Corus Panels and Profiles

Roof and Wall Composite Panels
With over 40 years experience in dealing with major building and construction projects throughout the UK and Europe, Corus Panels and Profiles have built an enviable reputation for technical knowledge and product innovation.

By working in partnership with clients over this long period, and listening and reacting to their needs, Corus Panels and Profiles continually refines its product range.

Research, manufacturing capability, quality control and testing procedures, as well as human and financial resources, play a leading role in the design and supply of composite panels to the construction industry to meet the most demanding specifications and volumes.

Corus Panels and Profiles’ extensive product range includes both foam filled and Rockwool cored composite panels. Subject to correct installation on site, this method of panel construction ensures that stringent regulations on thermal insulation and air permeability are fully complied with.

As a complete factory produced, single component product these composite panels provide designer and client alike with the essential reassurance that the building will meet the necessary regulations not only at the time of installation but also, critically, throughout its life.

By specifying Corus Panels and Profiles’ composite panels, time and money is saved at the two key stages in the project: at the design stage through the simplicity of detailing and on-site with installation because errors and omissions are significantly reduced.

Introduction

With over 40 years experience in dealing with major building and construction projects throughout the UK and Europe, Corus Panels and Profiles have built an enviable reputation for technical knowledge and product innovation.
Guardian Rockwool cored panel systems combine the best steel technology with the proven fire performance of Rockwool.

The Panels have excellent fire and acoustic properties and have been engineered to eliminate cold bridging with an airtight seal thus lowering the environmental impact and running costs of the building.

The strict quality control regime employed at the manufacturing units ensure the product conforms to the rigid specifications required for structural, thermal and acoustic performance.

The Guardian Panels were tested at Warrington Fire Research Centre in accordance with BS476, Part 22 and were shown to give a minimum performance of 60 minutes integrity and insulation. The panels are approved by the Loss Prevention Certification Board (LPCB) and are suitable for use as fire rated external or partition walls. The Guardian Panels also satisfy the requirements of Class O as defined in Building Regulations.

Features and Benefits
- Rockwool Core - Fire resistant and acoustically efficient
- Approved by the Loss Prevention Certification Board
- Panel Engineering - Weather tight and thermally efficient
- Complies with L2 Building Regulations
- Wide Range of Finishes - Aesthetically pleasing
- Comprehensive and robust warranties - piece of mind and reassurance

Trisomet Composite Panels have the extra flexibility to give your buildings the edge. Its new sharper design features a revolutionary robust interlocking joint to deliver greener, LPC and FM approved, total envelope building solutions to your projects.

Foam-filled composites offer the benefit of total one source quality control and provide a cost effective, attractive and environmentally sympathetic means of construction.

Trisomet is a profiled composite panel featuring an autohesively bonded, CFC/HCFC free polyisocyanurate core.

The joint detail, together with the foam formulation provides the panel with great strength and thermal efficiency. It is approved by the Loss Prevention Certification Board (LPCB) and Factory Mutual (FM) for both roof and wall application and also achieves 1 hour fire resistance to BS476, Part 22.

The Trisomet Panel is capable of spanning considerable distances with high resistance to bending and having good shear strength. They also satisfy the requirements of Class O as defined in the building regulations.

Features and Benefits
- Single component assembly - fast track construction, minimal installation costs.
- Uninterrupted insulation coverage - excellent thermal efficiency.
- Autohesively bonded steel facings - increased structural integrity.
- No cold bridges - warm roof construction.
- A range of panel thicknesses available - can comply with Building Regulations Part L2.
- A range of tailor-made components - total envelope approach allows design freedom.
- CFC/HCFC free insulation - environmentally friendly.
- Robust interlocking joint - thermally efficient and low air permeability.
Trisomet

A redesigned and improved profiled polyisocyanurate composite panel equally suited for roof or wall assembly.

Features and Benefits of the New Trisomet panel

• The panel’s steel interlocking robust joint gives 1 hour minimum fire resistance.
• The panel carries approval by the Loss Prevention Certification Board (LPCB) and also by Factory Mutual (FM) for both roof and wall applications.
• The interlocking and angled joint design allows the panel to be compressed tightly at its side lap giving improvements in air permeability.
• Greater panel strength is achieved by the interlocking liner providing greater resistance to loading and also gives scope to span larger distances.
• The increased thermal efficiency makes it ideally suited to high humidity conditions.
• The panel is HCFC and CFC free.
• The panels are available in a wide range of pre-finished steel products including Colorcoat Armacor® and Colorcoat HPS200®, the most specified pre-finished steel in Europe which is now maintenance free and covered with the Confidex® Guarantee for up to 30 years. Developed over forty years the Colorcoat® brand provides the Corus recognised mark of quality and metal envelope expertise.

When used in roof applications, construction can be safely undertaken down to a 4 degree pitch using conventional through fasteners.

Factory assembled windows, rooflights and flashing accessories complete the system, offering cost effective, fully insulated “warm construction” for industrial and commercial buildings.

Curved eaves and ridged details can also be accommodated to complement the Trisomet system. The panel specification can be matched with a range of fasteners, sealants and flute fillers.

Fixing Specification

Primary - preferably positioned in the valley. High thread fasteners are recommended incorporating an EPDM sealing ring with a 19mm diameter load spreading washer, one fixing per trough at sheet ends and every other trough at intermediate supports.

Secondary - high torque stitching screws are recommended which have an EPDM sealing ring with a 14mm diameter washer to be secured at 450mm centres.

Trisomet panels are available in core thicknesses of 40mm, 60mm and 80mm. The panel is available in lengths up to 14000mm. The panel has a cover width of 1000mm and a profile depth of 32mm.

Trisomet Specification

<table>
<thead>
<tr>
<th>Application</th>
<th>Wall or Roof (Vertical &amp; Horizontal)</th>
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</thead>
<tbody>
<tr>
<td>External Finish</td>
<td>Colorcoat Armacor®, Colorcoat HPS200®, Colorcoat Celestia®, Colorcoat® PVDF</td>
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<tr>
<td>Internal Finish</td>
<td>Smooth Bright White Polyester</td>
</tr>
<tr>
<td>External Face</td>
<td>Profiled (1000/32)</td>
</tr>
<tr>
<td>Internal Face</td>
<td>Planked</td>
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<td>Standard Width</td>
<td>1000mm</td>
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<td>Max Length</td>
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<td>External Gauge</td>
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<td>Internal Gauge</td>
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<td>*Thickness ‘U’ Value</td>
<td>40mm - 0.450W/m²K, 60mm - 0.320W/m²K, 80mm - 0.250W/m²K</td>
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<tr>
<td>Weight</td>
<td>40mm - 10.53kg/m², 60mm - 11.29kg/m², 80mm - 12.05kg/m²</td>
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<tr>
<td>Insulant</td>
<td>PIR (HCFC free)</td>
</tr>
<tr>
<td>Acoustic Properties</td>
<td>Sound transmission class rating - 28db (for sound transmission loss tabulated from frequency range 100-5000 Hz)</td>
</tr>
</tbody>
</table>

*Assuming 1000mm module
Composite Panel Systems

Robust Details

**Base Detail**
- Drip Flashing
- Support angle
- Continuous high performance strip sealant 4mm diameter bead
- Mineral wool insulation

**Verge Detail**
- Gable Flashing butt or lap jointed sealed with two continuous high performance strip sealant 9 x 3mm
- Flashing stitched with sealed rivets or self drilling fasteners with sealing washers no greater than 450mm centres
- Continuous high performance strip sealant 4mm diameter bead

**Parapet**
- Continuous high performance strip sealant 6mm diameter bead
- Flashing stitched with sealed rivets or self drilling fasteners with sealing washers no greater than 450mm centres
- Site applied Insulation board
- Rail to be jointed with sleeve to ensure continuous seal using high performance strip sealant 6mm diameter

**Ridge Flashing Butt or Lap**
- Jointed sealed with two runs of continuous high performance strip sealant 9 x 3mm

**End Lap**
- Primary fastener, 5.5mm diameter self drilling austenitic S.S. high thread fastener with sealing washer

**Water head screw or tet**
- Profiled Filler sealed top and bottom
- Loose fill mineral wool insulation
- Cleder
- Purin

**Continuous high performance strip sealant 6mm diameter bead**
- End lap 150mm minimum

**Primary fastener, 5.5mm diameter self drilling austenitic S.S. high thread fastener with sealing washer**

**Profiled filler sealed top and bottom**

**Primary fastener, 5.5mm diameter self drilling austenitic S.S. high thread fastener with sealing washer**

**Flashin stitched with sealed rivets or self drilling fasteners with sealing washers no greater than 450mm centres**

**Internal Flashing stitched using rivets no greater than 450mm centres**

**Flashin stitched with sealed rivets or self drilling fasteners with sealing washers no greater than 450mm centres**

**Continuous high performance strip sealant 6mm diameter bead**

**Site applied Insulation board**

**Continuous high performance strip sealant 6mm diameter bead**

**Rail to be jointed with sleeve to ensure continuous seal using high performance strip sealant 6mm diameter**

**Foam**

**Insulated membrane lined gutter**

**Continuous high performance strip sealant 6mm diameter bead**

**Primary fastener, 5.5mm diameter self drilling austenitic S.S. high thread fastener with 19mm sealing washer**

**Primary fastener, 5.5mm diameter self drilling austenitic S.S. high thread fastener with 19mm sealing washer**

**Internal Flashing stitched with sealed rivets or self drilling fasteners with sealing washers no greater than 450mm centres**

**Primary fastener, 5.5mm diameter self drilling austenitic S.S. high thread fastener with sealing washer**

**Flashin stitched with sealed rivets or self drilling fasteners with sealing washers no greater than 450mm centres**

**Primary fastener, 5.5mm diameter self drilling austenitic S.S. high thread fastener with sealing washer**

**Continuous high performance strip sealant 6mm diameter bead**

**Internal Flashing stitched using rivets no greater than 450mm centres**

**Flashin stitched with sealed rivets or self drilling fasteners with sealing washers no greater than 450mm centres**

**Continuous high performance strip sealant 6mm diameter bead**

**Primary fastener, 5.5mm diameter self drilling austenitic S.S. high thread fastener with sealing washer**

**Continuous high performance strip sealant 6mm diameter bead**

**Primary fastener, 5.5mm diameter self drilling austenitic S.S. high thread fastener with sealing washer**

**Continuous high performance strip sealant 6mm diameter bead**

**Primary fastener, 5.5mm diameter self drilling austenitic S.S. high thread fastener with sealing washer**

**Primary fastener, 5.5mm diameter self drilling austenitic S.S. high thread fastener with sealing washer**
**Eaves**

- Gutter and Eaves flashing lying in every trough
- Gutter Support Bracket 1 metre spacing and either side of gutter joint.
- Rivets/Stitching Screws 3 per Support Bracket
- Primary fastener, 5.5mm diameter self-drilling austenitic S.S. high thread fastener with 19mm sealing washer
- Loose fill mineral wool insulation

**Internal Corner**

- Internal corner flashing butt or lap jointed with two continuous beads of high performance strip sealant 9 x 3mm
- Top sheet cut back on site to avoid cold bridge
- Continuous high performance strip sealant 3mm diameter bead
- Primary fastener, 5.5mm diameter self-drilling austenitic S.S. high thread fastener with sealing washer

**External Corner**

- Continuous seal of high performance strip sealant 6mm diameter bead
- Internal flashing stitched to underside of the panel using rivets at a minimum of 400mm centres. Sealed using continuous high performance strip sealant 6mm diameter bead
- Flashing to be stitched using sealed rivets or self-drilling fasteners with sealing washers no greater than 400mm centres

**Wall to Brick Wall Abutment**

- Masonry fastener
- Continuous PVC expandable foam seal between wall and internal flashing
- Primary fastener, 5.5mm diameter self-drilling austenitic S.S. high thread fastener with 15mm sealing washer
- Continuous high performance strip sealant 3mm diameter bead

**Roof to Brick Wall Abutment**

- Masonry fastener
- Lead flashing/EP Cover Flashing
- Continuous PVC expandable foam seal between wall and internal flashing
- End wall flashing butt or lap jointed sealed with two runs of continuous high performance strip sealant 9 x 3mm

**Cantilever Gutter**

- Flashing to be stitched using sealed rivets or self-drilling fasteners with sealing washers no greater than 400mm centres

**Internal flashing stitched to underside of the panel using rivets at a minimum of 400mm centres. Sealed using continuous high performance strip sealant 6mm diameter bead**

Ψ = 0.019 W/mK
f = 0.94

Continuous high performance strip sealant 3mm diameter bead
Flashing to be stitched using sealed rivets or self drilling fasteners with sealing washers no greater than 450mm centres

Primary fastener, 5.5mm diameter self drilling austenitic S.S. high thread fastener with 15mm sealing washer

Ψ = 0.32 W/mK
f = 0.73

Drip flashing Window frame

Continuous high performance strip sealant 3mm diameter bead

Position panel against rails with overlap edge in underlap recesses as shown

Small force is required to engage panel (ie. push with side of foot or hand)

When end lapping the panel some inward pressure may be required at the point indicated by the red dot shown below to engage the panel as it is moved into place

No site applied side lap sealant is required

The new Trisomet panel is simple to fit in roof and wall applications and no site applied side lap sealant is required. If you require any further assistance, please contact our technical department on 01684 856600.
Corus Panels and Profiles Paramount System is a non-loadbearing fully insulated fire resistant wall cladding system available to meet Building Regulation requirements and has a four hour rating.

This system is intended for use as an external wall, sited at least 1 metre from a relevant boundary. It is not suitable for partitions. Using a composite panel reduces the overall thickness of the system.

Installation of this system to be in accordance with approved document B (Fire Spread) in the Building Regulations 2000.

System assessment to comply with BS476 part 22:1987 in relation to internal fire.
- Stability = 240 minutes
- Integrity = 240 minutes
- Insulation = 30 minutes

Acoustic performance is an increasingly important functional area for steel roof and wall cladding systems. Whether it be reducing noise levels within a factory environment or eliminating nuisance from sound in residential areas, acoustic control is a significant aspect of steel cladding design.

This system is particularly suited to applications where sound absorption is required for the ceiling or roof.

Corus Panels and Profiles have the system to meet sound reduction and sound absorption standards frequently specified by industry today.

Test reference AT/94/19(20) System 4.
- Weighted SRI, Rw 30.3 dB (predicted)

Trisomet RTS, roof tile support system offers an alternative to traditional timber truss and structural metal tray lining systems.

See the Corus Panels and Profiles Tray & Support Systems brochure for more details.
Guardian

– Fire resistant Rockwool panel

Guardian is the Rockwool cored panel from Corus Panels and Profiles, complimenting the foam panels to provide a composite panel solution for any application.

Corus’ experience in composite panel manufacture has been developed over the past 20 years by utilising its prodigious research and development teams to maximum benefit, including a specialist fire engineering department.

The in house testing and research resource available to Corus from composite manufacturing plants in 6 countries ensures that we are at the forefront of composite panel manufacturing technology.

The strict quality control regime that Corus insist is applied at all stages of manufacture, from iron ore smelting, to the production of the finished product, ensures a consistent quality product that is backed with a complete process audit trail.

Access also to the latest developments in coating technology ensures that our customers constantly receive products that are truly fit for purpose.

The Guardian Panels are available in a variety of pre-finished steel products, including Colorcoat HPS200®, the most specified pre-finished steel in Europe which is now maintenance free.

- Fire Resistant
- LPCB approved system
- Weather-tight and thermally efficient construction
- Acoustically efficient
- Building regulations L2 compliant
- Aesthetically pleasing appearance
- Comprehensive and robust warranties
- Quality assured manufacture

Guardian Rockwool panels

Introduction

- Fire Resistant
- LPCB approved system
- Weather-tight and thermally efficient construction
- Acoustically efficient
- Building regulations L2 compliant
- Aesthetically pleasing appearance
- Comprehensive and robust warranties
- Quality assured manufacture

<table>
<thead>
<tr>
<th>Product</th>
<th>Guardian TF</th>
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<tbody>
<tr>
<td>Thickness</td>
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<tr>
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<td>Wall (Vertical &amp; Horizontal)</td>
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<tr>
<td></td>
<td>Wall (Vertical &amp; Horizontal)</td>
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<tr>
<td>External Finish</td>
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<tr>
<td></td>
<td>Colorcoat Rock®</td>
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<tr>
<td></td>
<td>Colorcoat HPS200®</td>
</tr>
<tr>
<td></td>
<td>Colorcoat Celestia®</td>
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<tr>
<td></td>
<td>Colorcoat® PVDF</td>
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<tr>
<td>Internal Finish</td>
<td>Smooth Bright</td>
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<tr>
<td></td>
<td>White Polyester</td>
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<td>Acoustic Properties*</td>
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<td>Fire Performance**</td>
<td>60 minutes insulation and integrity</td>
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<td>LPS 1181 Grade A</td>
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* Calculated figures.

** Warrington Fire Test Report No 130592 conducted in accordance with BS476, Part 22 (Non Loadbearing Walls) LPCB certificate number 460a/10.

LPCB approved systems

Strength, integrity and adaptability
**Span Tables and Installation**

**Composite Panel Systems**

**Span Tables Guardian TF 120mm thick**

**Imposed Loads**

<table>
<thead>
<tr>
<th>Span (m)</th>
<th>Single Span L/150</th>
<th>Double Span L/150</th>
<th>Multi Span L/150</th>
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<tbody>
<tr>
<td>2.0</td>
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<td>3.86</td>
<td>3.60</td>
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<td>2.5</td>
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<td>3.0</td>
<td>3.27</td>
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<td>2.35</td>
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<td>0.82</td>
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<td>7.0</td>
<td>0.47</td>
<td>0.19</td>
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Load Safety Factor 1.5
Deflection limit L/150

**Suction Loads**

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<tr>
<th>Span (m)</th>
<th>Single Span L/150</th>
<th>Double Span L/150</th>
<th>Multi Span L/150</th>
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<tbody>
<tr>
<td>2.0</td>
<td>4.07</td>
<td>3.86</td>
<td>3.60</td>
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<td>3.27</td>
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<tr>
<td>5.0</td>
<td>1.11</td>
<td>0.82</td>
<td>NA</td>
</tr>
<tr>
<td>5.5</td>
<td>0.99</td>
<td>0.40</td>
<td>NA</td>
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<tr>
<td>7.0</td>
<td>0.47</td>
<td>0.19</td>
<td>NA</td>
</tr>
</tbody>
</table>

Load Safety Factor 1.5
Deflection limit L/150

**Strength, integrity and adaptability**

**Robust Details**

**Horizontal Joint Detail**

- Material to be 0.73mm thick steel, coated with HPS200
- Material to be 0.60mm thick steel, with bright white lining enamel finish

**Vertical Joint**

- CP&P folded 0.7mm top hat closure with coating and colour to suit aesthetic requirements. For lengths over 4 metres, join with an internal butt strap
- Continuous high performance strip sealant, factory fitted
- Continuous high performance strip sealant, 9 x 3mm
- Rivet top hat closure to panel at 300mm centres max

**Wall Abutment**

- CP&P internal jamb flashing
- Support steelwork by others
- Continuous PVC expandable foam seal between wall and flashing

**Window Jamb**

- Mineral fibre insulation, site applied
- Cladding Rail, by others
- Window unit by others

**Composite Panel Systems**

**Span Tables and Installation**

**Robust Details**

**Composite Panel Systems**
Robust Details

Handling

Corus Panels and Profiles are leading exponents of current reforms within the construction industry and are continually trying to improve Health and Safety on site and curb losses that are caused by damage to materials.

It is therefore of great importance to Corus Panels and Profiles that Guardian Panels can be fixed efficiently and safely, saving both time and money.

For more information, please contact our technical department on +44 (0) 1684 856600.
Platinum Partnership System Warranty

We are delighted to offer our Platinum Warranty against a specification that involves any of our composite panels.

Corus Panels and Profiles has over 40 years’ experience serving clients in the construction industry and have now teamed up with some of the world’s leading suppliers of ancillary products; from fixings to fall arrest systems and rooflights to gutters, to provide comprehensive warranties for the entire building envelope.

In our increasingly complicated world, we are delighted to offer a simple solution to your specification requirements.

Our new concept in building warranties will cover your building envelope and all the elements included for up to 30 years, taking a project from specification through to completion and beyond.

The Platinum Warranty is completely free of charge and extends to cover installation and structural integrity for 12 years, providing all products are installed using our extensive nationwide network of Platinum Approved Contractors.

Obtaining a Platinum Warranty could not be simpler; Corus Panels and Profiles act as the one point of contact from beginning to end. We will provide you with a detailed NBS specification, warranties for all specified elements and full support for the duration of the warranty period.

Corus Panels and Profiles offer the Platinum System Warranty on a wide range of our product portfolio including:

- Profiled metal sheeting
- Standing seam roof systems
- Fire-safe wall panels
- LPC/FM composite roof and wall applications
- Façades & Rain screens systems
- Membrane faced composites
- Composite flooring

With the Platinum System Warranty you can rest assured that you will be given a meaningful warranty, supported by one of the largest construction product manufacturers in the world.

Whether your project is new-build or refurbishment, complete envelope or small project, it is perfectly suited to the Corus Panels and Profiles Platinum Partnership System Warranty.

A standard timber crib is positioned in the corner of the room and ignited. The test lasts for approximately 30 minutes, after which the panel system is assessed on the following basis:

- Distance of fire spread from the crib.
- Amount of damage sustained by the core material.
- Break-through of the fire to the outside of the building.
- Average air temperature inside the building (which must not exceed 50°C).

A panel system will be approved to LPS 1181 Grade B if it passes this test. However, if the panel system has also been tested to BS 476 part 22 and has achieved at least 30 mins integrity and 15 mins insulation, it can be approved to LPS 1181 Grade A.

Corus Panels and Profiles compliance with LPCB requirements:

- Corus Panels and Profiles Trisomet roof and wall panel and Guardian panel have been tested by the LPCB (Loss Prevention Certification Board) to LPS 1181, with successful results, achieving LPC EXT-A Approval.
- Factory Mutual

An alternative option to LPC approval can be Factory Mutual (FM) approval, which is internationally well known. FM require that composite panels with foam cores must have FM Certification, if a buildings constructed with them is to be insured by a FM company.

Guide to Insurer requirements and approvals

The attitude of insurance companies to the use of composite panels on the buildings depends on a risk assessment process. Polyurethane and polyisocyanurate foam core used externally on buildings have an excellent safety record, however increasingly insurance companies will demand compliance with their own particular standards, and this is a factor the designer must be aware of at the design stage.

Loss Prevention Certification Board LPS 1181


The LPS 1181 test involves a small room (10m x 4.5m x 3m) with three walls, a roof and one open end. A standard timber crib is positioned in the corner of the room and ignited. The test lasts for approximately 30 minutes, after which the panel system is assessed on the following basis:

- Distance of fire spread from the crib.
- Amount of damage sustained by the core material.
- Break-through of the fire to the outside of the building.
- Average air temperature inside the building (which must not exceed 50°C).

A panel system will be approved to LPS 1181 Grade B if it passes this test. However, if the panel system has also been tested to BS 476 part 22 and has achieved at least 30 mins integrity and 15 mins insulation, it can be approved to LPS 1181 Grade A.

Corus Panels and Profiles compliance with FM requirements:

- Only products containing combustible materials require FM Approval, which means that FM Approval is not required for Guardian rock wool core panels for them to be used in FM insured buildings.
- FM Approval Report 3015409 covers:
  - Trisomet Wall and Roof Panels
- The report specifies that Trisomet in thickness up to 80mm meet the Approval requirements of the Standards listed above for Class 1 insulated wall and roof/ceiling panels for installation to the maximum height of 30ft (9.1m) and Class 1 panel roofs. All cover widths for all panels up to and including 1200mm are certified. Wall panels can be laid horizontally or vertically.

- The Flammability Test showed that the foam blend we are using is one of the best they have ever tested with the actual performance figure being less than 50% of the Class 1 pass limit.
- In the UBC 26-3 Room Fire Test the test house (BRE) found “no charring of the Polyisoocyanurate foam panel cores at the extremities of the test panel area”.
- The Trisomet test samples also met the FM requirements in the following areas:
  - The class 1-75 windstorm requirement in the simulated wind uplift pressure tests. In UK terms the result is satisfactory for a general loading on UK buildings. A direct quote from the consultant employed as liaison with FM was that “A 75 rating will be OK for 99% of projects in the UK with a building height less than 15m with an open country exposure. It will be OK for 99% of projects on the continent. It will also be OK for locations in the centre and east coast of Ireland. Areas which maybe a problem are NW coast of Scotland, SW corner of Wales, NW corner of France, west coast of Ireland and Norway. There will not be many industrial projects in these areas. Thus a 75 rating should not create many (if any) problems.”

- The FM requirements for Foot Traffic. In UK terms this test equates to the minimum imposed load on a roof with no access other than necessary for maintenance and cleaning a concentrated load of 0.9kN.
- The FM requirements for hail damage in the simulated hail impact test where “No damage to the sample roof panel was observed after each drop of the simulated hail impactor.

With regard to the need for additional Sprinkler protection in buildings constructed with these panels the FM report comments – “Tests show1) that the panels in and of themselves would not create a need for automatic sprinklers and 2) that the panels would be acceptable in a combustible occupancy protected by automatic sprinklers as defined by FM Global Loss Prevention Standards.”

Use of Corus Panels and Profiles Composite Panels as Fire Walls

For a composite panel to be used as a fire resisting wall as defined in the Building Regulations it must be successfully tested to BS 476 Part 22: Methods for the determination of the Fire Resistance of non-load bearing elements of Construction.

Trisomet 60mm.

When tested at the Warrington Fire Research Centre, the panel achieved a 15 minute insulation and 67 minute integrity rating (standard fixing method was used – no need for any extra stitching internally, only difference is that the external overlap was stitched at 300mm). This allows both 60 and 80mm panel to be used as a boundary wall (firewall) condition, i.e. where the boundary is between 1 and 15 metres from the building envelope.

Guardian

The Guardian panels were tested at the Warrington Fire Research Centre and achieved a minimum 60 minutes integrity and insulation. This performance makes Guardian panels suitable for use either as a boundary wall or as a fire rated partition.

Class O as defined in the Building Regulations

All Corus Panels and Profiles Composite Panels satisfy this requirement.

Taking the risk out of your specification