal conductivity.
- High resistance to water vapour diffusion.
- Wide range of operating temperatures.
- Consistent performance.
- Higher mechanical properties with respect to uncoated elastomeric insulation.
- Quick and easy installation.

INFO ▸ K-FLEX® SRC ECO

Insulation HALOGEN FREE with reduced smoke emission.

Description
K-FLEX® SRC ECO is an insulating sheet comprising a layer of closed cell elastomeric foam and a protective jacket.
The special K-FLEX® SRC ECO configuration offers a unique product which, in case of fire, retards the emission of smoke and fumes which are also free of hydrohalic acids and organochlorine compounds.

Applications
K-FLEX® SRC ECO sheets are ideal for thermal and acoustic insulation of walls and technical installations where low smoke emission is required in case of fire.

Classification
K-FLEX® SRC ECO sheet has been tested according to the current European standard EN 13501-1, for fire classification of construction products, and is classified B-s2, d0.

The main advantages of K-FLEX® SRC ECO are:
- No halogen in the composition or expansion of the elastomeric material.
- No smoke containing hydrohalic acids and organochlorine compounds in case of fire.
- Retarded ignition of the flame.
- Retarded flame propagation.
- Reduced emission of smoke.
- Low thermal conductivity.
- Higher mechanical properties with respect to an uncoated elastomeric insulation foam.
- Quick and easy installation.

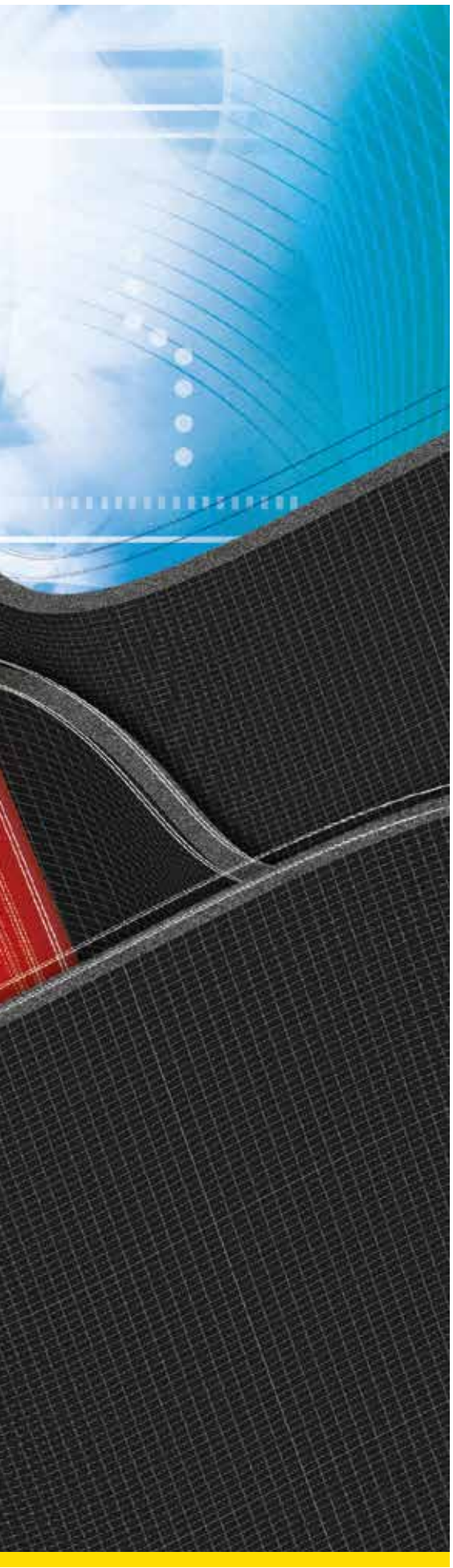
RANGE ▸ EUROCLASS B-S2, D0

	THICKNESSES	HEIGHT
K-FLEX® SRC - Sheets	6-9-13-19 mm	1000 mm
K-FLEX® SRC - Adhesive sheets	6-9-13-19 mm	1000-1500 mm

	LENGTH	THICKNESSES	DIAMETERS
K-FLEX® ST - Tubes	2 m	6-9-13-19-25-32 40-50-60 mm	from 6 to 210 mm

	THICKNESSES	HEIGHT
K-FLEX® SRC ECO - Sheets	6-9-13-19-25 mm	1000 mm
K-FLEX® SRC ECO - Adhesive sheets	6-9-13-19-25 mm	1000 mm

K-FLEX® ST DUCT



K-FLEX® ST DUCT

- ELASTOMERIC INSULATION SHEETS FOR AIR DUCTING
- SPECIALLY DESIGNED FOR ISOLATION OF VENTILATION DUCTS
- 1.5M WIDTH REDUCES INSTALLATION TIMES
- ADHESIVE COATING

> *Site* <

> *Video* <

> *App. Manual* <

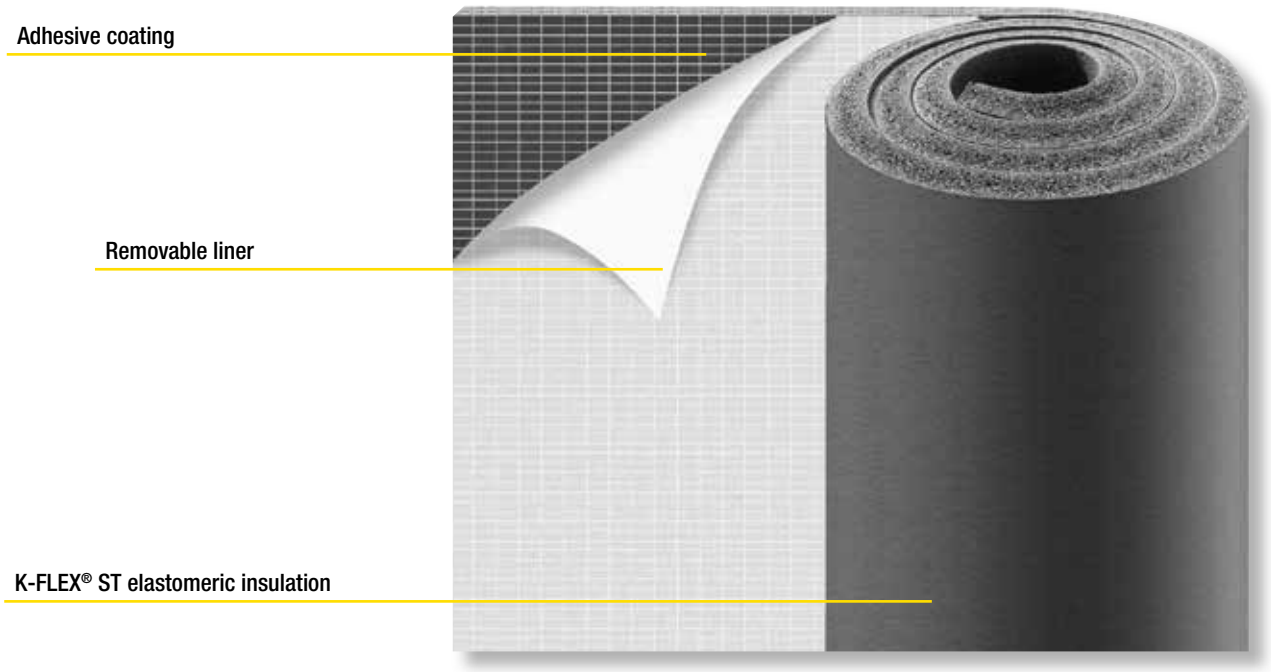
K-FLEX® ▸ ST DUCT

TECHNICAL DATA ▸ K-FLEX® ST DUCT

Property	Value		Test method
Temperature range	From -40 °C to +85 °C		EN 14706 EN 14707
Thermal conductivity λ W/(m•K)	Thicknesses ≤ 25mm -20 °C = 0,031 0 °C = 0,033 +20 °C = 0,035 +40 °C = 0,037	Thicknesses > 25mm -20 °C = 0,034 0 °C = 0,036 +20 °C = 0,038 +40 °C = 0,040	EN 13787 EN 12667
Corrosion prevention	pH neutral (7±0,5)		EN 13468
Permeability μ	≥ 7000		EN 12086
Fire rating	Euroclass B-s3, d0		EN 13501-1

K-FLEX® reserves the right to change data and technical requirements without notice.

K-FLEX® ST DUCT ▸ PRODUCT FEATURES



INFO ▸ K-FLEX® ST DUCT

K-FLEX® ST DUCT

K-FLEX® ST DUCT is specifically produced for the insulation of ventilation and air-conditioning ducts, meeting all the necessary requirements in terms of structure and dimensions.

Economical: flexible and easy to handle, it is made in measurements of 1500 mm in width to ensure easy installation on ducts.

Pratical: the self-adhesive surface has been made rougher to improve its grip on the metal ducts.

Convenient: its 1500 mm width cuts down on application time, reducing the final cost of pre-fabricated ducts.

Flexible: high elasticity helps attenuate vibrations that occur where there are joints and suspensions.

K-FLEX® ST DUCT - FINISHES

K-FLEX® ST DUCT ALU
Elastomeric self-adhesive sheet with reinforced mesh and a smooth aluminium 80 µ thick covering. Width: 1500 mm.
Euroclass C-s3,d0

K-FLEX® ST DUCT AL CLAD SYSTEM
Elastomeric self-adhesive sheet, with reinforced mesh and AL CLAD covering.
Width: 1500 mm.
Euroclass D-s3,d0

K-FLEX® ST DUCT COLOR SYSTEM
Elastomeric self-adhesive sheet, with reinforced mesh and COLOR coating.
Width: 1500 mm.
Euroclass C-s3,d0

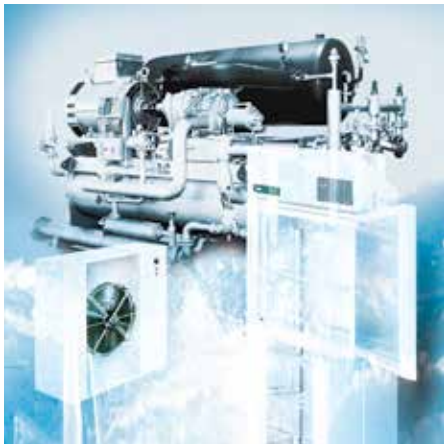
PRODUCT RANGE ▸ K-FLEX® ST DUCT

	THICKNESSES	HEIGHT
K-FLEX® ST DUCT - Sheets	6-8-10-12-15-20-30 mm	1500 mm

PROJECTS ▸ K-FLEX® ST DUCT AL CLAD

Italy, Rimini
Mall “Le Befane“

K-FLEX® ST FRIGO



K-FLEX® ST FRIGO

- ELASTOMERIC INSULATION FOR SPECIALISTS IN COLD TEMPERATURES.
- PRACTICAL PACKAGING
- EASY TO APPLY
- HIGH PERFORMANCE
- SUUITABLE FOR OEM APPLICATIONS.

> ***Site*** <

> ***App. Manual*** <

K-FLEX® ST FRIGO

TECHNICAL DATA K-FLEX® ST FRIGO

Property	Value	Test method
Temperature range	From -40 °C to +110 °C	EN 14706 EN 14707
Thermal conductivity λ W/(m•K)	Thicknesses ≤ 25mm -20 °C = 0,031 0 °C = 0,033 +20 °C = 0,035 +40 °C = 0,037	EN 13787 EN ISO 8497
Corrosion prevention	pH neutral (7±0,5)	EN 13468
Permeability μ	≥ 10000	EN 12086
Fire rating	Euroclass B_L-s3, d0	EN 13501-1

K-FLEX® reserves the right to change data and technical requirements without notice.

K-FLEX® ST FRIGO THE FUNCTIONAL AND USEFUL COOLING SOLUTION

K-FLEX® ST elastomeric insulation

INFO K-FLEX® ST FRIGO

K-FLEX® ST FRIGO

The revolutionary and exclusive packaging offers practical and economic benefits for both usage and distribution.

User-friendly: An aperture in the box lid allows easy removal of the insulation whilst keeping the remaining product intact and in place.

Precision cutting: The ruler printed on the edge of the box facilitates accurate measurement and precise cutting of the insulation required for the job. No more waste product; less use of glue and tape.

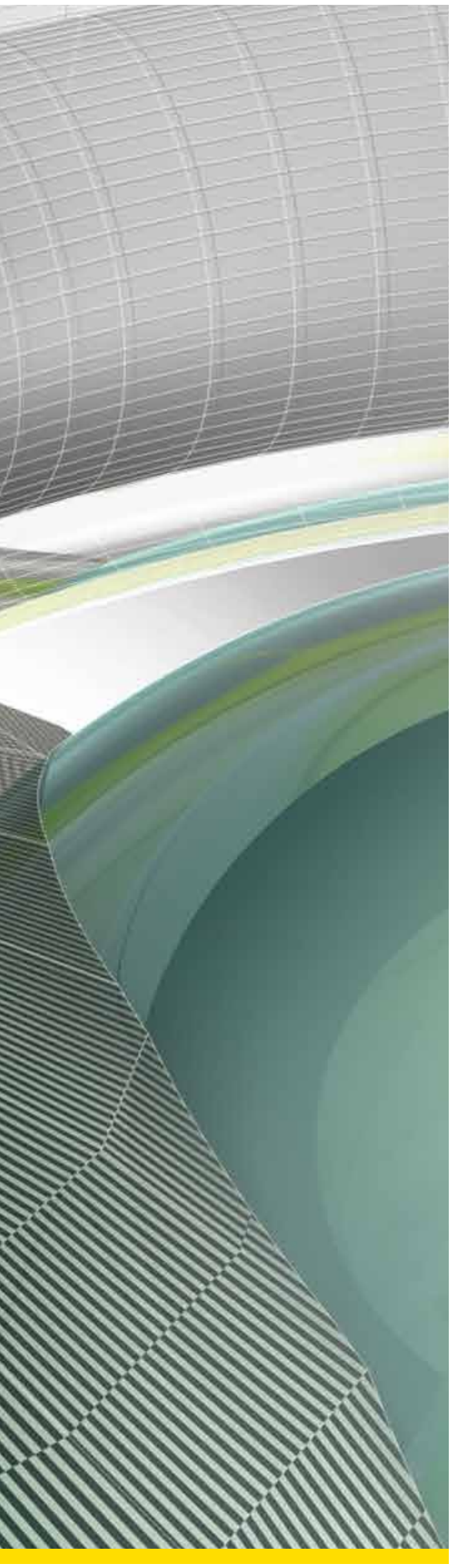
Easy to trasport: On request we can also supply K-FLEX® ST FRIGO in industrial sized cartons: 800 x 800 x 400 mm

RANGE K-FLEX® ST FRIGO

	THICKNESSES	DIAMETERS
K-FLEX® ST FRIGO Carton 500x500x200	6-9-13 mm	from 6 to 28 mm
K-FLEX® ST FRIGO Carton 800x800x400	6-9 mm	from 6 to 28 mm

K-FLEX® ST FRIGO		6 MM	9 MM	13 MM
Ø tube		m/Carton	m/Carton	m/Carton
Inches	mm			
1/4”	6	50	40	26
5/16”	8	48	37	26
3/8”	10	46	34	23
1/2”	12	40	31	18
5/8”	15	38	27	17
3/4”	18	30	23	15
7/8”	22	23	19	14
1 1/8”	28	20	14	10

K-FLEX® EC



K-FLEX® EC

- IDEAL FOR HEATING AND PLUMBING SYSTEMS
- FLEXIBLE AND EASY TO WORK WITH

> Site <

> App. Manual <

K-FLEX® EC

TECHNICAL DATA K-FLEX® EC

Property	Value		Test method
Temperature range	K-FLEX® EC: from -40 to +110 °C K-FLEX® EC AD: from -40 to +85 °C		EN 14706 EN 14707
Thermal conductivity λ W/(m•K)	Thicknesses ≤ 25mm -20 °C = 0,031 0 °C = 0,033 +20 °C = 0,035 +40 °C = 0,037	Thicknesses > 25mm -20 °C = 0,034 0 °C = 0,036 +20 °C = 0,038 +40 °C = 0,040	EN 13787 EN ISO 8497
Corrosion prevention	pH neutral (7±0,5)		EN 13468
Permeability μ	≥ 7000		EN 12086
Fire rating	Euroclass B_L-s3, d0 Class 1		EN 13501-1 BS 476 Part 6/7

K-FLEX® reserves the right to change data and technical requirements without notice.

INFO K-FLEX® EC

K-FLEX® EC TUBES

K-FLEX® EC offers all the requirements to meet the demands of civil and industrial installations that require the use of insulation material.

K-FLEX® EC AD
K-FLEX® EC AD with overlap

K-FLEX® EC AD is manufactured with a factory-applied specially formulated bonding adhesive. The revolutionary technology is pre-slit with convenient built-in tabs applied on both sides, making the pipe insulation convenient and quick to install.

K-FLEX® EC AD has high performance characteristics thanks to the new self-adhesive system which significantly reduces the use of contact adhesives, thus allowing for improved working conditions and compliance with safety requirements. Also available as version with overlap - **K-FLEX® EC AD** with overlap.

K-FLEX® EC/H ROLLS

EASE OF USE
An aperture in the box lid allows easy removal of the insulation whilst keeping the remaining product in place.

PRECISION CUTTING
The ruler printed on the edge of the box facilitates accurate measurement and precise cutting of the insulation required for the job. No more waste product; less use of glue and tape.

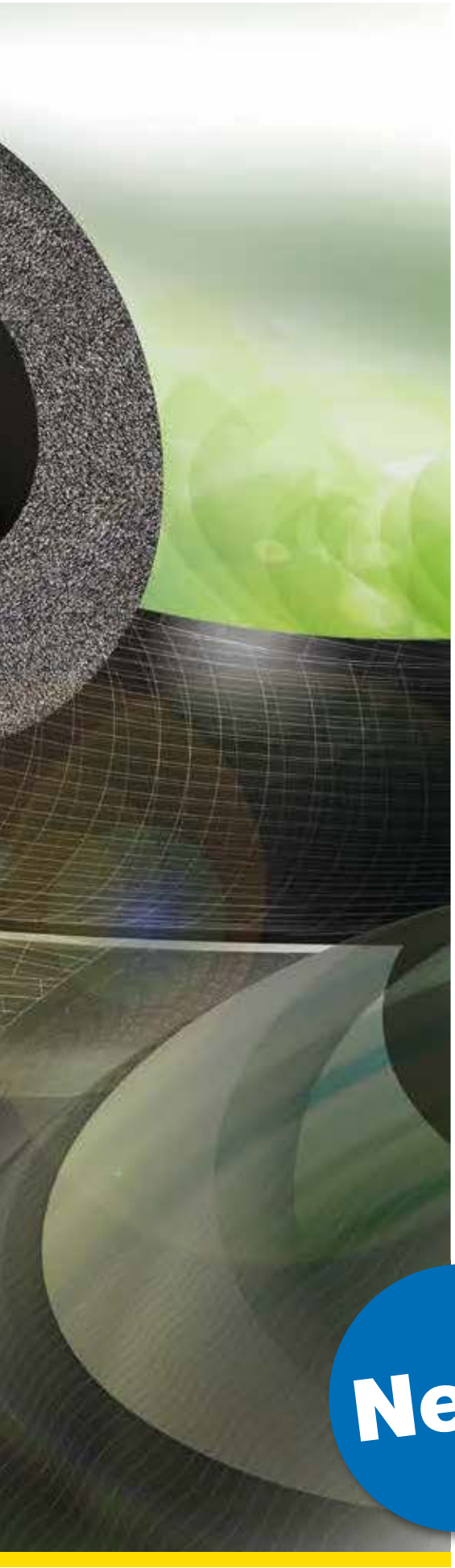
Better protection for the insulation in the work place No more wasted material caused by breakage or damage during transport.

PRODUCT RANGE K-FLEX® EC

	LENGTH	THICKNESSES	DIAMETERS
K-FLEX® EC - Tubes	2 m	6-9-13-19-25-40 50-60 mm	from 10 to 168 mm
K-FLEX® EC/H Rolls		6-9-13 mm	from 6 to 35 mm

K-FLEX® EC/H Rolls	6 MM	9 MM	13 MM
Ø tube mm	m/Carton	m/Carton	m/Carton
6	90	60	
8	80	56	
10	70	51	35
12	60	50	30
15	57	41	26
18	45	35	25
20	45	35	23
22	35	29	21
25	32	25	20
28	30	21	15
35			12

K-FLEX® ECO



K-FLEX® ECO

- ELASTOMERIC INSULATION FORMULATED AND MANUFACTURED WITHOUT THE USE OF HALOGENS
- DESIGNED FOR AREAS WITH SPECIAL SAFETY REQUIREMENTS
- APPROVED FOR USE IN RAIL AND MARINE INDUSTRIES

New!

THE PROVEN **K-FLEX® ECO** WILL ALSO AVAILABLE IN BLACK COLOR.

> Site <

> App. Manual <

TECHNICAL DATA ▸ K-FLEX® ECO TUBES

Property	Value	Test method
Temperature range	from -165 °C* to +120 °C	EN 14706 EN 14707
Thermal conductivity λ W/(m•K)	-20 °C = 0,036 0 °C = 0,038 +20 °C = 0,040 +40 °C = 0,042	EN 13787 EN 12667 EN ISO 8497
Corrosion prevention	pH neutral (7±0,5)	EN 13468
Permeability μ	≥ 3000	EN 12086
Fire rating	K-FLEX® ECO Tubes: Euroclass D_L-s2, d0 Class 1	EN 13501-1 BS 476 Part 6/7
Ecological data	Halogen free - PVC - CFC - HCFC Free	
Marine approvals	LR - DNV - M.M. ITALIANA CE-MARINE (Bureau Veritas) - US NAVY	
Fume classification (toxicity)	IMO RES 61(67)	
Fume density (NBS room)	≤ Dm 200	
Color	Green, Black	

* For temperatures of less than -50 °C, please consult our technical office.

TECHNICAL DATA ▸ K-FLEX® ECO SHEETS

Property	Value	Test method
Temperature range	from -165 °C* to +120 °C	EN 14706 EN 14707
Thermal conductivity λ W/(m•K)	-20 °C = 0,036 0 °C = 0,038 +20 °C = 0,040 +40 °C = 0,042	EN 13787 EN 12667 EN ISO 8497
Corrosion prevention	pH neutral (7±0,5)	EN 13468
Permeability μ	≥ 3000	EN 12086
Fire rating	K-FLEX® ECO Sheets: Euroclass E Class 1	EN 13501-1 BS 476 Part 6/7
Ecological data	Halogen free - PVC - CFC - HCFC Free	
Marine approvals	LR - DNV - M.M. ITALIANA CE-MARINE (Bureau Veritas) - US NAVY	
Fume classification (toxicity)	IMO RES 61(67)	
Fume density (NBS room)	≤ Dm 200	
Color	Green, Black	

* For temperatures of less than -50 °C, please consult our technical office.

INFO K-FLEX® ECO

Manufacturing without thought for the resultant environmental impact is no longer acceptable. This attitude of awareness, now largely rooted in all areas of modern society, has triggered a significant innovation in models of development and consumerism.

K-FLEX® ECO, formulated and manufactured without halogens is a real solution to the reduction of energy consumption with respect to the environment. The composition of K-FLEX® ECO renders any fumes released during a fire, transparent and non-toxic.

RANGE K-FLEX® ECO

	LENGTH	THICKNESSES	DIAMETERS
K-FLEX® ECO - Tubes	2 m	9-13-19-25-32 mm	from 10 to 114 mm

	THICKNESSES	HEIGHT
K-FLEX® ECO - Sheets	6-10-13-19-25-32-40-50 mm	1000 mm
K-FLEX® ECO - Adhesive sheets	6-10-13-19-25-32-40-50 mm	1000 mm

New!

Now also available in black.

PROJECTS K-FLEX® ECO

Italy

K-FLEX® SOLAR HT

K-FLEX® SOLAR HT

- ELASTOMERIC INSULATION FOR HIGH TEMPERATURES
- IDEAL SOLUTION FOR INDUSTRIAL AND SOLAR SYSTEMS
- INCREASED ENERGY EFFICIENCY
- EPDM WITH UV PROTECTION
- ALSO AVAILABLE WITH PROTECTIVE COATINGS FOR ADVERSE WEATHER CONDITIONS

> Site <

> App. Manual <

K-FLEX® ▸ SOLAR HT

TECHNICAL DATA ▸ K-FLEX® SOLAR HT

Property	Value	Test method
Temperature range	From -40 °C to +150 °C	EN 14706 EN 14707
Thermal conductivity λ W/(m•K)	0 °C = 0,040 40 °C = 0,044	EN 13787 EN 12667 EN ISO 8497
Corrosion prevention	pH neutral (7±0,5)	EN 13468
Fire rating	Euroclass E	EN 13501-1

K-FLEX® reserves the right to change data and technical requirements without notice.

INFO ▸ K-FLEX® SOLAR HT

Elastomeric EPDM (Ethylene-Propylene Diene Monomer) rubber based insulation with excellent mechanical properties suitable for high temperatures. Good UV resistance.

The rational and convenient solution for solar panels and industrial processes up to 150 °C. A new, revolutionary box, tailor-made for the client, offering practical and economical advantages for use and distribution.

High temperature insulation

RANGE K-FLEX® SOLAR HT

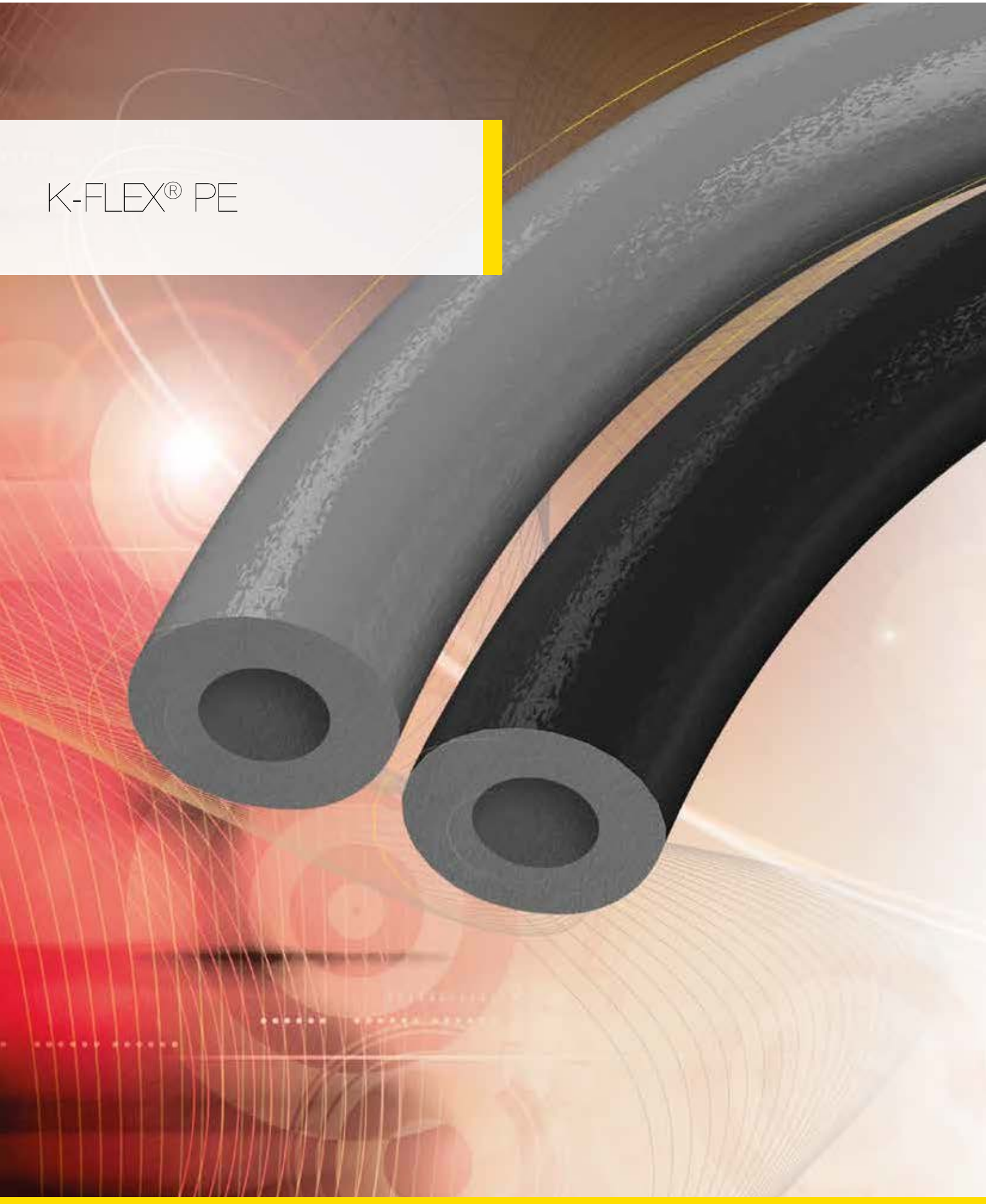
	LENGTH	THICKNESSES	DIAMETERS
K-FLEX® SOLAR HT - Tubes	2 m	13-19-25 mm	from 10 to 89 mm
K-FLEX® SOLAR HT - Rolls		13-19 mm	15-18-22 mm

	THICKNESSES	HEIGHT
K-FLEX® SOLAR HT - Sheets	10-13-19-25-32 mm	1000 mm

PROJECTS
K-FLEX® SOLAR HT

Zamo, Poland
Hospital

K-FLEX® PE



K-FLEX® PE

- MANUFACTURED SPECIFICALLY FOR INSULATION OF HEATING/ AIR CONDITIONING PIPES AND UNDERFLOOR INSTALLATIONS
- EXCELLENT MECHANICAL STRENGTH AND RESISTANCE TO COMPRESSION
- TEAR RESISTANT
- QUICK TO INSTALL

> K-FLEX® PE <

> K-FLEX® FONOMETAL <

K-FLEX® PE

TECHNICAL DATA K-FLEX® PE

Property	Value	Test method
Material	Polyethylene insulation produced by continuous extrusion and expansion, without the use of CFC or HCFC, with a protective outer coating.	
Thicknesses	6 - 9 - 13 - 20 mm	
Temperature range	From +8 °C to +90 °C	EN 14707
Thermal conductivity λ W/(m•K)	+10 °C = 0,038 +40 °C = 0,040	EN 13787
Permeability μ	2000	EN 13469
Fire rating	Euroclass E_L	EN 13501-1
Mechanical resistance	Extremely resistant to compression, tension and superficial lacerations.	
Other characteristics	Flexible. Resistant to materials commonly used for building. If properly installed, prevents corrosion and protects piping from direct contact with any aggressive agents.	

K-FLEX® reserves the right to change data and technical requirements without notice.

TECHNICAL DATA K-FLEX® FONOMETAL

Property	Value	Test method
Temperature range	Up to + 90 °C	EN 14707
Thermal conductivity λ W/(m•K)	+10 °C = 0,038 +40 °C = 0,040	EN 13787
Fire rating	Euroclass E_L	EN 13501-1

K-FLEX® reserves the right to change data and technical requirements without notice.

INFO K-FLEX® PE

K-FLEX® PE is an insulation tube with an extruded polyethylene coating available in different sizes. Ideal for plumbing professionals. The external protection is formed by a scratch-resistant co-extruded coating which ensures excellent resistance to tearing and abrasion.

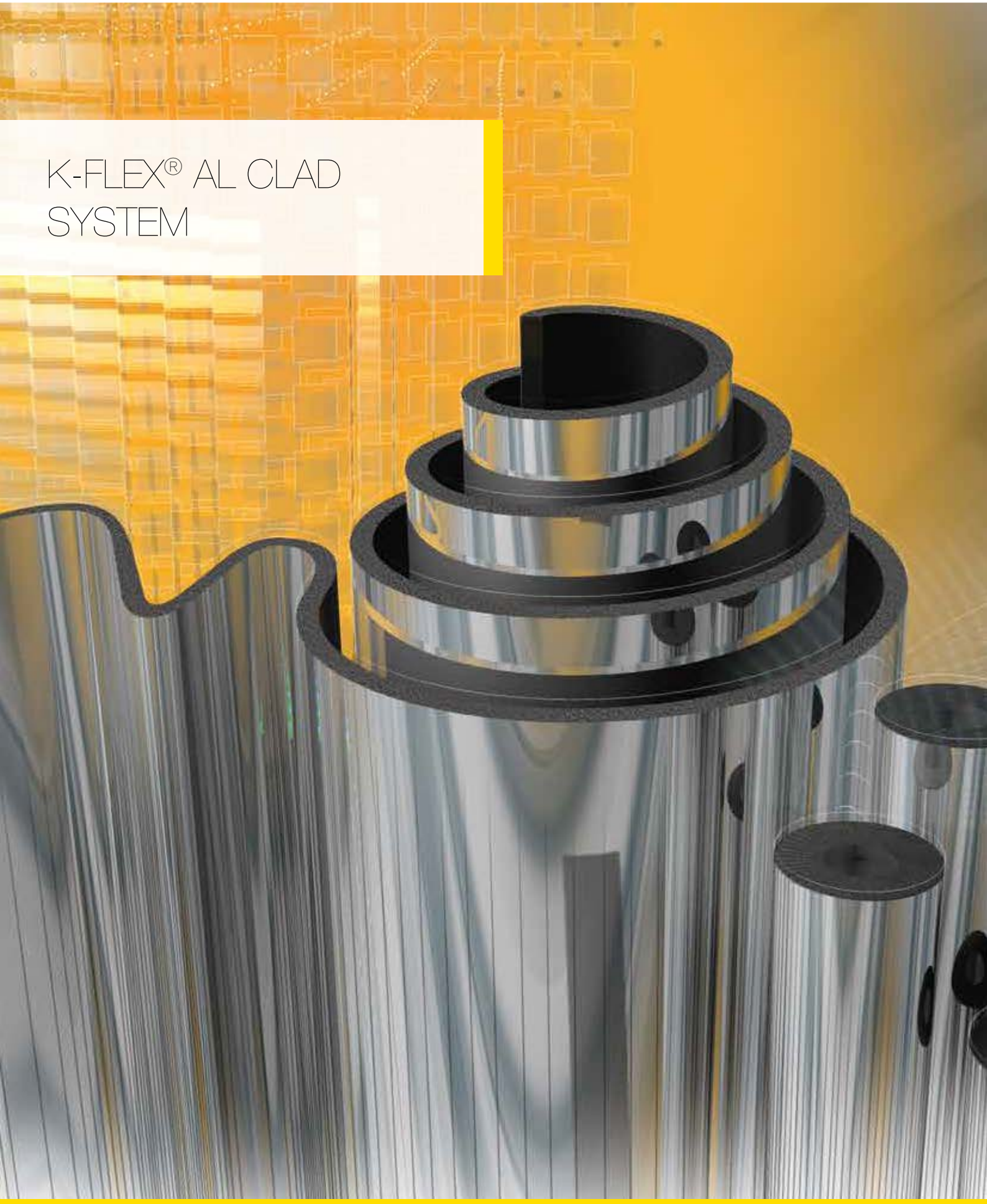
K-FLEX® FONOMETAL: ideal for acoustic insulation of urban sewage and rainwater pipes. By separating the piping from building work noise transmitted by vibration is reduced. A practical and economical solution for the installer.

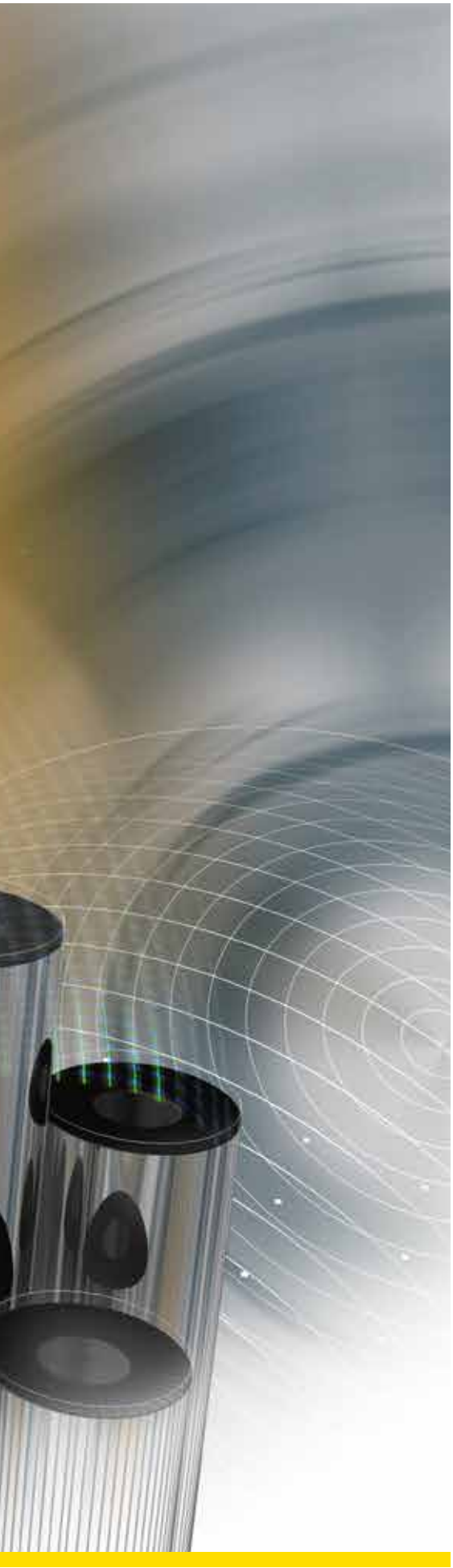
RANGE K-FLEX® PE

	LENGTH	THICKNESSES	DIAMETERS
K-FLEX® PE Black	2 m	6-9-13-20 mm	from 12 to 114 mm
K-FLEX® PE Silver	2 m	6-9-13-20 mm	from 12 to 114 mm

	LENGTH	THICKNESSES	DIAMETERS
K-FLEX® FONOMETAL	15 m	5 mm	from 42 to 160 mm

K-FLEX® AL CLAD SYSTEM





K-FLEX® AL CLAD SYSTEM

- VERSATILE AND FLEXIBLE
- REDUCED INSTALLATION COSTS
- ECONOMIC SYSTEM MANAGEMENT
- AESTHETIC FINISH
- UV AND WEATHER RESISTANT
- CAN BE APPLIED TO ANY INSULATION SYSTEM

> Site <

> Video <

> App. Manual <

K-FLEX® AL CLAD SYSTEM

TECHNICAL DATA K-FLEX® AL CLAD JACKETING (COVERING FOIL)

Weight	Approx.	388 g/m²	EN 22 286
Thickness	Approx.	280 µm	DIN 53 370
Traction resistance	longitudinal	175 N/15 mm	ISO 527- 3
	transverse	175 N/15 mm	ISO 527- 3
Breaking strain	longitudinal	35 %	ISO 527- 3
	transverse	40 %	ISO 527- 3
Resistance to tearing	longitudinal	155 N/25 mm	ISO 527- 3
	transverse	182 N/25 mm	ISO 527- 3
Resistance to bending	longitudinal	90 N/mm²	DIN 53 864
	transverse	90 N/mm²	DIN 53 864
Permeability to vapour		0,052 g/m²/d	DIN 53 122
Fire rating (with K-FLEX® ST)	Sheet: Euroclass D-s3, d0 Tube: Euroclass C_L-s3, d0 Class 0		EN 13501-1 EN 13501-1 BS 476 Part 6/7

TECHNICAL DATA
RESISTANCE CHARACTERISTICS OF THE AL CLAD SHEET TO ATMOSPHERIC AGENTS

UV resistance	>2000 hours 500 W/m² (Atlas Suntest XLS+ QUV, internal test)
Radiation resistance	>3.600.000 kJ/m²
Resistance to humidity	>2000 hours UVC (internal test)

TECHNICAL DATA AL CLAD: RESISTANCE OF THE SURFACE TO AGGRESSIVE CHEMICALS

Acids	acetic acid (max concentration)	resistant
	50% formic acid	resistant
	10% hydrochloric acid	resistant
	30% hydrochloric acid	partially resistant
	10% and 35% hydrofluoric acid	resistant
	10% nitric acid	resistant
	65% and 100% nitric acid	partially resistant
	30% and 85% phosphoric acid	resistant
	20% sulphuric acid	partially resistant
Aldehydes	Acetaldehyde	resistant
	Formaldehyde	resistant
Alcohols	Benzyl alcohol	partially resistant
	Cyclohexanol	resistant
	Ethyl alcohol	resistant
	Glycerine	resistant
	Glycol	resistant
	Isopropyl alcohol	resistant
	Methyl alcohol	resistant

Alkaline solutions	Ammonium hydroxide	partially resistant
	Calcium hydroxide	partially resistant
Chlorinate solvents	Chloroform	partially resistant
	Trichloroethylene	partially resistant
Esters	Ethyl acetate	resistant
Hydrocarbons	Aliphatic hydrocarbon	resistant
	Benzene	resistant
	Petroleum	resistant
	Mineral oil	resistant
	Toluene	resistant
	Xylene	resistant
Other organic substances	Acetone	resistant
	Ether	resistant
Salt solutions	Bichromates	resistant
	Cyanides	resistant
	Fluorides	resistant

K-FLEX® reserves the right to change data and technical requirements without notice.

INFO ▸ K-FLEX® AL CLAD SYSTEM

K-FLEX® AL CLAD SYSTEM TUBES

Tubes have a coating system with a high performance adhesive overlap coupled to K-FLEX® ST insulation. Suitable for both indoor and outdoor use, the AL CLAD foil has an aesthetic finish and forms an impermeable barrier protecting the insulation from UV radiation and adverse weather.
The complete system is easily installed with a significant reduction in labour time.
Matching pre-formed trims complete the range.

K-FLEX® AL CLAD SYSTEM SHEETS

Sheets are composed of the AL CLAD coating system coupled with K-FLEX® ST insulation. Available in standard or self-seal, they are designed for use with conduits, ventilation ducts and large pipes. Their flexibility and ease of processing make this material especially suitable for awkward configurations and trims.

PRODUCT RANGE ▸ K-FLEX® AL CLAD SYSTEM

	LENGTH	THICKNESSES	DIAMETERS
K-FLEX® AL CLAD SYSTEM Tubes	1 m	9-13-19-25-32-40-50 mm	from 15 to 160 mm

	THICKNESSES	HEIGHT
K-FLEX® AL CLAD SYSTEM Sheets	6-9-13-16-19-25-32-40-50 mm	1000/1500 mm
K-FLEX® AL CLAD SYSTEM Adhesive sheets	6-9-13-16-19-25-32-40-50 mm	1000/1500 mm

ACCESSORIES ▸ K-FLEX® AL CLAD SYSTEM

Preformed K-FLEX® AL CLAD elbows

Preformed elastomeric K-FLEX® elbows coupled with AL CLAD foil

Preformed "T" connections with AL CLAD foil

Preformed elastomeric K-FLEX® "T" connections coupled with AL CLAD foil

Preformed elastomeric K-FLEX® elbows

Preformed elastomeric K-FLEX® "T" section in standard sizes

AL CLAD foil, with or without adhesive

AL CLAD adhesive tape

AL CLAD butyl tape for outdoor application

K-FLEX® AL CLAD system pipe insulated supports

K-FLEX® AL CLAD system pipe insulated supports with collar

K-SIL Silicone

Available in accessories section glues and thinners.

K-FLEX® COLOR SYSTEM

K-FLEX® COLOR SYSTEM

- COLOUR FINISHED INSULATION
- AESTHETIC DESIGN
- FLEXIBILE AND EASY OF APPLICATION
- COLOUR CODING FOR DIFFERENT SERVICES
- UV PROTECTION

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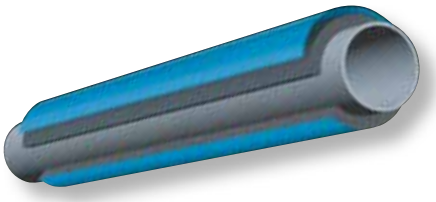
K-FLEX® ▸ COLOR SYSTEM

TECHNICAL DATA ▸ K-FLEX® COLOR SYSTEM (COVERING ONLY)

Property	Value	Test method
WOM 2000 hours	No significant alteration	DIN 53231
Humidistat 800 hours	Elasticity remains the same	ASTM D2247
Adhesion 24 hours after humidistat	Adhesion remains intact	
UVC 2000 hours QUV/SE	No blistering, no separation, no significant alterations	
Wash H_2O	No alterations	
Wash H_2O plus soap for hands	No alterations	
Test with solution 1	Elasticity and adhesion remain the same	DIN 53160/UAN-D1235/01
Test with solution 2	Elasticity and adhesion remain the same	DIN 53160/UAN-D1235/01
Immersion in water 60 °C 800 hours	No blistering, no separation	
Caustic soda contact to 5% 2 hours	No alterations	
Fire rating (with K-FLEX ST)	Sheet: Euroclass C-s3, d0 Tube: Euroclass C_L-s3, d0	EN13501-1 EN13501-1
Fire rating (facing only)	Class 0	BS 476 Part 6/7

K-FLEX® reserves the right to change data and technical requirements without notice.

INFO ▸ K-FLEX® COLOR SYSTEM



K-FLEX® COLOR SYSTEM Tubes

Insulation tube with a protective factory-applied coating. The thin layer of colour coating offers protection against UV rays and facilitates cleaning and maintenance of the insulation. Flexible, easy to work with and install.

K-FLEX® COLOR SYSTEM Sheets

K-FLEX® COLOR SYSTEM sheets are available in standard or self-seal. They are designed for use with conduits, ventilation ducts and large pipes. Their flexibility and ease of processing make this material especially suitable for awkward configurations and trims.

K-FLEX® COLOR SYSTEM Accessories

K-FLEX® offers a range of accessories especially for use with K-FLEX® COLOR SYSTEM. In addition to the standard pieces, curves, couplings and supports, adhesive tapes and coloured paints are available for re-touching and repairs.

RANGE K-FLEX® COLOR SYSTEM

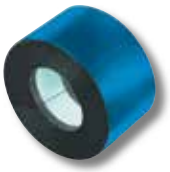
	LENGTH	THICKNESSES	DIAMETERS
K-FLEX® COLOR - Tubes	2 m	9-13 mm 19 mm 25 mm 32 mm	from 10 to 54 mm from 15 to 54 mm from 18 to 54 mm from 18 to 42 mm
K-FLEX® COLOR - Tubes	1 m	9-13-19 mm 25 mm 32 mm	from 57 to 160 mm from 60 to 160 mm from 48 to 160 mm

	THICKNESSES	HEIGHT
K-FLEX® COLOR - Sheets	6-10-13-16-19-25-32-40-50 mm	1000/1500 mm
K-FLEX® COLOR - Adhesive sheets	6-10-13-16-19-25-32-40-50 mm	1000/1500 mm

ACCESSORIES K-FLEX® COLOR SYSTEM

K-FLEX® COLOR preformed "T" fittings

K-FLEX® COLOR preformed elbows



K-FLEX® COLOR pipe support

K-FLEX® COLOR pipe support with collar

K-FLEX® COLOR paint

K-FLEX® COLOR anticonsation tape

COLOR RANGE K-FLEX® COLOR SYSTEM

Stock colour range and product codes

RAL 7035 grey Colour code **G0** RAL 9002 white Colour code **G1** RAL 9011 black Colour code **N0**

For the minimum order quantity per colour listed below, contact your sales office

RAL 5012 blue Colour code **B0**
RAL 3000 red* Colour code **R0**
RAL 6032 green Colour code **V0**
RAL 1019 sand Colour code **G2**

PROJECTS K-FLEX® COLOR SYSTEM

Germany

K-FLEX® IN CLAD SYSTEM

The first flexible
elastomeric foam
approved by DNV
For LNG and cryogenic
applications

K-FLEX® IN CLAD SYSTEM

- NON-METALLIC FLEXIBLE COATING
- DESIGNED FOR OIL & GAS AND INDUSTRIAL USE
- DEVELOPED FOR THE MOST CHALLENGING ENVIRONMENTS
- HIGH MECHANICAL AND CHEMICAL RESISTANCE
- RESISTANCE TO UV, SEA SALT, OIL AND OTHER ATMOSPHERIC AGENTS
- EASY TO INSTALL WITHOUT SPECIAL TOOLS
- FULL RANGE OF ACCESSORIES
- CAN BE APPLIED TO ANY INSULATION SYSTEM

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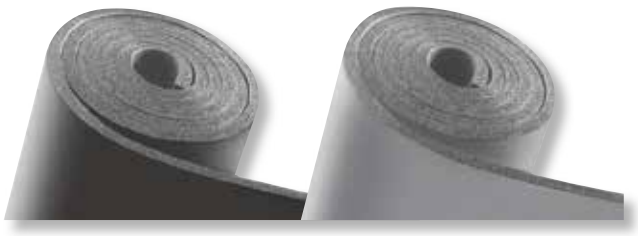
TECHNICAL DATA ▸ K-FLEX® IN CLAD SYSTEM

Material	Flexible polymeric barrier	
Colour	Grey and Black	
Thickness	1.2 mm (± 0.2)	
MAX Surface Temperature	80°C (176°F)	
MAX application temperature, IN CLAD System	105°C (221°F)	IN CLAD with K-FLEX® ST
	120°C (248°F)	IN CLAD with K-FLEX® ECO
MIN application temperature, IN CLAD System	-200°C (-328°F)	IN CLAD System with K-FLEX® ST tested at -163°C (-260°F) and approved with a statement of feasibility by DNV
Water Vapour Permeability Moisture Resistance Factor (covering)	μ > 90.000	EN12086
Specific weight	1,8 (± 0.1 g/cm³)	
Tensile Strength	>=6,9 MPa	ISO 37 (Typical value 7.5 MPa)
Elongation to break	>100%	ISO 37 (Typical values: elongation at 70%, elongation to break 300%)
Elastic Modulus	>=60 MPa	ISO 37 (Typical value70 MPa)
Modulus 10%	>1.5 MPa	ISO 37
Peel adhesion	>50 KPa	ISO 2411
Shear strength	>20 N/25mm	ISO 34-1
Hardness	>=80 ShA	ISO 7619, ASTM D2240
UV Resistance	Extremely good	2 years of exposure in New River, Arizona (USA) as per ASTm G 7-97, no pitting, no cracking, no blistering
Salt Spray resistance	Extremely good	ISO 3768 / ASTM B 117-73, 480 hours. No color shade, no scaling, no blistering
Ozone resistance	Extremely good	ASTM D1171 72h 50ppmh 20%, no oxidation
Resistance to aging	Extremely good	ISO 4982, after 360h, 72MJ, elongation to break and modulus conform to specification
Resistance to oil	Extremely good	ISO 1817; after 72h immersion in oil IRM 903, elongation to break and modulus conform to specification
Impact resistance	Extremely good	EN12691; 1 Kg, 20mm, 600mm
Health aspects	Dust and fiber free	
Spread of flame	Pass	BS 476 pt 7
Spread of flame	Pass	NF 92501
Fire propagation	Pass	BS 476 pt 6
Fire requirements for shipbuilding	Pass	IMO 61/67 part 2&5
Approvals and Supervisions	CE Marine Mark Approved (MED, module B)	DNV LNG Statement of Feasibility
	Type approval by American Bureau of Shipping	ABS Approval
	Type approved by Det Norske Veritas	
	Type approved by Lloyd's Register	

OTHER PROPERTIES:

The product is compliant to the requirements of Norsok standard R-004 ed 3 (par. 5.9 non metallic jacketing)	Fixing: neoprenic glue (K-FLEX® K414, K-FLEX® K420)
Application: Product is flexible down to -20°C	Sealing: SMP sealant (Bostik Findley / Simson ISR 70-03 or ISR 70-05)

K-FLEX® ▸ IN CLAD SYSTEM (BLACK OR GREY)



K-FLEX® IN CLAD SYSTEM TUBES

Insulation system specifically designed for aggressive environments such as offshore platforms, industrial, oil and petrochemical plants exposed to the sun and sea water and in situations where a high performance material is required. IN CLAD SYSTEM tubes are composed of K-FLEX® ST insulation coated with IN CLAD flexible polmeric film. The overlap facilitates installation and provides the coating system with a weather-proof seal. K-FLEX® IN CLAD SYSTEM prevents corrosion under insulation (CUI) in your installation.

K-FLEX® IN CLAD SYSTEM SHEETS

K-FLEX® IN CLAD SYSTEM sheets are ideal for insulating large industrial pipes, tanks, silos and awkwardly shaped equipment. The system is flexible, easy to work and does not require special tooling for cutting and gluing. Sealing the joints with silicone ensures total water- and weather-proofing. The protective IN CLAD foil is the ideal solution to protect thermal and acoustic insulation materials. It can be applied on different insulating materials such as mineral wool, PUR/PIR, FOAMGLASS, Aerogel, etc.

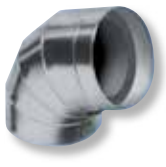
RANGE ▸ K-FLEX® IN CLAD SYSTEM (BLACK OR GREY)

	LENGTH	THICKNESSES	DIAMETERS
K-FLEX® IN CLAD SYSTEM Tubes	1 m	9-13-19-25-32-40-50 mm	from 15 to 168* mm

* For diameters greater than 168 mm, use sheet

	THICKNESSES	HEIGHT
K-FLEX® IN CLAD SYSTEM Sheets	6-10-13-16-19-25-32-40-50 mm	1000 mm
K-FLEX® IN CLAD SYSTEM Adhesive sheets	6-10-13-16-19-25-32-40-50 mm	1000 mm

ACCESSORIES ▸ K-FLEX® IN CLAD SYSTEM



Preformed IN CLAD elbows - Gray

Preformed IN CLAD elbows - Black

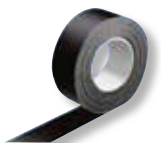
Preformed “T” connections IN CLAD - Gray

Preformed “T” connections IN CLAD - Black

IN CLAD foil - Gray

IN CLAD foil - Black

IN CLAD tape - Gray



IN CLAD tape - Black

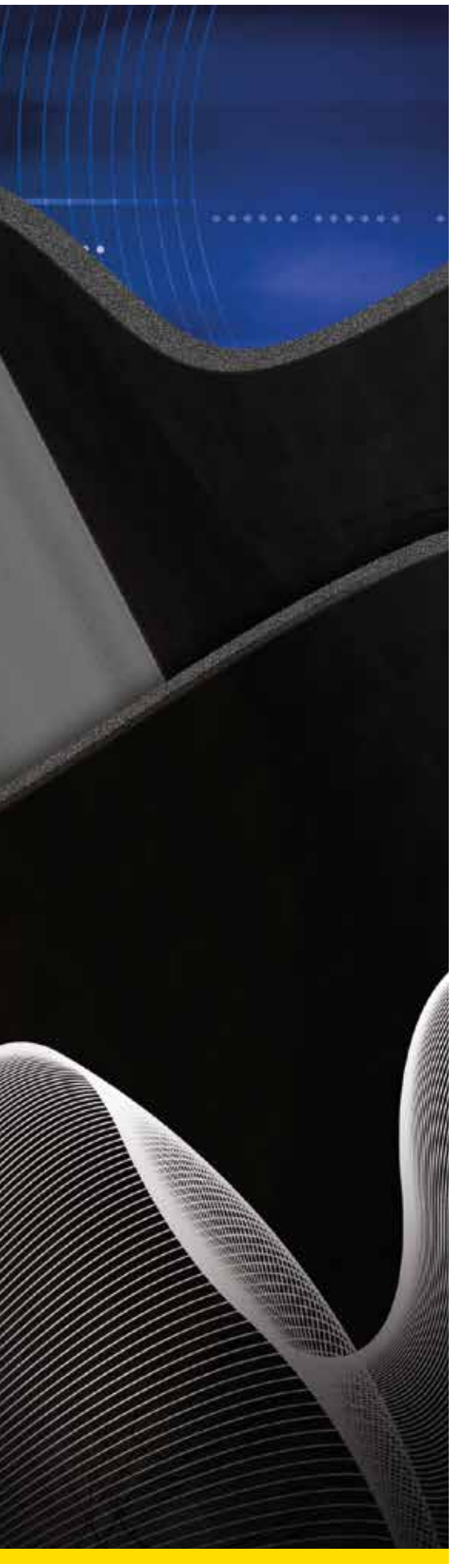
IN CLAD pipe support

IN CLAD pipe support with collar

Silicone

Available in accessories section glues and thinners.

K-FLEX® IC CLAD SYSTEM



K-FLEX® IC CLAD SYSTEM

- REINFORCED FIBERGLASS COATING
- EXCELLENT MECHANICAL RESISTANCE
- RESISTANT TO HIGH TEMPERATURES
- EASY TO INSTALL WITHOUT SPECIAL TOOLS
- FULL RANGE OF ACCESSORIES

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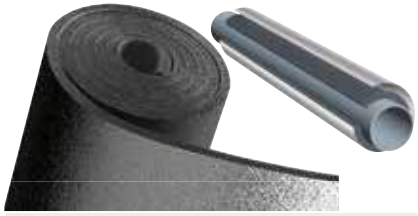
> *App. Manual* <

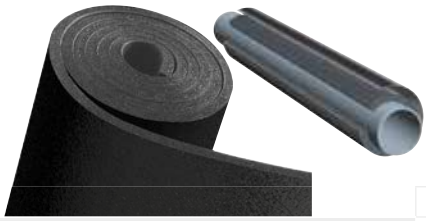
TECHNICAL DATA ▸ K-FLEX® IC CLAD BLACK (COVERING ONLY)



	Unit		Tolerance	Specification
Weave pattern		Plain		DIN ISO 9354
Area weight	g/m²	214	±5%	DIN EN 12127
Tensile strenght	N/cm			DIN EN 12654
Warp **Weft**		500 350		
Finish content	%	4,00-6,00		DIN ISO 1887
Thickness	mm	0,18		DIN ISO 4603/E
Temperature Resistance	°C			
Continuous load **Short time resistance**		180 230		
Fire rating (with K-FLEX® ST)	IMO Res. A 653, Class 0 BS 476 Part 6/7			
Certification (with K-FLEX® ST)	CE Marine Mark Approved, DNV, Lloyds Register			

K-FLEX® reserves the right to change data and technical requirements without notice.

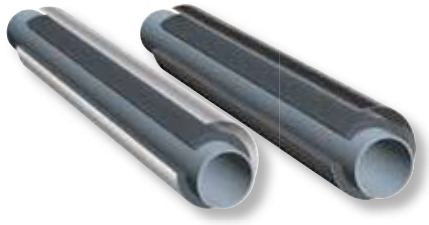
TECHNICAL DATA ▸ K-FLEX® IC CLAD SILVER (COVERING ONLY)



	Unit		Tolerance	Specification
Weave pattern		Plain		DIN ISO 9354
Area weight	g/m²	204	±5%	DIN EN 12127
Tensile strenght	N/cm²			DIN EN 12654
Warp **Weft**		500 360		
Finish content	%	1,00 - 3,00		DIN ISO 1887
Thickness	mm	0,22		DIN ISO 4603/E
Temperature Resistance	°C			
Continuous load **Short time resistance**		180 230		
Fire rating (with K-FLEX® ST)	IMO Res. A 653, Class 0 BS 476 Part 6/7			
Certification (with K-FLEX® ST)	CE Marine Mark Approved, DNV, Lloyds Register			

K-FLEX® reserves the right to change data and technical requirements without notice.

INFO ▸ K-FLEX® IC CLAD SYSTEM (BLACK OR SILVER)



K-FLEX® IC CLAD SYSTEM TUBES

K-FLEX® IC CLAD SYSTEM tubes have an inorganic glass fibre fabric covering which is coupled to K-FLEX® ST insulation. The IC CLAD foil is especially resistant to mechanical stress and can withstand temperature peaks up to 230°C. Available in silver (aluminum) or black.

K-FLEX® IC CLAD SYSTEM SHEETS

K-FLEX® IC CLAD SYSTEM sheets have IC CLAD foil backing coupled to K-FLEX® ST insulation. Available in standard or self-seal, they are designed for use with large pipes, tanks and silos. Their flexibility and ease of processing make this material especially suitable for awkward configurations and trims.

PRODUCT RANGE ▸ K-FLEX® IC CLAD SYSTEM (BLACK OR SILVER)

	LENGTH	THICKNESSES	DIAMETERS
K-FLEX® IC CLAD SYSTEM Tubes	1 m	9-13-19-25-32-40-50 mm	from 15 to 168* mm

* For diameters greater than 168 mm, use sheet

	THICKNESSES	HEIGHT
K-FLEX® IC CLAD SYSTEM Sheets	6-10-13-16-19-25-32-40-50 mm	1000 mm
K-FLEX® IC CLAD SYSTEM Adhesive sheets	6-10-13-16-19-25-32-40-50 mm	1000 mm

ACCESSORIES ▸ K-FLEX® IC CLAD SYSTEM

Preformed IC CLAD elbows - Silver

Preformed IC CLAD elbows - Black

Preformed “T” connections IC CLAD - Silver

Preformed “T” connections IC CLAD - Black

IC CLAD tape - Silver

IC CLAD tape - Black

IC CLAD foil - Silver

IC CLAD foil - Black

Silicone

Available in accessories section glues and thinners.

SOLAR SYSTEMS

K-FLEX® ▸ SOLAR SYSTEMS

K-FLEX® offers a line of products designed specifically for solar heating, renewable energy sources used to produce hot water using solar energy.
The K-FLEX® TWIN SOLAR product range consists of a system to connect the hot water storage tank with the solar panel, composed of two corrugated stainless steel tubes (flow and return) with a sensor cable and a high temperature thermal insulator made of EPDM rubber coated with a film that provides both UV and mechanical protection.
A range of fittings and mounting accessories make installation a fast and easy process.

K-FLEX® ▸ PRODUCTS AND APPLICATIONS

	Heating	Air Conditioning/ Ventilation	Refrigeration	Solar	Industrial	Oil & Gas	Ship building and train	Halogen Free	UV Resistant
K-FLEX® SOLAR R				●					●
K-FLEX® TWIN SOLAR SYSTEM				●					●
K-FLEX® TWIN SOLAR SYSTEM SLIM				●					●

Requirement	K-FLEX® solution
Solar power product range	K-FLEX® SOLAR R K-FLEX® TWIN SOLAR SYSTEM K-FLEX® TWIN SOLAR SYSTEM SLIM
UV and weather protection	K-FLEX® SOLAR R K-FLEX® TWIN SOLAR SYSTEM K-FLEX® TWIN SOLAR SYSTEM SLIM
Good mechanical resistance	K-FLEX® SOLAR R K-FLEX® TWIN SOLAR SYSTEM K-FLEX® TWIN SOLAR SYSTEM SLIM
Complete system	K-FLEX® TWIN SOLAR SYSTEM K-FLEX® TWIN SOLAR SYSTEM SLIM
Products for installations already completed	K-FLEX® SOLAR R
Products for roof space and passages	K-FLEX® TWIN SOLAR SYSTEM SLIM
Quick and easy installation	K-FLEX® SOLAR R K-FLEX® TWIN SOLAR SYSTEM K-FLEX® TWIN SOLAR SYSTEM SLIM

K-FLEX® ▸ PACKAGING

Cartons	Products	Carton dimensions (cm)			Cartons/ Pallet	Pallet dimensions (cm)			Pallet/ Truck	Pallet**
		Length	Width	Height	Quantity*	Length	Width	Height	Quantity	
	K-FLEX® **TWIN SOLAR SYSTEM**	80 80 80 80	80 80 80 80	29 39 55 65	14 12 8 6	160 160 160 160	80 80 80 80	218 249 235 210		
	K-FLEX® **SOLAR R (Rolls)**	60	60	45	40	212	118	245		
	K-FLEX® **SOLAR R (Standard carton)**	39	32	210	21	212	118	145		
	K-FLEX® **SOLAR R (Half carton)**	39	15,5	210	42	212	118	140		
	K-FLEX® **TWIN SOLAR SYSTEM SLIM**	120 120 80 115	120 120 80 115	80 64 82 84	2 2 2 2	120 120 80 120	120 120 80 120	175 143 179 183		

* Maximum number per pallet
** Images for illustration purposes only, the amount of cartons/pallet may differ from that shown.

NB: transport volumes are calculated for full loads. This may change according to the size of the truck. Please check with our customer service department on transport volumes valid for the particular job.

K-FLEX® TWIN SOLAR SYSTEM

K-FLEX® TWIN SOLAR SYSTEM

- COMPLETE RANGE OF INSULATION PRODUCTS
- FAST & EASY INSTALLATION
- UV RESISTANT
- MINIMISES HEAT LOSS

> Site <

K-FLEX® ▸ TWIN SOLAR SYSTEM

The convenient solution for solar panels and industrial processes.

Recommended for solar panels and and low pressure steam or industrial process.

K-FLEX® SOLAR R is available in rolls, standard cartons, and half cartons.

TECHNICAL DATA ▸ K-FLEX® SOLAR R

Property	Value	Test method
Temperature range	From -40 °C to +150 °C	EN 14706 EN 14707
Thermal conductivity λ W/(m•K)	0 °C = 0,040	EN 13787 EN ISO 8497
Fire rating	Euroclass E	EN 13501-1
UV resistance	Good	EN 13859-1

K-FLEX® reserves the right to change data and technical requirements without notice.

RANGE ▸ K-FLEX® SOLAR R

	INSULATION THICKNESS	TUBE DIAMETER						
		12 mm	15 mm	18 mm	22 mm	28 mm	35 mm	Length
K-FLEX® SOLAR R Roll	14 mm				•	•	•	
K-FLEX® SOLAR R Roll	20 mm		•	•	•	•	•	
K-FLEX® SOLAR R Standard Carton	14 mm				•	•	•	2 m
K-FLEX® SOLAR R Standard Carton	20 mm	•	•	•	•	•	•	2 m
K-FLEX® SOLAR R Half Carton	14 mm				•	•	•	2 m
K-FLEX® SOLAR R Half Carton	20 mm	•	•	•	•	•	•	2 m

K-FLEX® TWIN SOLAR SYSTEM

PACKAGING K-FLEX® SOLAR R

ROLLS

600 mm x 600 mm x 405 mm

STANDARD CARTON

390 mm x 320 mm x 2100 mm

HALF CARTON

390 mm x 155 mm x 2100 mm

K-FLEX® ▸ TWIN SOLAR SYSTEM

K-FLEX® TWIN SOLAR SYSTEM Is a solar thermal insulation system which is resistant to high temperatures. It facilitates the connection of a hot water tank to a solar panel; it is designed to minimise heat loss and be resistant to chemicals and weather.

TECHNICAL DATA ▸ K-FLEX® SOLAR R

Property	Value	Test method
Temperature range	From -40 °C to +150 °C	EN 14706 EN 14707
Thermal conductivity λ W/(m•K)	0 °C = 0,040	EN 13787 EN ISO 8497
Fire rating	Euroclass E	EN 13501-1
UV resistance	Good	EN 13859-1

K-FLEX® reserves the right to change data and technical requirements without notice.

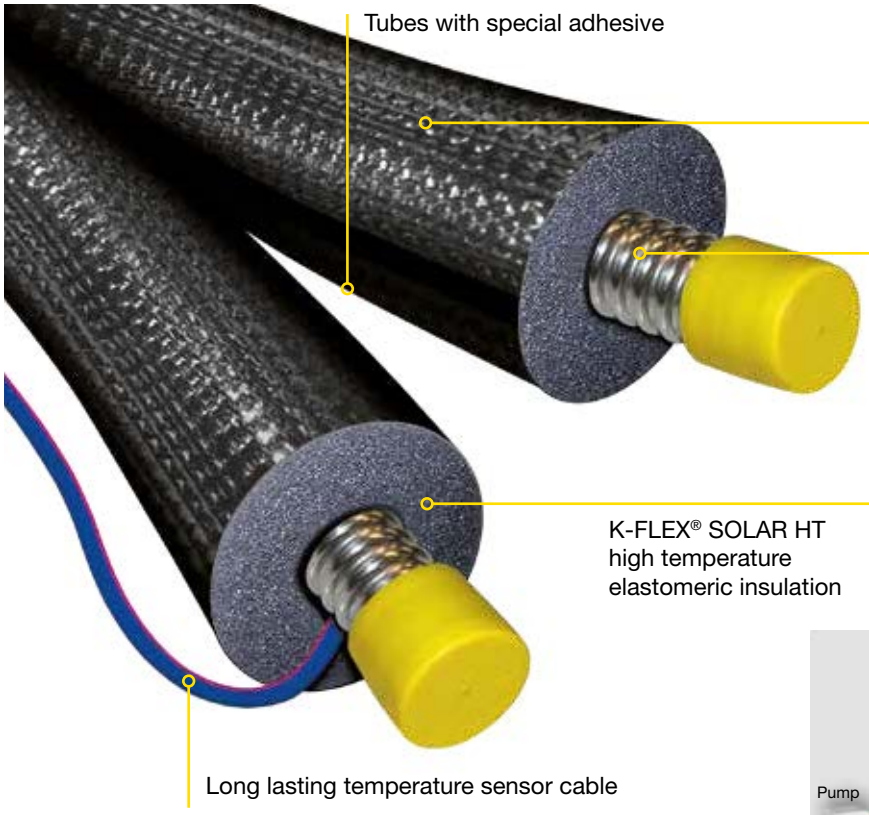
TECHNICAL DATA ▸ ANULAR FLEXIBLE STAINLESS STEEL TUBE

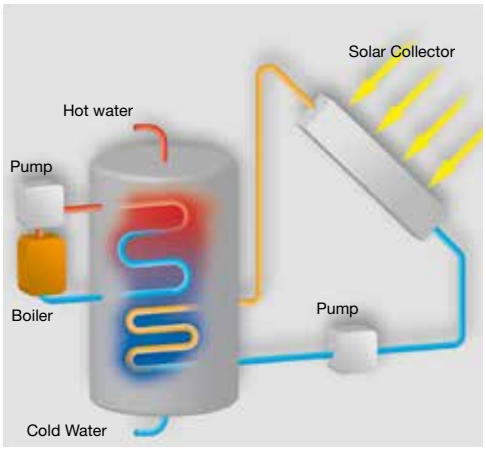
Material	AISI 316 L			
Ext.Ø (mm)	**DN**	**Thickness (mm)**	**Max service pressure (bar)**	**Bend radius (mm)**
21,3 ±0,2	16	0,18	16	25
26,4 ±0,2	20	0,18	10	30
31,8 ±0,4	25	0,20	10	35

TECHNICAL DATA ▸ TEMPERATURE SENSOR WIRE

Temperature Range	From -60 °C to +200 °C
Flexible Copper Ø 1 mm	CEI 20 - 19/15
Wire Insulation	Silicon Rubber
Rated Voltage	300/500 V
Electrical Resistance	20.0 Ohm/km

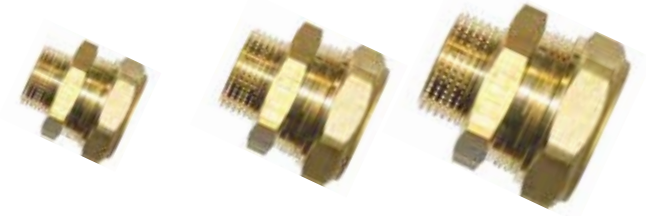
K-FLEX® reserves the right to change data and technical requirements without notice.





RANGE ▸ K-FLEX® TWIN SOLAR SYSTEM

	STEEL TUBES		INSULATION	TUBE LENGTH			
	O.D.	Wall Thickness	Thickness	10 m	15 m	20 m	25 m
K-FLEX® TWIN SOLAR SYSTEM DN16	21,3 ±0,2 mm	0,18 mm	14 mm	•	•	•	•
	21,3 ±0,2 mm	0,18 mm	20 mm	•	•	•	•
K-FLEX® TWIN SOLAR SYSTEM DN20	26,4 ±0,2 mm	0,18 mm	14 mm	•	•	•	•
	26,4 ±0,2 mm	0,18 mm	20 mm	•	•	•	•
K-FLEX® TWIN SOLAR SYSTEM DN25	31,8 ±0,4 mm	0,20 mm	14 mm		•	•	•
	31,8 ±0,4 mm	0,20 mm	20 mm		•	•	•



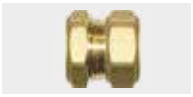
DN 16 DN 20 DN 25

Quick assembly without the need for tools or special equipment. Simple metal to metal seal.

Meets safety requirements and enhances performance by eradicating assembly mistakes.

▸ EXTERNAL THREAD COUPLING

DESCRIPTION
External Thread 1/2“ DN16
External Thread 3/4“ DN16
External Thread 3/4“ DN20
External Thread 1“ DN20
External Thread 1 1/4“ DN25



▸ INTERNAL THREAD COUPLING

DESCRIPTION
Internal Thread 1/2“ DN16
Internal Thread 3/4“ DN16
Internal Thread 3/4“ DN20
Internal Thread 1“ DN20

▸ COUPLING WITH CU CLAMPING RING

DESCRIPTION
Connection system Steel DN 16 Copper Ø 15 mm
Connection system Steel DN 16 Copper Ø 18 / 22 mm*
Connection system Steel DN 20 Copper Ø 18 / 22 mm*
Connection system Steel DN 25 Copper Ø 18 / 22 mm*

* Copper connection Ø 18 or 22 mm

▸ DOUBLE COUPLING

DESCRIPTION
Double Coupling system DN 16 - DN 16
Double Coupling system DN 20 - DN 20
Double Coupling system DN 25 - DN 25

▸ STRAIGHT FITTING

DESCRIPTION
DN 16 - Straight fitting Ø 22 mm
DN 20 - Straight fitting Ø 22 mm
DN 25 - Straight fitting Ø 22 mm
DN 16 - Straight fitting Ø 18 mm
DN 20 - Straight fitting Ø 18 mm
DN 25 - Straight fitting Ø 18 mm

▸ OLIVE

DESCRIPTION
Olive for compression coupling DN 16
Olive for compression coupling DN 20
Olive for compression coupling DN 25

K-FLEX® TWIN SOLAR SYSTEM ▸ ACCESSORIES

Flange Tool

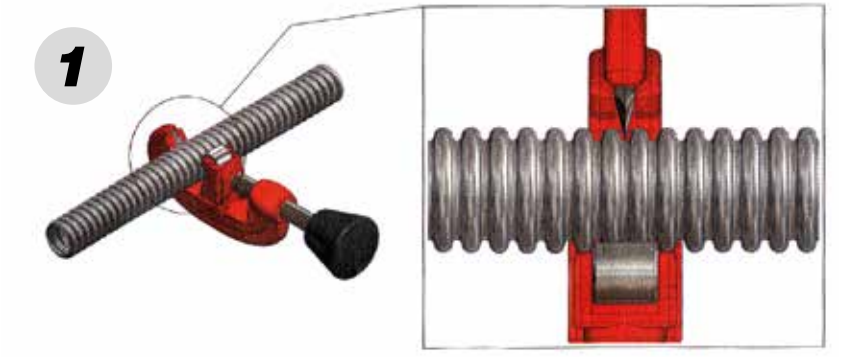
Tube Clamp

Nipple, Nut, Split Ring and Gasket

Oval Pipe Support

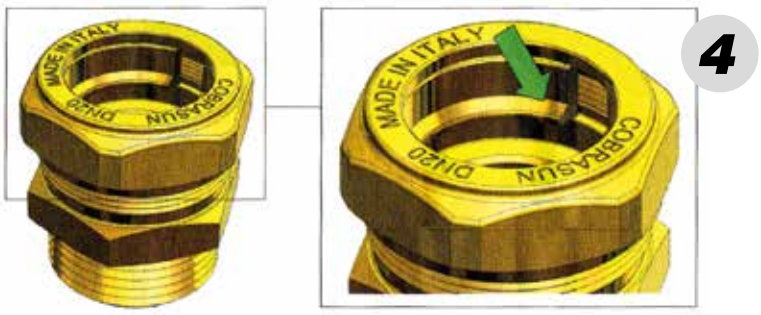
COMPRESSION QUICK COUPLING ▸ ASSEMBLING

Place the blade in the groove perpendicularly the pipe.

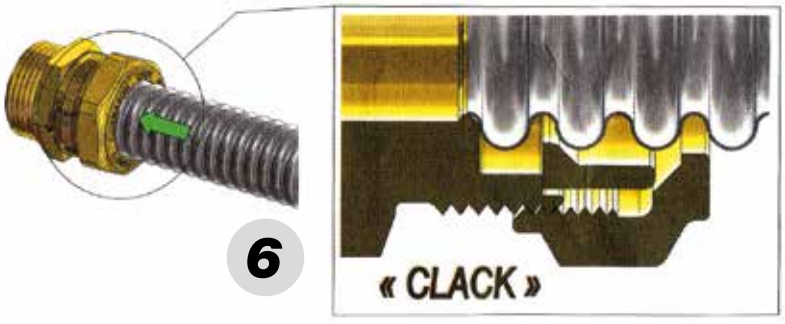


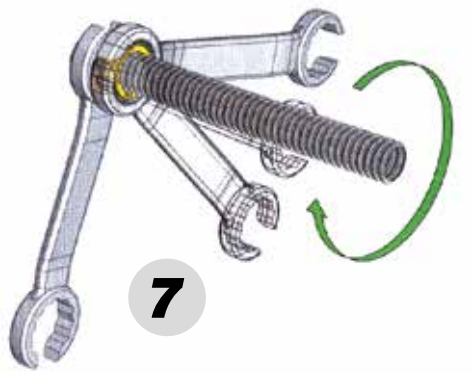
The cut must be clean and without burrs.

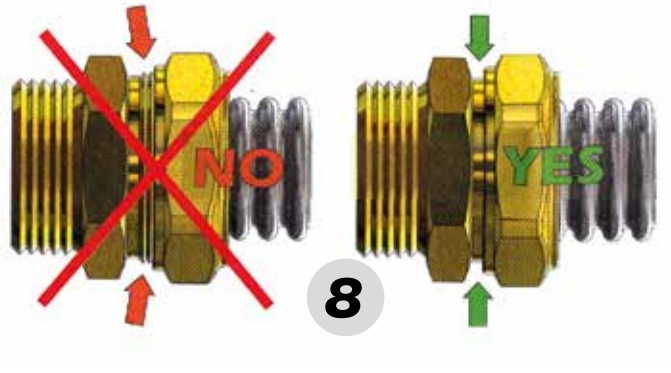
Do not disassemble the fitting: should this accidentally occur, the fool of the inner ring must be rested on the fitting body.



Manually loosen the bolt by approximately ½ rev, unless it is not already loose (fig.5)
Push the pipe into the fitting until the "CLACK" sounds (fig. 6).







K-FLEX® TWIN SOLAR SYSTEM SLIM

K-FLEX® TWIN SOLAR SYSTEM SLIM

- SPECIFICALLY DESIGNED FOR SOLAR THERMAL PANELS
- UV RESISTANT
- SAVING ON INSTALLATION TIME
- IDEAL FOR INSTALLATIONS IN CONFINED SPACES AND UNDER TILES

> Site <

K-FLEX® ▸ TWIN SOLAR SYSTEM SLIM

Thermal insulation systems for solar power with resistance to high temperatures.
For connecting the hot water storage tank with the solar panel saving on installation time. Designed to minimise heat loss. Good chemical resistance and weatherproof. Ideal for roof space and passages.

TECHNICAL DATA ▸ K-FLEX® SOLAR R

Property	Value	Test method
Temperature range	From -40 °C to +150 °C	EN 14706 EN 14707
Thermal conductivity λ W/(m•K)	0 °C = 0,040	EN 13787 EN ISO 8497
Fire rating	Euroclass E	EN 13501-1
Resistenza UV	Good	EN 13859-1

K-FLEX® reserves the right to change data and technical requirements without notice.

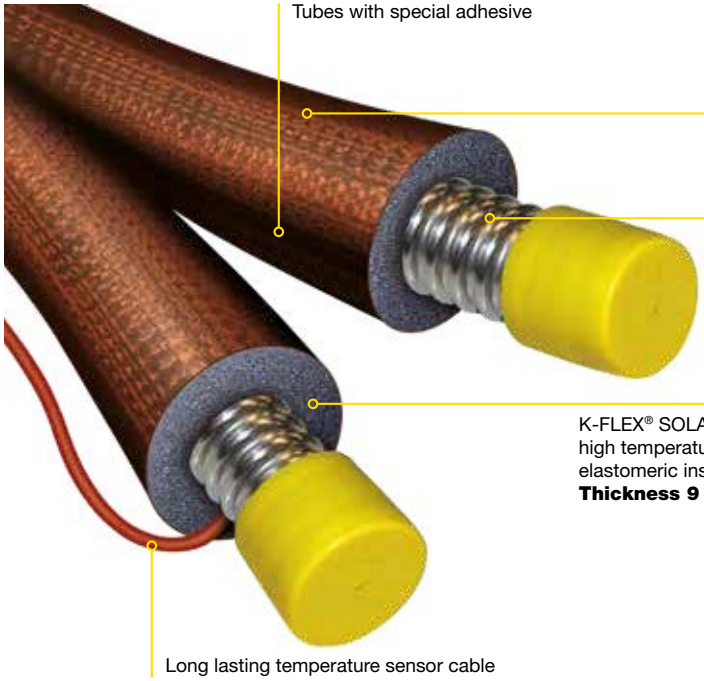
TECHNICAL DATA ▸ ANULAR FLEXIBLE STAINLESS STEEL TUBE

Material	AISI 316 L			
Ext.Ø (mm)	**DN**	**Thickness (mm)**	**Max service pressure (bar)**	**Bend radius (mm)**
21,3 $^{\pm 0,2}$	16	0,18	16	25
26,4 $^{\pm 0,2}$	20	0,18	10	30
31,8 $^{\pm 0,4}$	25	0,20	10	35

TECHNICAL DATA ▸ TEMPERATURE SENSOR WIRE

Temperature Range	From -60 °C to +200 °C
Flexible Copper Ø 1 mm	CEI 20 - 19/15
Wire Insulation	Silicon Rubber
Rated Voltage	300/500 V
Electrical Resistance	20.0 Ohm/km

K-FLEX® reserves the right to change data and technical requirements without notice.



RANGE ▸ K-FLEX® TWIN SOLAR SYSTEM SLIM

	STEEL TUBES	INSULATION	TUBE LENGTH							COILS WEIGHT
	DN	Thickness	10 m	15 m	20 m	25 m	50 m	100 m	150 m	
K-FLEX® TWIN SOLAR SYSTEM SLIM Tubes	16	9 mm	•	•	•	•				-
	20	9 mm	•	•	•	•				-
	25	9 mm		•		•				-
K-FLEX® TWIN SOLAR SYSTEM SLIM Coils	16	9 mm					•	•	•	45 - 105 - 135 kg
	20	9 mm					•	•	•	55 - 110 - 120 kg
	25	9 mm					•	•		55 - 105 kg

K-FLEX® DE-REELER

De-reeler for the production of K-FLEX® TWIN SOLAR SLIM rolls of variable dimensions.
Designed and built for fast and easy operation. An ideal tool for precision cutting; also suitable for use on construction sites, in warehouses and retail outlets.

MACHINE PARTS:
FRAMEWORK – Designed to use K-FLEX® TWIN SOLAR SYSTEM SLIM drums.
CUTTING DISC – to enable the tube to be cut to the desired length.
METRE COUNTER – For accurate measurement of lengths cut to the customer's own specification.
RE-REELER – Ratchet system to facilitate re-coiling the product in the required lengths.

Machine dimensions: 2370 mm x 1200 mm x 1350 mm.

K-FLEX® MANUAL DE-REELER

Suitable for rolls up to 150m long.

K-FLEX® K-FONIK SYSTEM

K-FLEX® K-FONIK SYSTEM

- ACOUSTIC INSULATION OF WASTE AND RAINWATER DRAINAGE PIPES
- ACOUSTIC INSULATION OF INDUSTRIAL PIPES, CIVIL AND INDUSTRIAL MACHINERY
- SOLUTIONS FOR TRADITIONAL BRICK DIVIDING WALLS AND DRY CONSTRUCTION SYSTEMS (PLASTERBOARD)
- UNDERFLOOR SOLUTIONS
- APPLICATIONS IN SHIPBUILDING AND RAIL

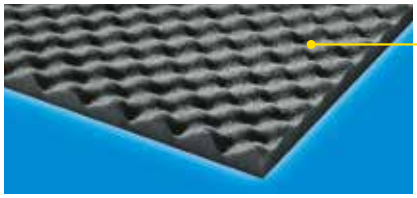
> Site <

> Brochure <

Whether at home, work or leisure, most of our time is spent inside buildings, so it is important that we feel comfortable. The optimum environment is created from a combination of the correct ambient temperature, humidity and lighting, access to necessary resources and suitable acoustic insulation. All these factors have to be taken into consideration when designing buildings, and will also have a direct bearing on the build cost and final project value.

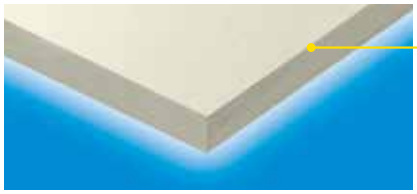
K-FLEX® offers good value high performance acoustic solutions to meet the demands of today's buildings (both new-build and renovation projects) with high quality, excellent durability and optimum design, complying with the required regulations.

K-FLEX® products are manufactured to the highest specifications using high quality durable materials and finishes with excellent performance qualities.



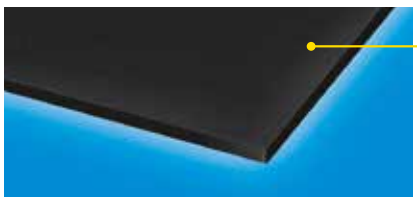
Sound Absorption Materials

To absorb and dissipate sound energy reducing its reflection from the source.



Sound Insulation Materials

To isolate airborne noise and prevent its migration.



Damping Materials

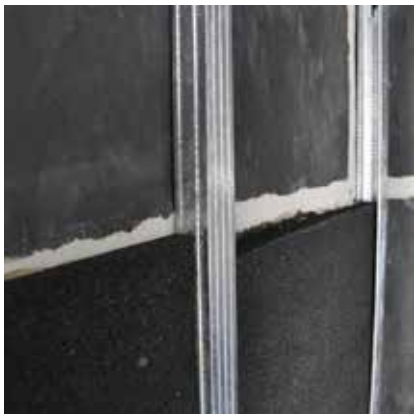
To dampen noise produced by vibrations from sheets, panels and covers.

PRODUCTS AND APPLICATIONS ▸ K-FLEX® K-FONIK SYSTEM

WORK SECTOR	APPLICATIONS	SOUND INSULATION				SOUND ABSORPTION						SY-STEM
		K-FLEX® ST	K-FLEX® K-FONIK ST GK	K-FLEX® K-FONIK GK	K-FLEX® K-FONIK GV	K-FLEX® K-FONIK OPEN CELL160	K-FLEX® K-FONIK OPEN CELL 240	K-FLEX® K-FONIK B	K-FLEX® K-FONIK P	K-FLEX® K-FONIK PE GK	K-FLEX® K-FONIK PU GK	K-FLEX® INDUSTRIAL*
BUILDING	Floors	●										
	Walls		●	●		●	●	●	●			
	Structure	●	●	●								
HVAC	Ventilation ducts and drainage pipes		●	●		●	●	●		●	●	
INDUSTRIAL and OIL & GAS	Piping, equipment and plants			●	●		●					●
OEM PRODUCTS	Machinery covers, engine compartments		●	●		●	●	●	●	●	●	
TRAIN & SHIPBUILDING	Engine and frames, partitions, technical installations				●							
AUTOMOTIVE	Engine noise insulation and frames, sound absorption for roof frames, driver cabins		●	●		●	●					

* Refer to K-FLEX® K-FONIK INDUSTRIAL brochure

APPLICATION ▸ K-FLEX® K-FONIK SYSTEM



PROJECTS ▸
K-FLEX® K-FONIK OPEN CELL
K-FLEX® K-FONIK GK

Poland

K-FLEX® ▸ PACKAGING

Cartons	Products	Carton dimensions (cm)			Cartons/ Pallet	Pallet dimensions (cm)			Pallet**
		Length	Width	Height	Quantity*	Length	Width	Height	
	K-FLEX® K-FONIK **GK/GV:** 1000 mm 1200 mm 1500 mm	 102 - -	 19 - -	 16,5 - -	 16 from 1 to 5 1	 120 120 130	 80 80 110	 12 12 12	
	K-FLEX® K-FONIK **OPEN CELL**	210	109	16,5	7	210	110	14	
	K-FLEX® K-FONIK **ST GK**	102	19	19	30	110	110	14	

* Maximum number per pallet
** Images for illustration purposes only, the amount of cartons/pallet may differ from that shown.

Logistic informations and packaging for K-FLEX® K-FONIK B, K-FLEX® K-FONIK P, K-FLEX® K-FONIK PE GK, K-FLEX® K-FONIK FIBER-P and K-FLEX® K-FONIK PU GK on request.

NB: transport volumes are calculated for full loads. This may change according to the size of the truck. Please check with our customer service department on transport volumes valid for the particular job.

K-FLEX®
K-FONIK GK / GV

High-density elastomeric acoustic insulating panel for building, OEM and industrial applications. **The product is lead-free and therefore does not represent a health risk.**

K-FONIK GK is a high density elastomeric material based on partially reticulated polymers with viscoelastic properties designed for acoustic insulation applications. Installed as a mass barrier, its special sound insulation characteristics make it an excellent product for insulation of walls and ceilings in civil applications, pipe insulation in industrial applications and damping reduction in OEM applications.

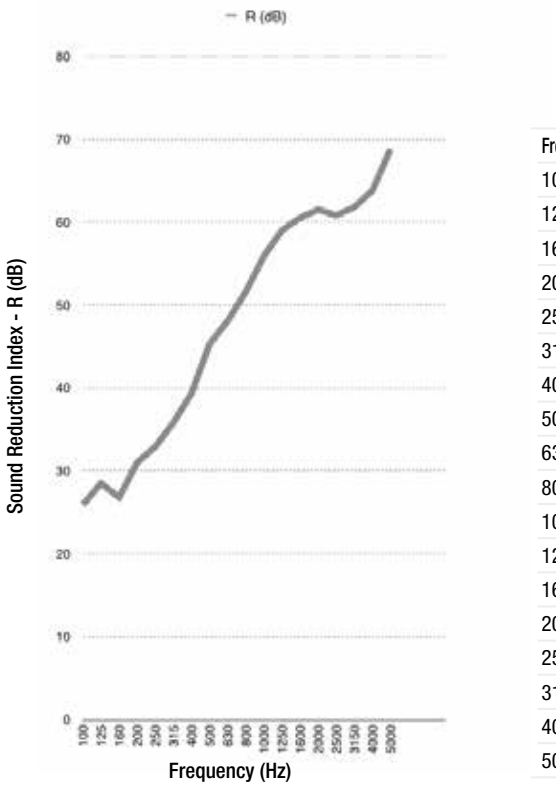
K-FONIK GV is a high density elastomeric material based on partially reticulated polymers and fireproof mineral fillers. Its viscoelastic properties make it ideal for acoustic insulation in shipbuilding and railway applications.

APPLICATION ▸

K-FONIK GK is ideal for sound insulation of walls, ceilings, acoustic cabins, drainage systems, OEM sound insulation applications, etc.

K-FONIK GV is ideal for the railway and shipbuilding industries.

ACOUSTIC PERFORMANCE ▸



Freq. (Hz)	R (dB)
100	20,9
125	14,5
160	15,6
200	16,6
250	18,8
315	17,9
400	20,2
500	21,1
630	23,1
800	25,2
1000	27,1
1250	29,2
1600	31,5
2000	32,6
2500	33,6
3150	35,6
4000	37,4
5000	37,9

$R_w\ (C;C_{tr})=27(-1;-4)dB$

RANGE ▸

K-FONIK GK
from 4 to 8 Kg/m²

High-density elastomeric material

K-FONIK GV
from 4 to 8 Kg/m²

High-density elastomeric material

Please see the price list for the full range

K-FONIK GK ▸		
Material type	High density elastomeric material	
Fire rating	B - s3,d0[1], IMO A653 (CE MARINE)[2], FMVSS 302	EN 13501
	Class 0	BS 476 Part 6/7
Temperature	-40 °C +70 °C	
Dimensions	1000 x 2000 mm; 1200 x 2000 mm; 1500 x 2000 mm - Rolls 25 or 50 m	
Surface	smooth[3]	
Weight	from 4 Kg/m² to 8 Kg/m²	
Base colour	Black (GK) White (GV)	
Density	2000 Kg/m³ (±10%)	

1) Only for K-FONIK GK on request 2) Only for K-FONIK GV
3) Different finishes available: ALU and non-woven fabric

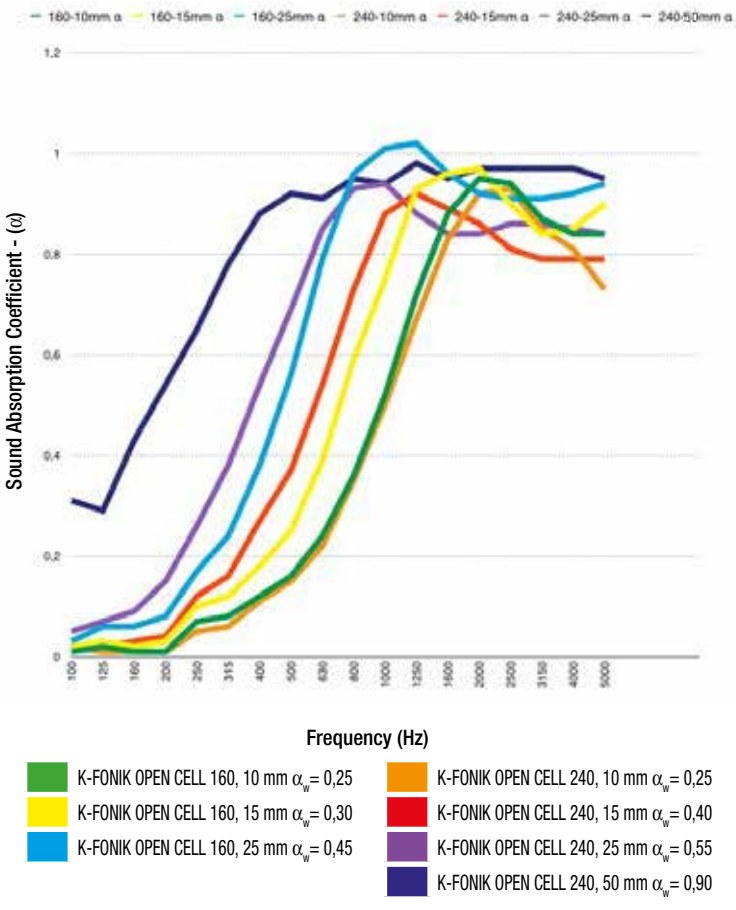
K-FLEX® K-FONIK OPEN CELL

K-FONIK OPEN CELL is an open cell Flexible Elastomeric Foam designed for sound absorption.
Its viscoelastic properties, open cell structure and good air flow resistance make it excellent for acoustic insulation in building, HVAC/R, pipes and industrial applications. It combines excellent acoustic performances and insulation characteristics.

APPLICATION ▸

K-FONIK OPEN CELL is ideal for sound absorption application; industrial pipes, building, OEM products and HVAC/R.

ACOUSTIC PERFORMANCE ▸



RANGE ▸

K-FONIK 160 - 240

Please see the price list for the full range

K-FONIK OPEN CELL ▸		
Material type	Flexible elastomeric foam open cell	
Density	OPEN CELL 160: ≥ 100 kg/m³ OPEN CELL 240: 240 kg/m³ (-20 / +120 kg/m³)	
Thermal conductivity	OPEN CELL 240: 0,056 W/(m•K) OPEN CELL 160: 0,048 W/(m•K)	EN 12667
Fire rating	C-s3,d0 Class 1	EN 13501-1 BS 476 Part 6/7
Temperature	-40 °C +85 °C	
Dimensions	See price list	
Thickness	From 10 to 500 mm	
Base colour	Black	
Modulus (MPa)	22 ± 3.7 (160) - 57.7 ± 8.0 (240)	
Elongation to break (%)	114 ± 33 (160) - 140 ± 47 (240)	
Insertion Loss:	K-FONIK 160 10mm R_w=5 dB	
	K-FONIK 160 15mm R_w=8 dB	
	K-FONIK 160 25mm R_w=9 dB	
	K-FONIK 240 10mm R_w=8 dB	
	K-FONIK 240 15mm R_w=10 dB	
	K-FONIK 240 25mm R_w=14 dB	

K-FLEX®
K-FONIK ST GK

Smooth elastomeric sound insulation panel in various thicknesses, coupled with a high density elastomeric sheet. **The product is lead-free and therefore does not represent a health risk.**

K-FONIK ST GK combines the features of K-FONIK GK with a layer of our elastomeric K-FLEX® ST.

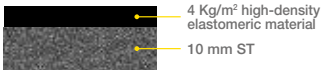
APPLICATION ▸

K-FONIK ST GK is ideal for sound insulation of walls, ceilings, acoustic cabins, drainage systems, OEM sound insulation applications, etc.

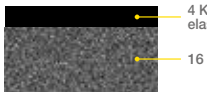
RANGE ▸

K-FONIK ST GK 074

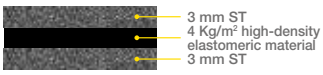
K-FONIK ST GK 072



K-FONIK ST GK 070

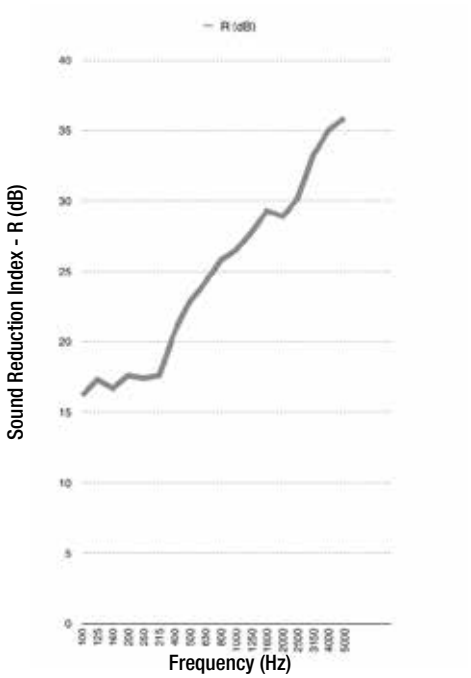


K-FONIK ST GK ST 074



Please see the price list for the full range

ACOUSTIC PERFORMANCE ▸



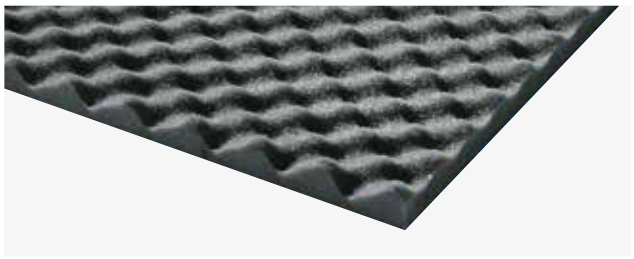
Freq. (Hz)	R (dB)
100	16,2
125	17,3
160	16,7
200	17,6
250	17,4
315	17,6
400	20,7
500	22,9
630	24,2
800	25,8
1000	26,5
1250	27,8
1600	29,3
2000	28,9
2500	30,2
3150	33,3
4000	35,0
5000	35,9

R_w (C;C_{tr})=26 (0;-3)dB

K-FONIK ST GK ▸

Material type	Flexible elastomeric foam with high-density elastomeric material	
Weight	4,4 Kg/m² (K-FONIK ST GK 072)	
Fire rating	B - s3,d0	EN 13501-1
Thermal conductivity	0.036 W/(m•K)	EN 12667
Temperature	-40 °C +70 °C	
Dimensions	2000 x 1000 mm	
Surface	Smooth	
Base colour	Black	

K-FLEX®
K-FONIK B



Embossed surface polyurethane foam sheet ideal for acoustic absorption. **K-FONIK B** material is specifically designed for situations where sound absorption is a priority. It is made of open cell flexible polyurethane foam with a density of 25/30 kg/m³. It is also available in the **K-FONIK ST B** version made with ST rubber foam.

APPLICATION ▸

K-FONIK B is widely used in gyms, conference rooms, rifle ranges, recording studios, radio/television studios, moveable acoustic panels, engine rooms, etc.

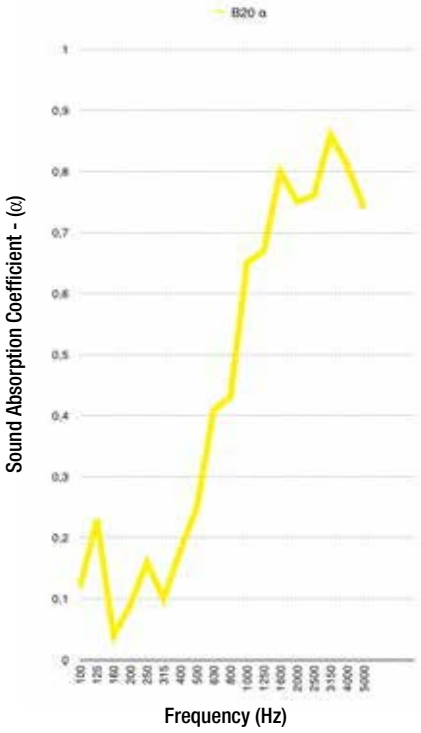
RANGE ▸

K-FONIK B 20

K-FONIK ST B 20

Please see the price list for the full range

ACOUSTIC PERFORMANCE ▸

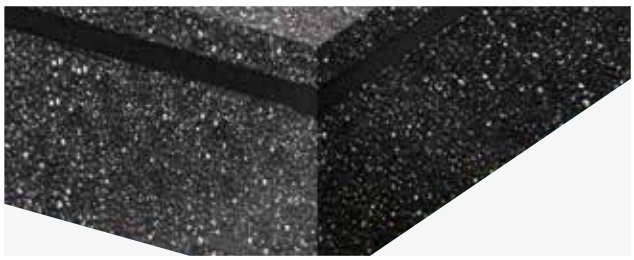


K-FONIK B 20 (Thickness: 20mm)

	B20
Freq. (Hz)	α
100	0,12
125	0,23
160	0,04
200	0,09
250	0,16
315	0,10
400	0,18
500	0,25
630	0,41
800	0,43
1000	0,65
1250	0,67
1600	0,80
2000	0,75
2500	0,76
3150	0,86
4000	0,81
5000	0,74
α_w	0,28

K-FONIK B ▸		
Material type	Polyurethane foam Flexible elastomeric foam	
Density	25 ÷ 30 Kg/m³	
Fire rating	B - s3,d0 (only ST B version)	EN 13501-1
Temperature	-40 °C +70 °C	
Dimensions	1000 x 2000 mm - also available in rolls of different sizes	
Surface	Embossed	
Thickness	20 mm	
Base colour	Black	

K-FLEX®
K-FONIK PE GK



K-FONIK PE GK is a sound insulation material with high density elastomeric sheet specifically designed to provide a solution to particular soundproofing problems. **K-FONIK PE GK** GK is a complete range with specific features designed to handle different types of acoustic requirements.

APPLICATION

K-FONIK PE GK is ideal for the sound insulation of fixed or false walls, ceilings and false ceilings, garages, acoustic cabins and drainage systems.

RANGE

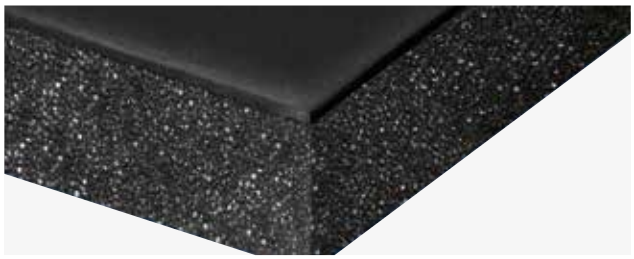
K-FONIK PE GK

K-FONIK PE GK

Please see the price list for the full range

K-FONIK PE GK ▸	
Material type	Polyethylene foam and high density mass
Fire rating	Self-extinguishing
Temperature	-40 °C +70 °C
Dimensions	1000 x 2000 mm in rolls
Surface	Smooth
Base colour	Black

K-FLEX®
K-FONIK PU GK



K-FONIK PU GK is a sound absorption material with high density elastomeric sheet specifically designed to provide a solution to particular soundproofing problems.

APPLICATION

K-FONIK PU GK is ideal for the sound insulation of fixed or false walls, ceilings and false ceilings, garages, acoustic cabins and drainage systems.

RANGE

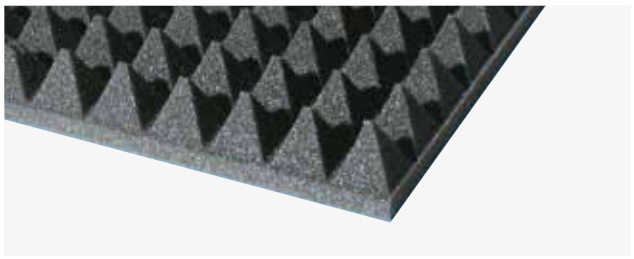
K-FONIK PU GK

K-FONIK PU GK

Please see the price list for the full range

K-FONIK PU GK ▸	
Material type	Polyurethane foam and high density mass
Fire rating	Self-extinguishing
Temperature	-40 °C +70 °C
Dimensions	1000 x 2000 mm
Surface	Smooth or embossed
Base colour	Black

K-FLEX®
K-FONIK P



K-FONIK P is a sound absorption material manufactured with a pyramid-shaped surface, It is the ideal acoustic insulation solution for rooms etc.

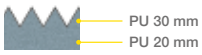
Example of possible application

APPLICATION

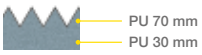
K-FONIK P is widely used in gyms, conference rooms, rifle ranges, recording studios, radio/television studios, moveable acoustic panels, engine rooms, etc.

RANGE

K-FONIK P 50



K-FONIK P 100



Please see the price list for the full range

ACOUSTIC PERFORMANCE

P50 - α_w = 0,34
P100 - α_w = 0,82

K-FONIK P	
Material type	Polyurethane foam
Density	25 ÷ 30 Kg/m^3
Fire rating	Self-extinguishing
Temperature	-40 °C +70 °C
Dimensions	1000 x 1000 mm
Surface	Pyramid structure
Thickness	50 - 100 mm
Base colour	Dark grey

PROJECTS

K-FLEX® K-FONIK OPEN CELL
K-FLEX® K-FONIK GK

Poland

K-FLEX® K-FIRE

Firestopping solutions

K-FLEX® K-FIRE

K-FLEX® is proud to announce K-FLEX® K-FIRE, the new range of product for passive fire protection.

In an ever more evolving world is growing awareness and attention to the protection of people in dangerous situations, such as those resulting from a fire.

New bigger, more futuristic and innovative buildings are in the design and/or construction phase and require solutions for passive protection against fire even more efficient.

K-FLEX® wants to provide designers and installers a complete range of solutions for fire protection, capable of ensuring the compliant of the most stringent regulatory requirements.

K-FLEX® K-FIRE solutions are economical, versatile, easy to install and, above all, reliable.

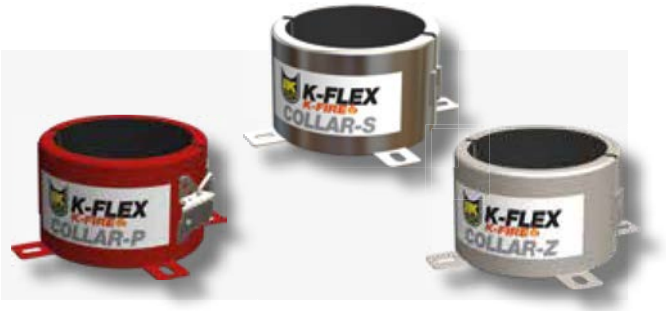
Each solution of K-FLEX® K-FIRE is tested by independent and recognized laboratories and evaluated according to the current standard of fire resistance test.

K-FLEX® constantly develops new products and solutions able to satisfy all the requirements of fire stopping and fire protection.

> Site <

> Brochure <

K-FLEX® K-FIRE COLLAR



A range of devices designed to be fitted around plastic pipes where they penetrate fire separating structures. Under fire conditions the intumescent material within the collar expands to crush the softening pipe and fill the resultant opening, thereby maintaining the fire integrity and insulation performance of the floor or wall.

APPROVALS
CE Marked 0843–CPR–0279
ETA 15-0756
ETAG 026-2 (2011) according EN 1366-3 Penetration Seals

TECHNICAL DATA ▸

K-FLEX® K-FIRE ▸ COLLAR

Property	Value	Test method
Fire Rating	Up to EI 240	EN 1366-3
Tested penetration seal in	Flexible walls: min. thickness 100 mm; Rigid walls: min. thickness of 100 mm; Rigid floors: min. thickness of 150 mm;	
Tested service penetration	- PVC-U pipe up to Ø200mm; - PE pipe up to Ø200mm; - ABS pipe up to Ø200mm; - SAN+PVC pipe up to Ø200mm; - PVC-U pipe up to Ø55mm + FEF insulation - Copper pipe up to Ø54mm + FEF insulation - Cables in bundles up to Ø100mm *FEF = Flexible Elastomeric Foam	
Durability and serviceability	Type Y_2: intended for use at temperature below 0°C, but with no exposure to rain nor UV. Includes lower use categories.	EOTA TR 024:2009

K-FLEX® ▸ K-FIRE COLLAR-P

K-FIRE COLLAR-P is K-FLEX®'s premium solution for protecting combustible pipe penetrations up to DN200* (larger
diameter will be soon available) and consists of red painted steel shells secured by a hinge and latch system.

K-FLEX® K-FIRE ▸ COLLAR-P

Type	Thicknesses
K-FLEX® K-FIRE **COLLAR-P**	55 - 82 - 110 - 125 - 140 - 160 - 200 mm

K-FLEX® ▸ K-FIRE COLLAR-S

K-FIRE COLLAR-S represents an ideal solution for protecting penetration of small diameter pipes and comprises stainless steel shells that are secured by interlocking fastening system.

K-FLEX® K-FIRE ▸ COLLAR-S

Type	Thicknesses
K-FLEX® K-FIRE **COLLAR-S**	32 - 38 - 42 - 46 - 48 - 50 mm

K-FLEX® ▸ K-FIRE COLLAR-Z

K-FIRE COLLAR-Z represents the economical solution for protecting combustible pipe penetration, made of galvanized steel metal shells and interlocking fastening system.

K-FLEX® K-FIRE ▸ COLLAR-Z

Type	Thicknesses
K-FLEX® K-FIRE **COLLAR-Z**	55 - 65 - 70 - 82 - 90 - 110 - 125 - 140 - 160 mm

K-FLEX® K-FIRE WRAP

K-FLEX® K-FIRE WRAP & SEALSTRIP are pipe closure devices used to form penetration seals where combustible pipes, cables and metal pipes penetrate walls and floors. K-FLEX® K-FIRE WRAP is supplied at the correct length to wrap around the diameter of the pipe. K-FLEX® K-FIRE SEALSTRIP is supplied on a continuous roll, to be cut to the correct length during installation. The products are otherwise identical. Under fire conditions the intumescent material within the Wrap expands to crush the softening pipe and fill the resultant opening, thereby maintaining the fire integrity and insulation performance of the floor or wall.

APPROVALS
CE Marked 0843–CPR–0278
ETA 15-0752
ETAG 026-2 (2011) according EN 1366-3 Penetration Seals

TECHNICAL DATA ▸

K-FLEX® K-FIRE ▸ WRAP

Property	Value	Test method
Fire Rating	Up to EI 240	EN 1366-3
Tested penetration seal in	Flexible walls: min. thickness 100 mm Rigid walls: min. thickness of 100 mm, Rigid floors: min. thickness of 150 mm.	
Tested service penetration	- PVC-U pipe up to Ø200mm; - PE pipe up to Ø125mm; - ABS pipe up to Ø125mm; - SAN+PVC pipe up to Ø125mm; - Copper pipe up to Ø54mm + 19mm FEF insulation - Cables bundles up to Ø100mm *FEF = Flexible Elastomeric Foam	
Durability and serviceability	Type Y_2: intended for use at temperature below 0°C, but with no exposure to rain nor UV. Includes lower use categories.	EOTA TR 024:2009

RANGE ▸

K-FLEX® K-FIRE ▸ WRAP

Type	Thicknesses
K-FLEX® K-FIRE **WRAP** - precutted strip	40 - 55 - 82 - 110 - 125 - 140 - 160 - 200 mm
K-FLEX® K-FIRE **SEALSTRIP** - roll	25 m x 50 mm

K-FLEX® K-FIRE PIPE WRAP

K-FLEX® K-FIRE PIPE WRAP is a pipe closure device used to form penetration seals where combustible pipes and insulated metal pipes penetrate walls and floors. K-FLEX® K-FIRE PIPE WRAP is supplied in bags sized according to pipe diameter. The wrap is wrapped around the pipe and pushed into the aperture in the separating element or cast in with K-FLEX® K-FIRE EX MORTAR.

APPROVALS
CE Marked 0843–CPR–0411
ETA 17-1049
ETAG 026-2 (2011) according EN 1366-3 Penetration Seals

TECHNICAL DATA

K-FLEX® K-FIRE PIPE WRAP

Property	Value	Test method
Fire Rating	Up to EI 240	EN 1366-3
Tested penetration seal in	Flexible walls: min. thickness 100 mm; Rigid walls: min. thickness of 100 mm; Rigid floors: min. thickness of 150 mm;	
Tested service penetration	- PVC-U pipe up to Ø315mm; - PP pipe up to Ø75mm; - PE pipe up to Ø250mm; - ABS pipe up to Ø250mm; - SAN+PVC pipe up to Ø250mm; - Bundle of 2 pipes made of PVC-U, PP, PE, ABS and SAN+PVC; - Geberit Mepla pipe up to Ø75mm; - PVC-U pipe up to Ø110mm + FEF insulation; - Copper pipe up to Ø54mm + FEF insulation; - Steel pipe up to Ø165mm + FEF insulation; *FEF = Flexible Elastomeric Foam	
Durability and serviceability	Type X: intended for use at conditions exposed to weathering.	EOTA TR 024:2009

RANGE

K-FLEX® K-FIRE PIPE WRAP

Type	Thicknesses
K-FLEX® K-FIRE **PIPE WRAP** - precutted strip	55 - 85 - 110 - 125 - 160 - 200 - 250 mm
K-FLEX® K-FIRE **PIPE WRAP** - roll	25 m x 50 mm or 25 m x 75 mm

K-FLEX® K-FIRE SEALANT A PLUS

K-FIRE SEALANT A PLUS is a fire resistant water based acoustic acrylic sealant, designed for internal use with fire and smoke resisting gaps and service penetrating capability. K-FIRE SEALANT A PLUS can be used where a low movement fire resistant and/or acoustic joint is required. K-FIRE SEALANT A PLUS provides good adhesion to most common building materials like brick, concrete, plasterboard, wood etc.

APPROVALS
CE Marked 0843-CPR-0284
ETA 15-0818
ETAG 026-2 (2011) according EN 1366-3 Penetration Seals
ETA 15-0795
ETAG 026-3 (2011) according EN 1366-4 Linear Joint and Gap Seals

TECHNICAL DATA ▸

K-FLEX® K-FIRE ▸ SEALANT A PLUS

Property	Value	Test method
Fire Rating	Up to EI 240	EN 1366-3 EN 1366-4
Tested penetration seal In	Flexible walls: min. thickness 100 mm Rigid walls: min. thickness of 100 mm Rigid floors: min. thickness of 150 mm	
Tested service penetration	- Copper pipes up to Ø35mm - Copper pipes up to Ø54mm + MW insulation - Steel pipes up to Ø89mm - Steel pipes up to Ø219mm + MW insulation - Electrical Cables in bundles - Telecom Cables in bundles - Linear Joint up to W50 + backing material *MW: Mineral Wool	
Durability and serviceability	Type Z_1: Intended for use at internal conditions, excluding temperature below 0°C.	EOTA TR 024:2009
Application Temp.	+5°C to +40°C	
Storing Temp.	+5°C to +30°C	
Density	1.64 g/ml	
Water solubility	Miscible	
Ecological data	Halogen Free Non-toxic Dust Free	

RANGE ▸

K-FLEX® K-FIRE ▸ SEALANT A PLUS

Type	Contents	Colors
K-FLEX® K-FIRE **SEALANT A PLUS** - cartridge	310 - 600 ml	White or grey

K-FLEX® K-FIRE SEALANT A

K-FLEX® K-FIRE SEALANT A is a one part, acrylic emulsion that intumesces and forms a char when exposed to the heat of a fire, preventing the passage of fire and smoke In normal use, it will maintain the sound reduction index of a structure. It does not emit halogenated by-products under fire conditions, and does not contain any hazardous raw material. It has good, unprimed, adhesion to a wide variety of common building substrates, and it is designed to work in combination with K-FLEX® K-FIRE BATT to prevent the passage of fire and smoke between compartimentations whilst still allowing the installation of services.

APPROVALS
CE Marked 1121-CPR-JA5095
ETA 15-0777
ETAG 026-2 (2011) according EN 1366-3 Penetration Seals
ETA 15-0776
ETAG 026-3 (2011) according EN 1366-4 Linear Joint and Gap Sealsls

TECHNICAL DATA ▸

K-FLEX® K-FIRE ▸ SEALANT A

Property	Value	Test method
Fire Rating	Up to EI 120	EN 1366-3 EN 1366-4
Tested Penetration Seal In	Flexible walls: min. thickness 120 mm Rigid walls: min. thickness of 150 mm.	
Tested Service Penetration	- Copper pipes up to Ø159mm - Steel pipes up to Ø159mm - Cables up to 50mm - Perforated cable tray up to 450x50mm - Linear Joint up to W50 + backing material	
Durability And Serviceability	Type Z_1: Intended for use at internal conditions, excluding temperature below 0°C, without exposure to rain or UV.	EOTA TR 024:2009
Application Temp.	+5°C to +40°C	
Storing Temp.	+5°C to +30°C	
Density	1.57 g/ml	
Slump	5mm after 1hr in 30mm joint	
Shrinkage	12%	
Cure Rate	3mm per day at 50% relative humidity 23°C	
Tack Free	30 mins at 23°C, 50% RH	
Water Resistance	Good when fully cured	
U.V. Resistance	Good	
Acoustic Performances	Rw up to 65 dB Rw up to 40 dB	EN 10140 EN ISO 717-1
Water Solubility	Miscible	
Ecological Data	Low Ozone Depletion Potential (ODP) Low Global Warming Potential (GWP) Low VOC Dust Free	

RANGE ▸

K-FLEX® K-FIRE ▸ SEALANT A

Type	Content	Colors
K-FLEX® K-FIRE **SEALANT A** - cartridge	310 ml	White or grey
K-FLEX® K-FIRE **SEALANT A** - tube	5 kg	White

K-FLEX® K-FIRE ACRYLIC

K-FLEX® K-FIRE ACRYLIC is an one part acrylic sealant designed to prevent the spread of fire and smoke through joints and openings in fire rated walls and floors including openings formed around building service penetrations. K-FLEX® K-FIRE ACRYLIC will also maintain the acoustic design performance in walls and floors. K-FLEX® K-FIRE ACRYLIC cures when it is subjected to atmospheric conditions and retain a certain elasticity for joint movement. Under fire exposure, K-FLEX® K-FIRE ACRYLIC creates a robust fire seal creating a durable intumescent char. Thermal activation takes place at about 180°C when the material will expand (intumesce) and prevent the passage of fire and smoke for periods up to and beyond 4 hours.

APPROVALS
CE Marked 0843-CPR-0408
ETA 17/1048 and 17/1047
ETAG 026-2 (2011) according EN 1366-3 Penetration Seals
AgBB and EC1Plus for Low VOC

TECHNICAL DATA ▸

K-FLEX® K-FIRE ▸ ACRYLIC

Property	Value	Test method
Fire Rating	Up to EI 240	EN 1366-3
Tested Penetration Seal In	Flexible walls: min. thickness 100 mm Rigid walls: min. thickness of 150 mm Rigid floors: min. thickness of 150 mm	
Tested Service Penetration	- PVC-U pipes up to Ø32mm - PVC-U pipes up to Ø40mm + MW Insulation - PE, PE-HD pipes up to Ø40mm + MW Insulation - ABS pipes up to Ø40mm + MW Insulation - SAN+PVC pipes up to Ø40mm + MW Insulation - PP pipes up to Ø32mm - PP pipes up to Ø75mm + AESW Insulation - Geberit Mepla up to Ø75mm + FEF / MW / AESW Insulation - Copper pipes up to Ø54mm - Copper pipes up to Ø54mm + FEF / MW / AESW Insulation - Steel pipes up to Ø16mm - Steel pipes up to Ø165mm + FEF / AESW Insulation - Steel pipes up to Ø324mm + MW Insulation - Alupex pipes up to Ø75mm + MW / AESW Insulation - Electrical Cables in bundles up to Ø100mm - Telecom Cables in bundles up to Ø100mm - Blank Seal + AESW Insulation *FEF: Flexible Elastomeric Foam *MW: Mineral Wool *AESW: Alkaline earth silicate wool	
Durability And Serviceability	Type Z_2: Intended for uses in internal conditions, excluding temperature below 0°C, without exposure to rain or UV.	EOTA TR 024:2009
Reaction To Fire	D-s1,d1	EN 13501-1
Storing Temp.	+5 to +30°C	
Service Temp.	-20°C to +70°C	
Density	1.58 g/ml	
Flexibility	7.5%	
Cure Rate	3 to 5 days depending on thickness and temperature	
Tack Free	75 minutes	
Water Resistance	Good when fully cured	
U.V. Resistance	Good	
Water Solubility	Miscible	
Acoustic Performances	up to 62 dB (single side) over 62 dB (double side)	EN 10140-2
Ecological Data	EMICODE emission class EC 1PLUS Low Emission	

RANGE ▸

K-FLEX® K-FIRE ▸ ACRYLIC

Type	Contents	Colors
K-FLEX® K-FIRE **ACRYLIC** - cartridge	310 - 600 ml	White or grey
K-FLEX® K-FIRE **ACRYLIC** - sausage	600 ml	White

K-FLEX® K-FIRE SEALANT S PLUS

A one part, fire resistant, neutral curing, silicone sealant to be used in situations where a flexible fire resistant joint is required. Excellent adhesion to most building substrates, including porous materials, without the use of primers. Good durability.

APPROVALS
CE Marked 0843–CPR–0285
ETA 15-0819
ETAG 026-2 (2011) according EN 1366-3 Penetration Seals
ETA 15-0817
ETAG 026-3 (2011) according EN 1366-4 Linear Joint and Gap Seals

TECHNICAL DATA

K-FLEX® K-FIRE SEALANT S PLUS

Property	Value	Test method
Fire Rating	Up to EI 240	EN 1366-3 EN 1366-4
Tested Penetration Seal In	Rigid walls: min. thickness of 150 mm Rigid floors: min. thickness of 150 mm	
Tested Service Penetration	- Copper pipes up to Ø38mm - Copper pipes up to Ø38mm + FEF Insulation - Steel pipes up to Ø40mm - Steel pipes up to Ø40mm + FEF Insulation - Cables in bundle up to Ø80mm - Linear Joint up to W40 + backing material *FEF: Flexible Elastomeric Foam	
Durability And Serviceability	Type X: Intended for use at conditions exposed to weathering and in the temperature range -20°C to 70°C. Also suitable for internal conditions.	EOTA TR 024:2009
Movement Capability	+/- 25%	
Storing Temp.	+5°C to +30°C	
Application Temp.	-5°C to +40°C	
Density	1.40 g/ml	
Water Solubility	Immiscible	
Ecological Data	Halogen Free Non-toxic Low smoke Dust Free	

RANGE

K-FLEX® K-FIRE SEALANT S PLUS

Type	Content	Colors
K-FLEX® K-FIRE **SEALANT S PLUS** - cartridge	310 ml	White or grey

K-FLEX® K-FIRE HIGH PRESSION SEALANT

K-FLEX® K-FIRE HP SEALANT is a is an intumescent pressure sealant which, when exposed to fire, expands protecting penetrations including cables, cable bunches, cable trays, plastic and metallic pipes. K-FLEX® K-FIRE HP SEALANT maintains the integrity and insulation performance of the seal through masonry and plasterboard. The sealant is intended for use in service penetrations through walls and floors where fire integrity and insulation needs to be preserved. Under fire conditions the product swells and exerts pressure to the surrounding substrates leading to closure of the penetration.

APPROVALS
CE Marked 1121-CPR-JA5097
ETA 15-0778
ETAG 026-2 (2011) according EN 1366-3 Penetration Seals

TECHNICAL DATA ▸

K-FLEX® K-FIRE ▸ HP SEALANT

Property	Value	Test method
Fire Rating	Up to EI 240	EN 1366-3
Tested Penetration Seal In	Flexible walls: min. thickness of 100 mm Rigid walls: min. thickness of 100 mm Rigid floors: min. thickness of 150 mm	
Tested Service Penetration	- PVC pipes up to Ø125mm - HDPE pipes up to Ø63mm - ABS pipes up to Ø63mm - PP pies up to Ø110mm - PE pipes up tp Ø125mm - Copper pipes up to Ø60mm + FEF / MW Insulation - Single cables up to Ø80mm - Cables in bundle up to Ø100mm - Linear Joint up to W40 + backing material *FEF: Flexible Elastomeric Foam *MW: Mineral Wool	
Durability And Serviceability	Type Z_2: Intended for uses in internal conditions, excluding temperature below 0°C, without exposure to rain or UV.	EOTA TR 024:2009
Movement Capability	+/- 25%	
Storing Temp.	+5°C to +25°C	
Application Temp.	-5°C to +35°C	
Density	1.28 g/ml	
Cure Time	1.7 mm per 24 hours	
Expansion	Up to 20x	
Expansion Temp.	180°C	
Shore Hardness	68	ISO 7619-1:2010
Air permeability	600Pa	EN 1026
Ecological Data	Low Ozone Depletion Potential (ODP) Low Global Warming Potential (GWP) Low VOC (0.05g/l) Dust Free	

RANGE ▸

K-FLEX® K-FIRE ▸ HP SEALANT

Type	Content	Color
K-FLEX® K-FIRE **HP SEALANTS** - cartridge	310 ml	Gray

K-FLEX® K-FIRE BATT

K-FLEX® K-FIRE BATT is a coated mineral wool board used to reinstate the fire resistance performance of wall constructions where they have been provided with apertures for the penetration of single or multiple services. K-FLEX® K-FIRE BATT together with K-FLEX® K-FIRE SEALANT A are designed to prevent the passage of fire and smoke between compartment walls whilst still allowing the installation of services. K-FLEX® K-FIRE SEALANT A is required to seal all joints and junctions during the sealing process. K-FLEX® K-FIRE HP SEALANT is required to seal around specific services This system is tested according both EN1366-3 and BS476 pt 20/22 giving a fire resistance and smoke barrier for up to 120 minutes.

APPROVALS
CE Marked 1121-CPR-JA5096
ETA 15-0779
ETAG 026-2 (2011) according EN 1366-3 Penetration Seals

TECHNICAL DATA

K-FLEX® K-FIRE BATT

Property	Value	Test method
Fire Rating	Up to EI 120	EN 1366-3
Tested penetration seal in	Flexible walls: min. thickness 100 mm; Rigid walls: min. thickness of 100 mm;	
Tested service penetration	- Copper pipe up to Ø159mm + MW insulation; - Steel or Copper conduits up to Ø16mm; - Cable bundles up to Ø100mm; - Cable trays and ladders; - Cable conduits up to Ø16mm; - Max aperture size: 730 x 1200 mm *MW: Mineral Wool	
Durability and serviceability	Type Z_1: Intended for use in internal conditions, excluding temperature below 0°C, without exposure to rain or UV.	EOTA TR 024:2009
Storing temperature	-5°C to +30°C	
Density	> 140 kg/m^3	
Air Permeability	600 Pa	EN 1026
Thermal Conductivity	0.034 W/mK at 10°C	
Acoustic performances	up to 24Rw (Single 50mm Batt) up to 48Rw (Double 50mm Batt)	EN 10140
Ecological data	Low Ozone Depletion Potential (ODP) Low Global Warming Potential (GWP) Low VOC Contributes to Green Building	

RANGE

K-FLEX® K-FIRE BATT

Type	Height	Length	Thicknesses
K-FLEX® K-FIRE **BATT** - board	1200 mm	600 mm	50 - 60 mm

K-FLEX® K-FIRE MORTAR

A single pack material that, when mixed with water, provides a fire resistant and smoke seal able to reinstate fire resistance of separating walls and floors when penetrated by building services.

APPROVALS
CE Marked 0843–CPR–0277
ETA 15-0757
ETAG 026-2 (2011) according EN 1366-3 Penetration Seals

TECHNICAL DATA ▸

K-FLEX® K-FIRE ▸ MORTAR

Property	Value	Test method
Fire Rating	Up to EI 240	EN 1366-3
Tested penetration seal in	Flexible walls: min. thickness 100 mm; Rigid walls: min. thickness of 100 mm; Rigid floors: min. thickness of 150 mm;	
Tested service penetration	- PVC-U pipes up to Ø 200mm; - PE pipes up to Ø 55mm; - ABS pipes up to Ø 55mm; - SAN+PVC pipes up to Ø 55mm; - Copper pipes up to Ø93mm; - Copper pipes up to Ø93mm + FEF / MW insulation; - Steel pipes up to Ø194mm; - Steel pipes up to Ø194mm + FEF insulation; - Single cables up to Ø80mm; - Cable bundles up to Ø 100mm; - Cable trays up to 300x25mm; - Perforated steel trays up to 500x60mm *FEF: Flexible Elastomeric Foam *MW: Mineral Wool	
Durability and serviceability	Type Y_2: intended for use at temperature below 0°C, with no exposure to rain nor UV. Includes lower use categories.	EOTA TR 024:2009
Density	Approximately 860 kg/m^3 one month after application	
Thermal Conductivity	< 0.3 W /m K	
Shelf life	6 months	
Ecological data	Free of fibers, silica and halogens	

RANGE ▸

K-FLEX® K-FIRE ▸ MORTAR

Type	Contents
K-FLEX® K-FIRE **MORTAR** - bag	20 - 10 kg

K-FLEX® K-FIRE EX MORTAR

K-FLEX® K-FIRE EX MORTAR is a gypsum based mortar material, used to reinstate the fire resistance performance of wall and floor constructions where they have been provided with apertures for the penetrations of multiple services. When mixed with water, the compounds form a highly thermally insulating fire sealing compound to prevent the spread of fire and smoke through openings in fire rated walls and floors, including openings formed around building service penetrations. K-FLEX® K-FIRE EX MORTAR will also maintain the acoustic design performance in walls and floors. K-FLEX® K-FIRE EX MORTAR expands approx. 1% by hydraulic action during curing ensuring a very tight seal around the service penetrations and the surrounding opening apertures.

APPROVALS
CE Marked 0843–CPR–0412
ETA 17-1046
ETAG 026-2 (2011) according EN 1366-3 Penetration Seals

TECHNICAL DATA

K-FLEX® K-FIRE EX MORTAR

Property	Value	Test method
Fire Rating	Up to EI 240	EN 1366-3
Tested penetration seal in	Flexible walls: min. thickness 100 mm; Rigid walls: min. thickness of 150 mm; Rigid floors: min. thickness of 150 mm.	
Tested service penetration	- PVC-U pipes up to Ø315mm; - PVC pipe bundles up to Ø32mm; - PE pipes up to Ø160mm; - PE pipe bundles up to Ø32mm; - ABS pipe bundles up to Ø32mm; - SAN+PVC pipe bundles up to Ø32mm; - PP pipes up to Ø75mm; - PP pipe bundles up to Ø32mm; - Geberit Mepla pipes up to Ø75mm + FEF / MW insulation; - Alupex pipes up to Ø75mm; - Alupex pipes up to Ø75mm + FEF / AESW insulation; - Copper pipes up to Ø54mm + FEF / MW insulation; - Steel pipes up to Ø165 mm + FEF insulation; - Steel pipes up to Ø219 mm + MW insulation; - Single cables up to Ø80mm; - Cable bundles up to Ø 100mm; - Steel cable trays and ladders; - Metal or plastic conduits up to Ø16mm; - Blank seals up to 2400x1200mm. *FEF: Flexible Elastomeric Foam *MW: Mineral Wool *AESW: Alkaline earth silicate wool	
Durability and serviceability	Type Z_2: Intended for uses in internal conditions, excluding temperature below 0°C, without exposure to rain or UV.	EOTA TR 024:2009
Reaction to fire	A1	EN 13501-1
Storing temperature	5 to 30 °C	
Density	About 900 kg/m^3 after full cure	
Cure rate	Up to 30 days depending on thickness and temp.	
Tack free time	Less than 1 hour depending on the local climate	
Acoustic performances	64 dB	
Ecological data	EMICODE emission class EC 1PLUS	

RANGE

K-FLEX® K-FIRE EX MORTAR

Type	Content
K-FLEX® K-FIRE **EX MORTAR** - bag	20 kg

K-FLEX® K-FIRE HS COMPOUND

K-FLEX® FIRE HS COMPOUND is is dry blended from high quality gypsum plaster and carefully graded fire resistant aggregates to give excellent fire resistance, strength and versatile workability in floor seal applications. K-FLEX® K-FIRE HS COMPOUND is readily mixed with water, to consistencies ranging from pourable through to trowelable, with a controlled expansion on setting to give a flame and smoke tight seal within the opening and around all services.

APPROVALS
tested according EN 1366-3 Penetration Seals
tested according BS476

TECHNICAL DATA ▸

K-FLEX® K-FIRE ▸ HS COMPOUND

Property	Value	Test method
Fire Rating	Up to EI 240	BS476
Tested penetration seal in	Rigid floors: min. thickness of 150 mm.	
Tested service penetration	- Copper pipes up to Ø107mm + MW insulation; - Steel pipes up to Ø160mm + MW insulation; - Single cables up to Ø80mm; - Cable bundles up to Ø100mm; *MW: Mineral Wool	
Durability and serviceability	Type Z_1: intended for use at temperature below 0°C, without exposure to rain nor UV. Includes lower use categories.	EOTA TR 024:2009
Storing temperature	5 ÷ 25 °C	
Density	Loose Bulk 950kg/m^3 Wet Cast 1750 to 1900 kg/m^3 Dried 1450 to 1600 kg/m^3	
Thermal Conductivity	0.45 W/mk	EN 1745
Shelf life	up to 12 months	
Acoustic performances	50 dB @ 100mm thick	

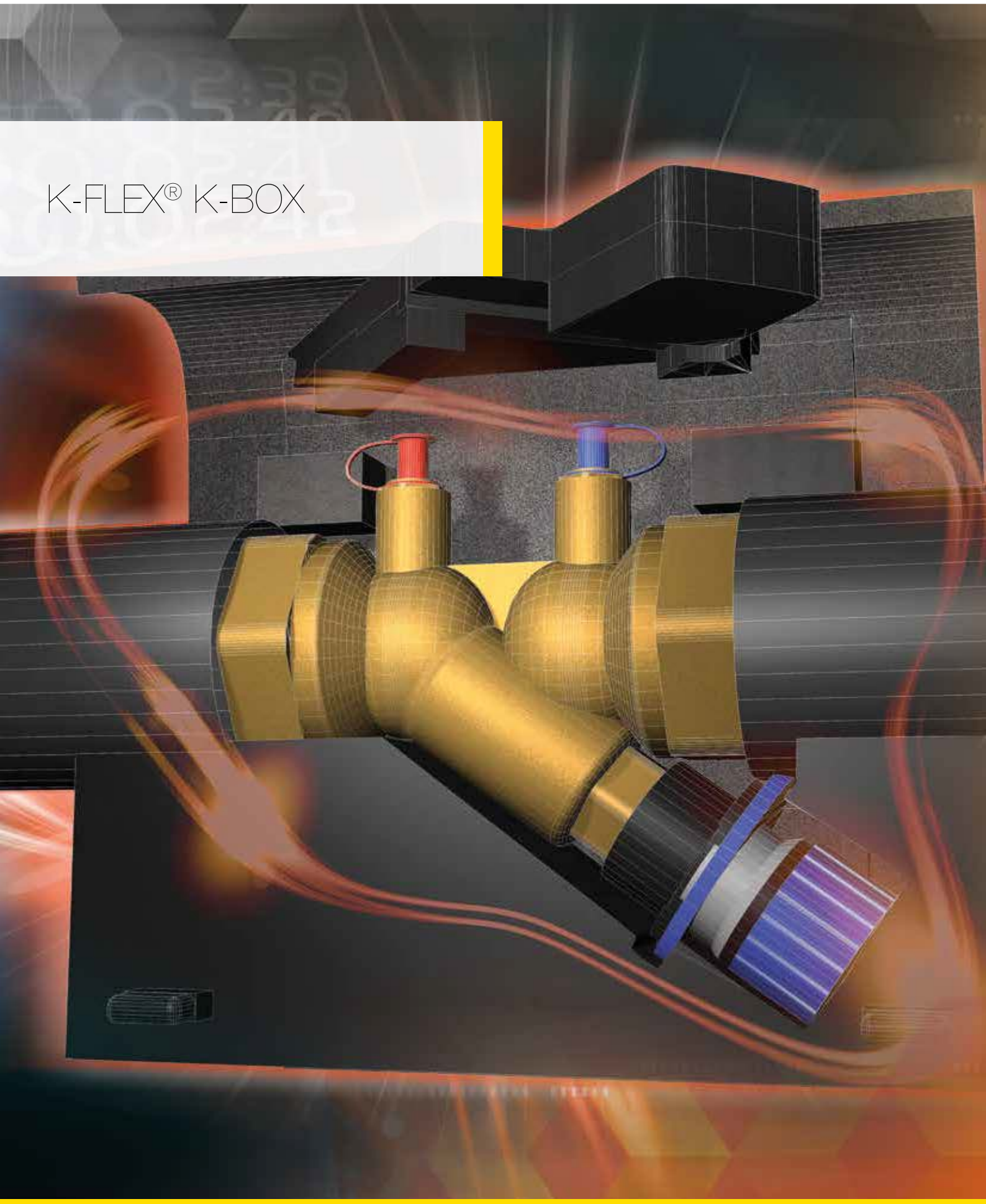
RANGE ▸

K-FLEX® K-FIRE ▸ HS COMPOUND

Type	Content
K-FLEX® K-FIRE **HS COMPOUND** - bag	20kg

Firestopping SOLUTIONS

K-FLEX® K-BOX



K-FLEX® K-BOX

- PREFORMED INSULATION BOXES SUITABLE FOR INSULATION OF VALVES,FILTERS, FLANGES AND OTHER ELEMENTS IN A PIPING SYSTEM

> Video <

K-FLEX® ▸ K-BOX

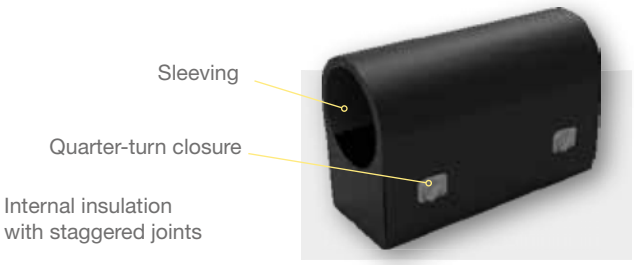
TECHNICAL DATA ▸ K-FLEX® K-BOX

Property	Value
Insulation material	K-FLEX® ST
Temperature range	K-BOX **removable**: from 0°C to +85°C K-BOX **glued**: from -45°C to +85°C
Storage	From +10°C to +30°C
Thermal conductivity λ W/(m•K)	0,036 W/mK at 0°C
Permeability μ	7000
Corrosion properties	pH neutral (7±0,5)
Resistance to mould, fungi and bacteria	Excellent
Odour	Neutral
Colour	Black
Use	Internal

INFO ▸ K-FLEX® K-BOX

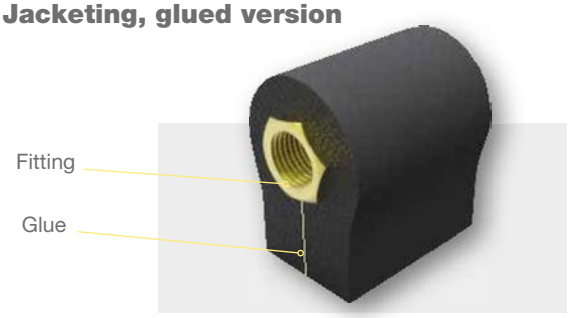
K-FLEX® K-BOX are available in removable or non removable versions.

Removable version



Service temperature range: from 0°C to +85°C

Non Jacketing, glued version



Service temperature range: from -45°C to +85°C

INFO ▸ K-FLEX® K-BOX

K-FLEX® K-BOX

Each piece has been specifically designed in order to perfectly match the equipment to be insulated.

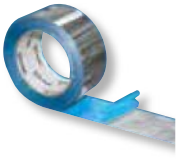
The elastomeric closed cell structure offers a very low thermal conductivity combined with excellent resistance to water vapor diffusion.
> Time savings during equipment maintenance.
> Easy and quick to use.
> Quality finish.
> Made in the EU.

K-FLEX® K-BOX are available in removable or non removable versions.
For different sizes and models, please contact us.

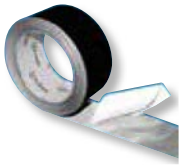
RANGE ▸ K-FLEX® K-BOX

	FITTING	THICKNESSES	DIAMETERS
K-FLEX® K-BOX - Removable	Threaded	from 19 to 40 mm	from 22 to 76 mm
	Flanged	from 32 to 50 mm	from 48 to 168 mm
K-FLEX® K-BOX - Glued	Threaded	from 19 to 40 mm	from 22 to 76 mm
	Flanged	from 32 to 50 mm	from 48 to 168 mm

ACCESSORIES ▸ K-FLEX® K-BOX



K-FLEX® ALU Tape

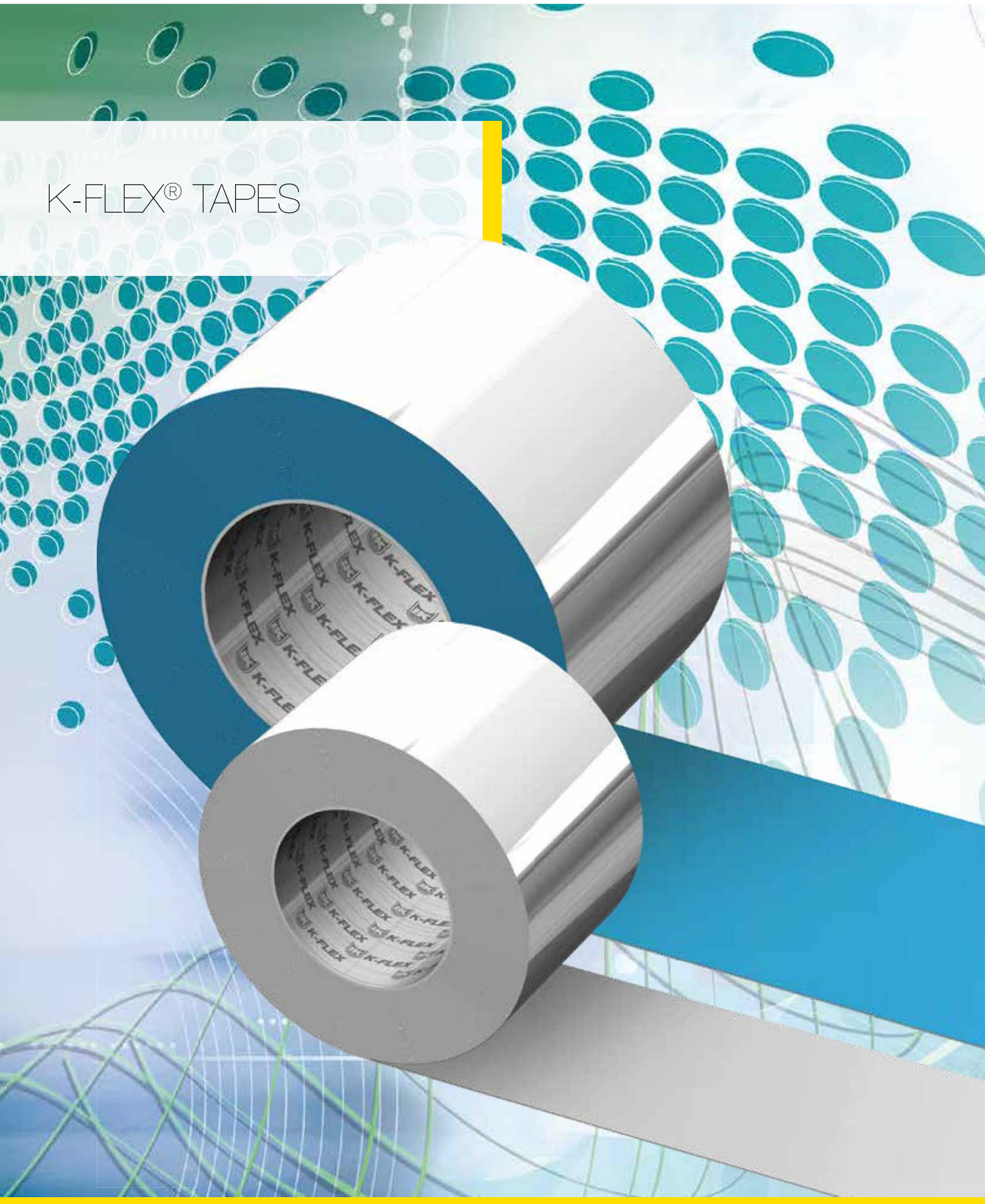


K-FLEX® ALU Black Tape

K-FLEX® Anticondensation Tape

Adhesives

K-FLEX® TAPES



K-FLEX® TAPES

THE DIFFERENCE IS IN THE DETAILS

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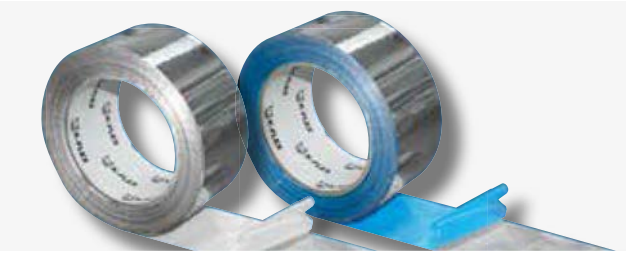
K-FLEX®
ALU AA CW TAPE
Aluminum Foil Tape



High tensile strength aluminum foil, combined with cold weather solvent acrylic adhesive, protected by an easy-release silicone release paper or silicone coated blue polyethylene liner.
Cold Weather version (low temperatures).

MEASUREMENTS
Thicknesses: 25 - 30 - 40 Micron
Length: 50 m
Widths: 50 - 75 - 100 mm

FEATURES:
> Aluminum foil provides excellent reflection of both heat and light.
> High quality adhesive with strong adhesion offers a permanent seal and bond on Foil-Scrim-Kraft Facing joints and seams in HVAC ductwork applications.
> Good resistance to aging, both indoors and outdoors.
> Low moisture vapor transmission rate offers excellent performance.

APPLICATIONS:
HVAC industry for joining and sealing Foil-Scrim-Kraft Facing laminated ductwrap / duct board joints and seams; joining and sealing flexible air duct seams and connections. General purpose holding, patching, sealing and masking applications – indoors and outdoors.

STORAGE & SHELF LIFE:
12 months when stored at 21°C (70°F) / 50% relative humidity out of direct sunlight.

SURFACE PREPARATION:
It is essential, as with all pressure-sensitive tapes, that the surface to which the tape is applied must be clean, dry, free of grease, oil or other contaminants.

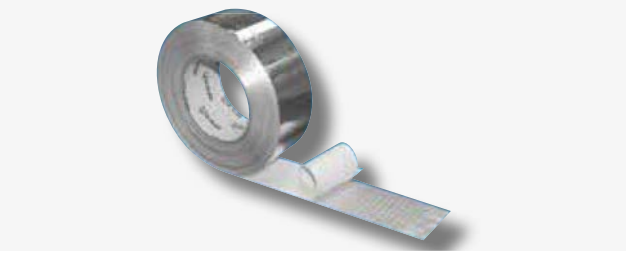
PRODUCT USE:
It is essential that the user evaluate the products to determine whether it is fit for a particular purpose and user's method of application. Good results will be obtained when applied to a clean, dry surface with a suitable pressure on products between +10 ~ +40°C (+50 ~ +105 °F).

TECHNICAL DATA ▸

	K-FLEX® ALU **AA 130 CW**	K-FLEX® ALU **AA 130 PLUS CW**	K-FLEX® ALU **AA 140 CW**	TEST METHOD
Backing thickness	25 Micron	30 Micron	40 Micron	PSTC-133 / ASTM D 3652
Total thickness	60 Micron	70 Micron	80 Micron	PSTC-133 / ASTM D 3652
Adhesion to steel	15 N/25mm	15 N/25mm	15 N/25mm	PSTC-101 / ASTM D 3330
Rolling ball tack test	5 cm	5 cm	5 cm	PSTC-6 / ASTM D 3121
Tensile strength	40 N/25mm	45 N/25mm	55 N/25mm	PSTC-131 / ASTM D 3759
Elongation	3.0 %	3.0 %	3.0 %	PSTC-131 / ASTM D 3759
Service temperature	-35 ~ +120 °C	-35 ~ +120 °C	-35 ~ +120 °C	----------

The physical properties of the products shown above are obtained from test methods defined by Technical Standards Authorities, Quality Assurance and Technical Service Departments and do not represent a guarantee of product performance.
Individual tapes may vary from these parameters and in all applications the end user should determine whether the product is fit for a particular purpose and is suitable for the user's method of application before use.

K-FLEX®
ALU AR CW TAPE
Foil-Scrim Tape



Foil-Scrim backing, combined with cold weather solvent acrylic adhesive, protected by an easy-release silicone release paper.
Cold Weather version (low temperatures).

MEASUREMENTS
Thicknesses: 43 - 50 Micron
Length: 50 m
Widths: 50 - 75 - 100 mm

FEATURES:
> Foil-Scrim provides excellent reflection of both heat and light.
> High quality adhesive with strong adhesion and holding power offers reliable and durable Foil-Scrim Facing for joints and seams sealing in HVAC and ductwork applications.
> Low moisture vapor transmission rate makes K-FLEX® ALU AR 107 an excellent vapor barrier.
> Service Temperature range from -30 ~ +120 °C (-22~ +248 °F).

APPLICATIONS:
HVAC industry for joining and sealing Foil-Scrim Facing laminated blankets / duct board / pipe section joints and seams; joining and sealing flexible air duct seams and connections. May also be used for other industrial uses requiring a tape with these characteristics and benefits.

STORAGE & SHELF LIFE:
12 months when stored at 21°C (70°F) / 50% relative humidity out of direct sunlight

SURFACE PREPARATION:
It is essential, as with all pressure-sensitive tapes, that the surface to which the tape is applied must be clean, dry, free of grease, oil or other contaminants.

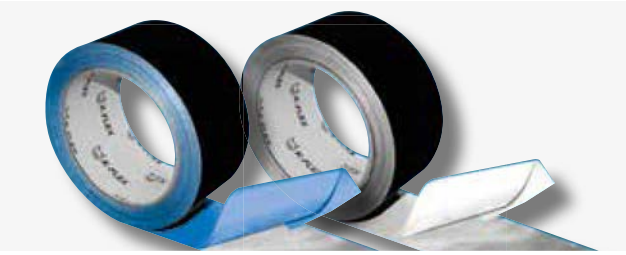
PRODUCT USE:
It is essential that the user evaluate the products to determine whether it is fit for a particular purpose and user's method of application. Good results will be obtained when applied to a clean, dry surface with a suitable pressure on products between +10 ~ +40°C (+50 ~ +105 °F).

TECHNICAL DATA ▸

	K-FLEX® ALU AR **107** CW TAPE	K-FLEX® ALU AR **107 PLUS** CW TAPE	
Backing thickness	43 Micron	50 Micron	PSTC-133 / ASTM D 3652
Total thickness	83 Micron	90 Micron	PSTC-133 / ASTM D 3652
Adhesion to steel	15 N/25mm	15 N/25mm	PSTC-101 / ASTM D 3330
Rolling ball tack test	5 cm	5 cm	PSTC-6 / ASTM D 3121
Tensile strength	100 N/25mm	120 N/25mm	PSTC-131 / ASTM D 3759
Elongation	3.0%.	3.0%.	PSTC-131 / ASTM D 3759
Service temperature	-30 ~ +120 °C	-30 ~ +120 °C	----------

The physical properties of the products shown above are obtained from test methods defined by Technical Standards Authorities, Quality Assurance and Technical Service Departments and do not represent a guarantee of product performance.
Individual tapes may vary from these parameters and in all applications the end user should determine whether the product is fit for a particular purpose and is suitable for the user's method of application before use.

K-FLEX® ALU BLACK CW TAPE
Coloured Aluminum Foil Tape



Black or white lacquered 30 micron (1.2 mil) aluminum foil, combined with cold weather solvent acrylic adhesive, protected by an easy-release silicone release paper or silicone coated blue polyethylene liner.
Cold Weather version (low temperatures).

MEASUREMENTS
Thickness: 30 Micron
Length: 50 m
Width: 50 mm

FEATURES:
> Lacquered aluminum foil.
> Good aging resistance, both indoors and outdoors.
> Low moisture vapor transmission rate offers excellent sealing and patching performance.

APPLICATIONS:
HVAC industry for joining and sealing black lacquered Foil-Scrim-Kraft Facing laminated ductwrap / duct board / pipe insulation's joints and seams. May also be used for other industrial uses requiring a tape with these characteristics and benefits.

STORAGE & SHELF LIFE:
12 months when stored at 21°C (70°F) / 50% relative humidity out of direct sunlight.

SURFACE PREPARATION:
It is essential, as with all pressure-sensitive tapes, that the surface to which the tape is applied must be clean, dry, free of grease, oil or other contaminants.

PRODUCT USE:
It is essential that the user evaluate the products to determine whether it is fit for a particular purpose and user's method of application. Good results will be obtained when applied to a clean, dry surface with a suitable pressure on products between +10 ~ +40°C (+50 ~ +105 °F).

TECHNICAL DATA ▸

K-FLEX® ALU **BLACK** CW TAPE		
Backing Thickness	30 Microns	PSTC-133 / ASTM D 3652
Total Thickness	70 Microns	PSTC-133 / ASTM D 3652
Adhesion to Steel	15 N/25mm	PSTC-101 / ASTM D 3330
Rolling ball tack test	5 cm	PSTC-6 / ASTM D 3121
Tensile Strength	45 N/25mm	PSTC-131 / ASTM D 3759
Elongation	3.0 %	PSTC-131 / ASTM D 3759
Service Temperature	-35 ~ +120 °C	----------

The physical properties of the products shown above are obtained from test methods defined by Technical Standards Authorities, Quality Assurance and Technical Service Departments and do not represent a guarantee of product performance.
Individual tapes may vary from these parameters and in all applications the end user should determine whether the product is fit for a particular purpose and is suitable for the user's method of application before use.

Available also in ALU WHITE version.

K-FLEX®
CLOTH DUCT TAPE

High Quality PE Duct Tape, adopts high grade fabric cloth with color polyethylene covering, coats improved synthetic rubberresin adhesive coated. It enjoys fast stick, straight and smooth tear, good tensile strength, excellent moisture resistant. It conforms well to irregular surface. It is a good choice for bundling, heavy carton packing, general maintenance, pipe wrapping, carpet fixing, air-conditioning duct's seam and joint sealing etc.

MEASUREMENTS
Thicknesses: 160 - 180 Micron
Length: 50 m
Widths: 50 - 75 - 100 mm

STORAGE & SHELF LIFE:
12 months when stored at 21°C (70°F) / 50% relative humidity out of direct sunlight.

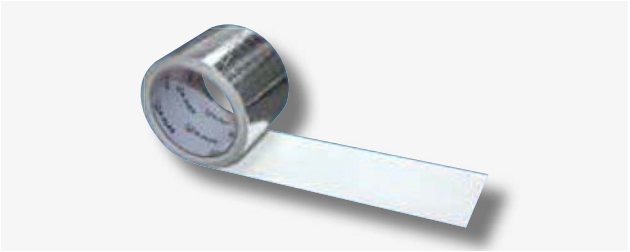
PRODUCT USE:
It is essential that the user evaluate the products to determine whether it is fit for a particular purpose and user's method of application. Good results will be obtained when applied to a clean, dry surface with a suitable pressure on products between +10 ~ +40°C (+50 ~ +105 °F).

TECHNICAL DATA

	Mesh	Colour	Thickness Micron	Adhesion N/25mm	Tensile N/25mm	Elongation %	Service temp. °C
CLOTH DUCT 1604H	35	Grey	160	16	75	12	-20 ~ +60
CLOTH DUCT 1804H	35	Grey, Black	180	18	80	12	-20 ~ +60
CLOTH DUCT 1805H	50	Grey	180	18	85	12	-20 ~ +60

The physical properties of the products shown above are obtained from test methods defined by Technical Standards Authorities, Quality Assurance and Technical Service Departments and do not represent a guarantee of product performance. Individual tapes may vary from these parameters and in all applications the end user should determine whether the product is fit for a particular purpose and is suitable for the user's method of application before use.

K-FLEX®
FSK FACING TAPE



3-way Foil-Scrim-Kraft backing, combined with aggressive cold weather solvent acrylic adhesive, protected by an easy-release silicone release paper.

MEASUREMENTS
Thickness: 120 Micron
Length: 45,7 m
Widths: 75 - 100 - 125 mm

FEATURES:
> 3-way Foil-Scrim-Kraft provides excellent reflection of both heat and light.
> Cold weather adhesive with strong adhesion offers good sealing and bonding on Foil-Scrim-Kraft Facing joints and seams in HVAC ductwork applications.
> Good aging resistance, both indoors and outdoors.
> Low moisture vapor transmission rate offers excellent sealing and patching performance.

APPLICATIONS:
HVAC industry for joining and sealing Foil-Scrim-Kraft Facing laminated fiberglass blanket / duct board joints and seams; joining and sealing flexible air duct seams and connections. May also be used for other industrial uses requiring a tape with these characteristics and benefits.

STORAGE & SHELF LIFE:
12 months when stored at 21°C (70°F) / 50% relative humidity out of direct sunlight.

SURFACE PREPARATION:
It is essential, as with all pressure-sensitive tapes, that the surface to which the tape is applied must be clean, dry, free of grease, oil or other contaminants.

PRODUCT USE:
It is essential that the user evaluate the products to determine whether it is fit for a particular purpose and user's method of application. Good results will be obtained when applied to a clean, dry surface with a suitable pressure on products between +10 ~ +40°C (+50 ~ +105 °F).

TECHNICAL DATA ▸

Backing Thickness	120 Micron	PSTC-133 / ASTM D 3652
Total Thickness	170 Micron	PSTC-133 / ASTM D 3652
Adhesion to Steel	16 N/25mm	PSTC-101 / ASTM D 3330
Rolling ball tack test	5 cm	PSTC-6 / ASTM D 3121
Tensile Strength	120 N/25mm	PSTC-131 / ASTM D 3759
Elongation	2.0 %	PSTC-131 / ASTM D 3759
Service Temperature	-35 ~ +80 °C	----------

The physical properties of the products shown above are obtained from test methods defined by Technical Standards Authorities, Quality Assurance and Technical Service Departments and do not represent a guarantee of product performance.
Individual tapes may vary from these parameters and in all applications the end user should determine whether the product is fit for a particular purpose and is suitable for the user's method of application before use.

The DIFFERENCE is in the DETAIL

K-FLEX® ACCESSORIES

K-FLEX® ACCESSORIES

COMPLETE RANGE OF SOLUTIONS
FOR THE INSTALLERS

> Site <

K-FLEX® GUTTAGENA PVC BAND

Twice the thickness compared to the previous range, it is ideal for finishing PVC sheet insulation coverings (eg. K-FLEX® PACK RS 590). The GUTTAGENA band is available in one colour, light grey, and is matt finished.

Measurements:
Thicknesses: 0,2 mm
Lengths: 50 m
Widths: 5 - 10 cm

K-FLEX® VINYL BAND

Flexible, robust and resistant to external agents, used for covering pipes insulated with elastomeric insulation or other materials. The small roll sizes allow for applications even in tight and narrow spaces. The wide range of colours available allows for a correct colour-coding of pipes, in compliance with the law.

Colours:
red
green
blue
grey (K-Pack RS 590 type)
light grey
black

Measurements:
Thicknesses: 0,1 mm
Lengths: 50 - 25 m
Width: 10 cm

K-FLEX® PACK RS 590

A rigid PVC self-rolling sheet with a smooth grey surface. The sheet adheres perfectly to all cylindrical pre-insulated surfaces. Light and easy to use, this non-drip self-extinguishing product protects the insulation as well as enhancing overall external appearance. To maintain the product features intact, in the winter season the rolls should be stocked at room temperature for 24 hours prior to their use.

Use:
It is used as a protective covering and to enhance the external appearance of large and small cylindrical pipes insulated with elastomeric material, glass wool mats, rock wool mats, polyurethane and polystyrene pipe coverings.

Application:
- Measure and cut a section of the PVC sheet based on the circumference of the insulation, leaving an excess of a few centimeters for overlapping the joining edges.
- Wrap the sheet around the insulation
- Seal the borders with plastic rivets (see reference in the section “components: fixing products”).

TECHNICAL DATA

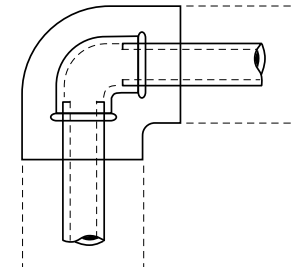
Base	Rigid PVC
Colour	Standard light grey
Packaging	Rolls
Sheet thickness	0,30 mm ÷ 0,35 mm
Temperature range	From -25 °C to +70 °C
Thermal conductivity λ	0,16 W/(m•K)
Permeability to vapour μ	1,0 gm² 24h Pa

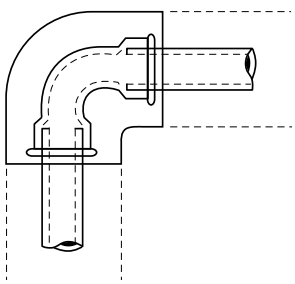
K-FLEX® PVC 200 TYPE W ELBOWS

90° single-piece elbows in laminated plastic. Apart from enhancing the overall appearance of the insulated part, they increase protection against impact.

Application:
After having taken the measurements and having chosen the suitable type of elbow, place it onto the part to be covered. The internal borders should overlap to allow for fastening with the appropriate plastic rivets (see the section “components: fixing products”).

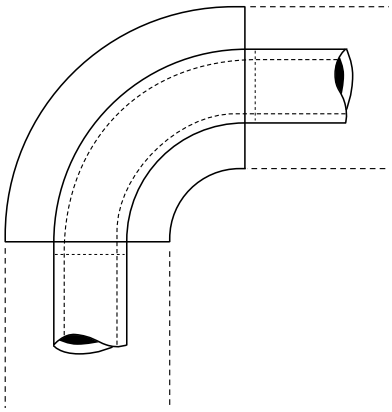
Measurements:
Thicknesses mm: 20, 25, 30, 40, 50, 70, 80, 90
Tube diameters mm: from 17 to 114; inches: from 3/8” to 4”





K-FLEX® PVC TYPE SE 90° ELBOWS

90° single-piece elbows in laminated plastic.
Apart from enhancing the overall appearance of the insulated part, they increase protection against impact.

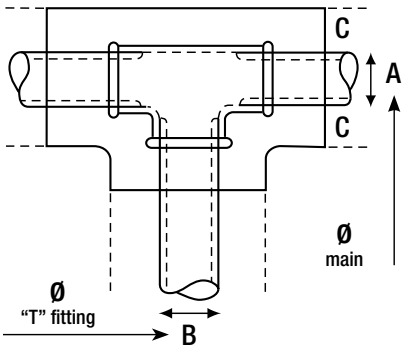


Application:
After having taken the measurements and having chosen the suitable type of elbow, place it onto the part to be covered. The internal borders should overlap to allow for fastening with the appropriate plastic rivets (see the section “components: fixing products”).

Measurements:
Thicknesses mm: 20, 25, 30, 40, 50, 70, 80, 90
Tube diameters mm: from 17 to 114; inches: from 3/8” to 4”

K-FLEX® PVC TYPE T

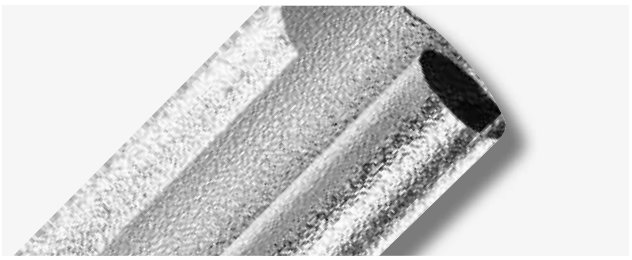
Laminated plastic PVC singlepiece T sections.
Ideal for protecting insulated pipes of medium and large diameters.



Application:
The external diameter of the PVC T section also includes the thickness of the insulation.
E.g.: to cover a pipe with a 76 mm Ø
(A-B), and a 32 mm thick insulation (C), a 140 x 140 type should be ordered.

Measurements:
External diameter (main./branch.) mm: from 52/52 to 245/245 from 67/61 to 108/61
from 108/67 to 245/218

K-FLEX® ALU EMBOSSED R 200



Self-wrapping embossed protection sheet in rolls of 99.5% pure aluminium.
Sheet thickness 0.1 and 0.2 mm
Supplied in 1 m wide rolls

Properties:
The product grips perfectly to all cylidrical pre-insulated surfaces, it is light, easy to handle, protects the insulation and enhances the overall appearance. It is incombustible.

Possibilities of use:
Used as a protective covering, it also improves the overall appearance of small and large cylindrical pipes insulated with elastomeric, fibre-glass mattresses, mineral wool, polyeurothane and polystyrene.

Application:
If not already pre-cut, cut the sheet to the required circumference. Wrap the sheet around the insulation, seal the longitudinal edges with adhesive foil tape and plastic rivets.

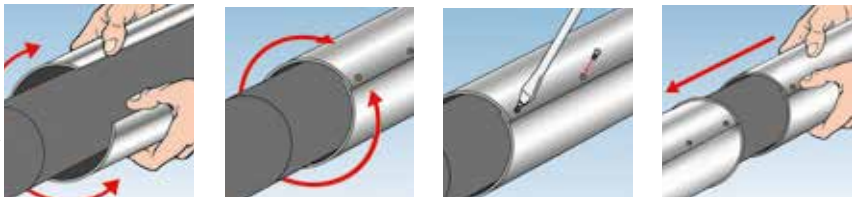
K-FLEX® BLECH MT-CU

99.5% PURE ALUMINIUM SHELL and 90° ELBOWS with a thickness ranging from 0,6 and 0,8.

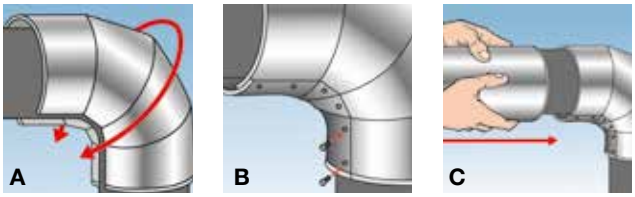
MT 500: male and female ball swaged edges calendered tube, with reinforced length-wise drilled sealing system.
Length: 1000mm

CU 501: 90° preformed segmented elbows with female-female ball swaged edges.

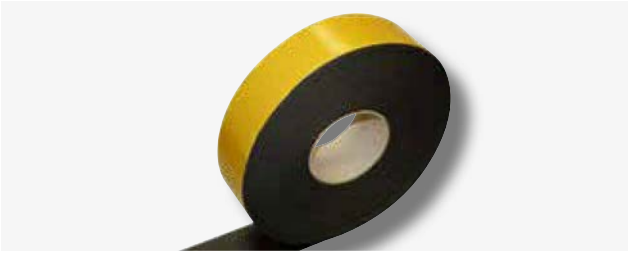
Application on tubes:
- The MT 500 tube diameter is slightly greater than that of the corresponding CU 501 elbow, which makes the connection between the two parts much easier.
- The edges of the joints are fixed together by using the short screws in the holes provided.



Application of CU501 elbows:
A - Open the segments of the elbow and place them around the insulated pipe.
B - After the sections have been correctly positioned, seal the elbow with short screws using the holes provided.
C - Connect the MT 500 tube by attaching male edge to female edge.



K-FLEX® ST ANTICONDENSATION TAPE



Highly flexible closed cell elastomeric foam (FEF) suitable for hot and cold thermal insulation, featuring a combination of low thermal conductivity, high water vapour diffusion resistance and low flame spread.

MEASUREMENTS
Thickness: 3 mm
Lengths:10 - 15 m
Heights: 15 - 25 - 30 - 50 - 75 - 100 mm

APPLICATIONS:
Pipes, ducts, tanks, applied for refrigeration, air conditioning, heating and plumbing, pipe fittings and water ducts, industrial applications for energy saving and/or condensation prevention purposes.

TECHNICAL DATA ▸

Maximum service temperature	+85°C	
Minimum service temperature	-40°C	
Water vapour diffusion resistance (EN 12086)	μ ≥ 7 000	
Water absorption (EN 13472)	<0.1 %	
Leachable chlorides (EN 13468)	<500 ppm	When tested in line with DIN1988/7, leachable chlorides <0.05%
Ph (EN 13468)	Neutral (7±1)	
Reaction to fire (EN13501)	Euroclass B, s3, d0	
Dimensional tolerances	as per EN14304	

Medium temperature [°C]	-30	-20	-10	0	10	20	30	40	50	70
Thermal conductivity [W/(m °K)] EN 13787 - EN12667	0.030	0.031	0.032	0.033	0.034	0.035	0.036	0.037	0.038	0.042

K-FLEX® SOLAR HT TAPE

Flexible closed cell elastomeric foam (EPDM) suitable for hot thermal insulation, specially designed to suit highed temperature sapplications.

MEASUREMENTS
Thickness: 3 mm
Length:15 m
Height: 50 mm

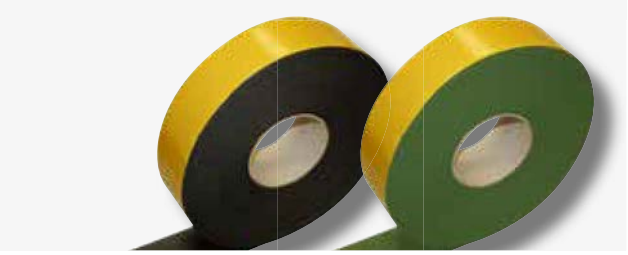
APPLICATIONS:
Ducts and pipes, specially designed for solar systems and high temperatures.

TECHNICAL DATA

Maximum service temperature	+85°C	
Minimum service temperature	-40°C	
Water vapour diffusion resistance (EN 12086)	NPD	
Water absorption (EN 13472)	<0.1 %	
Leachable chlorides (EN 13468)	<500 ppm	When tested in line with DIN1988/7, leachable chlorides <0.05%
Ph (EN 13468)	Neutral (7±1)	
Reaction to fire (EN13501)	Euroclass E	
Dimensional tolerances	as per EN14304	

Medium temperature [°C]	-30	-20	-10	0	10	20	30	40	50	70
Thermal conductivity [W/(m °K)] EN 13787 - EN12667	0.037	0.038	0.039	0.040	0.041	0.042	0.043	0.044	0.044	0.045

K-FLEX® ECO ANTICONDENSATION TAPE



Highly flexible closed cell elastomeric foam (FEF) suitable for hot and cold thermal insulation, free from halogenated flame retarders and halogenated ingredients, featuring a low toxicity in case of fire.

MEASUREMENTS
Thickness: 3 mm
Length:15 m
Height: 50 mm

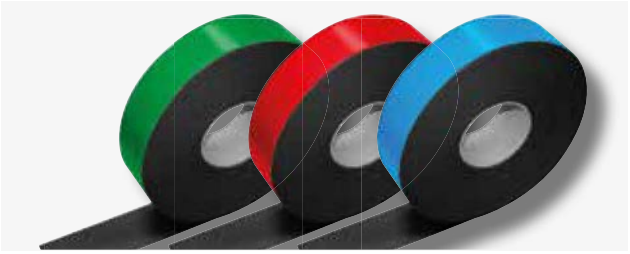
APPLICATIONS:
Pipes, ducts, tanks, applied for refrigeration, air conditioning, heating and plumbing, pipe fittings and water ducts, industrial applications for energy saving and/or condensation prevention purposes.

TECHNICAL DATA ▸

Maximum service temperature	+85°C	
Minimum service temperature	-40°C	
Water vapour diffusion resistance (EN 12086)	μ ≥ 3 000	
Water absorption (EN 13472)	<0.1 %	
Leachable chlorides (EN 13468)	<500 ppm	When tested in line with DIN1988/7, leachable chlorides <0.05%
Ph (EN 13468)	Neutral (7±1)	
Reaction to fire (EN13501)	Euroclass E	
Dimensional tolerances	as per EN14304	

Medium temperature [°C]	-30	-20	-10	0	10	20	30	40	50	70
Thermal conductivity [W/(m °K)] EN 13787 - EN12667	0.035	0.036	0.037	0.038	0.039	0.040	0.041	0.042	0.043	0.044

K-FLEX® COLOR ANTICONDENSATION TAPE



Highly flexible closed cell elastomeric foam (FEF) protected by a layer of specially designed acrylic paint available in different colours.

MEASUREMENTS
Thicknesses: 3 - 6 mm
Lengths:7,5 - 15 m
Heights: 50 - 100 mm

APPLICATIONS:
Pipes, ducts, tanks, applied for air conditioning, heating and plumbing, fittings and accessories.

TECHNICAL DATA

	Value	Unit measure	Standard
UV stability			
Weatherometer	> 2000	Hours	DIN 53231
Desert exposure	> 2	Years	ASTM G 7-97
Total weight approx.	50	g/m²	
Thickness	45	µ	
COLOR System - Reaction to fire:			
With K-FLEX® ST	Euroclass C-s3, d0		
With K-FLEX® ECO	Euroclass E		
With K-FLEX® SOLAR HT	Euroclass E		

COLOUR RANGE

RAL **7035 grey**	Colour code **G0**	RAL **5012 blue**	Colour code **B0**
RAL **9002 white**	Colour code **G1**	RAL **3000 red**	Colour code **R0**
RAL **9011 black**	Colour code **N0**	RAL **6032 green**	Colour code **V0**

K-FLEX® BITUMINOUS CONGLOMERATE TAPE

This product was formulated to provide insulation and to prevent condensation on pipes, fittings, and tubings used in heating, air conditioning, refrigeration, and plumbing.

MEASUREMENTS
Thickness: 3 mm
Lengths:9 - 15 m
Height: 50 mm

COMPOSITION:
This product is a polymer-based material containing butyl rubber, asphalt, and granulated cork (55% by volume). It contains no fibers.

DETAILS:
This product adheres to most clean, dry surfaces and to itself, making it possible to apply more than one layer without adding fasteners or adhesives. It is sufficiently soft and pliable to be molded around most fittings and connections. The material retains its flexibility and adhesion after prolonged exposure to UV and over a service temperature range of – 20 °F to 190 °F (-29 °C to 88 °C). It is black in colour and has a grainy, rubber-like consistency.

STORAGE & SHELF LIFE:
Indefinite if stored under normal warehouse conditions.

TECHNICAL DATA ▸

	Test Method	Typical Values
Composition		Select grades of ground virgin cork and synthetic elastomeric materials.
Color	ASTM D1729	Black
Odor		Imparts no odor, can be used without danger of contamination.
Service Temperature		From -30°C to +100°C
% Solids	ASTM C771	>99% by weight
Specific Gravity	ASTM D297	0.99 ± 0.05 g/cm^3
Tensile Yield	ASTM C907	2,688 bar
Elongation	TP-019	>2 inches

K-FLEX®
PVC AT 070
SELF-ADHESIVE TAPE

A thin premium grade plasticized PVC film coated with an aggressive rubber based adhesive with good characteristics. It is highly conformable and unaffected by most chemicals and moisture. Meet ROHS, REACH requirement. It does not contain substances harmful to human body, such as lead and cadmium.

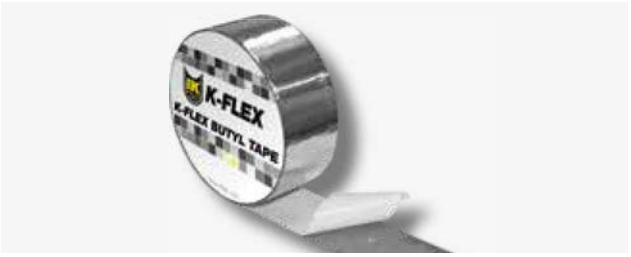
MEASUREMENTS
Length:25 m
Heights: 25 - 38 - -50 mm

APPLICATIONS:
> Electric insulation below 600V
> Insulating wrapping of electric wires and cables
> Marking of electric wires and cables
> Can be used indoor and outdoor

TECHNICAL DATA

	Value	Unit	Test method
Total thickness	0.13	mm	ASTM-D-1000
Tensile strength	20	N/cm	ASTM-D-1000
Elongation at break	200	%	ASTM-D-1000
Adhesion Strength:			
> to steel	1.5	N/cm	ASTM-D-1000
> to backing	1.5	N/cm	ASTM-D-1000
Voltage resistance	600	V	UL510
Temperature resistance	80	°C	ASTM-D-1000
Flame resistance	<2	s	ASTM-D-1000
Content of Heavy Metal:			
Lead, Cadmium	<30	ppm	US EPA3052
Mercury, Chromium	<10	ppm	US EPA3060A
Polybrominated biphenyl	<10	ppm	US EPA3540C

K-FLEX®
BUTYL TAPE



K-FLEX® Butyl Tape is a self-adhesive sealing tape consisting of a high-performance butyl rubber adhesive compound, protected by a reinforced aluminium film. K-FLEX® Butyl Tape is highly adhesive, even at low temperatures, to all common building materials. K-FLEX® Butyl Tape is highly resistant to ageing and UVrays. K-FLEX® Butyl Tape is available in various sizes for multipurpose applications.

MEASUREMENTS
Length:10 m
Heights: 50 - 100 mm

FEATURES:
> Tear-resistant;
> Cold applied;
> Excellent adhesion at low temperatures;
> Waterproof and self-sealing;
> Excellent heat stability;
> Resistant to ageing and to UV-rays;
> No oil migration;
> Solvent-free.

APPLICATIONS:
Choose the most suitable width and metal finish of the sealing tape. Unroll the tape until the desired length is reached. Start removing the release liner that covers the adhesive part of the tape and position the sealing tape. Carry out a rollpressing to avoid entrapment of air bubbles. When connecting two tapes, use an overlap of at least 5 cm. Press with a roller or a cloth pad.

STORAGE & SHELF LIFE:
The quality and the characteristics of the materials remain unaltered for a long period of time. However, it is recommended to use the product within 12 months from production date. The product must be stored in the original and unopened packaging in a dry and well ventilated place at a temperature between + 5 °C and + 40 °C. Storage above 50 °C may lead to difficulties in removing the release liner when applying. The product is not affected by frost.

SURFACE PREPARATION:
The sealing tape must be applied to a clean, dry, smooth and dust-free surface. For an application between 0 °C and 5 °C, ensure that frost or condensation are absent on the surface. In case of porous supports it's advisable to stabilize the surface. No special tools are required to install this sealing tape.

PRODUCT USE:
Sealing and joining materials such as glass, steel, Plexiglas, polycarbonate, wood, aluminium, PVC. K-FLEX® Butyl Tape can be used for the sealing of doors and windows frames, conservatories, gutters, piping and ducting. K-FLEX® Butyl Tape can also be applied in construction on canopies, roofs, chimneys and skylights.

TECHNICAL DATA

	Value	Test Method
Film Type / Colour	Aluminium - PET	-
Compound Type / Colour	Butyl Rubber Adhesive / Grey	
Standard Thicknesses	0.6 mm	
Tensile Strength	Long. > 150 N / 50 mm | Tras. > 150 N / 50 mm	EN 12311-1
Elongation at Break	Long. > 20 % | Tras. > 20 %	EN 12311-1
Solids	100%	-
90° Peel Adhesion	≥ 90 N	ASTM D 1000
Probe Tack	≥ 8.0 N	ASTM D 2979
Vertical Flow	0 mm	ISO 7390
Application Temperature Range	0 °C / + 40 °C	
Service Temperature Range	- 30 °C / + 90 °C	

TEST REPORTS

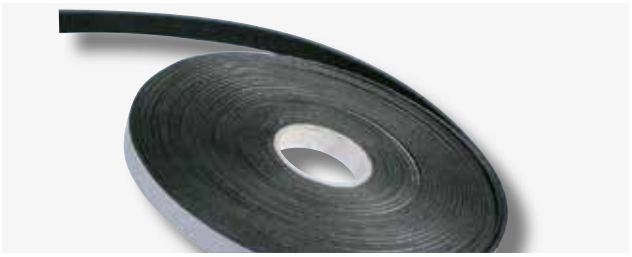
Flammability Classification: M1, Non-flammable, test by SNPE N°14647-09 (UNE 23727:1990, UNE 23721:1990, NFP 92501).

Fire classification: E, test by MPA Stuttgart (EN ISO 11925-2, EN 13501-1).

Permeability to Vapour: 1,29 e^{-16} kg / (m.s.Pa) - μ = 1,53 e^{+6}, test by CSTB CPM 11/260-33839 (NF EN 1931).

The manufacturer disclaims all liability for product use and applications. Butyl sealants are plastic products. They possess no elastic recovery. Do not use for permanent fixing or in load bearing applications instead of an adhesive or a mechanical fixing. Butyl adhesive are sensitive to solvents. It is advisable to check the chemical compatibility of the butyl adhesive with the substrate adhesives.

PE INSULATION TRIMMING



Self-adhesive closed-cell wired foam PE packing, used to cover the seal flange in air-conditioning ducts.

Measurements:
Thicknesses mm: 3
Length m: 20
Height mm: 15, 20, 25

K-FLEX® ADHESIVE DISPENSER

A useful accessory that controls flow and helps spread adhesives evenly on insulation surfaces, avoiding having to continuously dip the brush into the tin of adhesive.
The adhesive correctly diluted, is manually pumped through the brush.

SPECIAL THINNER FOR K-FLEX® ADHESIVES

Before covering the surfaces to be insulated, it is advisable to clean them with the special K-FLEX® thinners which, thanks to its composition, is also suitable for use with K 414, K 420 or K 425 adhesives. Cleaning of all surfaces with the special K-FLEX® thinners also improves the performance of the adhesives.The special K-FLEX® thinners can be also used for cleaning brushes and spatulas used to spread the glue.
Available in 1 litre tins.

K-FLEX®
FASTENING PRODUCTS PLASTIC RIVETS, PUNCH AND K-FIX

Important for correctly fastening PVC and AL CLAD sheets.
PLASTIC RIVETS: box of 100 WHITE and GREY rivets.
PUNCH: straight/angular

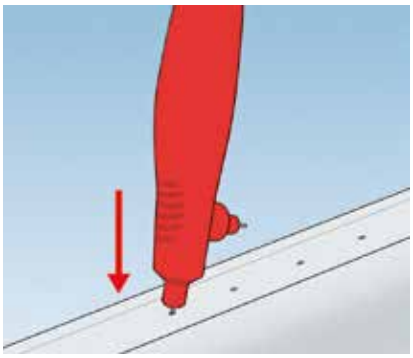
K-FIX. Galvanized steel installation hangar spike with a 50x50 mm base. With adhesive and nonadhesive surface, with a 2,7 mm diameter stick pike, and a self-blocking 30 mm diameter disc.

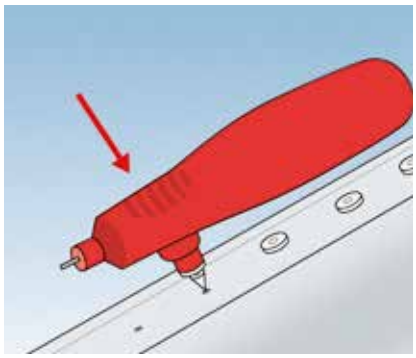
It can be applied to flat metal surfaces for fastening insulation material in sheet or roll form (mineral wool, polyethylene, etc.).
Strongly recommended for air-conditioning ducts.

Temperature range
min/max +10 °C/ +80 °C.
Supplied in boxes of 100 pieces.
Length of pins - from 19 to 114 mm.

Applications:
> Punch holes along the overlap of the sheet, going through both layers.

> Insert the plastic rivets in the holes, pressing them firmly into the insulation layer.





INSTRUCTIONS FOR THE USE OF K-FIX SELF-ADHESIVE SUPPORTS NO. OF PIECES REQUIRED PER M² AND NO. OF SUPPORTS REQUIRED														
TYPE A: HORIZONTAL USE TYPE B: VERTICAL USE	INSULATION THICKNESS													
	20 MM		25/30 MM		35/40 MM		50 MM		60 MM		80 MM		100 MM	
	TYPE A	TYPE B	TYPE A	TYPE B	TYPE A	TYPE B	TYPE A	TYPE B	TYPE A	TYPE B	TYPE A	TYPE B	TYPE A	TYPE B
20 kg/m³	8	4	8	4	8	4	8	4	8	4	8	4	10	6
30 kg/m³	8	4	8	4	8	4	8	4	10	6	10	6	10	6
40 kg/m³	8	4	8	4	8	4	10	6	10	6	10	6	12	8
50 kg/m³	8	4	8	4	10	6	10	6	10	6	12	8	14	10
80 kg/m³	8	4	10	6	10	6	12	8	12	8	14	10	16	12
100 kg/m³	10	6	10	6	12	8	14	10	14	10	16	12	20	16

K-FLEX® ADHESIVE

K-FLEX® K 414, K 420 and K 425 glues have been specifically designed for use with K-FLEX® elastomeric foam insulation material. The securely bonded surfaces and joints are resistant to ageing and atmospheric agents, and preserve the technical characteristics of the insulating material.

K 414 ADHESIVE in tins of: 0.5 - 0,8 - 2.6 litres
K 420 ADHESIVE in tins of: 0.25 - 1 - 2.6 litres
K 425 ADHESIVE in tins of: 0.85 litre (complete with glue activator)

INDICATED CONSUMPTION OF 1 LITRE OF ADHESIVE		
TUBES	GLUED TO THE HEADS	GLUED LENGTHWAYS
thickness 9 mm	every 1350 m	every 150 m
thickness 13 mm	every 500 m	every 100 m
thickness 19 mm	every 300 m	every 80 m
thickness 25 mm	every 220 m	every 60 m
thickness 32 mm	every 180 m	every 40 m
thickness 40 mm	every 139 m	every 27 m

SHEETS: 1 litres every 7m^2
K-FLEX® does not accept responsability for different values to those indicated.

K-FINISH PAINT

K-FINISH is a water-based paint for coverings on internal and external installations insulated with K-FLEX® materials. With its polymerized acrilic base, it does not pollute and does not give off odours, and is particularly recommended for all indoor uses. Quick drying, it offers excellent protection. Coats of white paint, applied over a layer of K-FINISH will maintain their colour even in dark environments. The colours are resistant to light. It is advisable to paint the surface of externally insulated pipes to protect them againt harsh weather conditions and UV rays. For further protection it is advisable use a double layer of K-FINISH paint.

Available in 2.5 litre tins, and on request, in various colours.

K-FLEX® COLOR PAINT

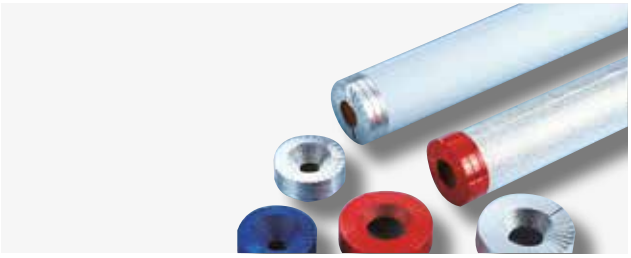
Special paint for retouching the surfaces of COLOR coverings, scratched or damaged during installation. The paint, ready for use, should be applied with a soft brush.

Available in 0.5 litre tins.

COLOUR RANGE

- RAL **7035 gray**
- RAL **9002 white**
- RAL **5012 blue**
- RAL **3000 red**
- RAL **9011 black**
- RAL **6032 green**
- RAL **1019 sand**

ALUMINIUM ENDCAPPING IN ROLLS



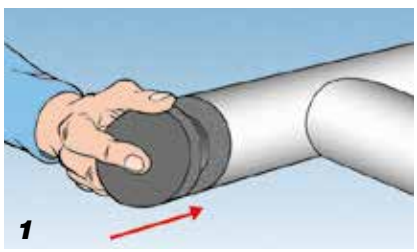
Special endcapping in ribbed aluminium for sealing the ends of insulated pipes. Available in the following colours: SILVER, LIGHT GREY, BLACK, BLUE AND RED. Length of rolls - 10 m.
The different colours make it easier to identify the various pipes of a system.
Measurement:
Internal/external ø mm: 18x32, 23x32, 28x32, 38x42, 48x42,58x42

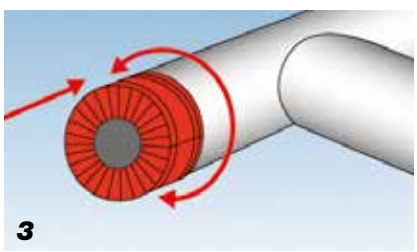
Application:
1) Place a cap of insulating material over the end of the pipe.

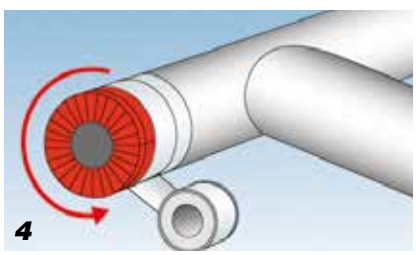
2) Cut a strip of the endcapping long enough to wrap around the circumference of the pipe covering.

3) Wrap the endcapping around the end of the insulated pipe and around the edges of the pipe covering.

4) Fix the endcapping to the pipe covering with the correct selfadhesive tape.





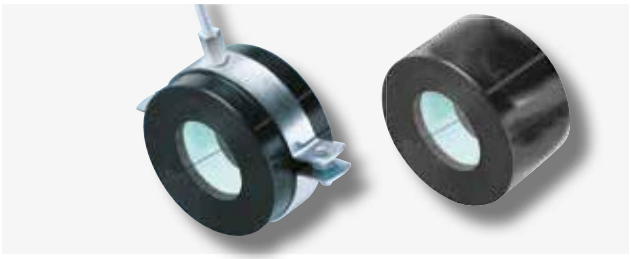


K-FLEX® PIPE SUPPORT

K-FLEX® PIPE SUPPORT

▸ RESEARCH HAS SHOWN THAT UNINSULATED PIPE FITTINGS ARE STILL A COMMON THERMAL BRIDGE ON INSULATED PIPE SYSTEMS.
THEIR EFFECT IS OFTEN UNDERESTIMATED.
A FINITE ELEMENT METHOD ANALYSIS (FEM) ON AN INSULATED PIPE SECTION HAS SHOWN THAT APPROXIMATELY 50% OF THE HEAT LOSS FOR THE ENTIRE CONSIDERED SECTION IS DUE TO THE LACK OF USE OF PIPE SUPPORTS.
IT IS SO EASY TO AVOID THERMAL BRIDGES.
THE SOLUTION IS CALLED K-FLEX PIPE SUPPORT.

PIPE SUPPORTS



Specifically designed to ensure a correct insulation thickness where joints are made. The PIR central section, which covers the whole circumference and is attached to two K-FLEX® insulating material sections, ensures a perfect continuity of the vapour barrier.
Longitudinal sealing is obtained by means of the self-adhesive overlap. The external cover is in PVC.
The support is also available with a collar and a special metal support which, when fixed to the supporting framework, ensures greater overall installation stability.

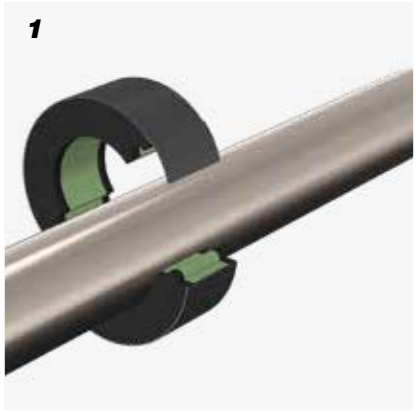
Measurements:
Thicknesses mm: 13, 19, 25, 32
Tube diameter mm: from 18 to 160; inches: from 3/4" to 5"

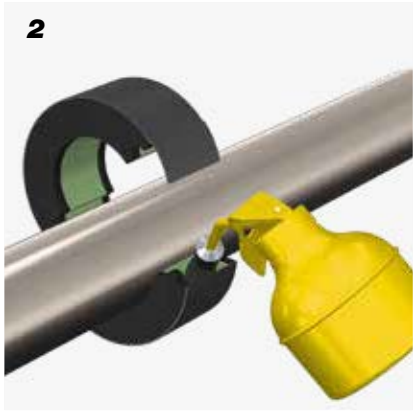
The insulating supports are also available in K-FLEX® ECO, SOLAR, AL CLAD, COLOR, in the same measurements as those indicated for K-FLEX® ST.

TECHNICAL DATA ▸

Central section in PIR	Density 120 kg/m^3
Compression resistance	1350 kPa
Temperature range	-45 °C +105 °C
Thermal conductivity λ	0,036 W/(m•K) a 0 °C
Maximum stockage time	1 year
Colour	Black
Permeability to vapour	μ 7000
Diam. and thickness tolerance	+ 1 mm / +/- 1 mm

Application:
1 - Place the insulating support around the pipe.
2 - Spread K-FLEX® adhesive onto the half-collars.
3 - Seal lengthways using the adhesive overlap.
4 - Fix the collar around the support.
5 - Glue the support to the insulating material.



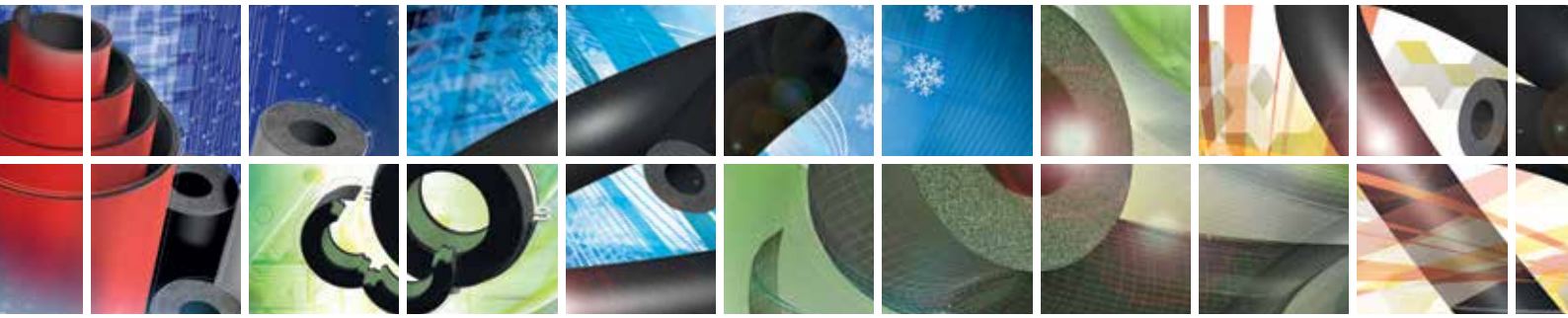


Worldwide Leader in the production of Elastomeric Insulation for Energy Saving

> Gen. Catalogue <
> PDF Version <

TECHNICAL DPT e-mail kflex-technical@isolante.com

K-FLEX® CATALOGUE



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