



SPECIALISED DOORS FOR HIGH RISK ENVIRONMENTS

A MAJOR PLAYER IN THE STEEL DOOR INDUSTRY IN FRANCE



—KEY FIGURES—

1994 FOUNDATION OF AIR'EQUIP
WHICH BECAME DOORTAL
IN 2006

95 CLASSIFICATION CERTIFICATES OBTAINED
FROM ACCREDITED EU LABORATORIES

100 % OF DOOR SETS ASSEMBLED
AND TESTED IN-HOUSE

1 500 000 € AVERAGE ANNUAL INVESTMENT



100% Manufactured in France

Since the foundation of the company, the family shareholders have maintained their vision of an **integrated production** process in France, leading to products with a second-to-none reputation in the industry.

All concepts are **engineered in-house** and tested in **Doortal's internal laboratory**, before being manufactured using **state of the art technology**.

"We are enthused to contribute to the French industrial network and employment of local skilled labour".

A solid and innovative family partnership

Totally independent, the Doortal partnership is 100% family-owned and in a strong financial situation. This sustainable position provides Doortal with a **durable vision** and the means to **continually innovate** without disturbing the company's growth.

Ever since the establishment of Doortal, the shareholders have pursued the same goal: to always answer more precisely to the needs in the door industry, with **innovative and technical solutions** time after time.

Doortal's well-known reliability in France and abroad is a result of their strategic choice for high quality products and premium service.

A team of experts 6 specialities

**Thermal and acoustic insulation,
fire resistance, protection against
burglary and vandalism,
access control**

Public places

Public places are demanding by definition, requiring careful protection of property and persons against burglary, armed attacks, fire etc.

These mandatory requirements have given DOORTAL the scope to show its expertise and leadership in these complex markets. Today, Doortal products protect leisure and cultural centres, shopping malls, education centres, business premises etc.

High Security Sites

With anti-burglary, fireproof and acoustic classification certificates, Doortal door sets have the needed requirements to secure strategic buildings and infrastructures with substantial demands: military buildings, banks, data centres, nuclear bases etc. The door sets are integrated with sophisticated access control systems, permitting flow control within these high security premises.

**Our goal:
promoting security and
anticipating the needs of
tomorrow's building industry**

UNCHANGING VALUES



Radical innovation

1994: The birth of first steel door stamped with DOORTAL. In a small workshop of 400 m², the founders were asking each other critical questions: "How can we bring added value to a steel door? How can we exceed the performance of products already on the market?" Not to remake what already existed was a tough challenge but an exciting adventure for the passionate owners who spent long months labouring over numerous prototypes. At long last, a technical door set design was chosen for its robustness coupled with its swift installation abilities.



Oliver and Bruno GUILHOT in 1997 – founders of DOORTAL door sets

A vision of excellence

The success story was immediate! DOORTAL's first "ready to install" door sets won an increasing number of clientele in extremely diverse industries. Thick steel, exceptionally solid frame, colour coating in any colour, factory installed equipment... nothing was neglected in this design, an upmarket "must have" in the steel door industry.

A vision of excellence, which the shareholders have never compromised, sets DOORTAL apart from mass producers, and enables them to concentrate on the development of products with high added value.

The DOORTAL Promise

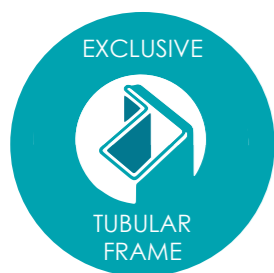
The "DOORTAL" stamp on each of its products is a firm commitment, a genuine guarantee.

"Our customers choose to invest in our products, we owe them years and years of satisfaction, it's our promise to them".

Whether it is in R&D, in the factory, or in the office, every member of the DOORTAL team shares the same **commitment to the brand**.

"It is the culture of our business, knowing that our products have to be better than anything you can find on the market, and no matter what decisions we make, we always keep that in mind."

RESILIENT
QUALITY...
YEAR AFTER
YEAR



Starting with the frame work...

To make a robust door set, DOORTAL's steel tubular frame is made of seam welded profiles, which ensures an exceptional mechanical resistance at point of installation and during use.

No compromise on thickness

The leaves, designed in 1.5 or 2 mm thick steel sheet depending on the product range, provide a high level of mechanical resistance and therefore support particularly heavy cladding, if required.

Ultimate anticorrosion resistance

DOORTAL steel door sets are manufactured using galvanized steel and then powder coated.

The laboratory result for this composition was classified "coastal", boasting longevity of more than 15 years.



Testing hinges to the EN 1935 standard

Quality Control

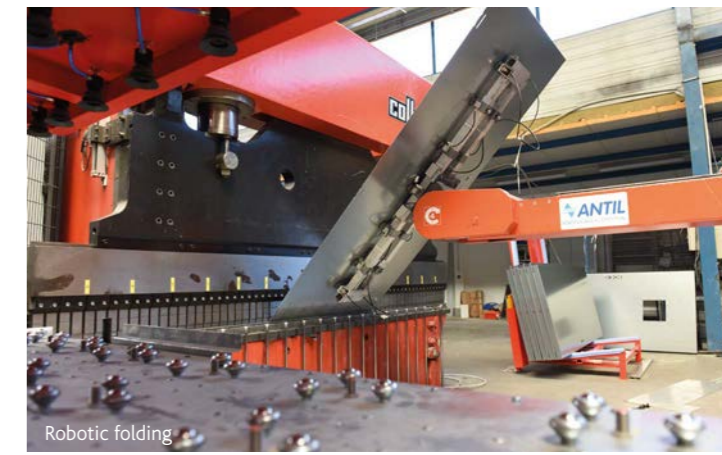
Control procedures have been put in place at each workstation throughout the whole production line to detect any non-conformity, with the information identified and stored in a computerised system.

Certified durability, unlimited usage

Doortal's 10 year warranty covers unlimited usage of the doors. Leaf, hinges, rubber seals... every component is signed DOORTAL. Their quality is superior to what is commonly found on the market and their resistance to intensive usage is proven by bench testing.



DEDICATED PRODUCTION CAPACITY



Owning 20 000 m² of land located in the second largest industrial district of France, Doortal thrives in its modern, recently built factories.

Consisting of CNC punching machines, press brakes and machining centres, this broad machinery range enables in house manufacturing with the assurance of full control at each stage of leaf and frame production. The production is set up on "Lean Manufacturing" principles: optimised work space, ergonomic material handling, controlled fabrication time... every slightest detail has been thought of to improve performance and eliminate wastage.

INNOVATION AT HEART



F. Melay, R&D Manager

**Sketch, design, integrate...
developing new products does not happen
in the stroke of a pen. New specific components
have to be found, internal reinforcements reviewed,
access control systems integrated ...**

After defining the required performance criteria (fire resistance, thermal insulation, acoustic etc.) the R&D department works off an existing Doortal model, modifying and innovating until achieving a new concept in conformity to the researched objective. The next step is to create a prototype, test, review and correct it until the completion of the project. Doortal is a customer oriented business, focused on innovation and reactivity, thanks to its efficient and rapid decision procedure.

"We do not estimate, we assure ourselves. In our trade we are not satisfied to estimate, everything has to be tested and certified according to the official standards. In spite of our experience, we do not deliver any performance rating without justification from a certified laboratory."

The tests are often destructive and push the products to their limits. Doortal's technicians analyse the test performance of the door sets in detail and identify the weak points with the expertise of laboratory engineers, then re-test until perfection is achieved.

OUR SPECIALITY: THERMAL INSULATION



Rapidly evolving environmental regulations

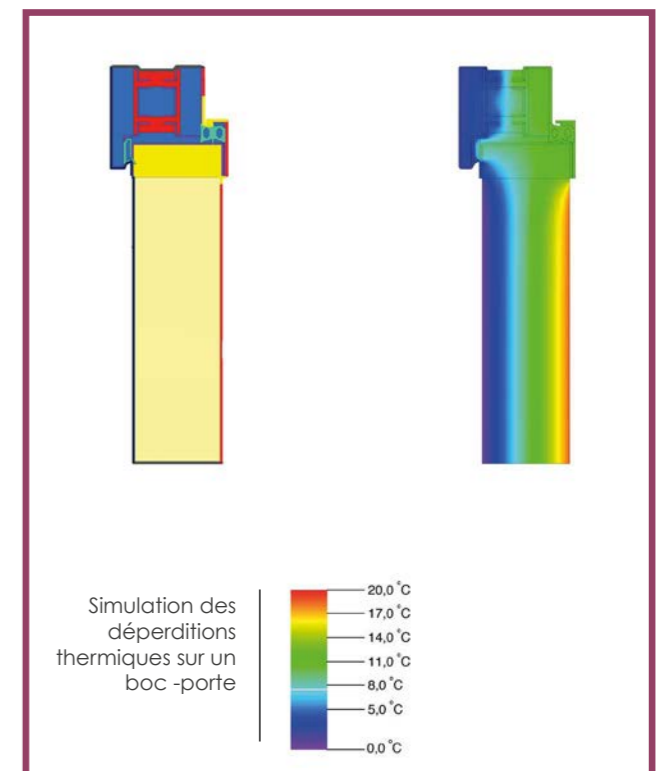
After the Grenelle Environment Forum, the RT 2012 followed the RT 2005, again reducing the energy impact of buildings on the environment. The RT 2012 is one of many certifications, such as the BBC and HQE, awarded to the most environmentally friendly projects.

In accordance with these regulations, Doortal exterior door sets must attain the lowest possible thermal rating along with optimal airtightness.



20 Years of expertise

Thermal break profiles, insulated panels, low emission glass etc. Doortal's design department knows how to combine different components to create doors with unequalled thermal performance. **Proof of their quality and insulation**, Doortal's technical doors are all certified.



OUR SPECIALTY: ACOUSTIC INSULATION



Laboratory tested

Doortal acoustic door sets have been tested in CSTB qualified laboratories, in conformity to the current European standards. The R_w acoustic ratings are expressed in decibels (dB) and determine the door set's sound transmission loss.

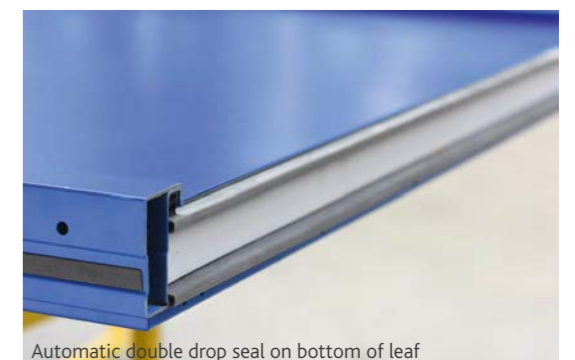


Market leaders

Doortal products have acoustic properties that rate amongst **the highest on the market**, up to R_w 58 dB, regardless the structure in which they are fitted – concrete, steel frame etc. The secret of this performance is in the know-how of Doortal's engineering office: choice of absorbent material, design of the rubber seals, opening clearances... nothing is done by chance!



Exclusive Doortal rubber seals



Automatic double drop seal on bottom of leaf

OUR SPECIALTY: FIRE RESISTANCE



Inside view of the oven during a fire resistance test



External view of the oven – double leaf door set

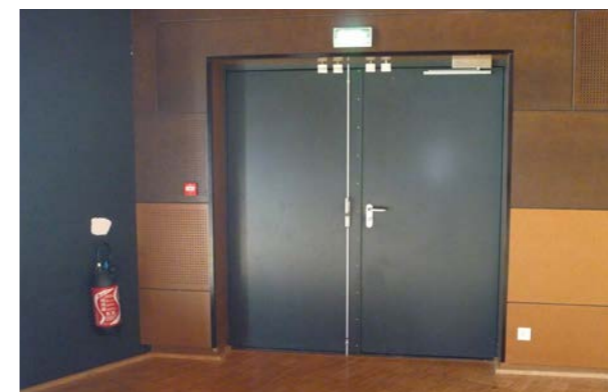


Intumescent seal after expansion

Risk Management

Extreme increase in temperature – over 1,000 °C – leads to intense deformation of steel and heat transmission. An understanding of these phenomena is crucial in the design of fire proof doors. With an excellent management of these extreme demands, the Doortal products are designed to ensure the protection of property and persons against fire.

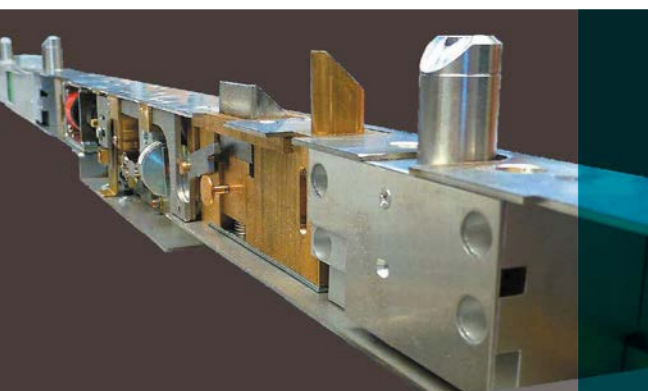
The special quality of the doors' components and equipment contribute to guaranteeing these performances over time.



Fire Resistance Classification certificate

Our range of fire proof doors have been tested for fire resistance in French laboratories, in accordance with the new European standard EN 1634-1 and the decision of 22 March 2004 of the Minister of the Interior. These rigorous standards define two levels of fire resistance for door sets: the E integrity rating against flames and smoke and the EI thermal insulation rating.

OUR SPECIALTY: BURGLARY RESISTANCE



Security: our culture

Solid steel reinforcements inside the leaf and around the closing points have been designed exclusively by Doortal. Fully integrated in the thickness of the door set, the reinforcements maintain the aesthetic finish, while discretely allowing unequalled performance.



Destructive tests

Protecting people from armed attacks

As well as protecting property, it is often necessary to ensure safety of people against armed attacks: ammunition must not cut through the leaf nor create shrapnel which could harm someone. Shooting tests are performed in certified laboratories, on different parts of the door sets.

Protecting property against the risk of burglary

Attacks commonly depend on the following three criteria: the level of professionalism, the time available and the tools used. The destructive tests on the door sets are performed in laboratories by professionals using hand tools and portable electric tools, according to the applicable standards.



THE LARGEST RANGE OF TECHNICAL DOORS

Insulated doors

The universal INSUPLUS door sets are available with a large range of equipment.

High performance in thermal insulation and airtightness (up to $U_w 1,0 \text{ W/m}^2\text{K}$) makes these doors the perfect solution for outside access.

Fireproof doors

The multi-performance PYROPLUS door sets provide a combination of fire resistance, thermal insulation and sound attenuation at the highest level. The technical door 'par excellence'.

Acoustic doors

Aimed at insulating public premises (collective and industrial) from noise disturbance, SONIPLUS door sets offer sound attenuation up to 62 decibels.

Anti-burglary doors

The BLOCUS product range protects high risk premises from the threat of intrusion with antiburglary ratings of up to 20 minutes and FB4 bulletproof classification.

Power transformer doors

TRANSFOPLUS is a metal door set which meets obligatory security standards for electric power plant rooms.

Anti vandalism doors

Designed to resist urban degradation, the robust VANDALIUS door set ensures a reliable way to secure collective premises.

Steel glazed doors

Combining the strength of steel with the transparency of glass, the VITROPLUS door sets offer thermal insulation, fire resistance and security.



Doortal offers 7 product lines, comprised of nearly 30 different models. Today our products are specified in numerous markets with high technical demands. As a leader in production of multipurpose doors, we are continually improving our efforts to satisfy our customer's needs in view of maintaining their loyalty and gratitude.

Building industry professionals are able to entrust us with the totality of their projects and benefit from our teams expertise. The homogeneity in design of our products provides comfortable and ergonomic usage which is extremely appreciated globally.

Choosing Doortal doors is a guarantee of exceptional quality, time saved and top service!

A BRAND,
A TEAM,
A PASSION





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