Singapore Standard SS 332: 2007

#### Specification for fire doors

## AMENDMENT NO. 1

August 2009

## 1. Page 18, Clause 5 Hardware requirements and test methods

- a) Replace 5.2.1 as follows:
  - **5.2.1** Other hardware, except sliding and folding door hardware, shall be subjected to the requirements of the test standards specified in Table 1.
- b) Amend S/N 10 in Table 1 from "Sliding and folding door hardware" to "Sliding and folding door hardware (for information)".

## 2. Page 76, K.2 Requirements

Replace K.2 as follows:

## K.2 Requirements

- K.2.1 Requirements for door coordinator devices are as stated in Clause 5 of EN 1158.
- **K.2.2** The test apparatus and methods are as specified in Clauses 6 and 7 of EN 1158 respectively.
- **K.2.3** Classification shall be at least as stated in K.3.

## 3. Page 78, Annex L

- a) Add new subclause as follows:
  - **L.1.4** Door bolts include manual and automatic flush bolts.
- b) Replace L.2 as follows:

# L.2 Requirements

- **L.2.1** Requirements for door bolts are as stated in Clause 4 of EN 12051.
- L.2.2 The test apparatus and methods are as specified in Clause 5 of EN 12051.
- L.2.3 Classification shall be at least as stated in L.3.
- c) Replace L.3.4 as follows:
  - **L.3.4** The test duration (second digit in the classification) shall be 10,000 test cycles (Grade 3) except for automatic door bolt which shall be 50,000 test cycles (Grade 4).

#### 4. Page 80, M.2 Requirements

Replace M.2 as follows:

## M.2 Requirements

- **M.2.1** Requirements for the lever handles and knob furniture are as stated in Clause 5 of EN 1906.
- **M.2.2** The test apparatus and methods are as specified in Clauses 6 and 7 of EN 1906 respectively.
- **M.2.3** Classification shall be at least as stated in M.3.

## 5. Page 82, N.2 Requirements

Replace N.2 as follows:

# N.2 Requirements

- **N.2.1** Requirements for the mechanical locks and latches are as stated in Clause 5 of EN 12209. The test shall only be conducted on the latch bolt.
- N.2.2 The test apparatus and methods are as specified in Clause 6 of EN 12209.
- N.2.3 Classification shall be at least as stated in N.3.

#### 6. Page 84, Annex O

- a) Replace O.1.6 as follows:
  - **O.1.6** To provide ease of use, the hinged or pivoted door shall not exceed 200 kg in mass, 2,500 mm in height and 1,300 mm in width. For hinged door, the selection of the door closer shall be in accordance with Table 4.
- b) Replace O.2 as follows:

# O.2 Requirements

- **0.2.1** Requirements on design of emergency exit devices are as stated in 4.1 of EN 179.
- **0.2.2** Requirements on performance of emergency exit devices are as stated in 4.2 of EN 179.
- **O.2.3** For pressurised door, 4.2.1 of EN 179 shall be superseded by the Code of practice for fire precautions in buildings 7.2.2 (c) where the force required to open any door against the combined resistance of the pressurising air and the automatic door-closing mechanism shall not exceed 110 N at the door handle.
- **O.2.4** The test apparatus and methods are as specified in Clauses 5 and 6 of EN 179 respectively.
- **O.2.5** Classification shall be at least as stated in O.3.

- c) Replace O.3.4 as follows:
  - **O.3.4** The test duration (second digit in the classification) shall be 100,000 test cycles (Grade 6).
- d) Replace 0.3.7 as follows:
  - **0.3.7** The safety grade (fifth digit in the classification) shall be Grade 1.

## 7. Page 88, Annex P

- a) Replace P.1.6 as follows:
  - **P.1.6** For ease of use, the hinged or pivoted door shall not exceed 200 kg in mass, 2,500 mm in height and 1,300 mm in width. For hinged door, the selection of the door closer shall be in accordance with Table 4.
- b) Replace P.2 as follows:

# P.2 Requirements

- P.2.1 Requirements on design of panic exit devices are as stated in 4.1 of EN 1125.
- P.2.2 Requirements on performance of panic exit devices are as stated in 4.2 of EN 1125.
- **P.2.3** For pressurised door, 4.2.1 of EN 1125 shall be superseded by the Code of practice for fire precautions in buildings 7.2.2 (c) where the force required to open any door against the combined resistance of the pressurising air and the automatic door-closing mechanism shall not exceed 110 N at the door handle.
- **P.2.4** The test apparatus and methods are as specified in Clauses 5 and 6 of EN 1125 respectively.
- **P.2.5** Classification shall be at least as stated in P.3.
- c) Replace P.3.1 as follows:
  - P.3.1 Panic exit devices are classified according to a ten-digit/character coding system.
- d) Replace P.3.4 as follows:
  - **P.3.4** The test duration (second digit in the classification) shall be 100,000 test cycles (Grade 6).
- e) Replace P.3.7 as follows:
  - **P.3.7** The safety grade (fifth digit in the classification) shall be Grade 1.
- 8. Page 94, Annex Q
- a) Replace Q.2 as follows:

## Q.2 Requirements

Q.2.1 Requirements for single axis hinges are as stated in Clause 5 of EN 1935.

- Q.2.2 The test apparatus and methods are as specified in Clauses 6 and 7 of EN 1935 respectively.
- Q.2.3 Classification shall be at least as stated in Q.3.
- b) Replace Q.3.4 and Q.3.5 as follows:
  - **Q.3.4** The test duration (second digit in the classification) shall be 200,000 test cycles (Grade 7).
  - Q.3.5 The test door mass (third digit in the classification) shall be 60 kg (Grade 3).
- c) Delete the entire subclause Q.3.8.

## 9. Page 96, R.2 Requirements

Replace R.2 as follows:

# R.2 Requirements

- **R.2.1** Requirements on design of electrically powered hold-open devices are as stated in 5.1 of EN 1155.
- **R.2.2** Requirements on performance of electrically powered hold-open devices are as stated in 5.2 of EN 1155.
- **R.2.3** The test apparatus and methods are as specified in Clauses 6 and 7 of EN 1155 respectively.
- **R.2.4** Classification shall be at least as stated in R.3.

#### 10. Page 99, S.2 Requirements

Replace S.2 as follows:

## S.2 Requirements

- **S.2.1** Requirements for cylinders for locks are as stated in Clause 4 of EN 1303.
- **S.2.2** The test apparatus and methods are as specified in Clause 5 of EN 1303.
- **S.2.3** Classification shall be at least as stated in S.3.

## 11. Page 101, Annex T

a) Amend the title of Annex T to:

# **Annex T**

(informative)

# Sliding door hardware : Requirements and test methods – EN 1527

b) Replace T.2 as follows:

# T.2 Requirements

- **T.2.1** Requirements for sliding door hardware are as stated in Clause 5 of EN 1527 for sliding doors.
- **T.2.2** The test apparatus and methods are as specified in Clause 6 of EN 1527 for sliding doors.
- **T.2.3** Classification shall be at least as stated in T.3.
- c) Deleted the entire subclause T.3.8.

## 12. Page 102, Annex U

- a) Delete the following reference from U.1 Normative references; and
- b) Add this reference to U.2 Other standards for information.

EN 1527 : 1998 Building hardware – Hardware for sliding doors and folding doors – Requirements and test methods