

# BS EN 1155 : 1997

# BS EN 1154 : 1997 Electrically powdered hold open devices for swing doors

Products tested to British and European standards provide greater durability, longer warranty periods, peace of mind and evidence of professional specification.

The standard specifies requirements for separate electrically powered hold-open devices and also for hold-open mechanisms incorporated in a door closer. Whilst these devices may incorporate smoke or fire detection elements, the performance of these particular elements is outside the scope of EN 1155.

Under the standard each product is tested and classified accordingly to show its compliance. The identification of a 6-digit code is visible on the individual product. Each digit represents a category and how it measured against the standard to which it was tested.

#### Digit 1 - Category of use

Only one category of use is identified for electrically powered hold open devices:

**Grade 3**: For all internal and external doors for use by the public, and others, with little incentive to take care, i.e. where there is some chance of misuse of the door

#### Digit 2 - Number of Test Cycles

Two test durations are identified for devices manufactured to this European Standard:

Grade 5: 50,000 cycles. For all stand alone electrically powered hold open devices.

**Grade 8**: 500,000 cycles. For all electrically powered hold-open and freeswing door closers and devices that contain operating arms.

#### Digit 3 - Test door mass/size

Five test door mass grades and related hold-open power sizes are identified as the table below illustrates. Where an electrically powered hold open device is suitable for a range of power sizes both the minimum and the maximum sizes shall be identified.

Test Door Mass & Recommended Door Widths		
Power size of closer	Maximum mass of hinged leaf	Width of test door leaf
3	60kg	950mm
4	80kg	1100mm
5	100kg	1250mm
6	120kg	1400mm
7	160kg	1600mm

#### Digit 4 - Fire behaviour

Only one grade of fire resistance is identified for electrically powered hold open devices.

**Grade 1**: Suitable for use on fire/smoke door assemblies, subject to satisfactory assessment of the contribution of the door closer to the fire resistance of specified fire/smoke assemblies.

#### Digit 5 - Safety

All electrically powered hold open devices are required to satisfy the Essential Requirement of safety in use contained in the Construction Products Directive issued by the EU. Therefore only grade 1 is identified:

Grade 1: Safe

Safe

Secure

Accessible

## Digit 6 - Corrosion Resistance

Five grades of corrosion resistance are identified according to EN 1670:

Grade O: No defined corrosion resistance

Grade 1: Mild resistance

Grade 2: Moderate resistance

Grade 3: High resistance

Grade 4: Very high resistance

#### Example



The above code signifies an electrically powered hold-open device suitable for a range from power size 3 to 6.



## **Product Marking**

This standard requires that each door closer and separately supplied accessory manufactured to the standard be marked with the following:

a: manufacturer's name or trademark, or other means of identification

b: product model identification

c: the 6 digit classification listed above

d: number of this European standard



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