

# FDS Complete™ Range

Communal Fire Resisting Doorsets  
for Compartmentation





Gerda's range of communal fire doorsets provide peace of mind by helping organisations to meet and exceed their fire safety responsibilities.

Specifying the correct type of doorset is about assessing the risks to the environment as well as the compartmentation requirements. At Gerda we recognise that this can be challenging and we work with our customers to provide a **sustainable solution for the long term.**

### Innovation and Design

Gerda is at the forefront of innovation, bringing doorset design together with fire safety and security. We offer a holistic approach with products designed to improve the living area for residents while assisting with the management of communal areas.

### Whole Life Costs

Our products offer reliability in the environment they are designed for. They offer true value for money both in initial investment and maintenance programmes. Gerda designs and manufactures the communal range to the highest specification.

### Quality Assurance

Gerda is an ISO9001 accredited organisation. Our products carry third party accredited certification which means that we are audited by independent UKAS notification bodies, including BM Trada and the British Standards Institute.

### Credibility

We work with leading authorities in fire safety and the Fire & Rescue Services nationwide, as well as the police initiative Secured by Design, in order to ensure our products not only meet industry standards, but go above and beyond to ensure they are fit for purpose in the environments in which they function.

### Aftercare and Maintenance

Gerda offers a comprehensive maintenance service with a range of options. Gerda's maintenance programme, which ensures the longevity of the product, can be linked into your fire risk assessment schedule. There is a real benefit in this service rather than going to third parties, particularly as Gerda has designed and developed the product range. Please enquire for further information.

### Sustainability

We strive to provide products and services that offer benefits to the environment through innovative product design and through our every day practice. We work together with customers to provide a holistic approach and our involvement, from local community events to apprenticeship developments in the locality, reflects our ethos for inclusion.

### Installation Service

A complete service is available for the survey, manufacture and delivery of the doorset. We offer a high quality installation service directly or through approved partners. Gerda conducts in-house training with theory to impart why the correct installation is important in the context of fire safety legislation and practical in-depth training on site.

### Fire Safety Seminars

Held at the Gerda Conference Centre and Showroom in central London, the Fire Safety seminars are hosted by leading authorities in fire safety. The seminars span specific sector subjects from Fire Safety in High Rise Housing to Continuous Professional Development (CPD) presentations. The seminars include interactive demonstrations that highlight aspects of fire safety.

# FDS Complete Range™ of Communal Fire Resisting Doorsets

offers the complete solution for compartmented communal areas including lobbies, stairwells and corridors.



## FIRE SAFETY

### Function

*"compartmentation, means of escape and enabling the Fire & Rescue Service to carry out their operational duties"*



### Fire doorsets:

- Protect escape routes from the effects of fire so occupants can reach means of escape
- Enable the Fire & Rescue Service to carry out their operational duties within compartmented areas
- Protect the contents and structure of the building by limiting the spread of fire.

*The FDS Complete™ Range is designed, manufactured, tested and certified to make the above possible.*

*"Only a purpose-built fire resisting door that has been tested to an approved standard will provide the necessary protection."*

**HM Government Fire Safety Risk Assessment, Sleeping Accommodation 2008**

*"Doors in fire-separating elements are one of the most important features of a fire protection strategy and it is important to select a fire door that is suitable for its intended purpose."*

**BS9999:2008**

*"Any facilities, equipment and devices provided in respect of the premises for the use by or protection of fire-fighters...are maintained in an efficient state, in efficient working order and in good repair." 38-(1)*

**RR(FS)O – Regulatory Reform Fire Safety Order 2005**

### Performance

#### Testing - Fire

*"extensive testing is essential to ensure that the doorset design performs as it should"*

The FDS Complete™ Range has undergone successful extensive testing for fire resistance at major independent UKAS accredited test houses.

Double and single doorsets are tested for and exceed thirty minutes fire resistance in a series of large full scale tests specific to half hour fire rated doorsets including side panels/screens and fanlights.

Double and single doorsets are tested for and exceed sixty minutes fire resistance in a series of large full scale tests specific to one hour fire rated doorsets including side panels/screens and fanlights.

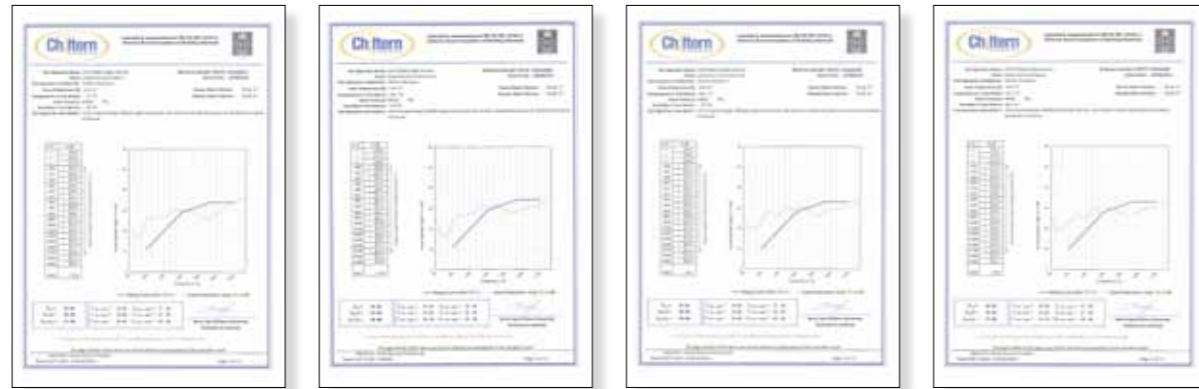
Fire test standards include BS476 part 22 1987 and EN1634-1:2008



### Testing - Acoustics

*“residents have commented positively on substantial improvements in heat and sound”*

Gerda has carried out tests on the FDS Complete™ Range of doorsets for acoustics to meet the requirements of Building Regulations Part E. This includes testing single and double doorsets for both FD30(S) and FD60(S).



### Testing - Smoke

*“comprehensive full scale smoke tests”*

Successful full scale smoke tests have been conducted on the FDS Complete™ Range of doorsets to EN1634-3:2004 for smoke. This includes testing single and double doorsets.



### Certification

The FDS Complete™ Range carries third party certification through the notified body BM Trada.



BM Trada check that products demonstrate high performance through independent testing against exacting requirements and ensure consistent manufacture through approved quality management systems.

### Smoke Control

*“smoke kills - engineered design protects means of escape and compartmented areas”*

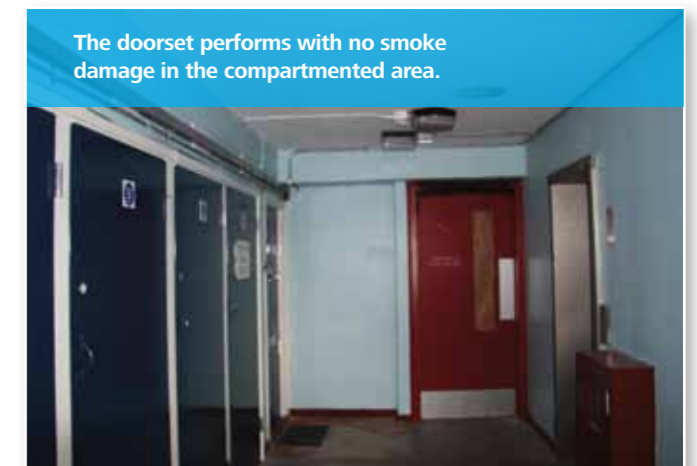
The FDS Complete™ Range of communal doorsets is designed to perform effectively in the event of smoke. The doorset below underwent a severe fire which melted the floor.

The smoke damage can be seen to the fire side of the door. The door operated as designed, protecting the compartmented area and prevented the seepage of smoke. It continued to function until it was replaced.

Gerda fully tests its fire doorset ranges in large scale smoke tests at UKAS accredited test houses to EN1634-3:2004. This includes doorsets and large screens and side panels as well as fanlights.



After a full scale fire, the Gerda® doorset still functions.



The doorset performs with no smoke damage in the compartmented area.

### Fire Safety Seminars

Gerda holds highly respected fire safety seminars at its premises in central London. Hosted by leading authorities in fire safety, the seminars span specific market sector subjects, from Fire Safety in High Rise Housing to Continuous Professional Development (CPD) presentations.

The importance of smoke control is often under-estimated. As part of Gerda’s fire safety seminars, interactive smoke demonstrations in specially constructed smoke pods highlight the dangers of smoke and the importance of correct specification.



*“an excellent seminar - extremely valuable to organisations similar to ours with high rise or multi-occupancy blocks”*



Scan the QR code to view video: ‘The Dangers of Smoke’

## SECURITY

### The Environment

The location of the doorset is important - if this forms part of a firefighting area, it may be that the compartmentation requirements are for a one hour, as opposed to a half hour, fire doorset.

If the doorsets are in an environment which is regularly exposed to wilful damage through vandalism or just general lack of care, the need for replacement of the doorset or component parts, such as door closers, may be frequent.

There is the added legal requirement that if the doorset does form part of a firefighting area, then this area must be maintained under the RR(FS)O. By looking at the design of the doorset, cost savings can be made in terms of maintenance, while at the same time assisting with this requirement.

### The Prevention and Control of Arson

In its latest edition of **'The Prevention and Control of Arson'**, the Fire Protection Association states:

*"To ensure fire doors continue to operate as they are designed to do so (given their role in compartmentation), consideration may need to be given as the doorset type specified for an environment. Certified doorsets with in-built features to prevent vandalism may be an option for more onerous environments."*

### Fit for Purpose

*"the Gerda® doorsets are engineered to meet the harsh environment which fire doors have to endure"*

*"Gerda's range of fire doorsets has allowed us to meet our fire safety responsibilities with peace of mind. Gerda's leading-edge design features help us to meet our on-going maintenance responsibilities, which are an important requirement under the RR(FS)O, and furthermore reduce our maintenance costs."*

**Project Manager**  
London Borough of Newham

*"the high performance FDS Complete™ and the FDS Complete™Plus ranges are design-engineered for longevity"*



## DESIGN

### The FDS Complete™ Range

The FDS Complete™ Range offers beautifully finished FD30(S) and FD60(S) single and double doorsets with the option of screens and panels all tested as a complete doorset.



### Construction

This range is tailored to suit your building structure openings. It comprises 54mm or 44mm engineered timber core door leaf and a hardwood frame. The doorset is tested with all hardware and signage in full scale tests.

### Features

All frame finishes are supplied in white as standard to assist with contrast of colours for the partially sighted.

The door closer is factory fitted and tested to ensure smooth operation and quiet closure. This is a concealed closer preventing accidental damage to walls and making itself less prone to damage. There is the option of surface mounted closers if required. Both options are manufactured to BS EN 1154

The stainless steel D handle is ergonomically designed and manufactured to Gerda specification GFH3450 and positioned so that it can be reached and gripped by wheelchair users.

### Smoke Control

The latest photoluminescent signage assists those who are partially sighted as well as those needing to quickly identify a means of escape in a smoke filled environment. The sign incorporates "Fire Door Keep Closed", the manufacturer's identification and "FD60(S)" or FD30(S) in line with BS9999:2008.



The 3tiervision™ panel is able to withstand a high level of accidental or deliberate misuse. It seldom requires replacement. However should this become necessary, it is fitted with security screws to enable this to take place. The glazing in both the door and side screens is coded and has security fixings to enable efficient replacements.

## The FDS Complete™ Plus Range

The FDS Complete™ Plus Range with enhanced security in FD30(S) and FD60(S) single and double doorsets with the option of screens and panels all tested as a complete doorset.



Concealed door closers to prevent against breakage & damage

Quality stainless steel hinges. Highest grade achievable for corrosion and durability

Interlocking screens & panels enable versatility particularly for delivery to location

Photoluminescent signs to identify signage in smoke

Careful design of location & type of intumescent seals

Glazing system offering both safety and resistance to vandalism attack with a cartridge replacement system

Automatic variable drop down seal assisting with uneven floor levels and meeting smoke requirements under BS9999:2008

### Construction

This robust range is tailored to suit your building structure openings. It comprises a beautifully finished 54mm or 44mm engineered timber core door leaf and hardwood frame. The doorset is tested with all hardware and signage in full scale tests.

### Anti-vandalism Features

The concealed overhead door closer prevents wanton damage and breakage from misuse. The door closer is factory fitted and tested to ensure smooth operation and quiet closure. Stainless steel hinges with security studs are factory fitted to ensure the correct tolerance.

The 3tiervision™ panel is positioned to prevent deliberate breakage. The system is designed to withstand a high level of accidental or wanton damage. It has sustained axe attacks, after which the doorset has been able to function as it should. The glazing system is fitted with security screws to enable replacement should it become necessary. The glazing in both the door and side screens is coded.



Axe attack on the anti-vandal 3tiervision™ panel. The fire door is still able to function with no breach to the inner section of fire resistant glazing.

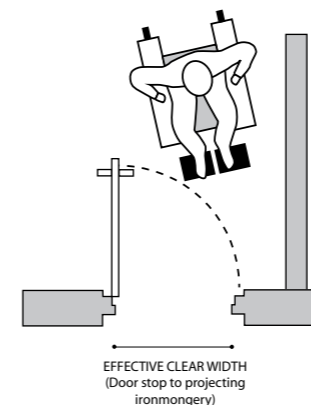
### Smoke Control

All intumescent seals are factory fitted in line with doorset design and testing. These seals effectively resist the passage of smoke. This is because they are manufactured from a material that is unaffected by moisture or atmospheric carbon dioxide making them less prone to degradation which in turn causes ineffectiveness. It is important that the seals are fitted correctly for all areas: frame, glazing, hinges and door leaf.

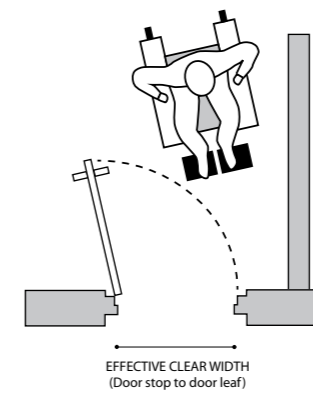
The automatic drop down seal is an important feature of the doorset design. This requires no electrical connection and automatically drops down during the last few millimetres of the door closing, thus preventing the passage of smoke between the bottom of the leaf and the floor. Fully intumescent-lined, it acts together with the doorset edge to provide conformity to EN1634-3:2004 and is in line with BS9999:2008.

## Intelligent Systems

Investment into bespoke software has led to enhancements in surveying and manufacturing processes. Dimensions and data are automatically cross checked throughout the ordering system so that doorsets meet part M and the scope within Gerda's extensive fire test remit.



EFFECTIVE CLEAR WIDTH (Door stop to projecting ironmongery)



EFFECTIVE CLEAR WIDTH (Door stop to door leaf)

### Part M Mobility Building Regulations

To ensure accessibility for wheelchair users, a clear opening of at least 750mm\* is required for existing buildings and 800mm for new. Users must be able to reach and grip handles.

\*Where an existing building structure does not allow for this, Gerda highlights this from the survey.

*“door closers must be maintained under the fire doorset maintenance programme to ensure they are working to the optimum for a given environment”*

### Opening and Closing Forces

A fire resisting doorset must close to be effective and circumstances may arise which need to take into account air pressure or smoke seal considerations. BE EN 1154 states that door closers of less than power size three are not suitable for fire resisting doorsets.

The FDS Complete™ Range can be used in conjunction with automatic hold open devices to assist with opening.

For further details on Gerda's maintenance programme please enquire.

### Interlocking Frames

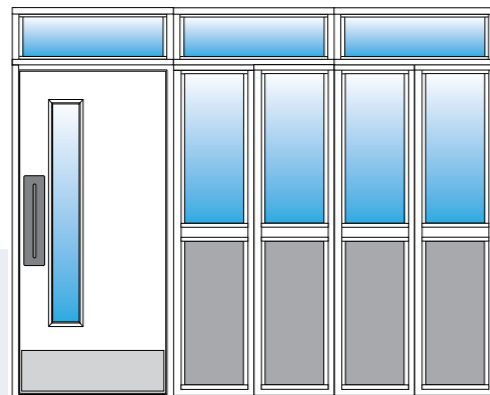
The FDS Complete™ Range is designed with interlocking frames to enable easy fitting on site and to assist with the correct installation of the doorset and its side or top screens/panels.

When replacing an old door with a new tested and certified fire doorset, it is important that the top and/or side panels perform to the same required level. The level of compartmentation needs to be maintained, so top and side panels whether glazed or solid, need to perform effectively to the required level of 60 minutes or 30 minutes.

The FDS Complete™ Range offers glazed and solid, side and top panels subject to measurements that are within the full scale fire tests and test reports under the certification scheme.

This means:

- The doorset is tailored to specific requirements
- The doorset gives a complete solution that meets Fire, Smoke, Safety and Acoustic standards
- Installation is precise and efficient owing to the specialised interlocking system.



Example of modular unit arrangement around a door screen showing location of timber joint inserts



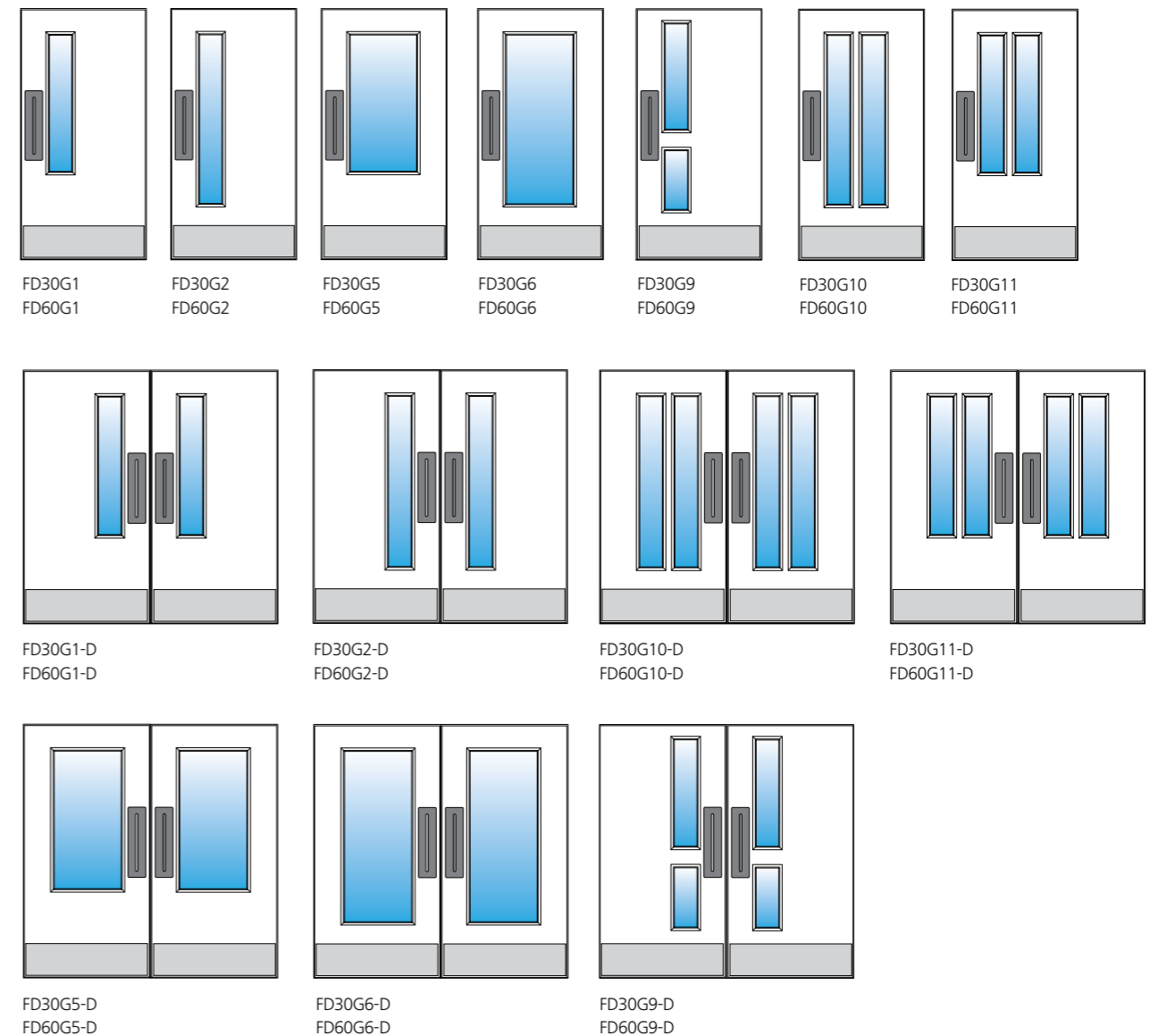
*“all frames have a specialised interlocking system enabling precise and efficient installation on site”*

### Standard Finishes

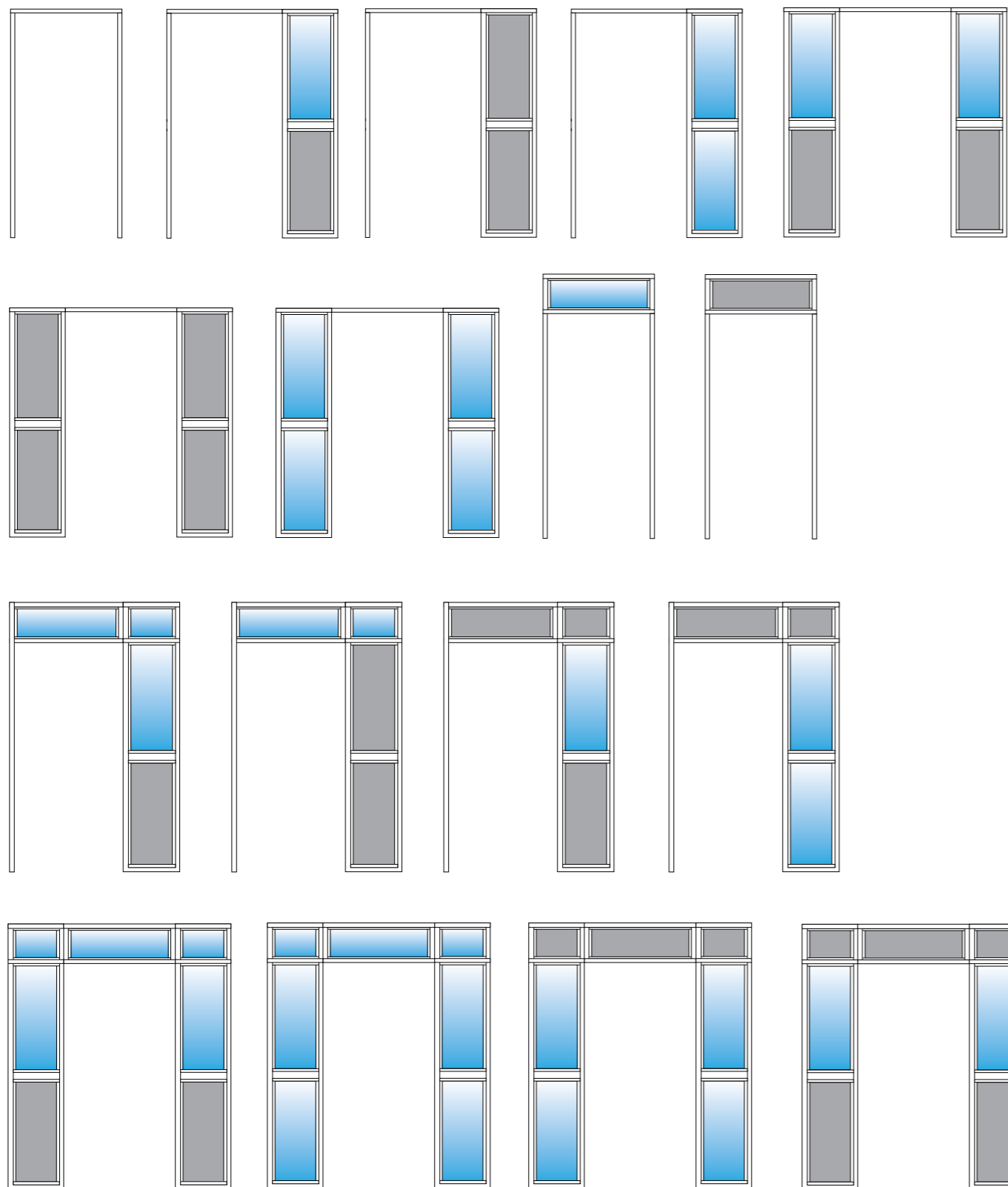
Our standard finishes are Midnight Blue and White. Other RAL colours and woodgrains are available upon request.



### Door Styles



### Frame Styles



\*Left hand versions are available.

\*Other combinations are available subject to test parameters.

## SUSTAINABILITY

### Environmental Policy

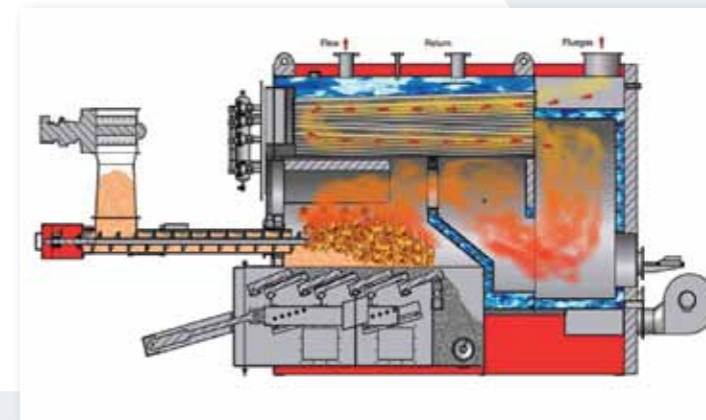


Gerda® is totally committed to environmental sustainability and management. We source our timber from Forest Stewardship Council certified sources. Gerda® works closely with approved suppliers to ensure they understand and work with us in our commitment to environmental sustainability.



*“as ever, Gerda® strives to innovate not only in product design but also in environmental developments”*

Doors replaced by the FDS Complete Range™ are recycled. Gerda’s commitment to further improving this process is through biomass biodegradability. Here replaced doors are reformed into heat bricks using a specialised process. These bricks are then used to heat the manufacturing facilities.



### Whole Life Costs

*“whole life costs importantly take into account costs that are sometimes overlooked, notably environmental and social impact costs”*

Whole life costs can be defined as the total cost of owning an asset over its entire life. This includes the design and building or refurbishment, operating, financing, depreciation and disposal costs. Whole life costs also importantly take into account costs that are sometimes overlooked, notably environmental and social impact costs.

From working with our clients, the impact of installing the FDS Complete™ doorsets for communal compartmented areas has been immediately apparent.

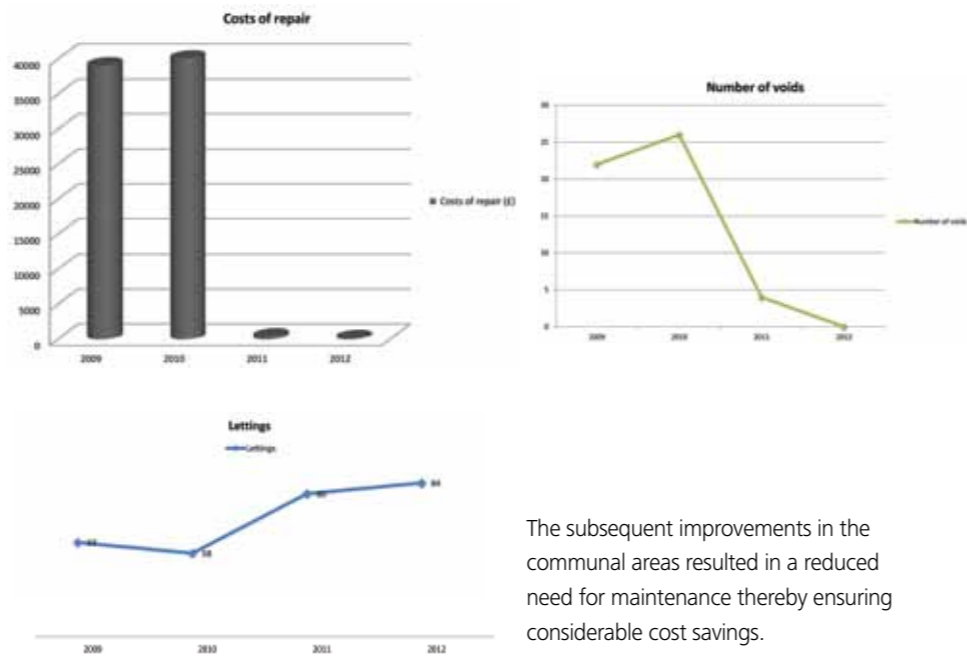
A leading social housing provider adopted the innovative holistic approach involving all stakeholders in the process of its fire safety policy. The fire safety management of their housing stock is based on a strategic methodology of diagnosis, design and delivery.

Through conducting a pilot based on specific fire safety works, including renewing the compartmentation in one of its tower blocks in December 2010, the organisation was able to monitor the progress. Refurbishment work included:

- One hour fire protection to landing areas with the Gerda FDS Complete™ communal doorsets
- Half hour fire protection to flats with the Gerda Contemporary front entrance doorsets
- One hour service room doorsets with the Gerda H System® providing immediate access for the Fire & Rescue Service
- Premises Information Box™ (PIB)® System to provide a secure focal point for attending fire fighters to obtain premises plans and information.
- Class O treatment to communal areas
- Sprinkler installation to bin rooms
- Smoke vents to communal areas
- Fire signage
- DDA compliance.



Scan the QR Code to view video: 'Smoke kills - how will your building perform in the event of a fire?'



### Installation

*“to maximise your return on investment, use qualified Gerda installers and ensure doorsets are maintained under the Gerda maintenance scheme”*



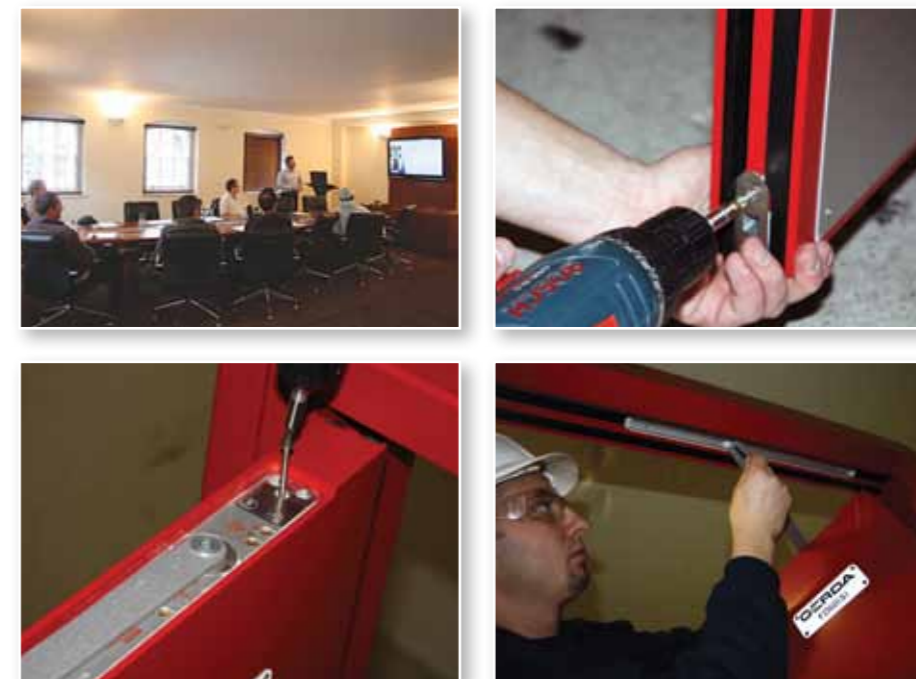
Before

After

The Gerda FDS Complete™ Range is an engineered fire door, designed for compartmentation, means of escape and enabling the Fire & Rescue Service to carry out their operational duties.

To ensure longevity and correct operation the doorsets must be fitted by qualified installers trained and approved by Gerda®. Gerda trains installers in both fire safety theory at the Gerda Training Centre and on site in clearly structured and monitored courses. Successful attendees are awarded certificates of approval by Gerda®.

For details of the Gerda maintenance scheme please enquire.



# Technical Specifications

	DOORSET		SIDE PANELS/SCREENS & FANLIGHTS/TOP PANELS	
	TEST REQUIREMENT	TEST REPORT	TEST REQUIREMENT	TEST REPORT
FIRE	BS476 pt 22 1987 Requirement Integrity 30 minutes	CFR1001261 Double Doorset Insulation > 30 minutes Integrity > 30 minutes	BS476 pt 22 1987 Requirement Integrity 30 minutes	Chilt/RF08015 Rev A
			BS476 pt 22 1987 Requirement Integrity 30 minutes	Test Report Chilt/RF11035 Insulation 30 minutes Integrity 30 minutes
			BS476 pt 22 1987 Requirement Integrity 30 minutes	Chilt/RF07046
	BS476 pt 22 1987 Requirement Integrity 30 minutes	Chilt/A10198 Rev B for FDS Complete™ FD30S Olympian Range. Integrity = / > 30 minutes	BS476 pt 22 1987 Requirement Integrity 30 minutes	Chilt/A10198 Rev B for FDS Complete™ FD30(S) Olympian Range Integrity = / > 30 minutes
	BS476 pt 22 1987 Requirement Integrity 30 minutes	Chilt/A10093 Rev B for FDS Complete™ FD30S Titan Range. Integrity = / > 30 minutes	BS476 pt 22 1987 Requirement Integrity 30 minutes	Chilt/A10093 Rev B for FDS Complete™ FD30(S) Titan Range Integrity = / > 30 minutes
	BS476 pt 22 1987 Requirement Integrity 60 minutes	Chilt/RF09046 Double Doorset Insulation > 60 minutes Integrity > 60 minutes	BS476 pt 22 1987 Requirement Integrity 60 minutes	CFR1206281 Large side panels and fanlights/panels Integrity > 60 minutes
	BS476 pt 22 1987 Requirement Integrity 60 minutes	CFR1206151 Integrity > 60 minutes	BS476 pt 22 1987 Requirement Integrity 60 minutes	CFR1206151 Large side panels and fanlights/panels Integrity > 60 minutes
	BS EN 1634-1:2008 Requirement Integrity 60 minutes	CFR1301041 Integrity > 60 minutes	BS EN 1634-1:2008 Requirement Integrity 60 minutes	CFR1301041 Large side panels and fanlights/panels Integrity > 60 minutes
	BS EN 1634-1:2008 Requirement Integrity 60 minutes	Classification report: CFR13C001 issue 2 Integrity > 60 minutes	BS EN 1634-1:2008 Requirement Integrity 60 minutes	Classification report: CFR13C001 issue 2 Integrity > 60 minutes
	BS EN 1634-1:2008 & BS476 pt 22 1987 Requirement Integrity 60 minutes	Chilt/A10199 Rev B for FDS Complete™ FD60S Hercules Range Integrity > 60 minutes	BS EN 1634-1:2008 & BS476 pt 22 1987 Requirement Integrity 60 minutes	Chilt/A10199 Rev B for FDS Complete™ FD60S Hercules Range Integrity = / > 60 minutes
BS EN 1634-1:2008 & BS476 pt 22 1987 Requirement Integrity 60 minutes	Chilt/A09135 Rev A for FDS Complete™ FD60S Zeus Range Integrity > 60 minutes	BS EN 1634-1:2008 & BS476 pt 22 1987 Requirement Integrity 60 minutes	Chilt/A09135 Rev A for FDS Complete™ FD60S Zeus Range Integrity = / > 60 minutes	

	DOORSET		SIDE PANELS/SCREENS & FANLIGHTS/TOP PANELS	
	TEST REQUIREMENT	TEST REPORT	TEST REQUIREMENT	TEST REPORT
SMOKE	EN1634-3:2004 Requirement Doors should have smoke leakage rate not exceeding 3m³/h/m at 25Pa	Test report: Chilt/P11094-02 for double doorset FDS Complete FD30S Range. Positive chamber pressure 1.80m³/h/m at 25Pa (Door leaf opening away from chamber). Negative chamber pressure 1.40m³/h/m at 25Pa (Door leaf opening away from chamber)	EN1634-3:2004	Test Report Chilt/P11054
	EN1634-3:2004 Requirement Doors should have smoke leakage rate not exceeding 3m³/h/m at 25Pa	Test report: Chilt/P11094-04 for single doorset. FDS Complete FD30S Range. Positive chamber pressure 2.62m³/h/m at 25Pa (Door leaf opening away from chamber). Negative chamber pressure 2.05m³/h/m at 25Pa (Door leaf opening away from chamber)	EN1634-3:2004	Test Report Chilt/P11054
	EN1634-3:2004 Requirement Doors should have smoke leakage rate not exceeding 3m³/h/m at 25Pa	Test report: Chilt/P11094-01 for double doorset FDS Complete F60S Range. Positive chamber pressure 0.73m³/h/m at 25Pa (Door leaf opening away from chamber). Negative chamber pressure 0.71m³/h/m at 25Pa (Door leaf opening away from chamber)	EN1634-3:2004	Test Report Chilt/P11054
	EN1634-3:2004 Requirement Doors should have smoke leakage rate not exceeding 3m³/h/m at 25Pa	Test report: Chilt/P11094-03 for single doorset FDS Complete FD60S Range. Positive chamber pressure 1.71m³/h/m at 25Pa (Door leaf opening away from chamber). Negative chamber pressure 1.67m³/h/m at 25Pa (Door leaf opening away from chamber)	EN1634-3:2004	Test Report Chilt/P11054
	EN ISO 10140-2:2010. Requirement 29dB	Test report: Chilt/Z11016/02 for double doorset FDS Complete FD30S Range caulked 32dB		
	EN ISO 10140-2:2010. Requirement 29dB	Test report: Chilt/Z11018/01 for single doorset FDS Complete FD30S Range caulked 33dB		
ACOUSTICS	EN ISO 10140-2:2010. Requirement 29dB	Test report: Chilt/Z11016/01 for double doorset FDS Complete FD60S Range caulked 32dB		
	EN ISO 10140-2:2010. Requirement 29dB	Test report: Chilt/Z11018/03 for single doorset FDS Complete FD60S Range caulked 32dB		

# Accreditations



**ISO9001 Quality Management**

**Continuous Professional Development Certification**

**BM Trada Certification for Fire**

**Secured by Design** - the police (ACPO) initiative to ensure high standards in products and measures to prevent crime

**BM Trada Certification for Security**

**Equal Opportunities** - Gerda is an Equal Opportunities Employer

# Partnerships

Gerda® works in partnership on training and publications with the **Fire Protection Association**



**Constructionline** - the largest online database for pre-qualified contractors and consultants

**Safe Contractor** - an accreditation scheme that assesses the health & safety competency of contractors and service providers


**CHAS** - recognised health & safety scheme

**DHF** - The Door and Hardware Federation is responsible for maintaining industry standards

**Equality Act** - Our products can be manufactured in line with The Equality Act requirements

**Association for Specialist Fire Protection**

Gerda® works in partnership in the high security sector with the **Master Locksmiths Association**



**Gerda's leading-edge design features help us to meet our on-going maintenance responsibilities, which are an important requirement under the RR(FS)O, and furthermore reduce our maintenance costs.**

To arrange for a free consultation or information relating to the Gerda range of products please contact us on the number below.

For interactive product demonstrations and dates of Fire Safety Seminars taking place at Gerda's Conference Centre please email:  
**[firesafetyseminar@gerdasecurity.co.uk](mailto:firesafetyseminar@gerdasecurity.co.uk)**

**GERDA**<sup>®</sup>  
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Information is for general purposes only. For detailed specifications to suit your requirements, please contact a member of the Gerda doorsets team who will be pleased to assist. Please read in conjunction with Gerda Terms & Conditions. Gerda reserves the right to amend data at any time.  
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