Digital Asset Management: Your Golden Thread Connection From Specification to Service
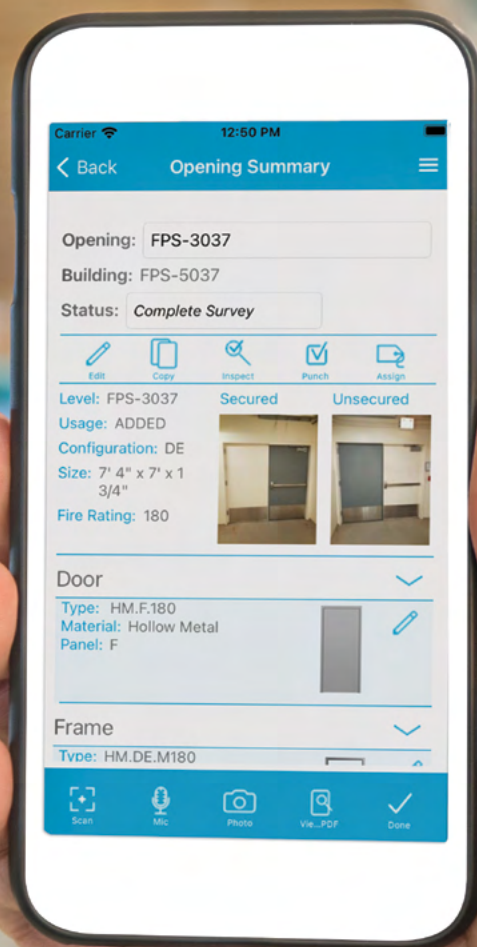
Enhancing Compliance and Delivering Digital Transparency with Openings Studio™ & RFID Asset Tagging

ASSA ABLOY
Opening Solutions

assaabloy.com

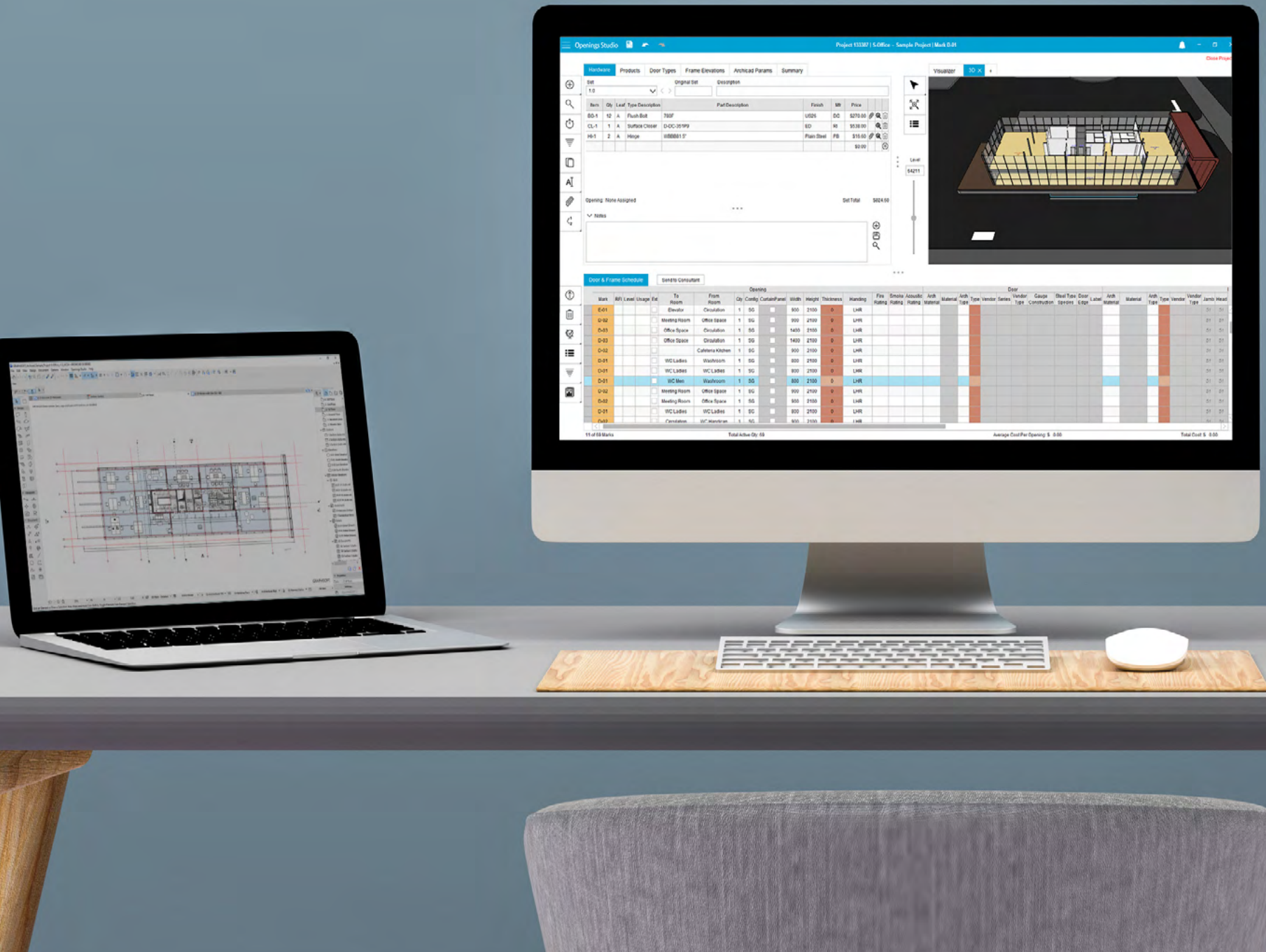Experience a safer and more open world

Opening Doors
to Opportunities

Content

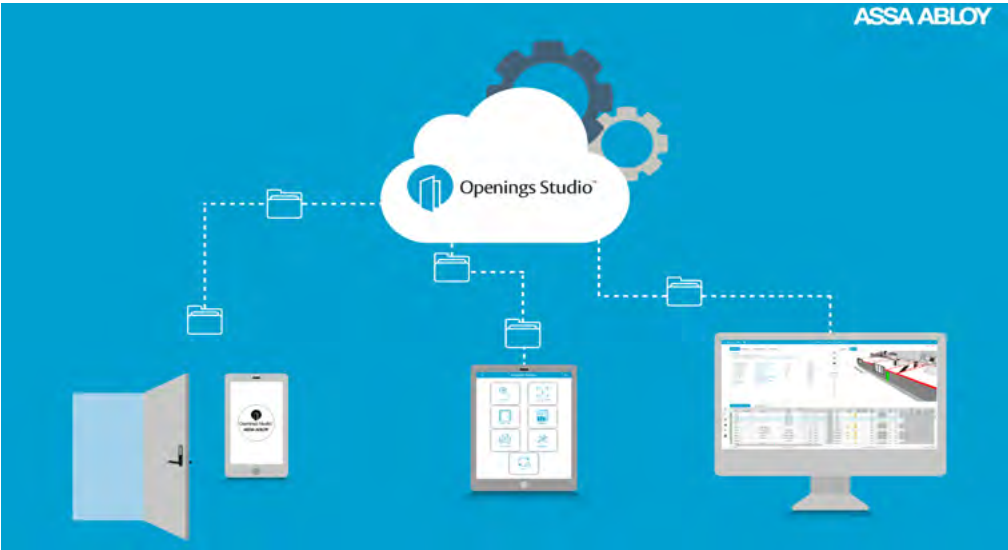# RFID Asset Tagging -
The Gateway to Digital Asset Management

RFID asset tagging acts as a bridge to the ASSA ABLOY Openings Studio™ System and the BIM environment, enabling seamless integration between physical assets and digital management tools.

Building Information Modelling (BIM) is a digital process that develops and manages intelligent 3D models of buildings and infrastructure, combining geometry, data, and collaboration to optimise design, construction, and facility management.

One of the biggest challenges in the building and infrastructure industry is human error, which occurs throughout every stage of the project pipeline.

While BIM is a powerful and essential tool for building design, Openings Studio™ – a BIM integrated software plugin for Revit – enhances its efficiency by bridging critical gaps in door and hardware specification, automation, and lifecycle tracking, making it an indispensable GOLDEN THREAD solution for architects, suppliers, contractors, and facility managers.

Most importantly, RFID asset tagging connects the physical asset – in this case, the door – with asset management tools, ensuring accurate tracking and smarter lifecycle management whilst digitising the process as shown in figure 1 below.

How RFID Tagging Works

RFID (Radio Frequency Identification) asset tagging works in ASSA ABLOY Door Group by using RFID tags attached to each door and connected to the Openings Studio™ Mobile app to track and manage assets automatically.

1. RFID Tag Attachment
- Each door produced in ASSA ABLOY Door Group factory is tagged with an RFID tag.
- Each tag contains a microchip which is programmed in the ASSA ABLOY Door Group Factory after a door is manufactured using the Openings Studio™ mobile app and provides a digital gateway to all the door details, data sheets and inspections from concept to product in service.

2. Reading The RFID Tag
- Using a Smartphone or Tablet, scan the RFID tag in the Openings Studio™ mobile app to access a historical account of the door - from design intent through manufacturing and installation and then to facilitate product servicing, maintenance and upgrades.
- The Openings Studio™ mobile app is available to download on the Apple and Android App Stores.

3. Data Processing & Transmission
- Data is processed in real-time on the Openings Studio™ platform.

4. Asset Tracking & Management
- RFID enables real-time monitoring of assets to evidence continued product compliancy.
- RFID integrates with Openings Studio™ which plugs directly into BIM for enhanced lifecycle tracking.

The Gateway to Digital Door Tracking, Lifecycle & Compliance Transparency

RFID asset tagging is the gateway to asset management. ASSA ABLOY are revolutionising the door industry by enabling digital tracking, lifecycle management, and compliance transparency. ASSA ABLOY's Openings Studio™ application, together with RFID technology supports and optimises specification, ensures compliance, records change management, reduces time-consuming manual processes, reduces human error and enhances product and facilities management.

1. Real-Time Door Design Development, Tracking & Asset Management
- RFID tags enable instant identification of doorsets, eliminating manual tracking.
- Openings Studio™ is the only dedicated platform for door solutions that directly integrates with the digital building model, extracting and updating door information in real time, capturing door locations, door interfaces, door specification, door attributes and a historical account of the asset development.
- Ideal for small, medium and large scale projects, to ensure clarity, consistency and accountability for life safety systems.

2. Automated Maintenance & Lifecycle Management
- RFID tags provide access to detailed door information (e.g., fire ratings, security levels, warranties, product data, drawings, certification).
- Facilities managers can quickly check the status of inspections along with the service history easily by scanning the RFID tag on the asset, when connected to the Openings Studio™ application.

3. Compliance & Regulatory Tracking
- RFID provides a gateway to track modifications and repairs, reducing the risk of unauthorised adjustments (e.g., non-compliant letterbox additions).
- Creates audit trails for easy reporting on safety and accessibility compliance.

4. Security & Loss Prevention
- RFID creates a digital footprint for each door, preventing unauthorised movement or theft.
- Tracks high-value security doors in data centres, hospitals, and commercial buildings.
- Enhances access control systems by linking doors with smart credentials.

5. Seamless Integration with Openings Studio™
- RFID tags sync directly with Openings Studio™, a cloud-based BIM-integrated platform.
- Provides real-time updates on door specifications, ensuring accurate data throughout the design, construction, and maintenance phases.
- Improves collaboration between architects, contractors, and facility managers.

6. Faster Audits, Project Handover & Time Savings
- RFID tagging speeds up door audits by eliminating manual scanning and paperwork.
- Streamlines handover processes between construction teams and facility managers.
- Reduces administrative workload, saving hours or even days on large-scale projects.

7. Minimising Human Error
- Manual asset tracking often leads to misplaced doors, incorrect installations, or incomplete records.
- RFID automates data capture, significantly reducing errors in door tracking, specification, and maintenance logs.
- Ensures accurate and up-to-date information is accessible to all stakeholders.

8. Scalability & Industry Adaptability
- RFID technology can be applied to any project scale, from small buildings to mega infrastructure projects.
- Suitable for hospitals, schools, commercial buildings, manufacturing plants, and more.

RFID asset tagging is the entry point to a fully digital asset management ecosystem, transforming door tracking and lifecycle management across the industry. When combined with ASSA ABLOY's Openings Studio™, it enhances efficiency, compliance, and security, while eliminating manual paperwork and reducing human error. This results in a seamless digital workflow for architects, contractors, and facility managers, saving time and ensuring accuracy.

A Golden Thread Solution
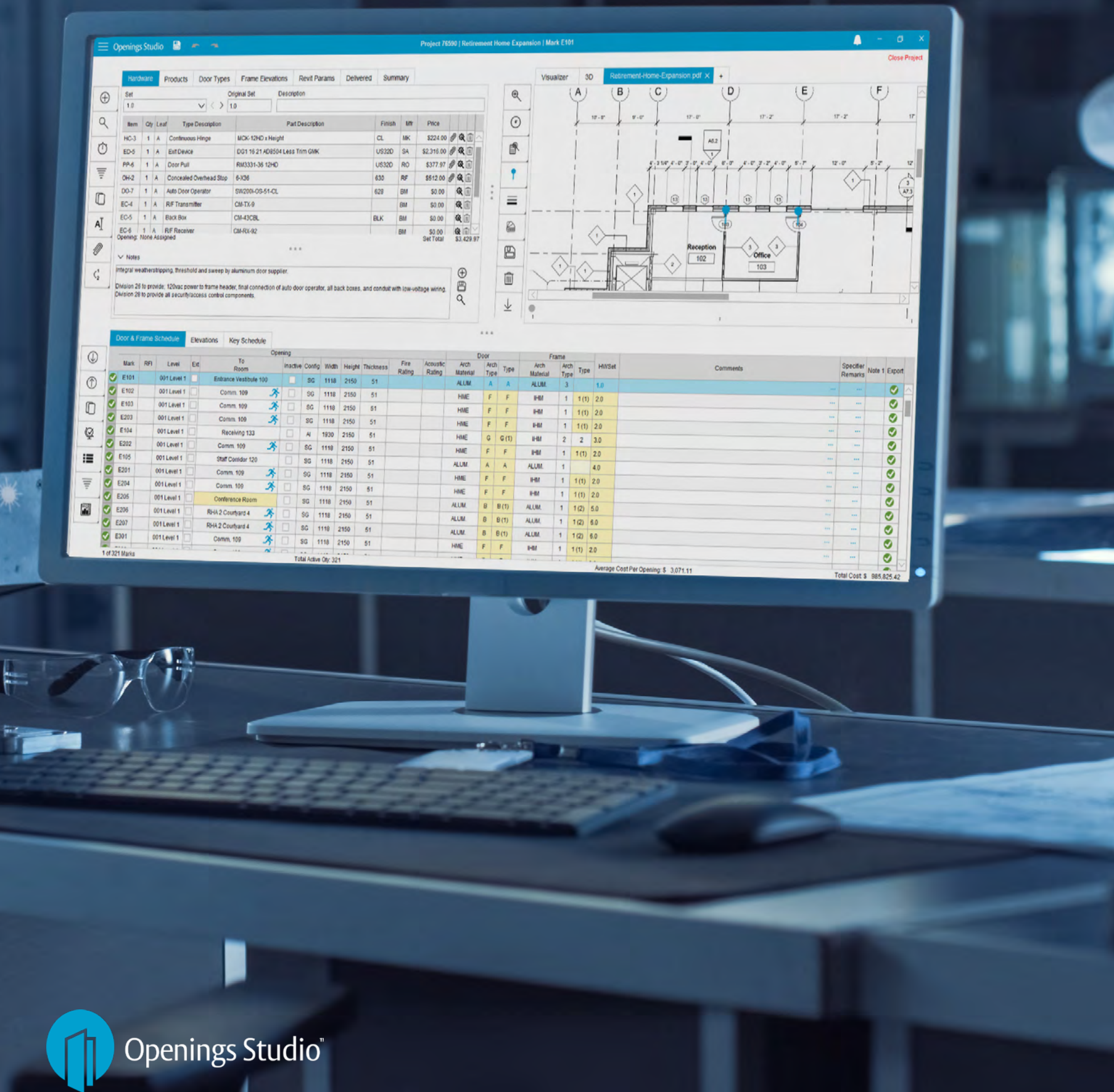
Openings Studio™ - A Golden Thread Solution

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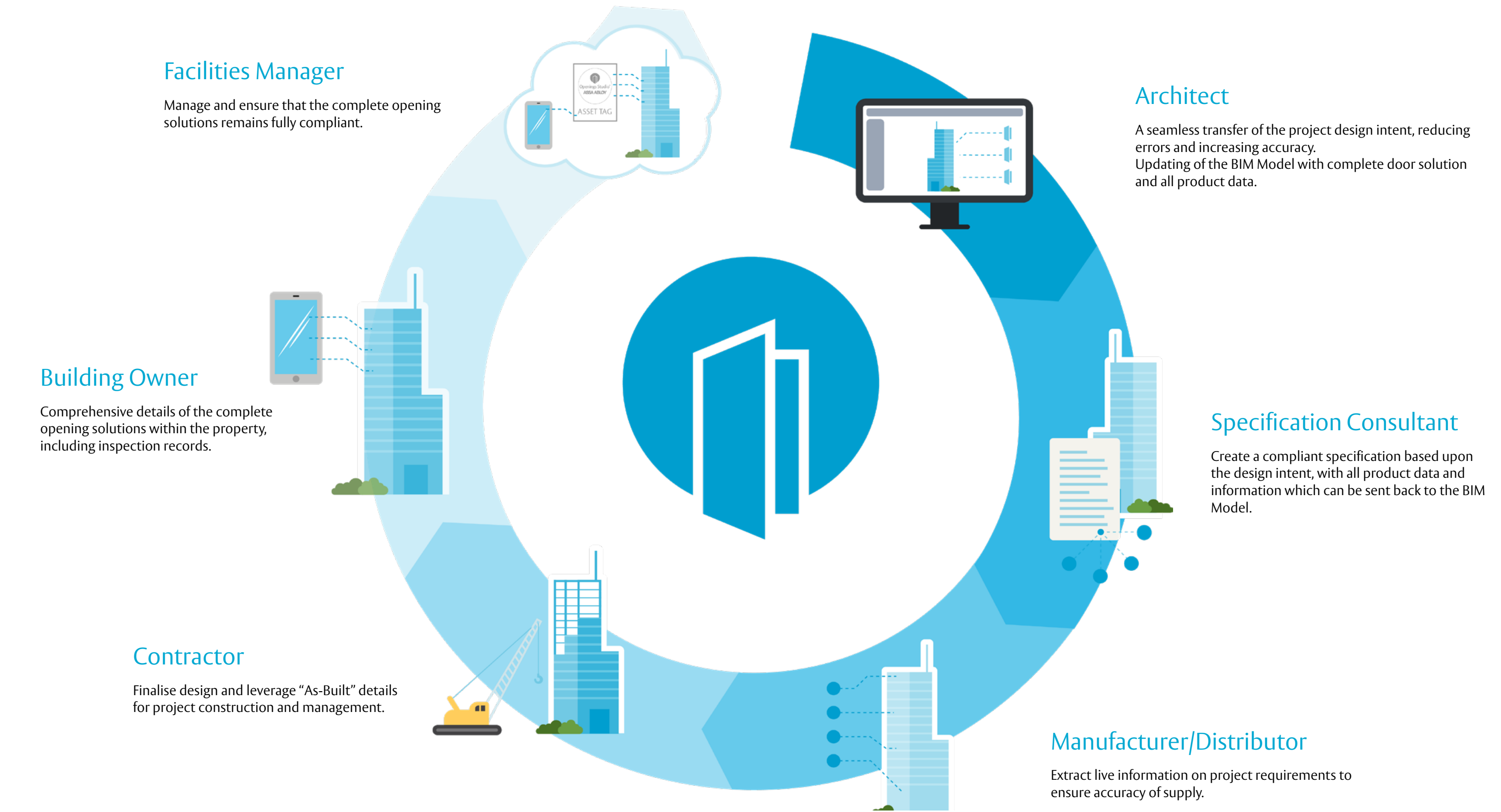
This report set out a clear pathway on how buildings should be constructed, maintained and made safe. The projects require a "golden thread" of information, with safety considered at every stage of the building's life cycle.

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.

The GOLDEN THREAD

The evolution of BIM technology has coincided with the tightening of building regulations within the industry, with emphasis currently placed on the 'Golden Thread' approach outlined. Introduced as a tool to manage buildings as holistic systems, and allow people to use information to safely and effectively design, construct and operate their buildings.

"Transparency of information and an audit trail all the way through the life cycle of a building from the planning stage to occupation and maintenance is essential to provide reassurance and evidence that a building has been built safe and continues to be safe."
Dame Judith Hackitt, 2018

Facilities Manager

Manage and ensure that the complete opening solutions remains fully compliant.

Architect

A seamless transfer of the project design intent, reducing errors and increasing accuracy.
Updating of the BIM Model with complete door solution and all product data.

Building Owner

Comprehensive details of the complete opening solutions within the property, including inspection records.

Specification Consultant

Create a compliant specification based upon the design intent, with all product data and information which can be sent back to the BIM Model.

Contractor

Finalise design and leverage "As-Built" details for project construction and management.

Manufacturer/Distributor

Extract live information on project requirements to ensure accuracy of supply.

Digital Transformation

The one software tool were architects, suppliers, contractors and facilities managers can design, build and maintain openings for their entire life cycle.

Design

Create or select a door from your own customised library of openings. Modifications can be easily made to door frames and hardware to meet project specific standards.

Construction

During construction live RFI's can be submitted and responded to, submissions reviewed and approved and all changes logged, tracked and managed.

Installation

Access as-built information, including production quality control records and enable verified compliant on-site installation and inspections.

Management

Through desktop or mobile app access, management have access to completed specifications, updated information on changes and requests, links to production quality inspection details and progress reporting on installation along with overall construction status updates.
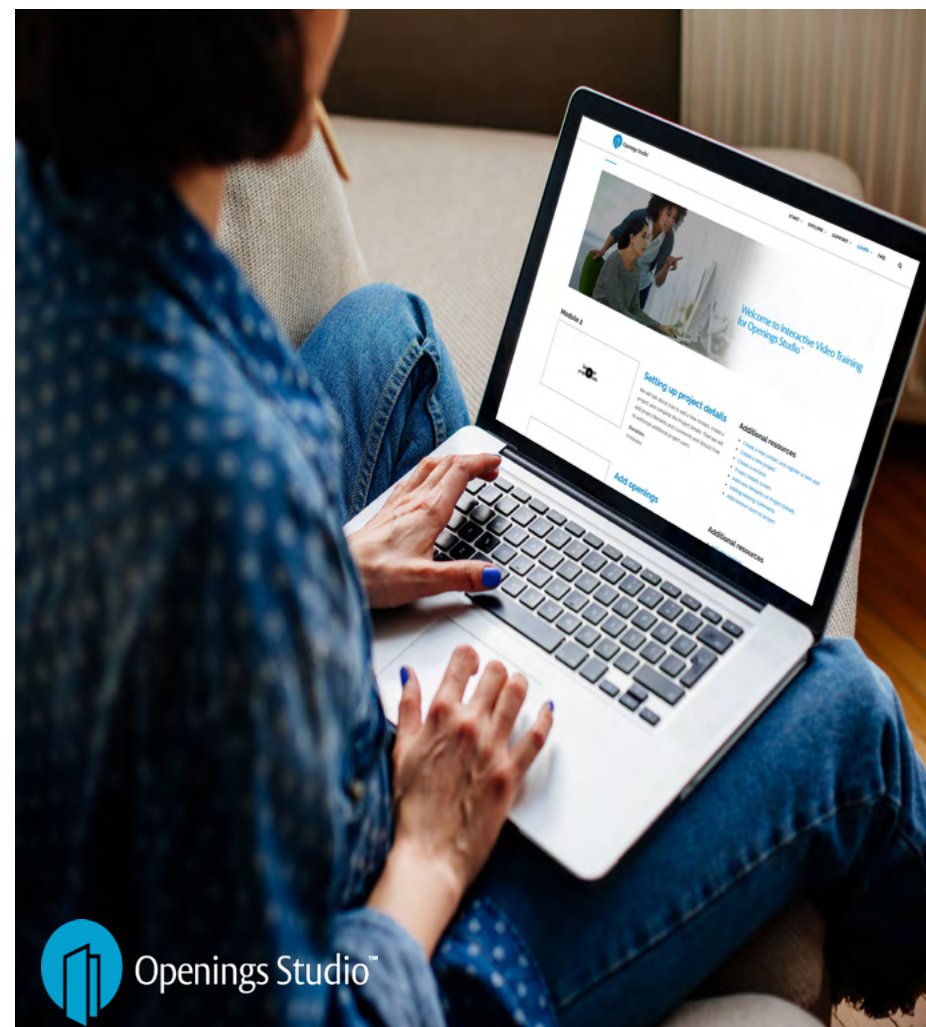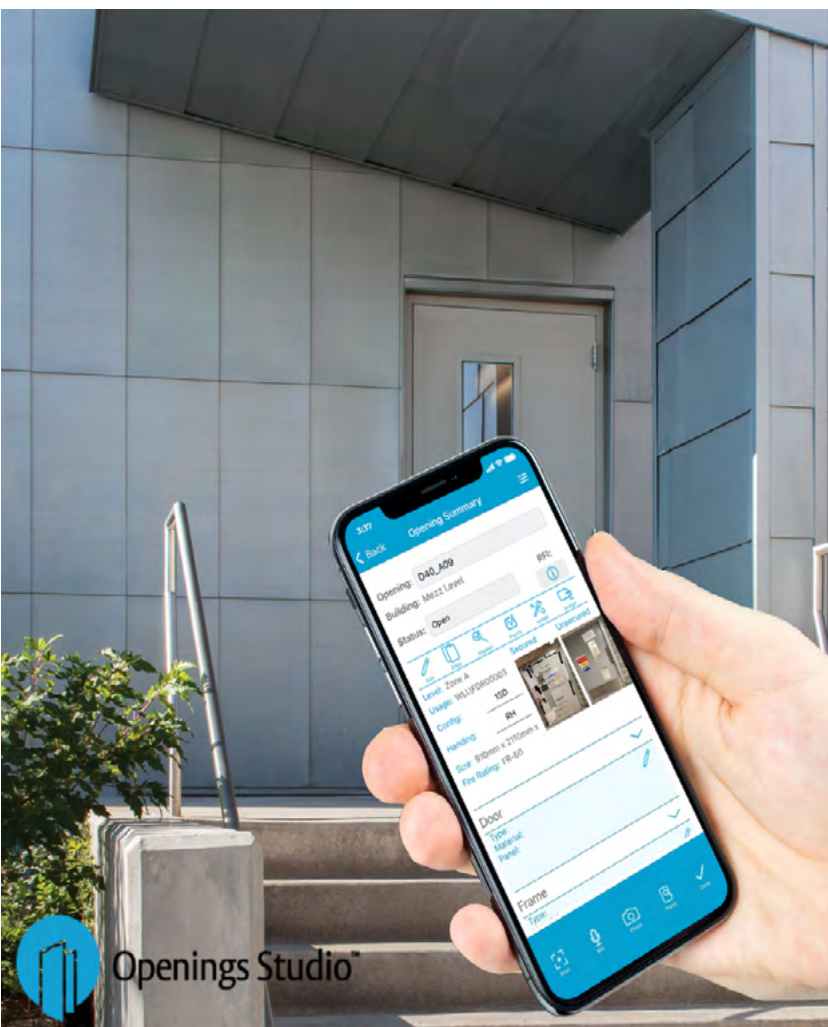
DESIGN

CONSTRUCTION

INSTALLATION

MANAGEMENT

Revolutionising the Construction Industry with Openings Studio™ & RFID Technology

Overview

Integrating RFID technology into door systems, in conjunction with ASSA ABLOY's Openings Studio™, enhances efficiency, compliance, and safety across all sectors of the door industry. This integration supports the Golden Thread of information, ensuring a continuous and transparent digital record of an asset's lifecycle, from design and specification to installation, maintenance, and compliance. By digitising processes, RFID and Openings Studio™ significantly save time, reduce administrative burdens, and accelerate workflows. Discover how this benefits your role:

Manufacturing

At ASSA ABLOY, we integrate RFID technology into our door manufacturing processes to uphold the Golden Thread of information. By embedding RFID tags into doors during production, we achieve real-time tracking of each unit from specification through installation and maintenance. This approach ensures that detailed information—such as product specifications, hardware schedules, inspection reports, and maintenance records—is readily accessible throughout the door's lifecycle, enhancing safety, compliance, and efficiency in building management.

- **Quality Control Assurance** – Trace each product's journey to verify adherence to high manufacturing standards.
- **Reduced Human Error** – Automate data collection to minimize manual entry, preventing mislabeling or misplacement.
- **Golden Thread Continuity** – Provide a verifiable history of every door from production to installation, ensuring transparency and accountability.
- **Time Efficiency** – Automate progress checks and eliminate time-consuming manual audits, streamlining operations.

Architects & Specification Consultants

Integrating Openings Studio™ into architectural workflows offers significant advantages in both design development and long-term building management. This advanced BIM software seamlessly integrates with platforms like Autodesk® Revit® and Graphisoft® Archicad®, enabling architects to create, visualise, and manage detailed 3D models of door openings. It offers architects significant advantages throughout the design and construction process, including:

- **Efficient Design Development and Specification** – Openings Studio™ allows architects to quickly generate comprehensive door families within minutes, enabling early-stage project analysis and accurate specifications before finalising door schedules.
- **Long-Term Compliance and Transparency** – By maintaining a continuous digital record of each door's lifecycle, from design intent to product in service, Openings Studio™ ensures long-term compliance and transparency, supporting the 'Golden Thread' of information.
- **Reduced Liability and Visibility of Change Management** – The software's real-time integration with virtual building models allows for dynamic updates to door models with enriched data, reducing liability and enhancing visibility of change management throughout the project.
- **Potential for Reduced Paperwork and Approvals** – Openings Studio™ simplifies collaboration among specification writers, architects, and contractors by managing openings information throughout a building's lifecycle, leading to reduced paperwork and streamlined approval processes.
- **Real-Time Integration with Virtual Building Models** – The capability to dynamically update door models with enriched data ensures accurate and up-to-date information is reflected in the virtual building model, enhancing design accuracy and coordination.

Contractors

Integrating RFID technology into door management processes offers contractors significant advantages in efficiency and accuracy. By affixing RFID tags to doors during construction, contractors can achieve real-time tracking of each unit throughout the project lifecycle. This integration facilitates seamless monitoring of installations, reduces manual data entry errors, and ensures precise asset management. Additionally, RFID-enabled systems provide valuable insights into project workflows, enabling contractors to optimise operations and maintain high-quality standards.

- **Asset Tracking** – Reduce loss and optimise usage by monitoring assets with RFID via the Openings Studio™ App.
- **Safety Compliance** – Ensure timely inspections and proper maintenance of critical safety equipment.
- **Seamless Installation Tracking** – RFID ensures the right doors are installed in the correct locations with accurate documentation.
- **Golden Thread Linkage** – Digitally connect installation records to long-term building maintenance logs, ensuring continuous and transparent digital record of each door's lifecycle.
- **Time Efficient** – Speed up installations by instantly verifying correct door placement, reducing delays and enhancing project timelines.

Building Owners & Facilities Managers

The combination of RFID Technology and ASSA ABLOY's Openings StudioTM enhances asset management by assigning each door a unique RFID tag, providing direct assess to detailed information such as installation dates, inspection records, and maintenance history. This seamless integration ensures a transparent record of asset histories, contributing to a safer and more efficient building environment.

- **Automated Maintenance Management** – Schedule and log maintenance activities seamlessly, ensuring timely upkeep of door systems.
- **Enhanced Asset Lifecycle** – Access comprehensive maintenance histories of every door in your facility, facilitating informed decision making.
- **Golden Thread Assurance** – Maintain comprehensive data continuity for safety and regulatory compliance, supporting the creation and maintenance of the Golden Thread of information.
- **Time Efficient** – Reduce the time spent locating, inspecting, and maintaining assets, streamlining facility management operations.

Fire Inspectors

- Incorporating RFID technology into fire door inspection processes offers significant improvements in compliance and safety management. By embedding RFID tags within fire doors, inspectors can access detailed maintenance histories, installation dates, and compliance records instantly via the Openings StudioTM app. This digitisation minimises manual record-keeping errors and ensures that inspections are thorough and up-to-date. Moreover, RFID systems provide a transparent, traceable history of each door, supporting the Golden Thread of information by maintaining a continuous digital record throughout the asset's lifecycle. This approach not only enhances operational efficiency but also reinforces accountability and adherence to safety regulations.

- **Instant Compliance Verification** – Access digital inspection records instantly for fire doors and safety equipment, ensuring adherence to safety standards.
- **Efficient Inspections** – Quickly identify and retrieve maintenance histories, facilitating thorough and informed assessments.
- **Automated Record Keeping** – Reduce paperwork and human error with RFID-enabled compliance tracking, ensuring accurate and up-to-date records.
- **Golden Thread Transparency** – Maintain a complete audit trail for fire door inspections and compliance, supporting the creation of the Golden Thread of information.
- **Time Efficient** – Expedite inspections by eliminating the need for manual record checks, enhancing productivity and effectiveness.

By adopting RFID technology and leveraging Openings Studio™, stakeholders across the building lifecycle can streamline operations, ensure compliance, and enhance safety and transparency. The integration of RFID and digital asset management supports the creation of a comprehensive Golden Thread of information, maintaining a continuous and accessible digital record of each door's lifecycle.

About
Door Group

Door Group, part of ASSA ABLOY Opening Solutions EMEIA Door Business Segment, is the UK's leading manufacturer of high-performance steel and timber doors, tailor made to individual project requirements from its Powershield, Prima, Safeguard and SMARTec ranges.

We provide an end-to-end solution for architects, specifiers, contractors and facilities management companies working across a range of markets, including: health, education, commercial, data centres, logistics, leisure, retail, government facilities, critical national infrastructure, utilities and hospitality.
Our Group designs, manufactures, installs and maintains high performance steel and timber doors tailormade to individual project requirements, with the support and resources of the global leader in door opening solutions.

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

ASSA ABLOY Opening Solutions UK & Ireland is part of the ASSA ABLOY Group. Formed in 1994, the ASSA ABLOY Group has grown to now cover more than 70 countries around the world, with a global workforce of 61,000.
In addition to Opening Solutions, the ASSA ABLOY Group also includes two other key business divisions: Global Technologies and Entrance Systems.
Together, the ASSA ABLOY Group has an unrivalled presence in areas such as access control, identification technology, entrance automation, and hotel security.

Leading The Market

As the UK's leading supplier of door opening solutions, we provide everything from mechanical and electromechanical locks, digital door locks and smart access solutions, high-security doors, fire doors, and high-performance hardware.
Right from the earliest design stage, our products are developed to meet the very highest standards for performance, safety and security, while also meeting all relevant legislation and regulation requirements for the UK and Ireland.

Trusted Hardware

We pride ourselves on our tried and trusted hardware offering, which covers everything from traditional mechanical locks to the latest access control systems. Our range covers door controls, fire door safety products, electromechanical access control systems, architectural hardware, panic and exit devices and hands-free solutions.
We've supported sites such as Edinburgh University, Royal United Hospitals Bath NHS Foundation Trust, and Twycross Zoo with their hardware needs.

Specification Expertise

Our specification team can work closely with you through every stage of a project – from the initial design and specification to installation and on-going maintenance. By working collaboratively, we can ascertain everything from the best door opening solution for you in terms of whole life costs, to providing BIM-ready packages for Revit and ArchiCAD, streamlining the specification process and enabling more complete, sustainable and cost-effective designs. Birmingham Dental Hospital, Cheltenham Racecourse and One New Street Square in London are just some of the sites that have benefited from our specification expertise.

High-Performance Doors

Our door range covers high-performance steel and timber doors. We believe it's important that we offer you a complete doorset solution – from design and manufacture to installation, service and maintenance. Our engineers are trained to DHF and BRE standards, and we offer a dedicated fire door inspection scheme for total peace of mind.
Sites we've supplied our high-performance doors to include Heathrow and Gatwick Airports, National Grid, and the London Underground.

World Class Service

Every building or estate has its own needs. Finding the right product will depend on an extensive range of factors, including how an environment is used, the level of traffic passing through a building, future development plans, and so on.
Whatever your needs, our range of high-quality support services can help. From training courses, ensuring you're up to date on all the latest industry issues or how to take a best practice approach when specifying a solution, to service and maintenance or fire door inspection reports that guarantee a system is operating as it should be.
Our goal is to ensure you have complete confidence in your door opening solutions.

Openings Studios™

Collaborate. Design. Build. Manage.
Openings Studio is our cloud-based building information modelling software, which provides collaboration and support for your openings throughout the entire building life cycle. Openings Studio is being used by specification writers, architects, contractors, security consultants, building owners and facilities managers to design, build and manage openings information.

ASSA ABLOY. Experience a
safer and more open world.

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