The Committee on Design of Steel Building Structures of the Committee on Metals of the Structural Division of ASCE of the Structural Engineering Institute of ASCE was formed in 1981 with the express purpose of studying problems that are uniquely associated with the design of the overall structural steel building. Previous publications by this committee have been written to address specific design office problems that have not been addressed through concerted efforts of research and development.

As part of the continuing effort to bring useful information to the design community, the Committee on Design of Steel Building Structures recognized a need for a list of references covering a variety of subjects. Therefore, a compendium of selected, accurate, complete and available references on a wide variety of subjects regarding design of steel structures was assembled by collecting references that are used by the Committee members and their associates. The subjects were selected to cover a fairly wide range of subjects of interest to those practicing in a design office. The references were selected to be current, complete and easily available. As a general guideline, a maximum of three references were selected; hence some other very good references may not appear on the list. Therefore the absence of a reference from this list should not be taken as an unfavorable comment on that reference but rather a need to economize the listing.

This list is offered to the design community as a useful reference. It is expected that publication of this list will inspire responses from the design community, including added suggestions for references. Readers of this article are invited to offer comments on this list. Future discussion will allow these comments to be brought forth. Comments should be addressed to:

The Committee on Design of Steel Building Structures, Structural Engineering Institute, 1801 Alexander Bell Dr., Reston, VA 20191-4400 (email: sei@asce.org).

Anchor Rods and Embedments


Base Plates


Beams


Beam-Columns


Bearing Plates


Bolts


Bracing

Buckling

Cambering

Cladding Supports

Columns

Cold Formed Steel Structures

Composite Construction

Coped Beams

Crane Runways

Deflections

Diaphragms

Drift
Elevator Beams

Erection

Expansion Joints

Fatigue

Fire Protection

Fracture Mechanics/Brittle Fracture

Frame Stability

Framing Systems

Grid Beam System

Heat Straightening

Horizontally Curved Beams

Human Response to Floor Vibrations

Industrial Buildings

Inspection
- “Suggested Procedure for Inspecting and Upgrading Existing Structures,” Guide for the Design and
Instantaneous Center of Rotation

Jumbo Shapes

Knee Braces

Lamellar Tearing

Low Rise Buildings

Material Properties

Metric Conversion

Mill Practices

Old Steel Shapes

Painting

Parking Garages

Plastic Design

Plate Girders
Plates Structures

Pre-engineered Metal Buildings

Prying Action

Riveted Joints

Repair, Rehabilitation, and Restoration

Residual Stress

Rivets

Second Order Analysis

Seismic Design
- Recommended Lateral Force Requirements and Commentary, Structural Engineers Association of California (SEAC), Sacramento, California, (1996).

Semi-Rigid Frames and Connections

Serviceability
Stability


Staggered Truss Systems


Stainless Steel

- ASCE Specification for the Design of Stainless Steel Cold-Formed Structural Members, American Society of Civil Engineers (ASCE) Standard No. ASCE-8-90.

Stairs


Steel Deck


Steel Joists

- Standard Specifications, Load Tables, and Weight Tables for Steel Joists and Joist Girders, Steel Joist Institute, Myrtle Beach, South Carolina, (1994).

Steel Materials


Stressed Columns


Stress Corrosion Cracking


Tapered Members


Tension Members


Thermal Movement


Tolerances


Torsional Design

Trusses

Tubular Structures

Vibration

Weathering Steel

Web Openings

Welding

Wind Response
- “Wind Loading and Wind-Induced Structural Response,” a state-of-the-art report prepared by the Committee on Wind Effects, American Society of Civil Engineers (ASCE), New York, New York, (1987).

Acknowledgements

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- Charles J. Carter, American Institute of Steel Construction, Chicago, IL.
- Michael F. Engstrom, Nucor-Yamato Steel, Frederick, MD.
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- Lawrence G. Griffis, Walter P. Moore & Associates, Houston, TX.
- John L. Gross, National Institute of Standards and Technology, Gaithersburg, MD, Committee Chairman, 1996-present.
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