



PC-FireShield® HPS

High-performance fire-resistant calcium silicate board for durable passive fire protection systems.

PC-FireShield® HPS is a high-performance, non-combustible fire-resistant calcium silicate board engineered for advanced passive fire protection applications in power generation facilities, industrial, commercial infrastructure projects. It is specifically designed for the fabrication of fire-rated enclosures around cable trays, service penetrations, ducts, structural steel protection systems, smoke exhaust shafts, fire-rated partitions, ceilings, and floor assemblies. The board offers excellent dimensional stability, high mechanical strength, and long-term durability under demanding service conditions. With superior resistance to fire, moisture, and environmental exposure, PC-FireShield® HPS is suitable for both indoor and outdoor use where reliable compartmentation and thermal shielding are required. It is an ideal solution for projects requiring robust, maintenance-friendly, and code-compliant fire protection systems with extended service life.

AREAS OF APPLICATION

- Fire-rated cable enclosure systems and cable tray protection boxes
- Fire-resistant wall and partition assemblies
- Fire-rated ceiling and suspended ceiling systems
- Fire-resistant floor and slab protection systems
- Smoke exhaust shaft and vertical service shaft linings
- Fire protection cladding for structural steel elements
- Enclosures for electrical, mechanical, and service ducts
- Passive fire protection systems in industrial plants and utility areas
- Protection of escape routes, plant rooms, and service corridors
- Fire-rated access panels, inspection hatches, and service closures

FEATURES

- Non-combustible calcium silicate board for passive fire protection
- High fire resistance performance for enclosure and compartmentation systems
- Excellent dimensional stability under elevated temperatures
- Resistant to moisture and suitable for humid environments
- Durable and weather-resistant for indoor and outdoor applications
- Good mechanical strength and impact resistance
- Easy to cut, shape, and install on framed or self-supporting systems
- Suitable for use in walls, ceilings, floors, shafts, and cable protection systems
- Long service life with low maintenance requirements
- Compatible with a wide range of fire-rated construction assemblies

PRODUCT INFORMATION

Designation	Dimensions	Density	Thickness
PC-FireShield® HPS-900	2500 × 1200 × 12.5 mm	900 kg/m ³	12.5 mm
PC-FireShield® HPS-850	2500 × 1200 × 12.5 mm	850 kg/m ³	25 mm
	2500 × 900 × 25 mm	850 kg/m ³	25 mm
PC-FireShield® HPS-700	2500 × 900 × 25 mm	700 kg/m ³	25 mm

APPLICATION PROCESS

PC-FireShield® HPS should be installed on a clean, sound, and properly aligned steel frame or approved support structure. The boards are measured, cut to the required size, and mechanically fixed using suitable corrosion-resistant screws or approved fasteners in accordance with the specified fire-rated system design. All board joints, gaps, and penetrations must be tightly fitted and sealed with compatible fire-rated joint compounds or firestop sealants to maintain the integrity of the fire protection assembly. Proper joint treatment, fixing pattern, and support spacing should always follow approved drawings and project specifications to achieve the required fire resistance performance.

TECHNICAL DATA

Property	Value
Fire Resistance (Integrity)	50 - 240 minutes* ASTM E119
Reaction to Fire	Negative / Non-combustible
Moisture Resistance	100 % moisture-resistant
Hydrocarbon Fire Rating	Resistant for hydrocarbon fire conditions
Chemical Resistance	Resistant of Deactive Solutions
Weather Resistance	Compatible All weather for indoor & outdoor use
Application Type	Framed/Hatches/self-supporting/Locking
Service Life	45 years +
Standard	ASTM C533

IMPORTANT NOTES

- Fire resistance performance depends on the complete tested assembly, not only the board itself.
- Final rating must be based on system design, thickness, fixing method, joint treatment, and support configuration.
- Always follow project specifications, approved shop drawings, and local fire code requirements.
- Project-specific engineering verification is recommended for critical applications.

STORAGE AND SHELF LIFE

This product should be stored flat on a clean, dry, and level surface in a covered area, protected from moisture, direct weather exposure, and physical damage during handling and storage. Boards should be kept in their original packaging or adequately covered until use. Avoid improper stacking, edge impact, or excessive point loading that may cause cracking or deformation. When stored under recommended conditions, the product has a practically unlimited shelf life.

HEALTH AND SAFETY

PC-FireShield® HPS is an inorganic building board intended for professional use. During cutting, drilling, or mechanical processing, dust may be generated; therefore, suitable personal protective equipment such as dust masks, safety goggles, gloves, and protective clothing should be used. Ensure adequate ventilation during installation and avoid inhalation of dust particles. Use appropriate cutting tools and follow safe handling practices to prevent injury from sharp edges or board breakage. Refer to the relevant safety guidelines and local regulations for proper handling, storage, transportation, and disposal.



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TDS/PC-FIRESHIELD® HPS/20

All technical data in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

The information, particularly the recommendations relating to the application and end-use of PC-WC products, are given in good faith based on PC-WC's current knowledge and experience of the products when properly stored, handled and applied under normal conditions by PC-WC recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or any other advice offered. The user must test the product's suitability for the intended application and purpose. PC-WC Global FZ-LLC reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Our technical assistance is at the disposal of the users. Consult the latest update of the technical data sheet on our [website www.pc-wc.com](http://www.pc-wc.com)