Fire Safety in Housing
Making our communities safer

auro by harmony®

Tea, Coffee and break

Back at 15:10

Fire Safety in Housing
Making our communities safer

Fire Safety in Housing

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Pete Davies

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Fireco

Compliance Made Easy

Innovation @ Fireco: Fire Safety That Listens

How Customer Led Innovation Shaped Our Journey

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Compliance Made Easy

The Fireco Ethos: Compliance Through Innovation

- Founded on innovation and compliance
- Listening to customer needs
- Designing for accessibility, safety, and simplicity

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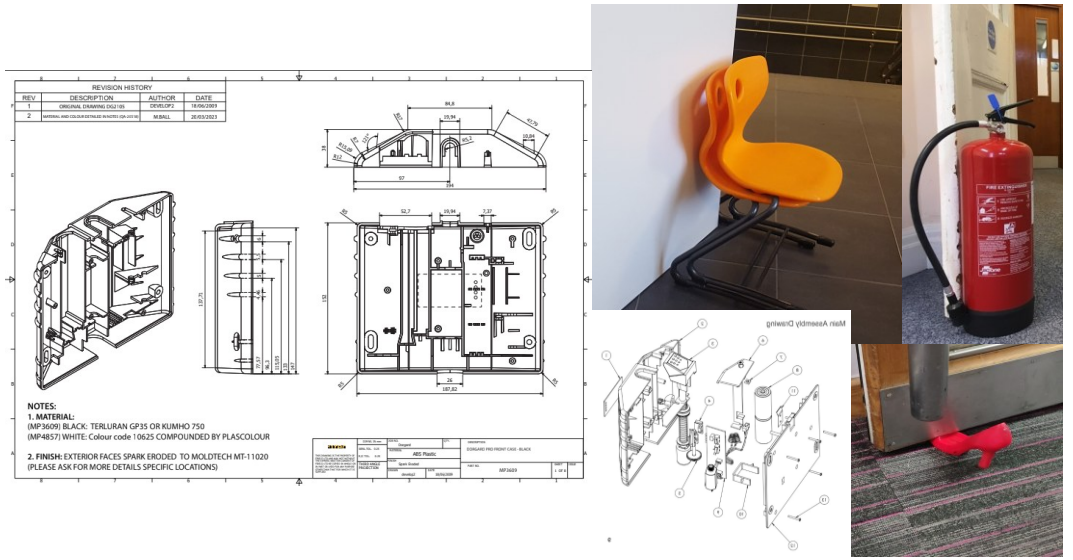
Where It All Started: The Dorgard Story

- The problem: wedged fire doors
- The idea: automatic release on fire alarm
- The result: safer, more accessible buildings



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Deafgard - How Dorgard helped the hearing impaired

- Designed in collaboration with hearing impaired people
- Helps with Equality Act Compliance
- Quickly became a staple of the hotel industry

Case Study: Meet Fiona

Meet Fiona

- Fiona has been profoundly Deaf from a young age
- Booked a hotel in Perth for a family wedding
- Contacted the hotel 3 months prior to check-in asking for an accessible fire alarm solution
- None was provided
- Fiona was reassured that a staff member would come to her room to help her evacuate if necessary
- Fiona was not evacuated when the fire alarm went off at 7AM the next morning
- It wasn't until 8AM that her parents, also staying at the hotel, realised she wasn't at the muster point
- Fiona was woken shortly after by her Mum, the hotel manager and the commander of the fire brigade
- A member of staff *had* come to her room during the evacuation, but, failing to see Fiona due to low lighting, simply shouted 'FIRE! FIRE!' before being distracted by other guests needing assistance

When is a fire alarm not a fire alarm?

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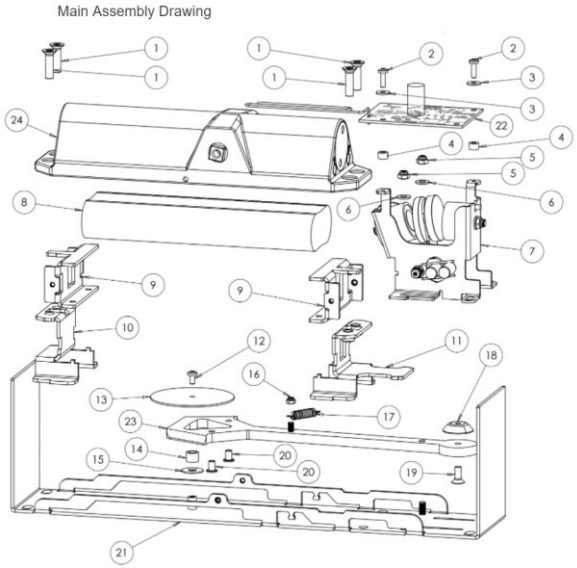
Freedor: Freedom to Move Safely

- Built on Dorgard success
- Free-swing closer with sound activation
- Designed for accessibility & independence



Case Study: City of London Corporation

Over 1500 Freedor installed across the Cities housing estate

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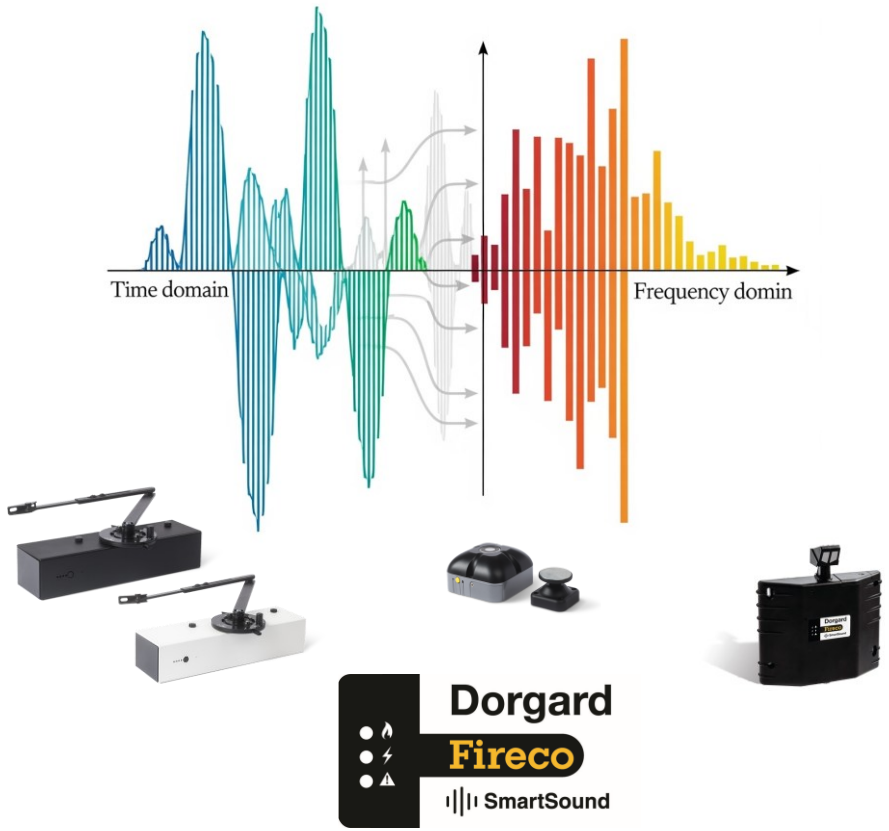
SmartSound: Listening Better

- Addressing false activations
- Fast Fourier Transform (FFT) sound analysis
- Reliability in complex environments



Case Study: Housing 21 – SmartSound Reliability in Care Environments

- Reducing false activations in a busy care home
- Helped residents to tackle heavy bedroom doors
- Staff confidence in fire door compliance

Granville Court

Residents are now empowered by easy access to their rooms

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The Pro Range: Hardwired compliance - cable free installations

- Standalone devices → networked systems
- Highest levels of compliance
- Simplified maintenance via InSite
- Door retainment and Mass Notification in one system

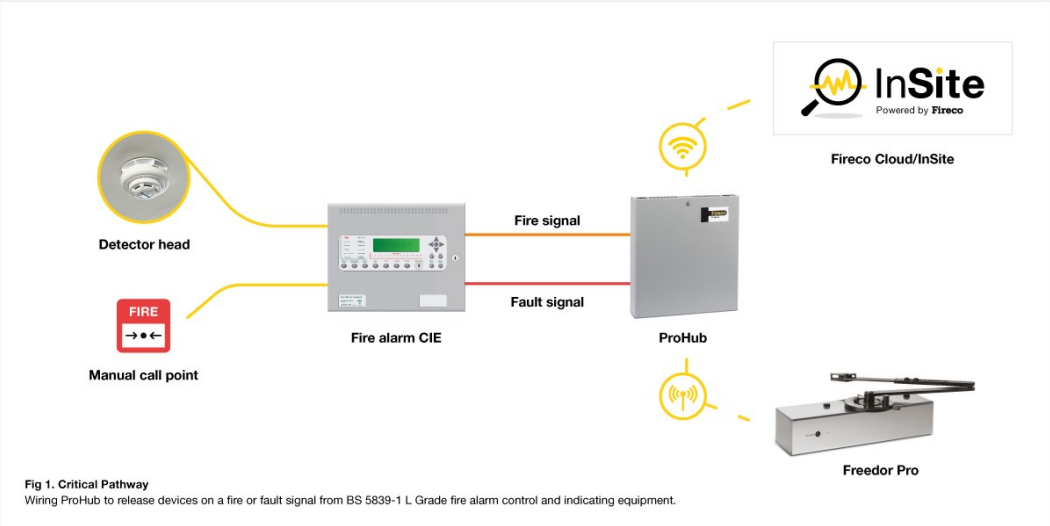
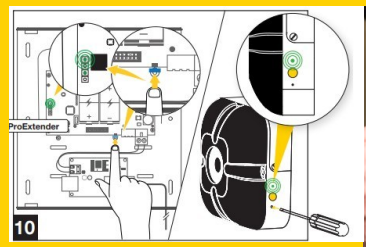


Fig 1. Critical Pathway
Wiring ProHub to release devices on a fire or fault signal from BS 5839-1 L Grade fire alarm control and indicating equipment.

Case Study: Portsmouth Hospitals NHST - Pro range for highest levels of compliance

- Doors on acute wards were being wedged open
- Cost of a fully hardwired system was prohibitive
- One of the first large scale Pro installations by Fireco
- Requirements for relevant guidance (HTM05-02) met



Patients can be monitored without risking safety

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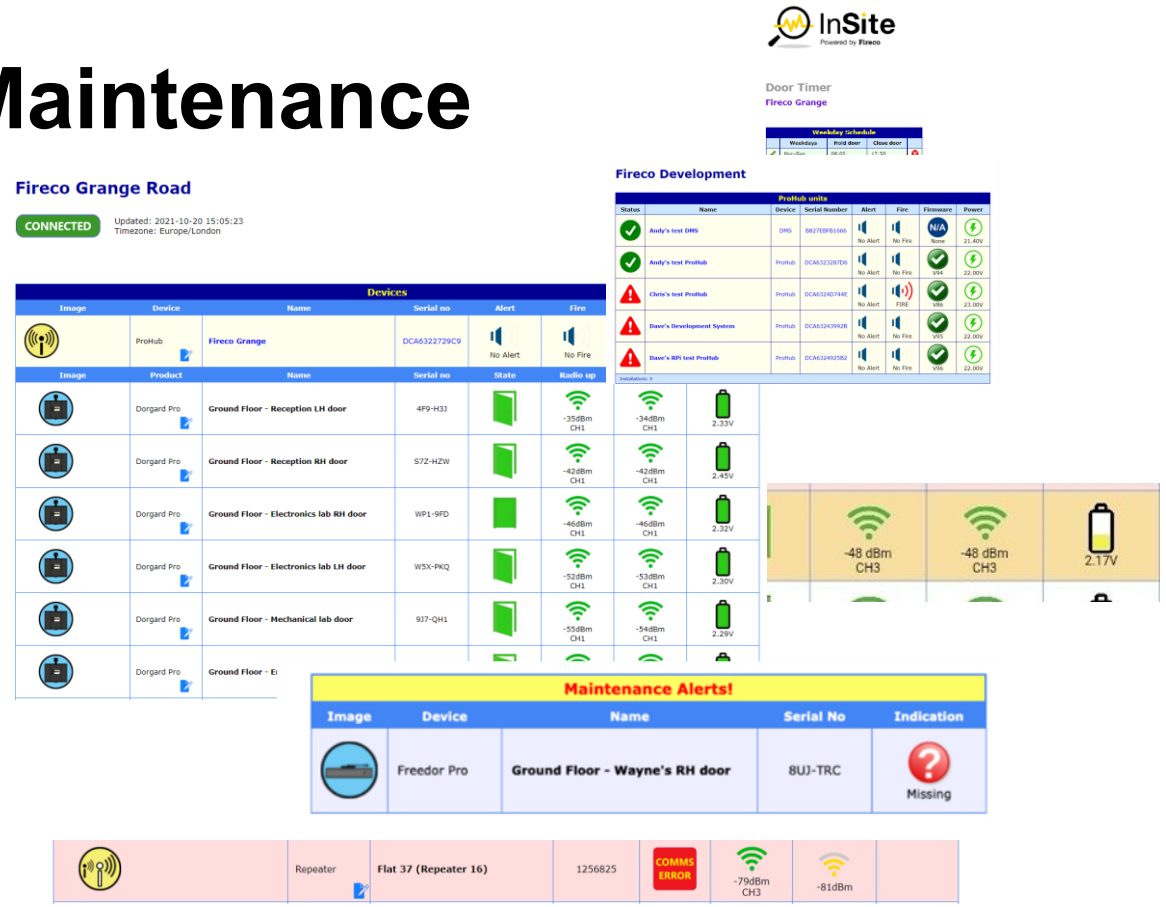
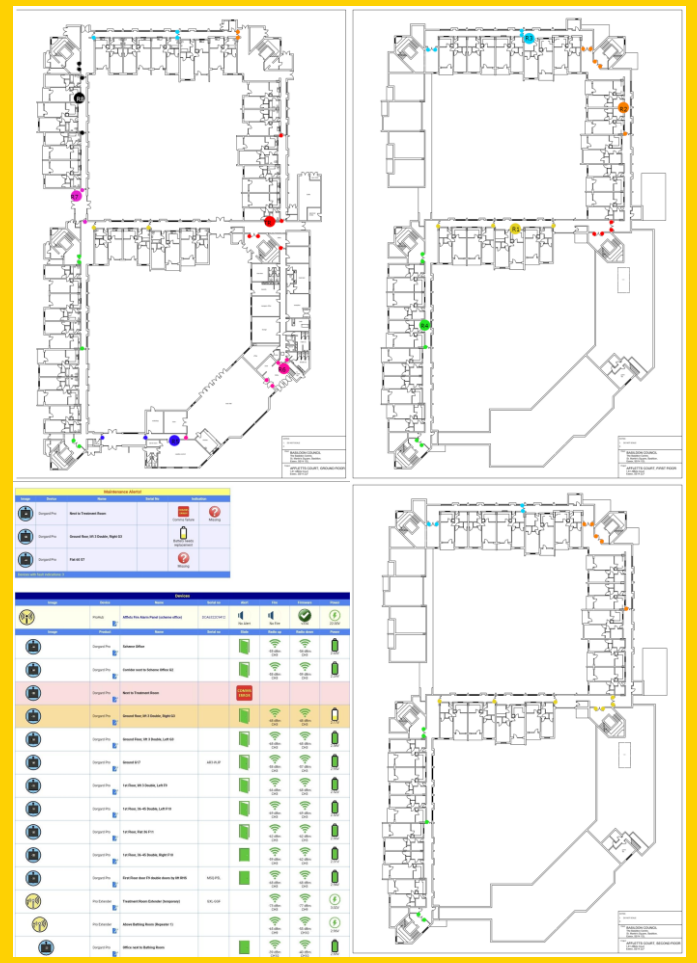
The IoT & Site Manager: Easy Maintenance

- Hundreds of doors monitored remotely
- Fault detection
- Significant reduction in manual inspections



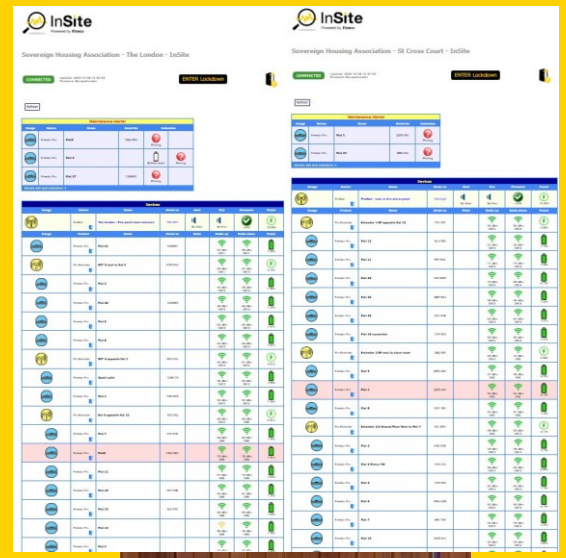
Case Study: How Customers Improved maintenance with Site Manager

- Large Pro Range installation
- Corridor doors creating a nuisance
- Client had concerns around device management
- Site Manager was deployed to bolster ‘boots on the ground’
- 79 Dorgard Pro across corridor doors (1 ProHub, 10 ProExtenders)



Basildon Council - Affletts Court

Case Study: How Customers Improved maintenance with Site Manager



- Various sheltered schemes across the IoW
- Residents struggling to get into homes. Freedor Pro chosen as the solution
- Client wanted the ability to monitor the sites live from mainland
- Helped identify issues with RF signal as changes were made to the building
- 208 Freedor Pro, 135 DorMag Pro, 12 ProHubs, 40 ProExtenders over 11 sites

Sovereign Housing Group - Isle of Wight

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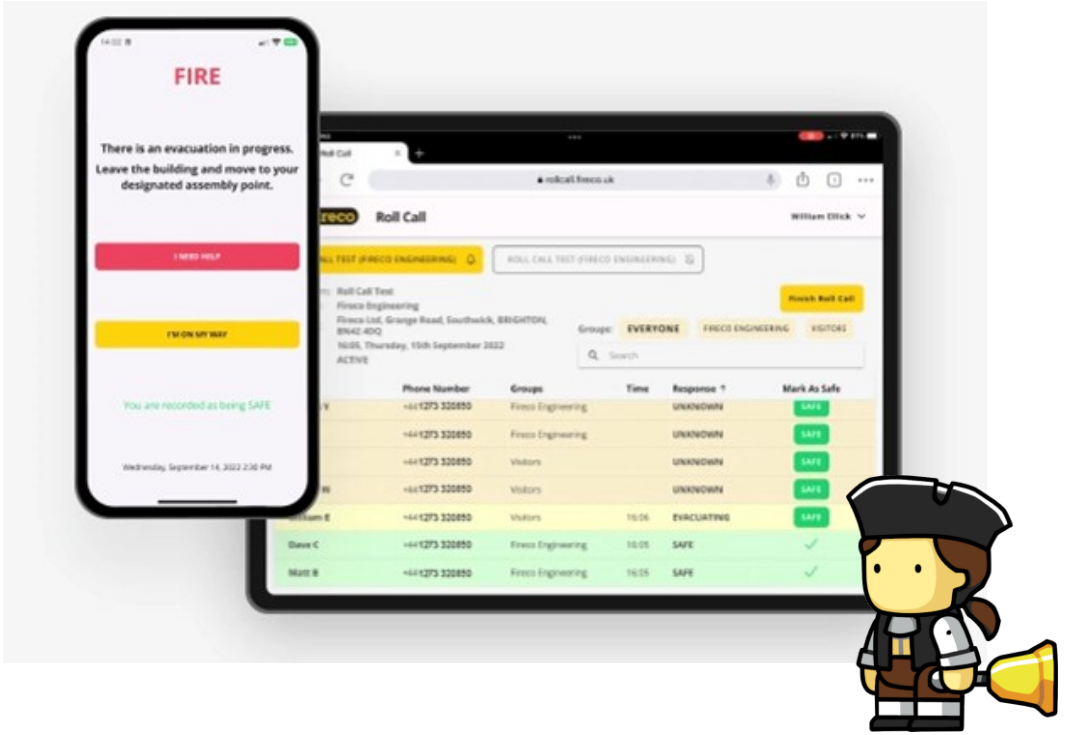
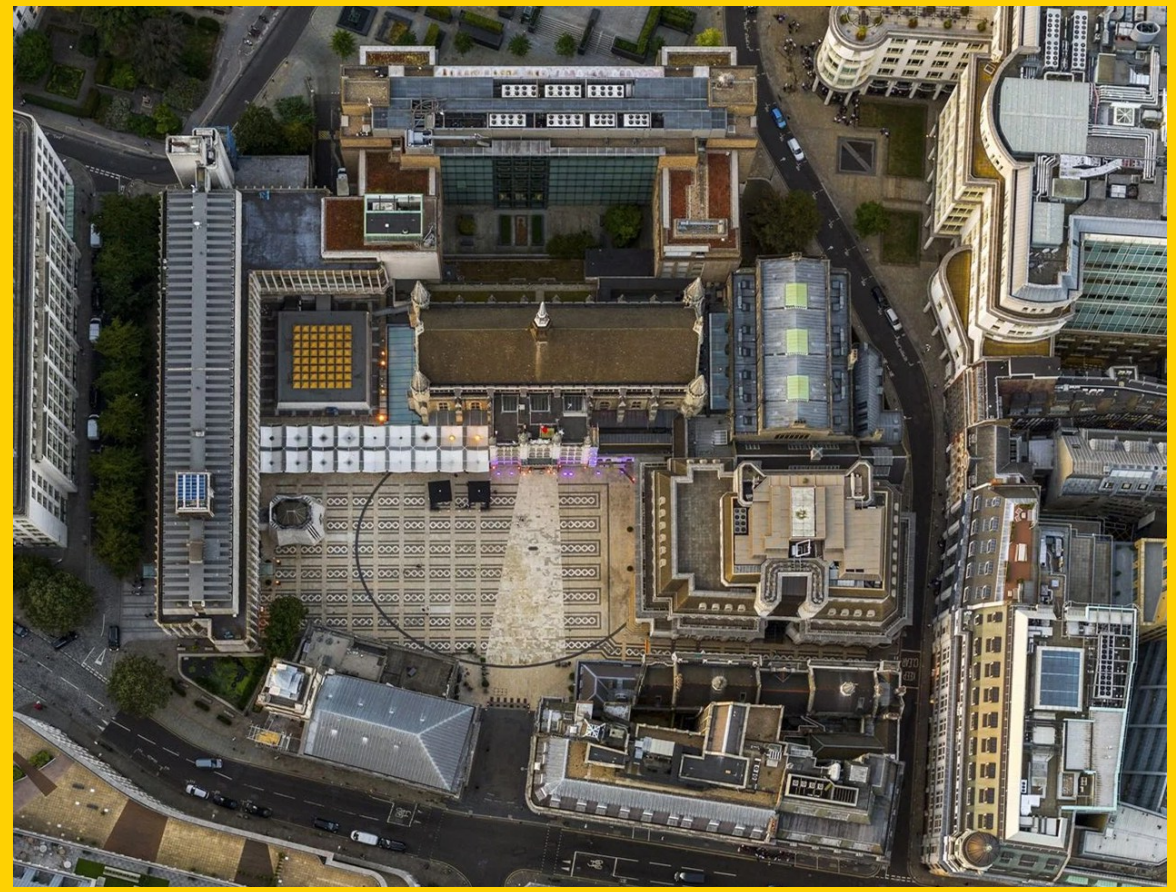
Modern Day Town Crier - Digital Messaging Service (DMS)

- Instant alerts for fire alarms
- Notify / roll call thousands in one go
- Keep relevant stakeholders informed
- Takes advantage of our obsession with mobiles
- Fire alerts, lockdowns, additional equipment monitoring



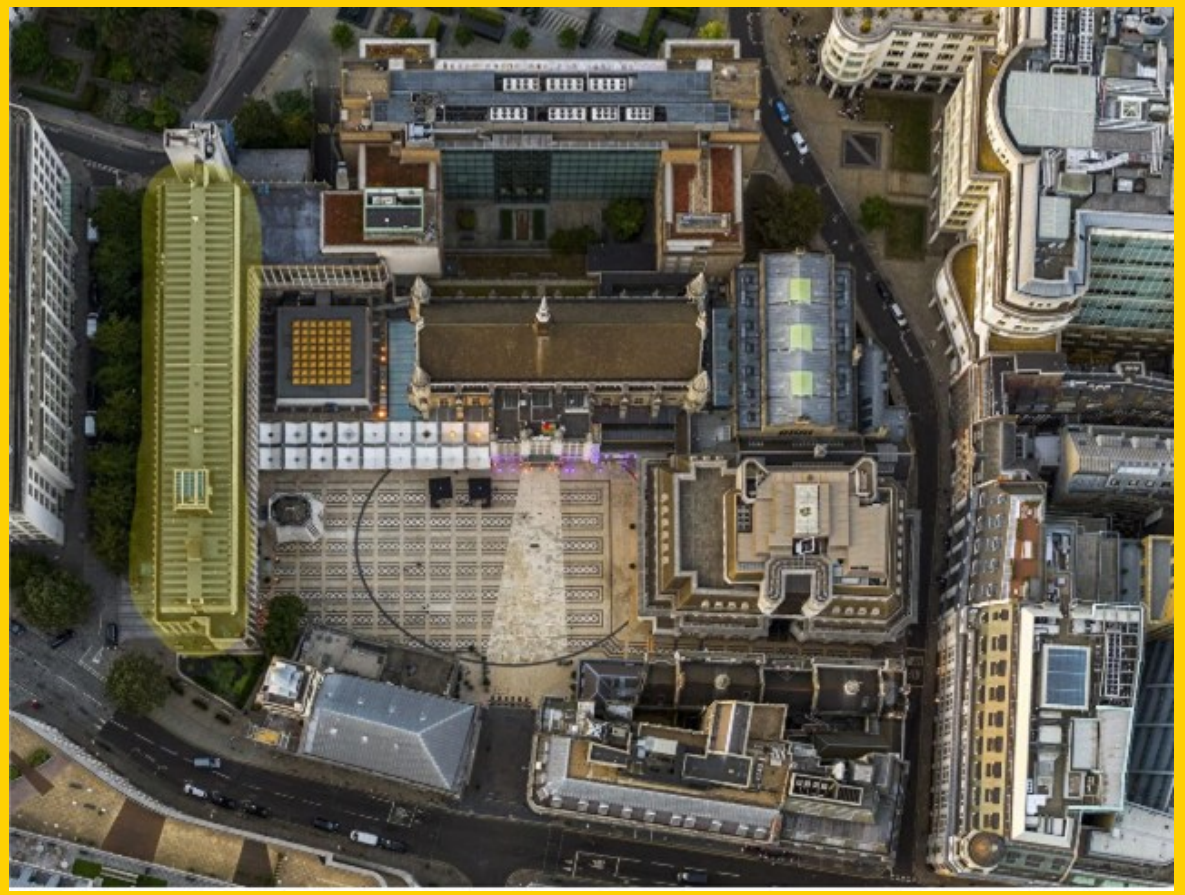
Case Study: City of London Corporation



How collaboration influenced design

Case Study: City of London Corporation

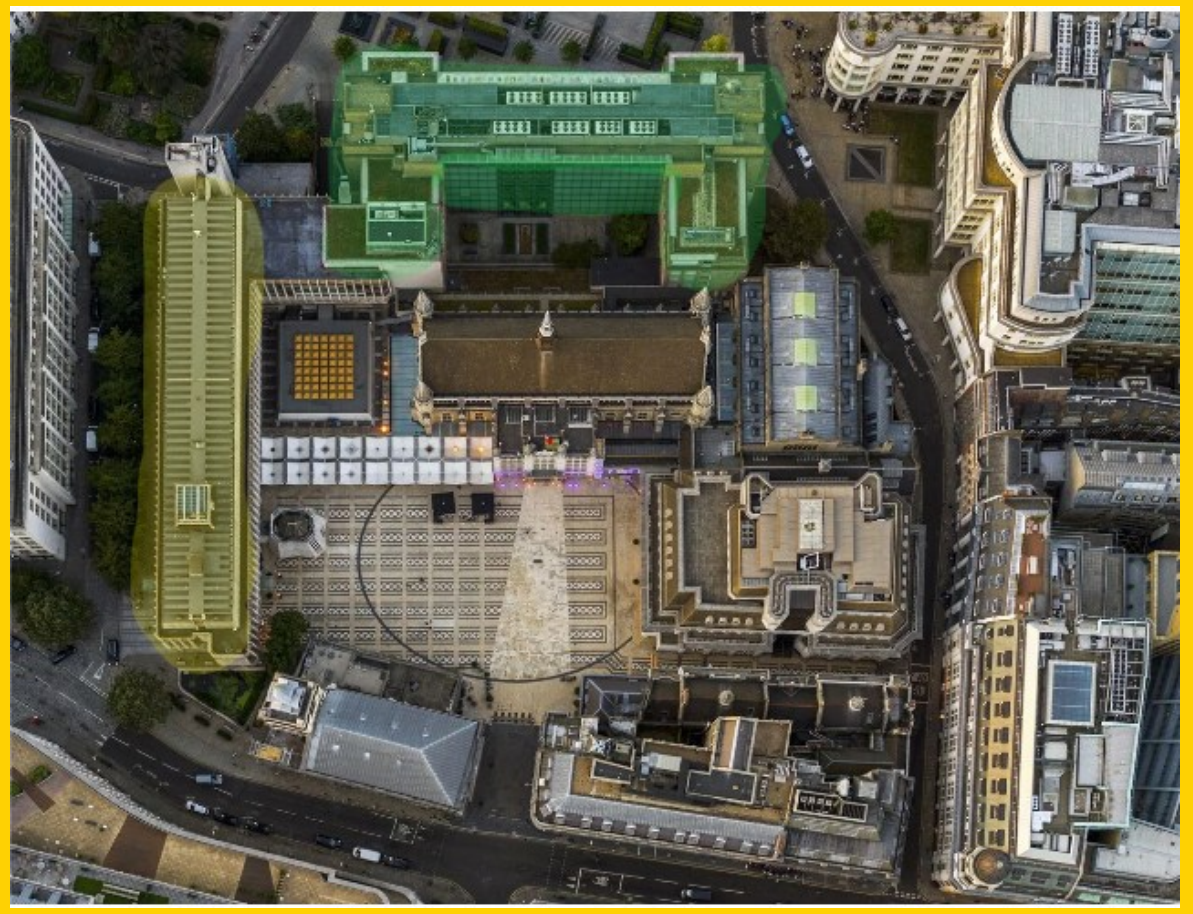
- West Wing



How collaboration influenced design

Case Study: City of London Corporation

- West Wing
- North Wing



How collaboration influenced design

Case Study: City of London Corporation

- **West Wing**
- **North Wing**
- **Guildhall Art Gallery**

Main alarms send messages out to those who have registered and to advise appropriate evacuation.

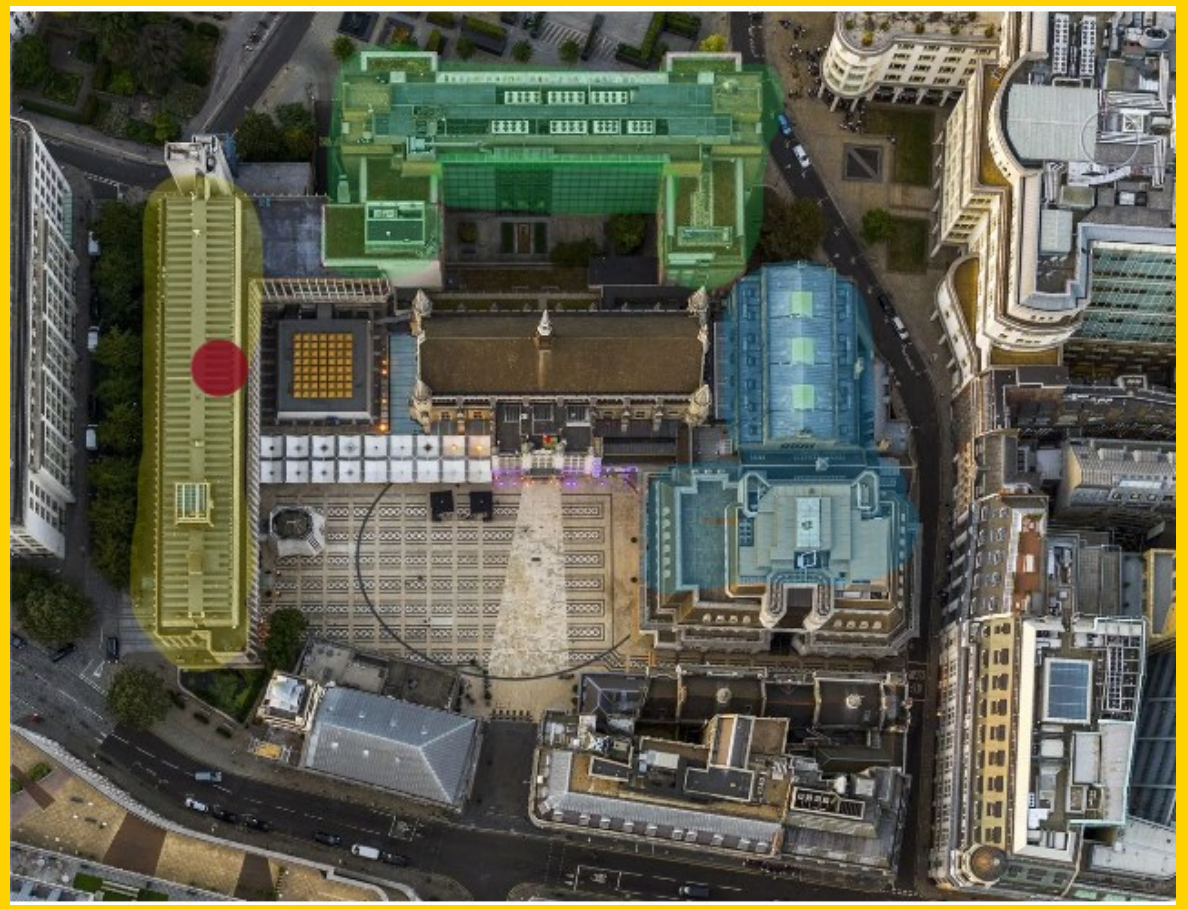
How collaboration influenced design

Case Study: City of London Corporation

- **West Wing**
- **North Wing**
- **Guildhall Art Gallery**
- **Pre-alarm**

Main alarms send messages out to those who have registered and to advise appropriate evacuation.

Pre-alarm - notifies select members of staff, including fire wardens, visitors, pregnant women and people with mobility issues.



How collaboration influenced design

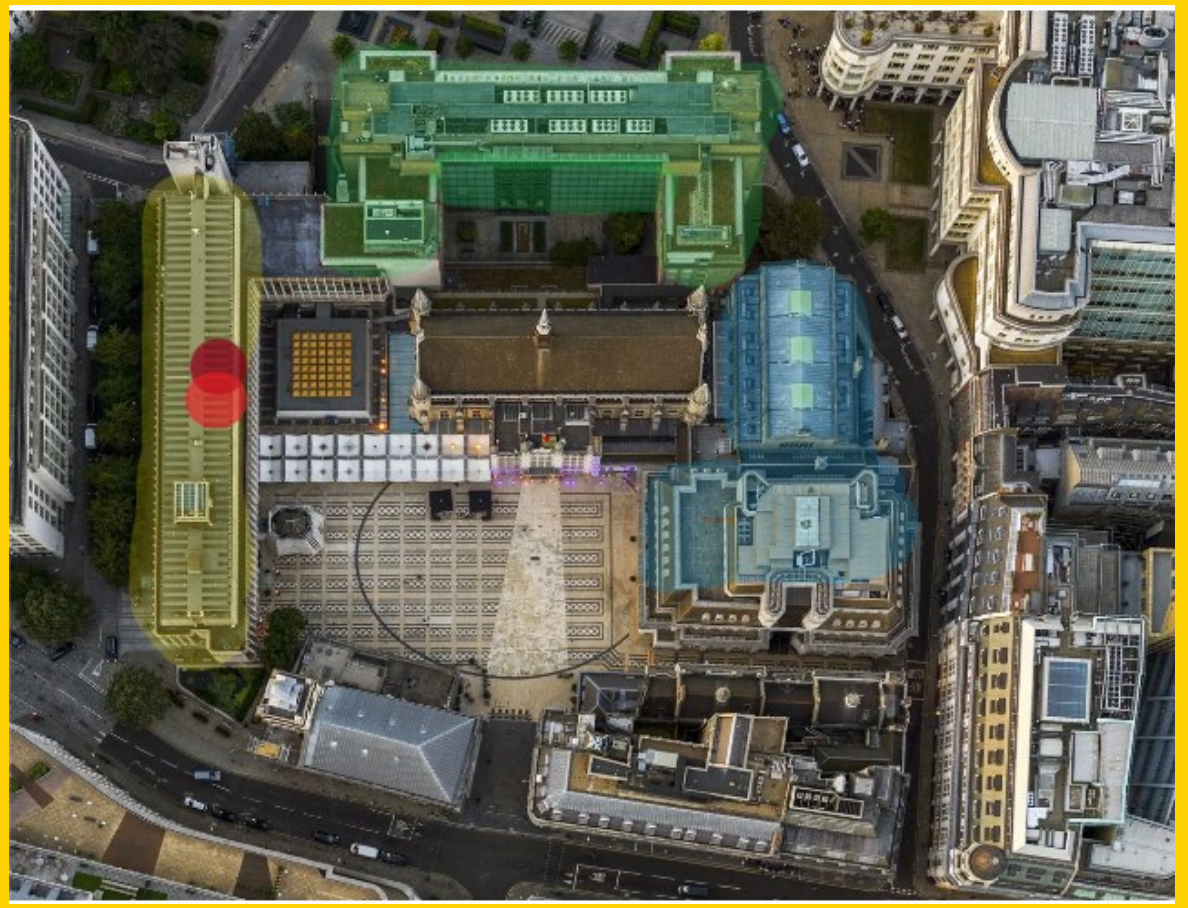
Case Study: City of London Corporation

- West Wing
- North Wing
- Guildhall Art Gallery
- Pre-alarm
- Invac

Invac is activated by push button. This advises all to evacuate into the basement.

Main alarms send messages out to those who have registered and to advise appropriate evacuation.

Pre-alarm - notifies select members of staff, including fire wardens, visitors, pregnant women and people with mobility issues.



How collaboration influenced design

Case Study: City of London Corporation

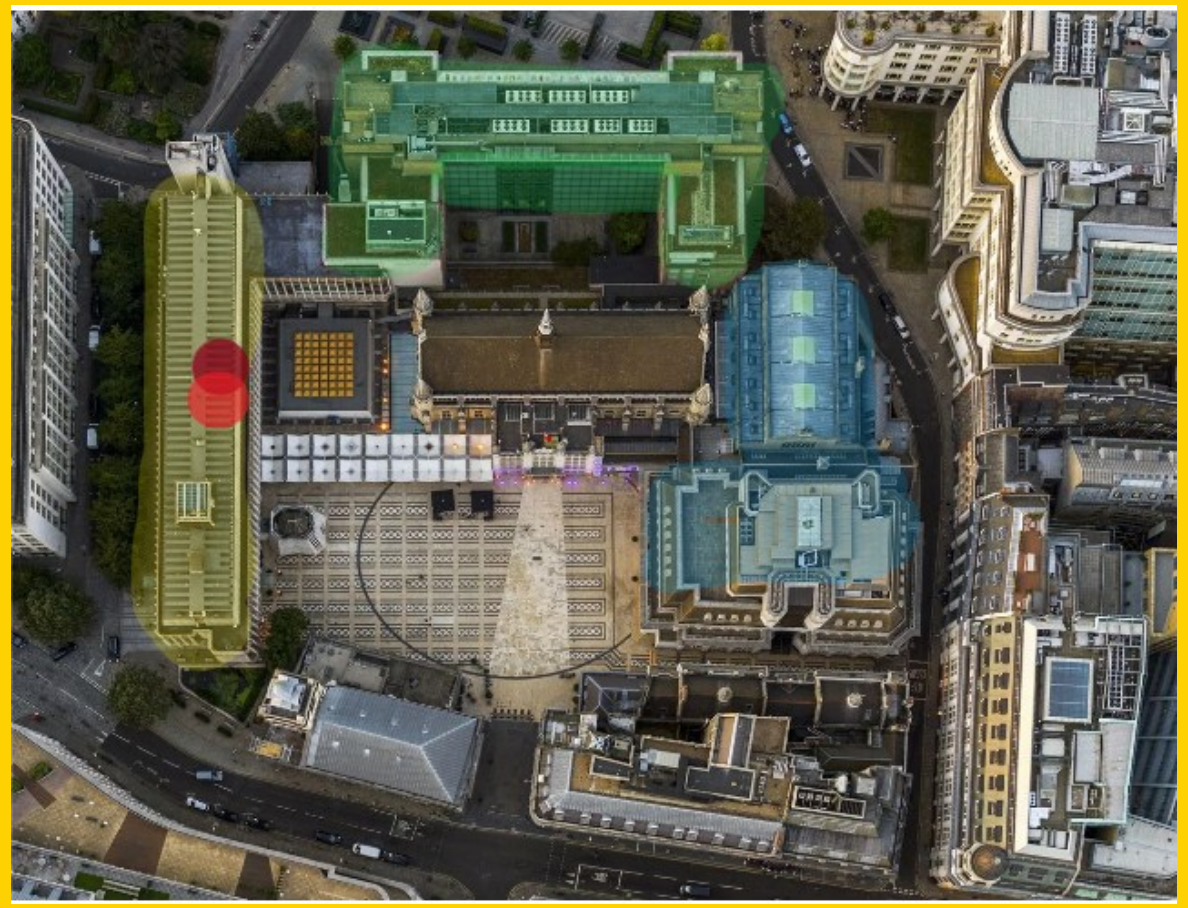
Muster Points

Disadvantages:

- Risk of terrorism
- Inappropriate proximity to buildings

Solution: Evacuate and Disperse

But how do people know it's safe to return?



How collaboration influenced design

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Customer-Led Innovation: The Fireco Way

- Listening to real-world problems
- Iterative product development
- Solutions shaped by user needs
- Friends of Fireco

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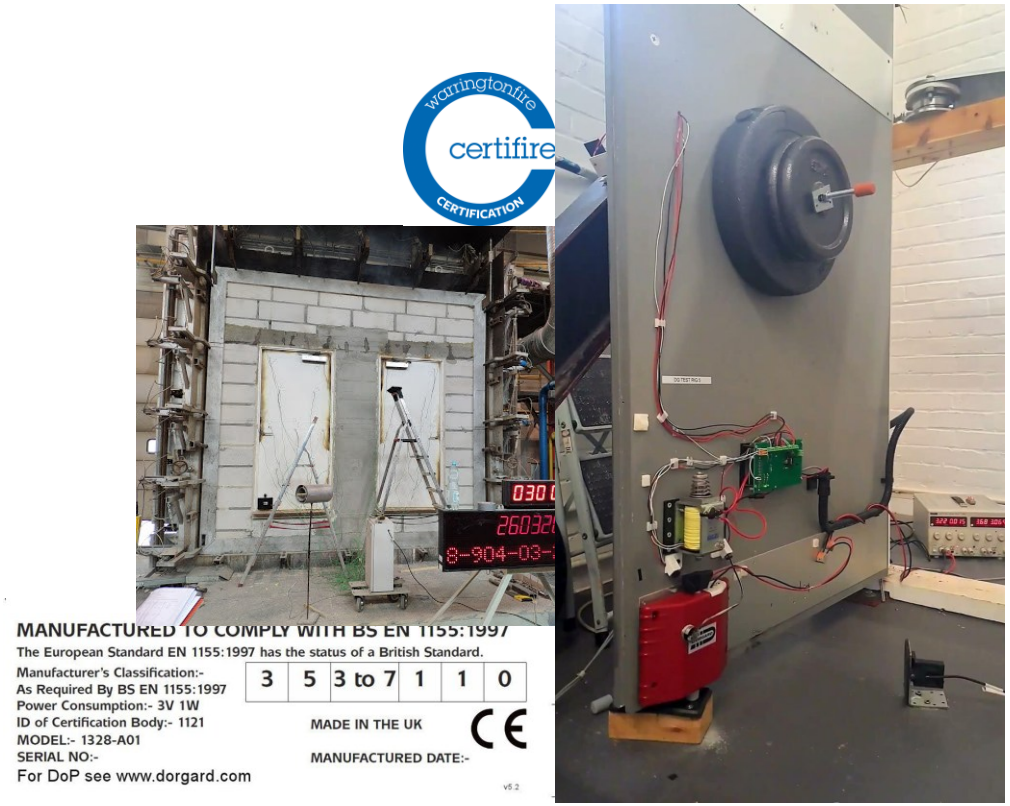
Product Compliance & Testing

- CE/UKCA marking
- BS EN standards (e.g., BS EN 1155, 1634-1)
- Independent third-party testing



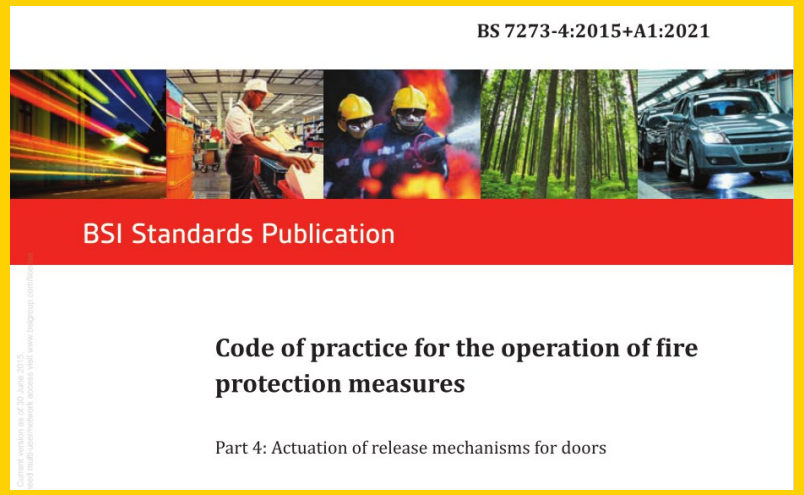
Product Compliance & Testing

BS 7273-4:2022(+A2:2023)

- RRFSO guides suggest a risk assessed approach
- Risk assessment can be married with the guidance in 7273-4 to find the most appropriate solutions

In the absence of a risk assessment, Annex B, table B1 offers detail on what level of compliance might be required

Clause 4.1.4 - *“If the designer is not informed as to the category of actuation required, the designer should select the category of actuation from Annex B and should make clear, to the purchaser or their agent, the category of actuation that the designer proposes.”*



Product Compliance & Testing

***BS 7273-4,* Clause 7 - Methods of actuation**

Critical Category (Formally Category A) – Hard wired devices linked directly to fire alarm. This system is intended for high risk doors.

Standard Category (Formally Category B) – This system is intended for normal risk doors and includes acoustically actuated devices.

Indirect Category (Formally Category C) – This system is intended for low risk doors.

Product Compliance & Testing

***BS 7273-4,* Clause 7 - Methods of actuation**

Release mechanisms should respond (i.e release the door) to the following;

Signal from the fire alarm system (manual call point or AFD)
Fault signals from the fire alarm CIE
Electrical power failures

Product Compliance & Testing

Understanding Variations - BS 7273-4, Clause 6

Change from ‘deviation’ to ‘variation’

- Clarity of intent
- Regulatory Flexibility
- Legal and compliance precision
- Consistency with other standards

Product Compliance & Testing

Understanding Variations - BS 7273-4, Clause 6

Variations should be;

- risk assessed
- noted clearly in specification OR clearly noted during installation
- detailed on Commissioning Certificate

Agreement from all relevant parties

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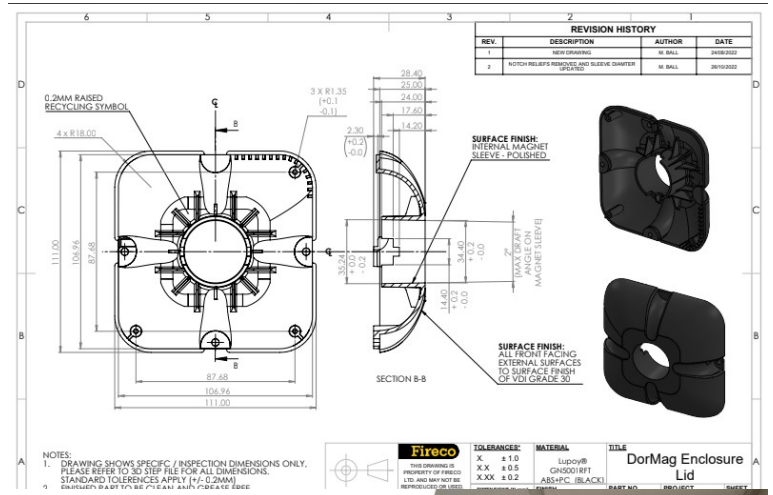
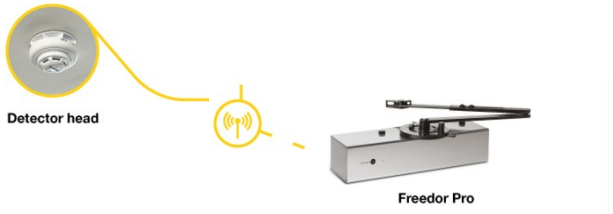
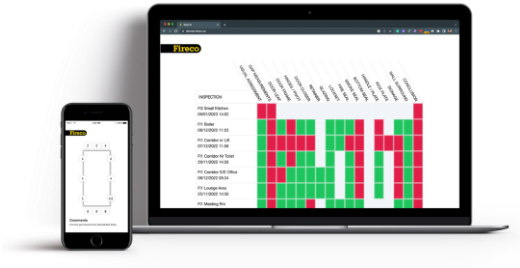
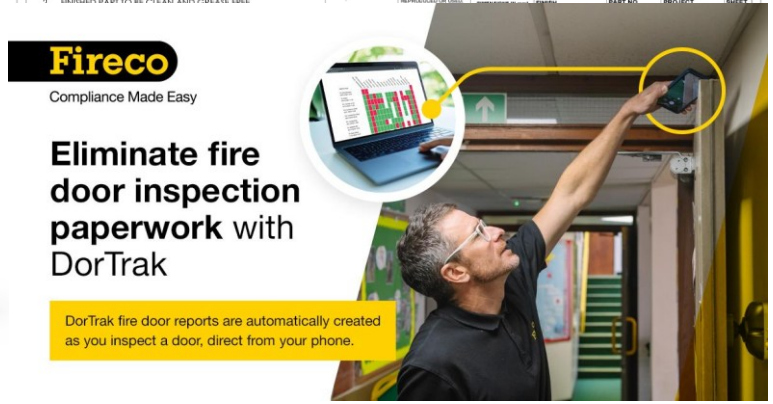
Looking Ahead: The Future of Fireco Innovation

- NEW - DorMag
- NEW - DorTrak
- NEW - Door Packages (door sets with Fireco products)
- UPCOMING - Product Name TBD









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We can show you: Seeing is Believing

- Discover practical innovation in action
- Arrange a site demonstration
- Support your compliance & maintenance goals
- HQ visits

Summary

- Innovation starts with listening to customer needs
- Compliance and testing are never compromised
- Technology evolves to make life safer and simpler
- Practical solutions save time, reduce risk, and improve accessibility

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Q&A

- Questions & discussion
- Contact info: www.fireco.uk / pete.davies@fireco.uk

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Ged Moore

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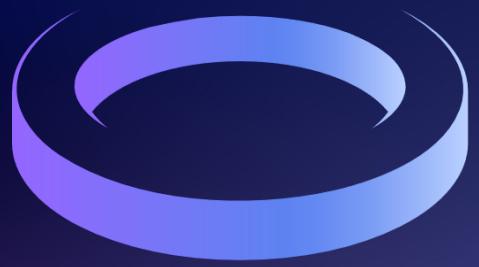
Making our communities safer



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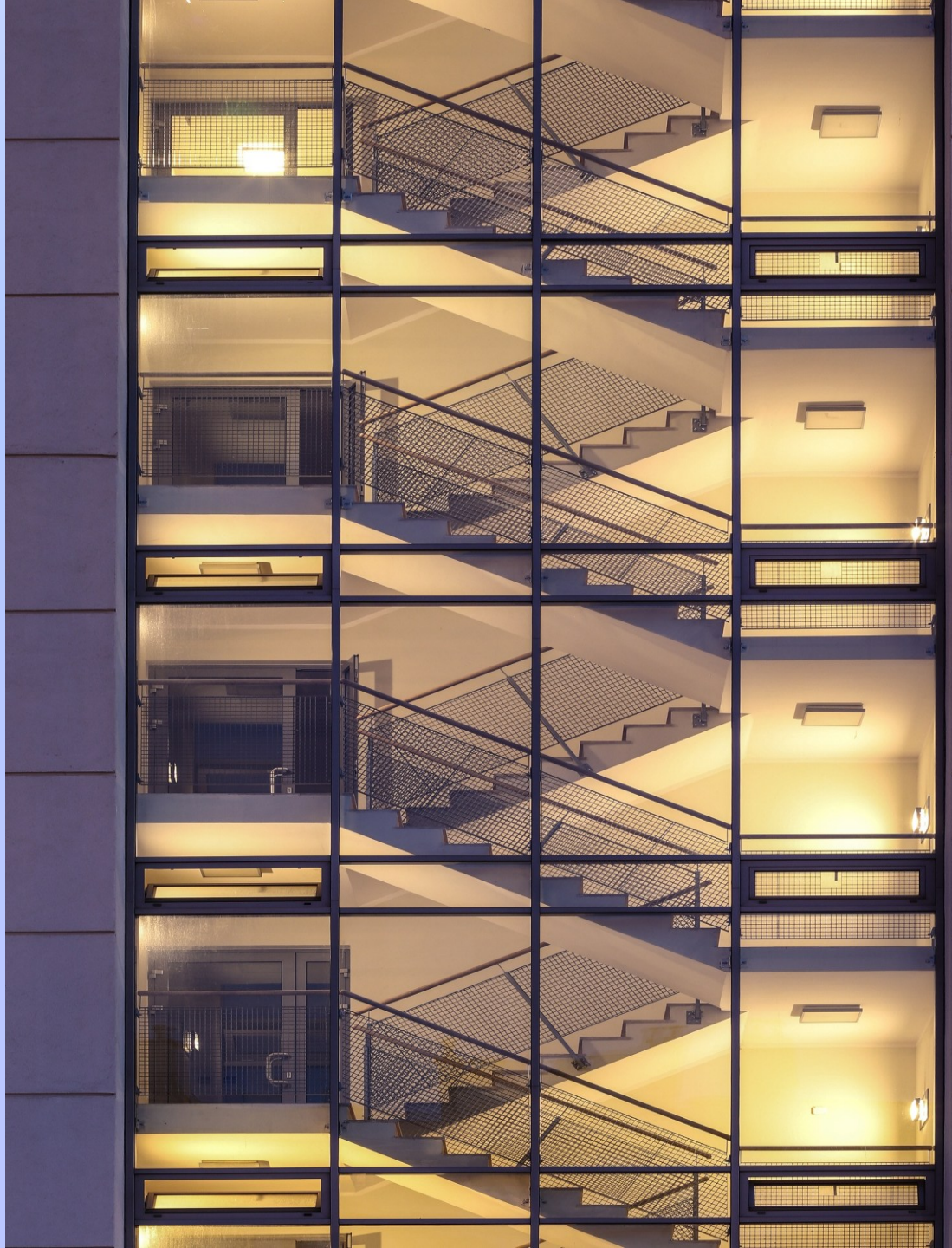
The Current Reality:

- Resource Constraints
- Compliance Pressure
- Inspection Treadmill
- The Gap



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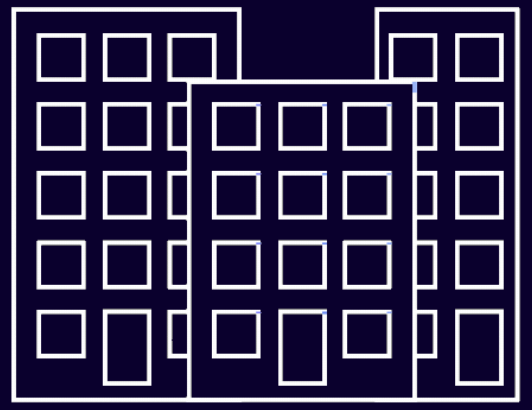
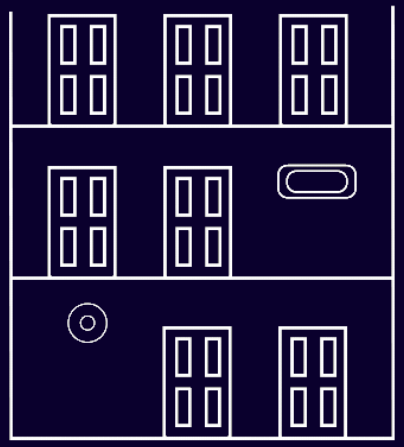
The IoT Solution





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The Three Big Benefits:

Enhanced Safety

Simplified Compliance

Operational Efficiency

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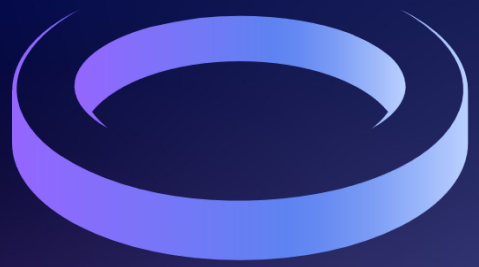
Considerations:

- Starting Point
- Pilot Approach
- Evaluation
- Success Indicators
- Key Question



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Please complete the feedback form and have a safe journey home!

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