Code 1  Part A

Code for Fusion Welding and Gas Cutting in Building Construction

Formulated by American Welding Society Committee on Building Codes

Part A—Structural Steel Edition of 1930

AMERICAN WELDING SOCIETY
33 West 39th Street
New York City
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New York City
PREFACE
To 1928 Edition

The increase in the use of welding and gas cutting in the construction and equipment of buildings has brought to the American Welding Society a number of requests from municipal and other authorities for assistance in the formulation of regulations in the revision of existing Building Codes and the compilation of new codes where none is now in force, which will insure the safe and satisfactory use of the processes in the fabrication and erection of structural steel, piping and tankage in building construction.

In response to these requests a Committee on Building Codes was appointed by the President of the American Welding Society to undertake the codification of those practices in the application of fusion welding and gas cutting in building construction which have reached the stage where they may be properly standardized.

Recommended practices in the application of fusion welding and gas cutting to structural steel have been prepared by the Committee and formulated in the accompanying Part A "American Welding Society Code for Fusion Welding and Gas Cutting of Structural Steel," which part has been formally approved by the Society. This document has been so arranged that it may be embodied wholly or in part in existing municipal or other Building Codes. Care has been taken to be conservative in the formulation of this code. The various regulations are based on practices which have been demonstrated to be safe by experience, covering many full size destructive tests and numerous welded building structures erected throughout the country.

This being the first edition of the Code, it has been made as simple and as devoid of details as possible. The Committee is prepared, however, to assist in the interpretation of the Code or its applications. Communications should be addressed to the American Welding Society, 36 West Thirty-ninth Street, New York City. The Society reserves the privilege of publishing inquiries and answers in its Journal, with the name of the inquirer omitted.

Codes dealing with fusion welding and gas cutting, as applied, respectively, to piping and tankage in buildings, are being prepared and will appear as Parts B and C. Other codes will be undertaken as the need
for them arises. It is the purpose of these codes to serve and assist all interested in providing safe welded construction and to aid municipal and other authorities responsible for the preparation and enforcement of general building codes in the regulation of construction welding.

Following is the personnel of the Committee on Building Codes as at present constituted:

- E. A. Doyle (Chairman) The Linde Air Products Co.
- J. L. Anderson Air Reduction Sales Company.
- Gilbert D. Fish Westinghouse Electric & Manufacturing Co.
- F. T. Llewellyn U.S. Steel Corporation.
- H. H. Moss The Linde Air Products Co.
- James W. Owens Newport News Shipbuilding & Dry Dock Co.
- Edmund Vom Steeg General Electric Company.

The Committee is authorized at all times to call for advice and assistance from responsible members of National Technical and Regulatory bodies in the work of preparing Welding Codes and the Committee proposes to enlist such aid as the needs arise.

F. T. Llewellyn, President.
American Welding Society.

**PREFACE**

To 1930 Edition

The 1930 Code includes an Appendix whose use obviates the necessity of consulting the publications of the American Bureau of Welding cited in the 1928 edition, and the body of the Code has been reworded to correspond. The matter given in the Appendix is primarily a digest of the publications referred to, with additional explanatory matter where needed to make it more applicable to Code purposes.

No other revision has been made in the body of the Code except in the wording of:

Sec. 3, Par. 1—To limit the application of structural welding to a cited specification for base metal parts.

Sec. 4, Par. 1—to include a design criterion for fillet welds placed transverse to the direction of stress.

Sec. 5, Par. 5—to clarify the intention in this paragraph as regards beveling of butt joints which have only one edge beveled for welding, i.e. single bevel joints.

The publication of Codes for fusion welding will be supplemented by codes dealing with other welding processes which the Committee considers suitable when properly performed. As a part of this program it is now
planning to compile a code covering electric resistance welding, as applied to the shop fabrication of building parts.

The following is the personnel of the Committee on Building Codes as constituted June 30th, 1930.

F. T. Llewellyn, Chairman  U. S. Steel Corporation
J. L. Anderson  Air Reduction Sales Company
H. G. Balcom  Consulting Engineer
C. T. Bissell  National Board of Fire Underwriters
Frank Burton  Steel Joist Institute
E. A. Doyle  The Linde Air Products Co.
G. D. Fish  Westinghouse Electric & Manufacturing Co.
Grover A. Hughes  Truscon Steel Co.
J. C. Lincoln  Lincoln Electric Company
F. P. McKibben  General Electric Company
H. H. Moss  The Linde Air Products Co.
James W. Owens  Welding Engineering and Research Corp.
Edmund Vom Steeg  General Electric Company
C. C. Whittier  R. W. Hunt Company
Herbert A. Woolter  Swift Electric Welder Co.

E. A. Doyle, President,
American Welding Society.