

**NA+A2:2024 to  
SS EN 1997-1:2010(2018)+A1:2018**  
(ICS 91.010.30)

**SINGAPORE STANDARD**

**Singapore National Annex to Eurocode 7:  
Geotechnical design**

**– Part 1 : General rules**

Incorporating Amendments No. 1 and 2

Confirmed 2018

**NA+A2:2024 to SS EN 1997-1:2010(2018)+A1:2018**  
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## Contents

## Page

National Foreword	4
NA.1 Scope	5
NA.2 Nationally determined parameters	5
NA.3 Decisions on the status of informative annexes	10
NA.4 References to non-contradictory complementary information	12

## Annex

A Design approach and values of partial, correlation and model factors for ultimate limit states to be used in conjunction with SS EN 1997-1:2010(2018)+A1:2018	15
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

## Tables

NA.1 Provisions of this National Annex related to Clauses in SS EN 1997-1:2010(2018)+A1:2018 where “national choice” is to be exercised	6
A.NA.1 Partial factors on actions ( $\gamma_F$ ) for the equilibrium (EQU) limit state	16
A.NA.2 Partial factors for soil parameters ( $\gamma_M$ ) for the EQU limit state	16
A.NA.3 Partial factors on actions ( $\gamma_F$ ) or the effects of actions ( $\gamma_E$ ) for the structural (STR) and geotechnical (GEO) limit states	17
A.NA.4 Partial factors for soil parameters ( $\gamma_M$ ) for the STR and GEO limit state	17
A.NA.5 Partial resistance factors ( $\gamma_R$ ) for spread footings for the STR and GEO limit states	18
A.NA.6 Partial resistance factors ( $\gamma_R$ ) for driven piles for the STR and GEO limit states	18
A.NA.7 Partial resistance factors ( $\gamma_R$ ) for bored piles for the STR and GEO limit states	19
A.NA.8 Partial resistance factors ( $\gamma_R$ ) for continuous flight auger CFA piles for the STR and GEO limit states	19
A.NA.9 Correlation factors ( $\xi$ ) to derive characteristic values of the resistance of axially loaded piles from static pile load tests	20
A.NA.10 Correlation factors ( $\xi$ ) to derive characteristic values of the resistance of axially loaded piles from ground test results	20
A.NA.11 Correlation factors ( $\xi$ ) to derive characteristic values of the resistance of axially loaded piles from dynamic impact tests	21
<span style="border: 1px solid black; padding: 0 2px;">A2</span> > A.NA.12 deleted < <span style="border: 1px solid black; padding: 0 2px;">A2</span>	
A.NA.13 Partial resistance factors for retaining structures at the STR and GEO limit states	21
A.NA.14 Partial resistance factors for slopes and overall stability at the STR and GEO limit states	21
A.NA.15 Partial factors on actions ( $\gamma_F$ ) at the UPL limit states	22
A.NA.16 Partial factors for soil parameters ( $\gamma_M$ ) and resistances ( $\gamma_R$ ) at the uplift (UPL) limit state	22

A.NA.17	Partial factors on actions ( $\gamma_F$ ) at the hydraulic heave (HYD) limit state_____	23
A.NA.18	Partial factors on actions and action effects for persistent and transient design situations at the ultimate limit state_____	23
A.NA.19	Partial resistance factors ( $\gamma_{a,ULS}$ ) for anchors in ultimate limit state for persistent and transient design situations_____	23
A.NA.20	Values depending on anchor test method for persistent and transient design situations at the ultimate limit state and for serviceability limit states_____	24
A.NA.21	Limiting criteria for investigation, suitability and acceptance tests for persistent and transient design situations at the ultimate and serviceability limit states_____	25
Bibliography _____		13

## **National Foreword**

This National Annex was prepared by the Technical Committee on Civil and Geotechnical Works under the direction of the Building and Construction Standards Committee.

This standard is an adoption of UK National Annex (NA to BS EN 1997-1:2004+A1:2013) to Eurocode 7: Geotechnical design – Part 1: General rules. Permission to reproduce extracts from British Standards is granted by BSI Standards Limited (BSI). No other use of this material is permitted. This standard incorporates Amendment No. 1, January 2018 and Amendment No. 2, June 2024 denoted by  and  respectively.

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 SS EN 1997-1 for national choice, known as nationally determined parameters. The Singapore NA is to be read in conjunction with the SS EN 1997-1: 2010(2018)+A1:2018 – Eurocode 7: Geotechnical design – Part 1: General rules.

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. 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 (informative) to SS EN 1997-1: 2010(2018) – Eurocode 7: Geotechnical design – Part 1 : General rules

### NA.1 Scope

This National Annex gives:

- a) the Singapore decisions for the Nationally Determined Parameters (see NA.2) described in the following subclauses in the body of SS EN 1997-1:2010(2018)+A1:2018:

2.1(8)P	2.4.7.4(3)P	7.6.2.4(4)P	8.5.1(2)P	8.6.2(2)P
2.4.6.1(4)P	2.4.7.5(2)P	7.6.3.2(2)P	8.5.2(1)P	8.6.2(3)P
2.4.6.2(2)P	2.4.8(2)	7.6.3.2(5)P	8.5.2(2)P	11. 5.1(I)P <span style="border: 1px solid black; padding: 0 2px;">A1</span>
2.4.7.1(2)P	2.4.9(1)P	7.6.3.3(3)P	8.5.2(3)P	
2.4.7.1(3)	2.5 (1)	7.6.3.3(4)P	8.5.2(5)P	
2.4.7.2(2)P	7.6.2.2(8)P	7.6.3.3(6)	8.5.3(1)P	
2.4.7.3.2(3)P	7.6.2.2(14)P <span style="border: 1px solid black; padding: 0 2px;">A1</span>	8.4(6)P	8.5.3(2)P	
2.4.7.3.3(2)P	7.6.2.3( 4)P	8.4(7)P	8.5.3(3)P	
2.4.7.3.4.1(1) P	7.6.2.3(5)P	8.5.1(1)P	8.5.3(4)P	

and the following subclauses in Annex A of SS EN 1997-1: 2010:

- A1 – A.2.1 and A.2.2 A1
- A.3.1, A.3.2, A.3.3.1, A.3.3.2, A.3.3.3, A.3.3.5, A.3.3.6
- A.4
- A.5
- A1 – A.6 A1
- b) the procedure to be used where alternative procedures are given in SS EN 1997-1: 2010(2018)+A1:2018 (see NA.2 first paragraph);
- c) the Singapore decisions on the status of A1 SS EN 1997-1: 2010(2018)+A1:2018 A1 informative annexes (see NA.3); and
- d) references to non-contradictory complementary information (see NA.4).

### NA.2 Nationally determined parameters

National choice is permitted in the use of a Design Approach for the STR and GEO limit states (see A1 SS EN 1997-1: 2010(2018)+A1:2018, A1 2.4.7.3.4.1(1)P). As indicated in Table NA.1, only Design Approach 1 is to be used in Singapore.

Annex A of A1 SS EN 1997-1: 2010(2018)+A1:2018 A1 lists the partial and correlation factors for ultimate limit states; the values of these factors are nationally determined parameters. Table NA.1 of this National Annex lists the clauses in A1 SS EN 1997-1: 2010(2018)+A1:2018 A1 where national choice may be exercised in respect of factor values for design in Singapore. Where choice applies, Table NA.1 indicates where values are given, or states a value to be used, or describes the procedure for specifying the factor. The values given in the Tables in Annex A of this National Annex replace the recommended values in Annex A of A1 SS EN 1997-1:2010(2018)+A1:2018. A1