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to BRITISH STANDARD 449 : 1959

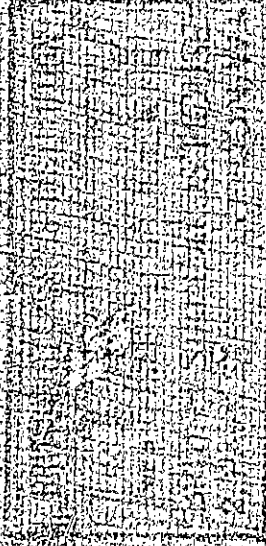
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SPECIFICATION FOR

THE USE OF
COLD FORMED STEEL
SECTIONS IN BUILDING

PD 4054



BRITISH STANDARDS INSTITUTION

SPECIFICATION FOR
THE USE OF COLD FORMED
STEEL SECTIONS
IN BUILDING

Addendum No. 1 (1961)
to B.S. 449 : 1959

The Use of Structural Steel in Building

PD 4064

Price 7/6 net

BRITISH STANDARDS INSTITUTION

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THIS ADDENDUM, having been approved by the Building Divisional Council and the Council for Codes of Practice, was published under the authority of the General Council on 27th February, 1961.

The Institution desires to call attention to the fact that this Addendum to B.S. 449 : 1959 does not purport to include all the necessary provisions of a contract.

In order to keep abreast of progress in the industries concerned, British Standards are subject to periodical review. Suggestions for improvements will be recorded and in due course brought to the notice of the committees charged with the revision of the standards to which they refer.

A complete list of British Standards, numbering over 3000, indexed and cross-indexed for reference, together with an abstract of each standard, will be found in the Institution's Yearbook, price 15s.

This Addendum makes reference to the following British Standards:

- B.S. 449 Use of structural steel in building.
- B.S. 1140 General requirements for spot welding of light assemblies in mild steel.
- B.S. 1449 Steel plate, sheets and strip.
- B.S. 2645 Tests for use in the approval of welders.
- B.S. 2994 Cold rolled steel sections.
- PD 420 Recommendations on methods of protection against corrosion for light gauge steel used in building.

British Standards are revised, when necessary, by the issue either of amendment slips or of revised editions. It is important that users of British Standards should ascertain that they are in possession of the latest amendments or editions.

The following B.S.I. references relate to the work on this standard:
Committee reference B/20/6 Draft for comment CZ(B) 9465

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CO-OPERATING ORGANIZATIONS

The Technical Committee of the Building Divisional Council responsible for the preparation of this Addendum consists of representatives from the following Government departments and industrial organizations:

- Admiralty
- Air Ministry
- Association of Municipal Corporations
- *British Constructional Steelwork Association
- *British Iron and Steel Federation
- British Railways, The British Transport Commission
- British Welding Research Association
- Crown Agents for Oversea Governments and Administrations
- *D.S.I.R. Building Research Station
- District Surveyors' Association
- Institute of Builders
- Institute of Welding
- Institution of Civil Engineers
- Institution of Municipal Engineers
- *Institution of Structural Engineers
- *London County Council
- *Ministry of Works
- National Federation of Building Trades Employers
- Royal Institute of British Architects
- War Office

The Government department and industrial organizations marked with an asterisk in the above list, together with the following, were directly represented on the committee entrusted with the preparation of this British Standard:

Cold Rolled Sections Association

BRITISH STANDARD SPECIFICATION FOR THE USE OF STRUCTURAL STEEL IN BUILDING

Addendum No. 1

The Use of Cold Formed Steel Sections in Building

FOREWORD

The methods used for the design and construction of steel structures composed of cold formed steel sections differ in certain material respects from the methods set out in B.S. 449 for hot rolled steel sections and plates, and normalized tubular shapes. Since, however, this standard covers in great detail the general aspects of all steelwork design and construction, the present Addendum No. 1 to B.S. 449 : 1959, has been restricted to the presentation in full of those requirements which are considered essential in the use of cold formed steel sections for structural work.

Co-ordination with B.S. 449. In order to facilitate cross reference, the numbering of Parts in the present addendum is the same as in B.S. 449. The clauses in the addendum are, however, for convenience numbered consecutively beginning with 101. Those clauses of B.S. 449 which apply in their entirety and those which are amended or replaced are also specified.

SPECIFICATION

SCOPE

101. The present addendum relates to the use in building of Cold Formed Steel Sections, formed from plate, sheet and strip steel $\frac{1}{4}$ in thick and under. It is further specified that

- a. Sections shall be formed by cold rolling or pressing, or any other method in such a way as to avoid excessive work hardening.
- b. The inside radius of all bends shall be not less than t , the thickness of the material used, except for 180° bends of symmetrical Tee-sections (see B.S. 2994, 'Cold rolled steel sections').
- c. The proportions of structural members shall be within the range for which section constants are given in the tables of this addendum.
- d. It is assumed that all members shall be plain sections generally, with only