PENSA | CHAMPION Door | Aircraft Hanger & Shipyard Doors

Product Technical Statement: 114074

Champion Door: Durable, large-scale industrial doors for hangars, ports, and demanding environments <u>View miproducts listing</u>

MEDIUM

Level of assurance needed to demonstrate NZ Building Code Compliance

Supporting documentation should include technical information by manufacturer and either an independent assessment or reference to an industry-based scheme

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PENSA | CHAMPION Door confirms that this minimum level of assurance has been met or exceeded by the following: Material Lab

Thermal Transmission Properties Assesment - 500430

BPIR

The following information has been provided by PENSA | CHAMPION Door demonstrating how this product complies with the <u>Building Product</u> <u>Information Requirements</u>.

Technical Statement

Product Class

CLASS 2

Product Description

Champion Door specializes in advanced industrial door solutions, crafted for durability and low maintenance in challenging environments. <u>The product range</u> includes fabric fold-up doors for hangars, shipyards, and industrial sites, specifically engineered to withstand extreme weather, corrosion, and heavy use. Champion Door's systems feature a modular, lightweight design that eases installation and reduces building load, providing energy efficiency and structural safety. Available in customizable configurations, including automated and remote control options, these doors enhance access control, making them ideal for complex applications. Champion Door supports its clients from initial consultation to installation, ensuring tailored solutions with a commitment to reliability, resilience, and functionality in even the most demanding conditions.

Scope of use

Champion Door's industrial doors are suitable for large-scale applications across various sectors, including aviation, marine, manufacturing, logistics, and mining. These doors are ideal for environments with extreme weather, wind loads, and corrosive elements, supporting operations in cold, humid, or otherwise demanding climates. They serve as both exterior doors for hangars, shipyards, and distribution centers and as interior partitions within warehouses and factories, optimizing space management and workflow efficiency. The doors can be configured for diverse structural requirements, accommodating the specific needs of industries requiring robust, weather-resistant access solutions that support smooth operations in high-traffic or complex environments.

New Zealand Building Code (NZBC)

The product will, if employed in accordance with the supplier's installation and maintenance requirements, assist with meeting the following provisions of the building code:

• Clause B1 Structure: Performance B1.3.1, B1.3.2, B1.3.3(a), B1.3.3(h)

(Structure)

- Structural engineering reports and load calculations verifying design integrity against building loads.
- Testing certifications from structural assessments for load-bearing capacity.

(Self-weight)

- Manufacturer's structural specifications showing compliance with weight limitations.
- Load analysis to demonstrate that the door's self-weight does not exceed the design tolerances.
- Relevant standards: AS/NZS 1170, specific structural assessment documentation.

(Wind)

- Wind load testing reports that validate the door's capacity to resist wind forces.
- Certification of wind resistance from manufacturer. Conforming with AS/NZS 1170
- Clause B2 Durability: Performance B2.3.1(b)
 - Accelerated aging tests or documented performance in comparable environments.
- Clause D1 Access routes: Performance D1.3.3(a)





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Company Contact Details

Brand:	PENSA CHAMPION Door
Company:	Pensa Doors NZ Limited
Physical Address:	92 Takanini School Road Auckland
Postal Address:	
Email:	info@pensadoors.com
Website:	https://www.pensadoors.com/large- door-systems

PENSA | CHAMPION Door | Aircraft Hanger & Shipyard Doors

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- · Installation specifications showing door size and clearances to ensure safe movement.
- Clause E2 External moisture: Performance E2.3.2
 - Installation details demonstrating adherence to weather-sealing requirements.
- Clause G4 Ventilation: Performance G4.3.1
 - · Installation guidelines confirming that door placement does not obstruct ventilation.
 - Conforms with AS 1668 for ventilation systems if mechanically ventilated.
- Clause H1 Energy efficiency : Performance H1.3.1(a)
 - Thermal resistance testing reports showing R-values for door insulation.

Evidence

The product meets the requirements set out in the following documents, or relevant parts of cited standards within the documents:

Champion Doors are engineered to meet New Zealand Building Code (NZBC) standards across key structural, durability, safety, and environmental provisions. Complying with B1.3.1 and B1.3.2, they are designed to maintain integrity under applied loads without excessive deformation. B1.3.3(a) ensures each door can support its own weight, while B1.3.3(h) certified resistance to high wind loads, guaranteeing stability in challenging conditions. For durability (B2.3.1(b)), Champion Doors use long-lasting materials, ensuring performance over a minimum of 15 years. Safety and accessibility are prioritized under D1.3.3(a), with ample operational space to support safe passage. Moisture resistance (E2.3.2) is achieved through effective weather-sealing, protecting interiors from dampness. The doors do not obstruct airflow, aiding compliance with G4.3.1 for ventilation. Finally, thermal insulation options meet H1.3.1(a), enhancing energy efficiency by reducing heat transfer, making Champion Doors an all-around compliant solution.

Supporting Evidence

The product has and can make available the following additional evidence to support the above statements:



Thermal Transmission Properties Assesment - 500430

Use in Service History

Material Lab

- Emirates Team NZ Base, Viaduct Events Centre Auckland, New Zealand
- ORAMS Marine, Boat Shed Auckland, New Zealand
- Fonterra, Clandeboye New Zealand

Product Criteria

Design requirements

Champion Doors are large-scale vertical lifting fabric fold-up doors designed primarily for industrial and commercial applications, including aircraft hangars, shipyards, and industrial facilities. These doors provide high structural performance and weather resistance, making them suitable for harsh environments. They integrate with building elements like structural frames and external walls and are compatible with large openings requiring wide clearances. Champion Doors are designed to withstand high wind loads, extreme temperatures, and are suitable for various climates.

Installation requirements

Installation must be performed by qualified PENSA technicians experienced in handling large, automated doors. Key steps include aligning the door system with the building's structural frame, sealing for weather resistance, and ensuring alignment for operational stability. Essential tools include heavy-duty mounting hardware and lifting machinery. Precautions involve verifying structural alignment, ensuring that tracks and motors are calibrated correctly, and conducting safety checks.

Maintenance requirements

PENSA offer comprehensive preventative maintenance agreements to ensure compliance with NZBC Clause B2 (Durability) and long-term performance. These agreements cover regular maintenance to maintain optimal performance and extend the door's lifespan. Key services include annual inspections of all mechanical and structural components, lubrication of moving parts, and replacement of worn weather seals. Monthly inspections (If required) focus on motor functions, track alignments, and weather seals, with cleaning to prevent material degradation. Quarterly, PENSA inspects seals and insulation for airtightness, while fasteners, mounts, and guardrails are checked for corrosion or loosening to ensure stability. Non-slip flooring and RAL color panels are cleaned and inspected to maintain safety and appearance, with replacements provided as needed. Detailed records of all maintenance activities document compliance and ensure Champion Doors remain durable and secure over time.

Warrantees

PENSA provides a standard two-year warranty covering the door and partition products, as well as the installation services. This warranty ensures that the products function properly and are free

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from manufacturing or structural defects during this period.

NOTE: Warrantees are subject to a maintenance agreement being in place upon completion of the installation.

Company Product Information

Environmental

Champion Door is committed to environmental responsibility, holding ISO 14001:2015 certification for its Environmental Management System. The company sources materials from sustainable forests, adhering to the Program for the Endorsement of Forest Certification (PEFC) standards. Their fabric fold-up doors are designed for energy efficiency, featuring superior thermal insulation to reduce energy consumption. Champion Door emphasizes durability and minimal maintenance, extending product lifespan and reducing environmental impact. Through continuous innovation and adherence to environmental standards, Champion Door ensures its products meet both performance and sustainability criteria.

Quality Assurance

ISO 9001 (Quality Management)

Videos Champion | Vertical Lifting Aircraft Hangar Door

Champion | Shipyard doors in New Zealand

Building Product Information Requirements

Manufacturer

Legal Trading Name: Champion Door Oy

Company Website: https://www.championdoor.com/

Contact Number/s: +3588 445 88

Importer

Legal Trading Name: Pensa Doors NZ Limited

Business Email: info@pensadoors.com

Company Website: www.pensadoors.com

Contact Number/s: 0800 667721

Product Identifier

NK2 DOUBLE NK4 WARM NK2L DOUBLE LITE NK4L WARM LITE

Warnings

This product has no warnings associated with it.



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1