

## **THE FUTURE EUROPEAN SYSTEM**

The CE marking will provide the door with a unitary mark that approves it for free circulation in all EU member states.

At the national level there will be no additional requirements for using the doors in the building context, and the performance level (EI 30,60,90,120) will remain under the competence of individual EU states..

There will be common testing and reference standards for everyone, so that doors tested in one state produce the same results when tested in another state, and this correspondence applies to fire resistance capacity as well.

While the process for obtaining the CE marking has already been delineated, several support regulations that are essential for test references and related extensions are still in need of definition.

Experts from the CEN working group do not expect the complete package of standards to be defined before 2012. Once defined, there will be a 3-5 year coexistence period during which CE marking may be applied for on a voluntary basis, and after the coexistence period expires the CE marking will become obligatory.

The process that door manufacturers must undertake to obtain approval to use the CE marking passes through:

### **DRAFT STANDARD prEN 16034 - Product standard for openable fire and/or smokeproof doors and windows (pedestrian, industrial, commercial, garage)**

This standard has not been approved yet. It is scheduled for publication in 2012 with a three year transition period if accepted by the Commission.

This EN identifies the features that are applicable to fire resistant and/or smoke-tight doors. Depending on the designated use and national prescriptions, furthermore, doors may have other capacities in addition to these features, such as:

- Closing capacity
- Watertightness
- Air permeability
- Wind resistance
- Heat insulation
- Acoustic insulation
- Impact resistance
- Radiant properties

The tests required (in addition to the fire resistance and/or smoke-tight tests) must make reference to the relevant EN testing standards.

### **UNI EN 14600 STANDARD - Openable doors and windows with fire resistant and/or smoke-proof characteristics. Requirements and classification (bilingual version, March 2008)**

This support standard specifies the requirements for and classification of fire resistance and smoke control. It defines the durability test requirements for automatic door closing. It also defines the mechanical conditioning of samples prior to the fire test. Lastly, it defines the issuance tests for the mechanism that holds the door in the open position

### **UNI EN 1191:2002 STANDARD - Resistance to repeated opening and closing**

This standard specifies the method to use for determining the mechanical durability of doors after a pre-defined number of operational cycles. Its main purpose is to determine the durability of automatic door closing and the mechanical conditioning of the samples prior to fire testing.

### **UNI EN 1634-1:2008 STANDARD - Fire resistance and smoke dispersion tests for doors and closing systems, openable windows and their building accessories**

Part 1: Fire resistance tests for doors, closing systems and openable windows.

This standard establishes the fire testing method to be used for doors and other closing devices. This standard is the new version that will replace the current EN 1634-1: 2001, and has already been approved and published on the CEN site. The Italian Ministry for the Interior will have to incorporate it for results to be valid for purposes of obtaining type approval statements.

**DRAFT STANDARD prEN 1634-2 - Fire and smoke resistance tests for closures, main doors, movable windows and building accessories**

Part 2: Fire characterization test for building accessories.

This European standard specifies the method to use for characterizing the influence of fire door accessories on the overall fire resistance capacity. The tests are conducted on reduced-size door samples and the results whether fire door accessories can be replaced without requiring the product's entire fire testing procedure to be repeated.

**UNI EN 13501-2 STANDARD - Fire classification of products and manufactured elements**

Part 2: Classification based on fire resistance test results, excluding ventilation systems.

This standard specifies the fire door classification procedure, which is based on the data from fire resistance and/or smoke-proof tests that fall within the field of direct application of the relevant test method.

**DRAFT STANDARD prEN 15269 (EXAP) - Part 1: General requirements**

The standard specifies the applications extended by the results obtained from fire/smoke resistance tests conducted according to EN 1634-1 and/or EN 1634-3. The door manufacturer chooses the appropriate test program to validate the extended applications needed for a product family.

The criteria for the EXAP standards are subdivided into the following basic manufacturing types: doors on hinges or pivots, sliding doors, horizontally-folding doors, roller doors and flexible curtain doors. Within each different construction type, each of the following materials was considered separately: wood - steel - aluminum - glass - composites.

For metal doors hinged on a vertical axis (e.g., our Proget and Univer doors), the EXAP reference standard is:

**DRAFT STANDARD prEN 15269-2 - - Extended application of the results of fire resistance and smoke-tight testing of doors and openable closures and windows. Part 2: Metal doors on hinges**

This design standard is presently undergoing its second formal inquiry. Publication is expected by the end of 2011. This standard prescribes the method for extending the test results obtained by one or more tests conducted in accordance to EN 1634-1. Any variations requested by fire door manufacturer that are admissible in accordance with the EXAP standard will be recorded in the extended application test report, including the replaceability of accessories following EN 1634-2 testing. This gives the manufacturer a clear understanding of what variations can be made in the product without invalidating the door's CE conformity.

The standards for other manufacturing systems are:

**DRAFT STANDARD prEN 15269-3 - Wooden doors**

**DRAFT STANDARD prEN 15269-4 - Glazed doors (draft not launched yet)**

**DRAFT STANDARD prEN 15269-5 - Glass door with metal frames**

**DRAFT STANDARD prEN 15269-6 - Sliding wooden doors**

**DRAFT STANDARD prEN 15269-7 - Sliding metal doors**

**DRAFT STANDARD prEN 15269-8 - Folding wooden doors (draft not launched yet)**

**DRAFT STANDARD prEN 15269-9 - Folding metal doors (draft not launched yet)**

**DRAFT STANDARD prEN 15269-10 - Roller closures**

**DRAFT STANDARD prEN 15269-11 - Flexible curtain doors**

**DRAFT STANDARD prEN 15269-20 - Smoke-proof doors**

After the testing process has been completed and the documentation of the results has been obtained, the fire door manufacturer needs to request CE conformity certification from a Notified Body.

If the Notified Body deems conformity to be satisfactory, this entity itself should draw up an CE Conformity Ce

The CE Certificate comes with authorization to use the CE marking on the fire door.

As a fire-resistant door under conformity subsystem 1, the manufacturer also needs to adhere to the well-established control procedures for ensuring that the doors actually being marketed conform with the declared characteristics.

The notified body will engage in ongoing oversight by taking sample doors from the factory in order to conduct correspondence controls on the certified product.

**As should be clear at this point, the process for obtaining the CE marking is neither simple nor short. Manufacturers who are already familiar with this issue and have been working with it for some time, therefore, are sure to be more likely to succeed.**