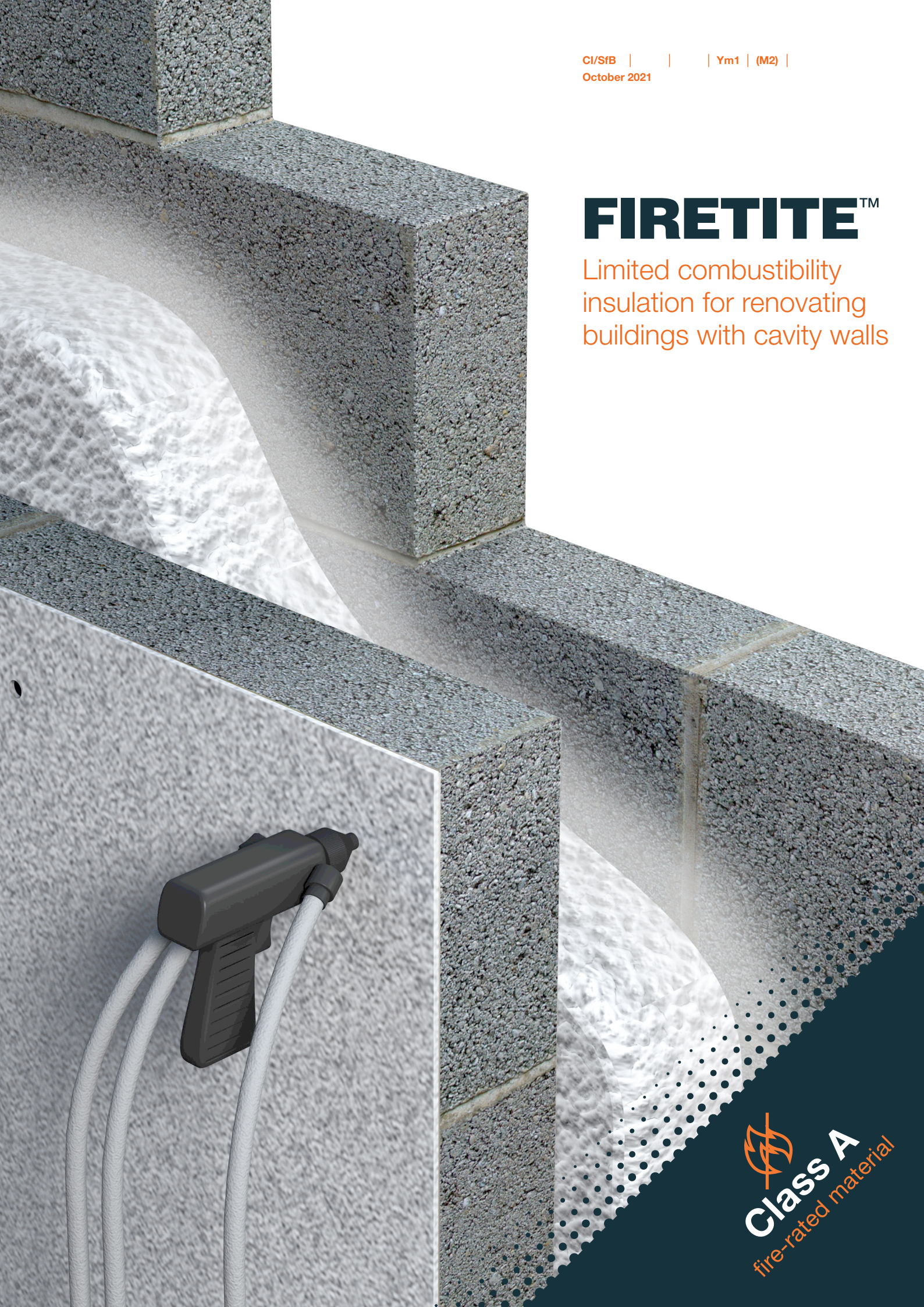


FIRETITE™

Limited combustibility
insulation for renovating
buildings with cavity walls




Class A
fire-rated material

FIRETITE™

Limited combustibility mineral-based insulation

FIRETITE is a Class A2 fire rated, mineral based insulation material ideal for new and refurbished cavity wall insulation. This innovative system combines the benefits of a hydrophobic and open-pore mineral insulation material with the fast, safe and seamless airtight process of a self sealing foam system.

FIRETITE is the world's first 3-component mineral based in-situ insulation material. It has been developed over many years of extensive research to create this unique formulation.

FIRETITE Approved Contractors

Every high performing system requires high performance installation to guarantee satisfaction. In order to ensure the highest standard application, FIRETITE systems are installed by fully trained Approved Contractors.

Our contractors are part of a well established and growing consortium of independent local spray foam contractors across the UK, Ireland and the Channel islands.

Before becoming part of our network our contractors must attend rigorous training programme, which includes application, techniques, building regulations, health and safety requirements and much more.

Why choose a FIRETITE Approved Contractor?

FIRETITE contractors will guarantee the client that the product will be installed in line with recommendations and specifications and will be completed to the highest quality. Each contractor is an independent insulation contractor with a local reputation to maintain and will offer a consistent level of service and quality throughout the UK and Ireland. Identify your needs and offer the most appropriate product to suit your application.

ECON Support Services

The ECON FIRETITE team will be pleased to assist with any technical queries that may arise. Our professional dedicated technical support based at both our UK and Irish offices are on hand to help industry professionals and FIRETITE contractor choose the correct specification for their project.

We have a range of advance tools and support services used to calculate the risk of interstitial or surface condensation in a building taking into account each building component within the assembly.

Please contact the team for any specific queries regarding thermal performance including U-value calculations and condensation risk analysis.



Non-flammable

FIRETITE insulation consists of 90% inorganic minerals and 10% organic components and is classified as a non-combustible A2-s1,d0 construction material. All A1 and A2 classified materials are suitable for high rise buildings above 18m. A2 fire rating confirms the products has passed the most stringent test and is noncombustible. FIRETITE achieves the best s1 'smoke propagation indicator' and also d0 for non-flaming droplets or particles as part of the overall A2 classification.



Insulation

FIRETITE has a rated thermal conductivity value of 0.034W/mK.



Waterproof

The product is open to vapour diffusion but is water repellent.



Quick and easy to install

FIRETITE is quick and easy to install by fully trained contractors.



Breathable

Its open-pored structure allows water vapor to evaporate. The product also has a certain capacity to store vapour, thereby regulating moisture in the surrounding area helping contribute to better indoor climate.



Harmless

FIRETITE is a mechanically blown foam with pressurized air, meaning the foam does not contain any internal propellants, so no internal pressure is built up. It does not emit any pollutants – neither while drying nor while the foam remains in the hollow layer. FIRETITE achieves the best EMICODE emission classification of EC1 plus.



Sustainable

Production and installation of the components uses very low energy. Waste material can be disposed with construction waste. FIRETITE shows a very low carbon footprint determined within the Environmental Product Declaration (EPDBAS- 20180124-IBA1-EN).



Space saving

Once the three components are mixed and expanded by air, FIRETITE will finish up to 10 times its original liquid volume, saving on transportation and storage. The product is fully expanded before injected into the cavity and does not cause any internal pressure on the cavity.



Adhesive

It is a self-sealing product which is set directly after application, adhering to both itself and the masonry cavity walls. The flow properties of the product ensures it fills the cavity seamlessly.



Water based

The system is solely water based. While drying the pores open and the foam is open for diffusion.



Installation

The product is suitable for new build or refurbishment cavity walls where the external wall is open to diffusion. The product is compatible with existing cavity wall insulations.



FIRETITE production and installation process

1 FIRETITE's water-based components can easily be transported and mixed on site using specialist equipment.

2 FIRETITE is dust and fiber-free, offering 10x the foam volume after being expanded with air. The fresh foam is injected into the cavity wall through small filling holes, where it does not expand further or build up internal pressure. The foam's flow properties ensure that it fills the cavity layer seamlessly – largely independent of the layer's thickness and any narrow areas.

3 FIRETITE is installed by fully trained specialist Approved Contractors, guaranteeing the client that the project will be completed to the highest quality and with the best product available.

4 FIRETITE is self-sealing. It is prevented from exiting through small holes and cracks in the wall, and no preliminary work or reworking is generally necessary. The fresh foam already offers good insulation capabilities at this point. After the drying process, during which the breathable foam continuously dries out by releasing the water as water vapor without causing any damage, the foam will reach its optimal thermal insulation level and notably dampen even ambient noise.

5 The process of filling the cavity wall should begin at the base of the wall and horizontally across the wall before moving upwards to the next set of holes approximately every 1m vertically. All cavity barriers and cavity closures used in the construction must be fire rated to maintain the integrity of the FIRETITE non-combustible performance. The product should only be installed where there are no signs of dampness on the inner leaf of the cavity wall and when the building is completely watertight and sealed from the weather.

6 FIRETITE is used as a thermal insulation cavity wall system which also provides a non-combustible benefit to both new and refurbished domestic and non-domestic constructions. It is suitable for most external masonry wall construction with nominal cavity widths are not less than 40mm. A site survey should be carried out prior to installation to confirm walls are in a good state or need to be repaired to prevent moisture penetration.

Technical data



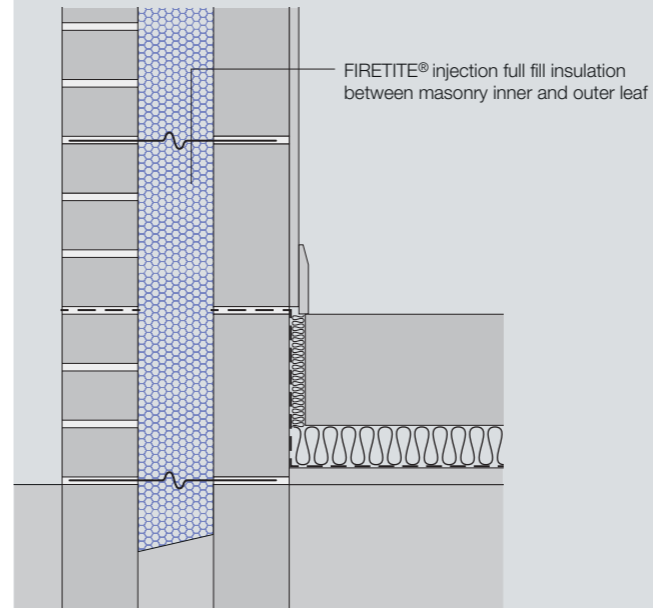
FIRETITE in-situ formed thermal insulation made of mineral based foam has achieved European Technical Assessment for use in double wall masonry construction.

Characteristic	Test method	Performance
Reaction to fire	EN 13823:2010+A1:2014 and EN ISO1716:2010	Class A2 – s1, d0 To EN 13501–1:2018 ^{1,2}
Thermal conductivity Conversion of humidity EN ISO 10456:2010 Moisture conversion factor (23°C/50% RH to 23°C/80% RH)	EN 1266:2001	Declared value $\lambda_{D(23/50)} = 0.034W/(m.K)$ $F_m = 1.015$
Density (dry form)	EN 1602:2013	Range 29kg/mm ³ to 35kgm ³
Water absorption at long term partial immersion	EN 12087:2013	Wlp ≤ 1.0kg/m ²
Dimensional stability at 23°C and 50% RH Conditioning: 28d at 23°C and 50% RH	EN 1603:2013	Relative changes in length, width & thickness ≤ 2.0% (length, width, thickness)
Dimensional stability at 70°C and 90% RH Conditioning: 28d at 70°C and 90% RH	EN 1603:2013	Relative changes in length, width & thickness ≤ 5.0% (length, width) ≤ 12.0% (thickness)
Dimensional stability at -30°C Conditioning: 24h at -30°C	EN 1603:2013	Relative changes in length, width & thickness ≤ 2.0% (length, width, thickness)
Reactivity to a.m.	EAD (clause 2.2.8)	≤ 60 seconds
GEV EMICODE emission class		EC 1 plus

Notes
 1 Valid for applications on or between substrates made of building material classified as A1 or A2-s1,d0 to EN12501-1 with thickness $d \geq 12mm$ and a density $\geq 650kg/m^3$
 2 Valid for a thickness range as stated in clause 2 and a density range as stated in table below
 * Declared value of thermal conductivity for a moisture content of the insulation product at 23°C/50%

Typical specifications and U-values

Wall detail

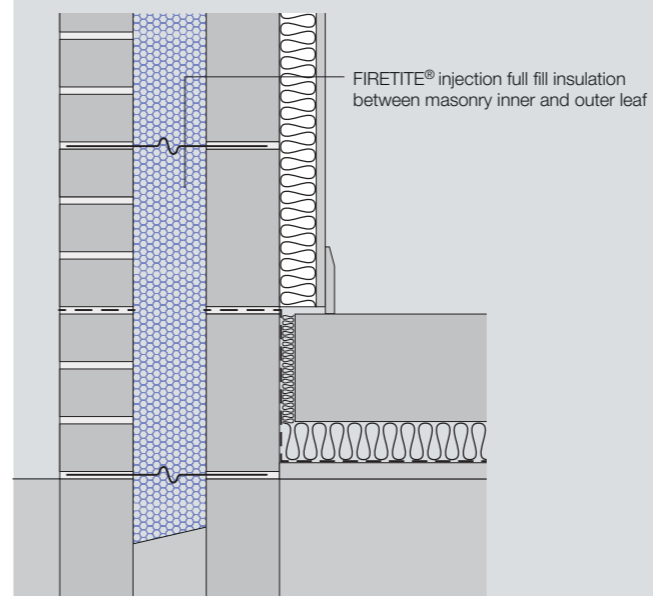


Specification

- 100mm outer block or brick wall
- FIRETITE full fill cavity wall insulation, Class A2 fire rated mineral, lambda value =0.034W/mK
- 100mm inner block wall with internal plaster
- NBS clauses: To Be Confirmed

FIRETITE thickness (mm)	U-value (W/m ² K)
50	0.56
80	0.38
100	0.32
120	0.27
130	0.25
150	0.22
180	0.20
200	0.18

Wall detail



Specification

- 100mm outer block or brick wall
- FIRETITE full fill cavity wall insulation, Class A2 fire rated mineral, lambda value =0.034W/mK
- 100mm inner block wall with 50mm PIR board (0.20W/mK) on 12.5mm plasterboard with internal skim plaster
- NBS clauses: To Be Confirmed

FIRETITE thickness (mm)	U-value (W/m ² K)
50	0.25
80	0.21
100	0.19
120	0.17
130	0.17
150	0.15
180	0.14
200	0.13

About ECON Polyurethanes

We are leading distributors in the UK and Ireland of polyurea coatings, polyurethane spray in place and injection systems from BASF plc. We are dedicated to providing high performance cost effective materials in line with our customer's needs. Our partnership with the industries longest established and most well respected manufacturer puts us at the forefront of the spray foam industry sector.

For more information, samples or if you would like to discuss a particular project please contact us at the details below.

About BASF

BASF plc creates chemistry for a sustainable future. As the world's largest chemical producer, they lead the way in developing and manufacturing polyurethane system solutions for construction, automotive, appliance leisure, seating, offshore and marine industries. Many of the systems are developed and formulated in close partnership with individual customers to meet their particular requirements.

 **BASF**
We create chemistry



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