



**NSAI**  
Standards

National Annex plus Amendment  
NA:2010+A2:2020 TO I.S. EN 1993-1  
-6:2007&AC1&A1:2017

# Irish National Annex to I.S. EN 1993-1-6: Eurocode 3 - Design of Steel Structures - Part 1-6: Strength and Stability of Shell Structures

## NA:2010+A2:2020 to I.S. EN 1993-1-6:2007&A1:2017

*Relationship with other documents and/or  
Incorporating amendments/corrigenda issued since publication:*

		Published	Withdrawn
Replaces	NA:2010+A1:2019 to I.S. EN 1993-1-6:2007&A1:2017	31/05/2019	08/12/2020

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document was published  
under the authority of the NSAI  
and comes into effect on:  
8 December, 2020

ICS number:  
91.010.30  
91.080.13

**NSAI**  
1 Swift Square,  
Northwood, Santry  
Dublin 9

T +353 1 807 3800  
F +353 1 807 3838  
E standards@nsai.ie  
W NSAI.ie

**Sales:**  
T +353 1 857 6730  
F +353 1 857 6729  
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

## Contents

	Page
<b>ANNEX NA (informative) Irish National Annex to Eurocode 3 - Design of steel structures – Part 1 - 6: Strength and stability of shell structures .....</b>	<b>3</b>
<b>NA.1 Introduction.....</b>	<b>3</b>
<b>NA.2 Scope .....</b>	<b>3</b>
<b>NA.3 Nationally Determined Parameters (NDPs).....</b>	<b>3</b>
<b>NA.3.1 Subclause 3.1(4) - Material properties .....</b>	<b>3</b>
<b>NA.3.2 Subclause 4.1.4(3) - LS4: Fatigue .....</b>	<b>4</b>
<b>NA.3.3 Subclause 5.2.4(1) - Stress resultants and stresses .....</b>	<b>4</b>
<b>NA.3.4 <math>\overline{A}_1</math> Subclause 6.2.1(6) - Design values of stresses.....</b>	<b>4</b>
<b>NA.3.5 <math>\overline{A}_1</math> Subclause 6.3(5) - Design by global numerical MNA or GMNA analysis.....</b>	<b>4</b>
<b>NA.3.6 Subclause 7.3.1(1) - Design values of total accumulated plastic strain .....</b>	<b>4</b>
<b>NA.3.7 Subclause 7.3.2(1) - Total accumulated plastic strain limitation .....</b>	<b>4</b>
<b>NA.3.8 Subclause 8.4.2(3) - Out-of-roundness tolerance .....</b>	<b>4</b>
<b>NA.3.9 Subclause 8.4.3(2) - Accidental eccentricity tolerance.....</b>	<b>4</b>
<b>NA.3.10 Subclause 8.4.3(4) - Accidental eccentricity tolerance.....</b>	<b>4</b>
<b>NA.3.11 Subclause 8.4.4(4) - Dimple tolerances.....</b>	<b>4</b>
<b>NA.3.12 Subclause 8.4.5(1) - Interface flatness tolerance.....</b>	<b>4</b>
<b>NA.3.13 Subclause 8.5.2(2) - Design resistance (buckling strength) .....</b>	<b>4</b>
<b>NA.3.14 <math>\overline{A}_1</math> Subclause 8.6.3(5) - Design using reference resistances - Design value of resistance.....</b>	<b>5</b>
<b>NA.3.15 Subclause 8.8.2(9) - Design by global numerical analysis using GMNIA analysis - Design value of resistance .....</b>	<b>5</b>
<b>NA.3.16. Subclause 8.8.2(18) - Design by global numerical analysis using GMNIA analysis - Design value of resistance.....</b>	<b>5</b>
<b>NA.3.17. Subclause 8.8.2(20) - Design by global numerical analysis using GMNIA analysis - Design value of resistance.....</b>	<b>5</b>
<b>NA.3.18 Subclause 9.2.1(2) P - Stress design - General.....</b>	<b>5</b>

**NA:2010+A2:2020 to I.S. EN 1993-1-6:2007&AC1&A1:2017**

**A1 National Annex Foreword**

National Annexes must always be used in conjunction with the relevant European Standard.

National Annexes are reviewed as necessary e.g. when a new edition, an amendment or a corrigendum is issued.

This National Annex identifies what amendments/corrigenda are addressed.

The user should check that the National Annex addresses the latest changes to the European Standard. Previews of all documents are available on [www.standards.ie](http://www.standards.ie). Any questions should be directed to NSAI.

Where a European Standard has been changed (revised/amended/corrected) and the National Annex has yet to be revised to account for the change(s), the National Annex for the previous version is available. Engineering judgement must be applied if using guidance contained therein e.g. when selecting appropriate parameters.

The table below indicates which changes have been considered by the relevant National Committee during the life of this edition of the European Standard.

<b>Publication</b>	<b>Date published</b>	<b>Assessed and taken into account if relevant</b>
I.S. EN 1993-1-6:2007	2007-10-12	Yes
I.S. EN 1993-1-6:2007/AC:2009	2009-08-28	Yes
I.S. EN 1993-1-6:2007/A1:2017	2017-12-19	Yes

Where relevant this NA includes:

- an overview of possible national choices and clauses containing complementary information;
- national choices;
- decisions on the application of informative annexes;
- references to A2 non-contradictory complementary information A2 which may assist the user of the Eurocode.

The numbering refers to the clauses of the Eurocode where national choices have been made and/or complementary information is given. To the extent possible, headings are identical to the headings of the clauses in the Eurocode followed by a clarification, as appropriate. A1

## ANNEX NA (informative)

### Irish National Annex to Eurocode 3 - Design of steel structures – Part 1 - 6: Strength and stability of shell structures

#### NA.1 Introduction

This National Annex has been prepared through the A1 NSAI Eurocodes Consultative Committee. A1

A2 This National Annex is to be used together with I.S. EN 1993-1-6:2007&AC1:2009&A1:2017. A2

A2 The start and finish of text introduced, altered or deleted by this National Amendment No. 2 are indicated by tags A2 A2. A2

#### NA.2 Scope

A1 This National Annex is to be used in conjunction with I.S. EN 1993-1-6:2007&AC:2009&A1:2017, for the design of buildings and civil engineering works in steel that will be erected on sites in Republic of Ireland.

This National Annex contains all Nationally Determined Parameters (NDPs) for the design of structures in the Republic of Ireland. These parameters are referred to in the following subclauses of I.S. EN 1993-1-6:2007&AC:2009&A1:2017: A1

— 3.1(4)	— 8.4.2(3)	— <span style="border: 1px solid black; padding: 0 2px;">A1</span> 8.8.2(9) <span style="border: 1px solid black; padding: 0 2px;">A1</span>
— 4.1.4(3)	— 8.4.3(2)	— <span style="border: 1px solid black; padding: 0 2px;">A1</span> 8.8.2(18) <span style="border: 1px solid black; padding: 0 2px;">A1</span>
— 5.2.4(1)	— 8.4.3(4)	— <span style="border: 1px solid black; padding: 0 2px;">A1</span> 8.8.2(20) <span style="border: 1px solid black; padding: 0 2px;">A1</span>
— <span style="border: 1px solid black; padding: 0 2px;">A1</span> 6.2.1(6) <span style="border: 1px solid black; padding: 0 2px;">A1</span>	— 8.4.4(4)	— <span style="border: 1px solid black; padding: 0 2px;">A1</span> 9.2.1(2)P <span style="border: 1px solid black; padding: 0 2px;">A1</span>
— 6.3(5)	— 8.4.5(1)	
— 7.3.1(1)	— 8.5.2(2)	
— 7.3.2(1)	— <span style="border: 1px solid black; padding: 0 2px;">A1</span> 8.6.3(5) <span style="border: 1px solid black; padding: 0 2px;">A1</span>	

A1 Additional A1 guidance is not given on using the Normative Annexes A, B, C, D A1 and E A1 for buildings and civil engineering works.

#### NA.3 Nationally Determined Parameters (NDPs)

##### NA.3.1 Subclause 3.1(4) - Material properties

Information regarding material properties at temperatures exceeding 150°C is not given but shall be selected from authoritative research at the designer's discretion.

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

- 
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
  - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-