

Behaviour of connections in steel structures and design of mechanical fasteners and welds according to Eurocode 3

Steel Design 3

Connections

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Colophon

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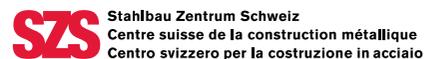
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The text is based on the (English) EN version of the Eurocodes using default and/or recommended values. Where a country can make a national choice – or when non-contradictory complementary information may be used – this is indicated by the following symbol: **NA**. Separate annexes contain the national choices for Belgium, Luxembourg, The Netherlands and Switzerland. These annexes – as well as any errata, corrections and additions to this textbook – can be downloaded free of charge from the websites of the (national) organisations.

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Content

1	Connections in steel structures	1-2
1.1	The function of connections	1-2
1.2	Parts of connections	1-4
1.3	Common connections found in buildings	1-7
1.3.1	Column splice	1-8
1.3.2	Column base connection	1-8
1.3.3	Beam-to-column connection	1-11
1.3.4	Beam-to-beam connection	1-14
1.3.5	Beam splice	1-15
1.3.6	Connection of bracings	1-17
1.4	Design and detailing	1-17
1.4.1	Requirements regarding connections	1-18
1.4.2	Cost-conscious design of connections	1-19
1.5	Standards for connections	1-26
1.5.1	EN 1993-1-8	1-26
1.5.2	EN 1090-2	1-28
1.5.3	Product standards	1-28
1.6	The role of the computer	1-29
1.7	Literature	1-32
2	Bolts in clearance holes	2-2
2.1	Categories of bolted connections	2-3
2.1.1	Bolted connections loaded in shear	2-3
2.1.2	Bolted connections loaded in tension	2-5
2.2	Bolts	2-6
2.2.1	Product standards	2-7
2.2.2	Screw-thread	2-8
2.2.3	Bolt/nut combinations	2-8
2.2.4	Washers	2-9
2.2.5	Mechanical characteristics	2-10
2.2.6	Hole clearance	2-12
2.2.7	Practical bolt choice	2-12
2.3	Positioning of bolts	2-14





2.4	Resistance of elements with holes	2-15
2.4.1	Net cross-section	2-15
2.4.2	Tension resistance of a plate with holes	2-18
2.4.3	Tension resistance of an angle with holes	2-19
2.4.4	Block tearing	2-20
2.5	Resistance of bolts	2-23
2.5.1	Bolts loaded in shear	2-23
2.5.2	Bolts loaded in tension	2-28
2.5.3	Bolts loaded in shear and tension	2-29
2.5.4	Countersunk bolts	2-29
2.6	Literature	2-34
3	Slip-resistant connections, rivets and pins	3-2
3.1	Preloaded bolted connections	3-3
3.1.1	Tightening of preloaded bolts	3-3
3.1.2	Preloaded connection loaded in shear	3-6
3.1.3	Preloaded connection loaded in tension	3-12
3.1.4	Preloaded connection loaded in shear and tension	3-15
3.2	Connections with fit bolts and injection bolts	3-17
3.2.1	Fit bolts	3-17
3.2.2	Injection bolts	3-18
3.3	Rivets	3-24
3.4	Pins	3-26
3.5	Literature	3-28
4	Welds	4-2
4.1	Welding processes	4-2
4.1.1	Arc welding	4-2
4.1.2	Resistance welding	4-8
4.2	Weld shapes	4-8
4.2.1	Fillet welds	4-10
4.2.2	Full penetration butt welds	4-11
4.2.3	Partial penetration butt welds	4-14
4.2.4	Plug welds and flare groove welds	4-14



4.3	Welding procedures	4-15
4.4	Weld quality	4-16
4.4.1	Welding errors	4-17
4.4.2	Welding inspection	4-19
4.5	Weld design	4-21
4.5.1	Fillet welds	4-21
4.5.2	Butt welds	4-34
4.6	Literature	4-35

5 Design and detailing of connections

5.1	Design approach	5-2
5.2	Force distribution in connections	5-6
5.2.1	Influence of relative stiffnesses	5-6
5.2.2	Centre of rotation	5-9
5.2.3	Non-linear distribution of bolt forces	5-19
5.2.4	Force distribution in long connections	5-20
5.2.5	Combination of different types of connections	5-22
5.3	Transfer of axial compression or tension forces	5-23
5.3.1	Butt welds	5-23
5.3.2	Plates	5-24
5.3.3	Gusset plates	5-30
5.4	Transfer of shear forces	5-51
5.5	Introduction of tension forces	5-56
5.5.1	Welded connections	5-56
5.5.2	Bolted connections and prying forces	5-60
5.6	Transfer of compression forces	5-65
5.7	Transfer of shear forces	5-66
5.8	Literature	5-67



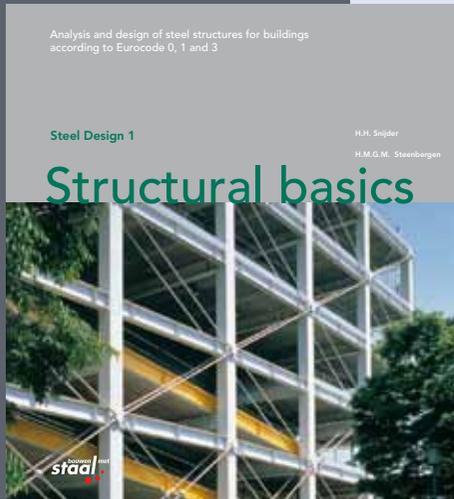
Structural basics

Steel Design 1

CONTENT

- 1 Structural safety
- 2 Actions and deformations
- 3 Modelling
- 4 Analysis
- 5 Analysis methods
- 6 Assessment by code checking
- 7 Resistance of cross-sections

H.H. Snijder and H.M.G.M. Steenbergen, *Structural basics. Analysis and design of steel structures for buildings according to Eurocode 0, 1 and 3* (Steel Design 1), published by Bouwen met Staal, Zoetermeer 2019, ISBN 979-90-72830-98-2, format 23x25 cm, 272 p. Also available as e-book at Wiley / Ernst & Sohn.



Fire

Steel Design 2

CONTENT

- 1 Fire safety
- 2 Calculation of the fire resistance
- 3 Fire safety engineering
- 4 Design tables

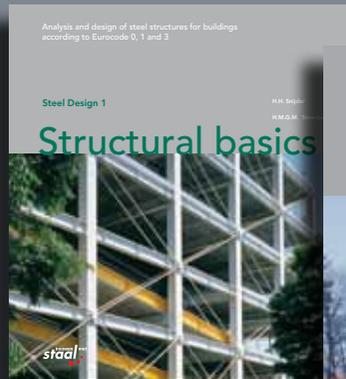
A.F. Hamerlinck, *Fire safety and fire resistant design of steel structures for buildings according to Eurocode 3* (Steel Design 2), published by Bouwen met Staal, Zoetermeer 2021, ISBN 979-90-75146-04-2, format 23x25 cm, 164 p. Also available as e-book at Wiley / Ernst & Sohn.



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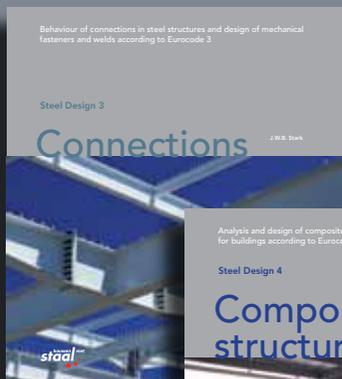
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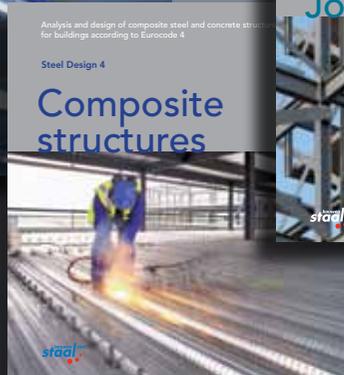
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Steel Design 5

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Education and high quality textbooks are crucial to developing an interest in steel structures and their benefits for clients, architects and designers. However, despite the need to inspire the industry's next generation, many textbooks on steel structures are commissioned on a low budget, resulting in material that lacks imagination and tends to feature, at best, moderate illustrations. These textbooks are usually intended for high school and university level students, as well as designers who are not yet specialised in steel and steel construction. Therefore, it is vital that lecturers have access to up-to-date books that offer clear and concise explanations, while inspiring readers about the possibilities of steel through beautiful graphics and images. Steel Design is a set of English textbooks translated from the original Dutch that are based on the EN version of Eurocode with differences in nationally defined parameters included in an annex. These textbooks are intended for high-school and university level students. The content is applicable to designers who are not specialised in steel and steel construction. See <https://publicaties.bouwenmetstaal.nl/?p=all> for more detailed information on *Structural basics*, *Fire* and other textbooks of Bouwen met Staal.

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worldsteel has supported the development of study material related to steel in construction since 2018. This allows future architects and designers to take advantage of steel products and their features that support designs that meet the circular economy principles.

A separate opt-in programme has been developed called 'constructsteel.org' and is able to be joined by steel producers and construction industry related organisations upon application. This programme focusses on the construction market sector exclusively to promote steel and steel products. Please see www.worldsteel.org and www.constructsteel.org for further details about the steel industry and specifically the construction market.