

SINGAPORE NATIONAL ANNEX

# NA to SS EN 1991-1-2 : 2008

(ICS 13.220.50; 91.010.30)

## Singapore National Annex to Eurocode 1: Actions on structures –

*Part 1-2: General actions – Actions on  
structures exposed to fire*

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## **National Foreword**

This Singapore Standard was prepared by the Technical Committee on Building Structure and Sub-structure under the purview of the Building and Construction Standards Committee.

This standard is an adoption of UK National Annex to Eurocode 1: Actions on structures – Part 1-2 : General actions – Actions on structures exposed to fire and is implemented with the permission of British Standards Publishing Ltd.

In preparing this standard, reference was also made to PD 6688-1-2 : 2007 – Background paper to the UK National Annex to BS EN 1991-1-2.

Acknowledgement is made to BSI for the use of information from the above publications.

This Singapore NA contains information on those parameters which are left open in EN 1991-1-2 for national choice, known as nationally determined parameters. The Singapore NA is to be read in conjunction with the SS EN 1991-1-2 : 2008 – Eurocode 1: Actions on structures – Part 1-2: General actions – Actions on structures exposed to fire.

At the time of publication, this standard is expected to be used as a reference in the Building and Construction Authority's 'Approved Document – Acceptable Solutions'.

Attention is drawn to the possibility that some of the elements of this Singapore Standard may be the subject of patent rights. SPRING Singapore shall not be held responsible for identifying any or all of such patent rights.

### **NOTE**

- 1. Singapore Standards are subject to periodic review to keep abreast of technological changes and new technical developments. The changes in Singapore Standards are documented through the issue of either amendments or revisions.*
- 2. Compliance with a Singapore Standard does not exempt users from legal obligations.*

# Singapore National Annex to SS EN 1991-1-2 : 2008 – Eurocode 1: Actions on structures – Part 1-2 : General actions – Actions on structures exposed to fire

## NA.1 Scope

This Annex gives:

- a) the Singapore decisions for the Nationally Determined Parameters described in the following subclauses of SS EN 1991-1-2 : 2008:
  - 2.4 (4)
  - 3.1 (10)
  - 3.3.1.2 (1)
  - 3.3.1.3 (1)
  - 3.3.2 (2)
  - 4.2.2 (2)
  - 4.3.1 (2)
- b) the Singapore decisions on the status of SS EN 1991-1-2 : 2008 informative annexes.

## NA.2 Nationally determined parameters

### NA.2.1 Temperature analysis [SS EN 1991-1-2 : 2008, 2.4 (4)]

SS EN 1991-1-2 recommends that temperature analysis is performed using a nominal temperature-time curve or a fire model.

When performing temperature analysis in terms of the nominal temperature-time curve, the period of time within which to make the temperature analysis is specified in the 'Code of Practice for Fire Precautions in Buildings' administered by the Singapore Civil Defence Force (SCDF) [1].

When performing temperature analysis using fire models, no limited periods of fire resistance are specified. Fire models used should be soundly based, robust and suitable for the given fire design scenario.

### NA.2.2 Thermal actions for temperature analysis [SS EN 1991-1-2 : 2008, 3.1 (10)]

The use of the nominal temperature-time curves specified in SS EN 1991-1-2 : 2008, 3.2 is permitted as appropriate to the application.

NOTE – The nominal time-temperature relationships are taken from the furnace heating curves described in BS EN 1363-1 and BS EN 1363-2.

The use of the natural fire models specified in SS EN 1991-1-2 : 2008, 3.3 is permitted.