

# GERDA<sup>®</sup>

## uniting fire safety & security<sup>™</sup>

[andrewthompson@gerdasecurity.co.uk](mailto:andrewthompson@gerdasecurity.co.uk)



- Over 25 years in fire doorset design & manufacture
- First manufacturer to gain third party DUAL certification
- CE Marking to EN16034 & EN14351-1 for external flat doorsets
- Residential & communal doorsets offering multi-performance
- Traditional sustainable materials
- Third party certification for fire doorset manufacture



Gerda House, Mildenhall



Barnham Distribution Warehouse



Thetford Manufacturing Site



Technologies House, Mildenhall



Adamson House Manchester

- Investment into R&D, UKAS testing & production facilities



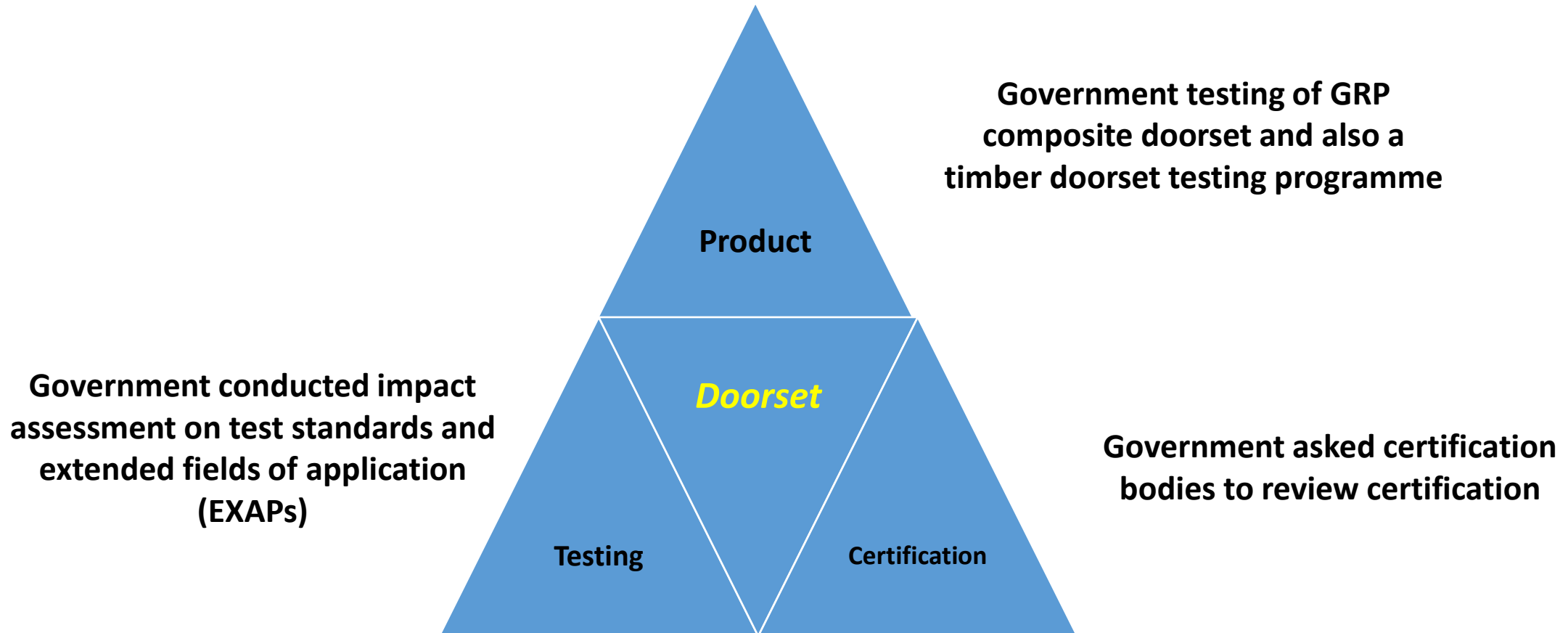
Accountability • Competence • Traceability

What this means for Fire Doorsets and how this  
may change going forwards



**GERDA**<sup>®</sup>  
uniting fire safety & security™

# Accountability



# Accountability

## Building a Safer Future

An Implementation Plan

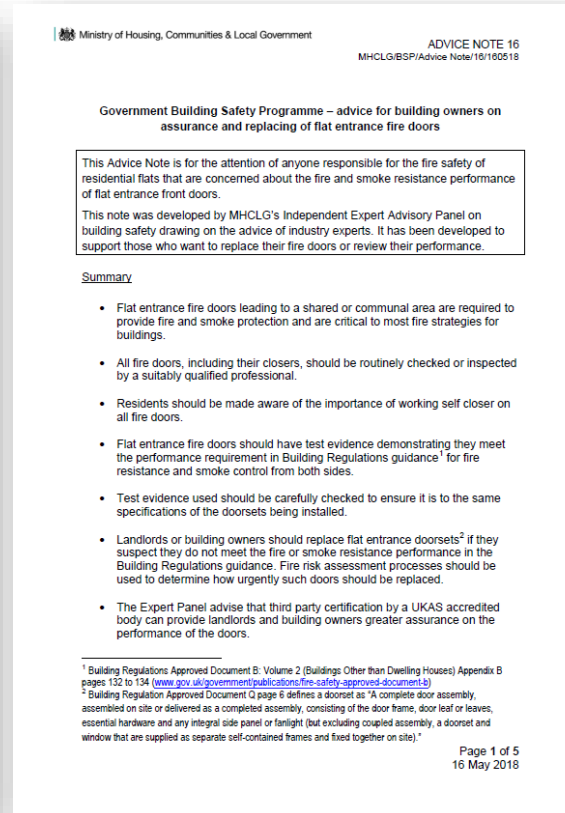
Latest MHCLG documentation “Building a Safer Future. An Implementation Plan<sup>6</sup>” references MHCLG Advice Note 16:

**Government Building Safety Programme – advice for building owners on assurance and replacing of flat entrance fire doors**  
**Advice for building owners on assurance and replacing of flat entrance fire doors.**

” it is imperative that doorsets are designed to meet all of the relevant requirements in one package i.e. the same specification.”

*And* highlights the importance of third party certified fire doorsets.

# Background





# Competence - Proven Performance



**Performance matters**



# Competence - Proven Performance

Limited amount of smoke damage caused by fire fighter access.



Performance matters

stairwell on the same floor

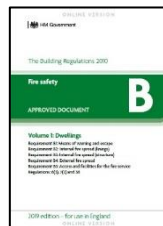


# Performance

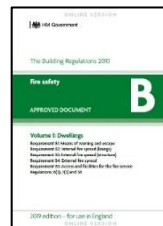
“Flat entrance doorsets have an essential role as the ‘gateway’ to the dwelling.”



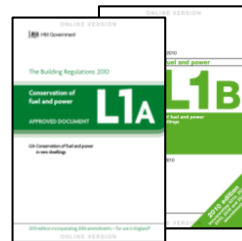
Restricting fire entering or escaping



Preventing smoke leakage



Keeping the dwelling conditioned



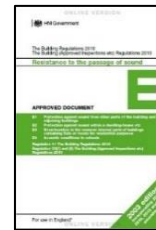
Protecting the dwelling from intruder attack



Ensuring ease of access



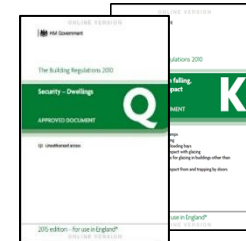
Assisting noise reduction



Weather resistance



Operation & safety



National building regulation guidance documents affecting doorsets

# How to determine performance

**FIRE  
RESISTANCE**  
Building Reg  
ADB

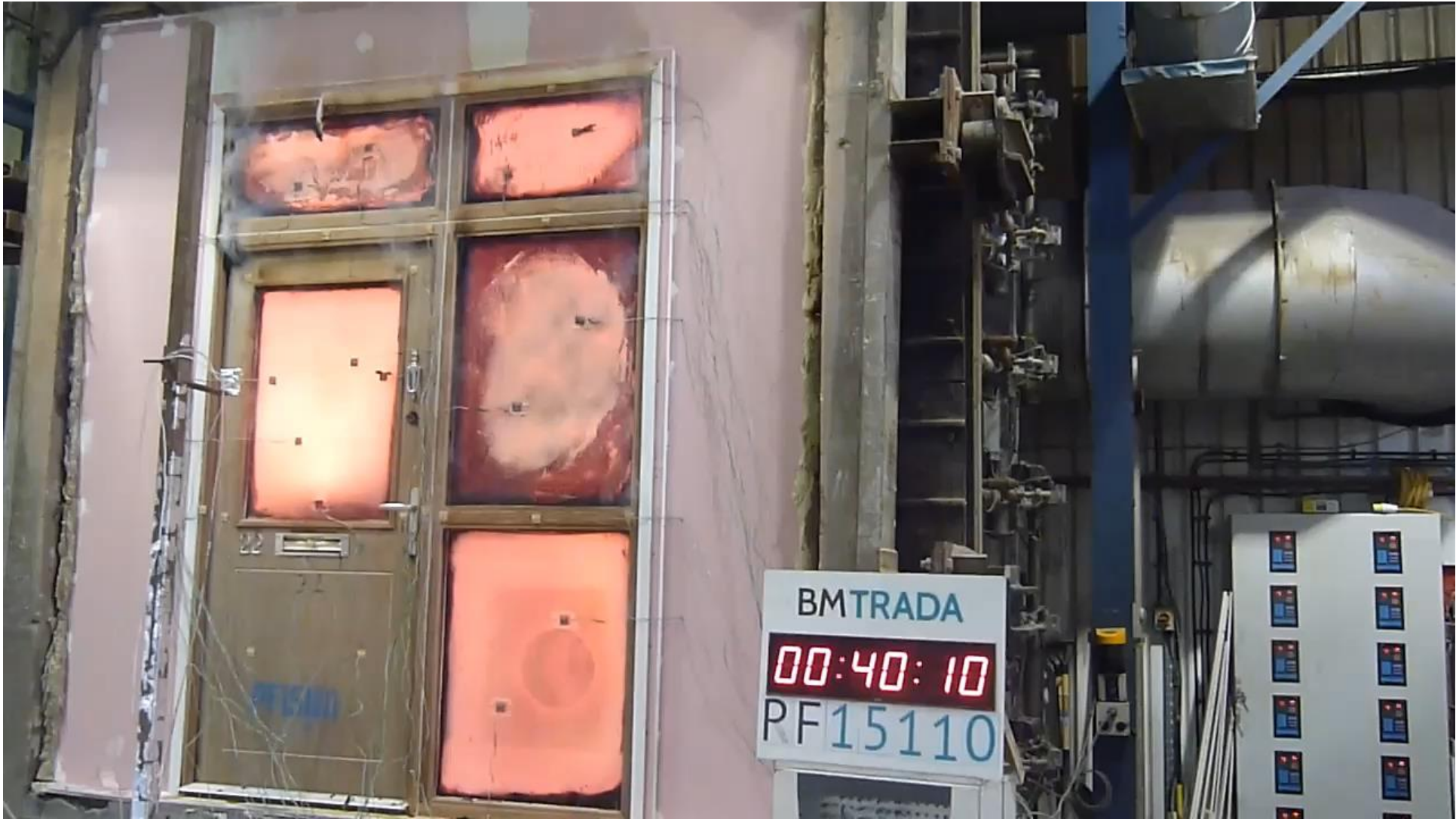


Industry standard:

EN1634-1  
BS476-22

Primary testing is crucial.

Latest Government Guidance 2020 advises new doorsets to have been tested from both sides



# How to determine performance

**SMOKE  
CONTROL**  
Building  
Reg ADB



Performance standard:

EN1634-3  
BS 476-31.1

Ensure the doorset for the cold smoke test is the same design as for the fire test, i.e. with smoke seals in place.

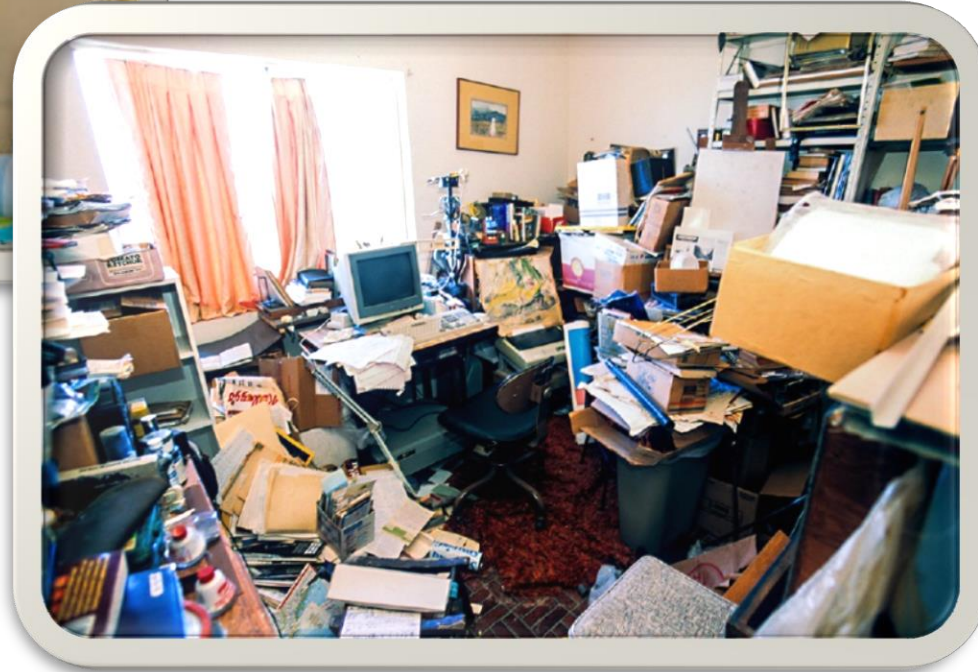
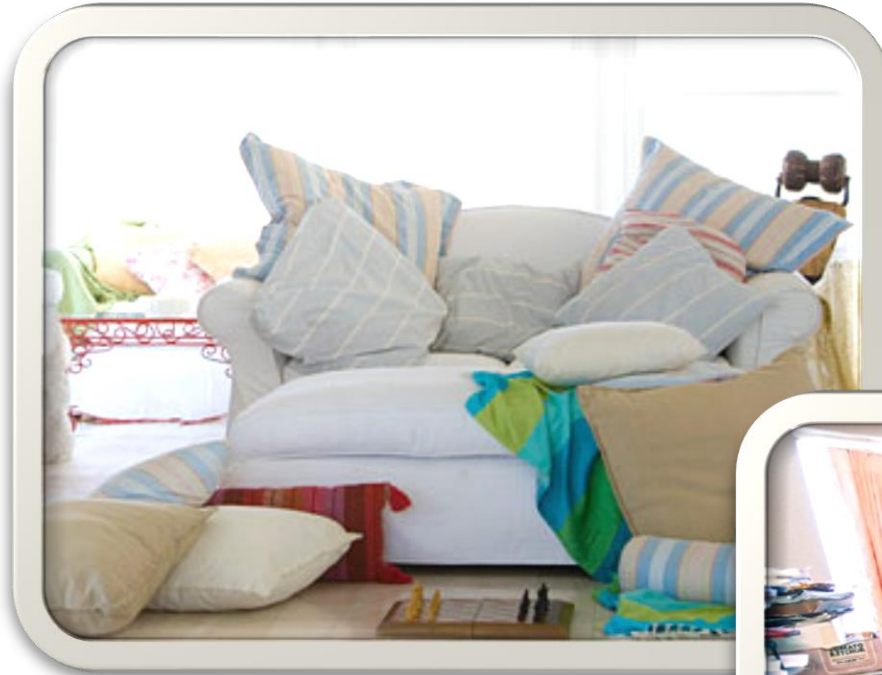
*Do you know that **41%** of the fatalities died from smoke inhalation and **46%** of injuries were caused by smoke inhalation?*

*(DCLG 2015)*

1960's



2020





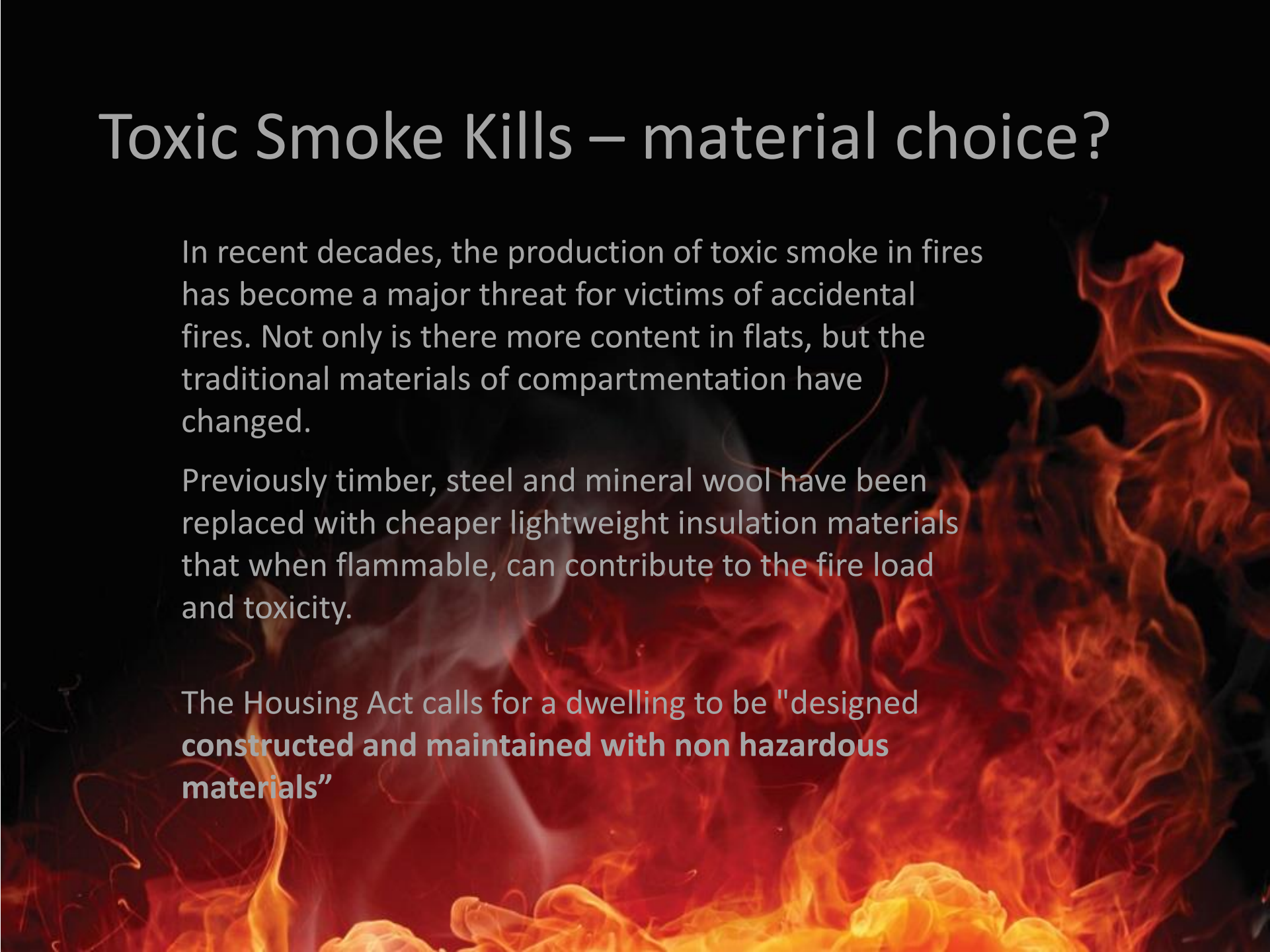


# Toxic Smoke Kills – material choice?

In recent decades, the production of toxic smoke in fires has become a major threat for victims of accidental fires. Not only is there more content in flats, but the traditional materials of compartmentation have changed.

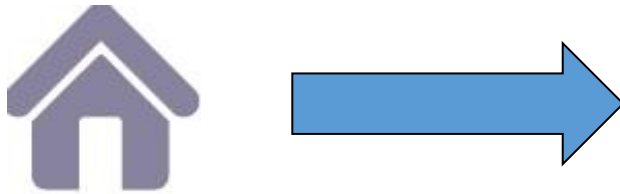
Previously timber, steel and mineral wool have been replaced with cheaper lightweight insulation materials that when flammable, can contribute to the fire load and toxicity.

The Housing Act calls for a dwelling to be "designed **constructed and maintained with non hazardous materials**"



# How to determine performance

**ENERGY  
CONSERVATION**  
**Building Reg ADL**



Thermal Transmittance Industry  
Standards:  
Calculative test: EN ISO 10077  
Hotbox test: EN ISO 12567-1 or EN  
ISO 8990

To establish the **U Value of the  
doorset/s** e.g.: 1.6 W/m<sup>2</sup>K.

A doorset is a controlled fitting.

Applies to doorsets situated in between a controlled and an uncontrolled environment – a **heated dwelling and an unheated corridor**

# Approved Document L

Approved Document L Conservation of Fuel and Power				
	Dwellings [Houses] (Approved Document L1B)	Buildings other than Dwellings [including flats, apartments] (Approved Document L2B)	Dwellings (Approved Document L1A) [Houses]	Buildings other than Dwellings [including flats, apartments] (Approved Document L2A)
<b>Existing Buildings</b>	Pedestrian doors - glazed (> 60% internal face glazed) and other pedestrian doors, U value 1.8W(m <sup>2</sup> K)	Pedestrian doors - glazed (> 60% internal face glazed) and other pedestrian doors, U value 1.8W(m <sup>2</sup> K)		
<b>New Buildings</b>			Pedestrian Doors: 2.00(m <sup>2</sup> K)	Pedestrian Doors: 2.2(m <sup>2</sup> K)

# How to determine performance

## SECURITY

Building Reg

ADQ



**PAS24 industry security standard**  
(or equivalent)

This standard calls for:

Durability &  
operation  
standard  
BS6375-1

Weather  
performance  
standard  
BS6375-2



**DURABILITY**  
Building Reg  
ADQ



**WEATHERING**  
Building Reg  
ADQ

# How to determine performance

## ACCESSIBILITY

Building Reg ADM



Surveying  
Features of design

## SOUND

### TRANSMISSION

Building Reg ADE



Industry standard  
EN ISO 10140-2 for acoustics

# Competence - Third party certification



Registration Schedule

Branch	Address
Gerda Security Products Ltd	53/54 Chiswick Avenue Mildenhall Suffolk IP28 7AY

Assessment/ Test Report	Owner of Assessment/ Report	Doorset Description	Rating	Test Type
ChIRAD7105	Gerda Security Products Ltd	The Gerda Capital Doorset™ Range (CDR)	30min	BS476 Part 22
ChIRAD7105	Gerda Security Products Ltd	Gerda Safer City Doorset™ Range (SCD)	30min	BS476 Part 22
ChIRA10093 (CFR11001261)	Gerda Security Products Ltd	Gerda FDS Complete™ Titan Range	30min	BS476 Part 22
ChIRAS1155 (RF09045)	Gerda Security Products Ltd	Gerda FDS Complete™ Zeus Range	60min	BS476 Part 22
ChIRA10198 (RF07045) (RF08115 Rev A) (CFR11001261)	Gerda Security Products Ltd	Gerda FDS Complete™ Olympian Range	30min	BS476 Part 22
ChIRA10199 (RF09045)	Gerda Security Products Ltd	Gerda FDS Complete™ Hercules Range	60min	BS476 Part 22
ChIRRF13051 (Doorset B)	Gerda Security Products Ltd	Gerda FDS Complete™ (Inglazed)	60min	BSEN 1534-1
ChIRRF13109 (Doorset A)	Gerda Security Products Ltd	Gerda FDS Complete™	60min	BSEN 1534-1
ChIRRF10122 (Doorset B) (Plus assessment ChIRAC12190)	Gerda Security Products Ltd	The Gerda Contemporary Doorset™ Range (TCR)	30min	BS476 Part 22
ChIRRF11035 (Plus assessment ChIRAC12190)	Gerda Security Products Ltd	The Gerda Contemporary Doorset™ Range (TCR)	30min	BS476 Part 22
BMTICNAP15138 (BMTFEPF15110)	Gerda Security Products Ltd	The Safer Homes Range™ (SHR)	30min	BSEN 1534-1



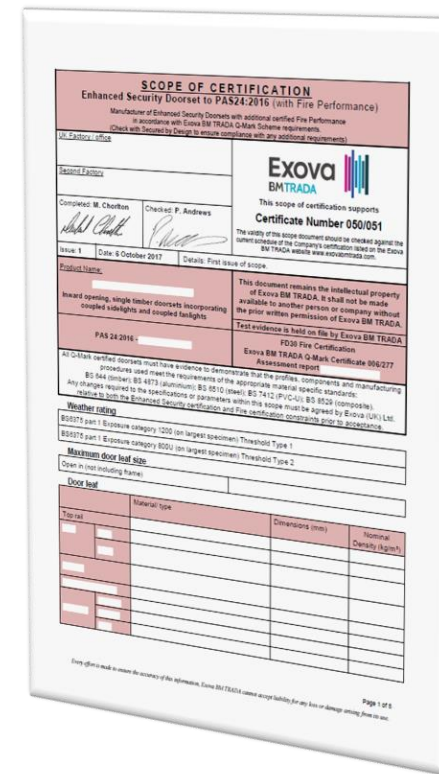
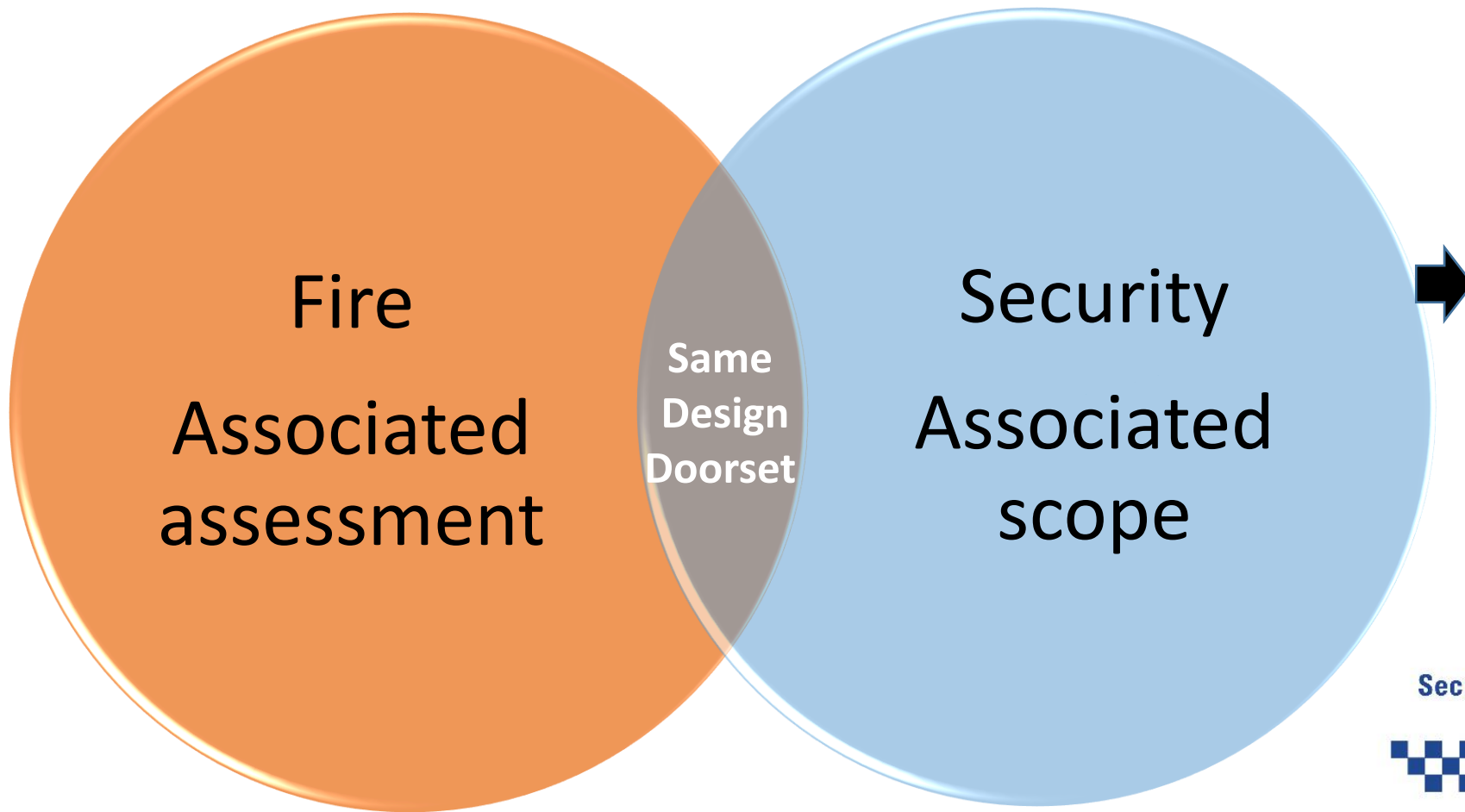
Ensures that what is produced is in line with test evidence & global assessment.

Supplied from **One Source:** A Doorset (as opposed to several sources)



# Dual Certification for flat / apartment doorsets

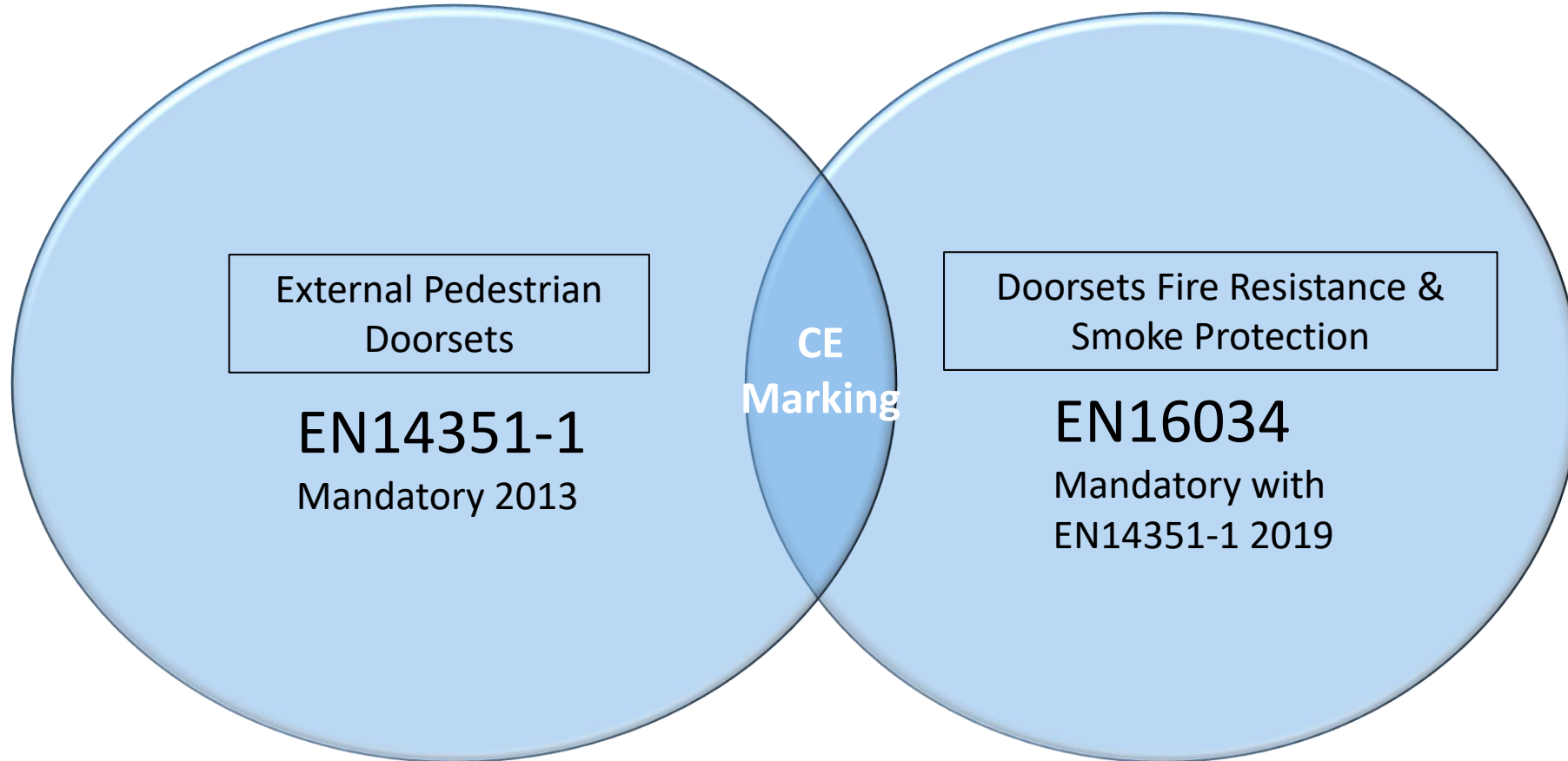
Dual Certification verified through UKAS accredited Certification Body leads to Secured by Design Approval





# CE Marking for external flat / apartment doorsets

Construction Products Regulations – harmonised standards affecting doorsets



This involves test reports from a UKAS accredited test house for water tightness, wind resistance, air permeability, U-value (mandatory) wind load, acoustic performance and impact resistance

This involves a notified product certification body for fire & smoke testing & factory control

# Example Safer Homes (SHR) 30 EI30Sa

- Exap for Fire (based on test evidence)
- Exap for Smoke (based on test evidence)
- Type of testing linked to Factory Production Control
- Classification Report – pulls the above together
- Certificate of Constancy of Performance
- Manufacturer’s Declaration of Performance
- CE Mark
- This will become a UKCA mark in January 2021 for products in the United Kingdom

CE		
Gerda Security Products Ltd, 54 Chiswick Avenue, Mildenhall, Suffolk, IP28 7AY		
20		
Safer Homes Range EI30 Sa		
Essential characteristic	Declared performance	Harmonised standard
Thermal Transmittance	1.6W/(m2.K)	BS EN 14351-1:2006 +A1:2010
Air permeability	Class 3	
Watertightness	Class 3A	
Resistance to wind load	Class B3	
Dangerous substances	None	
Acoustics	NDP	
Impact resistance of glass and fragmental material	3 (B) 3	
Load bearing capacity of safety devices	NPD	
Radiation Properties	NPD	
Resistance to fire (for fire compartmentation uses):	E: 30 EI <sub>2</sub> : 30	
Smoke control	Sa 25Pa	
Ability to release	Released	
Self-closing	C	
Durability of ability to release	Release maintained	
Durability of self-closing:		
* Against degradation (cycle testing):	Class 2	
* Against ageing (corrosion):	Achieved	
WARRINGTONFIRE (UK) issued a certificate of constancy of performance and carried out type testing and calculation. Intended use: Communication in domestic and commercial locations; fire and/or smoke compartmentation and/or escape routes.		

# Example Safer Homes (SHR) 30 EI30Sa

- Scope: Fire Resisting External Pedestrian Doorsets covered by EN14351-1  
Intended use: fire compartmentation and/or escape routes
- Fire Resistance: Integrity and Fire Insulation – 30 minutes
- Smoke Control classification (Sa)



Notified Body No. 1224

## Certificate of Constancy of Performance

1224-CPR-1190

In compliance with *Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011* (the Construction Products Regulation or CPR), this certificate applies to the construction product:

### The Safer Homes Range SHR (30) – Unglazed only

Fire Resisting External Pedestrian Doorsets covered by EN 14351-1  
Intended for use in Fire Compartmentation and/or escape routes

# Third Party Certification

- Highlighted throughout new guidance
- Of all the aspects of performance discussed only fire doorset manufacture and security doorset manufacture certification schemes exist.
- Installation
- Maintenance

## Support for certification:

- Government Advice Note 16
- Building a Safer Future. An Implementation Plan
- Building Safety Advice To Building Owners of Multi-storey, Multi-occupied Residential Buildings (section 10 Fire Doors) 2020
- Annex A Assurance & Assessment of Fire Doors 2020

# Certification Labelling



Here is an example of the Q Mark Fire Door Scheme

Silver plug denotes doorset

Yellow denotes thirty minutes fire resistance (blue denotes sixty minutes)

Red plug denotes glazed doorset

**Additional labelling for the doorset security scheme is:**  
Q Mark for Security silver label and additionally a PAS24 label with details of the manufacturer

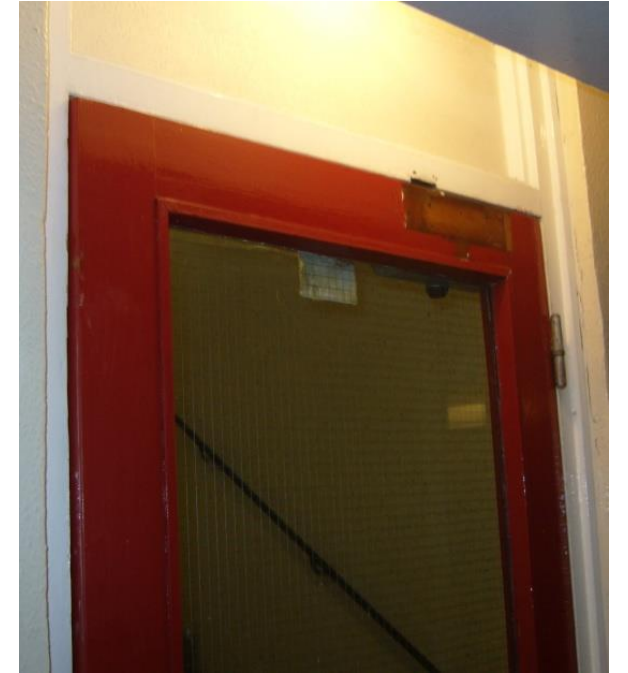
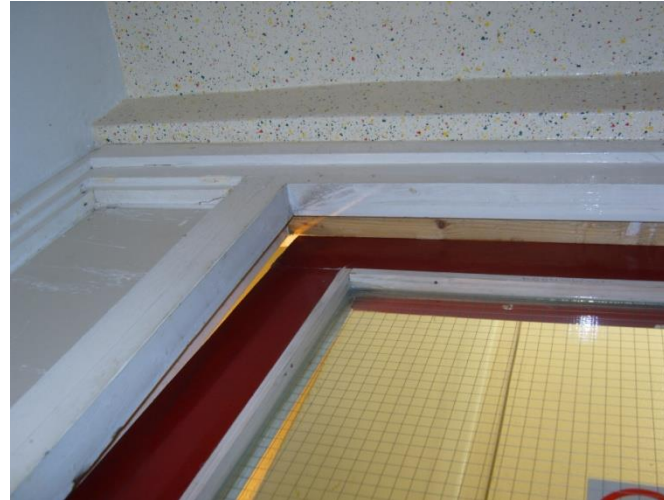
# Competence – Maintenance

## Regulatory Reform Fire Safety Order 2005 RR(FS)O Section 38 (1)

“...the responsible person must ensure that the premises and any facilities, equipment and devices ...for use by or protection of fire-fighters under this Order ..are subject to a suitable system of maintenance ...and in good repair.”

# Competence – Maintenance

Is lack of maintenance or ASB making a criminal of you?



# Competence – Maintenance

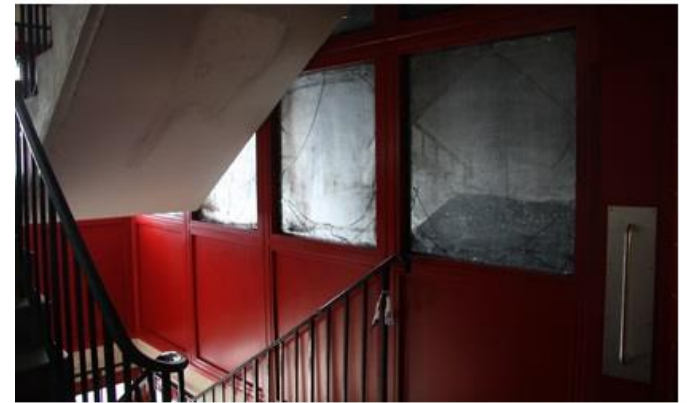
Under the RR(FS)O, section 38(1) and 17 (1), fire doorsets must be maintained.

## Maintenance

### Manufacturers

- ✓ Know their design
- ✓ Know their test evidence
- ✓ Draw on their extensive test data

Correct maintenance makes the difference in performance.





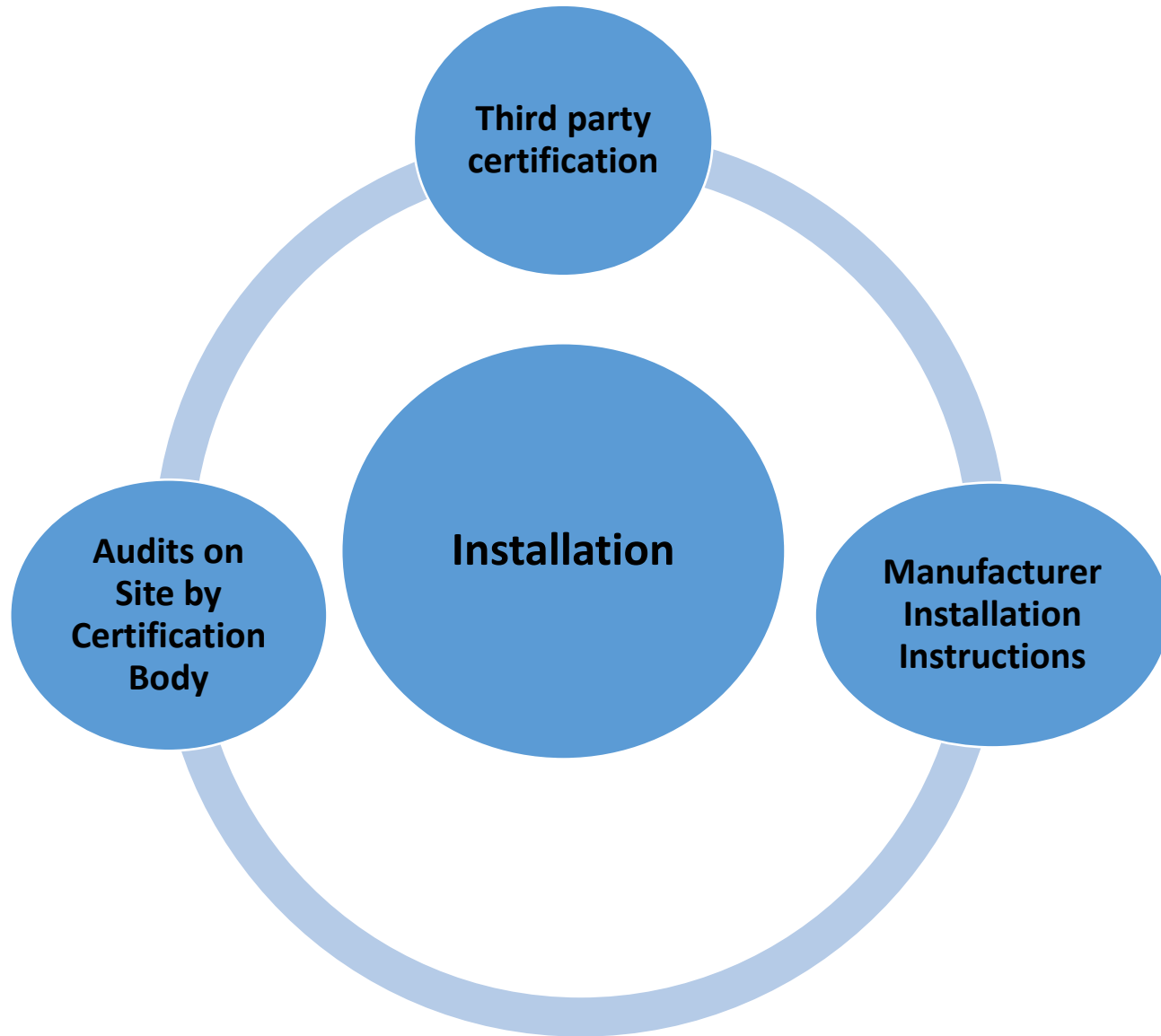
# Competence – Installation



## Spot the problems

Is bad installation making a criminal of you?

# Competence – Installation



**Installation Instructions**  
Gerda Safer Homes Range™ Doorsets FD30(S) with TS008 letterbox  
Fire Rated Doorsets to be Installed by Third Party Accredited Installers Only

**GERDA**  
uniting fire safety & security™

Gerda Security Products Ltd  
34 Chiswick Avenue  
Middlesex, IP28 7AY

enquiries@gerdasecurity.co.uk  
www.gerdasecurity.co.uk  
0200 309 1521

SHR002-15C3

**Door Preparation — Placement of Door Knocker and Door Viewer**

In the Safer Homes Range™ lockbox, intumescent is supplied for the door knocker and the door viewer. Affix door knocker and door viewer with intumescent as indicated below into the pre-drilled apertures.

Door viewer needs to be wrapped by black intumescent 13

Screws for the door knocker needs to be wrapped by black intumescent 11& 12

- Pilot drill the holes with a 2mm HSS drill bit to the depth of the screw provided only and affix numerals with the PZ1 screws provided to the chosen position.

6

SHR002-15C3

“Making sure the installer has sufficient instruction with which to proceed” BM Trada

# Are you 100% sure your fire-rated doorsets comply?

**Good  
Installation?**



**Architrave  
Removed...**



**Not what it  
seems...**



# Traceability – Golden Thread

3.36 The dutyholder will be responsible for maintaining the ‘golden thread’ of information about the building structure and materials, detailing the maintenance, testing and inspection routine.....

Building a Safer Future Dame Judit Hackitt

## Gerda G-Smart™ App

Fire doorset installation & maintenance  
Full lifecycle management helping you achieve compliance



- Doorset DNA in label
- Record of installation / repairs / all inspection / maintenance with photos
- Straight-forward App
- Comprehensive reports

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uniting fire safety & security<sup>™</sup>

[andrewthompson@gerdasecurity.co.uk](mailto:andrewthompson@gerdasecurity.co.uk)



# Fire Risk Discussion

Leon Storer  
Assistant Director of Assets  
Stonewater

# FIRE RISK PROCESS

2

**Stonewater has an in-house Team of risk assessors and an automated system for undertaking Fire Risk Assessments.**

**The Team has recently transferred to the Health, Safety and Compliance Team.**

**Currently reviewing Fire Safety Policy and Fire Safety Management Plan to ensure it includes current MHCLG guidance specifically in relation to higher risk buildings and changes to building regulations.**

**Ensuring in house risk assessment surveyors are up to date with knowledge of requirements in the sector and are maintaining adequate continuing professional development (CPD).**

# FIRE RISK PROCESS

3

**Reviewing our training plan / matrix for Stonewaters in house risk assessors that includes**

- **fire door inspections;**
- **fire stopping and compartmentation;**
- **regular updates to any changes in regulation or sector standards, such as Approved Document B, the British Standards relating to Fire Alarm Systems, the MHCLG guidance;**
- **CPD with regard to ‘what’s on the horizon’ to inform their knowledge and competence.**

**3 Phase Audit Approach of FRA’s**

- **‘Buddy’ / Critical colleague**
- **In-House ‘Police’**
- **Sensor Check by Primary Authority**



# FIRE RISK PROCESS

4

## **Primary Authority Scheme**

**Continue with our scheme membership with the Primary Authority Scheme.**

## **SMaRT Watch**

**In conjunction with local Fire and Rescue Services and colleagues explore the expansion and roll out of the system for remote alarm resets.**

**Recent procurements for compliance servicing elements.**

**Reviewing process for the agreed timescale for completion of actions identified as part of the risk assessment process.**

**Looking to procure this work via a framework going forward.**



# Fire Safety – Responding to the Challenge

October 2020

# Key Issues Identified by the Hackitt Report

- Ignorance
  - regulation and guidance not always read and understood or misinterpreted
- Indifference
  - motivation has been to do things quickly and as cheaply as possible rather than deliver quality homes which are safe for people to live in
- Lack of clarity on roles and responsibility
  - ambiguity over responsibility, accountability and clear audit trails
- Inadequate regulation and enforcement tools
  - ineffective deterrent for poor behaviour by the regulator

*“The above issues have helped to create a cultural issue across the sector, which can be described as a ‘race to the bottom’ caused either through ignorance, indifference, or because the system does not facilitate good practice. There is insufficient focus on delivering the best quality building possible, in order to ensure that residents are safe, and feel safe.”*

# Report Recommendations

- Clear model of Risk Ownership
  - Clear roles and responsibilities for Client, Designer, Contractor and Owner
- Buildings as a System
  - Change in thinking to consider different layers of protection that may be required to make a building safe considering other areas such as carbon reduction etc
- Risk Based Approach
  - To both planning and delivery and regulatory oversight. The more complex the project the greater the oversight
- Transparency of Information and Audit
  - Throughout the life of a building from planning to occupation and maintenance it is essential to provide reassurance and evidence that building has been built safe and remains safe.

# Challenge for Landlords

- Prevention and Planning
  - Building Regs are not retrospective, legacy of unknown risks
  - FRA's look at the visible, non intrusive and superficial
- Detection, Alarm and Suppression
  - Active Fire Prevention - Correctly installed and serviced by Responsible Persons
- Containment
  - Passive Fire Prevention (Fire doors, compartmentation, ventilation)
- Means of Escape
  - Resident engagement and training
- Fire Fighting
  - Local Partnerships with Fire Departments. Documented and accessible building plans.
- Business Continuity
  - Building a Safer Future. Plan for future regulatory change

# Meeting the Challenge

- Balancing cost with effective prevention
- Resident safety at the heart of the matter
- Risk assessed on a case by case basis. More complex the project more associated risks
- Compliant and regulated procurement – understanding your requirements
- Accredited contractors who understand their roles and responsibilities

# Fire Safety Support

- Fire Door Framework (live)
  - Access to 7 national manufacturers with optional fitting and ongoing maintenance
- Passive Fire Framework (live)
  - Smoke & Heat detector installation
  - Compartmentation & passive fire works
  - Smoke barriers
  - Fire signage
- Active Fire and Security Framework (go live Oct 2020)
  - Sprinklers & misting systems
  - Fire Alarms, EM lighting
  - Smoke control incl Dampers & AOV's
  - Door entry & Access Control
  - Security systems & CCTV
- Temporary Fire Detection (go live Oct 2020)
  - Alternative to Waking Watch
- Cladding Framework (go live March 2021)
  - In partnership with L&Q
  - Inspection & Reporting
  - Removal & Installation
- Compliance (go live March 2021)
  - Fire Risk Assessments

# Our Role in the Process

- Industry and regulatory knowledge – staying on top of the changing landscape and best practice
- Critical friend – providing confidence in your specifications
- Matching your specific requirements with the correct provider
- Quick, efficient and compliant route to market
- MEAT does not always mean cheapest provider
- Cost/quality certainty in the delivery of the works/service



The background features a central white circle containing text, surrounded by a network of colorful, rounded shapes in shades of purple, green, and orange. Each shape contains a circular inset image: a classroom, a group of people, a person writing, a document with a pen, a house, and a person in a white coat.

**Luke Hurd**  
**Chief Operating Officer**  
**07497 044014**  
**[lhurd@chicld.co.uk](mailto:lhurd@chicld.co.uk)**