

## Promat DURASTEEL® Fire, Blast and Impact Protection for the Industrial Sector



[www.promat-durasteel.co.uk](http://www.promat-durasteel.co.uk)



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.

Effective fire, blast and impact protection is particularly important in industrial premises, such as warehouses, distribution facilities, and factories, because they usually house a variety of combustible or valuable products and equipment. They can also include many different types of electrical services. All these factors increase the potential of a fire starting and spreading quickly.

It is important to protect existing stock and minimise the extent of disruption to the facility's operations in the unfortunate event of a fire.

Promat DURASTEEL® systems provide the following benefits to those specifying products for fire, blast and impact protection within the industrial sector:

- Protection and safe evacuation of staff
- Protection of buildings, fixtures and fittings
- Protection of stock and equipment to ensure minimal disruption to business
- Protection of surrounding areas and the environment

## What is Promat DURASTEEL® ?

Promat 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 4 hours of fire protection.

It has been used successfully across the construction industry for many years and is the preferred choice for specifiers and project managers responsible for fire and blast applications in the industrial sector due to its flexibility and modular nature.

- UK Manufactured to independently accredited ISO 9001 quality, ISO 14001 environmental and OHSAS 18001 health and safety management systems
- Tested with a range of service penetrations and fire doors
- CERTIFIRE accredited
- Licensed installer network with full Certificate of Conformity for every installation
- Insurance industry recognition



Technical Data	
Fire rating	Classed as 'non-combustible' to BS 476: Part 4: 1970 and A1 to Clause 10 of BS EN 13501-1:2007 and can provide 4 hours of fire protection. Classified from EI30 to EI240 according to Clause 7.5 of BS EN 13501-2:2007 +A1 2009
Blast resistance	Tested from 0.3 to 2 bar over pressure and impact resistant to 4000J after 3 hour fire test in accordance with DIN 4102 Parts 2 and 3 requirements
Hydrocarbon fire resistance	Lloyds Approved H0 to H120 capable of maintaining fire resistance post-blast
Hose stream resistance	Tested to a 3 bar pressure hose (ASTM E119)
Acoustic characteristics	Sound reduction index of 29.9 bB
Thermal conductivity	0.55 W/Mk at 20 deg C (BS 874)

More detailed technical data is available on request.

It is a tested and proven solution to UK, EN and International standards (inc. ASTM), suitable for use in walls, doors, stairwells, for ducting and ceiling applications, as a stand-alone barrier or blast wall, and also for cable protection. Its unique features and benefits combine strength, impact, blast resistance, and durability with exceptional fire resistance:

- A maintenance-free 'fit and forget' system providing quick, adaptable, and simple installation both internally and externally
- Slim, lightweight, and space-saving

profile, requiring no foundations and suitable for retro-installation; unlike plasterboard or blockwork solutions

- Fire performance remains unaffected even when wet or from firefighters' hoses or sprinkler systems, leaving boards still able to perform even during a fire
- Fully demountable and has 40 years of proven service life
- Emits minimal smoke or toxic gas during a fire
- Low sound transmission and good acoustic insulation performance
- Mechanical and seismic vibration resistant



### Product Construction

Able to withstand high impact and blast pressures and maintain structural integrity, offering advantages over blockwork walls which can fail under high impact due to failure of mortar joints.



### Approved Licensed Installer Network

Every installation is issued with a Certificate of Conformity and carried out by an expert licensed installer with transportation sector experience.



### Protecting the Environment

Warehouse and factory fires can be devastating to their surroundings. Promat DURASTEEL® reduces the potential environmental impact.



### A Fit and Forget System

A maintenance-free system which forms a natural part of the construction of a facility.



Promat DURASTEEL® is commonly used for the safety and protection of premises and facilities in the industrial sector. It is suitable for both new and upgrade projects in:

- Warehouses and distribution centres
- Factories

The need for safe and effective protection of personnel, plant, stores and property in the

## Warehouses and Distribution Centres

A warehouse is considered a high-risk environment as they usually house a variety of combustible or valuable products and packaging, which are made from a number of different materials in an array of sizes. They also regularly use many different types of mechanical equipment for loading and lifting as well as an abundance of electrical services and computerised stock control systems.

These factors contribute to the potential of a fire starting and spreading quickly; especially with many warehouses now in operation around the clock which increases the possibility of technical faults or accidents.

Promat DURASTEEL® systems will contain fire within compartments of a storage facility and can withstand high levels of intense fire; helping to stop heat transferring throughout the facility and causing further damage. This allows for the safe evacuation of personnel and minimises damage, as well as saving stock, reducing rebuild costs, and giving businesses the ability to continue to service their customers' needs as soon as possible after any incident.

## Factories

A factory is a very high-risk environment as they contain machinery and equipment with highly dangerous sources of ignition, especially if fuel and oil are present. Additionally, electrical power and services needed to run the machinery and the heat levels generated from machinery in operation add to the potential fire risk.

Large amounts of combustible products and packaging in close proximity, along with the movement of vehicles (e.g. forklifts), greatly increases the potential of a fire starting and spreading quickly.

manufacturing and supply sectors is of vital importance in their construction and on-going maintenance.

All installations are supported by the expertise of the Promat technical team and licensed installer network.

Another key benefit is reducing the potential environmental impact of a fire to the surrounding areas of the site.

Due to the need of warehouses to maximise storage capacity, providing suitable means of escape from modern storage facilities is not as simple as it was. However, Promat DURASTEEL® passive fire protection systems help to overcome this issue, as they can be installed almost anywhere to create effective escape routes or pathways that will stop fire from penetrating into these areas. This provides a life support system for the building until emergency fire services arrive.

Promat can also supply and install a comprehensive range of high performance steel 2 and 4 hour fire doors for industrial applications. Each doorset can be purpose built to the client's exact specification, enabling virtually any shape or size to be created. The DD range of doorsets can be supplied as an integral part of the Promat DURASTEEL® system or as an individual item.

Promat DURASTEEL® will contain fire and smoke, blasts, impact and explosions within compartments of a manufacturing, production or assembly area, thus allowing for the safe evacuation of personnel, minimising disruption of processes, and preventing the destruction of or damage to valuable machinery and equipment.

It is an adaptable system and is commonly used in walls, doors, stairwells, ceiling applications and as stand-alone barriers or blast walls. It is also suitable for the protection of cables, and electrical or building services.



## Helping the Emergency Services

Minimises disruption and damage to facilities and gives the fire services vital planning time to preserve life and property.



## Protecting Stock

Helps to prevent loss of valuable stock and fire spreading into other areas.



## Keeping the Supply Chain Open

Provides vital continuity of supply for businesses and their customers.



## High-risk Environments

Protection from the threat of dangerous ignition sources common in factories.

# Your dedicated industry partner for fire protection in the industrial sector

## Total Project Support

Promat are committed to providing the highest level of technical expertise and support from the start of a fire safety project through its completion and beyond. We work with specifiers, architects, clients, project managers and contractors to ensure the appropriate solution is specified. Support services include:

- Dedicated industry-specific specialist advice
- Development of working drawings
- Regular site inspections
- Expert guidance, drawing on the experience of the Promat DURASTEEL® team, gained from years of dealing with projects in the industrial sector

- Understanding of the regulations – when we say it is proven, we can provide you with a reference point and a tested specification
- CAD drawings and a wealth of relevant technical data, information, accreditations, approvals, test reports and calculation tools
- NBS specification
- RIBA approved CPD training schemes

Our aim is to make your life easier and to supply and install a safe, maintenance-free, robust fire protection system you can rely on.



## Promat DURASTEEL® Licensed Installers

Promat DURASTEEL® is only installed by experienced, fully accredited, licensed installers, who ensure the system is fitted correctly for its intended application.

The client benefits from the extensive experience and expertise Promat has of working on similar projects in the industrial sector. This gives total peace of mind and complete confidence to the entire project team.

Each system undergoes a thorough check before the completed installation is issued with a Certificate of Conformity demonstrating the commitment of Promat to provide a fully tested and third party accredited 'fit-for-purpose' solution.



DURASTEEL®  
Licensed Installer

**Promat**

## Discuss Your Project

Contact us to discuss how we can assist and support you throughout your fire protection project or to arrange a site survey by one of our specialists.

Our Technical Support Team is available to provide expert assistance.

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