



TEMPEST Door

*Uncompromising Security for
High-Risk Environments*

ASSA ABLOY
Opening Solutions

Experience a safer
and more open world



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Introduction

Shaping the future of door solutions - Where performance meets possibility.

At ASSA ABLOY Door Group, we engineer doors that go beyond access—they are integral to the safety, efficiency, and design integrity of modern buildings. Our steel and timber doorsets are precision-manufactured to meet the highest standards of fire resistance, acoustic performance, hygiene, and security, ensuring compliance with UK, European, and international regulations.

With decades of experience and a global presence, we support architects, contractors, and facility managers with fully certified, project-specific solutions. Whether for healthcare, education, commercial, custodial, or high-security environments, our doors are rigorously tested and third-party accredited to deliver consistent, reliable performance.

Sustainability at the Core

We are committed to reducing environmental impact across the entire product lifecycle. Our doors are designed with durability and recyclability in mind, and we actively pursue low-carbon materials, energy-efficient manufacturing, and responsible sourcing. Through initiatives like

Environmental Product Declarations (EPDs), lifecycle assessments, and compliance with green building standards such as BREEAM and LEED, we help our clients meet their sustainability goals without compromising on performance or aesthetics.

The Importance of Electromagnetic Security

Every electronic device emits electromagnetic radiation, which can inadvertently carry sensitive information. Sophisticated interception methods can exploit these emissions, leading to unauthorized data access. Protecting against such threats is crucial for maintaining the confidentiality and integrity of sensitive information.

Security Risks

Electromagnetic emanation poses significant security risks, as leaked signals can be intercepted and exploited. Hackers and intelligence agencies may use electromagnetic surveillance techniques, such as Van Eck Phreaking, to reconstruct sensitive information, including text, images, or keystrokes.

Additionally, attackers can take advantage of these emissions to infiltrate networks or extract confidential data through wireless hacking. A more advanced threat, known as TEMPEST, attacks, involves the use of electromagnetic leaks for covert surveillance on electronic devices, making it a critical concern for high-security environments.


Mitigation

To mitigate the risks of electromagnetic emanation, several countermeasures can be implemented. Shielded enclosures, such as Faraday cages, block electromagnetic signals by using conductive materials that prevent signal leakage. Electromagnetic emanation-resistant doors are specifically designed to prevent signal escape from secure rooms.

Additionally, RF filtering and grounding help minimise unwanted emissions from power and data lines, while TEMPEST-approved equipment is engineered to reduce electromagnetic radiation and ensure compliance with security standards. Together, these measures protect sensitive environments from electromagnetic interference and surveillance.

Shielding Against Electromagnetic Threats with TEMPEST Doors





Total Door Solutions—
Engineered for Security,
Performance, and Design.

The Importance of Electromagnetic Security

Application

In environments where sensitive information must be protected—such as government agencies, military installations, banks, and financial institutions—the risks of electromagnetic emanation are a serious concern. The ability to intercept and reconstruct data remotely using EM signals can lead to devastating security breaches, making it crucial to implement comprehensive countermeasures.

The ASSA ABLOY TEMPEST Door effectively addresses key security risks by preventing electromagnetic signal leakage and blocking RF and EM signals that could be intercepted. It has been tested to IEEE Std 299-2006 - IEEE Standard Method for Measuring the Effectiveness of Electromagnetic Shielding Enclosures. By enhancing both cyber and physical security, it effectively prevents data breaches, unauthorised surveillance, and RF hacking threats, making it a critical solution for safeguarding sensitive information in high-security environments.

Additionally, the ASSA ABLOY TEMPEST Door offers high RC4 burglary resistance, providing a robust barrier against physical attacks. This makes it suitable for use in various high-security settings, including:

- State Administration and Government Facilities
- Military Command Centres
- Diplomatic Missions
- Critical Infrastructure
- Large Corporations Processing Classified Data

The door's design ensures that electromagnetic leakage is minimised, even in environments with extensive electronic equipment, such as data centres and secure communication rooms.

ASSA ABLOY TEMPEST Door - Advanced Protection

Product Features

- **Electromagnetic Emanation Shielding:** Blocks RF and EM signals effectively, with shielding effectiveness from 44.7 dB to 121.4 dB across 30 MHz to 5 GHz.
- **High-Security Construction:** Reinforced materials, including angular steel frame and zinc-plated steel sheets, providing enhanced durability and protection. Includes anti-burglary bolts and high-class locks.
- **Customisable Design:** Available in multiple sizes and finishes, such as powder coating, varnished MDF board, plywood board with natural oak veneer, and oak wood. Offers various security levels, including optional locks and door closers.
- **Tested & Certified:** Tested to IEEE Std 299-2006 for electromagnetic shielding effectiveness. Meets standards like EN 1192:2001 and EN 1627:2012.
- **Seamless Integration:** Designed to work with Faraday cages, SCIFs, and secure RF rooms, ensuring comprehensive protection in high-security environments.

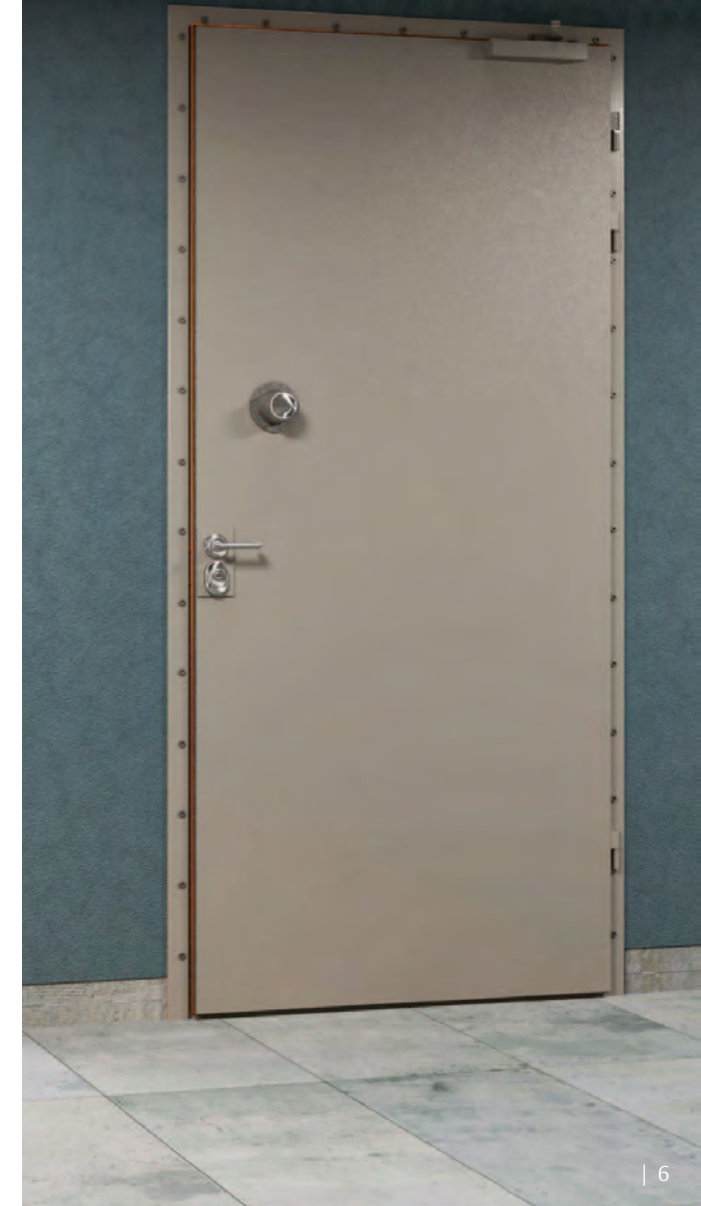
Technical Specification


- **Door Frame:** Made of a special angular steel section, 3 mm thick, with a metal gasket on four edges.
- **Door Leaf:** Constructed from zinc-plated steel sheets, 2.0 mm thick, without additional coverings, and filled with mineral wool with a density of 60 kg/m³.
- **Thickness:** 90 mm with metal gaskets.
- **Hinges:** Four steel welded hinges with bearings.
- **Anti-Burglary Bolts:** Three anti-burglary bolts.
- **Locks:** Main expansion lock in class 7, with options for additional locks and combination locks.
- **Door Closer:** Optional.

Performance Ratings

- **Shielding Effectiveness:** 44.7 dB to 121.4 dB across frequencies from 30 MHz to 5 GHz.
- **Mechanical Strength:** Class 4 (per EN 1192:2001).
- **Burglary Resistance:** Class RC4 (per EN 1627:2012).

Engineered for Security.
Built for Compliance.





Engineered for Security.
Built for Compliance.

ASSA ABLOY TEMPEST Door - Advanced Protection

Shielding Effectiveness

Measuring Range	Field Polarisation	Measuring Point	Minimum Value	Maximum Value
30 MHz to 200 MHz	vertical	P1	59.4 dB	112.4 dB
30 MHz to 200 MHz	horizontal	P1	73.4 dB	111.1 dB
200 MHz to 1 GHz	vertical	P1	54.1 dB	108.9 dB
200 MHz to 1 GHz	horizontal	P1	61.2 dB	95.3 dB
1 GHz to 5 GHz	vertical	P1	44.7 dB	91.6 dB
1 GHz to 5 GHz	horizontal	P1	45.6 dB	79.1 dB

ASSA ABLOY TEMPEST doors should be installed in shielded walls of min. 180 mm, designed for this type of room and appropriately designed steel structures.

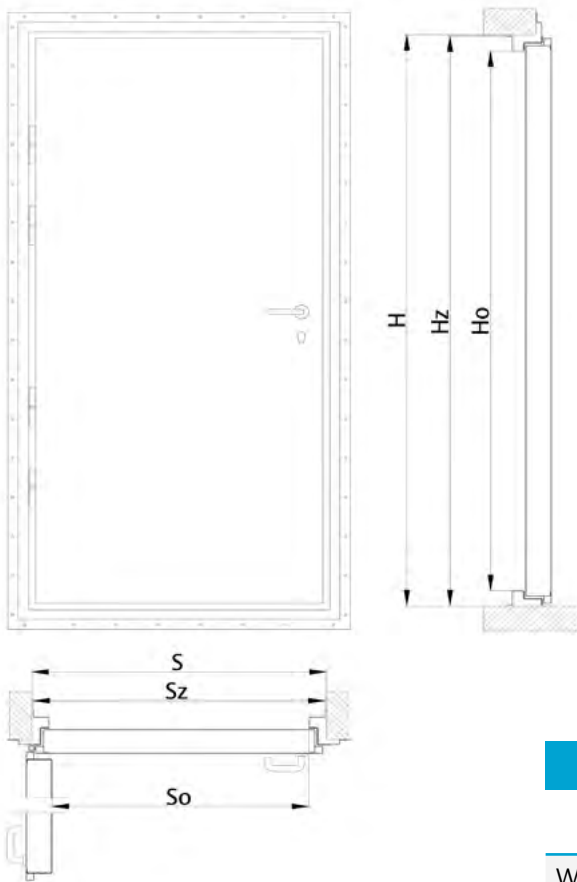
Surface Finish

The Tempest door can be supplied with a variety of aesthetically pleasing finishes to match the surroundings, including:

- Powder coating to a standard RAL colour
- A range of timber finishes using veneers or natural wood

ASSA ABLOY TEMPEST Door - Advanced Protection

Basic Dimensional Dependencies



DC 3.1 XL TEMPEST		
	Width	Height
Wall Opening S/H [mm]	$S = Sz + 10$	$H = Hz + 10$
External Dimension Sz/Hz [mm]	$Sz = So + 130$	$Hz = Ho + 120$
Clearance Dimensions So/Ho [mm]	So	Ho

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A photograph of a modern hallway with white walls and a light-colored wooden floor. Several white doors are visible, each with a small number above the handle. The hallway is well-lit, and the perspective leads the eye down the corridor.

Doors That Deliver.
Innovation That Secures.

About Door Group

High Performance Steel & Timber Doors Solutions

Door Group, part of the ASSA ABLOY Opening Solutions EMEA Door Business Segment, is the UK's leading manufacturer of high-performance steel and timber doors. Through our trusted brands—Powershield, Prima, Safeguard, and SMARTec—we deliver tailored door solutions that meet the specific demands of each project.

We offer a complete, end-to-end service—from design and manufacturing to installation and maintenance—supporting architects, specifiers, contractors, and facilities managers across a wide range of sectors. These include healthcare, education, commercial, data centres, logistics, leisure, retail, government, critical national infrastructure, utilities, and hospitality.

With decades of experience and the backing of ASSA ABLOY, the global leader in access solutions, we combine international innovation with local expertise and UK-based manufacturing. Our doors are rigorously tested, fully certified, and built to perform—ensuring compliance, durability, and peace of mind.

We are committed to responsible manufacturing and long-term product performance, helping clients meet both regulatory and sustainability goals.

Door Group - Delivering doors that secure, perform and endure.

Our Value Propositions

Every building or estate has its own needs. Finding the right product will depend on an extensive range of factors, the intended use of a building and ease of access through it, the level of traffic passing through a building, future development plans, and so on. Whatever you need, our range of high-quality support services can help.

Every day, we help you experience a safer and more open world.



International Partner

As part of the global ASSA ABLOY Group—operating in over 70 countries with 61,000 employees—we bring world-class expertise in access control, entrance automation, and identification technology to every project.



Market Leader

We're the UK's leading provider of door opening solutions, offering everything from mechanical and digital locks to high-security doors and smart access systems—designed to meet the highest standards of safety, performance, and compliance.



Trusted Hardware

Our comprehensive hardware range includes mechanical locks, access control systems, fire door safety products, and hands-free solutions—trusted by institutions like Edinburgh University and NHS Trusts across the UK.



Specification Expertise

Our expert team supports every stage of your project—from design to installation—offering BIM-ready packages, lifecycle cost analysis, and tailored solutions for efficient, sustainable building design.





Our Value Propositions



High-Performance Doors

We deliver fully certified steel and timber doorsets, backed by DHF and BRE-trained engineers and a dedicated fire door inspection scheme. Our doors protect critical infrastructure including airports, hospitals, and transport networks.



World-Class Service

From training and compliance support to maintenance and inspection, our services are designed to give you complete confidence in your door systems—whatever the size or complexity of your estate.



Openings Studio™

Our cloud-based BIM software, Openings Studio™, enables seamless collaboration across the building lifecycle—helping architects, contractors, and facilities managers design, manage, and maintain door openings with precision.



Design4Doors

Our Design4Doors service brings your vision to life with tailored door design support, finish samples, and visual mock-ups—helping you specify with confidence and align aesthetics with performance from the very start.

Our Services

Every building or estate has its own needs. Finding the right product will depend on an extensive range of factors, the intended use of a building and ease of access through it, the level of traffic passing through a building, future development plans, and so on. Whatever you need our range of high-quality support services can help.

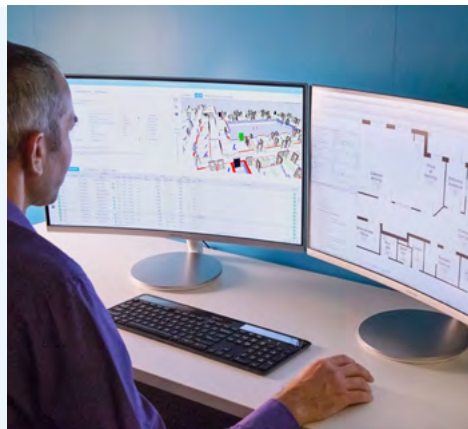
Architectural Specification

- Help you create compliant and accurate schedules
- Prepare specification briefs and streamline the process to help mitigate potential risk.
- Design complete door opening solutions for all applications and security requirements.



Project Management, Design and Construction

- Complete design service.
- Help you meet day-to-day practical demands of your environment.
- Our project engineers translate architectural design and performance expectations.



Training Courses

- RIBA accredited training provider, catering to individual or combined CPD courses, which architects can earn points towards their annual targets.
- We also deliver product training or education programmes tailored to meet your specific needs.
- Knowledge and experience sharing to help you with the expertise you will need for a competitive edge.



Our Services

Testing and Accreditation

- Integrity, ingenuity, and innovation. Meeting the highest technical standards for testing accreditation.
- A custom-built UKAS performance testing laboratory.
- All our products are independently tested with third party accreditation.
- Our in house facilities ensure the quality of our products.



Service, Maintenance and Repair

- Aftersales solutions for end users and facility management companies.
- UK wide coverage to make sure we can reach you quickly.
- Our maintenance contract incorporates regular inspections, priority calls and discounts that can be applied to our repair work prices.



Master Keying Consultancy

- A suite for every scenario, no matter the size or scale of your site.
- Patented protection. Unique features incorporated in the design of the product offers greater protection and allows only authorised suppliers to cut keys.
- Enables buildings to satisfy security and access needs with greater control.



Fire Door Inspections

- Regular inspections are essential to fully ensure health and safety measures are met.
- Digitised fire door inspection software via a mobile app to ensure fire doors are kept compliant and operational, keeping occupants safe.
- The identification of any potential issues that could impact building safety and effective product performance.
- A detailed report offering advice and recommendations of necessary improvements.



A Golden Thread Solution

Openings Studio™ is a cloud based, custom configuration tool for the creation, visualisation, modification and management of door openings. This unique BIM application provides access to complete doorset information at all stages from product concept to product care.

Our unique Openings Studio Suite fully delivers on this expectation by providing a fully integrated and real-time BIM connection that supports the specification and design process. With a seamless connection to Revit or Graphisoft Design software Openings Studio™ connects all stakeholders in the design, construction and facilities management of buildings. This links directly with our production process, connects and aligns with our third party testing and accreditation, and enables verified onsite installation along with ongoing product inspections through its mobile platform.

Suite of BIM tools used to create, visualise and modify doors, frames and hardware objects.

Produces “complete opening” models with hardware and specifications.

Time for a Change

The Building a Safer Future Independent Review of Building Regulations and Fire Safety Report published in May 2018 and presented to Parliament by the Secretary of State of Housing, Communities and Local Government made it clear that transparency, accountability and a more interconnected approach to construction was essential to improve safety for people and improve the standard of buildings, thereby avoiding similar events to the Grenfell Tower disaster in 2017.

This report set out a clear pathway on how buildings should be constructed, maintained and made safe. The projects require a “golden thread” of information, with safety considered at every stage of the building’s life cycle.

As a result, the Building Safety Act 2022 received Royal Assent and introduces new legal requirements on how buildings are constructed and maintained in the UK.



ASSA ABLOY. Experience a
safer and more open world.

ASSA ABLOY
Opening Solutions

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