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MAINTENANCE SAFETY VALUE
SAFE DOORS POLICIS CUSTOMER
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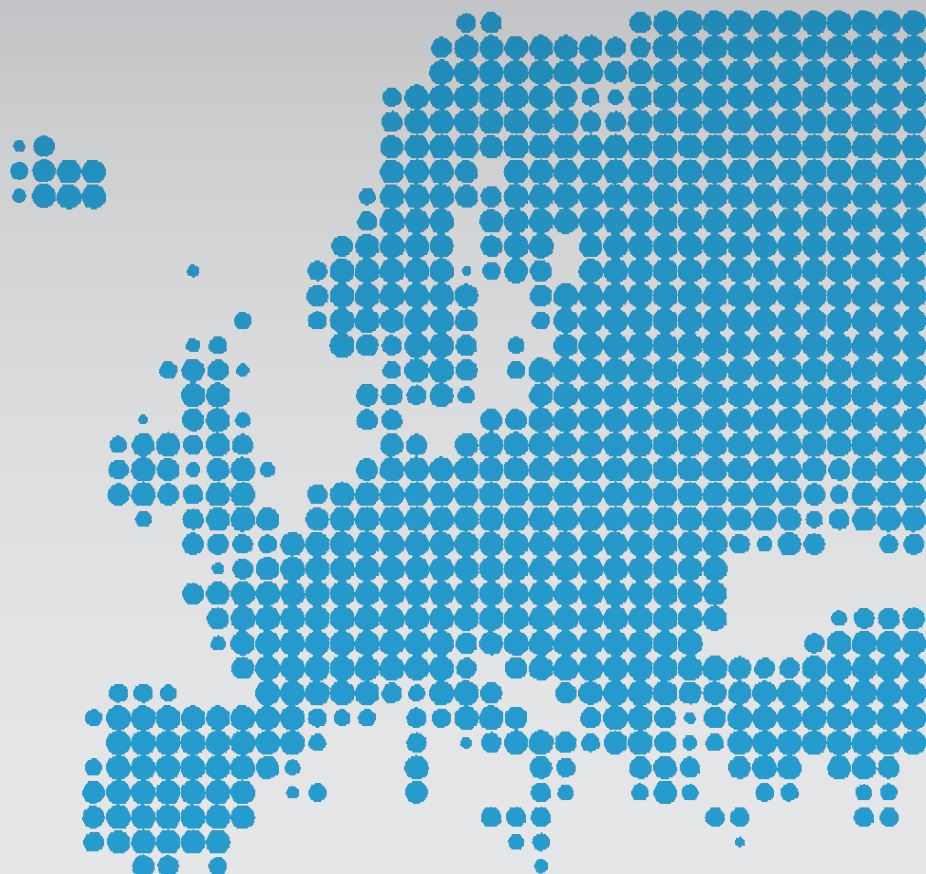
E.D.S.F.

European Door and Shutter Federation e. V.
Neumarktstr. 2 b
58095 Hagen · Germany

Fon +49 2331 2008-0
Fax +49 2331 2008-40

info@edsf.com
www.edsf.com





The E.D.S.F. Mission: Safe passage of people and goods through doors

Contents

04 - 05	E.D.S.F. – for safe doors
06 - 08	Legislation & Responsibility
09 - 13	Expertise and qualifications
14 - 17	Maintenance requirements / service agreements
18 - 20	Upgrading requirements
20 - 22	Sustainability
23 - 24	References





Modern and regular maintained doors are safe – Are your doors safe?
With this brochure E.D.S.F. seeks to give you answers to the questions raised

What does EDSF stand for?

Safe doors and safe passage of people and goods through doors

General door market condition

Power operated (automatic) or manually operated doors are used by millions of people every day. According to estimates, more than 15 million industrial, commercial and pedestrian doors have been installed on the market over the last 10 years. **Unfortunately, we must assume that fewer than a third of these doors are properly maintained.**

The European standards EN 13241, resp. EN 12453 and EN 16005 stipulate that the manufacturer is responsible for determining appropriate maintenance, maintenance intervals and replacement intervals for spare parts within the scope of the product's intended use. After the product is installed, the owner of the building is responsible for the safe and secure function of the door – this includes providing regular service by professional service companies.

Key questions facing ...

- Manufacturers/Installation companies

Are your products safe and in compliance with the present European standards and directives?

- Owners / customers

Are your doors safe? Are you aware of the present legal requirements? Do you know that maintaining the safe function of the doors in your building is your responsibility?

- Service providers

Do you have the appropriate skills and competences?

About E.D.S.F.

The E.D.S.F. European Door and Shutter Federation e. V. is the umbrella organisation for Europe's associations and manufacturers of doors, gates, shutters and components. Founded in 1985, the federation has members from several European countries with a growing network. E.D.S.F. is currently representing over 1,000 manufactures, installers and service providers. E.D.S.F. plays a leading role in the development of

products and the associated standards for doors, such as EN 13241, EN 12453 and EN 16005, etc., and represents the views of the European door and roller shutter industry at meetings with the European Commission, the CEN committees, etc.

E.D.S.F. – Position

E.D.S.F. promotes the development of safe and reliable doors on the market that comply with current European and national legislation and is committed to ensuring that these are maintained safely in accordance with the manufacturer's instructions throughout their service life. It is therefore essential that performance levels are maintained that no additional risks arise, and that both international and national standards and regulations are considered.

Qualified service providers draw the attention of owners and customers to the fact that compliance with the latest European and national legislation, as well as with the 'state of the art' – for example, in terms of safety, comfort, protection and energy consumption – is required. With this brochure, E.D.S.F. aims to provide you with answers to the questions raised.

Legislation & Responsibility

It is the responsibility of all parties involved to comply with the applicable European and national legislation on doors.

European and national legislation

The relevant European and national legislation must be followed. The chapters related to inspection, maintenance, repair and upgrading in the product and supporting standards, directives and regulations, should be considered, e.g.:

- Industrial/commercial/garage doors and gates EN 13241 (Product standard), resp. EN 12453
- Power operated pedestrian doors - Safety in use - EN16005
- Machinery Regulation (EU) 2023/1230)
- Construction Products Regulation (305/2011/EC) / (EU) 2024/3110
- European Health and Safety Directives as: 89/391/EEC, 89/654/EEC and 2009/104/EC

- National health and safety requirements and building regulations

CE marking – not just a simple label

When doors are placed on the market, safety in use and the CE marking (2008/768/EC) must be considered.

The CE marking on a product is visible evidence of a comprehensive process that includes conformity assessment and facilitates free trade within the EU. At the same time, it ensures a high level of protection for public interests such as health and safety, as well as the protection of consumers and the environment, and guarantees fair competition within the single market. The CE marking also ensures the traceability of a product throughout the entire supply chain and helps to simplify market surveillance and make it more efficient.

Manufacturers and installers responsibility

The manufacturers and installers are responsible to bring safe doors in the market, in line with the European standards and national legislation:

- Installation instructions should be detailed and clear enough to ensure safe installation.
- Instructions for use shall be delivered in local languages.
- Maintenance instructions must include the replacement cycles of parts



exposed to wear and tear to keep the doors safe.

Owners' responsibility Industrial & Commercial

The owner of an industrial and/or commercial building has the responsibility and liability for safe operation of the door in the premises. The Workplace Directive 89/391/EEC establishes the employer's responsibility for the safety and health of employed workers.

In short: a workplace must be safe, and hazardous elements must be eliminated through safe measures and procedures. Also, the Directives for the workplace and work equipment must be considered by the owner (89/654/EEC and 89/655/EEC).

Private & Residential

- **Without access to public area**

Unfortunately, there is no existing EU legislation making the private building owner responsible for regular servicing or inspection of doors (e.g. garage doors) to ensure their safety. **However, this must not obscure the fact that**

the owner bears no legal liability!

- **With access to public area**

The owner of a building with access to a public area is responsible and liable for the safe operation of the door on their premises, in accordance with standards EN 13241, EN 12453 and EN 16005.

In most EU countries there are national building regulations which state that the owner must ensure a safe and functional door to avoid



public damage and protect life and health.

Responsibility of service companies

Companies providing service are responsible to ensure that the qualifications of their employees fulfil the requirements as set in EN 12635 and national health, safety and building regulations.

In the event of a product modification or the modernisation of door systems, service providers must ensure that the requirements of the relevant directive, as indicated by the CE marking, are met.

Expertise and qualifications

Competent and qualified service engineers/technicians are necessary to maintain and improve the safety level of doors in accordance with the current EU and national legislations

Criteria relating to technical competence, standards and

regulations, as well as to quality, safety, legal obligations, training and certification, are required. The qualifications and criteria are derived from the 'Terms and Definitions' section of standard EN 12635:

- Professional installer (service provider)

Competent person or organisation offering third parties door installation services incl. upgrading.

- Competent person (service engineer / technician)

A person, suitably trained, qualified by knowledge and practical experience, and provided with the necessary instructions to enable the required installation to be carried out correctly and safely.

Qualified service provider and installer

A "qualified service provider" - as qualified by this E.D.S.F. definition - must meet the requirements listed here below.

- Expertise in the field recognized experience within the industry

- Knowledge
 - Industry specific processes and tools
 - Knowledge of the legal requirements regarding the safety, reliability and functionality of products and services in accordance with the applicable standards and regulations.
 - Membership of professional bodies or associations, to recognise the limits of one's own knowledge and experience. This should go hand in hand with a willingness and ability to build on existing experience and knowledge.
 - An understanding of both the financial and operational risks facing the company, and of best practice in managing them. Access to regulations relating to products, health, safety and EU law.
 - Providing regular information, briefings, training and supervision, as necessary, to ensure compliance with product, health and safety regulations, as well as EU occupational health and safety regulations, for all employees and business partners.
 - Understanding of relevant best practices
 - Elements of health, safety, quality and environmental management system related to product, service and repair are available in some format.
- These can be:
- A documented health, safety, quality and environmental policy
 - Information on health, safety, quality and the environment, as well as on rules and regulations, is available to all staff.
 - Well-defined health, safety, quality, environmental objectives & targets which are reviewed and archived



Service providers are responsible for ensuring that their staff's qualifications comply with the EN 12635 standard and with national health, safety, and building regulations.

- Maintenance and service repair visits documented by using a logbook
- Product & service-related health and safety risk assessments
- Health, safety, quality, environment, code & regulation trainings for employees for all relevant activities

Competent service engineer and technician

A 'qualified service technician' – who has been certified by a qualified service provider or manufacturer – must meet the requirements set out below.

A combination of knowledge, skills and practical experiences is required which a person needs to perform his tasks properly. Frequently documented training of the engineer / technician is needed to keep their knowledge up to date.

- Knowledge
 - about the technical process (product, maintenance & methods training), safety, health, quality, environment

- Legal provisions & regulations (standard for doors, etc.)
- Certification (including the products)
- Skills
 - Industry specific (professional education in mechanical / electronic)
 - Good oral and written communication
 - Transferable skills in communicating & sharing the lessons learned during the work activities

- Practical experience
 - Experience in the door industry
 - Knowledge about Installation, upgrading, replacement and maintenance. The service engineer has successfully demonstrated his skills and ability in inspection, risk assessment,



Maintenance in accordance with the manufacturer's specification shall take place at least: "once per year" for all power operated doors and "twice per year" for escape power operated doors.

maintenance (inc. functional safety tests) upgrading and replacing the product in accordance with the manufacturer's specification, so that a doorset remains reliable, safe, functional and durable.

Content of a service training

E.D.S.F. objectives for a competent service engineer/technician:

A 'qualified service technician' is a person who, by virtue of a recognised qualification, certificate or professional accreditation, as well as comprehensive knowledge, training and experience, is capable of inspecting, maintaining (including functional safety testing of devices/components) They are able to maintain and upgrade the product in accordance with the manufacturer's instructions and applicable legislation, ensuring that the product remains reliable and retains its levels of safety, functionality and durability.

¹⁾ In addition to regular maintenance as prescribed by the manufacturer for adequate performance of the door, some countries

Maintenance requirements / service agreements

Regular maintenance secures accessibility, minimizes hazards and extends product lifetime



may require periodical technical inspection by independent third parties.

Current Situation

The terms 'maintenance' and 'service' are often used interchangeably and with the same meaning. The term 'maintenance' is preferred, as it refers to regular servicing measures designed to ensure safe operation and extend the product's life cycle.

The European standards EN 13241, EN 12453, EN 12635 and EN 16005 stipulate that the manufacturer is responsible for defining appropriate maintenance, maintenance intervals and the service life of wear parts for the intended use of the system.

Once the product has been installed, the building owner is responsible for ensuring the safe and proper operation of the product - this includes carrying out regular maintenance work.

Safe Service and Maintenance on power operated pedestrian doors.

Since 2012 the European standard EN 16005 covers all safety in use aspects for power operated

pedestrian doors. This standard states that the manufacturer is responsible for defining the maintenance (service) and replacement cycles.

Maintenance (excluding inspection by a third party¹⁾) in accordance with the manufacturer's specification shall take place at least:

- once per year for all power operated doors
- twice per year for power operated doors in escape routes

to maintain the existing safety level of the doors.

Maintenance of power operated pedestrian doors shall always include technical and visual risk assessments by competent engineers/technicians to advise possible upgrade of the door according to the state of the art to ensure that all the latest safety and the reliability requirements are met.

For all doors placed on the market, a documented risk

assessment is necessary if the originally intended use has changed.

After the correct installation of the door, the building's owner²⁾ is responsible for the safety function of the door – this includes regular service.

Safe Service and Maintenance on industrial, commercial and garage doors

The European standards for industrial/commercial/garage doors and gates EN 13241, EN 12453 and EN 12635 states that the manufacturer is responsible for defining the service (maintenance) and replacement cycles.

E.D.S.F. advice

Maintenance (excluding inspection by a third party³⁾) in accordance with the manufacturer's specification shall take place at least once per year for all manually or power operated doors.

For doors placed on the market before 2005 (not CE-marked

²⁾ In some countries the building's owner and the user are responsible for safety e.g., if the building is rented.

against EN 13241) the maintenance should always include risk assessments to update the door) according to state of the art (technology) to ensure safety and that reliability is met. Attention should be paid to upgrading including drives, control units (compatibility with one another!) or even implementation of a new door.

For all doors placed on the market, a risk assessment is necessary if the originally intended use has changed.

After the correct installation of the door / gate, the building's owner⁴⁾ is responsible for the safety function of the doors - something that cannot be guaranteed at all without regular servicing!

³⁾ In addition to regular maintenance as prescribed by the manufacturer for adequate performance of the door, some countries may require periodical technical inspection by independent third parties.



⁴⁾ In some countries the building's owner and the user are responsible for safety e.g., if the building is rented.

Upgrading requirements

Maintain or improve performance but do not add risks

Replacement of components or products of industrial/commercial/garage doors and gates

The European standard for industrial/commercial/garage doors EN 13241-1 and EN 12635 states that the manufacturer is responsible for defining the service (maintenance) and replacement cycles for components or products. Generally, when replacing components or products as part of maintenance, repair or modernisation work, it must be ensured that the safety, reliability, functionality, classification and service life of the doors are maintained.

In other words: retain the performance and don't add risks.

The Service provider is also obliged to inform the customer about the 'state of the art' safety level.

Using genuine parts is advisable, but if non-genuine or 'look-alike' components are used which may affect the declared characteristics,

or safety level, conformity to the relevant directive shall be reviewed for applicability by a qualified service provider.

Replacement of components or products of power operated pedestrian doors

A powered pedestrian door is a machine. **Machinery must be safe to operate!**

The social cost of accidents caused directly using machinery can be reduced by inherently safe design and construction of machinery and by proper installation and maintenance.



The European standard EN 16005 states that the manufacturer is responsible for defining the service (maintenance) and replacement cycles for components or products. Replacement of components must follow the manufacturer's specification for maintenance, including the relevant documentation and with due regard for current

Machinery Directive, resp. Regulations and EN 16005.

Basically, when components or products are replaced during maintenance, repair or upgrading, it must be ensured, that the safety, reliability, functionality, classification and durability level of the doors is retained.



In other words: sustain the performance and don't add risks.

CE-marking, Declaration of Conformity and Technical File

When the existing safety, reliability, functionality, classification or durability level of the door are not sustained, the CE-marking must be evaluated and reconfirmed. According to the Machinery Directive / Regulation when:

- Manually operated doors are changed into power operated doors
- An existing power operated door is moved to another place in the building
- Hold to run operation is changed into impulse operation, or automatic closing is added
- Components are replaced which effects the declared characteristics and/or safety
- When the original intended use is changed

⁵⁾ In some countries the building's owner and the user are responsible for safety e.g., if the building is rented.

The compliance of the CE marking must be checked by the service provider. This includes a risk analysis establishing a technical file, and a signed Declaration of Conformity, in accordance with the Machinery Directive (2006/42/EC) resp. Machinery Regulation (EU) 2023/1230.

After the correct installation of the door/gate the building owner⁵⁾ is responsible for the safety function of the doors – this includes a regularly service.

Sustainability

Doors have a much higher impact on building sustainability than previously known

Today the impact of energy saving potential of automated doors is not well known within the Green Building certification bodies and building owners. A door is a small financial investment (2% - 3% of the main investment cost of a building) in comparison to all materials used for a new building, but the door has a high financial impact on the

whole life-time cycle – if the right components are used!

A thermally well insulated door with low U-Value has no impact on energy saving if it is open all day or the open cycles are very long and velocity is slow. An intelligent, automated door could save a lot of energy and money. Additionally, CO₂ pollution could be reduced!

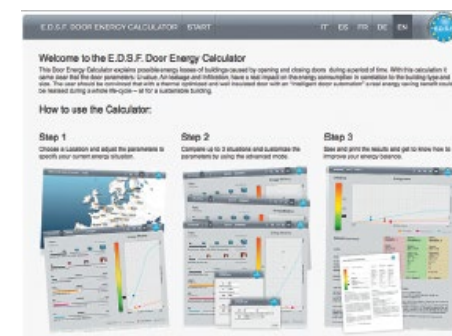
With the E.D.S.F. Door Energy Calculator possible energy losses of buildings in correlation between door parameters like U-value, Air-Leakage, opening time depending on building volume, door size, etc. can be displayed.

The solution is an “Intelligent door automation in combination with thermally optimized door”.

E.D.S.F. members provide such products to fulfil the requirements of energy & sustainability. Such door solutions could save a lot of energy and money. Also, the higher investment costs amortize in a short period of time. Besides the energy saving aspects and reduction of CO₂ pollution

- as a benefit, comfort, safety and accessibility will be improved.
- regular maintenance extends product lifetime and contributes to energy saving.
- upgrading of doors has a big potential for the optimization of existing buildings.

The door industry is well prepared and can make a big contribution to sustainable energy saving!



Please scan the barcode with your smartphone and try out the calculator on the E.D.S.F. website.
www.calculator.edsfdoorenergy





Upgrading of doors has immense potential for the optimization of existing buildings. The door industry is well prepared and can make a substantial contribution to sustainable energy saving!

References

Important Standards

- **EN 13241:2003+A2:2016** Industrial, commercial, garage doors and gates - Product standard, performance characteristics
 - **EN 12453:2017+A1:2021** Industrial, commercial and garage doors and gates - Safety in use of power operated doors - Requirements and test methods
 - **EN 12635:2002+A1:2008** * Industrial, commercial and garage doors and gates - Installation and use
- * Although the standard has been withdrawn, it remains in force as it is cited in standard EN 13241:2003+A2:2016.
- **EN 16005:2023+A1:2024** Power operated pedestrian doorsets - Safety in use - Requirements and test methods

Directives and Regulations

- **Machinery Directive 2006/42/EC**
- **Machinery Regulation (EU) 2023/1230** (valid from January 2027)
- **Construction Products Directive 89/106/EEC** (CPD)
- **Construction Products Regulation 305/2011/EC** (CPR)
- **89/391/EEC** - EU Workplace Health and Safety Directive - 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work
- **89/391/EEC** safety and health of workers at work

- **89/654/EEC** minimum safety and health requirements for the workplace
- **2009/104/EC** (replace 89/655/EEC)
minimum safety and health requirements for the use of work equipment by workers at work
- **Decision No 768/2008/EC**
common framework for the marketing of products, and repealing
- **2024/2853** (replace 85/374/EEC)
liability for defective products and repealing

E.D.S.F. Guideline-Papers

- **01** - Safe Service and Maintenance “industrial/commercial/garage doors and barriers”
- **02** - Safe Service and Maintenance “Power operated pedestrian doorsets”
- **03** - Sustainable impact of doors during the life cycle of buildings
- **04** - Maintenance, Repair, Upgrade and Replacement of components or products of “industrial/commercial/garage doorsets and gates”
- **05** - Maintenance, Repair, Upgrade and Replacement of components or products of “pedestrian doorsets”
- **06** - EN 16005 Power operated pedestrian doorsets – Safety in use
- **07** - Introduction of EN 16034 of European harmonized product standard for pedestrian and industrial doorsets
- **07a** - EN 16034 – FAQs
- **08** - Safe Service and Maintenance of industrial/commercial/garage doors and gates and barriers
- **09** - E.D.S.F. position Standby - Interpretation of the Ecodesign Regulation – Standby
- **10** - Cyber Resilience Act (CRA) - and Artificial Intelligence Act (AIA) – a distant vision of the future
- **11** - CRA and AIA – What to do?



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E.D.S.F.

European Door and Shutter
Federation e.V.

Neumarktstr. 2 b

58095 Hagen · Deutschland

Fon +49 2331 2008-0

Text / Editorial team:

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