
Structural steels —

Part 6:
**Technical delivery conditions for
seismic-improved structural steels for
building**

Aciers de construction —

*Partie 6: Conditions techniques de livraison pour aciers de
construction améliorés sismiques pour bâtiment*



This document is a preview generated by EMS



COPYRIGHT PROTECTED DOCUMENT

© ISO 2014

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

	Page
Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Classification and designation	2
4.1 Classification	2
4.2 Grades and Qualities	2
5 Information to be supplied by purchaser	2
5.1 Mandatory information	2
5.2 Options	2
6 Requirements	3
6.1 Steel-making process	3
6.2 Delivery condition	3
6.3 Chemical composition	3
6.4 Mechanical properties	6
6.5 Surface conditions	7
6.6 Internal soundness	7
6.7 Dimensions and tolerances on dimensions, shape, and mass	7
7 Inspection	8
8 Sampling — Frequency of testing	8
8.1 Verification	8
8.2 Test units	8
9 Test Methods	9
10 Marking	9
Annex A (normative) Shapes and dimensions tolerances of H-sections	10
Annex B (normative) The formula of carbon equivalent and the maximum carbon-equivalent value	14
Bibliography	16

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 17, *Steels*, Subcommittee SC 3, *Steels for structural purposes*.

This first edition of ISO 630-6 cancels and replaces ISO 24314:2006, of which it constitutes a technical revision.

ISO 630 consists of the following parts, under the general title *Structural steels*:

- *Part 1: General technical delivery conditions for hot rolled products*
- *Part 2: Technical delivery conditions for non alloy structural steels for general purpose*
- *Part 3: Technical delivery conditions for fine grain structural steels*
- *Part 4: Technical delivery conditions for high yield strength quenched and tempered structural steels*
- *Part 5: Technical delivery conditions for structural steels with improved atmospheric corrosion resistance*
- *Part 6: Technical delivery conditions for seismic-proof improved structural steels for building*

Structural steels —

Part 6:

Technical delivery conditions for seismic-improved structural steels for building

1 Scope

This part of ISO 630 specifies qualities for seismic-proof improved structural steels. This part of ISO 630 applies to steel plates with thicknesses of 6 mm or over and up to 125 mm, wide flats and hot-rolled sections up to 140 mm, which are used in the usual delivery conditions as given in 6.2 and normally intended for welded or bolted structures.

This part of ISO 630 does not include the following structural steels, certain of which are covered by other International Standards:

- sheet and strip – refer to ISO TC 17/SC 12, Continuous mill flat rolled products;
- tubular products – refer to ISO TC 5/SC 1, Steel tubes.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 630-1, *Structural steels — Part 1: General technical delivery conditions for hot-rolled products*

ISO 7452:2013, *Hot-rolled steel plates — Tolerances on dimensions and shape*

ISO 7778, *Through-thickness characteristics for steel products*

ISO 9034:1987, *Hot-rolled structural steel wide flats — Tolerances on dimensions and shape*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

as-rolled

steel without any special rolling and/or heat treatment condition

3.2

normalized

steel produced by heating to a suitable temperature above the transformation range and then cooling in air to a temperature substantially below the transformation range

3.3

quenching

operation which consists of cooling a ferrous product more rapidly than in still air from a high temperature above A_{c1}

Note 1 to entry: A_{c1} is the temperature at which austenite begins to form during heating.