

1. Record Nr.	UNINA9910825259603321
Autore	Hayward Alan (Alan T. J.)
Titolo	Steel detailers' manual // Alan Hayward and Frank Weare
Pubbl/distr/stampa	Malden, MA, : Blackwell Science, 2001
ISBN	1-281-30840-4 9786611308407 0-470-77438-X 1-4051-8000-5
Edizione	[2nd ed. /]
Descrizione fisica	1 online resource (182 p.)
Altri autori (Persone)	WeareFrank OakhillAnthony, C. Eng.
Disciplina	624.1/821
Soggetti	Steel, Structural Building, Iron and steel Building, Iron and steel - Details
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Contents; List of Figures; List of Tables; Foreword by the Director General of the British; Preface to the First Edition; Preface to the Second Edition; 1 Use of Structural Steel; 1.1 Why steel?; 1.2 Structural steels; 1.2.1 Requirements; 1.2.2 Recommended grades; 1.2.3 Weather resistant steels; 1.3 Structural shapes; 1.4 Tolerances; 1.4.1 General; 1.4.2 Worked examples - welding distortion for plate girder; 1.5 Connections; 1.6 Interface to foundations; 1.7 Welding; 1.7.1 Weld types; 1.7.2 Processes; 1.7.3 Weld size; 1.7.4 Choice of weld types; 1.7.5 Lamellar tearing; 1.8 Bolting 1.8.1 General 1.8.2 High strength friction grip (HSFG) bolts; 1.9 Doss and don'ts; 1.10 Protective treatment; 1.11 Drawings; 1.11.1 Engineer's drawings; 1.11.2 Workshop drawings; 1.11.3 Computer aided detailing; 1.12 Codes of practice; 1.12.1 Buildings; 1.12.2 Bridges; 2 Detailing Practice; 2.1 General; 2.2 Layout of drawings; 2.3 Lettering; 2.4 Dimensions; 2.5 Projection; 2.6 Scales; 2.7 Revisions; 2.8 Beam and column detailing conventions; 2.9 Erection marks; 2.10 Opposite handing; 2.11 Welds; 2.12 Bolts; 2.13 Holding down bolts; 2.14 Abbreviations; 3 Design Guidance; 3.1 General

3.2 Load capacities of simple connections  
3.3 Sizes and load capacity of simple column bases;  
4 Detailing Data;  
5 Connection Details;  
6 Computer Aided Detailing;  
6.1 Introduction;  
6.2 Steelwork detailing;  
6.3 Constructing a 3-D model of a steel structure;  
6.4 Object orientation;  
6.5 Future developments;  
7 Examples of Structures;  
7.1 Multi-storey frame buildings;  
7.1.1 Fire resistance;  
7.2 Single-storey frame buildings;  
7.3 Portal frame buildings;  
7.4 Vessel support structure;  
7.5 Roof over reservoir;  
7.6 Tower;  
7.7 Bridges;  
7.8 Single-span highway bridge;  
7.9 Highway sign gantry  
7.10 Staircase  
References; Further Reading; Appendix; Index

---

Sommario/riassunto

This highly illustrated manual provides practical guidance on structural steelwork detailing. It: describes the common structural shapes in use and how they are joined to form members and complete structures explains detailing practice and conventions provides detailing data for standard sections, bolts and welds emphasises the importance of tolerances in order to achieve proper site fit-up discusses the important link between good detailing and construction costs Examples of structures include single and multi-storey buildings, towers a

---