

# Kompozit'allUK - a Nationwide organisation

## Installation knowledge

FuranFlex25 is an advanced lining solution for the restoration of all heating flues and extraction duct systems, no matter which heating application is being used. However, since this system is only as good as the specification, technical knowledge, skill, and installation of the liner, it requires a dedicated attention to detail that few companies can provide.

## Nationwide specification service

The Kompozit'allUK organisation comprises a number of companies located right across the UK and Ireland with qualifications and many years of experience, most of them are family firms now managed by the second generation. They have made the investment in personnel, equipment and consistent training to secure their reputation and client satisfaction. Kompozit'allUK insists that all registered engineers have not only had the factory product awareness, but an assessment of their understanding of the requirements of all heating systems and the specification and sizing of flues for efficient operation.

The engineers and surveyors are trained and tested to ensure that during each survey the CCTV is clear, that they consider the correct sizing of flues, the equipment required, the working conditions including risks and have appreciated the particular heating source and the manufacturer's performance criteria. When enquiring for a lining we always advise the client to ask to see the surveyor's annual certification, since if they cannot produce one they are not currently listed on the Kompozit'all UK suppliers and installation engineers list and therefore the installation and guarantee will not be covered by Kompozit'allUK Ltd.

The estimate and quotation will be clear and enable the client to recognise where the cost are incurred.

## Product installation

The installation teams have all been trained, certified and annually re-registered to ensure that they are fully aware of the current technology and practices, both on the liner and the installation equipment. Awareness of safety on site for work personnel, fellow workers, members of the public and property is regarded as a priority and regular on-site visits are conducted to review standards. When an installation team arrives 'on-site' they should have available their individual certification and show you the official FuranFlex25 Guarantee from Kompozit'allUK Ltd. Many Kompozit'allUK engineers have spent significant amounts of time at construction sites, both domestic and commercial, working alongside heating specialist companies and are flexible while being compliant with regulations.

## Field technical support

Our engineers are supported by a multi-discipline technical team who will verify sizing, assist project management and provide fast support to 'field' questions as well as the unique technical reference library. This support is extended after installation to the client throughout the life of the system should be any advice that is required.

A stock of spare parts and a rental fleet of installation equipment to cope with demand on major projects at 'peak-time' ensures a fast response to client requests.

Note: every installation team carries extensive independent liability insurance to further cover their workmanship.

As a result over the last 5 years over 7,000 successful installations of this product have been completed in all types of applications, from Pittodrie House Hotel in Aberdeen, to the old Customs House in Padstow Cornwall, from Brighton Town Hall to Mater Hospital Dublin.



Kompozitor Ltd. factory appointed distributor  
2010

## Advanced lining specialist network

All installers of FuranFlex25 are chosen based on their ability to offer a complete and dependable service to the end users. They are experts in their field and extensive and comprehensive factory training ensures that installations are completed within budget and in agreed time frames. All installers also have access to our technical department for advice on solutions to the most demanding projects.

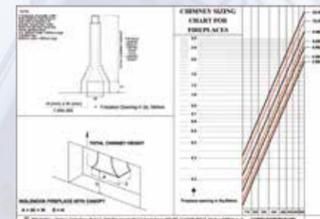
FuranFlex25 installers undertake new certification every year to ensure they remain up to date with all the latest innovations from Kompozit'allUK.

## Detailed planning for success

Training establishments, in general, only teach adherence to, and compliance, with standards and regulations. They do not teach how chimneys work or the principles governing chimney operation such as the Laws of Physics and Thermal Dynamics. At Kompozit'allUK, we ensure all our installation partners are fully trained and are familiar with the principles of chimney performance, and the impact on the performance of the appliance the chimney serves.

## Chimney design, sizing and performance

Following a detailed site survey, all projects are carefully considered before the preparation of a quotation. Computer software programs are used to calculate the chimney performance and its affect on the appliance operation. The chimney design and configuration are carefully checked for compliance with relevant regulations and standards, which can vary considerably due to the type of fuel being burnt.



## PLUS The advantages at a glance

The most flexible lining system available, from 50mm to over 1000mm diameter

Will mould to the shape of the duct/chimney and can increase and decrease in dimensions through the duct/chimney run

Maximises lining diameter for efficient operation

One of the highest fire resistance liners (tested and proven)

High insulation for better fire containment

Best corrosion resistance – protecting occupant's health

Quick & clean to install – minimises disruption

Long working life – best value for money

Guaranteed for 25 years – for your peace of mind



## Nationwide network

Kompozit'allUK trains and supplies a network of installation companies and annually certified installation teams who operate throughout the UK and Ireland.

Contact your local FuranFlex25 installer for guaranteed results.



## Kompozit'allUK Limited

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Kompozit'allUK is constantly searching for ways to improve its products and reserves the right to change the specification of any product at any time without prior notice

FURANFLEX25



from Kompozit'allUK

**FuranFlex25 the original and the best high heat-resistant flexible composite flue liner for solid fuel appliances and solid fuel open fires**



**THE ONLY APPROVED NATIONWIDE INSTALLATION NETWORK THROUGHOUT THE UK AND IRELAND FOR LOCAL GUARANTEED RESULTS**

**Everything is important.  
Consistent success is in the detail**



**Kompozit'allUK**  
guaranteed lining solutions

# FuranFlex25 - only from Kompozit'allUK

## The history of the product

In 2010 Kompozitor, the developer of the FuranFlex thermosetting resin lining system were manufacturing and exporting to 17 European countries. They asked for advice in developing their products to reach new markets and it was agreed that a dedicated company would be formed to organise the testing, certification and listing of Kompozitor products to comply with the UK market requirements.

## Dedicated UK company

The owners of Kompozitor chose the name for this company as Kompozit'allUK Ltd and since this was a new concept to the UK a decision was taken that in spite of European approval, the FuranFlex products would all be tested by BSRIA.



## Testing, certification and listing

All testing was completed and certification to meet UK regulations achieved. Kompozit'allUK applied to BBA for certification by the Board of Agrément from the factory manufacturing process right through to the Kompozit'allUK installation procedure. This has been awarded and on the basis of this HETAS listing achieved.



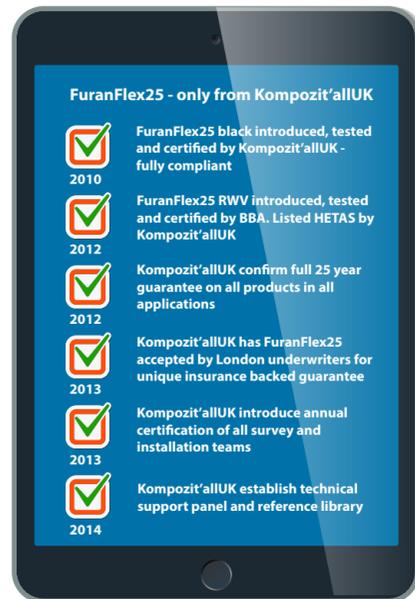
## Technical knowledge

Kompozit'allUK continues to work with the Kompozitor technical team and the leading European distributors to maintain a comprehensive technical library. Kompozit'allUK has introduced the FuranFlex technology into the German market following the achievement of the CE mark and is now incorporating these established standards to enhance UK operations. An example of this would be that where a challenging commercial installation is requested, a software approved by German TUV is utilised to proof the specification and sizing.



## Unique 25 year guarantee

Due to these high standards Kompozit'allUK Ltd is confident to provide a full 25 year lifetime guarantee on all their products when installed by a currently registered engineer. What this means is that should any fault be confirmed due to manufacturing fault, at any time over the 25 years then the liner will be replaced entirely free of charge. The performance of this product through the Kompozit'allUK organisation and their high standards have been further recognised by underwriters and as a result there is available a unique 20 year insurance backed guarantee.



by Kompozit'allUK

FURANFLEX25



from Kompozit'allUK

## FuranFlex25 Black® Commercial and domestic chimneys and flues

Specification:  
T200 P1 W 2 OXX  
EU classification (ETA-12/0346)  
Certification temperature: 200 °C  
Maximum heat resistance: 500 °C

FuranFlex25 is based on a glass fibre reinforced thermosetting resin, which is as strong as steel, when set, but has much better corrosion resistance than other materials. It is extremely thin (circa 3mm), has no joints and is installed by Kompozit'allUK's trained and certified engineers, providing the guaranteed solution for all lining applications.

### Commercial and domestic chimney lining

Building on the success of our domestic installations over recent years in the UK and over more than 20 years in Europe, FuranFlex25 is continuing to expand into the commercial sector, with recent installations including municipal buildings, hospitals, schools and colleges, hotels, public houses and restaurants, with many more in the pipeline. Primarily used for gas and oil heating it is flexible at installations but light and strong once cured. It will follow the line of the flue or duct with diameters from 80mm to over 1 metre and up to 100 metres in length. Once installed it is airtight and water-resistant so suitable for all boiler types. FuranFlex25 Black from Kompozit'all UK is CE marked and complies with UK building regulations.

### Kitchen extractor ducts

FuranFlex25 is installed as one continuous lining, totally waterproof and airtight making it ideal for kitchen extractors, providing a smooth easily cleaned duct and access is only required at the ends. Kitchen extractor ducts up to 1000mm diameter and over 50m in length have been installed swiftly to ensure the kitchens stay open.

### Chemical exhaust ducts

FuranFlex25 has been installed in chemical cabinet ducts, oil refinery ducts and with a very quick installation time and minimal downtime production is not interrupted.

### SE & U ducts

FuranFlex25 can be installed and branches fitted during installation to allow the boilers to be refitted in the same position.

This gives a totally gas tight duct for the boilers to operate safely and the only joints are where the boilers are fitted so they can be inspected during routine maintenance intervals.

As the FuranFlex25 is waterproof, it also allows suitable condensing boilers to be fitted.

### Drainage

FuranFlex25 has been widely used to line existing water fall pipes and as the lining material is only 2.5mm thick does not reduce cross sectional area substantially. This can be achieved even if there is only access to the pipe at one end and leaves a smooth lining, strengthening the pipe.

## FuranFlex25 RWV® Flues (solid fuel burning)

Specification:  
T450 N1 D 3 G  
EN 1443  
Certification temperature: 450 °C  
Maximum heat resistance: 1000 °C

FuranFlex25 RWV® has unique advantages in providing correctly sized flues for sophisticated modern biomass boilers.

Kompozit'allUK's insistence on correct surveying and calculated flue design ensures their flues provide biomass boilers with the correct draught characteristics.

Savings are therefore made by enabling the conversion of existing chimneys when retrofitting this renewable energy heating technology in existing buildings.

This is especially useful in Listed Buildings, National Parks and Conservation Areas where costly struggles over planning, style and appearance are avoided. The capacity to install without opening the chimney further enhances this product's advantages.

The whole cross-section of an old flue can be utilised where necessary and turned into a smooth, modern, insulated flue.



FuranFlex25 RWV® is a technically advanced product requiring a high level of understanding throughout Kompozit'allUK's national network of installers and their requirement for annual training and re-certification sustains the quality of their work.

## Specification

	FuranFlex25 (black)	FuranFlex25 RWV (red)
Fuel	gas and oil	wood (and solid fuel)
Operating temperature in flue gases	T200°C	T450°C (shock tested to 1000°C)
Cold resistance	- 50°C	- 50°C
Wall thickness	2 - 2.5mm	3 - 4mm
Diameter (optional within this range)	50 - 1000mm	100 - 800mm
Length (optional) [min and max length installed so far]	3 - 81m	3 - 60m
Operating conditions	wet	dry
Density	1.5 g/cm3	1.5 g/cm3
Tensile strength	100 - 150 N/mm <sup>2</sup>	70 - 90 N/mm <sup>2</sup>
Thermal conductivity	0.4 W/m K	0.4 W/m K
Coefficient of thermal expansion	2.4 x 10 - 5 m/m K	2.4 x 10 - 5 m/m K
Soot fire resistance	no	yes
Boiler types	P1 & N1	N1
EU classification	(EN-14471) T200P1 W 2 O40	BS EN 1443 T450 N1 D 3 G (BSRIA)

# Examples of nationwide installations by Kompozit'allUK installers

Over 7000 successful installations in the UK and Ireland.

Take a look at a selection of our case studies here - many more online at [www.furanflex.co.uk](http://www.furanflex.co.uk).

Project	Problem	Challenge	Result
	<b>Town Hall (Brighton)</b> In this Grade 1 Listed property attempts were made to install 300mm diameter stainless steel flexible liners but failed. During one attempt holes were excavated in the chimney to pull the steel liner through. This failed again and chimney sealant failed to fill the holes.	Complete the lining of the chimney, whilst also sealing all the holes that were created. It was recommended to use FuranFlex25 Black. This would ensure the chimney was lined with one piece lining with no joins and carrying a 25 year guarantee.	A CCTV survey confirmed dimensions and condition of the flue. The installation of the FuranFlex chimney lining was carried out and finished on programme (within one day) allowing other trades to continue with the boiler installation works. The installation was than successfully smoke tested.
	<b>Dauntseys School (Wiltshire)</b> The fireplace serving the main reception area was leaking smoke into the upper floors. On surveying, it was determined that there was a breach in the flue.	As the fireplace was relatively large, and therefore the cross sectional area of flue was critical, it was decided that the best way to solve the problem was to line the flue with FuranFlex25 RWV.	Camera surveyed the flue to ensure that there were no other problems and determined the correct size of flue required. The installation team returned and carried out the installation of the new flue in 1 day with minimal mess. HETAS certification was then issued.
	<b>Lasborough Park (Gloucestershire)</b> The flue for the entrance hall open fire was not drawing properly. On inspection it became clear the flue was breached.	Another aspect was the original construction had left a void at a height of 4 metres, which interfered with the proper function of the flue.	A FuranFlex25 RWV liner was installed in a single day, which maximised the possible cross sectional area of flue without the need for the installation of slips. The flue and fireplace now function properly. A standard 25 year guarantee and a HETAS certificate of compliance were issued.
	<b>Mater Hospital (Dublin)</b> New Condensing Boilers fitted, ensure maximum cross sectional area of existing chimneys and ensuring no condensate of combustion gas leaks.	Ensure maximum area of chimneys with waterproof and gas tight lining system.	FuranFlex25 Black installed in one day for each chimney leaving square chimneys suitable for condensing boiler plant.
	<b>Falkirk Church (Falkirk)</b> Old listed church. Leaking chimney, new liner required. Chimney would not accept stainless steel lining.	Maintain adequate cross sectional area. Future proof chimney for new boiler plant. Ensure no damage to building	FuranFlex25 Black liner of correct dimension installed. Gas and water tight to ensure suitable for high efficiency or condensing appliances. Installation on time and in budget.
	<b>Courtfield Gardens (London)</b> New condensing boilers, using existing concrete lined sectional chimney needed to maintain cross sectional area but seal all joints to stop condensate leaking.	Maintain adequate cross sectional area. Future proof chimney for new boiler plant. Ensure no damage to building.	FuranFlex25 Black liner of correct dimension installed. Gas and water tight to ensure suitable for high efficiency or condensing appliances. Installation on time and in budget.
	<b>Isle of Wight Council Office (IOW)</b> Investigate and survey the 25 metre flue that serviced 2x large commercial condensing boilers. The flue was leaking badly through the chimney walls due to the amount condensate caused by the boilers.	3 metres had to be reconstructed to the chimney and a 28m x 450mm diameter black FuranFlex25 was installed using 2 FuranFlex steamers. Due to the stack size we were able to winch the FuranFlex25 into position and maintain cross sectional area.	New stainless steel pipework was installed from the boilers to the FuranFlex25 Black liner which now has a suitable valve for collecting and draining the condensate. All works completed within 2 days using a team of 6 operatives.
	<b>Lartington Hall (County Durham)</b> The existing marble fireplace was to be used so a large diameter of flue liner needed to be maintained. It was decided that Furanflex25 was going to be the most cost effective and practical solution in maintaining the flue diameter within the chimney stack due to its thickness.	Large marble fireplace in reception room with a chimney length of 12 metres tapering towards the top. The chimney measured 275mm square through to the chimney stack. The existing chimney had a flexible 175mm flue liner installed to loft height and from this point to the top of the stack.	After the existing flue liner and chimney system had been removed cast in situ pumped cement was used to form a gather to locate the bottom of the FuranFlex25RWV liner. A 300mm RWV liner was winched up through the existing chimney. After the curing had been completed the liner was trimmed top and bottom.
	<b>Mayfair (London)</b> Open gas fire on third floor apartment, leaking into fourth floor apartment above.	FuranFlex25 Black liner had to be carried five floors to the roof and extra hose from boiler to fireplace had to be made due to the distance from ground floor to third floor apartment.	All works were carried out within the day with no disruption to the other apartments in the same building. Due to the nature and value of these apartments no mess was created during the install.