

Promat

by etex



**PROVEN PROTECTION AND SMARTER
CONSTRUCTION WITH OUR
COMPARTMENTATION SOLUTIONS**

INTRODUCTION

Compartmentation is one of the oldest and most essential principles in Passive Fire Protection. It dates to 1667, when new laws after the Great Fire of London required buildings to be made from brick or stone to slow the spread of fire. Over time, the concept evolved, from early vertical separation to the introduction of horizontal compartmentation in 1896.

Today, compartmentation is a core part of fire safety strategies worldwide. At its heart, it's about containing a fire within a specific area for a set period, using barriers like walls and floors. While these may look similar, not all partitions perform the same, factors like installation speed, system testing, and overall protection can vary significantly.

Discover our expert-backed solutions for compartmentation challenges

Extensive Testing

Promat's compartmentation solutions stand out due to extensive testing that meets and exceeds various regional and local standards. This rigorous testing ensures high-quality products and provides in-depth technical advice. Promat tests multiple scenarios, including firestopping in ceilings, and conducts specialist tests like blast and impact testing. Unique tests, such as fire from above, offer greater design flexibility and reliability for fire safety.

Space-Saving Simplicity

Promat's compartmentation systems excel by using a single layer of board, which maximizes room space and simplifies installation. This single-layer approach is also lighter, making it ideal for weight-sensitive elements like timber floors.

Technical Expertise

Compartmentation provides the foundation of fire protection within a building. However, in the design phase, complex detailing normally arises, which you can overcome through Promat's offer of advanced technical support. We have been providing advice on compartmentation for over 60 years, so you know the design is tailored for project.

Examples of unique solutions

Mezzanine Floors



Specifically tested to provide up to 120 minutes of fire protection to mezzanine floors supported by hot and cold rolled steel sections.

Mezzanine floors will need to be designed with fire protection in mind to meet the relevant Building Regulations and standards. The solution selected must carefully balance the required level of fire protection performance whilst maximising the use of valuable space.

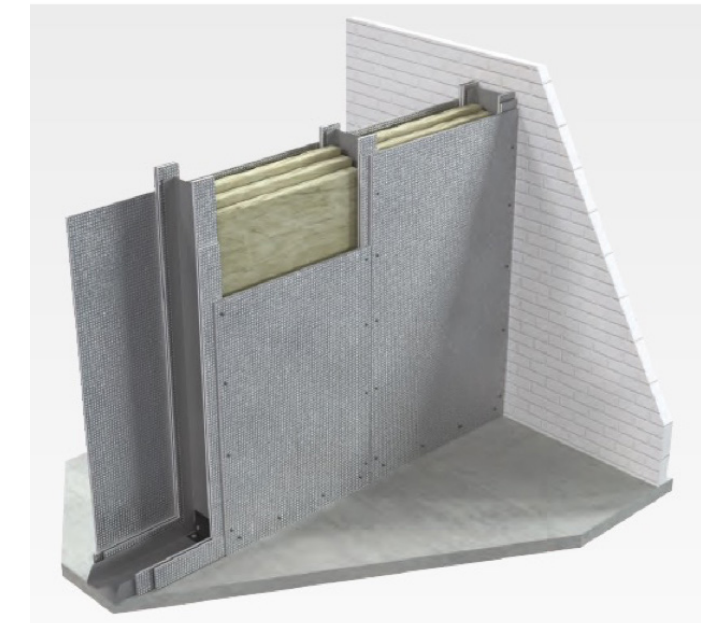
PROMATECT®-250 board offers a space-saving solution, specifically tested for use in protecting mezzanine floors supported by hot and cold rolled steel sections. Thinner and requiring only single- or double-layer direct fix boarding, it provides high levels of passive fire protection.

Durasteel - Fire, Blast & Impact

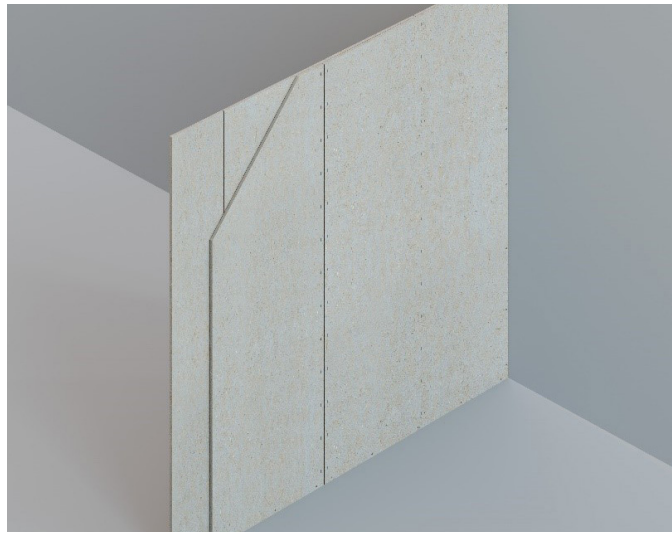
The effects of fire, blast and impact can be devastating, but with a properly designed and installed fire safety and protection system in place, the effects can be managed and minimised. Promat is driven by an uncompromising attitude to fire safety and specifiers can be confident of the performance of Promat DURASTEEL® due to an unparalleled range of testing on the product and applications.

DURASTEEL® is a fully certified and tested fire protection board. It is constructed as a composite panel of fibre-reinforced cement with punched steel sheets mechanically bonded to both outer surfaces. This delivers the strength and resistance required to withstand high impact and blast pressures, maintain structural integrity and provide up to four hours of fire protection.

It has been used successfully worldwide for many years and is the preferred choice for specifiers and project managers responsible for fire and blast applications due to its flexibility and modular nature. It is most used to protect the substrate above transformers in building substations. DURASTEEL® is tested to British, European and other international standards (including ASTM), and can be used to create fire resistant walls, ceilings, ducts, and stand-alone fire and blast barriers. Its unique features and benefits combine strength, impact, blast resistance and durability with exceptional fire resistance.



Solid Partitions



Promat's solid partitions offer a high-performance fire protection solution within an ultra-slim wall construction. Designed to meet rigorous safety standards while optimising space, these partitions are ideal for projects where every millimetre counts. The system delivers up to 240 minutes of fire resistance (EI240), combining excellent structural integrity with minimal thickness.

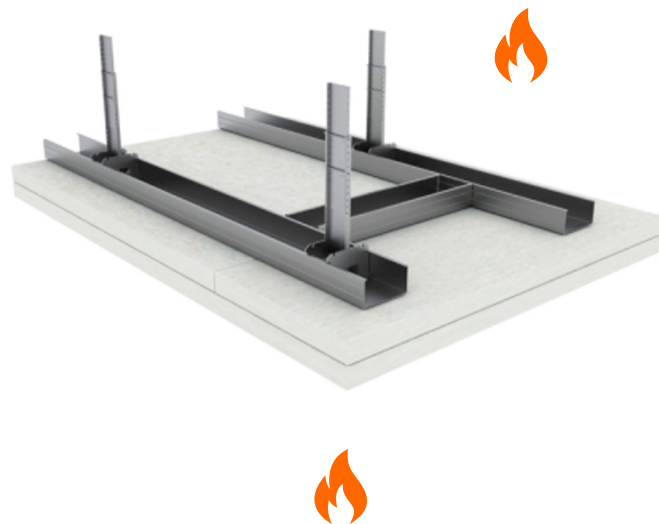
The benefits of this system are both practical and aesthetic. Its space-efficient design maximises usable floor area, allowing for greater design flexibility within tight spatial constraints. The partitions integrate easily into both new builds and refurbishment projects and can accommodate a wide range of finishes to suit different architectural styles. Despite their slim profile, the partitions are lightweight yet strong, reducing structural loads and making installation easier, particularly in complex or restricted site conditions, such as access to build from one side only.

Fire from above and below

Promat's ceiling systems provide advanced fire protection from both above and below, making them a reliable and versatile solution for comprehensive compartmentation. Engineered to deliver up to 240 minutes of fire resistance, (EI240) these systems help prevent fire and heat transfer between floors and ceiling voids, offering crucial protection in multi-level buildings and complex layouts.

These ceilings offer both safety and design flexibility. Their dual-directional fire performance supports compliant design in scenarios where fire risk exists on either side of the ceiling, such as escape routes where you have services running above the ceiling. The systems are lightweight and easy to install, reducing structural impact while maintaining high integrity and insulation standards.

These ceilings can be integrated seamlessly into new or refurbished buildings and are compatible with a variety of finishes, allowing for consistent aesthetics across different interior spaces. Promat's ceiling solutions offer peace of mind for architects seeking to balance safety, functionality, and design freedom in fire-critical zones.



Protected Zones



Up to 240 minutes fire protection underneath the roof, extending out from either side of the compartment wall

The risk of fire spreading to adjoining compartments through the area where an internal wall meets the roof must be carefully managed. To achieve this, a protected zone is created a minimum of 1500mm either side of the compartment wall. However, that distance will vary between different national building regulations. In more challenging circumstances the distance can be increased to between 2500mm and 5000mm depending on the orientation of the ridge and whether a sprinkler system is to be used.

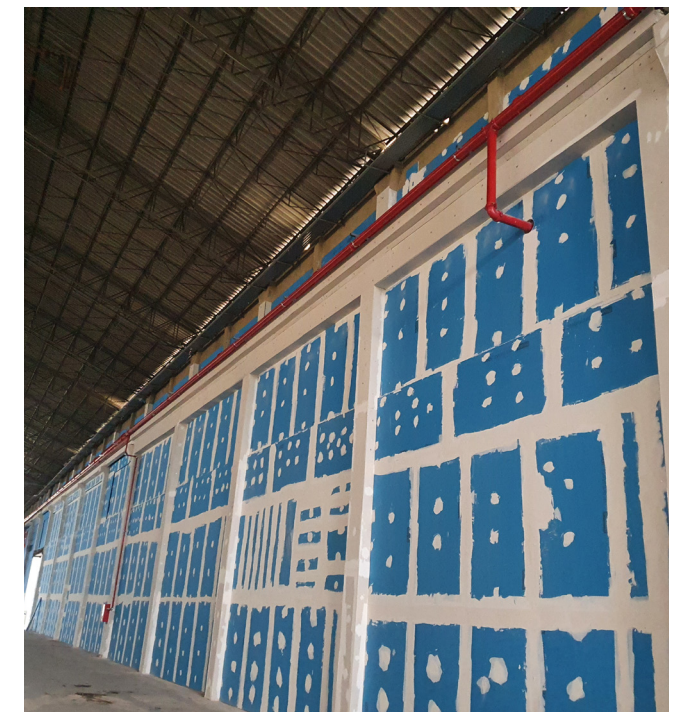
Promat boards can be fixed to a steel grid system hung from the roof structure to create protected zones of any size. The boards long service life means it can be installed in unheated, high moisture environments without suffering degradation – making it ideal for your project

Tall partitions

Promat offers robust tall partition systems specifically engineered to maintain fire performance in installations exceeding 10 metres in height. Using our high-performance fire protection boards these systems are designed to provide up to EI240 fire resistance while meeting the structural and safety demands of large, open spaces.

For architects, Promat's tall partitions enable safe compartmentation in high-ceiling environments without compromising on design ambition. Their proven fire integrity and insulation at extended heights make them ideal for large-scale projects such as atriums, industrial facilities, transport hubs, and high-rise buildings. Traditional testing is limited to 4m or 5m and will not cover extended heights. Promat systems can also incorporate mineral insulation to provide acoustic and thermal insulation.

Promat's systems are rigorously tested for mechanical stability, even under fire exposure, and design guidance for high installations. They allow for greater creative freedom in complex architectural volumes while ensuring compliance with stringent fire regulations. Promat's tall partition solutions offer a safe, efficient, and flexible approach to fire-rated design at scale.



Fewer layers



Promat's compartmentation systems for walls and ceilings are designed to deliver high levels of fire resistance and often require fewer layers than traditional plasterboard constructions. Often, the board can also be directly fixed to the existing substrate, eliminating the need for metal framework. By using specialist fire protection boards with superior performance characteristics, these systems can achieve up to 240 minutes of fire resistance while maintaining a thinner and more efficient build-up.

For your project, this translates into valuable design advantages. The reduced layer count or direct fix ability not only saves space but also simplifies detailing, speeds up installation, and reduces overall wall and ceiling thickness—maximising usable floor area without compromising fire safety. This is particularly beneficial in high-density developments, retrofit projects, or areas with strict spatial constraints.

In addition, fewer components mean less material waste and a lower environmental impact, supporting sustainable design goals. The systems are rigorously tested and certified to meet stringent regulatory standards, giving you the confidence in their compliance and performance. Promat's compartmentation solutions offer an intelligent alternative to plasterboard-based systems, combining safety, efficiency, and architectural flexibility.

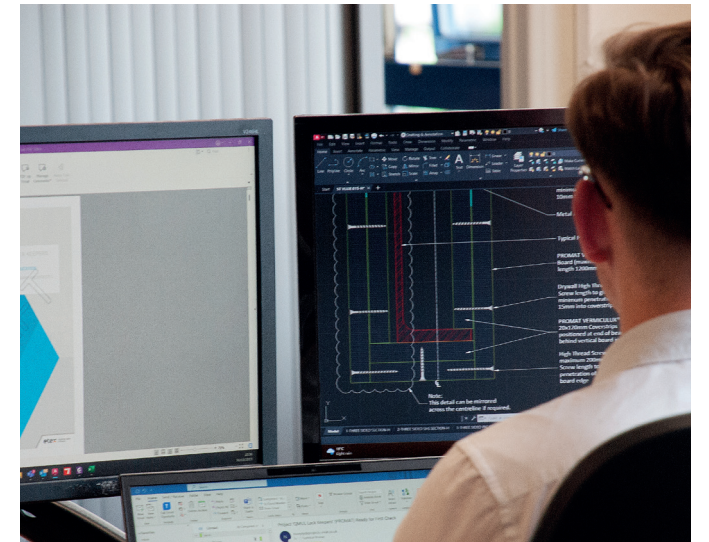


Why trust Promat?

Greater certainty for Project Schedules and business continuity

For over 60 years we have helped to protect property from the devastating effects of fire, working with clients from the specification stage onwards to develop the best solutions for their needs. Minimising damage, saving lives and allowing business to continue operating as quickly as possible. Our systems can withstand your projects fire requirements and stop heat transferring throughout your building, limiting further damage and providing the crucial time required for the fire service to arrive and tackle the blaze.

This is backed by the highly experienced Promat Team, making our expertise available from the very start of your project to ensure fire protection enhances schedule certainty rather than detract from it.



Designing out fire risks

Ensuring fire protection is considered at the project specification stage will not only help to get the best end results for the building, but it can also avoid fire protection becoming a lag on schedules later down the line. But this demands specialist expertise to get right. Buildings are becoming more and more complex and require more technical detailing than ever, to ensure fire protection offers the correct performance. This must consider not only how to prevent the spread of flames, but also preventing heat radiation.

Enhanced Performance

Promat conducts extensive testing beyond fire resistance, including environmental exposure, humidity, and water leakage. Thanks to the inherent properties of calcium silicate boards, our systems deliver enhanced performance as standard.

Building for the future: sustainable solutions with lasting impact

Preserve buildings. Protect lives.

Our compartmentation solutions are developed with high durability to withstand demanding conditions over time. Their long service life ensures consistent, reliable performance with minimal need for replacement or maintenance. By helping to extend the operational lifespan of buildings, our solutions support more sustainable construction, all in line with our purpose of advancing expertise to build a safe and sustainable world.

A Clear path to sustainability

As part of the Etex Group, Promat is committed to making sustainability measurable and meaningful. We focus on reducing embodied carbon, improving circularity, and minimising environmental impact across the entire product lifecycle. Through our ClearChange program, we're continuously evolving our portfolio to support safer, smarter, and more responsible building solutions.

Please note that not all Promat products are stocked in South Africa.



Preserve and Protect
with Promat.

