

The Passive Fire Protection Handbook



Partitions Section 4

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COMPARTMENTATION

- SUPALUX®**
Up to 240 minutes
fire resistance
 - 1 Compartment walls
 - 2 Timber floors
 - 3 Protected zones
- MASTERBOARD®**
Up to 30 minutes
fire resistance
 - 4 Timber floors
 - 5 Timber stud partitions

PROMATECT®-250

- Up to 120 minutes
fire resistance
 - 6 Mezzanine floors

THERMAL UPGRADE

- PROMAT TLFR BOARD®**
 - 7 Concrete slab

STRUCTURAL PROTECTION

- VERMICULUX®-S**
Up to 240 minutes
fire protection
 - 8 Structural steel

PROMATECT®-XW

- Up to 60 minutes
fire protection
 - 9 Structural steel

PROMATECT®-H

- Up to 240 minutes
fire protection
 - 10 Concrete slab
and beams
 - 11 Concrete columns
and walls

PROMATECT®-250

- Up to 120 minutes
fire protection
 - 12 Wind posts
 - 13 Structural steel

DUCT PROTECTION

- PROMATECT®-L500**
Up to 120 minutes
fire protection
 - 14 Duct protection

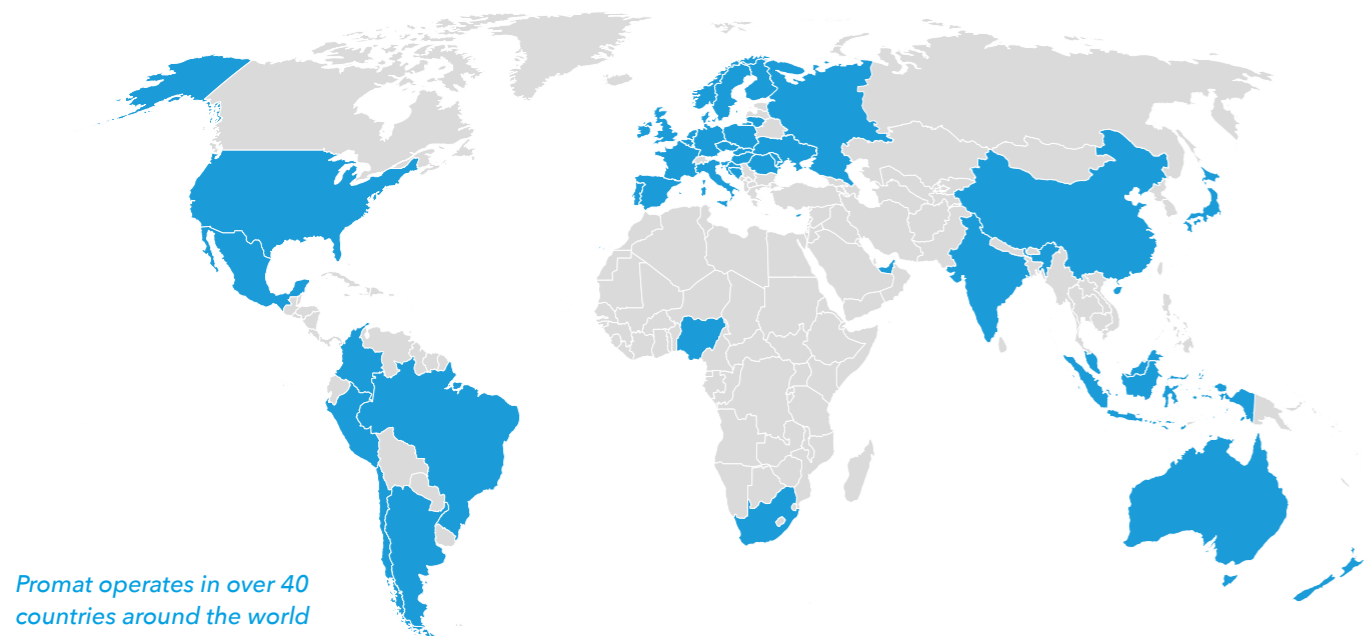
Promat from top to bottom

An overview of Promat applications



Who are Promat?

For more than 60 years, Promat has been designing, testing and manufacturing specialist fire protection systems. This means that our customers benefit from a complete portfolio from which to build a certified fire safety solution that is right for their project.



Promat operates in over 40 countries around the world

Why choose Promat?

Our fire testing culture

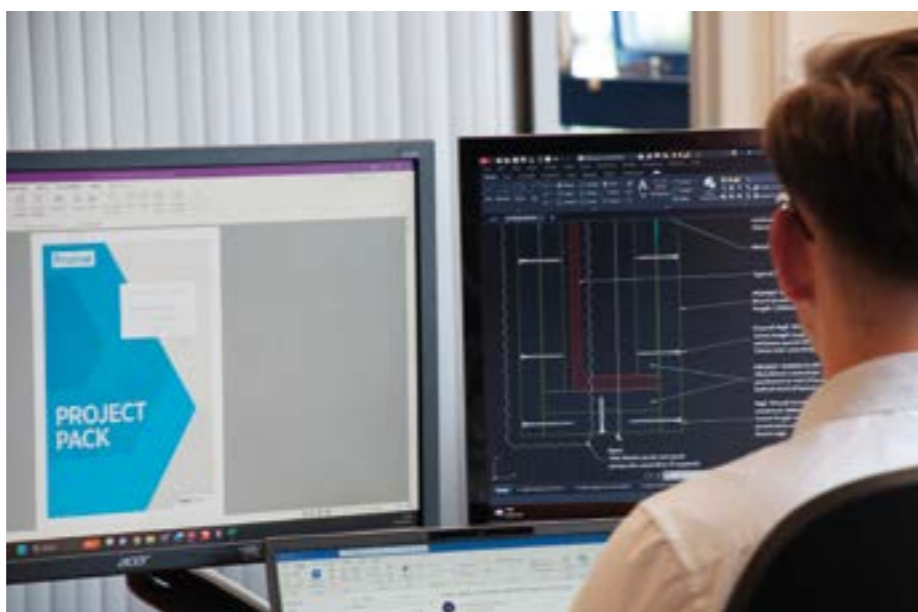
Our team of fire test engineers work with accredited laboratories to undertake an impressive program of global and local fire tests to ensure our systems perform at their best.

Our research and development

Our researchers constantly look for solutions to develop new, lightweight fire protection solutions that will help reduce our impact on the planet and contribute to the circular economy.

Our expertise

Our dedicated Technical Support team along with our extensive testing, certification and design support tools enable us to provide a superior level of support at every stage of your project.



Who are Etex?



Etex is the UK's leading provider of lightweight construction solutions. Our combined expertise in drywall, passive fire protection and firestopping has created a range of unique solutions from the building envelope to internal linings, partitions and penetrations.

Part of the Etex group

We are proud to be part of Etex, playing a key role in its mission to build living spaces that are ever safer, smarter, and more sustainable. This means that our customers benefit from the certainty and choice from working with a key global manufacturer of interior and exterior building solutions.



FSi Promat

Our fire stopping range is now available via our sister company FSi under the joint branding of FSi Promat. FSi have over 23 years of specialist knowledge in fire stopping and offer a large range of both fire stopping and cavity barrier products and systems. Visit [FSiltd.com](https://www.fsiltd.com) to find out more.

“WE’RE COMMITTED TO MAKING SURE OUR CUSTOMER’S PROJECTS BENEFIT FROM HIGH QUALITY FIRE PROTECTION PRODUCTS AND SYSTEMS THAT ARE TESTED, CERTIFIED AND TRUSTED. COMBINED WITH OUR COMMITTED TECHNICAL SUPPORT, WE ENABLE THE BUILDING OF EVER SAFER LIVING AND WORKING SPACES, AS WELL AS MORE SUSTAINABLE INDUSTRIES AND ENERGY SOURCES.

WE’RE EXTREMELY PROUD OF THE HARD-EARNED TRUST OUR CUSTOMERS HAVE IN US AND OUR SOLUTIONS.”

JOSH SLACK, – PROMAT COMMERCIAL DIRECTOR.

Services Offered



Whilst our literature has details of most typical systems and installations, we understand that every project is different and there are bound to be situations when you or your customer need access to expert advice. For this reason, our Promat Technical Services team is on hand to help.

Our highly experienced team can provide advice on any query you may have related to the specification or installation of Promat products and systems.

We also operate a training centre based at our UK headquarters in Bristol. We are able to offer practical training to demonstrate the speed and simplicity of installation. It allows you to get advanced knowledge of our product capabilities, meaning it is ideal for specifiers, main contractors, distributors and sub-contractors. For more information please contact technical@promat.co.uk

Online resources

The Promat website contains a wealth of information that helps you to:

- Choose which fire protection system would best suit your fire protection requirements, with online access to The Passive Fire Protection Handbook.
- Obtain technical documentation and Declarations of Performance (DoP's).
- Find information about the sustainability of our products and EPDs.
- Gain inspiration from our library of case studies, visit: promat.com/case-studies

We also have a comprehensive set of FAQs which answers the most common questions and can be filtered by Product, Performance, Application and Installation: promat.com/knowledge-base

Fire Testing & Golden Thread

The highest testing standards

Our materials, products and systems are the result of a rigorous research and testing process, validated by independent certification authorities. This testing regime goes beyond basic regulatory requirements and our systems are tested in real-world conditions to ensure that they live up to their promise.

At the Promat Research and Technology Centre, we perform more than 200 fire tests a year to ensure our products and systems will comply with the most stringent international standards and regulations. This is supplemented by local testing at our UKAS accredited fire test facility in Heywood, Manchester. Where possible, our fire tests go beyond what is demanded by regulations and replicate the real-life context where our products can be installed. When a Promat system passes the required series of testing, we have 3rd party certification or classification reports to provide independent evidence that our systems perform as stated and meet the appropriate standards.

Supporting the Golden Thread

The Building Safety Act 2022 sets out requirements for the collation and maintenance of building information across its lifecycle. This is known as the Golden Thread.

Product information is a key element of the Golden Thread and as a manufacturer this is a responsibility we take very seriously. Our strong testing culture means we are well positioned to help ensure the right performance information is available in a digital format when needed – whether that is needed during the design, construction or operation of a building.

This information is provided across multiple documents such as 3rd party certification, classification reports, ETAs, DoP's, Safety Data Sheets, Product Data sheets, drawings and ISO Certificates. The required information for specification is captured in Promat Project Packs which contain installation guidance, specification clauses, standard detail drawings and supporting evidence, assisting the project team in demonstrating full traceability of what has been installed. This pack can then also be used by the Accountable Person(s) during the use of the building.





Effective compartmentation is essential in order to contain fire and avoid it spreading throughout the building. Promat offers a range of solutions for standard partitions, which satisfy the fire integrity (E) and fire insulation (I) criteria of BS EN 1364-1: 2015 for up to 240 minutes. These lightweight, slim systems utilise framing and installation methods similar to those used in common drylining constructions, making their installation a straightforward process. Where access is restricted to installation from one side of a construction, the SUPALUX® solid partition systems offer a ready solution. Timber stud and steel stud partition systems are also available within the range of SUPALUX® certified solutions, with fire resistances of up to 120 and 240 minutes, respectively. Promat MASTERBOARD® also offers a solution for timber stud partitions for up to 30 minutes fire resistance, to BS 476: Part 22: 1987.

Advantages

- Fully fire tested solutions which have been independently assessed by Warringtonfire for up to 240 minutes fire resistance.
- Suitable for use in damp, humid or semi-exposed areas such as plant rooms or unheated warehouses.
- Non-combustible boards with a reaction to fire classification of A1 according to BS EN 13501-1.
- Can be used in combination with Promat solutions for timber floor systems.
- High compressive strength. 9.3N/mm²
- Boards can be easily finished, either by painting or by applying a plaster skim.
- Boards can be simply butt jointed or aesthetically finished by filling the joints with Promat MOISTURE RESISTANT READY-MIXED JOINT FILLER®.

Design considerations

Depending upon its situation and function within a building, a wall may be expected to fulfil different requirements in the event of fire. Fire resisting walls used for partitioning buildings and enclosing compartments will be required to provide a barrier to the passage of fire and heat transfer from one side or the other. A wall must therefore be able to satisfy the relevant criteria: fire integrity (E), fire insulation (I), and load bearing capacity (R) if the wall is providing this additional function, from either side for the prescribed period. Other situations arise where fire resistance is not required from both sides and where the construction may have to satisfy the criteria to different extents.

Partitions

General Design Considerations

The following points are some of the factors which should be considered when determining the correct specification to ensure a wall or partition will provide the required fire performance.

1. Studwork

The design of studwork should be adequate for the height and length of the partition. The studwork details given in the following specifications will be suitable up to the maximum heights stated.

2. Compartmentation at Head of Wall

The 2022 edition of Approved Document B discusses the need for fire protection at the head of compartment walls where they meet other fire resisting elements. It states that “Where a compartment wall or compartment floor meets another compartment wall or an external wall, the junction should maintain the fire resistance of the compartmentation.

3. Deflection

Where differential movement is expected between the floor or beam above the construction, and the floor below, details will be required to ensure undue stress is not placed upon the partition. Some form of movement detail is also required to allow for the expansion of the studs under fire conditions.

4. Partition Length

A vertical movement joint should be located at maximum 10m centres in long runs of partition.

5. Load bearing

The examples given in this handbook are for non-loadbearing partitions.

6. Service Penetrations

Care needs to be taken in detailing a suitable fire-stopping system around any penetrations in the partition by services to ensure:

- a) the fire-stopping material remains in situ
- b) fire and smoke do not penetrate the partition.

Allowance should be made for thermal movement of the services in both ambient and fire conditions to ensure loads are not applied to the partition. Please contact FSi Promat, part of the Etex Group, for further guidance on service penetrations.

7. Light Switches & Electrical Sockets

Additional protection may be required within the partition cavity around electrical fittings such as light switches. Please contact FSi Promat, part of the Etex Group, for further guidance on fire-stopping solutions for light switches and electrical sockets.

8. Fire Doors & Glazing

Tested or assessed doors and/or glazed assemblies should always be used. In most cases additional framework will be required to prevent loads being applied to the partition. Careful detailing is needed around the perimeter of any door or glazed assembly.

9. Protected Zones

If a fire breaks out near the area where a compartment wall meets a roof, there is a risk that it will spread over the roof to the adjoining compartment. To reduce the risk, Approved Document B requires protection to be installed to a protected zone of the roof 1500mm either side of the compartment wall. However, for more onerous circumstances, the FPA Design Guide suggests a minimum of 2500mm, or up to 5000mm dependent upon the orientation of the ridge and the presence of a sprinkler system. Please refer to Section 3 of this Handbook for further guidance on protected zones.

10. Concealed Spaces

Cavities in the construction of a building provide a ready route for smoke and flame spread. This is particularly so in the case of voids in, above, and below the construction of a building, e.g. walls, floors, ceilings and roofs. Please contact FSi Promat, part of the Etex Group, for further guidance on cavity barriers solutions.

11. Design

When considering the design of walls, it is essential to bear in mind the section size of the steel framing in conjunction with the wind loading factors and expansion allowance, together with the height and span of the wall, to ensure that under both fire and ambient conditions the wall will provide the necessary design performance. A structural/fire engineer will need to be employed to help with these design calculations.

12. Framing & Substrates

The standard perimeter condition for all passive fire protection systems is that the framing must be fixed back to a solid, load bearing element of the building construction that’s of equal or greater fire performance to the system being installed. All fixings must be non-combustible.

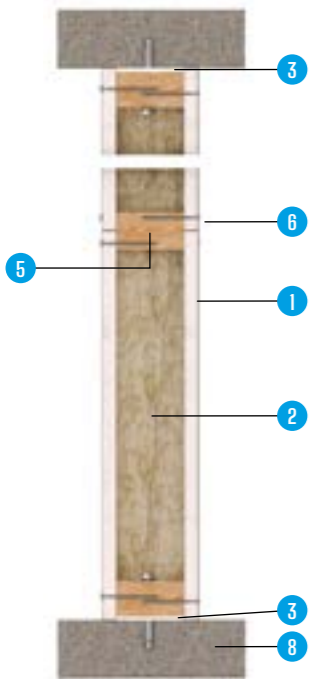
While the information shown for each of the systems in this section generally note these as being concrete walls and floors or soffits, these can also be brickwork or blockwork walls, masonry walls or adequately protected structural steelwork members. It is the responsibility of the designer to ensure that these criteria are met before installing any Promat passive fire protection systems.

Note: MASTERBOARD® timber stud partition assessed by UL International (UK) Ltd.

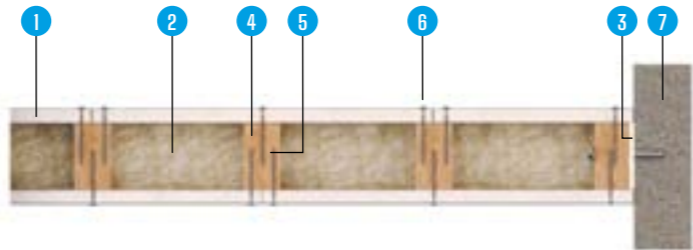
Stud layout and boarding specification

Methods of calculating fire resistance of timber stud walls and joisted floor constructions are detailed in Eurocode 5: Design of Timber Structures (EN 1995).

- 1. SUPALUX® or MASTERBOARD® facing boards, thickness according to fire performance of the system.
- 2. Stone wool insulation, density and thickness according to the fire performance of the system.
- 3. FSi Promat Pyrocoustic® sealant.
- 4. Timber stud, dimensions according to fire performance of the system.
- 5. Timber noggings at horizontal board joints, dimensions to match the timber studs.
- 6. Steel nails or screws, specification according to the fire performance of the system.
- 7. & 8. Concrete wall, floor, or soffit*.



Vertical section A-A



Horizontal section A-A

MASTERBOARD®



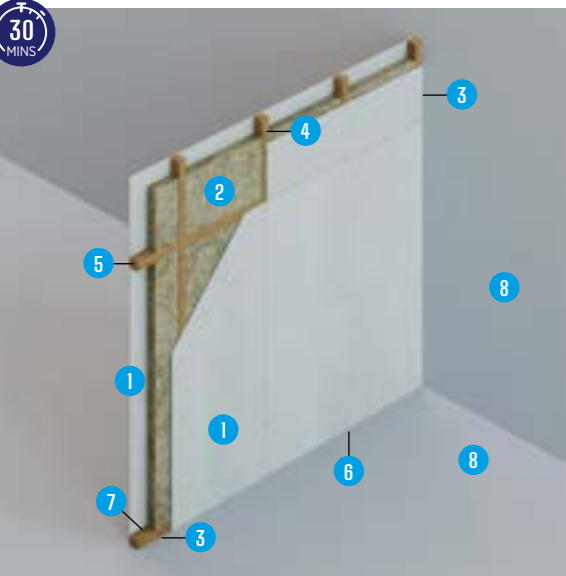
SUPALUX®



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Note: *Please refer to Design Considerations, Note 12 for further details.

MASTERBOARD® PARTITION
TIMBER STUDS



DETAIL 4.1

Fire Performance
30 minutes fire rating, integrity, and insulation in accordance with BS 476: Part 22: 1987

Certification Reference
Assessment UL - 4790242925-B

Specification Reference
PR MSBD-EI30-001S

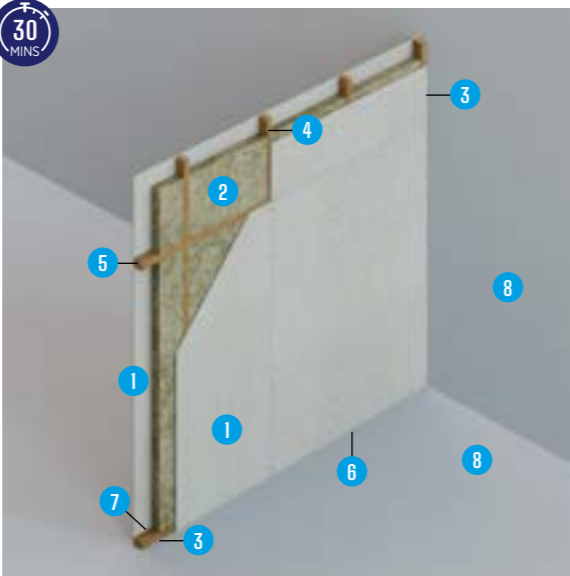
Nominal Thickness of Partition
75mm

Maximum Partition dimensions
4.0m high, the length of the partition is unrestricted.

- Instructions**
1. Promat MASTERBOARD® boards, each side 6mm thick, board joints coincide with the studs and are staggered between faces.
 2. Stone wool is fitted tightly between the studs in the cavity of the partition. The specification for the stone wool is 23 kg/m³, if the stud size is increased, the stone wool insulation thickness should be increased to fully fill the stud zone.
 3. FSi Promat Pyrocoustic® Sealant.
 4. Timber stud, 63mm x 50mm at maximum 610mm centres.
 5. Timber noggings at horizontal board joints, 63mm x 50mm.
 6. 38mm long round head nails or M4 x 38mm long steel wood screws at nominal 300mm centres. Fixings adjacent to board edges are positioned nominally 12mm from board edges and 40mm from corners.
 7. M6 steel anchor bolt at nominal 600mm centres.
 8. Concrete wall, floor, or soffit*.

Note: *Please refer to Design Considerations, Note 12 for further details. (Where countersunk screws are being used to fix the boards, increase the board thickness to minimum 9mm.)

SUPALUX® PARTITION
TIMBER STUDS



DETAIL 4.2

Fire Performance
30 minutes fire rating, integrity, and insulation in accordance with BS EN 1364-1: 2015

Certification Reference
Certifire CF 420A

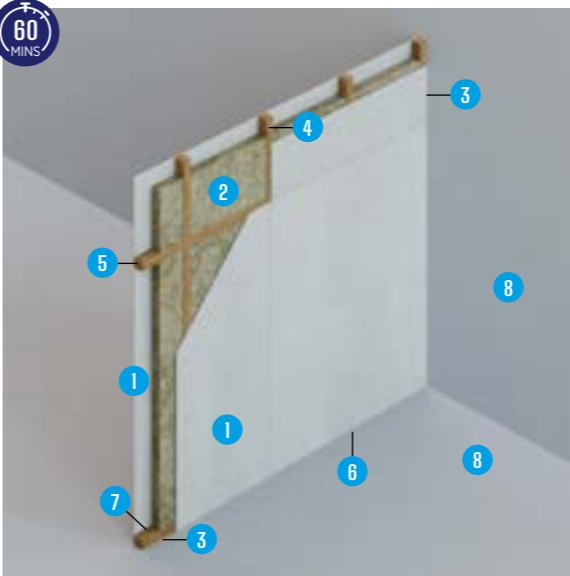
Specification Reference
PR SLUX-30-002S

Nominal Thickness of Partition
75mm

Maximum Partition dimensions
4.0m high, the length of the partition is unrestricted.

- Instructions**
1. Promat SUPALUX® boards, each side 6mm thick, board joints coincide with the studs and are staggered between faces.
 2. Rockwool Flexi Acoustic Slab Insulation is friction fitted tightly and filling the studs in the cavity of the partition. Minimum 60mm thick x 33kg/m³.
 3. FSi Promat Pyrocoustic® Sealant.
 4. C16 CLS Timber stud, 63mm x 38mm at maximum 610mm centres.
 5. Timber noggings at horizontal board joints, 63mm x 38mm.
 6. 2.7mm diameter x 38mm long round head nails at nominal 300mm centres. Fixings adjacent to board edges are positioned nominally 12mm from board edges and 40mm from corners.
 7. Minimum M6 steel anchor bolt or M6 concrete screw at nominal 600mm centres.
 8. Concrete wall, floor, or soffit*.

SUPALUX® PARTITION
TIMBER STUDS



DETAIL 4.3

Fire Performance
60 minutes fire rating, integrity, and insulation in accordance with BS EN 1364-1: 2015

Certification Reference
Certifire CF 420A

Specification Reference
PR SLUX-60-002S

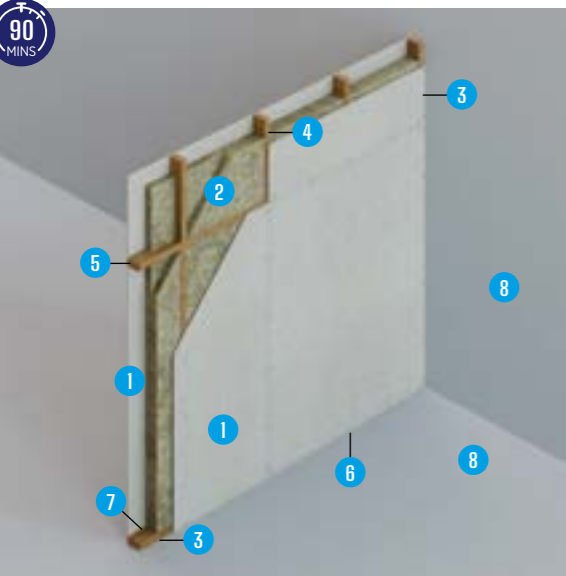
Nominal Thickness of Partition
81mm

Maximum Partition dimensions
4.0m high, the length of the partition is unrestricted.

- Instructions**
1. Promat SUPALUX® boards, each side 9mm thick, board joints coincide with the studs and are staggered between faces.
 2. Rockwool RW3 Slab Insulation is friction fitted tightly and filling the studs in the cavity of the partition. Minimum 60mm thick x 60kg/m³.
 3. FSi Promat Pyrocoustic® Sealant.
 4. C16 CLS Timber stud, 63mm x 38mm at maximum 610mm centres.
 5. Timber noggings at horizontal board joints, 63mm x 38mm.
 6. Siniat M3.5 x 50mm high thread screws at nominal 300mm centres. Fixings adjacent to board edges are positioned nominally 12mm from board edges and 40mm from corners.
 7. M6 steel anchor bolt or M6 concrete screw at nominal 600mm centres.
 8. Concrete wall, floor, or soffit*.

Note: *Please refer to Design Considerations, Note 12 for further details. (Where countersunk screws are being used to fix the boards, increase the board thickness to minimum 9mm.)

SUPALUX® PARTITION
TIMBER STUDS



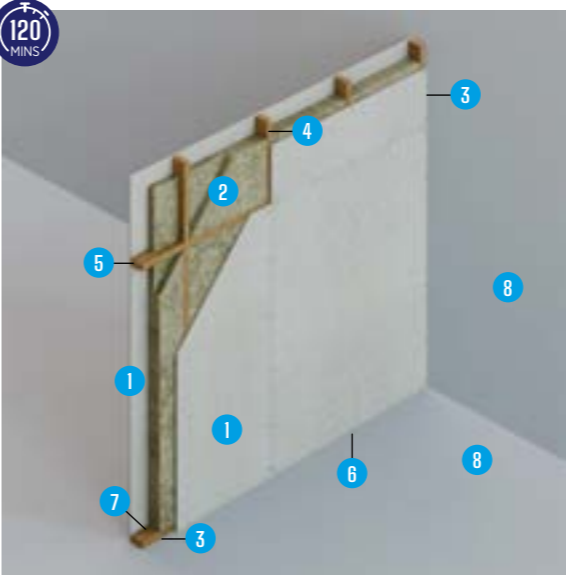
DETAIL 4.4

- Fire Performance**
90 minutes fire rating, integrity, and insulation in accordance with BS EN 1364-1: 2015
- Certification Reference**
Certifire CF 420A
- Specification Reference**
PR SLUX-90-002S
- Nominal Thickness of Partition**
107mm
- Maximum Partition dimensions**
4.0m high, the length of the partition is unrestricted.

- Instructions**
1. Promat SUPALUX® boards, each side 9mm thick, board joints coincide with the studs and are staggered between faces.
 2. Rockwool ProRox SL960 insulation is fitted tightly between and filling the studs in the cavity of the partition, minimum 80mm thick x 100 kg/m³. Fitted in 2 layers of 40mm thickness with joints staggered by minimum 150mm between layers.
 3. FSi Promat Pyrocoustic® Sealant.
 4. C16 CLS Timber stud, 89mm x 38mm at maximum 610mm centres.
 5. Timber nogging at horizontal board joints, 89mm x 38mm.
 6. Siniat M4.2 x 65mm high thread screws at nominal 300mm centres. Fixings adjacent to board edges are positioned nominally 12mm from board edges and 40mm from corners.
 7. M6 steel anchor bolt or M6 concrete screw at nominal 600mm centres.
 8. Concrete wall, floor, or soffit*.

Note: *Please refer to Design Considerations, Note 12 for further details.

SUPALUX® PARTITION
TIMBER STUDS



DETAIL 4.5

- Fire Performance**
120 minutes fire rating, integrity, and insulation in accordance with BS EN 1364-1: 2015
- Certification Reference**
Certifire CF 420A
- Specification Reference**
PR SLUX-120-002S
- Nominal Thickness of Partition**
119mm
- Maximum Partition dimensions**
4.0m high, the length of the partition is unrestricted.

- Instructions**
1. Promat SUPALUX® boards, each side 15mm thick, board joints coincide with the studs and are staggered between faces.
 2. Rockwool ProRox SL960 insulation is fitted tightly between and filling the studs in the cavity of the partition, minimum 80mm thick x 100kg/m³. Fitted in 2 layers of 40mm thickness with joints staggered by minimum 150mm between layers.
 3. FSi Promat Pyrocoustic® Sealant.
 4. C16 CLS Timber stud, 89mm x 38mm at maximum 610mm centres.
 5. Timber nogging at horizontal board joints, 89mm x 38mm.
 6. 63mm long round head steel nails or Siniat M4.2 x 65mm high thread screws at nominal 300mm centres. Fixings adjacent to board edges are positioned nominally 12mm from board edges and 40mm from corners.
 7. M6 steel anchor bolt or M6 concrete screw at nominal 600mm centres.
 8. Concrete wall, floor, or soffit*.

Note: *Please refer to Design Considerations, Note 12 for further details.

SUPALUX® PARTITION
STEEL STUDS



DETAIL 4.6

Fire Performance
30 minutes fire rating, integrity, and insulation in accordance with BS EN 1364-1: 2015

Certification Reference
Certifire CF 420A

Specification Reference
PR SLUX-30-001S

Nominal Thickness of Partition
70mm

Maximum Partition dimensions
4.0m high, the length of the partition is unrestricted.

- Instructions**
1. Promat SUPALUX® boards, each side 9mm thick, board joints coincide with the studs and are staggered between faces.
 2. Promat SUPALUX® coverstrips 75mm wide x 9mm thick each side at horizontal board joints. Fastened using Siniat M3.5 x 25mm self-tapping drywall screws at nominal 300mm centres on both sides of joint.
 3. Rockwool Flexi Acoustic Slab insulation is fitted tightly between and filling the studs in the cavity of the partition, minimum 50mm thick x 33 kg/m³.
 4. FSi Promat Pyrocoustic® Sealant.
 5. Siniat CS50/RX Steel stud, 48mm x 34/36mm x 0.5mm, at maximum 610mm centres. A minimum 20mm expansion allowance should be included for the studs.
 6. Siniat UT52/RX Head and Base tracks, 52mm x 27mm x 0.5mm.
 7. Siniat M3.5 x 25mm self-tapping drywall screws at nominal 300mm centres. Fixings adjacent to board edges are positioned nominally 12mm from board edges and 40mm from corners.
 8. M6 steel anchor bolt or concrete screw at nominal 600mm centres.
 9. Concrete wall, floor, or soffit*.



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SUPALUX® PARTITION
STEEL STUDS



DETAIL 4.7

Fire Performance
60 minutes fire rating, integrity, and insulation in accordance with BS EN 1364-1: 2015

Certification Reference
Certifire CF 420A

Specification Reference
PR SLUX-60-001S

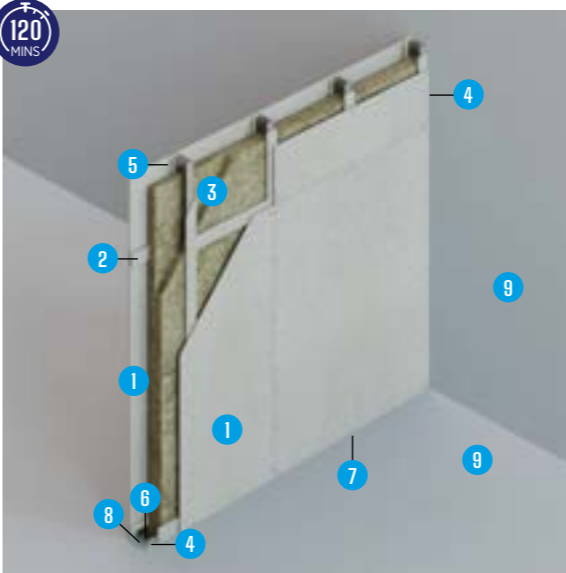
Nominal Thickness of Partition
88mm

Maximum Partition dimensions
4.0m high, the length of the partition is unrestricted.

- Instructions**
1. Promat SUPALUX® boards, each side 9mm thick, board joints coincide with the studs and are staggered between faces.
 2. Promat SUPALUX® fillet/coverstrip; 50mm wide x 9mm thick over studs and tracks, fixed to studs and tracks with Siniat M3.5 x 25mm self-tapping drywall screws at maximum 300mm centres, 75mm wide x 9mm thick at horizontal board joints. Coverstrips at horizontal board joints fastened using Siniat M3.5 x 25mm drywall high thread screws at 300mm centres on both sides of the joint.
 3. Rockwool RWA45 insulation is fitted tightly between and filling the studs in the cavity of the partition, minimum 60mm thick x 45kg/m³.
 4. FSi Promat Pyrocoustic® Sealant.
 5. Siniat CS50/RX Steel stud, 50mm x 34/36mm x 0.5mm, at maximum 610mm centres. A minimum 20mm expansion allowance should be included for the studs
 6. Siniat UT52/RX Head and Base tracks, 52mm x 27mm x 0.5mm.
 7. Siniat M3.5 x 32mm self-tapping drywall screws at nominal 300mm centres. Fixings adjacent to board edges are positioned nominally 12mm from board edges and 40mm from corners.
 8. M6 steel anchor bolt or concrete screw at nominal 600mm centres.
 9. Concrete wall, floor, or soffit*.

Note: *Please refer to Design Considerations, Note 12 for further details.

SUPALUX® PARTITION
STEEL STUDS



DETAIL 4.8

Fire Performance
120 minutes fire rating, integrity, and insulation in accordance with BS EN 1364-1: 2015

Certification Reference
Certifire CF 420A

Specification Reference
PR SLUX-120-001S

Nominal Thickness of Partition
148mm

Maximum Partition dimensions
4.0m high, the length of the partition is unrestricted.

- Instructions**
1. Promat SUPALUX® boards, each side 12mm thick, vertical board joints coincide with the studs and are staggered between faces, horizontal board joints staggered between faces.
 2. Promat SUPALUX® fillet/coverstrip; 75mm wide x 12mm thick over studs and tracks, fixed to studs and tracks with Siniat M3.5 x 25mm self-tapping drywall screws at any convenient centres, 75mm wide x 9mm thick at horizontal board joints. Coverstrips at horizontal board joints fastened using Siniat M3.5 x 25mm drywall high thread screws at 300mm centres on both sides of the joint.
 3. Rockwool RW5 insulation is fitted tightly between and filling the studs in the cavity of the partition, minimum 100mm thick x 100kg/m³, applied in two 50mm thick layers with all joints staggered by minimum 150mm between layers.
 4. FSi Promat Pyrocoustic® Sealant.
 5. Steel stud, 98.8mm x 47/49mm x 0.6mm, at maximum 610mm centres. A minimum 25mm expansion allowance should be included for the studs.
 6. Head and Base tracks, 100mm x 40mm x 0.6mm.
 7. Siniat M3.5 x 32mm self-tapping drywall screws at nominal 250mm centres. Fixings adjacent to board edges are positioned nominally 12mm from board edges and 40mm from corners.
 8. M6 steel anchor bolt or concrete screw at nominal 600mm centres.
 9. Concrete wall, floor, or soffit*.

Note: *Please refer to Design Considerations, Note 12 for further details.

SUPALUX® PARTITION
STEEL STUDS



DETAIL 4.9

Fire Performance
240 minutes fire rating, integrity, and insulation in accordance with BS EN 1364-1: 2015

Certification Reference
Certifire CF 420A

Specification Reference
PR SLUX-240-001S

Nominal Thickness of Partition
198mm

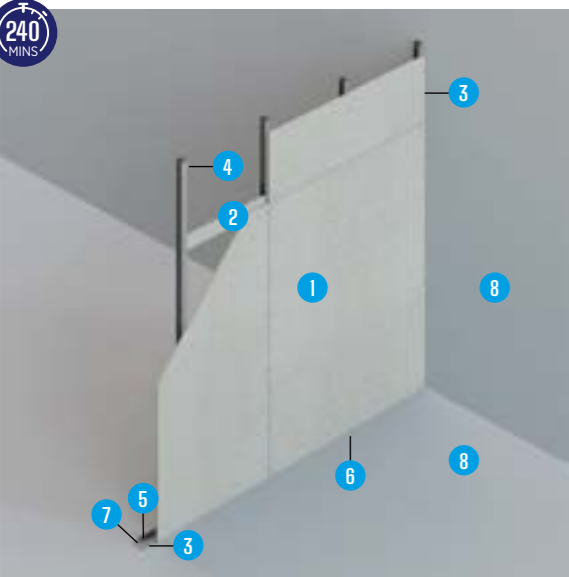
Maximum Partition dimensions
4.0m high, the length of the partition is unrestricted.

- Instructions**
1. Promat SUPALUX® boards, each side 2 layers x 12mm thick, the vertical joints coincide with the studs and are staggered between layers. The horizontal board joints are staggered by a minimum of 600mm between layers.
 2. Rockwool ProRox SL 960 insulation is fitted tightly between and filling the studs in the cavity of the partition, minimum 150mm thick x 100 kg/m³ applied in 3 layers of 50mm thickness with all joints staggered between layers by minimum 150mm.
 3. FSi Promat Pyrocoustic® Sealant.
 4. Protektor 5224 Steel stud, 148mm x 47/49mm x 0.6mm, at maximum 610mm centres. A minimum 25mm expansion allowance should be included for the studs.
 5. Protektor 5247 Steel Head and Base tracks, 150mm x 40mm x 0.6mm.
 6. Inner layer boards fastened to the studs and perimeter channels using Siniat M3.5 x 32mm self-tapping drywall screws at nominal 300mm centres.
 7. Outer layer board joints fastened to inner layer using Siniat M3.5 x 32mm high thread screws at nominal 300mm centres on both sides of the joint. Fixings adjacent to board edges are positioned nominally 12mm from board edges and 40mm from corners.
 8. M6 steel anchor bolt or concrete screw at nominal 600mm centres.
 9. Concrete wall, floor, or soffit*.



Note: *Please refer to Design Considerations, Note 12 for further details.

SUPALUX® PARTITION
UNINSULATED STEEL STUDS



DETAIL 4.10

- Fire Performance**
240 minutes fire rating, integrity only in accordance with BS EN 1364-1: 2015
- Certification Reference**
Certifire CF 420A
- Specification Reference**
PR SLUX-E240-001S
- Nominal Thickness of Partition**
68mm
- Maximum Partition dimensions**
4.0m high, the length of the partition is unrestricted.

- Instructions**
1. Promat SUPALUX® boards, 12mm thick, to fire risk side, vertical board joints coincide with the studs.
 2. Horizontal board joints backed with SUPALUX® coverstrip 100mm wide x 12mm thick. Fastened using Siniat M3.5 x 25mm drywall screws at nominal 300mm centres on both sides of the joint.
 3. FSi Promat Pyrocoustic® Sealant.
 4. Siniat CS50/RX Steel stud, 50mm x 34/36mm x 0.5mm, at maximum 610mm centres.
A minimum 20mm expansion allowance should be included for the studs.
 5. Siniat UT52/RX Head and Base tracks, 52mm x 27mm x 0.5mm.
 6. Siniat M3.5 x 25mm self-tapping drywall screws at nominal 300mm centres. Fixings adjacent to board edges are positioned nominally 12mm from board edges and 40mm from corners.
 7. M6 steel anchor bolt or concrete screw at nominal 600mm centres.
 8. Concrete wall, floor, or soffit*.



APPROVED DOCUMENT B
(2022 EDITION). B3 P75:

Where compartment walls are located within the middle half of a floor, between vertical supports, the predicted deflection may be assumed to be 40mm, unless a smaller value can be justified by assessment. Outside this area the limit can be reduced linearly to zero at the supports.

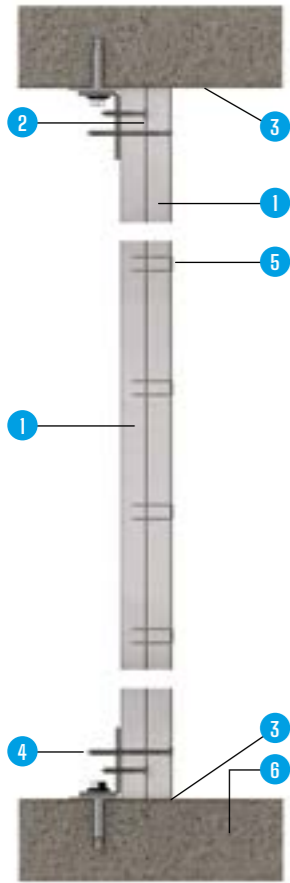
PLEASE CHECK THAT THIS IS THE CURRENT
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Note: *Please refer to Design Considerations, Note 12 for further details.

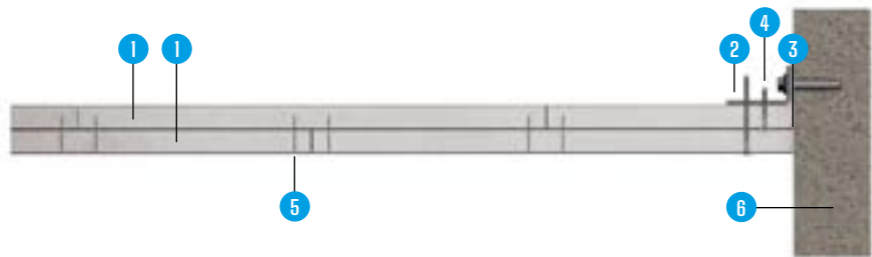
Angle layout and boarding specification

This type of partition system uses a simple perimeter angle frame, fixed back to the floor slab, soffit, and walls. Vertical boards joints between layers are staggered and each layer is secured to the other(s) with staples. For details of each system, fire performance, perimeter framing and fixing specification and board thicknesses, see below.

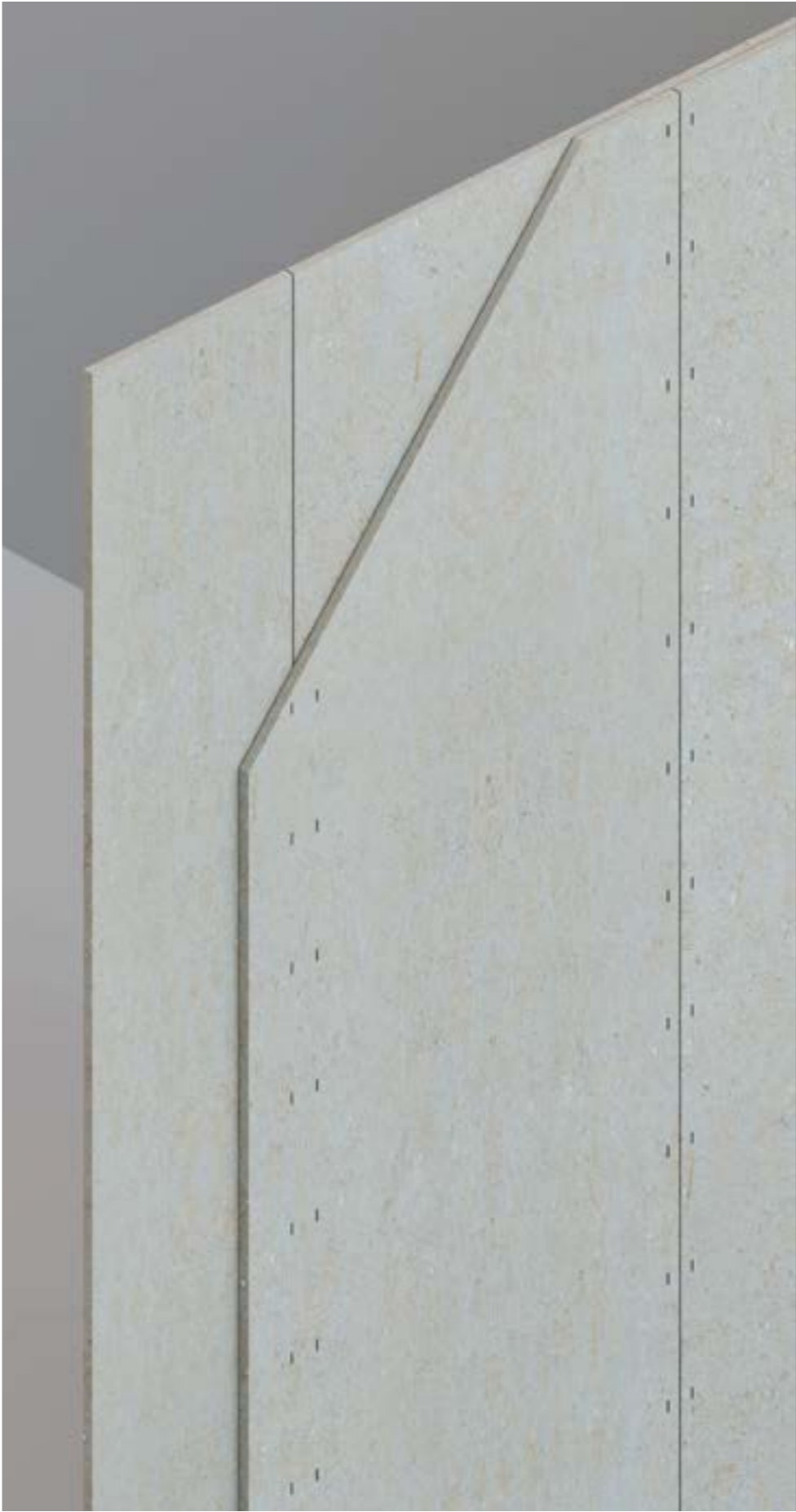
- 1. Promat SUPALUX® boards, in two or three layers, fixed to the angle framing - see individual systems for thickness and number of layers.
- 2. Siniat MFC2550 Steel angle frame minimum 25mm x 50mm x 0.7mm.
- 3. FSi Promat Pyrocoustic® sealant.
- 4. Siniat M3.5 Self-Tapping Drywall Screws at nominal 300mm centres. Lengths according to board thickness.
- 5. Chisel point staples at maximum 150mm centres on either side of all vertical board joints. Sizes according to board thickness.
- 6. Concrete wall, floor, or soffit*.



Vertical section A-A

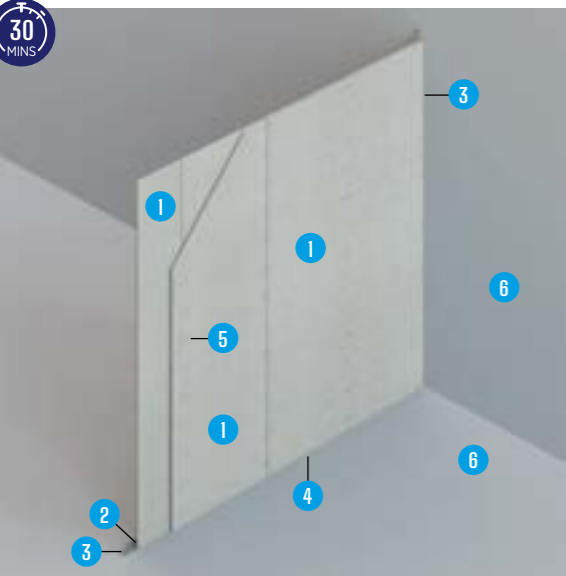


Horizontal section A-A



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SUPALUX® PARTITION
INTEGRITY AND INSULATION



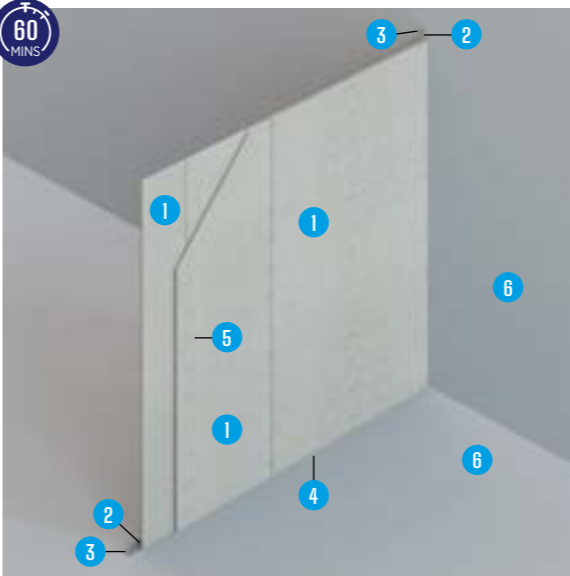
DETAIL 4.11

- Fire Performance**
30 minutes fire rating, integrity and insulation in accordance with BS EN 1364-1: 2015
- Certification Reference**
Certifire CF 420A
- Specification Reference**
PR SLUX-30-003S
- Nominal Thickness of Partition**
55mm (Including perimeter framing)
- Maximum Partition dimensions**
2.44m high, the length of the partition is unrestricted.

- Instructions**
1. Promat SUPALUX® boards, 2 x 15mm. Stagger vertical board joints by at least 600mm. Layers are fastened to one face of the perimeter framing.
 2. Steel angle frame, Siniat MFC2550 minimum 25mm x 50mm x 0.7mm bedded on FSi Promat Pyrocoustic® Sealant.
 3. M6 steel anchor bolt or concrete screw at nominal 500mm centres through the 25mm leg of the perimeter framing.
 4. Siniat M3.5 Self-tapping drywall screws. Fixings adjacent to board edges are positioned nominally 12mm from board edges and 40mm from corners. Both layers independently fixed to perimeter angles, first layer using M3.5 x 25mm screws at 300mm centres, second layer using M3.5 x 32mm screws at 300mm centres. Take care not to over tighten screws.
 5. Joints in the outer layer are stitched to the inner layer using 35mm staples at 150mm centres. Joints in the inner layer are stitched to the outer layer using 35mm staples at 150mm centres but applied from the outer face.
 6. Concrete wall, floor, or soffit*.

Note: *Please refer to Design Considerations, Note 12 for further details.

SUPALUX® PARTITION
INTEGRITY AND INSULATION



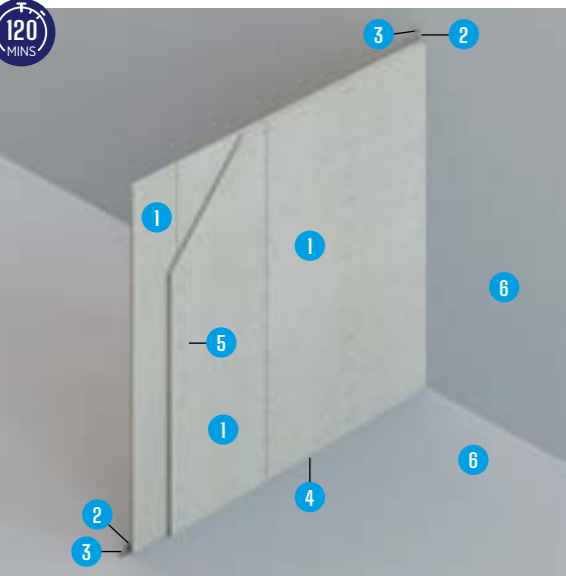
DETAIL 4.12

- Fire Performance**
60 minutes fire rating, integrity and insulation in accordance with BS EN 1364-1: 2015
- Certification Reference**
Certifire CF 420A
- Specification Reference**
PR SLUX-60-003S
- Nominal Thickness of Partition**
65mm (Including perimeter framing)
- Maximum Partition dimensions**
2.5m high, the length of the partition is unrestricted.

- Instructions**
1. Promat SUPALUX® boards, 2 x 20mm . Stagger vertical board joints by at least 600mm. Layers are fastened to one face of the perimeter framing.
 2. Steel angle frame, Siniat MFC2550 minimum 25mm x 50mm x 0.7mm bedded on FSi Promat Pyrocoustic® Sealant.
 3. M6 steel anchor bolt or screw at nominal 500mm centres through the 25mm leg of the perimeter framing.
 4. Siniat M3.5 & M4.2 Self-tapping drywall screws. Fixings adjacent to board edges are positioned nominally 12mm from board edges and 40mm from corners. Both layers independently fixed to perimeter angles, first layer using M3.5 x 32mm screws at 300mm centres, second layer using M4.2 x 65mm screws at nominal 300mm centres. Take care not to over tighten screws.
 5. Joints in the outer layer are stitched to the inner layer using 35mm staples at 150mm centres. Joints in the inner layer are stitched to the outer layer using 35mm staples at 150mm centres but applied from the outer face.
 6. Concrete wall, floor, or soffit*.

Note: *Please refer to Design Considerations, Note 12 for further details.

SUPALUX® PARTITION
INTEGRITY AND INSULATION



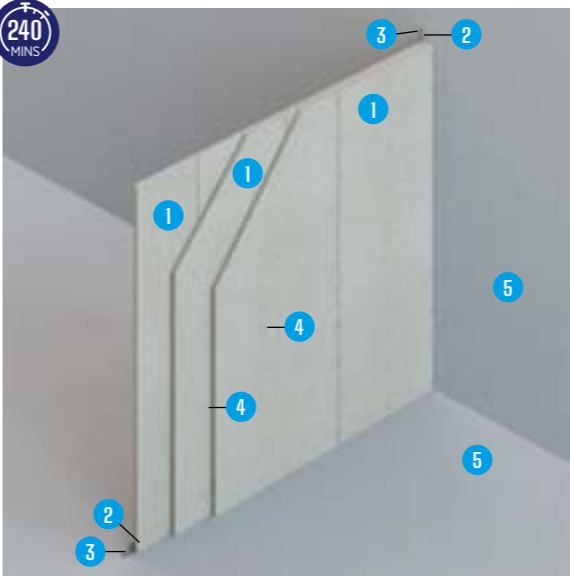
DETAIL 4.13

- Fire Performance**
120 minutes fire rating, integrity and insulation in accordance with BS EN 1364-1: 2015
- Certification Reference**
Certifire CF 420A
- Specification Reference**
PR SLUX-120-003S
- Nominal Thickness of Partition**
75mm (Including perimeter framing)
- Maximum Partition dimensions**
2.5m high, the length of the partition is unrestricted.

- Instructions**
1. Promat SUPALUX® boards, 2 x 25mm. Stagger vertical board joints by at least 600mm.
 2. Steel angle frame, Siniat MFC2550 minimum 25mm x 50mm x 0.7mm bedded on FSi Promat Pyrocoustic® Sealant.
 3. M6 steel anchor bolt or concrete screw at nominal 500mm centres through the 25mm leg of the perimeter framing.
 4. Siniat M3.5 & M4.2 Self-tapping drywall screws. Fixings adjacent to board edges are positioned nominally 12mm from board edges and 40mm from corners. Both layers independently fixed to perimeter angles, first layer using M3.5 x 38mm screws at 300mm centres, second layer using M4.2 x 65mm screws at nominal 300mm centres. Take care not to over tighten screws.
 5. Joints in the outer layer are stitched to the inner layer using 50mm staples at 150mm centres. Joints in the inner layer are stitched to the outer layer using 50mm staples at 150mm centres but applied from the outer face.
 6. Concrete wall, floor, or soffit*.

Note: *Please refer to Design Considerations, Note 12 for further details.

SUPALUX® PARTITION
INTEGRITY AND INSULATION

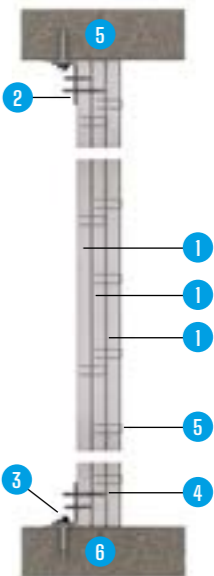


DETAIL 4.14

- Fire Performance**
240 minutes fire rating, integrity and insulation in accordance with BS EN 1364-1: 2015
- Certification Reference**
Certifire CF 420A
- Specification Reference**
PR SLUX-240-003S
- Nominal Thickness of Partition**
100mm
- Maximum Partition dimensions**
2.5m high, the length of the partition is unrestricted.

- Instructions**
1. Promat SUPALUX® boards, 3 x 25mm. Stagger vertical board joints by 625mm between inner and middle layers, 375mm between middle and outer layers.
 2. Steel angle, Siniat MFC 2550, minimum 25mm x 50mm x 0.7mm bedded on FSi Promat Pyrocoustic® Sealant.
 3. M6 anchor bolt or concrete screw at 500mm nominal centres through the 25mm leg of the perimeter framing.
 4. Siniat Self-tapping drywall screws. Fixings adjacent to board edges are positioned nominally 12mm from board edges and 40mm from corners. Both inner layers independently fixed to perimeter angles, first layer using M3.5 x 38mm screws at 300mm centres, second layer using M4.2 x 65mm screws at nominal 300mm centres. Take care not to over tighten screws.
 5. Joints in the middle layer are stitched to the inner layer using 50mm staples at 450mm centres on either side of board joints and at mid-span of the boards. Joints in the outer layer are stitched to the middle layer using 50mm staples at 200mm centres on either side of board joints and at mid-span of the boards.
 6. Concrete wall, floor, or soffit*.

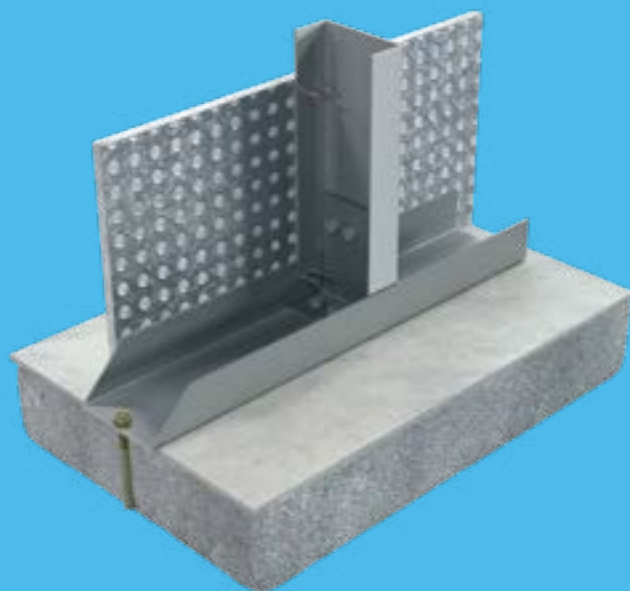
Note: *Please refer to Design Considerations, Note 12 for further details.



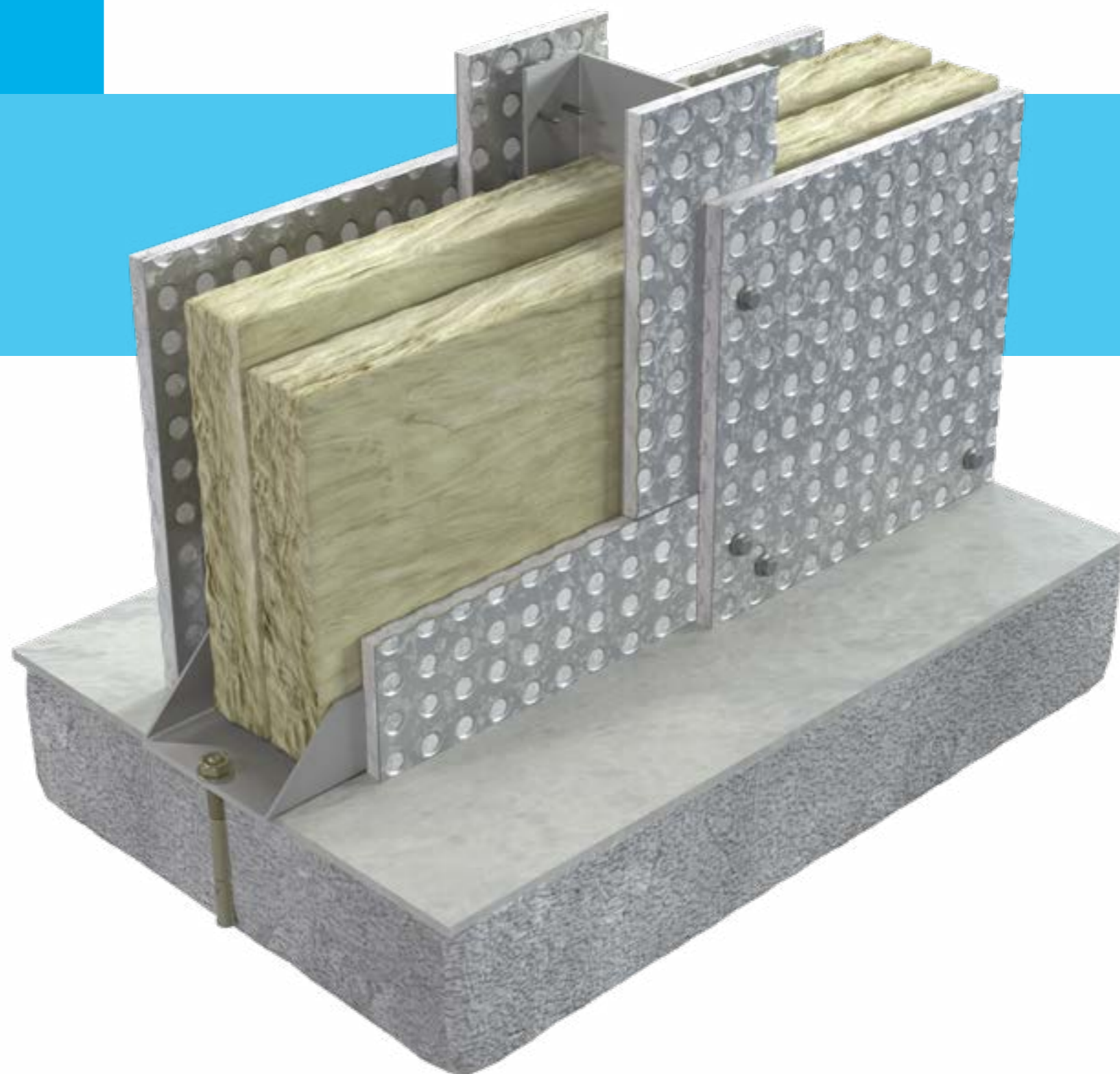
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high impact and blast protection.**

Promat DURASTEEL® is a composite panel of fibre-reinforced cement with punched steel sheets mechanically bonded to both outer surfaces.



DURASTEEL® partition systems combine lightness when compared to blockwork and masonry construction, demountability, strength, impact resistance, blast resistance and durability with up to 240 minutes fire resistance. These partition systems have been subjected to a hose stream test which measures the structural integrity of the wall at the end of the fire test, ensuring that the partition does not fail under the pressure of a firefighters hose.



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