

SINGAPORE STANDARD

**Singapore National Annex to
Eurocode 5: Design of timber structures**

– Part 1-2 : General – Structural fire design

Published by

**Enterprise
Singapore**

NA to SS EN 1995-1-2 : 2018
NA to BS EN 1995-1-2:2004, IDT
(ICS 13.220.50; 91.010.30; 91.080.20)

SINGAPORE STANDARD

**Singapore National Annex to Eurocode 5: Design of
timber structures**

– Part 1-2 : General – Structural fire design

All rights reserved. Unless otherwise specified, no part of this Singapore Standard may be reproduced or utilised in any form or by any means, electronic or mechanical, including photocopying and microfilming, without permission in writing from Enterprise Singapore. Request for permission can be sent to: standards@enterprisesg.gov.sg.

ISBN 978-981-47-8489-4

NA to SS EN 1995-1-2 : 2018

This Singapore Standard was approved by the Building and Construction Standards Committee on behalf of the Singapore Standards Council on 23 February 2018.

First published, 2018

The Building and Construction Standards Committee, appointed by the Standards Council, consists of the following members:

	Name	Capacity
Chairman	: Ar. Chan Kok Way	<i>Individual Capacity</i>
Deputy Chairman	: Er. Clement Tseng	<i>Building and Construction Authority</i>
Secretary	: Ms Amy Sim	<i>Standards Development Organisation – The Institution of Engineers, Singapore</i>
Members	: Mr Bin Chee Kwan	<i>National Environment Agency</i>
	Er. Chan Ewe Jin	<i>The Institution of Engineers, Singapore</i>
	Mr Shawn Chan	<i>Singapore Manufacturing Federation</i>
	Mr Chee Kheng Chye	<i>Housing & Development Board</i>
	Mr Chng Chee Beow	<i>Real Estate Developers' Association of Singapore</i>
	Mr Dominic Choy	<i>Singapore Contractors Association Ltd</i>
	Er. Paul Fok	<i>Land Transport Authority</i>
	Mr Goh Ngan Hong	<i>Singapore Institute of Surveyors and Valuers</i>
	Mr Desmond Hill	<i>Individual Capacity</i>
	Prof Ho Puay Peng	<i>National University of Singapore</i>
	Mr Benedict Lee Khee Chong	<i>Singapore Institute of Architects</i>
	Er. Lee Chuan Seng	<i>Individual Capacity</i>
	A/Prof Leong Eng Choon	<i>Nanyang Technological University</i>
	Mr Darren Lim	<i>Building and Construction Authority</i>
	Dr Lim Lan Yuan	<i>Association of Property and Facility Managers</i>
	Er. Lim Peng Hong	<i>Association of Consulting Engineers Singapore</i>
	Er. Mohd Ismadi	<i>Ministry of Manpower</i>
	Ms Kay Pungkothai	<i>National Parks Board</i>
	Er. Yvonne Soh	<i>Singapore Green Building Council</i>
	Mr Christopher Tan	<i>Singapore Civil Defence Force</i>
	Er. Tang Pei Luen	<i>JTC Corporation</i>
	Mr Young Joo Chye	<i>PUB, Singapore National Water Agency</i>

The Technical Committee on Building Structures and Sub-structures, appointed by the Building and Construction Standards Committee and responsible for the preparation of this standard, consists of representatives from the following organisations:

	Name	Capacity
Co-Chairmen	: Er. Lim Peng Hong	<i>Individual Capacity</i>
	Er. Chew Keat Chuan	<i>Building and Construction Authority</i>
Secretary	: Ms Jasmine Bai	<i>Standards Development Organisation – The Institution of Engineers, Singapore</i>

Members	:	Er. Chan Ewe Jin	<i>The Institution of Engineers, Singapore</i>
		Er. Dr Chiew Sing Ping	<i>Individual Capacity</i>
		Er. Lee Tuck Cheong	<i>Association of Consulting Engineers Singapore</i>
		Er. Dr Richard Liew Jat Yuen	<i>Individual Capacity</i>
		Er. Neo Bian Hong	<i>Land Transport Authority</i>
		Mr Ng Yek Meng	<i>Singapore Contractors Association Ltd</i>
		Dr Ng Yiau Heong	<i>Singapore Structural Steel Society</i>
		Dr Gary Ong Khim Chye	<i>Singapore Concrete Institute</i>
		Er. Poh Puay Yong	<i>Housing & Development Board</i>
		Mr Sze Thiam Siong	<i>Singapore Welding Society</i>
		Dr Tam Chat Tim	<i>Individual Capacity</i>
		Er. Dr Tan Guan	<i>Individual Capacity</i>
		Prof Tan Kiang Hwee	<i>National University of Singapore</i>
		Er. Dr Tan Teng Hooi	<i>Individual Capacity</i>
		Er. Tang Pei Luen	<i>JTC Corporation</i>
		A/Prof Susanto Teng	<i>Nanyang Technological University</i>
		LTC Tong Hong Haey	<i>Singapore Civil Defence Force</i>

The Working Group, appointed by the Technical Committee on Building Structures and Sub-structures to assist in the preparation of this standard, comprises the following experts who contribute in their *individual capacity*:

	Name
Convenor	: Er. Dr Tan Teng Hooi
Secretary	: Ms Jasmine Bai
Members	: Er. Adrian Billinghamurst
	Er. Cherlyn Leong Pei Ying
	Er. Lim Kim Cheong
	Er. Lung Hian Hao
	Er. Poh Puay Yong
	Er. Dr See Lin Ming
	LTC Tong Hong Haey
	Er. Serena Yap

The organisations in which the experts of the Working Group are involved are:

Arup Singapore Pte Ltd
Aurecon Singapore Pte Ltd
Building and Construction Authority
Housing & Development Board
JTC Corporation
Lim Kim Cheong Consultants
Singapore Civil Defence Force
Singapore University of Social Sciences
Worley Parsons Pte Ltd

Contents

	Page
National Foreword _____	6
NA.1 Scope _____	7
NA.2 Nationally determined parameters _____	7
NA.3 Guidance on using informative annexes _____	8
NA.4 References to non-contradictory complementary information _____	8
Bibliography _____	9

National Foreword

This National Annex (NA) was prepared by the Working Group appointed by the Technical Committee on Building Structures and Sub-structures under the direction of the Building Construction Standards Committee.

This standard is an identical adoption of NA to BS EN 1995-1-2:2004 “UK National Annex to Eurocode 5: Design of timber structures – Part 1-2: General – Structural fire design” and is implemented with the permission of British Standards Publishing Ltd.

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

This Singapore NA contains information on those parameters which are left open in EN 1995-1-2 for national choice, known as nationally determined parameters. The Singapore NA is to be read in conjunction with the SS EN 1995-1-2 : 2018 - Eurocode 5: Design of timber structures – Part 1-2 : General – Structural fire design.

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. Enterprise Singapore shall not be held responsible for identifying any or all of 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.*
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 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.*
3. *Compliance with a SS or TR does not exempt users from any legal obligations*

Singapore National Annex to Eurocode 5: Design of timber structures – Part 1-2: General – Structural fire design

NA.1 Scope

This National Annex gives:

- a) the Singapore decisions for the Nationally Determined Parameters described in the following subclauses of SS EN 1995-1-2:2018:
 - 2.1.3(2)
 - 2.3(1)P
 - 2.3(2)P
 - 2.4.2(3)
 - 4.2.1(1)
- b) the Singapore decisions on the status of SS EN 1995-1-2 : 2018 informative annexes;
- c) reference to non-contradictory complementary information.