

CE Marking of windows and external pedestrian doorsets

An interpretation of what information should
accompany CE Marking in the UK



Introduction

BS EN 14351-1 Windows and doors – Product standard, performance characteristics – Part 1: Windows and external pedestrian doorsets without resistance to fire and/or smoke leakage characteristics is due to end its period of co-existence with national standards on 1st February 2009 (*Note. At the time of writing, a proposal has been made to extend the period of co-existence to 1st February 2010 but no decision has yet been made*) at which time manufacturers of windows and doors covered by the scope of this standard will have to comply with the Construction Products Regulations 1991. It is likely that many manufacturers will then wish to apply CE Marking, which currently remains voluntary in the UK, but becomes a legally recognised way of demonstrating fitness for purpose. This paper explains what is involved and what information should accompany the CE Marking.

Mandated characteristics

From Annex ZA.1 of BS EN 14351-1, the following characteristics are mandated for windows and external doorsets.

- Water tightness
- Dangerous substances (indoor impact only)
- Resistance to wind load
- Impact resistance of glazed doors (injury risk only)
- Load-bearing capacity of safety devices
- Ability to release (locked doors in escape routes only)
- Acoustic performance (when required)
- Thermal transmittance (when required)
- Air permeability (when required)

Application to the UK

In the UK aspects covered by building regulations are thermal transmittance, dangerous substances, impact resistance of glazed doors, and ability to release locked doors on escape routes (Approved Document B on fire safety states that they should be “readily openable”). The threshold value set for load-bearing capacity of safety devices means all windows with such devices fitted are required to undergo this test.

Given that completed and installed windows and doors will give off nothing dangerous to the inside of a property, then CE Marking is possible by stating

- the declared U value,
- the threshold value for the load-bearing capacity of safety devices (350N), if fitted .
- that no dangerous substances are released under normal use.

A manufacturer is permitted to put “npd” (No Performance Determined) next to each of the other characteristics. As long as the manufacturer operates a factory production control system in accordance with BS EN 14351, the CE Marking can be applied.

Ability to release locked doors on escape routes

The ability to release characteristic has provoked much debate. BS EN 14351-1 clause 4.10 requires that emergency exit devices and panic devices installed on external pedestrian doorsets in escape routes shall comply with EN 179, EN 1125, prEN 13633 or prEN 13637. These hardware standards have test methods that use a standardised test specimen door and provide the classification for ability to release that then applies to any doorsets to which the devices are fitted. Attestation of conformity for this aspect only of external pedestrian doorsets (without fire or smoke characteristics) is set by table ZA.2 at level 1, so that any factory making doors with these devices fitted – on a strict interpretation - will need a Notified Body for continuous surveillance, assessment and approval of Factory Production Control.

The authors of this paper believe that the intent of the product standard is for the hardware to be CE marked for its ability to release under attestation of conformity system 1, then for it to be applied by the doorset fabricator according to the hardware manufacturer's instructions. A notified body will assess the manufacturer's documented procedures for verifying conformity of emergency/panic exit devices on receipt and for applying them to doorsets as instructed by the hardware supplier. If he already has FPC independently monitored by a notified body, then he should extend its scope to include ability to release.

Many external doorsets destined for escape routes are supplied without emergency exit or panic devices being fitted on delivery as they are installed later on site. CE marking will therefore not apply, because the doorsets are placed on the market without the relevant hardware.

Initial type testing

Compliance with the requirements of this European product standard BS EN 14351-1 has to be demonstrated by Initial Type Testing (ITT) and Factory Production Control (FPC). Other than the ability to release doors on escape routes, noted above, all characteristics shall be so tested and controlled under Attestation of Conformity (AoC) system 3. This entails initial testing of products by a Notified Body, a nationally approved test house "notified" to the European Commission. A proposed amendment to the standard will clarify the "cascading" of initial test results, eg from a system supplier to his licensed fabricators. This route is tightly controlled but should prove useful for U values, and the load bearing capacity of safety devices, as well as for other characteristics.

Other characteristics

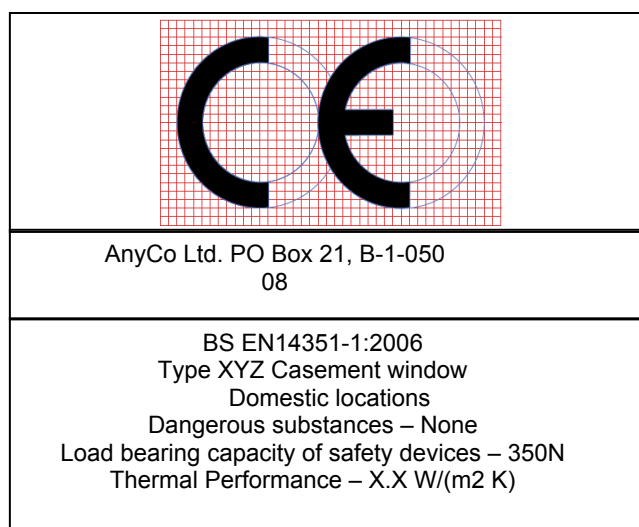
If a manufacturer wishes to declare a level of performance against any of the other mandated characteristics, then he must do so in accordance with BS EN 14351-1 as tested or approved by a Notified Body and the information must accompany the CE Marking. The manufacturer should not make a claim on these aspects of

performance in any other way, for instance by the use of in-house testing, or testing by a laboratory that is not notified, or in literature that is separate from the CE Marking.

None of the other aspects listed in BS EN 14351-1 are mandated. Tests for them can be carried out by any laboratory, not necessarily notified, and results declared in accordance with the classifications in BS EN 14351-1.

Roof windows require additional consideration and are not covered by this document. Glazing used in doors and lights adjacent to doors must meet the UK building regulations.

Example of typical CE mark



DISCLAIMER

It has not proved possible to obtain confirmation from Government that this is a correct interpretation of the CE Marking rules, nor has Government supplied any alternative view.

It is the responsibility of the person affixing the CE marking to determine what is needed. Enforcement is undertaken by individual Trading Standards Officers who may take views of what information should accompany CE Marking that differ from those given in this paper.

Whilst every effort has been made to interpret the CE marking rules correctly, the guidance offered in this paper represents the personal views of the authors, who accept no liability for the consequences of alternative interpretations by enforcement authorities.

Joint trades working party on CE Marking
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