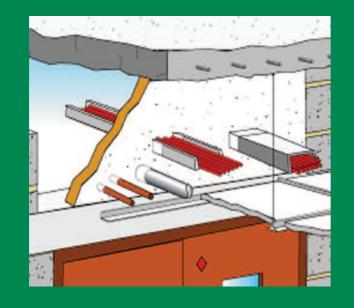
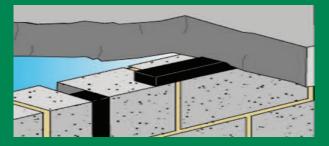
## CAVITY BARRIERS

Installation of products designed to fill fire rated joints in non-load bearing walls and structural joints in floors where a degree of movement is expected in the life of the building. Products in this range are of a very specialised nature and are designed for particular instances; Some systems are designed to firestop between the edge of the floor slab and curtain walling / cladding system and others are created for use within a cavity wall construction and some are designed to form cavity barriers at 20 metre intervals under raised access flooring.



### LINEAR GAP SEALS



Installation of products to provide firestopping to vertical and horizontal construction joints and at the interface between compartment walls and soffits. These products can be cut on site or pre-fabricated to suit joint size or indeed to block size to fit profiled decking / sheeting.

# FIRE CURTAINS

Fire curtains are effectively a cavity fire barrier developed to provide compartmentation of structures, typically within roof voids and above suspended ceilings. They are designed specifically to halt the passage of smoke and flame and in some circumstances insulate the cold face of the barrier from rapid temperature rises in a fire situation.

### PLASTIC PIPEWORK AND TRUNKING

Installation of products to fill the holes left in compartment floors and walls left by plasticpipes and trunking burning out. These products are generally used in conjunction with other types of firestopping services and range from intumescent wraps which are used in load-bearing compound type fire-stopping, to collar type which is used in conjunction with ablative panel or intumescent mastic. Also there are products to effectively provide a firestopping solution for cable management.



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# "Providing The Perfect Finish"



Joseph Hughes - Belfast Office



# PASSIVE FIRE PROTECTION DIVISION



intumescent coatings fire spray systems fire boarding systems

### PASSIVE FIRE PROTECTION – PFP DIVISION

The PFP division of Joseph Hughes offers a wide range of fire protection solutions to the construction industry and has expertise in intumescent coatings, sprayed fire protection, rigid and mineral fibre boarding, fire, thermal and acoustic compartmentalisation and firestopping. As the division is totally independent of the passive fire protection manufacturers, there is no vested interest in any product supplied or specified. Through a process of value engineering the client will receive the most cost effective fire protection solution in compliance with current legislation.

The operatives of the PFP Division are continually trained at our C.I.T.B. Approved Training Centre in the following disciplines of Passive Fire Protection:

• Intumescent Coatings • Cementitious and Mineral Wool Sprays • Board Systems

### INTUMESCENT COATINGS

There is an increasing demand by designers and architects for thin film intumescent systems as a method of fire protection for structural steelwork in modern buildings. Modern design often involves the use of the steel structure as part of the architectural feature in the building. When steelwork is expressed in this manner, the only aesthetic option for fire protection is an intumescent coating system.

Related Services which can be provided alongside a spraying service:

- Primer Compatibility Checks
- To ensure the complete Intumescent paint system is compatible.
- Annotation Service

To note on structural steelwork drawings the loadings of paint for the specifier or Building Control officer.

• Specification Assessment

To ensure the intumescent coating is suitable for the Environmental Category or Corrosivity Grade as set out in ISO – 12944.

• WFT and DFT Testing Records

To ensure correct loadings are applied in compliance with Published loading tables of paint manufacturer.

### ALL INTUMESCENT SPRAYING WORKS CARRIED OUT BY JOSEPH HUGHES' PFP DIVISION ARE ACCOMPANIED BY THE PAINT MANUFACTURER'S CERTIFICATES.

The benefits of intumescent coatings are that they are aesthetically pleasing, easily installed using conventional paint spraying equipment, can be applied to hollow sections, decorative topcoats can offer many colour options and they minimise space taken up for provision of passive fire protection.

# **REFURBISHMENT AND RESTORATION PROJECTS**



### SPRAYED FIRE PROTECTION

Cementitious and Mineral Wool systems are excellent fire protection materials giving fire resistance to steel and concrete structures for up to four hours. Many of these systems are fire tested to hydrocarbon standards as well as for resistance to blast overpressures. These systems are widely used and are particularly effective on tall buildings where fire resistance periods are often 120 minutes plus and the footprint of the building is relatively small.

The logistical advantages of cementitious sprays are immense and the speed at which the fire protection is applied cannot be rivalled by any other system. The benefits of cementitious sprays in summary are they provide up to four hours resistance, cost effective, easy to monitor, approved and recognised application techniques and the inert material will not degrade over time. These spray materials can also provide both acoustic and thermal benefits to buildings as well.

The Blast Division can help in refurbishment projects where old structural steelwork is judged to require fire protection or indeed where coatings have been applied but have failed. Before intumescent coatings can be applied the surfaces can require quite extensive preparation such as open blasting, Ultra High Pressure ( UHP ) Blasting or mechanical discing or grinding. By completing these works in-house through a sister division, we are able to iron out any programming issues providing a complete service to the Client.



### BOARD SYSTEMS

Board systems are many and varied. Low cost mineral wool-based products are generally used on beams where they will often be hidden by a suspended ceiling. Gypsum and calcium silicate based materials, supplied self - finished are used on columns and other low level applications where appearance and resistance to impact damage are more important. Boarding systems are a very popular option since their flexibility and speed of installation is a significant benefit and is less disruptive allowing other trades to operate in the same area.



### **COMPARTMENTALISATION / FIRESTOPPING**

A building is a dynamic environment which is continually changing to meet the demands of its' occupants. A large amount of risk originates from the increasingly complex mechanical and electrical service installations and imperfections of fit (e.g. gaps at wall heads) in fire resistant walls and floors. These risks are often neglected because they are hidden within suspended ceilings, raised access floors and service riser ducts.

The PFP Division provides the following compartmentalisation services;

### SERVICE PENETRATIONS

Installation of products to firestop / seal around mechanical and electrical services where they pass through fire rated walls and floors. Several systems can be used from compound, which will provide a load bearing seal to an ablative-coated panel system for non-load bearing situations, to intumescent pillows, which are easy to remove and re-instate whilst changing services.

