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Property fire is disastrous.

This is a statement that most people would agree with — especially those who have been unfortunate enough to experience the devastating effects of fire.







We can't completely prevent fires from starting — but what we can do provide innovative systems that will prevent the spread of fire until it is extinguished or it stops due to lack of oxygen or fuel.

How is this achieved? It is accomplished with Passive Fire Protection (PFP).

Buildings are designed to have 'sterile' areas that will contain a fire. These sterile areas are known as 'fire compartments'. Occupants of buildings in areas away from the fire source are therefore protected from flames, smoke and toxic gases by these compartments. An important and vital component within a building are the escape routes. These are constructed as separate fire compartments to keep them free of smoke and heat and as a result provide for the safe evacuation of the building. Passive Fire Protection products are used in these escape routes to maintain their integrity in the event of a fire.

To ensure the fire safety of buildings and for Passive Fire Protection to be effective it requires:

- Correct fire safety design & risk assessment
- · High performance certified products
- Trained installers



Why Protecta®?

Protecta® Passive Fire Protection products are manufactured by Polyseam Ltd, a progressive organisation with offices in the United Kingdom, Norway and Sweden. Polyseam have been independently manufacturing Passive Fire Protection products since 1993.

Our comprehensive manufacturing experience and capabilities, matched with dedicated research and development investment and extensive testing programme, has positioned our products as a top global brand. Our team of specialist chemists, engineers and technical managers design and test all our products. This is underpinned by the commitment and certification of our quality management systems, to ISO 9001 & ISO 14001.

Protecta® is a market leader in Passive Fire Protection, fire resistance, sound resistance and water resistance or a combination of them all. Protecta® offers an extensive range of penetration seals designed to provide systems which meet the harshest requirements of today's building and construction projects.



Polyseam Ltd new factory and Head office sits on 13,000 sq meters and is located in West Yorkshire, United Kingdom.



Specialist engineers and state of the art machinery.



In-house research and development facilities.

The Protecta® range

The Protecta® range of Passive Fire Protection products is one of the most comprehensive in the industry today. It is made up of a number of sealing solutions from intumescent and acrylic sealants through to mortar and the unique Protecta® FR IPT which is based on a NEW patented Inert Polymer Technology.

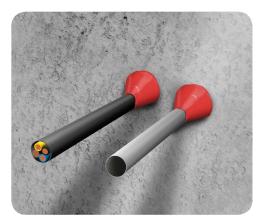
Protecta® products have been tested to the highest standards, are manufactured in our factory using the highest quality materials and our core products have achieved ETA's. They have a proven track record of sealing the penetrations found in buildings during construction, such as ventilation ducts, power cables, movement joints and pipes.

The Protecta® range is designed to offer specific protection for individual penetrating elements.

For further technical information on the entire range of Protecta® Passive Fire Protection products please visit <u>www.protecta.eu</u> or call our Customer Service department on +44 (0)1484 421036.

For quality, performance and reassurance — it pays to use Protecta®

FIRE STOPPING OF TINY GAPS



See this product on our website here

PROTECTA® FR PUTTY CORD

Protecta® FR Putty Cord is designed to be easily fitted around service penetrations where the gap around the services is very small. It is also perfect for where there are no gaps at all and it is difficult or impossible to use conventional fire rated sealants - due to the required depth and backing material.

Protecta® FR Putty Cord is an easy to apply fire and sound rated sealant supplied as a non-setting putty. The cord is hand workable, re-serviceable and re-useable due to its non-setting properties. They are supplied as pre-shaped mouldable cords Ø15mm x 200mm which are push fit and self adhesive

SAVE TIME AND MONEY

Protecta® FR Putty Cord is very versatile, the cords are pre-formed, mouldable and can be fitted in seconds sealing minor imperfections. It never hardens and ensures a tight fit, can be re-shaped to other sizes if necessary and has a working life of at least 25 years. It saves not only time and money, but also the preservation of life and property.

ECO AND USER FRIENDLY

Protecta® FR Putty Cord is solvent free, halogen free and has no VOC's (volatile organic compounds). No special tools are required for application, it is unaffected by moisture and is compatible with most building materials.

ALL IN ONE

Protecta® FR Putty Cord is tested and approved for a wide range of service types and installations, both within the new build and refurbishment sectors. A few examples of penetrations are cables in bundles, large cables, pipes (steel, copper and alupex) insulated or un-insulated. Tested within drywalls, masonry and concrete walls and concrete floors. The product also provides a good solution for suspended ceiling and timber floor applications.

ETA 16/0322 UL-EU 01053



See this product on our website here

PROTECTA® FR COLLAR

Protecta® FR Collars consist of a two part, coated, circular steel shell that fits around plastic pipes PVC-U, PVC-C, PE, LDPE, MDPE, HDPE, ABS, SAN+PVC and PP pipes; plastic pipe bundles — with or without cables, and bundles of cables. The collars have a secure and simple locking device.

The steel shell contains a patented fast expanding graphite material that reacts to heat. The graphite expands in the event of a fire to fill the opening left by the melting plastic of the through penetration. It can be fitted on the outside of a wall or floor, even in single sided applications.

Protecta® FR Collars are available up to Ø315mm with a wide range of pipe wall thicknesses. They are also available in two different heights for different fire classifications to maximize cost efficiency. With fire classifications up to 240 minutes for both integrity and insulation.

FAST REACTING TECHNOLOGY

Protecta® FR Collar is a perfect solution for core drilled pipe and cable bundle penetration holes. The reinforced steel collar exterior is designed to take the pressures of the intumescent's reaction, which expands to fill and crush down the melting pipe. This then fills the void that would otherwise allow for the passage of fire and prevent the passage of unseen toxic gasses.

SAVE TIME AND MONEY

Protecta® FR Collar (Fast Reacting Technology) has its own built in system, containing the fast reaction time of the intumescent. These collars can be simply fitted direct to the substrate through which penetrations such as plastic pipes, insulated pipes and cable bundles pass through. No additional requirements needed in most core/aperture drilled situations, whether they be plasterboard or concrete. Avaliable in two different heights for different fire classifications to maximise cost efficiency.

SOUND RESISTANCE

Protecta® FR Collar fitted as one single side collar on (160mm x 3.2 w/t) PVC pipe, results in a reduction of 58dB airborne sound. Making the Protecta® FR Collar an all-round robust firestop element and sound transfer reduction element.

CERTIFIED

Protecta® FR Collar has undergone hundreds of tests, achieving the markets best European Technical Assessment (ETA) possible. ETA's are necessary to CE mark the product.

ETA 14/0249 **UL-EU** 00913

FIRE STOPPING OF SMALL GAPS



See this product on our website here

PROTECTA® FR ACRYLIC

Protecta® FR Acrylic is widely used in markets across Europe. Its exceptional certification across a wide range of fire-stopping applications makes it popular with installers, reducing the need to carry different mastics. Used in combination with Protecta® FR Board establishes it as a unique fire rated acrylic in the PFP market place.

Protecta® FR Acrylic has been tested with various types of penetrations through walls, ceilings and floor constructions. Its intumescent property closes any gaps left by burnt away penetrations. It has a shelf life of 18 months

CUTS THE JOB IN HALF

Protecta® FR Acrylic is able to cut down application times, minimize material use and cut down on intensive labour costs. This is due to its ability to achieve high fire and insulation ratings with a single sided installation within solid construction elements, such as block or concrete walls.

ALL IN ONE

Protecta® FR Acrylic is tested and approved for a vast range of services types and installations both within the New Build and Refurbishment Sectors. A few examples are large single cables, large cable bundles and an array of plastic and metal pipes (insulated or un-insulated). Tested in plaster, masonry and concrete constructions and can also be used within dry lining applications. Protecta® FR Acrylic is one product with the flexibility for multiple applications.

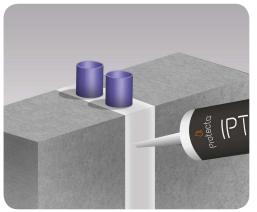
SOUND RESISTANT

Protecta® FR Acrylic is designed to resist not just the passage of fire but also an ever more prevalent issue of sound insulation and attenuation. Using Protecta® FR Acrylic Sealant, reductions of up to 62dB can be achieved with only a 12mm depth single sided, higher than most acoustic sealants in the marketplace today.

CFRTIFIFD

Protecta® FR Acrylic has undergone hundreds of tests, achieving the markets best European Technical Assessment (ETA) possible. ETA's are necessary to CE mark the product.

ETA 13/0879 & 13/0880 UL-EU 00912



See this product on our website here

PROTECTA® FR IPT

Protecta® FR IPT is a high performance, professional quality, one part ready to use sealant and adhesive. Based on an innovative new Inert Polymer Technology, it is suitable for a wide variety of building trade applications including decorating, flooring, joinery, plumbing and tiling and out-performs conventional silicone, MSP, butyl and acrylic based products as a sealant and adhesive — the only sealant free from dangerous emissions.

Protecta® FR IPT chemistry ensures compatibility with most building materials. It has 25% movement capability and so its dynamic movement will accommodate the natural or unexpected movements of sealed/bonded joints within a building. For long-lasting performance and fire protection.

ALL IN ONE

Protecta® FR IPT has been tested and approved for many service types and installations performed daily within the construction and refurbishment sectors. For instance, joinery, plumbing, flooring, tiling and within many dry lining applications. Protecta® FR IPT can be used as a sealant and an adhesive because its unique chemistry is compatible with most building materials. Protecta® FR IPT, one product for multiple applications.

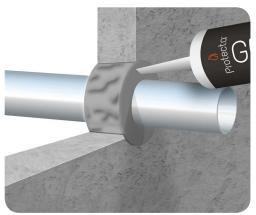
ECO AND USER FRIENDLY

Protecta® FR IPT uses technology and chemistry to achieve the lowest emission and VOC achievable within the sealants sector, falling well within the requirements of GEV. The results comply with EMICODE emission class EC1PLUS which is the best environmental and indoor hygiene health protection standard achievable.

CERTIFIED

Protecta® FR IPT has undergone hundreds of tests, achieving the markets best European Technical Assessment (ETA) possible. ETA's are necessary to CE mark the product.

ETA 14/0041 UL-EU 00910



See this product on our website here

PROTECTA® FR GRAPHITE

Protecta® FR Graphite is a waterbased, fire classified sealing compound which contains a high concentration of heat expanding graphite material. It also has a shelf life of 18 months.

Protecta® FR Graphite is a high specification formulation designed to prevent the spread of fire, smoke and gases through openings in fire rated walls and floors. Protecta® FR Graphite expands when it is subjected to heat and closes openings around penetrations when any combustible or low temperature melting materials have burnt away. It is designed to fire seal difficult services which traditional fire rated mastics do not achieve, such as large plastic pipes.

FIRE AND SOUND RESISTANT

Protecta® FR Graphite is a pressure exerting, aperture closer sealant designed to expand on contact with fire/excessive heat. It is resistant not just to the passage of fire, but also the ever more prevalent issue of sound insulation and attenuation. Using Protecta® FR Graphite, reductions of up to 53dB RW can be achieved with only a 25mm depth within single sided solid construction substrate, this is higher than most acoustic sealants in the marketplace today.

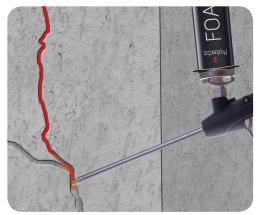
ECO AND USER FRIENDLY

Protecta® FR Graphite uses unique technology and chemistry to achieve the lowest emission and VOC achievable within the sealant sector. Falling well within the GEV requirements. The results achieved comply with EMICODE emission class EC1PLUS which is the best environmental and indoor health protection standard achievable.

CERTIFIED

Protecta® FR Graphite has undergone hundreds of tests, achieving the markets best European Technical Assessment (ETA) possible. ETA's are necessary to CE mark the product.

ETA 14/0242 UL-EU 00914



See this product on our website <u>here</u>

PROTECTA® FR FOAM

Protecta® FR Foam is a fire rated construction foam with good acoustic properties. Designed to maintain the fire resistance in walls and floors by filling linear gaps.

Protecta® FR Foam is supplied as a single component polyurethane foam which cures by moisture absorption. It has excellent adhesion to most materials used in construction with excellent durability during service once cured. The foam comfortably meets the fire resistance requirement of 240 minutes at a depth of 150mm, and is an ideal and cost effective option for sealing between concrete, Leca and similar elements where a quality surface finish is not required.

FIRE AND SOUND RESISTANT

Protecta® FR Foam is fire resisting up to EI240 dependent upon application. Used as a quick and inexpensive filler between concrete or masonry elements where no expansion movement is required. The product carries ETA and EC evaluation and approval for use in these area but also has excellent acoustic qualities, achieving up to 61dB.

CERTIFIED

Protecta® FR Foam has undergone hundreds of tests, achieving the markets best European Technical Assessment (ETA) possible. ETA's are necessary to CE mark the product.

ETA 15/0309

FIRE STOPPING OF LARGE GAPS



Protecta® EX Mortar works in conjunction with Protecta® FR Pipe Wrap.

PROTECTA® EX MORTAR

Protecta® EX Mortar is a dry white powder consisting of inorganic compounds and perlite. When mixed with water the compounds form a highly thermal insulating fire seal which prevents the spread of fire and smoke through openings in fire rated walls and floors. This includes openings formed to accommodate building service penetrations.

Protecta® EX Mortar expands by up to 1% by hydraulic action during curing, ensuring a very tight seal around service penetrations and the surrounding construction. Protecta® EX Mortar has a rapid setting time and it's easy to sand or drill after cure. The compound dries to an off-white colour which may be painted if required.

Protecta® EX Mortar will also maintain the acoustic design performance in walls and floors.

FASTER INSTALLATION

Protecta® EX Mortar is a high performance load bearing compound, tested with a vast array of penetrations through walls or floors, from depths as little as 50mm upward. This fast curing, workable, self levelling mortar is one of the best of its kind, providing safe usable working areas in a fraction of the time of its competitors.

LOAD BEARING WITHOUT REINFORCEMENT

Protecta® EX Mortar has great strength and adhesion properties with un-paralleled impact testing and the ability to withstand loads of up to 15kN concentrated load and 500Nm serviceability. It is not to be confused with normal mortars which shrink on curing and are therefore not suitable for reinstating fire separating floor installations.

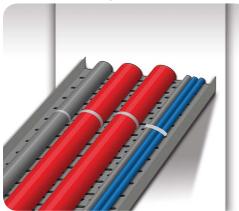
ALL IN ONE

Protecta® EX Mortar has been subject to the most stringent testing with approval for both fire compartment reinstatement and load bearing. This in conjunctions with a vast array of penetrating service installations, both within new build and refurbishment sectors. For instance, large cables, cables bundles, a wide variety of pipes from plastic to steel, copper and alupex, whether insulated or un-insulated

SOUND RESISTANT

Protecta® EX Mortar is designed to resist not just the passage of fire but also the ever more prevalent issue of sound insulation and attenuation. Using Protecta® EX Mortar, reductions of up to 64dB have be achieved. However, varying degrees of sound reduction can be achieved employing Protecta's wide and adaptable range of complimentary products.

ETA 13/0672 UL-EU 00911 See this product on our website here



Protecta® FR Board works in conjunction with Protecta® FR Acrylic, FR Pipe Wrap, FR Collars, FR Coating and FR Service Coating.

PROTECTA® FR BOARD

Protecta® FR Board has been designed to maintain the fire resistance of separating walls/floors where they are breached by single or multiple building services. It consists of a rigid stone wool core, sealed with Protecta® FR Coating on 1 or both faces. The coating provides an important barrier to the passage of fire, smoke & hot gases through the thickness of the board, reducing the rate at which the stone wool core heats up. This provides a better heat sink for the dissipation of conducted heat through penetrations with higher thermal conductivity.

The selection of the board coated on 1 or both faces is determined by installation considerations & fire resistance requirements. On site, Protecta® FR Board must be used together with Protecta® FR Acrylic for sealing around building services and the surrounding construction.

FASTER INSTALLATION

Protecta® FR Board is a high performance product carrying a classification code up to El 240 in a wide range of application, making it unique and advanced in a constantly challenging sector. Protecta® FR Board is also tested in single and double board applications both within solid construction walls, floors and dry lining scenarios. Single board testing has made for faster and more cost effective installation.

SAVE TIME AND MONEY

Protecta® FR Boards can be installed within in plasterboard wall constructions without time consuming framing of apertures. The flexibility afforded to the contractor of either friction fit or pattress installations are quick, easy and less labour intensive.

ALL IN ONE

Protecta® FR Board is tested and approved for a wide range of services types and installations, both within the new build and refurbishment sectors. A few examples of penetrations are cables in bundles, large cables, pipes (plastic, steel, copper and alupex) insulated or un-insulated. Tested within plasterboard and masonry walls, concrete, traditional and timber floor constructions.

SOUND RESISTANT

Protecta® FR Board is designed to resist not just the passage of fire but also an ever more prevalent issue of sound insulation and attenuation. Using Protecta® FR Boards, reductions of up to 55dB can be achieved with a mere single thickness 50mm board installation.

ETA 13/0673 UL-EU 00919

FIRE STOPPING ACCESSORIES



See this product on our website here

PROTECTA® FR PIPE WRAP

Protecta® FR Pipe Wrap is a graphite material, within a flexible plastic sleeve that reacts to heat expanding to fill the void created by the melting plastic throughpenetration. It can be used with plastic pipes (PVC-C, PVC-U, PP, PE, PE-HD, ABS and SAN+PVC), bundles of plastic pipes — with or without cables, and metal pipes with penetrating combustible insulation.

Fitted by wrapping around the through-penetration and securing with the adhesive tape, then casting into the wall or floor construction fitted in either Protecta® FR Board or Protecta® FX Mortar

FAST REACTING TECHNOLOGY

Protecta® FR Pipe Wrap is a flexible sleeve with a graphite intumescent inner, the perfect solution to wrap around plastic and insulated pipes within numerous construction scenarios.

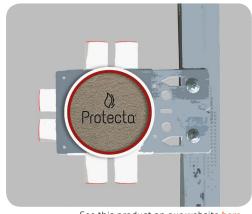
SAVE TIME AND MONEY

Protecta® FR Pipe Wrap is very versatile in use and quickly and easily installed. It saves not only time and money, but also the preservation of life and property. Able to cope with a vast array of penetrating elements such as plastic pipes, insulated pipes and cable bundles, this is a light weight, cost effective, but heavy hitting penetration seal.

CERTIFIED

Protecta® FR Pipe Wrap has undergone hundreds of tests, achieving the markets best European Technical Assessment (ETA) possible. ETA's are necessary to CE mark the product.

ETA 14/0247 **UL-EU** 00915



See this product on our website here

PROTECTA® FR GRAPHITE PLATE

Protecta® FR Graphite Plate is a pre-formed selfadhesive intumescent plate, used to reinstate the fire resistance performance of flexible wall constructions when punctured with plastic wall boxes. It is used where the walls have been provided with apertures for the penetration of conduits and cables into socket boxes, on one or both sides of the wall.

The graphite plate immediately reacts to the heat of the fire and automatically expands and fills up the box, preventing fire and smoke from passing through. Fitting Protecta® FR Graphite Plate will reinstate the fire resistance performance of flexible wall constructions for at least 60 minutes. It also prevents the passage of smoke and fire through the electrical conduits between socket boxes.

Protecta® FR Graphite Plate is available in pre-formed plates that fit the different types of electrical boxes from these manufacturers:

- FLKO
- SCHNEIDER
- ABB
- RUTAB
- LK FUGA

SAVE TIME AND MONEY

Protecta® FR Graphite Plate can be installed in seconds saving you time and money.

FAST REACTING TECHNOLOGY

Protecta® FR Graphite Plate immediately reacts to the heat of the fire and automatically expands and fills up the box, preventing fire and smoke from passing through.

CERTIFIED

Protecta® FR Graphite Plate has undergone hundreds of tests, achieving the markets best European Technical Assessment (ETA) possible. ETA's are necessary to CE mark the product.

ETA 16/0321



See this product on our website here

PROTECTA® FR PUTTY PADS

Protecta® FR Putty is an easy to apply fire and sound rated sealant supplied as a non-setting putty. The pad is hand workable, re-serviceable and re-useable due to its non-setting properties. They are supplied in pre-shaped mouldable pads which are push-fit and self adhesive.

Protecta® FR Putty Pads for tap water wall boxes will reinstate the fire rating of a dry lining partition wall for one and a half hours. It will also prevent the passage of smoke and flames in a fire and sound and air movement during service life, through the wall boxes into the cavity.

Protecta® Putty Pads for electrical sockets are shaped for use on both single and double electrical sockets installations in dry lining walls. The pads are supplied in a cross shape for internal installation in a socket and in a rectangular shape for application on the rear of the socket.

SAVE TIME AND MONEY

Protecta® FR Putty Pads are very versatile, the pads are pre-formed, mouldable and can be fitted in seconds sealing minor imperfections. It never hardens and ensures a tight fit, can be re-shaped to other sizes if necessary and has a working life of at least 25 years. It saves not only time and money, but also the preservation of life and property.

ECO AND USER FRIENDLY

Protecta® FR Putty Pads are solvent free, halogen free and has no VOC's (volatile organic compounds). No special tools are required for application, it is unaffected by moisture and is compatable with most building materials.

ETA 16/0322 UL-EU 01053



See this product on our website <u>here</u>

PROTECTA® FR SERVICE TRANSIT

Protecta® FR Service Transit consists of a circular high temperature plastic tube containing a graphite based intumescent lining material which expands upon heating to seal spaces or voids around cables and pipes, thus preventing the passage of flames, smoke and gases. After installation of the Service Transit, cables and pipes can be retrofitted without having to install a new fire seal.

The Service Transit is available in three different lengths, 150mm, 250mm and 400mm and the selection of which to use depends on the thickness of the supporting construction and the required fire classification. Certified for PVC-U, PVC-C, PE, LDPE, MDPE, HDPE, ABS, SAN+PVC and PP pipes plus all kinds of cables up to a certain diameter.

SAVE TIME AND MONEY

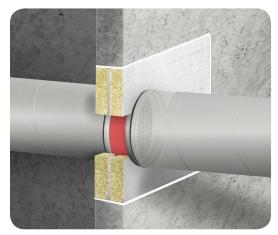
Protecta® FR Service Transit is the perfect product for applications where multiple cables and fibre optics are likely to need replacing when operational areas change or need upgrading. Available in multiple lengths and sizes, providing a versatile way of ensuring that areas which require change do not undergo complete removal of more permanent methods of fire stopping and replacement each time change occurs.

Protecta® FR Service Transits contain within them our patented fast expanding graphite material. The intumescent expands and closes the internal area of the transit within seconds of coming into contact with extreme heat or fire. It is one of the most cost effective products for ensuring a reusable fire seal with the comfort of knowing that the compartment is still protected.

Ideal for installations where it is likely that services will be inserted or replaced later on. Ideal for installations in tight spaces where it will be difficult to install a normal fire seal at a later stage in the building construction. Classified for fire sealing all types of constructions; drywalls, masonry or concrete walls and concrete floors. Can be fitted several ways; cast in concrete, friction fitted in concrete, masonry or gypsum, or inserted in larger apertures with Protecta® FR Acrylic, FR Board and EX Mortar. Very high fire classifications up to 240 minutes for both integrity and insulation.

ETA 17/0695 UL-EU 01067

FIRE STOPPING ACCESSORIES



See this product on our website here

PROTECTA® FR DAMPER

Protecta® FR Damper is used to fireproof ventilation duct penetrations in fire resistance walls and floors. Available in rectangular or circular form and require no mechanical or external device to operate as they rely solely on an internal reaction initiated by heat. They are therefore maintenance free and no electrical connections are necessary.

In a fire situation Protecta® FR Damper will rapidly expand to completely block the duct or opening thus preventing the further passage of fire, smoke and hot gasses. The damper can be installed in the fire seal and the ventilation ducting attached or the damper can be connected to the ducting and then fire sealed.

The aperture where the ducts pass through can include one or multiple ventilation ducts. Ducting can also pass through alongside other technical services such as cables, cable trays and pipes within the same aperture.

SAVE TIME AND MONEY

The active material encased within Protecta® FR Dampers provide maximum protection against the passage of fire and smoke and has a service life of more than 50 years.

Protecta® FR Dampers have no moving parts that can go faulty. They are easy to install and the same damper can be installed in both walls and floors. Designed to fit standard ducting equipment so that the installer can easily fit the dampers and require little maintenance thus saving time and money.

FAST REACTING TECHNOLOGY

Protecta® FR Dampers contain within them our unique quick reacting graphite intumescent. The intumescent expands rapidly upon coming into contact with extreme heat or fire, thus preventing the passage of fire and smoke both surrounding and inside the ventilation duct.

THE 'CLOSE IN AND PULL OUT' PRINCIPLE

A combined close in and pull out solution is one that prevents spread of fire by closing off the fire inside the fire compartment and that uses the ventilation system outside the area of the fire to pull out any smoke that filters out through the fire compartments constructions. Protecta® FR Dampers have to be used in all ventilation duct penetrations in fire compartments and fire walls. The dampers will close off the fire compartment but not in the parts of the building that are not on fire.

UL-EU 01028



See this product on our website here

PROTECTA® INTERIOR PAINT FR-1

Protecta® Interior Paint FR-1 is a water based intumescent acrylic paint for walls and ceilings. It is as easy to use as conventional paints providing a high quality, durable, decorative finish. Ideal for use in communal areas (e.g. public buildings, schools and hospitals) on broad walls and timber as it insulates against heat and prevents the spread of fire unlike conventional paint systems. Classified to EU Standard EN13501-1.

Protecta® Interior Paint FR-1 can be applied using a brush or roller leaving 2 to 4 hours between coats to achieve the desired thicknes. Spray equipment can also be used for faster results, for example Graco X-Force Spray Gun, with a tip size 17-21 thou. It has a coverage rate of 2.7m² per litre and offers excellent fire resistance. Available in 3 litre and 10 litre pails and in a variety of colours to provide a decorative and protective finish

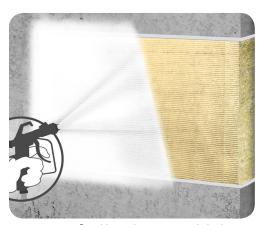
ROBUST AND EASY TO USE

Protecta® Interior Paint FR-1 is not only a quick way of upgrading an existing constructions fire performance, but is also does not suffer the same labour intensive process as more traditional methods of achieving this, saving on down time. Work can be undertaken in occupied areas with no ill effects.

CERTIFIED

Protecta® Interior Paint FR-1 has undergone hundreds of tests, achieving the markets best European Technical Assessment (ETA) possible. ETA's are necessary to CE mark the product.

ETA 16/0520



See this product on our website <u>here</u>

PROTECTA® FR COATING

Protecta® FR Coating spray grade, is an ablative sealant coating designed to enhance, seal and fire protect mineral fibres. It is based on a durable polymer system with inert fillers, non-halogenated fire retardants and a preservative to resist microbial attack.

Protecta® FR Coating is designed to be applied by spraying directly onto mineral fibres. The coating dries to give a sound, flexible white surface finish. During installation of mineral fibres, the cured sealant coating reduces de-lamination and increases surface stability for adhesive and fixing sealant application.

UNBEATABLE FIRE RESISTANCE

The ablative property of Protecta® FR Coating resists the spread of flames and protects the mineral fibres against fire penetrating. This is done by significantly reducing the permeability of the mineral fibre core and preventing the passage of hot gases and reducing rising temperature on the unexposed side. This also reduces heat conduction through the building services.

Mineral fibres coated with Protecta® FR Coating are designed to prevent the spread of fire and smoke through openings in fire rated walls and floors, also where openings are formed to allow the installation of multiple building services. The system will also maintain the acoustic design performance.

CERTIFIED

Protecta® FR Coating as undergone hundreds of tests, achieving the markets best European Technical Assessment (ETA) possible. ETA's are necessary to CE mark the product.

ETA 15/0821 & 16/0717



See this product on our website here

PROTECTA® **SERVICE COATING FR-1**

Protecta® Service Coating FR-1 is a water-based intumescent coating for the fire protection of cables in a service installation. The coating upgrades the insulation and integrity of the installation. The coating is non-toxic, emission free, durable and can be applied in one coat.

ECO AND USER FRIENDLY

Protecta® Service Coating FR-1 is non-toxic and emission free with near zero VOC's and the best possible emission classification. This is perfect for anyone not wanting to breathe toxic chemicals and especially people suffering from asthma, allergies or any other breathing related issues.

SAVE TIME AND MONEY

The WFT = wet film thickness = usage in litres per $m^2 = 0.3$ litre per m^2 (1000microns/ μ is 1mm). Protecta® Service Coating FR-1 is a one coat system and its durability is expected to be at least 12 years making it a cost effective option.

CERTIFIED

Protecta® FR Service Coating FR-1 as undergone hundreds of tests, achieving the markets best European Technical Assessment (ETA) possible. ETA's are necessary to CE mark the product.

ETA 13/0673 UL-EU 00919

APPLICATION OVERVIEW

Type of penetration	Seals without penetrations							Cables							Steel		Copper pipes		Alupex pipes		ventilation ducts		Plastic Pipes							
Size	30mm	50mm	100mm	300x300mm	1200x2400mm	1200x∞mm	≤Ø 21 single	≤Ø 21 bundled	≤Ø 50 single	≤Ø 50 bundled	≤Ø 80 single	≤Ø 80 bundled	Trays & ladders	Without insulation	<Ø 325	Without insulation	≤Ø 54	Without insulation	≤Ø 75	≤1.2m x 1.7m	≤Ø 1250	≤Ø 32	≥Ø 40	≤Ø 75	≤Ø 110	≤Ø 160	≥∅ 400	Conduits	PEX pipe-in-pipe	
FR PUTTY CORD	X	х	Х	Х	Х	Х						Х	х	V		1	1		х	√2)	$\sqrt{2}$)	Х	Х	Х	x	Х	Х	Х	х	
FR COLLAR	х	Х	Х	х	Х	х	Х	Х	х	Х	х	Х	Х	Х	Х	Х	х	х	х	х	х	1	1		√	√		Х	х	
FR ACRYLIC		1	√	√	х	х		$\sqrt{}$					х			1	1		√	√2)	√2)	√	√		х	х	х		$\sqrt{}$	
FR GRAPHITE	х	х	х	х	х	х	$\sqrt{}$	x	х	х	х	Х		Х	х	Х	х	х	х	х	х	√	√		1	Х	Х		х	
FR IPT		Х	х	х	х	х	Х	х	Х	х	х	Х	х		x	1	Х		х	х	х	х	х	х	Х	х	x	х	х	
FR FOAM		Х	х	х	х	х	Х	Х	х	Х	х	Χ	х	Х	х	Х	х	Х	х	х	х	х	х	Х	Х	х	х	Х	х	
EX MORTAR		V	1	√		х	$\sqrt{}$	$\sqrt{}$								1	1		√	√2)	√2)	√	1	$\sqrt{1}$	$\sqrt{1}$	$\sqrt{1}$	$\sqrt{1}$		$\sqrt{1}$	
FR BOARD		V	1					$\sqrt{}$								1	1		√	√2)	√2)		$\sqrt{1}$	$\sqrt{1}$	$\sqrt{1}$	$\sqrt{1}$	$\sqrt{1}$		$\sqrt{1}$	
FR PIPE WRAP	х	Х	Х	х	х	х	Х	Х	х	Х	х	Χ	х	Х		Х	1	Х	√	x	х		1		V				$\sqrt{}$	
FR SERVICE TRANSIT	х	Х	Х	х	х	х		$\sqrt{}$	х	Х	х	Χ	х	Х	х	Х	х	Х	х	x	х		х	Х	х	х	х		х	
FR DAMPER	Х	Х	X	Х	Х	Х	Х	Х	X	X	Х	Х	Х	Х	Х	X	X	Х	Х	1	1	Х	X	X	X	Х	X	X	х	

 $[\]sqrt{=}$ Yes $\mathbf{X} = \text{No}^{-1}$ With Protecta® FR Pipe Wrap. ²⁾ With Protecta® FR Damper.

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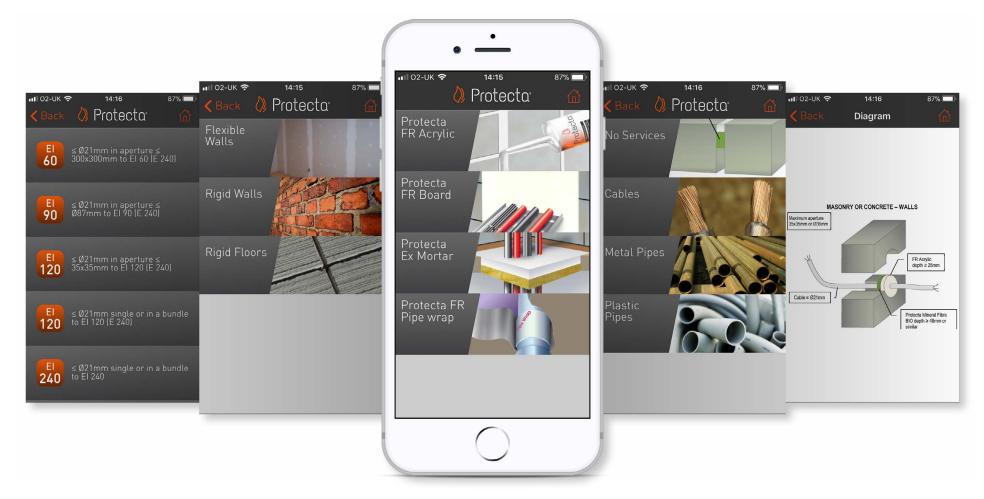




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