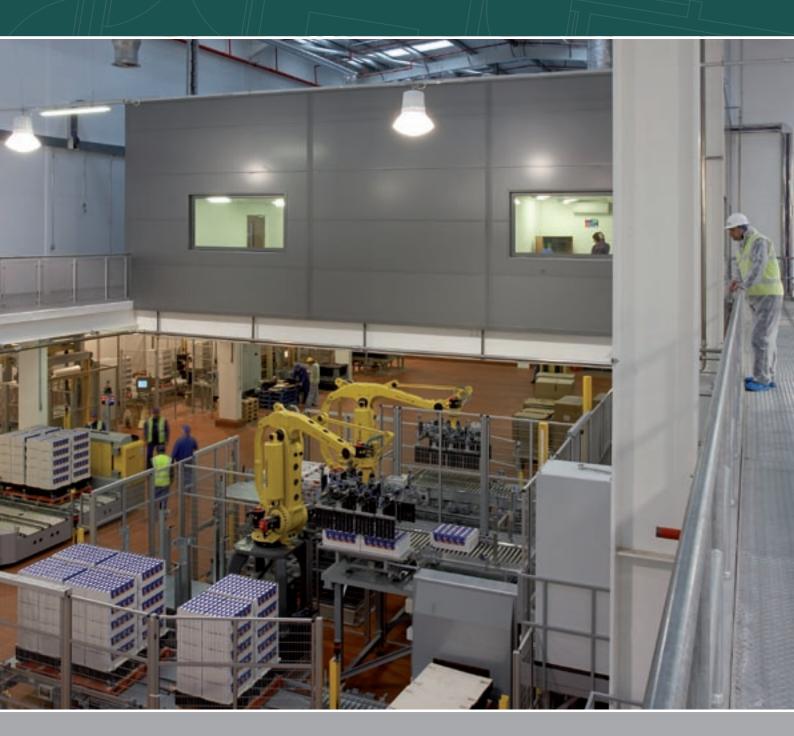


Composite Panel Firewall Systems



# Protecting more than your business



Insulated mineral fibre panels have excellent thermal and acoustic properties, ideal for factory and office partition walls



Stancold offer LPCB approved panel systems. The integrity of the structure is maintained, with no spread of fire within panel core, no flaming drops, low smoke emissions and satisfies the fire insulation criteria.



installed as the entire wall system or upon a block work or pre-cast concrete base.



No CFCs or HCFCs are used in the manufacture of the mineral fibre core of the panel and it is fully recyclable. The importance of fire safety in buildings can never be understated. Fire not only destroys buildings, it cripples business and endangers life.

Composite panels are used very successfully for internal walls and can compartmentalise fire. With high fire resistance they limit the spread of flames from one area to another, reducing the potential for loss and increasing safety for occupants and the emergency services.

The Stancold Firewall System includes non-combustible panels, profiles and sealants. By using high-density rock-fibre mineral wool our panels offer fire resistance of between 60 and 240 minutes.

Our system is certified by the Loss Prevention Certification Board to LPS 1181 Part 2, LPS 1208, and BS 476 Part 22e.









#### **Advanced Composite Panel System**

The system is designed to satisfy the demands of modern construction. It gives you flexibility of design, simple installation, improved thermal performance, tremendous durability, excellent fire safety and good overall economy.

For industrial and commercial internal partitions and walls, the system provides a more effective solution than traditional masonry or jumbo stud partitions.

#### **Faster build times**

The long individual panel spans of the system is a major advantage to construction professionals. They help to lower the construction programme and expenditure, plus minimise insurance costs.

#### High performance panels

Used as internal partition walls in industrial and commercial buildings, the panel system delivers improved fire ratings, strength and insulation.

#### **Bright future**

During a technical briefing on the fire performance of sandwich panels, the Association of British Insurers declared that, 'Masonry is not the only solution for compartment walls'. And went on to say, 'sandwich panel systems can be used very successfully in this application'. That's one of the many reasons why sandwich panels are superseding block work for internal walls in industrial and commercial construction.

### Block work v. Stancold Firewall system

- Our insulated composite panels do the same job but cost less per m<sup>2</sup>.
- Installation time is vastly reduced as our panels are easier and quicker to install. This in turn saves on costly scaffolding access for high-level block build.
- The manufacture of our panels is, as opposed to concrete, far less harmful to the environment.

#### **Benefits include:**

Lower cost of installation

Faster build times

Factory quality pre-finished

Insulating

Safe and uncomplicated

Minimal on-site waste

No wet trades

No scaffolding

## More applications



Mineral Fibre panels have the ability to prevent the penetration of hot gases and flames.



Mineral Fibre panels can reduce the temperature rise on the unexposed side of a fire, thus preventing fire spread through radiated heat.



The use of insurer approved products is increasingly being insisted on by the insurance industry, in all aspects of building construction. Stancold work closely with the insurance industry to ensure that our installations comply with their requirements.



Manufactured using metal facings bonded to a high density structural mineral fibre core, mineral fibre panels offer exceptional spanning characteristics.

Internal walls built with our panels are highly fire resistant, lightweight and extremely flexible. With finished facings on both sides they are an excellent alternative to more conventional masonry or concrete block walls.









#### Flexibility of use

The system can be used in many ways for industrial and commercial construction, including:

- Industrial units, warehousing, temperature controlled environments, hygienic applications and factory installations.
- Internal party walls dividing large areas of differing usage, either as the entire wall system, or upon a base of pre-cast concrete block work.
- Partition walls to create office and personnel environments in warehouses.
- Compartmentalise existing warehouse, office and personnel areas with high degrees of fire resistance.
- Stancold panels can be easily removed and reused in another location. The high quality and strength of panels ensure a longer life and superior overall economy.
- To give more freedom for designers and architects, panel framework can be made of steel, concrete or wood.

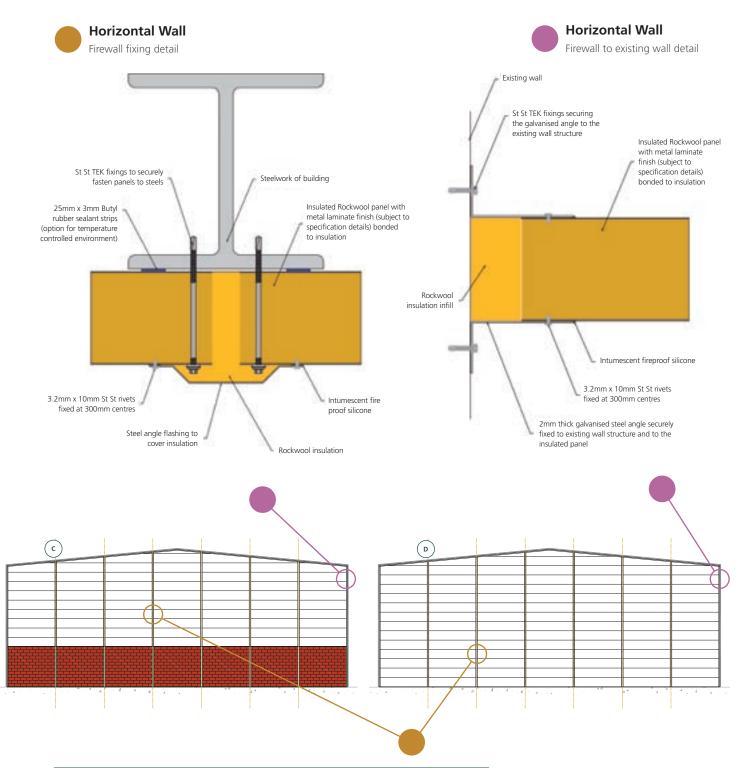
#### Stronger lightweight construction

The advanced sandwich structure provides panel strengths in excess of 50 kN/m². Combined with a weight of just 15–38 kg/m², depending on panel thickness, installation becomes far quicker and easier. The weight includes insulation, vapour barrier and finished surfaces.

Internal walls constructed by Stancold are safe and uncomplicated. The strength of the panel allows for high and wide spans and great flexibility in the positioning of doors and other openings. Vertical installation is a practical and economical solution for high internal walls, when the height of the support structures fits in with the panel span. Horizontal installation, between columns, is the traditional way of mounting panels.

Talk to us at the beginning of your project and we can help you avoid costly and time-consuming delays.

#### **Construction details** Ceiling structure St St TEK fixings securing the galvanised angle to the ceiling structure **Vertical Wall** Firewall to ceiling detail 2mm thick galvanised slotted steel angle Rockwool insulation securely fixed to ceiling structure and to the insulated panel to allow for deflection to external roof 3.2mm x 10mm St St rivets fixed at 300mm centres Intumescent fireproof silicone Insulated Rockwool panel with metal laminate finish (subject to specification details) bonded to insulation **Vertical Wall Vertical Wall** Firewall base detail Firewall fixing detail Insulated Rockwool panel Insulated Rockwool panel with metal laminate finish with metal laminate finish (subject to specification (subject to specification details) bonded to insulation details) bonded to insulation Intumescent fireproof silicone 3.2mm x 10mm St St rivets St St TEK fixing fixed through the panel fixed at 300mm centres and through the 2mm thick galvanised steel angle support steelworks. Optional cover cap over securely fixed to existing floor for panels to sit into TEK fixing available in a wide variety of colours to suit panel specification Sheeting rail/secondary steel support Non-Setting Bedding Mastic Hammer fixings



Panel Data:	
Panel Thickness	60mm – 200mm
Fire Rating	30 – 240 minutes
U Value	(W/m <sup>2</sup> k) 0.72 – 0.21
Panel Weight	15.5 – 38 kg / m²
Panel Core	Mineral Wool
<b>Acoustic Performance</b>	30 DB Max
Panel Lengths (Max)	14 m
For panel specific data please contact Stancold on <b>+44 (0) 117 316 7000</b>	

or email sales@stancold.co.uk



Assessed to ISO 9001: 2000 Certificate number 600



