EN 16005 INSTALLATIONS

IS IT LAW ?

An automatic door is a machine. Therefore all installations **must comply** with the Machinery Directive which is European law.

The easiest way to meet the essential health and safety requirements of the Machinery Directive is to follow the EN 16005 standard, which is a harmonised standard under the Machinery Directive.

By meeting the provisions of EN 16005 your installation is presumed to comply with the minimum legal health and safety requirements related to machines.

GENERAL RULE

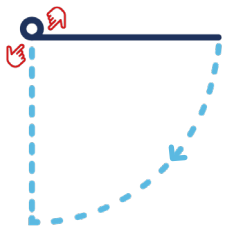
*"WHEN A LARGE PROPORTION OF THE USERS ARE ELDERLY, INFIRM, DISABLED PERSONS AND YOUNG CHILDREN **ANY CONTACT OF THE DOORSET WITH THE USER IS UNACCEPTABLE.**"*

TOLERATED RISK

Office, administration, building,...

CONTACT WITH THE DOOR IS TOLERATED

LOW ENERGY

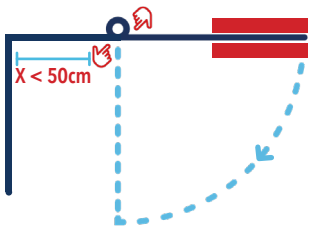


NO SAFETY for low energy doors tolerated if :

- Min. opening/closing time: 4,5sec
- Max. contact force : 67 Newton

NO SOLUTIONS NEEDED

PARTIAL SAFETY



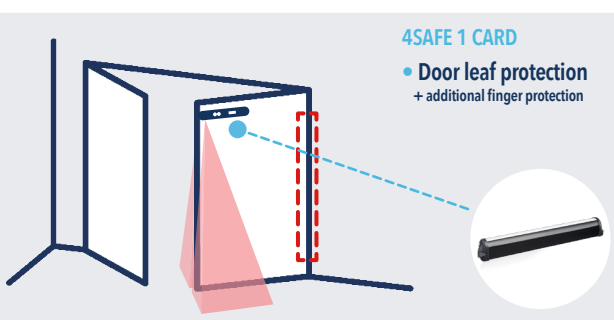
SECURE PARTIALLY the leading edge according the annexe G + hinge

EXCEPTIONS :

- Door opens on traffic area
- Distance X to wall/obstacle <50cm

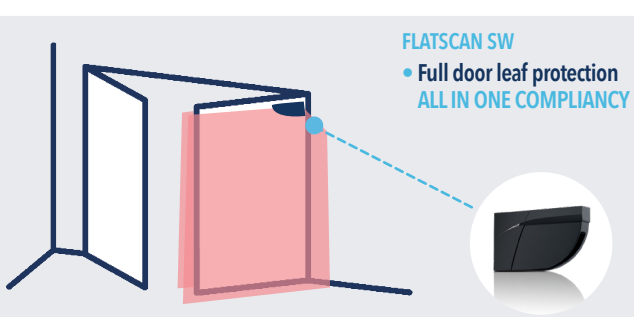
-> **GO TO FULL SAFETY**

SOLUTIONS



4SAFE 1 CARD

- **Door leaf protection**
  + additional finger protection



FLATSCAN SW

- **Full door leaf protection**

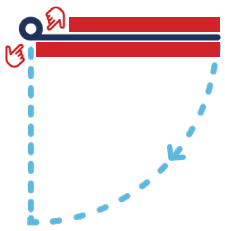
ALL IN ONE COMPLIANCY

HIGH RISK

Hospital, kindergarten, elderly home,...

CONTACT WITH THE DOOR IS FORBIDDEN

FULL SAFETY



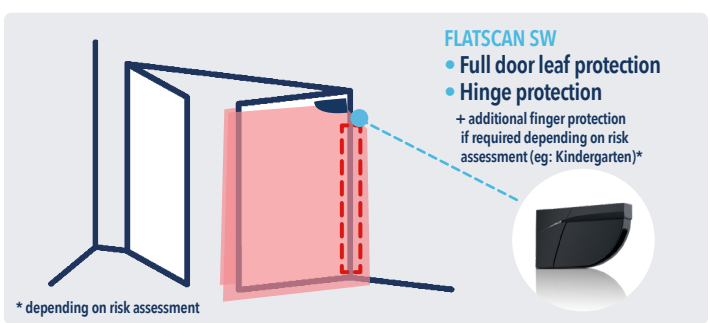
SECURE THE WHOLE WIDTH of the door + hinge

- No contact with the door is allowed in high risk area
- Even for low energy doors

SOLUTIONS

4SAFE 2 CARDS

- **Door leaf protection**
  + additional finger protection

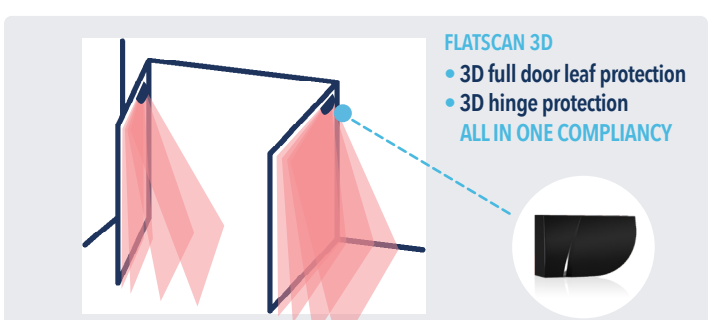


FLATSCAN SW

- **Full door leaf protection**
- **Hinge protection**

+ additional finger protection if required depending on risk assessment (eg: Kindergarten)*

* depending on risk assessment



FLATSCAN 3D

- **3D full door leaf protection**
- **3D hinge protection**

ALL IN ONE COMPLIANCY

GUIDELINE TO COMPLY WITH THE EN 16005

CHOICE OF SENSOR ACCORDING TO THE LEVEL OF SAFETY

CHOOSE YOUR SITUATION

LEVEL OF SAFETY REQUIRED	AUTOMATIC DOORS		LOW ENERGY DOORS
	FULL SAFETY	PARTIAL SAFETY	NO SAFETY
Majority of eldery people, disabled people and childern	✓	✗	✗
Contact between a person and the door is forbidden	✓	✗	✗
Door can open on traffic area	✓	✗	✗
Safety distance between the hinge and wall/barrier ≤ 50cm	✓	✗	✗
First 80° opening of the door can be faster than 3sec	✓	✓	✗
First 80° closing of the door can be faster than 3sec	✓	✓	✗
Last 10° closing of the door can be faster than 1,5sec	✓	✓	✗
The force of the door in movement is higher than 67N	✓	✓	✗
Minority of elderly people, disabled people and children, Contact between a person and the door is allowed, First 80° opening time of the door is more than 3 sec	✓	✓	✗
Protection of the hinge area	✓	✓	✓
RECOMMENDED SENSORS	4SAFE 2L + finger protection FLATSCAN SW + finger protection FLATSCAN 3D	4SAFE 2L + finger protection FLATSCAN SW FLATSCAN 3D	NONE

BEA EN 16005 PRODUCTS

SWING DOORS

4SAFE
- Safety during opening and closing
- Edge safety up to 2,5m
- Easy and reliable installation

FLATSCAN SW
- Safety during opening and closing
- Edge safety up to 2,5m
- Full door leaf coverage
- Hinge protection
- Fully compliant
- Easy and reliable installation

FLATSCAN 3D
- Safety during opening and closing
- Dynamic edge safety
- 3D door leaf coverage
- 3D hinge protection
- All in one compliancy
- Easy and reliable installation

EN 16005

SAFETY REQUIREMENTS FOR SWING DOORS

SENSING SOLUTIONS

A Halma company
BEA s.a. / LIEGE Science Park / Allée des Noisetiers 5 / 4031 Angleur • BELGIUM
T +32 (0)4 361 65 65 / **F** +32 (0)4 361 28 58 / **E** info@bea.be / beasensors.com

44.0473 • V1 • 10.19