FIREFLY®

Certified & Trusted Passive Fire Protection

Contents

NEW

Single-Sided Batt System

Page 6 - 7

NEW

Span™

Page 22

NEW

VapourSafe™

Page 23

Introduction

FIREFLY® is a pioneering UK specialist manufacturer of flexible fire barriers and passive fire protection systems. Offering a range of fully tested & certified products, comprising of lightweight, easy to install flexible fire barriers, ablative batt systems and ancillaries.

Fire barriers are used to compartmentalise building voids or concealed spaces, to contain the spread of fire and smoke for a specified period of integrity and insulation.

All **FIREFLY**® passive fire protection systems are certified and supported by an experienced team, able to provide timely and practical support and training to ensure installations are problem-free, compliant and meet the increasing regulatory requirements of the built environment.

Titan Lite and Zeus Lite was used in the Maggie's centre at the Royal Free Hospital in North London. See page 37.

Training & Development

Continuing Professional Development (CPD) is widely recognised as fundamental to education, compliance and improving standards & skills for individuals and their industries.

The **FIREFLY**® range of CPD's are tailored to provide an overview of Passive Fire Protection in the treatment of larger roof voids and cavities. Our CPD's can be delivered by a member of our technical support team in-person or remotely, with credits issued upon completion.

By attending our widely recognised RIBA approved Passive Fire Protection CPD's, you will earn you up to 3 CPD points. To register, scan the QR code below, or visit **www.tbafirefly.com/cpd**

Installation Training

It is critical that all fire protection systems are installed professionally, to exacting specifications & details to ensure compliance and performance.

FIREFLY® are long-standing providers of installer training programmes, and our ever-expanding course options ensure relevant, tailored and accessible content is available to all.

Training is designed to be both theoretical and hands-on, as well as being flexible to cover specialist areas, project specific requirements and assessment needs. Small numbers of participants allow content to be bespoke to the skill levels of those attending.

Our mission is to ensure all **FIREFLY**® products are expertly installed by well-trained installers to provide protection, compliance and peace-of-mind to all involved in a project.

FIREFLY® General Assembly Installation Course

Our most popular course, delivered at regional centres across the UK. On request, we can also provide on-site training at your offices / premises. The course provides hands-on, practical training in installing, fixing and jointing **FIREFLY**® fire protection systems and safely managing penetrations.

FIREFLY® Assessors Training

Recently added to our training suite, the **FIREFLY**® Assessor Training course gives working and non-working supervisors (or third-party assessors) a detailed overview of **FIREFLY**®'s high-performance passive fire protection systems. Focused on compliance, correct installation methods, managing penetrations and common installation challenges, the course provides both theoretical and hands-on experience.

NEW **FIREFLY**® FB180 Batt System Installation Training

A new addition to our installer training programme, also delivered at regional centres across the UK, or on-site. This course provides hands-on, practical training in installing our FB180 Batt wall and floor system and our range of ancillaries and accessories such as our fire collars, as part of our tested systems.

FIREFLY® training is designed to be delivered to groups of up to 6 people. For further details, availability and costs, please visit **www.tbafirefly.com/installation-training** or scan QR code.

1 HOUR BATT INSTALL SIDE

1-hour integrity, single-side installation

This fully tested and certified Batt system can be used to create a stand-alone, non-load-bearing wall built from one side in restricted access areas to create compartmentation. Stand-alone load and non-load bearing floor protection to create compartmentation.

90 minutes Integrity & 60 Minutes Insulation

FIREFLY® FB180 Ablative Batt 60mm Wall System provides a single layer EI60:E90 fire-rated compartmentation wall that can be installed free-standing up to 1.5 metres high or within a timber framework. Tested fixing to blockwork or plasterboard substrates.

Ease of install

Ease of installation with standard batt tools and friction fit in place – no additional tracking or fixing method required. **FIREFLY**® fixings & ancillaries such as the Acrylic Sealant and ablative coating also available as part of the tested system.

Tested system

FB180 Ablative Batt 60mm Wall & Floor Systems provide a tested & certified (classification number WF 550732) solution as part of a **FIREFLY**® system.

Noise insulation

32dB

Acoustic reduction of 32dB from batt in isolation.

Calculator app

Available 24/7 via our website www.tbafirefly.com/resources

Made in Great Britain

Designed, tested and manufactured in Great Britain

tbafirefly.com/single-side-fb180-60mm-batt

NEW

Single-Side FB180 Batt System

When access to both sides of a wall or floor is limited, traditional firestopping can be tricky. **FIREFLY**® have developed a tested,trusted solution: Single-side installation of our FB180 Ablative Batt system.

This one-sided solution is ideal for where compartmentation between rooms and corridors is critical to fire safety and access is restricted. The single-side installation method is specifically engineered and tested to address these challenges.

Faster to install than double sided batt systems and classified to BS EN 13501-2. Tested as part of the **FIREFLY**® system, to work alongside additional **FIREFLY**® fire stopping components such as sealants, fire collars, **FIREFLY**® Penowrap and **FIREFLY**® Roof Cavity Closers.

- **Ease of install**
- **Single-side solution – install from one side**
- **T ested to BS EN 1364-1 & BS EN 1366-3**
- **EI60 Fire Resistance from just one batt**
- **Less disruption, fewer access issues**
- **Sound reduction 32dB**
- **Lower material costs**

Education

Industrial & Production

Health & Social Care

Offices & Warehousing

Housing & Residential

Retail & Leisure

SOLUTIONS FOR
Walls

FIREFLY® FB180 Ablative Batt – 60mm Wall System provides a single layer EI60:E90 fire-rated compartmentation wall that can be installed free-standing or within timber or plasterboard applications.

Use Areas

The **FIREFLY®** FB180 Ablative Batt Wall System can be installed as a non-load bearing compartmentation wall into restricted areas such as lofts and roof voids. It can be friction-fitted into typical existing supporting timber frames and used within a double layer plasterboard wall.

Whether free-standing or working with existing timber/plasterboard structures, the FB180 60mm Batt Wall System provides 90 minutes Integrity & 60 minutes Insulation.

Penetrations

FIREFLY® FB180 Ablative Batt Wall System is tested with expected penetrations including the **FIREFLY®** Access Panel. See Installation Drawings/Manual for full details. A complementary **FIREFLY®** FB180 Ablative Batt 60mm Floor System is also available.

Construction

Layers of mineral wool are combined to create a 60mm thick board product, with an ablative coating factory-applied to both sides. The board has a density of 180kg/m3 with a rigidity that makes it suitable for friction fitting.

Testing & Certification

Classified: WF 550 732,
Certified IFC 1983 E90 I60 at 3m, EI60 at 4m

Key Benefits

- Single layer 60mm batt installation provides 90 minutes Integrity & 60 minutes Insulation
- Tested to BS EN 1364-1 2015 and BS EN 1366-3:2021 to include penetrations and access panels
- Can be used to create a stand-alone non-load bearing wall, built from one side in restricted access areas to create compartmentations
- Tested for use with timber where it must be treated with **FIREFLY®** Ablative Coating
- Also tested for use between 2 layers of plasterboard standard construction to EI60:E90
- Suitable and tested for use in conjunction with **FIREFLY®** flexible barriers and **FIREFLY®** FR120 Access Panel
- Acoustic reduction of 32dB
- Meets requirements of BS EN 1364-1:2015 and provides a tested & certified solution as part of a **FIREFLY®** system

> Initially the fire curtains were considered but then it was decided to use **FIREFLY**® FB180 batts. I have had very good feedback from our installers, regarding the ease of cutting and fitting them, with very little waste generated compared to other similar products.
>
> **Joe Stewart, Qualifire**

FB180 Batt Wall 60cm

Provides up to 90 minutes integrity and 60 minutes' insulation.

90/60 | 1 HOUR BATT INSTALL SIDED

FB180 Cavity Closers

Manufactured combination of Ablative Batt & Intumescent Graphite.

60 mins | 1 HOUR BATT

FB180 Batt Ancillary products and accessories

From Fire Collars to Penowrap®, **FIREFLY**® has a full range of products as part of the tested FB180 system. Visit our website for more details From Fire Collars to Penowrap®, **FIREFLY**® has a full range of products as part of the tested FB180 system. Visit our website for more details.

tbafirefly.com/fb180-ablative-batt60mm-wall-system

SOLUTIONS FOR

Raised Access Floor

The FIREFLY® FB180 Raised Access Floor fire protection system provides a fully tested solution for fire-rated raised access floors. Designed to maintain compartmentation and prevent the spread of fire, the system has been rigorously tested with Kingspan RMG 600 and 18mm OSB Board flooring materials. Offering up to 240 minutes of integrity and 120 minutes of insulation, it is ideal for high-risk voids where fire protection is critical.

Use Areas

- Raised access floor systems in commercial and industrial buildings
- Data centres and server rooms
- Offices and high-rise buildings requiring compartmentation
- Environments with high fire safety requirements
- Infrastructure projects, e.g., airports, rail stations & tunnels

Application

The FIREFLY® Raised Access Floor system is engineered for installation in both fire-rated and non fire-rated raised access floor applications. It maintains the compartment line while accommodating necessary penetrations such as Cable trays and data cables, maintaining compartmentation. Suitable for a wide range of environments, including:

- Commercial buildings: Offices, shopping centres, and public facilities requiring protected service voids beneath raised floors.
- Data centres & server rooms: Ensuring fire compartmentation where sensitive electronic equipment is housed.
- Industrial & manufacturing facilities: Providing fire protection in areas with extensive cabling and mechanical penetrations.
- High-rise buildings & residential complexes: Critical for ensuring fire containment in multi-level structures.
- Transport hubs & infrastructure projects: Rail stations, airports, and tunnels where fire-rated access floors are essential.

tbafirefly.com/raised-access-floor

SOLUTIONS FOR

Loaded Floors

The FIREFLY® Loaded Floor system is a single layer, fire-rated compartmentation system that can be simply installed in loaded floor spaces from above and below. Tested and certified to provide up to 60 minutes fire integrity and insulation, utilising the trusted FIREFLY® FB180 Batt floor system. Can be installed and friction-fit into new and existing floors, with excellent sound reduction and insulation properties.

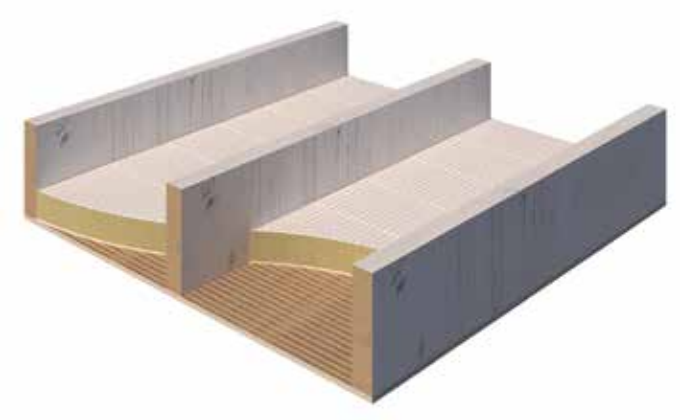
Use Areas

Developed specifically for enhancing fire resistance in loaded timber floor constructions, the FIREFLY® Loaded Floor System is designed to friction-fit between joists coated with FIREFLY® Ablative Coating. It can be installed from above or below, making it ideal for projects where ceiling access is restricted

- Fire compartmentation in multi-occupancy dwellings, flats, and conversions
- New-build timber floors requiring REI 60 fire performance
- Widely used to provide fire compartmentation in applications such as multiple occupancy dwellings, retail and leisure
- Can be installed retrofit from above or below, ideal for historic buildings
- Where existing ornate or lathe and plaster ceilings cannot be disturbed
- Compatible with FIREFLY® products as part of a tested system

Key benefits

- Provides 60 minutes loadbearing capacity, integrity & insulation (REI 60)
- Fully tested to BS EN 1365-2:2014 (loaded floor) Ideal for retrofit to leave ornate or lathe-and-plaster ceilings undisturbed while upgrading fire compartmentation
- Ease of installation with standard batt tools and friction fitting – no mechanical fixings required; FIREFLY® Sealant and Coating also available as part of the tested system
- Acoustic reduction of 32 dB from batt in isolation
- Fully supported with detailed drawings and installation instructions, including service penetration guidance Meets requirements of BS EN 13501-2:2023, providing a tested and certified solution as part of a FIREFLY® system



Application

Batt is cut to size and friction- fitted between timber joists (minimum 44 × 196 mm C16 softwood at 600 mm centres), all of which must be treated with FIREFLY® Ablative Coating to maintain fire performance. Batts are installed flush with the underside of the joists and sealed at all joints and perimeters using FIREFLY® FR Acrylic Intumescent Sealant to form a continuous fire protection layer.

Construction

Layers of mineral wool are combined to create a 60mm thick board product, with an ablative coating factory-applied to both sides. The board has a density of 180kg/m3 with a rigidity that makes it suitable for friction fitting.

Testing & Certification

Meets requirements of BS EN 1365-2:2014 – REI 60 (Loadbearing Capacity, Integrity & Insulation). Classification Report No. WF551857 (Issue 1) – REI 60 to EN 13501-2:2023. 3rd-party certification under application via IFCC Scheme (IFCC 1983)

tbafirefly.com/loaded-floor

SOLUTIONS FOR

Suspended Ceilings

All FIREFLY® fire barriers are tested and certified for a wide number of situations and environments inside buildings. As you can see from the case studies, FIREFLY® flexible fire barriers have been installed in a wide variety of commercial and residential buildings to form an aesthetically pleasing, neat and tidy finish above suspended ceilings.

FIREFLY®... a proven solution

Apollo Lite 30:30 and Zeus Lite 90:30 are widely tested to EN 1366-2 and 1366-3, ensuring their effectiveness in maintaining compartmentation. When installed in combination with CE-marked fire dampers, such as Actionair Smokeshield and BSB FD and FSD Series, these fire barriers provide a robust and fully compliant fire safety system.

Why are fire barriers needed above suspended ceilings?

To prevent hidden fire spread

Suspended ceilings often conceal large voids where fire and smoke can spread rapidly and undetected. These voids act like chimneys, allowing fire to bypass fire-rated walls and compartments.

To maintain compartmentation

Buildings are divided into compartments to contain fire within a specific area for a set time (e.g., 30, 60, 120 minutes). If the fire-rated wall doesn't extend to the ceiling (the slab or roof above), then the barrier must continue above the suspended ceiling to seal the gap.

To protect escape routes

Fire barriers help protect ceilings, roof voids, corridors, stairwells, walls and floors by preventing smoke and flames from entering via the ceiling voids.

To comply with building regulations

UK Building Regulations (e.g., Approved Document B) require that fire compartments are properly enclosed. Without barriers above suspended ceilings, the structure may fail to meet fire resistance ratings and legal compliance.

Because ceilings alone are not fire rated

Most suspended ceilings are not fire-resistant. **FIREFLY®** fire barriers are tested to provide the required fire resistance above the ceiling.

Visit **tbafirefly.com/suspended-ceilings** for more info and to read our latest case studies

> Titan Lite 120:60 and Collaroll, were secured across light gauge steel subframes to provide two hours integrity and 60 minutes insulation.
>
> **Ross Camberley, Cold Clad Contracts Manager**

The risks above suspended ceilings

Suspended ceilings create hidden voids that, if left unprotected, can facilitate rapid fire and smoke spread throughout a building. These concealed spaces often house mechanical and electrical (M&E) services, including electrical wiring, ventilation ducts, plumbing systems, and insulation materials, all of which can accelerate fire spread if not properly compartmentalised.

Hot and cold-water pipes, drainage systems, HVAC ducting, and cable trays frequently pass through these areas, creating potential pathways for undetected fire and smoke migration.

Undetected fire spread poses a significant risk, as flames and smoke can bypass traditional fire barriers above ceiling tiles, jeopardising life safety.

The integrity of fire compartments is compromised when penetrations, such as pipes, cables, ducts, and conduits, are not adequately sealed. Poorly installed or missing fire stopping allows fire and smoke to travel freely between compartments, increasing the risk of widespread damage and loss of life.

Apollo Lite 30:30

Provides up to 30 Minutes Integrity and 30 Minutes Insulation

Titan Lite 120:60

Provides up to 120 Minutes Integrity and 60 Minutes Insulation

Flexible Fire Barriers and Accessories

FIXINGS & SCREWS
Ensures a tested and certified system is achieved

FIREFLY® FIXING ANGLE
For fixing and clamping of **FIREFLY®** Barriers

FIRE COLLAR
50mm-160mm

FIREFLY® HTA
High Temperature Adhesive for bonding materials with high temperature resistance

COLLAROLL
Used to seal penetrations through **FIREFLY®** barriers

R31 STAPLE GUN & STAPLES
For use with **FIREFLY®** Fire Barriers and Collaroll

FLEXIBLE FIRE BARRIERS
Tested and certified range of flexible fire barriers

1

FIREFLY® Flexible Fire Barriers

2

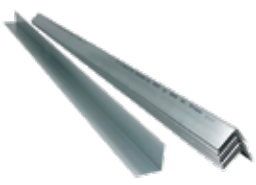
High Temperature Adhesive

3

FIREFLY® Collaroll

4

FIREFLY® Fire Collars

5

Fixing Angles

6 7

Fixings & Screws
R31 Stapler & Staples

Phoenix
120 Minutes Integrity

Phoenix Horizontal
60 Minutes Integrity

Apollo Lite
30 Minutes Integrity
30 Minutes Insulation

Apollo Lite Horizontal
30 Minutes Integrity
30 Minutes Insulation

Zeus Lite
90 Minutes Integrity
30 Minutes Insulation

Zeus Lite Horizontal
60 Minutes Integrity
30 Minutes Insulation

Titan Lite
120 Minutes Integrity
60 Minutes Insulation

Titan Lite Horizontal
90 Minutes Integrity
60 Minutes Insulation

> The installation was inspected by FIREFLY® and gained IFC certification. Overall, the project went smoothly and the client is satisfied with the outcome

Daniel Oldacre
Contracts Manager, Krasi

VERTICAL BARRIERS	DESCRIPTION	USE AREAS	IDEAL FOR	TESTING	
Phoenix 	Lightweight flexible smoke and flame barrier	Walls, Roofs	Industrial Housing/Social Healthcare Office/Warehouse Retail/Leisure Education	BS EN BS476 Parts 20 & 22	120 Minutes Integrity
Apollo Lite 	Lightweight flexible smoke and flame barrier, providing both integrity and insulation	Walls, Roofs & Ceilings	Industrial Housing/Social Healthcare Office/Warehouse Retail/Leisure Education	BS EN BS476 A1 (BS EN 13501:1)	30 Minutes Integrity 30 Minutes Insulation
Zeus Lite 	Lightweight flexible smoke and flame barrier, providing integrity and insulation	Walls, Roofs & Ceilings	Industrial Housing/Social Healthcare Office/Warehouse Retail/Leisure Education	BS EN BS476 A1 (BS EN 13501:1)	90 Minutes Integrity 30 Minutes Insulation
Titan Lite 	Lightweight flexible smoke and flame barrier, providing integrity and insulation	Walls, Roofs & Ceilings	Industrial Housing/Social Healthcare Office/Warehouse Retail/Leisure Education	BS EN BS476 A1 (BS EN 13501:1)	120 Minutes Integrity 60 Minutes Insulation

VERTICAL BARRIERS	DESCRIPTION	USE AREAS	IDEAL FOR	TESTING	
Phoenix Horizontal 	Lightweight flexible smoke and flame barrier for mezzanine floors and similar structures.	Floors, Ceilings	Industrial Housing/Social Healthcare Office/Warehouse Retail/Leisure Education	BS EN BS476 Parts 20 & 22	60 Minutes Integrity
Apollo Lite Horizontal 	Lightweight flexible smoke and flame barrier, providing integrity and insulation. Specifically designed and tested for horizontal application.	Floors, Ceilings	Industrial Housing/Social Healthcare Office/Warehouse Retail/Leisure Education	BS EN BS476 A1 (BS EN 13501:1)	30 Minutes Integrity 30 Minutes Insulation
Zeus Lite Horizontal 	Lightweight flexible smoke and flame barrier, providing integrity and insulation. Tested for horizontal application.	Floors, Ceilings	Industrial Housing/Social Healthcare Office/Warehouse Retail/Leisure Education	BS EN BS476 A1 (BS EN 13501:1)	60 Minutes Integrity 30 Minutes Insulation
Titan Lite Horizontal 	Lightweight flexible smoke and flame barrier, providing integrity and insulation. Horizontal application	Floors, Ceilings	Industrial Housing/Social Healthcare Office/Warehouse Retail/Leisure Education	BS EN BS476 A1 (BS EN 13501:1)	90 Minutes Integrity 60 Minutes Insulation

APPLICATION	PROPERTIES & FEATURES	COMPOSITION	SIZE	PACKAGING	LIMITATIONS	QR CODE
Vertical use only (See Phoenix Horizontal for alternative)	A1-Rated Combustibility; Flexible & Rollable; Calculator App; Made in Britain	Coated, woven glass fibre	Width: 130cm Length: 10 or 25m	Bagged, rolled	Not tested for insulation	
Vertical use only (See Apollo Horizontal for alternative)	A1-Rated Combustibility; Flexible & Rollable; Calculator App; Made in Britain	Aluminium, woven and nonwoven glass fibre, treated with a proprietary coated to greatly increase fire resistance.	Width: 127cm Length: 6m Thickness: 6mm+	Supplied bagged and concertinaed		
Vertical use only (See Zeus Horizontal for alternative)	A1-Rated Combustibility; Flexible & Rollable; Calculator App; Made in Britain	Aluminium, woven and nonwoven glass fibre, treated with a proprietary coated to greatly increase fire resistance.	Width: 127cm Length: 6m Thickness: 6mm+	Supplied bagged and concertinaed		
Vertical use only (See Titan Horizontal for alternative)	A1-Rated Combustibility; Flexible & Rollable; Calculator App; Made in Britain	Aluminium, woven and nonwoven glass fibre, treated with a proprietary coated to greatly increase fire resistance.	Width: 127cm Length: 6m Thickness: 18mm+	Supplied bagged and concertinaed		

APPLICATION	PROPERTIES & FEATURES	COMPOSITION	SIZE	PACKAGING	LIMITATIONS	QR CODE
Horizontal use only (See Phoenix for alternative)	A1-Rated Combustibility; Flexible & Rollable; Calculator App; Made in Britain	Coated, woven glass fibre	Width: 130cm Length: 10 or 25m	Bagged, rolled	Not tested for insulation	
Horizontal use only (See Apollo Lite for alternative)	A1-Rated Combustibility; Flexible & Rollable; Calculator App; Made in Britain	Aluminium, woven and nonwoven glass fibre, treated with a proprietary coated to greatly increase fire resistance.	Width: 130cm Length: 6m Thickness: 7.8mm	Supplied bagged and concertinaed		
Horizontal use only (See Zeus Lite for alternative)	A1-Rated Combustibility; Flexible & Rollable; Calculator App; Made in Britain	Aluminium, woven and nonwoven glass fibre, treated with a proprietary coated to greatly increase fire resistance.	Width: 127cm Length: 6m Thickness: 6mm+	Supplied bagged and concertinaed		
Horizontal use only (See Titan Lite for alternative)	A1-Rated Combustibility; Flexible & Rollable; Calculator App; Made in Britain	Aluminium, woven and nonwoven glass fibre, treated with a proprietary coated to greatly increase fire resistance.	Width: 127cm Length: 6m Thickness: 18mm+	Supplied bagged and concertinaed		

FB180 Ablative Batt Wall & Floor System

FIREFLY® FB180 Ablative Batt – 60mm Wall & Floor System provides single-layer EI60/E90 fire-rated compartmentation, installed vertically within timber frameworks or friction-fit to blockwork and double-layer plasterboard, and horizontally friction-fit between joists in floors and ceilings.

key benefits

1-hour integrity, single side installation

This fully tested and certified Batt system can be used to create a stand-alone, non-load-bearing wall built from one side in restricted access areas to create compartmentation. Stand-alone load and non-load bearing floor protection to create compartmentation.

90 minutes Integrity & 60 minutes insulation

FIREFLY® FB180 Ablative Batt 60mm Wall System provides a single layer EI60:E90 fire-rated compartmentation wall that can be installed free-standing up to 1.5 metres high or within a timber framework. Tested fixing to blockwork or plasterboard substrates.

Ease of install

Ease of installation with standard batt tools and friction fit in place – no additional tracking or fixing method required. **FIREFLY**® fixings & ancillaries such as the Acrylic Sealant and ablative coating also available as part of the tested system.

Certified system

FB180 Ablative Batt 60mm Wall & Floor Systems provide a tested & certified solution as part of a **FIREFLY**® system.

Noise insulation

Acoustic reduction of 32dB from batt in isolation.

Use areas

Can be installed in walls, above existing ceilings, placed between timber joists which are treated with **FIREFLY**® Ablative Coating.

Provides approved EI160 rated penetration for single layer Batt systems, ideal for retrofit upgrades in multi-occupancy and historic buildings without disturbing existing ceilings.

Tested for common penetrations including pipes, cables, trays, and timber. Installation details are available online. A 50mm system is also available.

Application

Batt is friction-fit between timber (min. 90 × 38mm C16), treated with **FIREFLY**® Ablative Coating to maintain EI60/E90 performance.

Dimensions and packaging

Supplied bagged to provide protection. Dimensions: 1200 x 600 x 60mm.

tbafirefly.com/fb180-ablative-batt

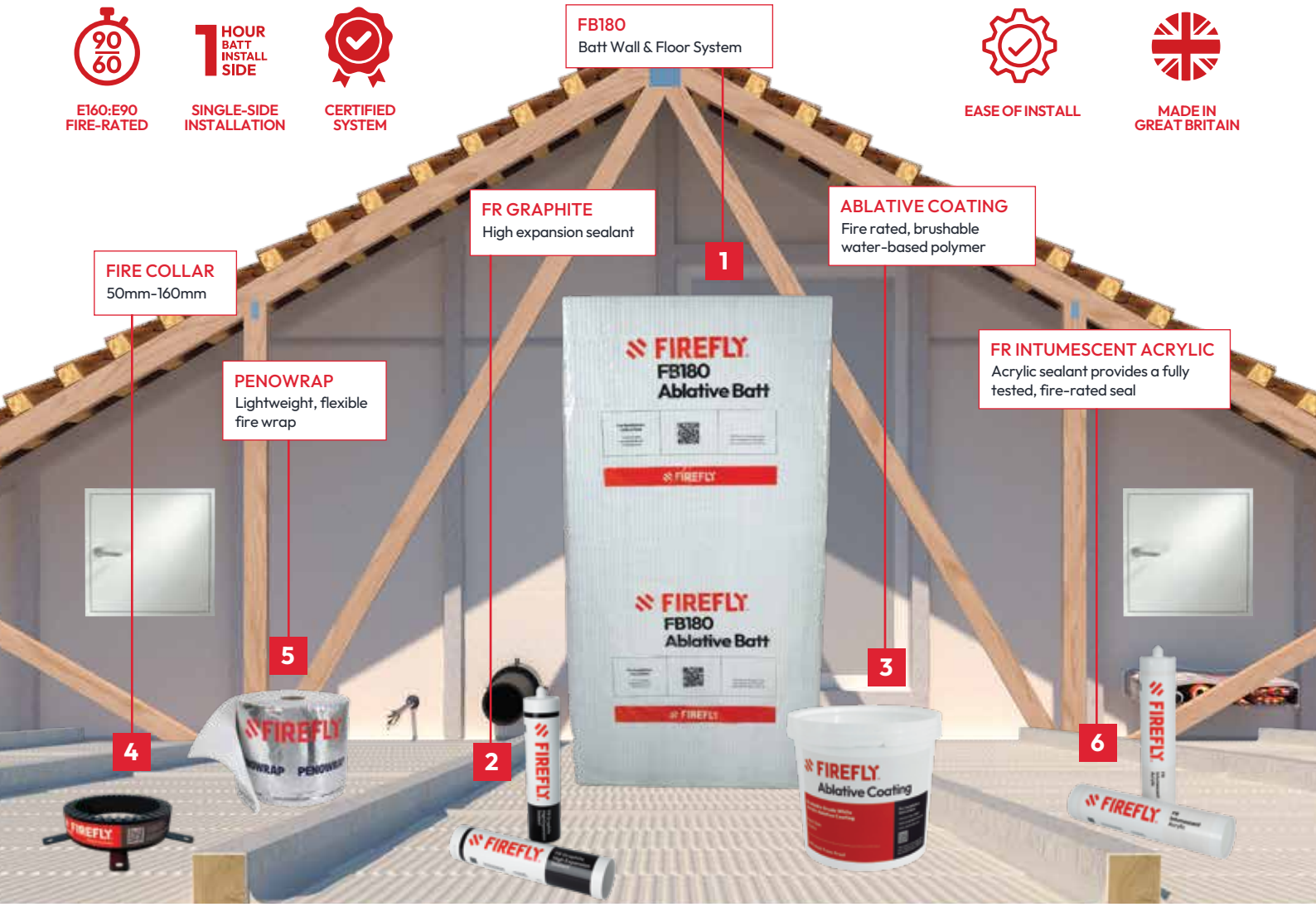
90/60 E160:E90 FIRE-RATED

1 HOUR BATT INSTALL SIDE SINGLE-SIDE INSTALLATION

CERTIFIED SYSTEM

EASE OF INSTALL

MADE IN GREAT BRITAIN



1

FB180 Ablative Batt

2

FR Graphite

3

Ablative Coating

4

Fire Collars

5

Penowrap

6

FR Intumescent Acrylic

PRODUCT	DESCRIPTION	USE AREAS	TESTING		APPLICATION
FB180 Batt Wall System 60mm 	High expansion, pressure exerting sealant, used to provide a fire-rated seal to joints, gaps and around penetrations	Walls	BS EN 1364-1 2015 BS EN 1366-3:2021	90 Minutes Integrity 60 Minutes Insulation	Vertical use only. Tested for penetrations & **FIREFLY**® FR120 Access Panel
FB180 Batt Floor System 60mm 	Mineral fibre ablative batt for vertical use with timber, plasterboard and **FIREFLY**® barrier	Floors, Ceilings	BS EN 1364-1 2015 BS EN 1366-3:2021	90 Minutes Integrity 60 Minutes Insulation	Horizontal use only. Tested for penetrations - see installation drawings for specific details
FB180 Batt System 50mm 	Mineral fibre ablative batt for vertical use with timber, plasterboard and **FIREFLY**® barrier	Walls, Floors & Ceilings	BS EN 1364-1 2015 BS EN 1366-3:2021	60 Minutes Integrity 30 Minutes Insulation	Vertical use only. Tested for for penetrations & **FIREFLY**® FR120 Access Panel
Roof Cavity 50mm Closers 	Providing a fire-tested solution to close the void between roof membrane and tile at compartment lines	Roofs	BS EN 1363-1:2020	60 Minutes Integrity	Vertical use only. Designed to extend compartmentation line all the way through the roof membrane to the outer tile/sheet.
Ablative Coating 5 Litres 	Fire-rated water-based polymer	Walls, Floors & Ceilings	As part of a tested system		Brush-grade liquid for use with **FIREFLY**® FB180 Ablative Batt Brushed liquid coating to reseal cuts, cracks and minor surface damage during installation
FR Graphite High Expansion Sealant 310ml cartridge 	High expansion, pressure exerting sealant, used to provide a fire-rated seal to joints, gaps and around penetrations	Joints, gaps & Penetrations	As part of a tested system		For penetrations of plastic pipes, single / bunched cables, cable trays and insulated metal pipes. Suitable to close off gaps in penetrations where collars or wraps have not been used.
FR Intumescent Acrylic Sealant 310ml cartridge 	Water based sealant, used to provide a fire-rated seal to joints, gaps and around penetrations	Joints, gaps & Penetrations	As part of a tested system BS EN 1366-3 when through batt		Vertical & horizontal use. Seals joints up to 35mm without slumping ISO 11600:2002, movement +/- 12.5% accommodation
Fire Collar 	Penetration sealing device that protects combustible pipes and maintain fire resistance. Up to 4 hours fire resistance	Pipe penetrations	As part of a tested system		Retro fit in conjunction with our flexible fire barriers, FB180 Wall and Floor Batt Systems, up to 160mm. For use where combustible pipe(s) penetrates a fire rated wall or floor.
Penowrap 	Lightweight, flexible fire wrap, used as a component within our fire barrier systems	Timber, Steel	As part of a tested system	As part of a tested system	Suitable for wrapping timber and steel structure/substrate up to 300mm below the barrier for additional fire protection.

PROPERTIES & FEATURES	ACOUSTICS	SIZE	PACKAGING	LIMITATIONS	QR CODE
1 HOUR BATT INSTALL SIDE — 1 Hour Single-Side Installation; Single layer installation; Calculator App; Made in Britain	32dB — 32dB Noise Reduction	1200mm x 600mm x 60mm	Supplied bagged to provide protection in transit and on site. Do not allow the batt to be exposed to rain	Not to be installed in areas of RH >85% Storage: Cool, dry place – protect from frost	
1 HOUR BATT INSTALL SIDE — 1 Hour Single-Side Installation; Single layer installation; Calculator App; Made in Britain	32dB — 32dB Noise Reduction	1200mm x 600mm x 60mm	Supplied bagged to provide protection in transit and on site. Do not allow the batt to be exposed to rain	Not to be installed in areas of RH >85% Storage: Cool, dry place – protect from frost	
1 HOUR BATT — 1-Hour Installation; Single layer installation; Calculator App; Made in Britain	32dB — 32dB Noise Reduction	1200mm x 600mm x 50mm	Supplied bagged to provide protection in transit and on site. Do not allow the batt to be exposed to rain	Not to be installed in areas of RH >85% Storage: Cool, dry place – protect from frost	
1 HOUR BATT — 1-Hour Installation; Single layer installation; Calculator App; Made in Britain		1200 x 150 x 50mm 600 x 150 x 50mm (Made to order) 1200 x 400 x 50mm 1200 x 300 x 50mm 600 x 400 x 50mm 600 x 300 x 50mm	Stocked in two sizes, can be made to order on request. Supplied bagged, do not allow the batt to be exposed to rain.	Not to be installed in areas of RH >85% Storage: Cool, dry place – protect from frost	
Calculator App; Made in Britain		10m² / 5L	5L resealable tub. Shelf life 24 months from manufacture	Not suitable for use with cPVC pipes or flexible fire barrier	
Calculator App; Made in Britain		310ml	1x 310ml tube = approx 12m of 6mm beads. Shelf life 18 months	Not suitable for PVC pipes. Store in a dry place, protected from frost. Application temp -5oC to +40oC.	
Calculator App; Made in Britain	55dB — 55dB Noise Reduction	310ml 600ml	Available in cartridge or 600ml foils. Shelf life 24 months Coverage: 1 tube approx 1 metre @ 20 x 15mm bead	Storage: cool, dry place, protect from frost. Application temperature +50^{C} to +40^{oC}	
Calculator App; Made in Britain		50mm 60mm 75mm 90mm 110mm 160mm	Supplied boxed in packs 6	Store in a dry place, protect from frost. Application temp -50^{C} to +40^{oC} Activation temperature 150^{oC} Not suitable for use with cPVC pipes	
Calculator App; Made in Britain		Thickness: 12mm Width: 30cm Roll Length: 10m Weight: 2kg/m²	Supplied shrink wrapped	Certified as part of a **FIREFLY**® tested system only. Store in a dry place, protect from frost.	

NEW

Span

Span high-performance linear joint seal

FIREFLY® Span is a fire-resistant linear joint seal designed to prevent the spread of fire, smoke, and sound through construction joints. It consists of compressible open-celled acoustic and thermally impregnated polyurethane foam integrated with intumescent graphite. Upon exposure to heat, the intumescent material expands to seal gaps, ensuring effective, easy to install fire compartmentation.

The foam core provides flexibility and movement capability, while the intumescent material expands under heat to create a robust fire seal. The product is supplied in pre-cut lengths, allowing easy handling and installation.

Use Areas

Engineered for sealing linear joints in floors, walls, and curtain wall perimeters. It accommodates structural movement while maintaining fire resistance, making it suitable for various construction applications such as linear joints in walls and floors, perimeter joints around curtain wall systems, expansion and movement joints, construction joints requiring fire resistance and acoustic insulation interfaces between different building elements.

EASE OF INSTALL

SOUND REDUCTION

60 MINUTES FIRE RESISTANCE

COMPRESSION & RECOVERY

MOISTURE RESISTANT

Key Benefits

- Provides up to 60minutes fire resistance, EI60 tested to BS EN 1366-4
- Expands under heat to form a fire resistant barrier
- High compressibility and recovery properties
- Excellent acoustic and thermal insulation
- Simple installation without the need for adhesives or mechanical fixings
- Resistant to moisture, aging, and environmental conditions
- Can be used in conjunction with other fire protection systems
- Available in 4 sizes 25mm, 50mm, 75mm and 100mm

tbafirefly.com/span

NEW

VapourSafe™

Limited combustibility, fire-resistant membrane

FIREFLY® VapourSafe™ is a fire-resistant membrane that achieves Class A2 (EN13501-1). Water resistant to Class W1 and vapour permeable. Suitable for use as a lining within ventilated façade systems, including applications above 18 metres.

Use Areas

Designed with modular and offsite construction in mind. Its lightweight, durable composition makes it easy to handle in extreme conditions, while its Class A2-s1, d0 fire classification ensures compliance is built into every panel before arriving onsite. Typical applications include:

- Modular and offsite construction; prefabricated wall and façade panels where consistent fire safety and weather proofing must be assured.
- Rainscreen and ventilated façade systems – providing a vapour-permeable, weather resistant layer behind cladding systems.
- High-rise & high-risk buildings, where non-combustible materials are essential above 18m.
- Refurbishment and remedial works –upgrading the fire performance without compromising breathability.

EASE OF INSTALL

WATER RESISTANT

BREATHABLE

FLEXIBLE & LIGHTWEIGHT

Key Benefits

- Weatherproof and breathable
- Rated A2 (EN13501-1), suitable for use over 18m
- Ideal for upgrading fire performance on remedial work & new installations
- Excellent strength and durability before and after age testing
- Lightweight, flexible
- Resistant to damage during installation to -40°C.
- Jointed by **FIREFLY®** membrane tape
- Supplied in 50m rolls 1.25m high

tbafirefly.com/vapoursafe

MEMBRANES	DESCRIPTION	USE AREAS	TESTING	APPLICATION
Membrane WP 	Non-combustible, lightweight, fire resistant, class A2 membrane. Vapour permeable. Suitable for use as a lining within ventilated façade systems 18m+	Use to upgrade existing and new installations requiring fire protection and waterproof cladding	BS EN BS476 Parts 20 & 22	Modular builds, exterior cladding systems, high-rise & high-risk commercial & residential properties
Membrane NB 	Non-combustible, lightweight, fire resistant, class A2 membrane. Non-breathable. Suitable for use as a lining within ventilated façade systems 18m+	Use as an impermeable fire protective barrier or reflective insulation within commercial wall applications	BS EN BS476 Parts 20 & 22 BS EN 13501-1 (Class A2)	Modular builds, exterior cladding , high-rise & high-risk properties, where an impermeable, non-breathable fire barrier is required
VapourSafe™ NEW 	Non-combustible, lightweight, fire resistant, class A2 membrane. Vapour permeable. Suitable for use as a lining within ventilated façade systems 18m+	Use to upgrade existing and new installations requiring fire protection and waterproof cladding	BS EN13501-1:2018 BS EN 13859	Modular builds, exterior cladding systems, high-rise & high-risk commercial & residential properties

ANCILLARIES	DESCRIPTION	USE AREAS	TESTING
NEW **Span** 	Fire-resistant linear joint seal designed to prevent the spread of fire, smoke, and sound. Made with compressible, thermally impregnated polyurethane foam with intumescent graphite.	For sealing linear joints in floors, walls, and curtain walls. Allows for structural movement while maintaining fire resistance, making it suitable for various construction applications.	BS EN BS EN 1366-4
Fire Collars 	Penetration sealing device that provides an expanding pressure seal during fire. Protects combustible pipes through floors and walls. Used as part of **FIREFLY®** FB180 tested Batt system.	To protect combustible pipes and maintain fire resistance as part of a tested and approved passive fire protection system.	BS EN 1366-3:2021
Access Panel FR120 	Heavy duty steel construction access panel. Easy installation and safe access while maintaining the integrity of the fire system. Provides up to 120 minutes fire resistance.	Used primarily in roof voids and lofts to provide reliable and safe acces to areas compartmentalised by **FIREFLY®** fire barriers.	EN 1363-1: 2020
FD30 Fire Door System 	Fire tested installation of Halspan FD30 interior 44mm fire door blank as part of a **FIREFLY®** flexible fire barrier system, achieving a minimum of 30 minutes Fire Protection.	Used in larger roof voids such as hospitals and care homes where a full size access door is required through a compartmentation zone	BS EN 1634-1
Collaroll 	A lightweight, flexible fire rated penetration collar used to seal penetrations through **FIREFLY®** fire barriers enabling the integrity of the fire barrier to remain intact.	Lightweight, flexible collar with flange - 120 minutes integrity. Use as a wrap around penetrations such as pipes	BS EN 1634-1
Timber Wrap 	A lightweight, woven glass fire barrier layer, designed to be affixed to or to be wrapped around a range of surfaces and structures as part of a **FIREFLY®** flexible fire barrier system.	Lightweight, flexible collar with flange - 60 minutes integrity for use primarily around timber	
Fire Hood & Downlight Cover 	Lightweight fire protective cover suitable for recessed luminaires or downlights of various sizes	Assessed for use with plasterboard – 60 minutes. Suitable for use under timber floors, assembly with plasterboard & suspended ceiling system	BS476 Part 23:1987
Pigtail Screws 	Galvanized Pigtail Screws for use as part of the **FIREFLY®** FB180 system	FB180 Wall and Floor system. Fire Collars	
Cable Ties 	Steel Cable Ties	For use with **FIREFLY®** Penowrap to ensure a fully tested and certified system.	
Pneumatic Staple Gun 	FF Pneumatic Staple Gun	For use with **FIREFLY®** fire barrier systems to ensure a fully tested and certified system.	

PROPERTIES & FEATURES	SIZE	PACKAGING	LIMITATIONS	QR CODE
Vapour Permeable, Breathable, Weather Proof, A2-Rated Combustibility, Flexible & Rollable, Made in Britain	Width: 125cm Length: 50m Thickness: 0.2mm Weight: 225g/m²	Supplied in 50m rolls and bagged	Resists damage from rain and temperatures as low as minus 40°C. Please refer to installation guide.	
Breathable, Weather Proof, A1-Rated Combustibility, Flexible & Rollable, Made in Britain	Width: 125cm Length: 50m Thickness: 0.2mm Weight: 225g/m2	Supplied in 50m rolls and bagged	Resists damage from rain and temperatures as low as minus 40°C. Please refer to installation guide.	
Vapour Permeable, Breathable, Weather Proof, A2-Rated Combustibility, Flexible & Rollable, Made in Britain	Width: 125cm Length: 50m Thickness: 0.2mm Weight: 225g/m2	Supplied in 50m rolls and bagged	Resists damage from rain and temperatures as low as minus 40°C. Please refer to installation guide.	

APPLICATION	SIZE	PACKAGING	LIMITATIONS	QR CODE
Modular builds, exterior cladding systems, high-rise & high-risk commercial & residential properties	25mm x 50mm 50mm x 50mm 75mm x 100mm 100mm x 100mm	25mm = 40 50mm = 40 75mm = 15 100mm = 10		
Retro fit in conjunction with our flexible fire barriers, FB180 Wall & Floor Batt Systems, up to 160mm. Should be used where a combustible pipe penetrates a fire rated wall or floor.	50mm, 60mm, 75mm, 90mm, 110mm, 160mm	Boxed in quantities of 8	Not suitable for use with cPVC pipes	
Vertical Installation to provide access as part of a **FIREFLY**® fire barrier system	Frame: 25mm width, Zintec steel Door: 600 x 600mm, Zintec steel Door: 1200 x 600mm, Zintec steel Door: 900 x 600mm, Zintec steel (available to order)	Supplied as single access panel unit including door panel, frame, lock, hinge, intumescent perimeter seal and fire barrier pillow to door rear. Unistrut and fixings not provided.	Not suitable for use with cPVC pipes	
Vertical	Single door maximum size – 2135 x 1100mm (door frame)		**FIREFLY**® flexible barriers must be fitted to join throughout the compartmentation, in accordance with **FIREFLY**® drawing and installation details. See website for more information.	
	30cm wide 10m length 1.3mm thick 5.1kG weight	Supplied and shrink wrapped in roll lengths	**FIREFLY**® Collaroll should be used with **FIREFLY**® barriers as part of a system	
	50cm wide 10m length 6kG weight	Supplied and shrink wrapped in roll lengths	Should be used with **FIREFLY**® barriers as part of a system	
	50cm wide 10m length	Supplied and shrink wrapped in roll lengths+M26:N27	Should be used with **FIREFLY**® barriers as part of a system	
	40mm 90mm 100mm	Packs of 1000		
	360mm 840mm	Packs of 100		
	12mm 16mm			

Case studies

From hospitals to hospitality, our FIREFLY® fire barrier systems are suitable for almost every type of building and interior space...

Education

Health & Social Care

Housing & Residential

Industrial & Production

Offices & Warehousing

Retail & Leisure

FB180 Batt System features in Glasgow Central Station redevelopment

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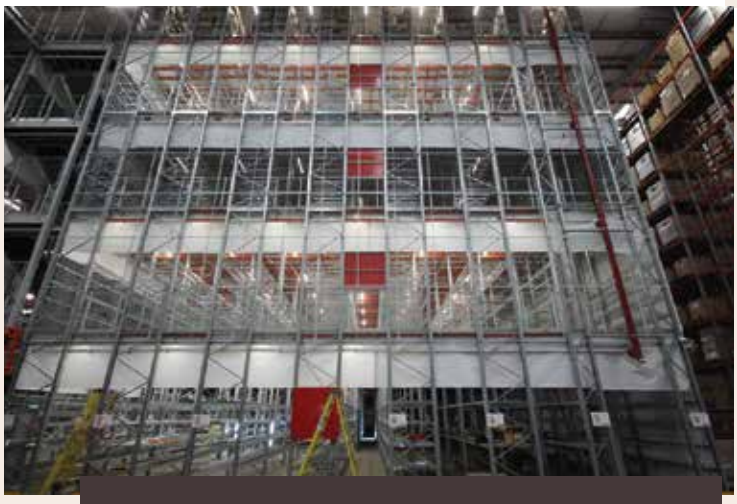
Offices & Warehousing

Phoenix specified to protect logistics warehouse



A large, multi-level logistics warehouse was upgraded using Phoenix and FB180 Batt system

Part of an international supply chain and logistics business, a vast warehouse in the Medway area of Kent enclosing almost 380,000 sq. ft. of storage space, has had its fire performance upgraded by a regular **FIREFLY**® customer utilising the manufacturer's Phoenix barrier material together with the recently launched 180 ablative batt and ancillary products to create a curtain running around the building perimeter.

The work at the Noatum Logistics ePort warehouse on the Isle of Grain was carried out by Essex based T&R Fire Protection over a five-week period earlier this year, with its operatives using a variety of access approaches to attach the lightweight Phoenix barriers to roof purlins and floor beams. **FIREFLY**® High Temperature Adhesive and special staples were used to secure the 150mm overlaps between lengths of the Phoenix material, as well as to secure the curtains to the lengths of steel angle and heavier section Unistruts.

The Site Manager for T&R Fire Protection, Tom Port-Smith, commented: "While we regularly put forward **FIREFLY**® systems for a variety of applications as our 'go-to' manufacturer for fire compartmentation. In this case the clients, Noatum/Dexion specified Phoenix based on having successfully installed in previous projects. We get great technical support from **FIREFLY**® whenever we need special details and the installation at the Medway premises went smoothly with the barriers being attached right around four floors and a walkway across a total distance of 600 metres."

Andy Greenwood, the Technical Sales Manager for **FIREFLY**®, explained how the relatively short Phoenix fire curtain offers a form of compartmentation in such situations: "A 300mm fire break, around the perimeter of a warehouse, is a standard fire safety measure."

"This means the 300mm wide band of fire-resistant material is used to separate different sections of the building – which typically house large amounts of flammable material – helping to contain a fire and prevent it from spreading. This is crucial for both life safety in allowing time for evacuation, and property protection: limiting damage and loss to the area where the fire starts."

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> **"We get great technical support from FIREFLY® and the installation went smoothly with the barriers installed on four floors and a walkway across a total distance of 600 metres."**
>
> Tom Port-Smith, Site Manager, T&R Fire Protection

Retail & Leisure

Titan Lite, Phoenix installed throughout airport expansion

FIREFLY® installed as part of £1.3billion upgrade at Manchester Airport

Following on from the redevelopment of Terminal 2 which was completed in 2021, the latest phases of work at Manchester Airport have seen an approved installer of the **FIREFLY®** range create thousands of square metres of the manufacturer's lightweight barriers, specified to provide compartmentation, offering up to 120 minutes of protection.

FIREFLY® was brought on board early in the design stages for the £1.3 Billion scheme to upgrade and expand Terminal 1 and refurbish Terminal 3, which will eventually see the Northwest's premier hub double in capacity. With construction giant MACE leading the project, London based LDD Construction is the specialist contractor installing the **FIREFLY®** Phoenix, Titan Lite and other products in four separate zones as passenger services continue with minimum disruption.

The Technical Manager for **FIREFLY®**, Chris Boam, recounts: "From a **FIREFLY®** perspective, we were involved during the design stage of the Manchester Airport works, providing technical input, drawings and specification support to the design team at Pascall + Watson. LDD Construction, as an approved **FIREFLY®** installer with trained operatives, were well placed to deliver the compartmentation requirements across multiple areas of the airport.

Throughout the installation phase, we worked closely with LDD and their Project Manager, Pavel Yegorov, providing technical support and carrying out site visits to review compliance as the works progressed. Given the scale of the project and the constraints of working within a live airport environment, maintaining alignment with tested and approved fire protection details was a key focus throughout."

The Project Manager for LDD, Pavel Yegorov, recounts: "We have installed around 50 different products from different suppliers for our fire-stopping work, but **FIREFLY®** is what the client likes and asks for. We use the products like Phoenix, Athena and Titan Lite for all different purposes in our work, including fire compartmentation along long corridors and at the head of walls."

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> **"The restricted space, with all the services going through on two sides, made this quite a challenging project. The project team and the other parties are very happy with the work we have done"**
>
> Pavel Yegorov, Project Manager, LDD

Industrial & Production

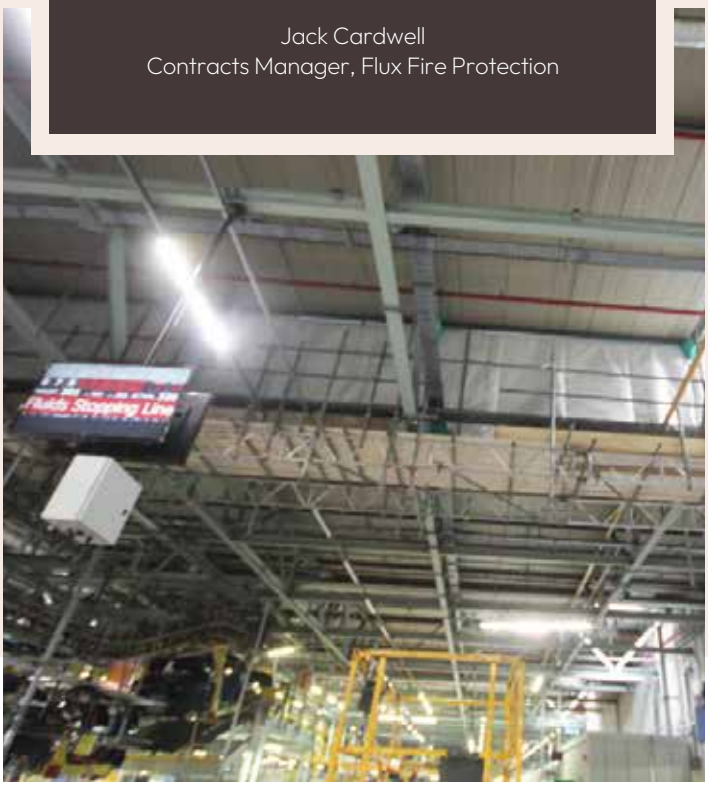
Apollo Lite upgrades roof at car manufacturing plant

FIREFLY® products successfully deployed in roof at UK's largest car manufacturing plant

Products from the **FIREFLY**® range have been successfully employed during a planned upgrade to the roof of the UK's largest car plant, ensuring the vast production space remains fully in line with current fire regulations. The work at the Nissan Motor Manufacturing plant in Sunderland, which produces big-selling models like the Qashqai, Leaf and Juke, was carried out by Flux Fire Protection during a seven/nine day maintenance period in May, when changes to the production tracks meant the existing smoke barriers beneath the roof had to be removed and reconfigured.

Following a direct approach from Nissan's engineering department, Apollo Lite 30/30 was selected from the **FIREFLY** range in preference to the manufacturer's Phoenix product and used to create a series of 2.4 metre deep smoke and fire barriers – each 21 metres in length – protecting five roof bays. In the unlikely event of a fire within the highly automated workspace, the Apollo barriers would act to prevent smoke travelling horizontally beneath the roof soffit, thereby assisting in the safe evacuation of the building. The Contracts Manager for Flux Fire Protection, Jack Cardwell commented: "This is the first time we have worked for Nissan Motor Manufacturing UK, who got in touch following a search which brought up our website. We put forward both the Phoenix and Apollo Lite, but the client chose Apollo because of the additional period of insulation it offers. Then to carry out the work, we used scissor lifts to get up to the self-supporting walkways installed by Nissan's own scaffolding sub-contractor. We bolted metal angles to the roof purlins, with the barriers fixed using **FIREFLY** 50mm Tek Screws. All overlaps were sealed using **FIREFLY** High Temperature Adhesive, while butt joints were fixed with stainless steel staples. The barriers were supported on vertical sections every eight metres, which is the maximum span the system can be installed unsupported. At the end of each run, the barriers were tied into the external façade or abutted a steel column.

> **"Apollo Lite was selected, protecting five roof bays. The work went really smoothly, especially given the compressed timeframe."**
>
> Jack Cardwell
> Contracts Manager, Flux Fire Protection



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Housing & Residential

FB180 Cavity Closer installed at army barracks

FIREFLY® Cavity Closers were fitted to protect the prestigious and historic Berwick Barracks

After adding a specialist fire design and contracting arm to its already diverse skill mix, Meldrum Group employed a similarly new product from the range of **FIREFLY®** during phased refurbishment work within the historic Berwick Barracks, located in the heart of the Scottish Borders: uprating the level of protection within the original pitched roof structures.

Brought in by main contractor, Meldrum Facilities to carry out a range of tasks including installing dozens of new fire doors, Meldrum Fire Engineering utilised **FIREFLY®** Roof Cavity Closer Batt to ensure the continuity of the compartmentation provisions within the extensive roof-spaces to the brick-built barracks.

> **"We had our operatives undergo product installer training at the FIREFLY® training centre. The FIREFLY® system was very straightforward to fit, plus we got very good technical guidance from the company."**
>
> Ian Cross, Contract Manager, Meldrum

A prominent landmark in Berwick-upon-Tweed, they date from around 1720 and are the home of the King's Own Scottish Borderers – attracting many thousands of visitors to its museum every year. The work there has been carried out under the scrutiny of English Heritage, while Edinburgh based LDN Architects has filled the role of lead consultant on the project. The first phase has seen the museum moved across the courtyard to the opposite wing which had already been refurbished, with the plan being to return the exhibits to their original location once that building has been upgraded.

The Contract Manager for Meldrum Fire Engineering, Ian Cross, commented: "The scope of our work has expanded rapidly over the past 18 months, carrying out contracts for the NHS, the new University of Glasgow campus, the Magdalen Trust and a number of care homes as well as clients in the commercial office sector – so we have a good mix of new-build and refurbishment work.

To date we have had half a dozen of our operatives undergo product training at **FIREFLY®** Rochdale premises, with more due to attend soon. Not only are the **FIREFLY®** products very straightforward to fit, but we get very good technical guidance from the company, with Daniel Gordon, the Scottish Sales Manager, always coming back to us very quickly when we need details. Also, he was always willing to visit site to confirm the installation has been carried out correctly. 'Right First Time' is very much part of our ethos."

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Retail & Leisure

Titan Lite installed at airport

FIREFLY® products installed at Birmingham Airport

Products from the **FIREFLY**® range of passive fire protection systems, including Titan Lite 120:60, are continuing to be used by one of the company's accredited and approved installers at Birmingham International Airport, as work progresses on phase 2 of the major reconstruction affecting the landside facilities used by thousands of passengers every day. The specification of Titan Lite for this prestige project reflects the barrier system's proven track record within industrial as well as more sensitive locations such as food processing facilities and data centres. Primarily intended for use in roof voids and other concealed spaces to create compartmentation, the high-performance material is manufactured from layers of aluminium as well as woven and non-woven glass fibre.

Developed for installation as a three-layer system, Titan Lite 120:60 is the highest performing barrier in the **FIREFLY**® range, offering two hours integrity and a full one hour's insulation. Work is being undertaken on behalf of main contractor Vinci by Midlands based KRASI Fire Protection, who in turn have deployed its teams repeatedly over the past 12 months and recently completed the installation of numerous compartmentation barriers within the roof space above the corridor areas adjacent to the World Duty Free Zone.

The Project Manager for Krasi Fire Protection, Richard Dark, commented: "Our task throughout has been to install new fire barriers to permit the existing ones to be dismantled, and thereby enable the major alterations and renovation work that is taking place. The **FIREFLY**® product range has been used here extensively in the past and the various details employed on the current work have been approved by the client and the airport's own fire engineer.

> **"The FIREFLY® product range has been used here extensively in the past and the various details employed on the current work have been approved by the client and the airport's own fire engineer"**
>
> Richard Dark, Project Manager

The barriers are being formed using the Titan Lite with lengths of Unistrut to secure the top of the barrier due to the distance between purlins."

The barrier is fixed to Unistrut, which spans between the purlins, with FB180 Batt mechanically secured through the Unistrut using **FIREFLY**® Pigtail Screws to maintain the compartment line up to the composite roof. Penowrap has been applied around the purlin ends to provide insulation, and Collaroll has been installed to protect service penetrations. Overall, the installation has progressed smoothly, and we are scheduled to return next month."

Manufactured from woven and non-woven glass, the **FIREFLY**® range of flexible barriers is designed to optimise resistance to flame and smoke, as well as offer heat protection in a wide range of scenarios. The barriers can be installed horizontally or vertically using a full selection of **FIREFLY**® ancillary products to create a fully tested and certified system. .

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Education

Zeus Lite ensures fire safety at new science building

FIREFLY® barrier system ensures fire safety of new Harwell science building

Critical work to ensure the fire performance across one elevation of a cavernous new research building, at a world-famous science campus in Oxfordshire, has been successfully carried out by a specialist installation company. Using a lightweight barrier system from **FIREFLY**® - in this instance, Zeus Lite Vertical was to remain permanently visible, requiring a novel upgrade to its appearance.

Harwell Science and Innovations Campus near Didcot in Oxfordshire, originally established in the 1940s as the country's atomic energy research centre but nowadays known as the Harwell Science and Innovation Campus. Harwell offers a mix of manufacturing, flexible laboratory space, R&D facilities and office accommodation, as well as for start-ups and major international businesses. As the designers of the Tech Edge, 1 AJA Architects chose to specify the Zeus Lite Vertical 90-30 system to protect the steel framed building from the proximity of another, timber clad office structure. Following a site visit and design input by a **FIREFLY**® Technical Sales Manager, Coventry based KRASI Fire Protection were awarded the contract to carry out the installation on behalf of Feltham Construction Ltd.

KRASI's Contract Manager, Daniel Oldacre, commented: "Due to the orientation and short distance to the existing building, a fire barrier was the only option and **FIREFLY**® Zeus Lite was specified. We installed it by shot-firing the normal steel angles against the inner frame of the building, stapling the barrier together and securing the barrier to it while we had to temporarily remove the cross bracing to achieve safe access for employing a cherry picker. However, while this would normally be left visible, we were required to conceal the staples by securing a strip of **FIREFLY**® Phoenix over the staples using high-temperature adhesive. The work went well – involving good cooperation with the client and architects and took us three weeks with four operatives on site."

FIREFLY® Technical Manager, Chris Boam, stated, "To meet the client's requirement for fire protection that not only achieved the necessary fire resistance rating but also maintained a visually appealing finish, we worked closely with KRASI to ensure all fixings were concealed. To accomplish this, the typically exposed staples were covered using **FIREFLY**® Phoenix, secured with high-temperature adhesive, while ensuring full compliance with safety standards.

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> **"FIREFLY® Zeus Lite was specified and we had to temporarily remove the cross bracing to achieve safe access for employing a cherry picker. We were required to conceal the staples by securing a strip of FIREFLY® Phoenix over the staples using FIREFLY® high-temperature adhesive. The work went well – involving good cooperation with the client and architects."**
>
> Daniel Oldacre, Contract Manager, KRASI

FB180 Ablative Batt protects patients at Staffordshire hospital

Health & Social Care

FIREFLY® FB180 Ablative Batts protect patients at Staffordshire Hospital

The FB180 Ablative Batts recently introduced to the range of **FIREFLY**® have been used along with two of the manufacturer's flexible barrier systems and ancillary products to carry out significant upgrades to a roof-space at the Sir Robert Peel Hospital in Tamworth, bringing the ward block up to current regulatory requirements. The Hospital is a minor injuries and day case surgery unit. The refurbishment contract concerning the roof-space was awarded to Coventry based KRASI Fire Protection in January of this year and carried out by half a dozen of its operatives, all of whom undergo annual training at **FIREFLY**® Rochdale premises. The area of roof void protected totalled over 400m2 with different periods of protection require depending on the usage of the area below and the positioning of the compartment walls.

> **"Prior to our involvement another contractor had attempted to install a batt wall system which came up to the underside of PIR insulation and wasn't compliant. When the FIREFLY® Technical Manager was called in, he recommended that the client check the TBA's approved installer list on their website, and KRASI quoted on upgrading the compartmentation."**
>
> Daniel Oldacre,
> Contract Manager, KRASI Fire Protection

The Contracts' Manager for KRASI Fire Protection, Daniel Oldacre, commented: "Prior to our involvement another contractor had attempted to install a batt wall system which came up to the underside of PIR insulation and wasn't compliant. When the **FIREFLY**® Technical Manager was called in, he recommended that the client check the **FIREFLY**®® approved installer list on their website, and KRASI quoted on upgrading the compartmentation – including installing the new FB180 **FIREFLY**® Batts together with Zeus 90:30 and Titan Lite™ 120:60 vertical barriers as 30 and 60 minute upgrades – depending on whether the space below was something like a kitchen or sluice, or a more critical access corridor. Then we put a horizontal protected zone in beneath the soffit which reaches 1.5 metres horizontally each side of the barrier using the FB 180 Batt.

This is all covered by the new detail which **FIREFLY**® brought out earlier this year and the company therefore also provided us with site specific details. To carry out the work we built walkways on the trusses above the suspended ceiling which allowed the Ward to remain in use throughout our contact which took 12 weeks. The installation was inspected by **FIREFLY**® and gained IFC certification. Overall, the project went quite smoothly, and the client is satisfied with the outcome." Underlining the versatility of its recently launched ablative batt, **FIREFLY**® has added the FB180 Floor System to its range with the potential to be installed between existing joists without disturbing the ceiling below, while also suiting numerous other compartmentation applications and even offering sound reduction benefits.

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Education

FB180 Batts & Titan help create new plant room above research laboratory

FIREFLY® FB180 Batts & Titan help create new plant room above research laboratory

FIREFLY® products, including our recently introduced 50mm Batt and Titan Horizontal, were used by one of Scotland's leading fire protection specialists to create a one-hour barrier within an existing floor construction at the University of Strathclyde.

The work within the upper level to the 20-year-old Robertson Building was carried out for the university's Estates and Buildings department by Glasgow based Adaptive Fire Protection under the direction of BMJ Architects, a highly respected practice with wide experience of the education and other sectors. The Technical Sales Manager for **FIREFLY**® in Scotland and Ireland, Daniel Gordon, was involved from an early stage in providing project specific guidance on the use of the new floor system, in combination with the manufacturer's Titan Horizontal barrier system offering 90:60 minutes of integrity and insulation. Commenting on the circumstances which led to the use of the new **FIREFLY**® system, the Project Architect for BMJ, Sonia Scott, said: "As part of our involvement on the Robertson Building, we were asked to create a new plant room up at roof level, but needed to make it internal so that maintenance work on the air handling units could be carried out without exposure to the weather. The Fire Engineering Consultant Jensen Hughes – therefore insisted that the floor zone between the usable occupied space below and the new plant facility should offer a one-hour fire resistance.

"Although I have used **FIREFLY**® barriers on other buildings in the past, this is the first time we have specified the new Floor Batts: they were identified as being ideal due to the slenderness of the build-up and the fact that the work had to be carried out from above as there was no possibility of getting access to the science laboratory below. The specification duly offered the required protection to the roof above with its Sarnafil covering." Underlining the versatility of its recently launched ablative batt, **FIREFLY**® has added a new Floor System to its range with the potential to be installed between existing joists without disturbing the ceiling below, while also suiting a few other compartmentation applications and even offering sound reduction benefits.

The **FIREFLY**® FB180 Ablative Batt 60mm Floor System has been developed for friction fitting between adjacent timber joists but has also been fully tested when laid horizontally across a larger area where a protected zone is required. This being one of the situations where the product can be used in conjunction with the Apollo Lite flexible fire barrier and the manufacturer's ancillary products such as its Acrylic Sealant and **FIREFLY**® Fixings or Penowrap to create an integrated system. Furthermore, like all **FIREFLY**® barrier systems, the new fireproof floor insulation's integrity can extend to protecting service penetrations, such as soil pipes, when fitted in compliance with the manufacturer's directions.

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> **"This is the first time we have specified the FB180 floor batts: They are ideal due to the slenderness of the build-up and the fact that the work had to be carried out from above, as there was no possibility of getting access to the science laboratory below. The specification duly offered the required protection to the roof above."**
>
> Jensen Hughes,
> Fire Engineering Consultant, BMJ Architects

Health & Social Care

Zeus Lite used to create compartments to protect care home

Operatives at PiLON were given installation training prior to fitting FIREFLY® Zeus and Collaroll at a care home in Kent

Davie Court Care Home, in Sheerness, on Isle of Sheppey, Kent – is the latest in a series of properties to be upgraded using **FIREFLY**® barrier systems, in partnership with PiLON, one of its accredited installers based in the South-east.

The four-month contract at Davie Court, a three-storey property built in the seventies with places for 38 one-bedroom flats, is being carried out by Bracknell based PiLON: an award-winning specialist contractor which has been active in the social house sector since 2004. To date, 10 of PiLON's operatives have undergone training in the installation of the **FIREFLY**® systems manufacturer's purpose-built facility in Rochdale, as it has grown to serve more clients in the sector.

The site manager for PiLON, Gabriel Predescu, commented: "As a multi-disciplinary, principal contractor, we specialise in the maintenance and refurbishment of assets owned and managed by social housing providers, establishing a strong reputation as a reliable partner. We operate across London, the South-East and the Midlands and are currently contracted with eight of the G15 Housing Associations. The company covers many specialist disciplines including electrical, kitchen and bathrooms, while also carrying out a lot of fire stopping and other fire upgrades. This includes work for Southern Housing. To carry out this work we have had a lot of our operatives undergo annual training with **FIREFLY**® and we are an approved installer for their systems. Here, it was the client which specified the use of Zeus and Collaroll along with the company's adhesives and other materials, while we also had on-site support from **FIREFLY**® Technical Manager, Andy Greenwood. Progress has been good with the Zeus being very straightforward to cut and install using the adhesive and steel angles. Then, as well as the fire barriers, we are also replacing all of the fire doors and communal doors – more than 20 in total."

> **"Our operatives had installation training with FIREFLY®, while we also had on-site support from thei FIREFLY® Technical Manager."**
>
> Gabriel Predescu, Site Manager, PiLON

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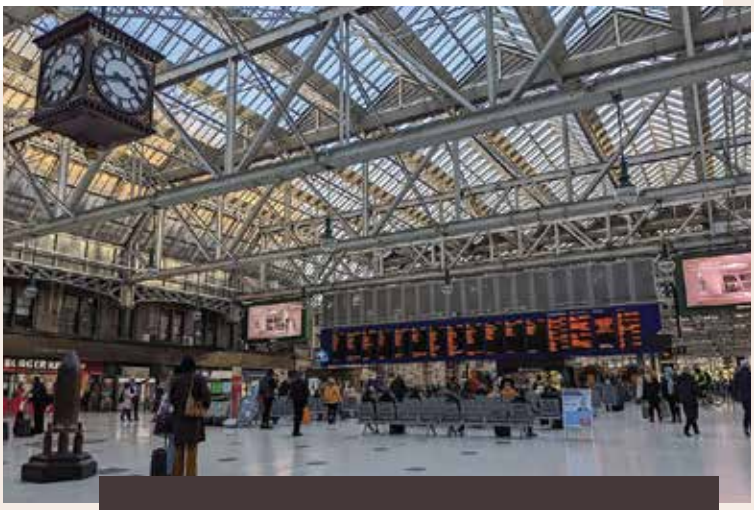
Retail & Leisure

FB180 Batt System features in Glasgow Central station redevelopment



FIREFLY® FB180 Batt fitted to provide protection in the historic Caledonian Chambers at Glasgow Central station

The first phase of a £5million investment by Network Rail in Scotland's busiest station, has completed with the opening of Avanti West Coast's new first-class lounge and ticket office. The first phase of the project involved the historic Caledonian Chambers area of the station which is on the east side of the concourse. Caledonian Chambers is a Category B Listed Building designed by Glaswegian architect, James Miller, and was completed in 1903. It was built for the Caledonian Railway Company.

> **"I had very good feedback from our installers, regarding the ease fitting them, with very little waste. Overall, we have had lots of positive comments about the work"**
>
> Joe Stewart, Qualifire

Modifications and improvements were led by Network Rail and included the upgrading of the fire protection for the historic main structure, which required the creation of bespoke as well as standard encasement details for large steel beams by sector specialist, **FIREFLY**®. Originally opened in 1879, the first phase of this multi-million-pound property project included the creation of Avanti West Coast's new ticket office and first-class lounge and a brand-new step-free Network Rail station reception on the concourse level. The wider project will see existing tenants relocate, new retail units created, and office accommodation refurbished. Such has been the extent of past adaptations that when the project began last November, the design team was unclear as to the nature of the roof deck's construction, until demolition of a fast-food restaurant revealed the I-beams up to 900mm deep.

Details originally developed by **FIREFLY**® parent company in Australia have been adapted to the requirements of the Building Standards (Scotland) and the Building Regulations, enabling the easy to cut and shape non-combustible FB180 batts to infill the web to different sized steel beams. The addition of fireproof mastic and additional layers and the special Ablative Coating complete an encasement which is able to offer 60 minutes or longer integrity and insulation. The installation work within the station, which has remained operational throughout, has been carried out by Glasgow based QualiFire Passive Fire Protection, with SIG being the merchant stockist supplying all the **FIREFLY**® materials.

Active across Scotland and the North of England, QualiFire was set up by Joe Stewart in 2019 as a specialist in passive fire protection solutions for clients in the education, healthcare and local authority as well as other sectors, but has been using **FIREFLY**® products for the first time on the Glasgow project.

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Health & Social Care

Titan Lite and Zeus Lite barriers installed to protect shape at cancer hospital

FIREFLY® barriers conform to complex shape of latest Maggie's Cancer hospital

> **"Because of the shape of the building, whose walls lean and curve in three directions, it would have been impossible to carry out conventional fire-stopping operations using fire boards and fire batts without extensive fire testing: so, the FIREFLY® products have proved ideal."**
>
> Simon Coldwell, Site Manager, Middlesex Limited

Conceived to offer comfort and support for patients and their families dealing with the trauma of cancer treatment, Maggie's Centres are also amongst the most striking of buildings to be found across our NHS estates, with the latest to be completed also showcasing the capacity of the UK construction industry to give form to architects' most imaginative concepts. Daniel Libeskind's design for the Maggie's centre at the Royal Free Hospital in North London eschew conformity in delivering a structure without vertical lines or flat surfaces, posing complex challenges for the contractors, including the fire-stopping specialists of Middlesex Ltd. who have made full use of **FIREFLY®** flexible fire barriers to protect the multi-directional form of the walls and soffits.

The 12 months build programme has been led by Sir Robert McAlpine, the Management Contractor and long-time supporter of the Maggie's charity, with Buckinghamshire based Middlesex Ltd. being appointed to install the façade and drywall wall elements to the build. As regular users of the **FIREFLY®** range, its fire-stopping division has employed Zeus Lite, Titan Lite and Collaroll across both the internal and external build up, covering the steelwork and other main elements to the structure. The Site Manager for Middlesex, Simon Coldwell, commented: "Because of the shape of the building, whose walls lean and curve in three directions, it would have been impossible to carry out conventional fire-stopping operations using fire boards and fire batts without extensive fire testing: so, the **FIREFLY®** products have proved ideal.

The company's technical reps have been out to site on several occasions – confirming compliance and providing special details for areas such as where the steel beams had to be wrapped at the wall/soffit junction. These had to allow for the potential expansion of intumescent paint of the steel in a fire, as well as maintaining continuity of protection. "As well as the fire-stopping internally, all of the exterior to the walls at ground and first floor level are wrapped in **FIREFLY®**. The barriers have been installed over the main frame and are then covered by 200mm of insulation, a Tyvek breather membrane and then the timber cassette cladding panels."

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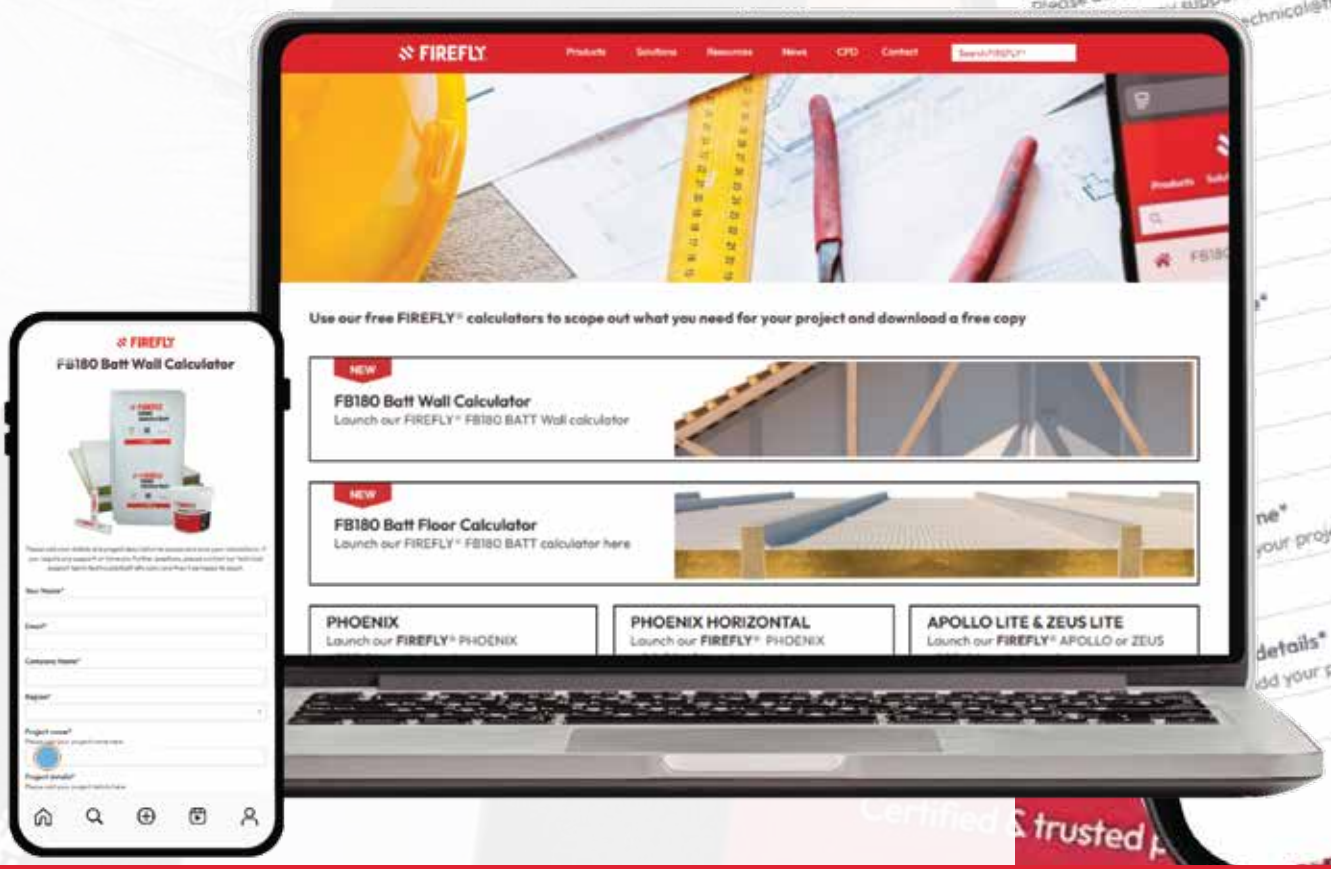
Calculators

Free and incredibly easy to use, our FIREFLY® calculator apps are available to use 24/7.

NEW

We've added new **FIREFLY®** FB180 Batt Wall and Floor calculators to our resources centre on our website. Free to use 24/7, head over our website to help cost and scope out your project. **tbafirefly.com/resources**

FIREFLY® introduced a range of new calculator apps to make estimating your latest project easy to plan and cost. Developed by our in-house team of experts, our calculator apps enable you to scope out in minutes and reach out to our technical support team if needed. **FIREFLY®** calculator apps work seamlessly desktop and mobile devices, meaning you can access them anytime, anywhere!



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