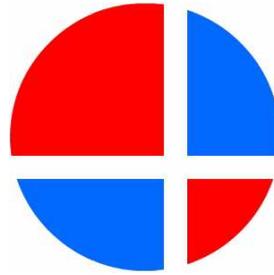




**AirFire**  
**CONTROL**



We are specialists in passive/structural fire protection and air tightness. We have over 20 years experience within these fields throughout the construction industry.

Based in Derbyshire we operate Nationwide throughout the UK.

We are committed to providing a quality and cost effective service at competitive prices. We pride ourselves in always delivering on time, and never letting our clients down.

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**Passive Fire Protection**  
**Structural Fire Protection**  
**Intumescent**  
**Dry - Lining**  
**Consultancy**

**Air Sealing & Air Testing**  
**Surveying and Advice**

*We guarantee that we can be **on-site** working throughout the UK **within 24 hours**.*



**AirFire** Control Limited

*We will never let you down....*

# Passive Fire Protection

Passive fire protection (PFP) is an integral part of the three components of structural fire protection and fire safety within a building.

PFP attempts to contain fires or slow the spread, through use of fire resistant materials.

All PFP systems, down to the smallest details, are founded upon, and entirely useless without bounding.

The aim for passive fire protection systems is to demonstrate in fire testing the ability to maintain the item or the side to be protected at or below either 140°C (for walls, floors and electrical circuits required to have a fire-resistance rating) or ca. 540°C, which is considered the critical temperature for structural steel, above which, it is in jeopardy of losing its strength, leading to collapse.

Passive Fire Protection measures are intended to contain a fire in the fire compartment of origin, thus limiting the spread of fire, excessive heat and corrosive, re-ignitable and fatal flue gases for a limited period of time, as determined by testing, which must bound the installed configuration in all respects in order to comply with the law, which is typically the local building code and the fire code.

## Structural fire protection

**Structural fire protection** gives integrity to steel or concrete structures from the effects of a fire in order to maintain a full load bearing capacity over a period of specified time. This is achieved through the installation of various materials.

**Fireproof cladding** (boards used for the same purpose and in the same applications as spray fireproofing) Materials for such cladding include Perlite, Vermiculite, Calcium Silicate, Gypsum, Intumescent Epoxy, DuraSteel and Beamclad.

**Spray Fireproofing** - application of **intumescent** or endothermic paints, or fibrous or cementitious plasters to keep substrates such as structural steel, electrical or mechanical services, valves, liquified petroleum gas (LPG) vessels, vessel skirts, bulkheads or decks below either 140°C for electrical items or ca. 500°C for structural steel elements to maintain operability of the item to be protected

### Summary

Typically, during the construction of buildings, fire protective systems must conform to the requirements of the building code that was in effect on the day that the building permit was applied for. Enforcement for compliance with building codes is typically the responsibility of municipal building departments.

Once construction is complete, the building must maintain its design basis by remaining in compliance with the current fire code, which is enforced by the fire prevention officers of the municipal fire department.

The most important goal of fire protection: **life safety**. This is mainly accomplished by maintaining structural integrity for a time during the fire, and limiting the spread of fire and the effects thereof.



## Air Sealing

Air sealing is now an essential feature within industry and building regulations, firstly to meet environmental standards and secondly to control & manage the movement of gases from fire and toxic smoke.

The amount of air leakage has a huge impact on occupant comfort and energy costs. The pressure testing process supplies air to the building at a variety of airflow rates and measures the resulting pressure differentials across the building.

We can offer piece of mind within air sealing by offering a total package of surveying, sealing and testing, or simply any individual aspect.