



Advanced special door engineering

There are increasingly higher requirements for fire-resistant doors. The fire safety standards are continuously being tightened, while insurance companies keep changing their conditions to stimulate the use of fire-resistant overhead doors.

# Fire-resistant overhead doors

Protec follows this market closely and has developed a whole new type of fire-resistant overhead door in anticipation of possible new requirements. This overhead door is very user-friendly and complies fully with the latest European standards and conditions.

### Requirements and certification!

Efectis (formerly TNO) has tested this newly developed overhead door and has assigned the NEN-EN 1634-1:2008 (NEN 6069) and also the classification NEN-EN 13501-2 to Protec for this innovative overhead door.

This overhead door has even brilliantly achieved the classification  $\mathrm{El_1}$ -60, the highest thermal insulation requirement. At Warrington in Gent (Belgium) this overhead door has even been submitted to an endurance test according to EN 1191:2000 and 14600:2000 and has been opened and closed 5,500 times!

Protec Industrial Doors delivers in whole Europe and even

beyond it. By obtaining all certifications for this newly developed overhead door, Protec is and remains a progressive player in the marketing of fire-resistant overhead doors.

The fire-resistant overhead doors of Protec function like a standard overhead door; both in a situation of fire partition walls as in outer façades. For the business process it hardly leads to restrictions and yet it complies with the stated requirements. Every fire-resistant overhead door can be designed with several control elements. Protec Industrial Doors is experienced in the development and production of fire-resistant overhead doors in very large dimensions and has the necessary endorsement of

As producer of innovative industrial doors, in the last years Protec Industrial Doors has been able to produce doors according to the latest standards. Development, engineering, advice and manufacturing are Protec's strengths, whereby 'listening to the market' is taken very seriously.











Efectis in this regard. As desired and according to any specification.

# Liquid-retention barrier

#### connected to a fire-resistant overhead door.

If desired, the fire-resistant overhead door can be designed with an integrated liquid-retention barrier, without this being detrimental to the fire resistance. This special liquid-retention barrier adequately stops the extinguishing water and/or dangerous substances. It not only ensures that no harmful liquid substances end up in the environment, but also prevents fire penetration and fire spread!

In cooperation with Efectis, Protec has successfully tested the overhead door on both properties. This unique solution ensures a safe and certified application for companies that must store dangerous substances.

The highest classification  $El_{\rm p}$ , can only be achieved by means of an actual fire test according to the EN1634-1 standard. By testing the liquid-retention barrier in combination with the fire-resistant overhead door (in cooperation with Efectis), Protec has proven that the liquid-retention barrier does not influence the fire resistance. During the five tests (the longest test took 240 minutes!) it has been evidenced that the fluid density of the liquid-retention

barrier has been maintained. The test results show that the leakage of fluids amounts to 0.15 litres per running metre per hour (0.15 l/m1/hour).

This unique liquid-retention barrier can already be delivered up to a height of 1,000 mm.

# Explosion safety

The fire-resistant overhead doors of Protec can also be delivered in blast proof designs. Protec Industrial Doors has knowledge and years of experience to provide advice in the area of doors, power drive and other components in accordance with the ATEX guidelines. Protec will give a complete customized advice, depending on the different EX zoning, gas, substance and temperature classes.

# Explosion-resistant overhead doors

Protec Industrial Doors develops and produces overhead doors that are able to resist compression stress as a consequence of an explosion. In each project there are different compression stresses. The engineers of Protec have the knowledge to take this into account and to develop different door constructions. Experience and flexibility enable Protec Industrial Doors to comply with any desired requirement.





standards. Because of experience and expertise gained over the years, customers in the construction world as well as end users can invariably count on a company that is

a continuous process of innovation and development so that it is geared up constantly to offer new solutions. Protec doors are likewise subject to tests and certifications that are constantly renewed. This







# Protec Industrial Doors B.V.

Stuartweg 1

4131 NJ Vianen

P.O. Box 306

4130 EH Vianen
The Netherlands

**T** +31(0)347 - 325050

**F** +31(0)347 - 325051

info@protecindustrialdoors.comwww.protecindustrialdoors.com

special door engineering

