

NA to SS EN 1993-1-9:2010(2023)
(ICS 91.010.30)

SINGAPORE STANDARD

**Singapore National Annex to Eurocode 3 :
Design of steel structures**

– Part 1-9 : Fatigue

Confirmed 2023

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National Foreword

This National Annex 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 (NA to BS EN 1993-1-9:2005) to Eurocode 3 – Design of steel structures – Part 1-9 : Fatigue and is implemented with the permission of the British Standards Publishing Ltd.

In preparing this standard, reference was also made to PD 6695-1-9 : 2008 'Recommendations for the design of structures to BS EN 1993-1-9'.

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 1993-1-9 for national choice, known as nationally determined parameters. The Singapore NA is to be read in conjunction with the SS EN 1993-1-9 : 2010 – Eurocode 3 – Design of steel structures – Part 1-9 : Fatigue.

Where appropriate, users may refer to the guidance and recommendation in BC 1:2008 'Design guide on use of alternative steel material to BS 5950' published by the Building and Construction Authority (BCA). Reference should be made to the most current version as this publication is expected to be replaced by subsequent revisions based on SS EN 1993 series of standards.

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

NOTE

- 1. Singapore Standards (SSs) and Technical References (TRs) are reviewed periodically to keep abreast of technical changes, technological developments and industry practices. The changes are documented through the issue of either amendments or revisions. Where SSs are deemed to be stable, i.e. no foreseeable changes in them, they will be classified as "mature standards". Mature standards will not be subject to further review unless there are requests to review such standards.*
- 2. An SS or TR is voluntary in nature except when it is made mandatory by a regulatory authority. It can also be cited in contracts making its application a business necessity. Users are advised to assess and determine whether the SS or TR is suitable for their intended use or purpose. If required, they should refer to the relevant professionals or experts for advice on the use of the document. Enterprise Singapore and the Singapore Standards Council shall not be liable for any damages whether directly or indirectly suffered by anyone or any organisation as a result of the use of any SS or TR. Although care has been taken to draft this standard, users are also advised to ensure that they apply the information after due diligence.*
- 3. Compliance with a SS or TR does not exempt users from any legal obligations.*

Singapore National Annex to SS EN 1993-1-9 : 2010 – Eurocode 3 – Design of steel structures – Part 1-9 : Fatigue

NA.1 Scope

This National Annex gives:

- a) the Singapore decisions for the Nationally Determined Parameters described in the following clauses and subclauses of SS EN 1993-1-9 : 2010:
 - 1.1(2)
 - Clause 2(2)
 - Clause 2(4)
 - Clause 3(2)
 - Clause 3(7)
 - Clause 5(2)
 - 6.1(1)
 - 6.2(2)
 - 7.1(3)
 - 7.1(5)
 - Clause 8(4)
- b) references to non-contradictory complementary information.

NA.2 Nationally determined parameters

NA.2.1 Material and execution tolerances and information on inspection requirements for fabrication [SS EN 1993-1-9:2010, 1.1(2)]

NA.2.1.1 Material and execution tolerances

The rules are applicable to structures where execution conforms to BS EN 1090-2. For additional guidance see NA.3.

NA.2.1.2 Information on inspection requirements for fabrication

For the safe life method of assessment, special inspection and testing requirements for welds, cut edges and plain surfaces should be provided on drawings for all applications where the minimum required fatigue strength exceeds the relevant value of $\Delta\sigma_c$ in Table NA.1.