

RESOURCES FOR STEEL DESIGN

2nd Edition

By the ASCE Structural Engineering Institute's **Committee on Design of Steel Building Structures** of the Committee on Metals and AISC's **Steel Solutions Center**

In June of 2000, *Modern Steel Construction* published the "Compendium of Steel References for the Design Office." That compendium was the work of ASCE's Committee on Design of Steel Building Structures as part of a continuing effort to bring useful information to the design community. It also represented a unique level of cooperation between ASCE and AISC to bring information about structural steel buildings to the profession in a timely and useful way.

Overwhelming reader response to that first edition and the inherent, dynamic nature of technical publications has prompted this revised edition. The references have been updated to reflect their current editions, and new topics and references have been added. We have also included tips for finding references and out-of-date publications.

The Committee on Design of Steel Building Structures, a subcommittee of the ASCE Structural Engineering Institute's Committee on Metals, was formed in 1981 with the express purpose of studying problems that are uniquely associated with the design of structural steel buildings. As part of the continuing effort to bring useful information to the design community, the committee recognized a need for a list of references covering a variety of subjects. Therefore, the original compendium of current, complete, and easily available references was assembled by collecting references that were used by the committee members and their associates. The subjects, which related to the design of steel structures, were selected to cover a fairly wide range of topics of interest to those practicing in a design office.

This updated list includes new topics that were identified as important and new references that will add to the knowledge base and will help the designer answer questions that arise in normal practice. The absence of a reference from this list does not imply an unfavorable comment on that reference, but rather a need to economize the listing. Comments and suggestions for this compendium are encouraged and can be addressed to AISC's Steel Solutions Center at solutions@aisc.org.

This edition of the compendium is respectfully dedicated to the memory of Jack Stecich, a senior consultant for 23 years with Wiss, Janney, Elstner Associates, Inc. in Chicago. Jack was an ASCE Fellow and a member of the Committee on Design of Steel Building Structures. He spearheaded the coordination of the first edition of this compendium and was continuing with this update until his untimely death. ★

TITLE	SOURCE
Anchor Rods and Embedments	
<i>Steel Construction Manual</i> , 13th Edition, p.14-9.	AISC
<i>Steel Design Guide No. 7, Industrial Buildings—Roofs to Anchor Rods</i> , Second Edition. Fisher, J.M., 2004.	AISC
<i>Steel Design Guide No. 1, Column Base Plates</i> . DeWolf, J. T. and Ricker, D. T., 1990.	AISC
<i>Engineering Journal</i> , First Quarter 1985. "Multiple Bolt Anchorages: Method for Determining the Effective Projected Area of Overlapping Stress Cones," Marsh, M. L. and Burdette, E. G.	AISC
<i>Engineering Journal</i> , First Quarter 1985. "Anchorage of Steel Building Components to Concrete," Marsh, M. L. and Burdette, E. G.	AISC
<i>Engineering Journal</i> , Third Quarter 1989. "Some Practical Aspects of Column Base Plate Selection," Ricker, D. T.	AISC
ASTM F1554-99 <i>Standard Specification for Anchor Bolts, Steel, 36, 55, and 105-ksi Yield Strength</i> , ASTM International.	ASTM
Architecturally Exposed Structural Steel (AESS)	
<i>Code of Standard Practice for Steel Buildings and Bridges</i> (2005): Section 10.	AISC
National Steel Construction Conference Proceedings, 1993, Orlando. "Fabricating Architecturally Exposed Tube Structures," Kloiber, L.	AISC
<i>Modern Steel Construction</i> , May (2003). "Architecturally Exposed Structural Steel Supplement."	AISC
Base Plates	
<i>Steel Construction Manual</i> , 13th Edition, Part 14.	AISC
<i>Steel Design Guide No. 1, Column Base Plates</i> . DeWolf, J. T. and Ricker, D. T., 1990.	AISC
<i>Engineering Journal</i> , First Quarter 1999. "Beam-Column Base Plate Design—LRFD Method," Drake, R.M. and Elkin, S.J.	AISC
<i>Engineering Journal</i> , Second Quarter 2000. "Errata: Beam-Column Base Plate Design—LRFD Method," Drake, R.M. and Elkin, S.J.	AISC
<i>Engineering Journal</i> , Third Quarter 1989. "Some Practical Aspects of Column Base Plate Selection," Ricker, D. T.	AISC
Salmon, C. G. and Johnson, J. E. <i>Steel Structures: Design and Behavior</i> . Fourth Edition, Section 13.9. New York: Harper Collins College Publishers, 1996.	
<i>Steel Tips</i> , "Practical Design and Detailing of Steel Column Base Plates." Honeck, W.C. and Westphal, D., 1999.	SSEC
Beams and Girders	
<i>Steel Construction Manual</i> , 13th Edition, Part 3.	AISC
<i>Specification for Structural Steel Buildings</i> (March 9, 2005): Chapter F.	AISC
Salmon, C. G. and Johnson, J. E. <i>Steel Structures: Design and Behavior</i> , Fourth Edition, Chapters 11 and 13. New York: Harper Collins College Publishers, 1996.	
Geschwindner, L. F., Disque, R. O. and Bjorhovde, R. <i>Load and Resistance Factor Design of Steel Structures</i> , Chapter 7. Englewood Cliffs, NJ: Prentice-Hall, 1994.	OOP
Beam-Columns	
<i>Steel Construction Manual</i> , 13th Edition, Part 6.	AISC
<i>Specification for Structural Steel Buildings</i> (March 9, 2005): Chapter H.	AISC
<i>Engineering Journal</i> , Second Quarter 2000. "A New Approach for Design of Steel Beam-Columns," Aminmansour, A.	AISC
<i>Engineering Journal</i> , Third Quarter 1986. "Combined Shear and Tension Stresses," Goel, Subhash C.	AISC
Galambos, T. V., Ed. <i>Guide to Stability Design Criteria for Metal Structures</i> , Fifth Edition. New York: Wiley-Interscience, 1998.	
Brockenbrough, R.L. and Johnston, B.G. <i>USS Steel Design Manual</i> . Pittsburgh: United States Steel Corporation, 1981.	OOP
Sputo, T. "History of Steel Beam-Column Design." <i>Journal of Structural Engineering</i> , Vol. 119, No. 2 (1993): American Society of Civil Engineers, p. 547-557.	ASCE
Bearing Plates (see Base Plates)	
Blast Design and Analysis	
Mays, G. C. and Smith, P. D., Eds. <i>Blast Effects on Buildings: Design of Buildings to Optimize Resistance to Blast Loading</i> . Reston, VA: American Society of Civil Engineers (ASCE), 1995.	ASCE

see notes on p. 44

TITLE	SOURCE
Blast Design and Analysis (continued)	
Task Committee on Blast Resistant Design, Petrochemical Committee of the Energy Division. <i>Design of Blast Resistant Buildings in Petrochemical Facilities</i> . Reston, VA: American Society of Civil Engineers (ASCE), 1997.	ASCE
<i>Design of Structures to Resist Nuclear Weapons Effects</i> . ASCE Manuals and Reports, No. 42. Reston, VA: American Society of Civil Engineers (ASCE), 1985.	ASCE
Conrath, E. J., Krauthammer, T., Marchand, K. A. and Mlakar, P.F., Eds. <i>Structural Design for Physical Security: State of the Practice, Committee Report</i> . Reston, VA: American Society of Civil Engineers (ASCE), 1999.	ASCE
Cooper, P. W. <i>Explosives Engineering</i> . Wiley-VCH, 1997.	
Baker, W. E., Cox, P. A., Westine, P. S., Kulesz, J. J. and Strelow, R. A. <i>Explosion Hazards and Evaluation</i> . Elsevier Scientific Publishing Co., 1983.	OOP
Smith, P. D. and Hetherington, J.G. <i>Blast and Ballistic Loading of Structures</i> . Butterworth-Heinemann Ltd, 1994.	OOP
Protective Technology Center, www.ptc.psu.edu	
Block Shear	
<i>Specification for Structural Steel Buildings</i> (March 9, 2005): Section J4.	AISC
<i>Journal of Structural Engineering</i> , "Strength of Double-Row Bolted Web Connections." Ricles, J.M and Yura J.A. Reston, VA: American Society of Civil Engineers (ASCE), 1983.	ASCE
<i>Engineering Journal</i> , Fourth Quarter 1978. "Behavior of Bearing-Critical Double Angle Beam Connections," Birkenoe, P.C and Gilmore, M.I.	AISC
<i>Engineering Journal</i> , Second Quarter 1985. "New Design Criteria for Gusset Plates in Tension," Hardash, S.G. and Bjorhovde, R.	AISC
<i>Engineering Journal</i> , Fourth Quarter 2001. "AISC LRFD Rules for Block Shear in Bolted Connections—A Review," Kulak, G. L. and Grondin, G. Y.	AISC
Bolts	
<i>Steel Construction Manual</i> , 13th Edition, Part 7.	AISC
<i>Specification for Structural Joints Using ASTM A325 or A490 Bolts</i> , 2004.	AISC
<i>Steel Design Guide No. 17, High Strength Bolts: A Primer for Structural Engineers</i> . Kulak, G., 2002.	AISC
<i>Guide to Design Criteria for Bolted and Riveted Joints</i> , Second Edition, Kulak, G. L., Fisher, J. W. and Struik, J. H. A., 2001.	RCSC/AISC
<i>Engineering Journal</i> , First Quarter 1973. "Bolt Tension Control with a Direct Tension Indicator," Struik, J.H., Oyeledun, A.O. and Fisher, J.W.	AISC
<i>Engineering Journal</i> , Third Quarter 1991. "Reuse of A325 and A490 High-Strength Bolts," Bowman, M.D. and Betancourt, M.	AISC
<i>Structural Bolting Handbook</i> . Novi, MI: Steel Structures Technology Center, 1999.	SSTC
Bickford, J.H. and Nassar, S. <i>Handbook of Bolts and Bolted Joints</i> . New York: Marcel Dekker Inc., 1998.	
Bickford, J.H. <i>An Introduction to the Design and Behavior of Bolted Joints</i> . New York: Marcel Dekker Inc., 1995.	
Bracing	
<i>Steel Construction Manual</i> , 13th Edition, Part 13.	AISC
<i>Engineering Journal</i> , "Forces on Bracing Systems." Nair, R. S., First Quarter 1992.	AISC
<i>Engineering Journal</i> , "The Importance of Tension Chord Bracing." Fisher, J. M., Third Quarter 1983.	AISC
<i>Engineering Journal</i> , Fourth Quarter 1985. "A Unified Approach For Stability Bracing Requirements," Lutz, L. A. and Fisher, J. M.	AISC
<i>Engineering Journal</i> , First Quarter 2001. "Fundamentals of Beam Bracing." Yura, J.A.	AISC
<i>National Steel Construction Conference Proceedings</i> , 1996, Phoenix. "Design Guidelines for Continuous Beams Supporting Steel Joist Roof Structures," Rongoe, J.	AISC
Ricles, J.M. and Walsh, D. "Is Your Structure Suitably Braced?" Gainesville, FL: Structural Stability Research Council (SSRC), University of Florida, 1993.	SSRC
Buckling (see Stability)	
Cables and Catenary Structures	
<i>Structural Applications for Steel Cables for Buildings</i> , ASCE 19-96. Reston, VA: American Society of Civil Engineers (ASCE), 1997.	ASCE
Broughton, P. and Ndumbaro, P. <i>The Analysis of Cable and Catenary Structures</i> . Thomas Telford Services, Ltd., 1994.	
Irvine, M. <i>Cable Structures</i> . Dover Publications, 1992.	OOP
Scalzi, J.B., Podolny, Jr., W. and Teng, W.C. <i>Design Fundamentals of Cable Roof Structures</i> . United States Steel Corporation, 1969.	OOP
Cambering	
<i>Code of Standard Practice for Steel Buildings and Bridges</i> (2005): Section 6.4.	AISC
<i>Engineering Journal</i> , Fourth Quarter 1989. "Cambering Steel Beams," Ricker, D. T.	AISC
<i>National Steel Construction Conference Proceedings</i> , 1990, Kansas City. "Economic Use of Cambered Steel Beams," Larson, J. W., and Huzzard, R. K.	AISC
Kloiber, L.A. "Cambering of Steel Beams." <i>Steel Structures Proceedings</i> , Structures Congress 1989. San Francisco: American Society of Civil Engineers (ASCE), 1989.	ASCE
A6/A6M-04a. <i>Standard Specification for General Requirements for Rolled Structural Steel Bars, Plates, Shapes and Sheet Piling</i> , ASTM International.	ASTM
Castellated Beams	
<i>Steel Design Guide No. 2, Steel and Composite Beams with Web Openings</i> . Darwin, D., 1990.	AISC
<i>Engineering Journal</i> , Third Quarter 1964. "Castellated Beams—New Development," Boyer, J. P.	AISC
<i>Engineering Journal</i> , Third Quarter 1974. "Lateral Instability of Castellated Beams," Pattanayak, U. C. and Chesson, E. Jr.	AISC
<i>Engineering Journal</i> , Fourth Quarter 1971. "Simplified Plastic Analysis for Reinforced Web Holes," Redwood, R. G.	AISC
<i>Engineering Journal</i> , First Quarter 1972. "Tables for Plastic Design of Beams with Rectangular Holes," Redwood, R. G.	AISC

TITLE	SOURCE
Castellated Beams (continued)	
<i>Specification for Structural Steel Beams with Web Openings</i> , SEI/ASCE 23-97. Reston, VA: American Society of Civil Engineers (ASCE).	ASCE
Blodgett, O. <i>Design of Welded Structures</i> , Section 4.7. Cleveland: The James F. Lincoln Welding Foundation, 1996.	JFLF
Cladding Supports	
<i>Steel Design Guide No. 3, Serviceability Design Considerations for Low-Rise Buildings</i> , Second Edition. Fisher, J.M. and West, M.A., 2003.	AISC
<i>Steel Tips</i> , "Exterior Wall Connections to Steel Framing." Steel Committee of California, 1989.	SSEC
Coatings	
<i>Designing with Structural Steel—A Guide for Architects</i> , Second Edition, 2002.	AISC
<i>Proceedings of the AISC National Engineering Conference</i> , 1954. "Shop Paint and Painting Practice," Bigos, J., Smith, G.W., Ball, E.F. and Foehl, P.J.	AISC
<i>Steel Structures Painting Manual, Volume 1, Good Painting Practice</i> , Fourth Edition. Pittsburgh: Society for Protective Coatings, 2000.	SSPC
<i>Steel Structures Painting Manual, Volume 2, Systems & Specifications</i> , Eighth Edition. Pittsburgh: Society for Protective Coatings, 2005.	SSPC
<i>Lead-Based Paint Operations and Maintenance Work Practices Manual for Homes and Buildings</i> . National Institute of Building Sciences (NIBS), 1995.	NIBS
<i>Guide Specifications for Reducing Lead-Based Paint Hazards</i> . National Institute of Building Sciences (NIBS), 1995.	NIBS
Cold-Formed Steel Structures	
<i>Load and Resistance Factor Design (LRFD) Cold-Formed Steel Design Manual</i> . Washington D.C.: American Iron and Steel Institute (AISI), 2002.	AISI
<i>North American Specification for the Design of Cold-Formed Steel Structural Members</i> . Washington D.C.: American Iron and Steel Institute (AISI), 2001.	AISI
<i>Standard for Cold-Formed Steel Framing—General Provisions</i> . Washington D.C.: American Iron and Steel Institute (AISI), 2001.	AISI
<i>Standard for Cold-Formed Steel Framing—Truss Design</i> . Washington D.C.: American Iron and Steel Institute (AISI), 2001.	AISI
<i>Cold-Formed Steel Framing Design Guide</i> . Washington D.C.: American Iron and Steel Institute (AISI), 2001.	AISI
Yu, W. W. <i>Cold-Formed Steel Design</i> , Third Edition. New York: Wiley-Interscience, 2000.	
<i>Design: Cold-Formed Load Bearing Steel Systems and Masonry Veneer/Steel Stud Walls</i> , USACE 3-310. U.S. Army Corps of Engineers, 2005.	USACE
ANSI/ASCE 8, <i>Specification of Cold-Formed Stainless Steel Members</i> . Reston, VA: American Society of Civil Engineers (ASCE), 2003.	ASCE
American Iron and Steel Institute	AISI
Columns	
<i>Steel Construction Manual</i> , 13th Edition, Part 4.	AISC
Bjorhovde, R. "Compression Members," Chapter 2.3. <i>Constructional Steel Design—An International Guide</i> . Dowling, P. J., Harding, J. E. and Bjorhovde, R., Eds. London: Elsevier Applied Science, 1992.	
<i>Engineering Journal</i> , Second Quarter 1995. "A Practical Approach to the "Leaning Column," Geschwindner, L. F.	AISC
<i>Engineering Journal</i> , First Quarter 1988. "Columns: From Theory to Practice," Bjorhovde R.	AISC
<i>Engineering Journal</i> , First Quarter 1984. "Effect of End Restraint on Column Strength: Practical Applications," Bjorhovde R.,	AISC
<i>Engineering Journal</i> , Second Quarter 1971. "The Effective Length of Columns in Unbraced Frames," Yura, J. A.	AISC
<i>Engineering Journal</i> , Fourth Quarter 1972. "Discussions and Closure of the Effective Length of Columns in Unbraced Frames," Yura, J. A.	AISC
Galambos, T. V., Ed. <i>Guide to Stability Design Criteria for Metal Structures</i> , Fifth Edition. New York: Wiley-Interscience, 1998.	SSRC
Geschwindner, L. F., Disque, R. O. and Bjorhovde, R. <i>Load and Resistance Factor Design of Steel Structures</i> , Chapter 6. Englewood Cliffs, NJ: Prentice-Hall, 1994.	
Combined Loading (see Beam-Columns)	
Composite Construction	
<i>Steel Construction Manual</i> , 13th Edition, Parts 3 and 4.	AISC
<i>Specification for Structural Steel Buildings</i> (March 9, 2005): Chapter I.	AISC
Salmon, C. G. and Johnson, J. E. <i>Steel Structures, Design and Behavior</i> , Fourth Edition, Chapter 16. New York: Harper Collins College Publishers, 1996.	
Viest, I. M., Ed. <i>Composite Construction Design for Buildings</i> . New York: McGraw-Hill/ASCE, 1997.	
ANSI/ASCE 3-91 <i>Standard for the Structural Design of Composite Slabs</i> . Reston, VA: American Society of Civil Engineers (ASCE), 1991.	ASCE
ANSI/ASCE 9-91 <i>Standard Practice for the Construction and Inspection of Composite Slabs</i> . Reston, VA: American Society of Civil Engineers (ASCE), 1991.	ASCE
Connection Design – General	
<i>Steel Construction Manual</i> , 13th Edition, Parts 7-15.	AISC
<i>Specification for Structural Steel Buildings</i> (March 9, 2005): Chapter J.	AISC
<i>Steel Design Guide No. 13, Stiffening of Wide-Flange Columns at Moment Connections: Wind and Seismic Applications</i> . Carter, C.J., 1999.	AISC
<i>National Steel Construction Conference Proceedings</i> , 1990, Kansas City. "Box-Tube Connections; Choices of Joint Details and Their Influence on Costs." Post, J. W.	AISC
Bjorhovde, R., Brozzetti, J. and Colson, A. <i>Connections in Steel Structures I: Behavior, Strength and Design</i> . Elsevier Applied Science, 1988.	
Bjorhovde, R., Colson, A., Haaijer, G. and Stark, J.W.B. <i>Connections in Steel Structures II: Behavior, Strength and Design</i> . American Institute of Steel Construction (AISC), 1992.	

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TITLE	SOURCE
Connection Design – General (continued)	
Bjorhovde, R., Colson, A. and Zandonini, R. <i>Connections in Steel Structures III: Behavior, Strength and Design</i> . Pergamon, 1996.	OOP
Leon, R.T. and Easterling, W. S. <i>Connections in Steel Structures IV: Behavior, Strength and Design</i> . Chicago: American Institute of Steel Construction (AISC), 2002.	OOP
Tamboli, A.R. <i>Handbook of Structural Steel Connection Design and Details</i> . McGraw-Hill, 1999.	
Thornton, W.A., and Kane, T., "Connections," Section 5, <i>Structural Steel Designers Handbook</i> , Third Edition. Brockenbrough, R.L. and Merritt, F.S., Eds., New York: McGraw Hill, 1999.	
Connection Design – Eccentricity	
<i>Steel Construction Manual</i> , 13th Edition, pp. 7-6 and 8-9.	AISC
<i>Engineering Journal</i> , Fourth Quarter 1987. "Design for Eccentric and Inclined Loads on Bolt and Weld Groups," Iwankiw, N. R.	AISC
<i>Engineering Journal</i> , Fourth Quarter 1984. "Nonlinear Analysis of Eccentric Bolted Connections," Ruten-berg, A.	AISC
Crawford, S. F. and Kulak, G. L. "Eccentrically Loaded Bolted Connections." <i>Journal of the Structural Division</i> , American Society of Civil Engineers (ASCE), Vol. 97, No. ST3, March (1971): pp. 765-784.	ASCE
Kloiber, L. A. and Thornton, W. "Design Approaches to Shear Connections for Skewed Members in Steel Structures." <i>Proceedings of the Sessions Related to Steel Structures</i> , SEI/ASCE Structures Congress, Portland, pp. 282-289, 1997.	ASCE
Connection Design – Hollow Structural Sections	
<i>Steel Construction Manual</i> , 13th Edition, Part 10	AISC
<i>National Steel Construction Conference Proceedings</i> , 1989, Nashville. "Gaining Confidence with the Fabrication, Welding and Inspection of Tubular Connections," Post, J. W.	AISC
<i>Engineering Journal</i> , Fourth Quarter 2000. "Gusset Plate Connection to Round HSS Tension Members," Cheng, J.J.R. and Kulak, G.L.	AISC
<i>National Steel Construction Conference Proceedings</i> , 1990, Kansas City. "Box-Tube Connections; Choices of Joint Details and Their Influence on Costs," Post, J. W.	AISC
AWS D1.1 <i>Structural Welding Code—Steel</i> . Miami: American Welding Society (AWS), 2004.	AWS
Packer, J. A. and Henderson, J. E. <i>Hollow Structural Section Connections and Trusses: A Design Guide</i> . Willowdale, Canada: Canadian Institute of Steel Construction, 1997.	CISC
<i>Constructional Steel Design—An International Guide</i> , Chapter 3.5. Dowling, P. J., Harding, J. E. and Bjorhovde, R., Eds. London: Elsevier Applied Science, 1990.	
Connection Design – Moment (see also Seismic Design)	
<i>Steel Construction Manual</i> , 13th Edition, Part 12	AISC
<i>Engineering Journal</i> , First Quarter 1975. "Directional Moment Connections," Disque, R.O.	AISC
Tamboli, A.R. <i>Handbook of Structural Steel Connection Design and Details</i> . McGraw-Hill, 1999.	
Connection Design – Seated Connections	
<i>Steel Construction Manual</i> , 13th Edition, pp. 10-84	AISC
Connection Design – Shear Tab	
<i>Steel Construction Manual</i> , 13th Edition, Part 10	AISC
<i>Engineering Journal</i> , First Quarter 1989. "Design of Single Plate Shear Connections," Astaneh-Asl, A., Liu J. and McMullin, K.M.	AISC
Liu, J. and Astaneh-Asl, A. "Cyclic Testing of Simple Connections, Including Effects of the Slab." <i>Journal of Structural Engineering</i> , ASCE, Vol. 126, No. 1 (2000): pp. 32-39.	ASCE
Leon, R.T. and Easterling, W. S. <i>Connections in Steel Structures IV: Behavior, Strength and Design</i> . Chi-cago: American Institute of Steel Construction (AISC), 2002.	OOP
Astaneh-Asl, A., Liu J. and McMullin, K.M. "Behavior and Design of Single Plate Shear Connections," 58 (2002): pp.1121-1141.	Elsevier
Connection Design – Skewed Connections	
<i>Steel Construction Manual</i> , 13th Edition, p. 10-149.	AISC
<i>Engineering Journal</i> , Third Quarter 2001. "Design of Skewed Connections," Kloiber, L. and Thornton, W.A.	AISC
<i>National Steel Construction Conference Proceedings</i> , 1999, Toronto. "Connections for Skewed Beams," Kloiber, L. and Thornton, W.A.	AISC
Kloiber, L. A. and Thornton, W. "Design Approaches to Shear Connections for Skewed Members in Steel Structures." <i>Proceedings of the Sessions Related to Steel Structures</i> , SEI/ASCE Structures Congress, Portland (1997): pp. 282-289.	ASCE
Connection Design – Stiffened Seated Connections	
<i>Steel Construction Manual</i> , 13th Edition, p. 10-92.	AISC
<i>Engineering Journal</i> , Fourth Quarter 1999. "Design Criteria for Stiffened Seated Connections to Column Webs," Ellifritt, D. S. and Sputo, T.	AISC
<i>Engineering Journal</i> , First Quarter 2000. "Errata: Design Criteria for Stiffened Seated Connections to Column Webs," Ellifritt, D. S. and Sputo, T.	AISC
Connection Design – Wind	
<i>Steel Construction Manual</i> , 13th Edition, Part 11.	AISC
<i>Engineering Journal</i> , Second Quarter 1964. "Wind Connections with Simple Framing," Disque, R.O.	AISC
Coped Beams	
<i>Steel Construction Manual</i> , 13th Edition, p. 9-15.	AISC
Cheng, J.J., Yura, J.A. and Johnston, C.P. "Design and Behavior of Coped Beams." Austin, TX: Depart-ment of Civil Engineering, The University of Texas, 1984.	AISC
Corrosion (see also Galvanizing and Metallizing)	
"Interior Corrosion of Structural Steel Closed Sections," Association of Iron and Steel Engineers (AISE) Bulletin, No. 18. Pittsburgh: AISE, 1970.	AIST*
National Association of Corrosion Engineers	NACE
Corrosion Source, www.corrosionsource.com	
Society for Protective Coatings, www.sspc.org	

TITLE	SOURCE
Cranes and Crane Runways	
<i>Steel Design Guide No. 7, Industrial Buildings: Roofs to Column Anchorage</i> . Fisher, J.M., 2002.	AISC
<i>Engineering Journal</i> , Fourth Quarter 1982. "Tips for Avoiding Crane Runway Problems," Ricker, D. T.	AISC
<i>Engineering Journal</i> , Second Quarter 2002. "Design Concepts for Jib Cranes," Fisher, J.M. and Thomas, S.J.	AISC
<i>National Steel Construction Conference Proceedings</i> , 2000, Las Vegas. "New Fatigue Provisions for the Design of Crane Runway Girders," Fisher, J.M. and Van de Pas, J.P.	AISC
<i>National Steel Construction Conference Proceedings</i> , 1996, Phoenix. "Crane Runway Design," Van de Pas, J.P. and Fisher, J.M.	AISC
"Guide for the Design and Construction of Mill Buildings," Association of Iron and Steel Engineers (AISE) Technical Report, No. 13. Pittsburgh: AISE, 2003.	AIST*
<i>Specifications for Top Running and Under Running Single Girder Electric Traveling Cranes Utilizing Under Running Trolley Hoists</i> , CMAA Specification 74. McLean, VA: Construction Management Association of America, 2000 ed.	CMAA
Curved Beams and Girders	
<i>Steel Design Guide No. 9, Torsional Analysis of Structural Steel Members</i> . Seaburg, P.A. and Carter, C.J., 1997.	AISC
<i>Engineering Journal</i> , Second Quarter 1970. "Straight Element Grid Analysis of Horizontally Curved Beam Systems," Wiessman, H. A.	AISC
Brookhart, G. C. "Circular-Arc I-Type Girders." <i>Journal of the Structural Division</i> , American Society of Civil Engineers (ASCE), Vol. 93, ST6, December (1976): pp. 133-159.	ASCE
<i>Guide Specifications for Horizontally Curved Highway Bridges</i> . Washington, D.C.: American Association of State Highway and Transportation Officials (AASHTO), 2003.	AASHTO
Deck	
<i>Design Manual for Composite Decks, Form Decks and Roof Decks</i> , Publication No. 30. Fox River Grove, IL: Steel Deck Institute, 2001.	SDI
ANSI/ASCE 3-91 <i>Standard for the Structural Design of Composite Slabs</i> . Reston, VA: American Society of Civil Engineers (ASCE), 1991.	ASCE
Fisher, J. M., West, M. A. and Van De Pas, J. P. <i>Designing with Vulcraft Steel Joists, Joist Girders and Steel Deck</i> , 2nd Edition. Charlotte, NC: Nucor Corporation, 2002.	NUCOR
Steel Deck Institute	SDI
Deflections (see also Serviceability)	
<i>Steel Design Guide No. 3, Serviceability Design Considerations for Low-Rise Buildings</i> , Second Edition. Fisher, J.M. and West, M.A., 2003.	AISC
<i>Engineering Journal</i> , Third Quarter 1986. "Ponding of Concrete Floor Decks," Ruddy, J. L.	AISC
Design Drawings	
<i>Code of Standard Practice for Steel Buildings and Bridges</i> (2005): Section 3.	AISC
"National Practice Guidelines for the Structural Engineer of Record," Document #962, Council of Ameri-can Structural Engineers (CASE). Washington D.C.: ACEC Publications, 1997.	CASE
"National Practice Guidelines for Specialty Structural Engineers," Document #962-B, Council of Ameri-can Structural Engineers (CASE). Washington D.C.: ACEC Publications, 1996	CASE
Troup, E.W.J. "Contract Documents: Key to Quality Shop Drawings for Structural Steel." <i>Structure</i> , Spring (1997): National Council of Structural Engineers Associations, pp. 14-19.	NCSEA
"A Guideline Addressing Coordination and Completeness of Structural Construction Documents," Docu-ment #962-D, Council of American Structural Engineers (CASE). Washington D.C.: ACEC Publications, 2003	CASE
Design Loads (see Loads)	
Detailing Practices	
<i>Detailing for Steel Construction</i> , Second Edition, 2003.	AISC
Diaphragms	
Lutrell, L. D. <i>Steel Deck Institute (SDI) Diaphragm Design Manual</i> , Third Edition. Steel Deck Institute (SDI), 2004.	SDI
ANSI/ASCE 3-91 <i>Standard for the Structural Design of Composite Slabs</i> . Reston, VA: American Society of Civil Engineers (ASCE), 1991.	ASCE
"IMSA Steel Floor and Roof Deck." Evaluation Report, ER-2757. Whittier, CA: ICBO Evaluation Service, Inc., 2001.	ICBO/ICC
Drift	
<i>Steel Design Guide No. 3, Serviceability Design Considerations for Low-Rise Buildings</i> , Second Edition. Fisher, J.M. and West, M.A., 2003.	AISC
Task Committee on Drift Control of Steel Building Structures. "Wind Drift Design of Steel-Framed Build-ings: State of the Art Report." <i>Journal of Structural Engineering</i> , American Society of Civil Engineers (ASCE), Vol. 114, No. 9, September (1988): pp. 2085-2108.	ASCE
Economical Design Considerations	
<i>Modern Steel Construction</i> , April (2000). "Economy in Steel." Carter, C.J., Murray, T.M. and Thornton, W.A.: pp. 39-48.	AISC
Elevator Beams	
<i>Safety Code for Elevators and Escalators</i> , ANSI/ASME A17.1. New York: American National Standards Institute (ANSI) and American Society of Mechanical Engineers (ASME), 2005.	ASME
Committee on Design of Steel Building Structures. "Compendium of Design Office Problems." <i>Journal of Structural Engineering</i> , American Society of Civil Engineers (ASCE), Vol. 122, No. 2, February (1996): pp. 116-124.	ASCE
Erection	
<i>Code of Standard Practice for Steel Buildings and Bridges</i> (2005): Section 7.	AISC
<i>Steel Design Guide No. 10, Erection Bracing of Low Rise Structural Steel Buildings</i> . Fisher, J.M. and West, M.A., 1997.	AISC
<i>National Engineering Conference Proceedings</i> , 1995, San Antonio. "Erection Bracing of Structural Steel Frames," Fisher, J. M. and West, M. A.	AISC

see notes on p. 44

TITLE	SOURCE
Erection (continued)	
<i>Code of Federal Regulations</i> , Title 29, Part 1926, Subpart R. Washington D.C.: U.S. Government Printing Office, 2001.	OSHA
Expansion Joints	
<i>Steel Construction Manual</i> , 13th Edition, p. 2-31.	AISC
<i>Expansion Joints in Buildings: Federal Construction Council Technical Report No. 65</i> . Washington D.C.: National Academy of Sciences, National Research Council, 1974.	NAS
Fatigue	
<i>Steel Construction Manual</i> , 13th Edition, p. 2-33.	AISC
<i>Engineering Journal</i> , First Quarter 1977. "Fracture and Fatigue Control in Steel Structures," Rolfe, S.T.	AISC
<i>Engineering Journal</i> , Second Quarter 1996. "Fatigue Life of Double Angle Tension Members," Christopher, B.P., Cousins, T.E. and Stallings, J.M.	AISC
Fisher, J. W., Kulak, G. L. and Smith, I. F. C. <i>A Fatigue Primer for Structural Engineers</i> . National Steel Bridge Alliance (NSBA), 1998.	NSBA/AISC
Fisher, J. W. <i>Fatigue and Fracture in Steel Bridges</i> . New York: Wiley, 1984.	
Barsom, J. M., and Rolfe, S. T. <i>Fracture and Fatigue Control in Structures: Applications of Fracture Mechanics</i> , Third Edition. West Conshohocken, PA: American Society for Testing and Materials (ASTM), 1999.	ASTM
Fire Protection Engineering	
<i>Engineering Journal</i> , First Quarter 2000. "Design of Concrete-Filled Hollow Structural Steel Columns for Fire Endurance," Kodur, V. K. R. and Mackinnon, D. H.	AISC
<i>Engineering Journal</i> , Second Quarter 2001. "Restrained Fire Resistance Ratings in Structural Steel Buildings," Gewain, R. G. and Troup, E. W. J.	AISC
Lie, T. T. <i>Structural Fire Protection</i> . American Society of Civil Engineers (ASCE) Practice Manual, No. 78. New York: ASCE, 1992.	ASCE
<i>Standard Calculation Methods for Structural Fire Protection</i> , SEI/ASCE/SFPE 29-99. Reston, VA: Structural Engineering Institute of the American Society of Civil Engineers, 2003.	ASCE
<i>The SFPE Handbook of Fire Protection Engineering</i> , Third Edition. Bethesda, MD: Society of Fire Protection Engineers, 2002.	SFPE
<i>Fire Protection Handbook</i> , 2003 Edition. Quincy, MA: National Fire Protection Association, 2003.	NFPA
"Fire-Resistance-Rated Construction." <i>International Building Code</i> , Chapter 7. Falls Church, VA, 2003.	ICBO/ICC
Schleich, J., Bouillette, J., Hass, R., Preston, R. and Sandman, T. <i>International Fire Engineering Design for Steel Structures: State of the Art</i> . Brussels, Belgium: International Iron and Steel Institute (IISI), 1993.	IISI
Buchanan, A. H. <i>Structural Design for Fire Safety</i> . John Wiley and Sons Ltd., 2001.	
Wang, Y. C. <i>Steel and Composite Structures: Behavior and Design for Fire Safety</i> . Spoon Press, 2002.	
<i>World Trade Center Building Performance Study: Data Collection, Preliminary Observations, and Recommendations</i> , FEMA 403. Washington D.C.: Federal Emergency Management Agency (FEMA), 2002.	FEMA
<i>Fire-Safe Structural Steel: A Design Guide</i> . Washington D.C.: American Iron and Steel Institute (AISI), 1979.	AISI
Underwriters Laboratories Inc., www.ul.com	
National Fire Protection Association, www.nfpa.org	
Fire Resistant Design	
<i>Steel Construction Manual</i> , 13th Edition, Appendix 4.	AISC
<i>Steel Design Guide No. 19, Fire Resistance of Structural Steel Framing</i> , Ruddy, J.L., Mario, J.P., Loanneides, S.A., Alfawakhiri, F.	AISC
<i>Engineering Journal</i> , Second Quarter 2001. "Restrained Fire Resistance Ratings in Structural Steel Buildings," Gewain, R. G. and Troup, E. W. J.	AISC
<i>Designing Fire Protection for Steel Beams</i> . Washington D.C.: Subcommittee on Fire Technology of the Committee on Construction Codes and Standards, American Iron and Steel Institute (AISI), 1984.	AISI
<i>Designing Fire Protection for Steel Columns</i> , Third Edition. Washington, D.C.: Subcommittee on Fire Technology of the Committee on Construction Codes and Standards, American Iron and Steel Institute (AISI), 1980.	AISI
<i>Designing Fire Protection for Steel Trusses</i> , Second Edition. Washington, D.C.: Subcommittee on Fire Technology of the Committee on Construction Codes and Standards, American Iron and Steel Institute (AISI), 1991.	AISI
Boring, D. F., Spence, J.C. and Wells, W. G. <i>Fire Protection Through Modern Building Codes</i> , Fifth Edition. Washington D.C.: American Iron and Steel Institute (AISI), 1981.	AISI
<i>Standard Calculation Methods for Structural Fire Protection</i> , SEI/ASCE/SFPE 29-99. Reston, VA: Structural Engineering Institute of the American Society of Civil Engineers, 2003.	ASCE
<i>GA-600 Fire-Resistance Design Manual</i> . Washington D.C.: Gypsum Association, 2000.	
<i>Fire Resistance Directory, Volume I</i> . Northbrook, IL: Underwriters Laboratories Inc., 2001.	UL
<i>Directory of Listed Products</i> . Cortland, NY: Intertek Testing Services NA Inc., 2000.	ITSNA
<i>Directory of Listed Building Products, Materials and Assemblies, Volume II</i> . Elmhurst, TX: Omega Point Laboratories Inc., 2001.	OPL
Floor Vibration (see Vibration)	
Fracture	
<i>Steel Construction Manual</i> , 13th Edition, p. 2-33.	AISC
Fisher, J. W., Kulak, G. L. and Smith, I. F. C. <i>A Fatigue Primer for Structural Engineers</i> . National Steel Bridge Alliance (NSBA), 1998.	NSBA/AISC
<i>Engineering Journal</i> , First Quarter 1977. "Fracture and Fatigue Control in Steel Structures," Rolfe, S.T.	AISC
Fisher, J.W. <i>Fatigue and Fracture of Steel Bridges: Case Studies</i> . Hoboken, NJ: John Wiley and Sons, 1984.	
Barsom, J. M. and Rolfe, S. T. <i>Fracture and Fatigue Control in Structures</i> , Third Edition. West Conshohocken, PA: American Society for Testing and Materials (ASTM), 1999.	ASTM
Galvanizing and Metallizing (see also Corrosion)	
AWS D19.0 <i>Welding Zinc-Coated Steels</i> . Miami: American Welding Society (AWS), 1972.	AWS
"The Design of Products to be Hot-Dip Galvanized after Fabrication." Engelwood, CO: American Galvanizers Association (AGA), 2000.	AGA

TITLE	SOURCE
Galvanizing and Metallizing (continued)	
"Recommended Details for Galvanized Structures." Engelwood, CO: American Galvanizers Association (AGA), 2002.	AGA
"Duplex Systems: Painting over Hot-Dip Galvanized Steel." Engelwood, CO: American Galvanizers Association (AGA), 1998.	AGA
"Galvanizing for Corrosion Protection: A Specifier's Guide." Engelwood, CO: American Galvanizers Association (AGA), 2000.	AGA
"Service Life Chart for Hot-Dipped Galvanized Coatings." American Galvanizers Association (AGA).	AGA
Gusset Plates	
<i>Steel Construction Manual</i> , 13th Edition, Part 13.	AISC
<i>Seismic Provisions for Structural Steel Buildings</i> , 2002.	AISC
<i>Engineering Journal</i> , Third Quarter 1990. "Experimental Study of Gusseted Connections," Gross, J.L.	AISC
<i>Engineering Journal</i> , Second Quarter 1985. "New Design Criteria for Gusset Plates in Tension," Hardash, S.G. and Bjorhovde, R.	AISC
<i>Engineering Journal</i> , Third Quarter 1997. "The Behavior and Load-Carrying Capacity of Unstiffened Seated-Beam Connections," Chen, W.F., Bowman, M.D. and Yang, W.H.	AISC
Whitmore, R.E. "Experimental Investigation of Stresses in Gusset Plates" Knoxville, TN: The University of Tennessee, 1952.	AISC
Yam, M.C.H. and Cheng, J.J. "Behavior and Design of Gusset Plate Connections in Compression." <i>Journal of Constructional Steel Research</i> , Vol. 58, No. 5-8 (2002): p. 1143-1159.	Elsevier
<i>Steel Tips</i> , "Seismic Behavior and Design of Gusset Plates." Astaneh-Asl, A., 1998.	SSEC
Heat Straightening	
<i>Engineering Journal</i> , First Quarter 2001. "What You Should Know About Heat Straightening Repair of Damaged Steel," Avent, R.R. and Mukai, D.J.	AISC
<i>Modern Steel Construction</i> , February 1995. "Engineered Heat Straightening Comes of Age." Avent, R. R., p. 32-39.	AISC
<i>National Steel Construction Conference Proceedings</i> , 1988, Miami Beach. "Heat Straightening of Steel: From Art to Science," Avent, R. R.	AISC
<i>National Steel Construction Conference Proceedings</i> , 1995, San Antonio. "Engineered Heat Straightening," Avent, R. R.	AISC
<i>National Steel Construction Conference Proceedings</i> , 1992, Las Vegas. "Designing Heat Straightening Repairs," Avent, R.R.	AISC
Avent, R. R., Mukai, D. J. and Heymsfield, E. "Repair of Localized Damage in Steel by Heat Straightening." <i>Journal of Structural Engineering</i> , American Society of Civil Engineers (ASCE), Vol. 127, No. 10, October (2001): p. 1121-1128.	ASCE
Avent, R. R. "Heat Straightening: Fact and Fable." <i>Journal of Structural Engineering</i> , American Society of Civil Engineers (ASCE), Vol. 115, No. 11, November (1989): p. 2773-2793.	ASCE
<i>Heat-Straightening Repairs of Damaged Steel Bridges</i> , Report No. FHWA-IF-99-004. Federal Highway Administration, 1998.	FHWA
<i>North American Steel Construction Conference Proceedings</i> , 2001, Ft. Lauderdale. "Principles and Practice of Heat-Straightening Repair," Avent, R. R. and Verma, K.K.	AISC
Heavy Shapes	
<i>Specification for Structural Steel Buildings</i> (March 9, 2005): Section A3.1.	AISC
<i>Engineering Journal</i> , Second Quarter 1987. "Experience with Use of Heavy W-Shapes in Tension," Fisher, J. W. and Pense, A. W.	AISC
<i>Engineering Journal</i> , Third Quarter 1987. "Material Considerations in Structural Steel Design," Barsom, J. M.	AISC
<i>National Steel Construction Conference Proceedings</i> , 1988, Miami Beach. "Solutions for the Use of Jumbo Shapes," Bjorhovde, R.	AISC
<i>National Steel Construction Conference Proceedings</i> , 2000, Las Vegas. "Through-Thickness Strength of Column Flanges in Welded Moment Connections," Dexter, R.	AISC
Blodgett, O. and Miller, D.K. "The Challenge of Welding Jumbo Shapes." <i>Welding Innovation</i> , James F. Lincoln Arc Welding Foundation, Vol. X, No. 1, 1993.	JFLF
Higher Strength Steels	
Axmann, G. "Steels For Seismic Applications: ASTM A913 Grade 50 and Grade 65." Arcelor International America, 2002.	Arcelor
Hollow Structural Sections (HSS)	
(see also Connection Design – Hollow Structural Sections)	
<i>Steel Construction Manual</i> , 13th Edition.	AISC
<i>Specification for Structural Steel Buildings</i> (March 9, 2005).	AISC
<i>National Steel Construction Conference Proceedings</i> , 1993, Orlando. "Fabricating Architecturally Exposed Tube Structures," Kloiber, L.A.	AISC
Sherman, D. R. <i>Constructional Steel Design—An International Guide</i> , "Tubular Members." Chapter 2.4. Dowling, P. J., Harding, J. E. and Bjorhovde, R., Eds. London: Elsevier Applied Science, 1992.	
<i>Engineering Journal</i> , Third Quarter 1996. "Designing with Structural Tubing," Sherman, D.R.	AISC
Steel Tube Institute of North America, www.steeltubeinstitute.org	STI
Industrial Buildings	
<i>Steel Design Guide No. 7, Industrial Buildings—Roofs to Anchor Rods</i> , Second Edition. Fisher, J.M., 2004.	AISC
<i>Roof Framing with Cantilever Girders and Open Web Joists</i> . Willowdale, Canada: Canadian Institute of Steel Construction, 1989.	CISC
"Suggested Procedure for Inspecting and Upgrading Existing Structures." <i>Guide for the Design and Construction of Mill Buildings</i> . Association of Iron and Steel Engineers (AISE) Technical Report, No. 13, Supplement II. Pittsburgh: AISE, 1997.	AIST*
Inspection and Structural Testing	
<i>Specification for Structural Joints Using ASTM A325 or A490 Bolts</i> , 2004.	AISC

see notes on p. 44

TITLE	SOURCE
Inspection and Structural Testing (continued)	
"Suggested Procedure for Inspecting and Upgrading Existing Structures." <i>Guide for the Design and Construction of Mill Buildings</i> , Association of Iron and Steel Engineers (AISE) Technical Report, No. 13, Supplement II. Pittsburgh: AISE, 1997.	AIST*
Brock, D. S. and Sutcliffe, L. L., Jr. <i>Field Inspection Handbook: An On-the-Job Guide for Construction Inspectors, Contractors, Architects, and Engineers</i> , Second Edition. New York: McGraw-Hill, 1995.	
Campbell, H. H. III. "Nondestructive Inspection (NDI) and Responsibility." <i>Welding Innovation</i> , James F. Lincoln Arc Welding Foundation, Vol. XVIII, No.1 (2001): p. 11-16.	JFLF
AWS D1.1 <i>Structural Welding Code—Steel</i> , Chapter 6. Miami: American Welding Society (AWS), 2002.	AWS
Joists and Joist Girders	
<i>National Steel Construction Conference Proceedings</i> , 1996, Phoenix. "Design Guidelines for Continuous Beams Supporting Steel Joist Roof Structures." Rongoe J.	AISC
Fisher, J. M., West, M. A. and Van De Pas, J. P. <i>Designing with Vulcraft Steel Joists, Joist Girders and Steel Deck</i> , Second Edition. Charlotte, NC: Nucor Corporation, 2002.	NUCOR
<i>Steel Joist Institute 75-Year Manual</i> . Myrtle Beach, SC: Steel Joist Institute, 2003.	SJI
<i>Standard Specifications and Load Tables for Steel Joists and Joist Girders</i> , 41st Edition. Myrtle Beach, SC: Steel Joist Institute, 2002.	SJI
Brockenbrough, R. L. "Material Properties," Chapter 1.2, <i>Constructional Steel Design—An International Guide</i> . Dowling, P. J., Harding, J. E., and Bjorhovde, R., Eds. London: Elsevier Applied Science, 1992.	
<i>Roof Framing with Cantilever (Gerber) Girders and Open Web Joists</i> . Willowdale, Canada: Canadian Institute of Steel Construction (CISC), 1989.	CISC
Steel Joist Institute	SJI
Jumbo Shapes (see Heavy Shapes)	
Knee Braces	
<i>Engineering Journal</i> , Fourth Quarter 1983. "Analysis of Knee-Braced Portal Frames For Vertical Loading." Vilas, H. K. and Surtees, J. O.	AISC
<i>Engineering Journal</i> , Fourth Quarter 1984. "Analysis of Knee-Braced Portal Frames For Vertical Loading: Part 2—Columns of Unequal Stiffness." Vilas, H. K. and Surtees, J. O.	AISC
Lamellar Tearing	
<i>Steel Construction Manual</i> , 13th Edition, p. 2-34.	AISC
<i>Engineering Journal</i> , Third Quarter 1973. "Commentary on Highly Restrained Welded Connections."	AISC
<i>Engineering Journal</i> , Fourth Quarter 1973. "Quality Control in Design and Supervision Combine to Eliminate Lamellar Tearing." Thornton, C. H.	AISC
Kloiber, L. A. "The Fabrication and Erection of Minneapolis Convention Center." <i>Proceedings of the Sessions Related to Steel Structures</i> , Structures Congress 1989, San Francisco. Washington D.C.: American Society of Civil Engineers (ASCE), 1989, p. 165-174.	ASCE
Loads	
<i>Minimum Design Loads for Buildings and Other Structures</i> , SEI/ASCE 7. Reston, VA: American Society of Civil Engineers (ASCE), 2002.	ASCE
<i>Design Loads on Structures During Construction</i> , SEI/ASCE 37-02. Reston, VA: American Society of Civil Engineers (ASCE), 2002.	ASCE
Low Floor-to-Floor Heights	
<i>Steel Design Guide 14—Staggered Truss Framing Systems</i> . Wexler, N. and Lin, F.B., 2002.	AISC
<i>National Steel Construction Conference Proceedings</i> , 2001, Fort Lauderdale. "Development of the Composite Girder and Slab Construction Technology." Naccarato, P.A.	AISC
Low-Rise Buildings	
<i>Steel Design Guide 3—Serviceability Design Considerations for Low-Rise Buildings</i> , Second Edition. Fisher, J.M. and West, M.A., 2003.	AISC
<i>Steel Design Guide 10—Erection Bracing of Low-Rise Structural Steel Frames</i> . Fisher, J. M. and West, M. A., 1997.	AISC
<i>Steel Design Guide 5—Low- and Medium-Rise Steel Buildings</i> . Allison, H., 1991.	AISC
Making Steel (see Mill Practices)	
Material Properties	
<i>Steel Construction Manual</i> , 13th Edition, p. 2-20-2-37.	AISC
Bjorhovde, R., Engestrom, M.F., Griffis, L.G., Kloiber, L.A. and Malley, J.O. <i>Structural Steel Selection Considerations</i> . Reston, VA: ASCE; and Chicago: AISC, 2001.	ASCE
<i>Engineering Journal</i> , Third Quarter 1987. "Material Considerations in Structural Steel Design." Barsom, J. M.	AISC
Barsom, J. M. "Properties of Bridge Steels." <i>Highway Structural Design Handbook</i> , Vol. 1, Chapter 3, 1991.	AISC
Fruehan, R.J., Ed. <i>The Making, Shaping and Treating of Steel—Steel Making and Refining Volume</i> , 11th Edition. Pittsburgh: Association of Iron and Steel Engineers (AISE) Foundation, 1998.	AIST*
<i>Constructional Steel Design—An International Guide</i> , Chapters 1.1 and 1.2. Dowling, P. J., Harding, J. E. and Bjorhovde, R., Eds. London: Elsevier Applied Science, 1990.	
Dieter, G. <i>Mechanical Metallurgy</i> , Third Edition. New York: McGraw-Hill, 1986.	
Material Specification and Availability	
<i>Steel Construction Manual</i> , 13th Edition, p. 2-20.	AISC
Bjorhovde, R., Engestrom, M.F., Griffis, L.G., Kloiber, L.A. and Malley, J.O. <i>Structural Steel Selection Considerations: A Guide for Students, Educators, Designers, and Builders</i> . Reston, VA: ASCE and Chicago: AISC, 2001.	ASCE
<i>Modern Steel Construction</i> , January 2003. "Do you 992?" Zoruba, S. and Grubb, K., p. 43-44.	AISC
<i>Modern Steel Construction</i> , January 1999. "Are You Properly Specifying Materials? Part 1: Structural Shapes." Carter, C. J., p. 48-55.	AISC
<i>Modern Steel Construction</i> , February 1999. "Are You Properly Specifying Materials? Part 2: Structural Plates." Carter, C. J., p. 36-41.	AISC
<i>Modern Steel Construction</i> , March 1999. "Are You Properly Specifying Materials? Part 3: Fastening Products." Carter, C. J., p. 50-55.	AISC

TITLE	SOURCE
Material Specification and Availability (continued)	
<i>Modern Steel Construction</i> , Structural Steel Shapes. Annual printing in January.	AISC
<i>Modern Steel Construction</i> , Hollow Structural Sections. Annual printing in July.	AISC
AISC Steel Availability: www.aisc.org/availability	AISC
Metal Buildings	
<i>Metal Building Systems Manual</i> (previously titled <i>The Low-Rise Building Systems Manual</i>). Cleveland: Metal Building Manufacturers Association (MBMA), 2002.	MBMA
<i>Guide Specifications: Metal Building Systems</i> . Cleveland: Metal Building Manufacturers Association (MBMA), 1996.	MBMA
Lee, G.C., Ketter, R.L., and Hsu, T.L. <i>Design of Single Story Rigid Frames</i> . Cleveland: Metal Buildings Manufacturers Association (MBMA), 1981	MBMA/OOP
Newman, A. <i>Metal Building Systems: Design and Specifications</i> . New York: McGraw-Hill, 2003.	
Metric Conversion	
<i>Specification for Structural Steel Buildings</i> (March 9, 2005)	AISC
<i>Manual of Steel Construction—LRFD</i> , Metric Conversion of the Second Edition.	AISC
<i>Metric Design Guide</i> , General Services Administration, National Institute of Building Sciences (NIBS). Washington D.C.: NIBS, 1996.	NIBS
<i>Metric Guide for Federal Construction</i> , The Construction Subcommittee of the Metrication Operating Committee of the Interagency Council on Metric Policy, National Institute of Building Sciences (NIBS). Washington D.C.: NIBS, 1992.	NIBS
Mill Practices	
<i>Steel Construction Manual</i> , 13th Edition, p. 1-19.	AISC
Brockenbrough, R. L. "Material Properties," Chapter 1.2, <i>Constructional Steel Design—An International Guide</i> . Dowling, P. J., Harding, J. E. and Bjorhovde, R., Eds. London: Elsevier Applied Science, 1992.	
Fruehan, R.J., Ed. <i>The Making, Shaping and Treating of Steel—Steel Making and Refining Volume</i> , Eleventh Edition. Pittsburgh: Association of Iron and Steel Engineers (AISE), 1998.	AIST*
Old Steel Shapes	
<i>Steel Design Guide 15—AISC Rehabilitation and Retrofit Guide</i> . Brockenbrough, T.L., 2002.	AISC
AISC Search Utility for Structural Steel Shapes, Version 13.0H—Steel Sections Produced from 1873 to 2001 (2005).	AISC
OSHA (see Safety)	
Painting (see Coatings)	
Parking Structures	
<i>Innovative Solutions in Steel: Open-Deck Parking Structures</i> . Troup, E.W.J. and Cross, J.P., 2003.	AISC
<i>Steel Design Guide No. 18, Steel-Framed Open-Deck Parking Structures</i> . Churches, C., Troup, E. and Angeloff, C., 2003.	AISC
"Parking Structure Design: 2001," reprints from <i>Modern Steel Construction</i> , 2001.	AISC
"Parking Structure Design: 2002," reprints from <i>Modern Steel Construction</i> , 2002.	AISC
<i>Steel Tips</i> , "Notes on Design of Steel Parking Structures Including Seismic Effects." Flynn, L. J. and Astaneh-Asl A., 2001.	SSEC
"Building Tomorrow's Parking Structures Today with Steel Frames." <i>Architectural Record</i> , November (2002): p. 221-225.	ArchRec
Chrest, A.P. <i>Parking Structures: Planning, Design, Construction, Maintenance, and Repair</i> , Third Edition. New York: Kluwer Academic Publishers, 2001.	
Cross, J. P. "Building Tomorrow's Parking Structures Today." <i>Parking Today</i> , August 2001.	PRKTD
"Steel Parking Garages Making a Comeback." <i>Parking Today</i> , June 2001.	PRKTD
<i>Innovations in Steel: Parking Structures around the World</i> . International Iron and Steel Institute, 2001.	IISI
Troupe, E.W.J., "Steel Frame Car Parks—New England Style," <i>Steel Construction Annual</i> , New Hampshire Business Review, Manchester, New Hampshire, 1989.	AISC
Partially Restrained (PR) Connections (see Semi-Rigid [PR] Frames)	
Plastic Design	
<i>Specification for Structural Steel Buildings</i> (March 9, 2005): Appendix 1.	AISC
<i>Plastic Design in Steel: A Guide and Commentary</i> , Second Edition. New York: American Society of Civil Engineers (ASCE)—Welding Research Council: 1971.	ASCE
Disque, R. O. <i>Applied Plastic Design in Steel</i> . New York: Van Nostrand Reinhold Company, 1971.	
Beedle, L.S. <i>Plastic Design of Steel Frames</i> . New York: John Wiley and Sons, 1958.	OOP
Tall, L., Ed. <i>Structural Steel Design</i> , Second Edition. New York: Ronald Press Company, 1974.	OOP
Plate Girders (Built-up Beams)	
<i>Specification for Structural Steel Buildings</i> (March 9, 2005): Chapter G and Appendix D.	AISC
<i>Engineering Journal</i> , First Quarter 1987. "Plate Girder Design Using Load and Resistance Factor Design (LRFD)." Zahn, C. J.	AISC
Geschwindner, L. F., Disque, R. O. and Bjorhovde, R. <i>Load and Resistance Factor Design of Steel Structures</i> , Chapter 8. Englewood Cliffs, NJ: Prentice-Hall, 1994.	OOP
Salmon, C. G., and Johnson, J. E. <i>Steel Structures: Design and Behavior</i> , Fourth Edition, Chapter 11. New York: Harper Collins College Publishers, 1996.	
Galambos, T. V., Lin, F. J. and Johnston, B. G. <i>Basic Steel Design with Load and Resistance Factor Design (LRFD)</i> , Chapter 7. Upper Saddle River, NJ: Prentice-Hall, 1995.	
Plate Structures	
"Design of Plate Structures," Committee of Steel Plate Producers, American Iron and Steel Institute (AISI) with cooperation of Steel Plate Fabricators Association. Downers Grove, IL: AISI, 1992.	AISI
Steel Plate Fabricators Association, www.sdfa.org	
Ponding	
<i>Specification for Structural Steel Buildings</i> (March 9, 2005): Appendix 2.	AISC
<i>Engineering Journal</i> , Third Quarter 1986. "Ponding of Concrete Floor Decks," Ruddy, J. L.	AISC
Prying Action	
<i>Steel Construction Manual</i> , 13th Edition, p. 9-10.	AISC

see notes on p. 44

TITLE	SOURCE
Prying Action (continued)	
<i>Guide to Design Criteria for Bolted and Riveted Joints</i> , Second Edition. Kulak, G. L., Fisher, J. W. and Struik, J. H. A., 2001.	RCSC/AISC
<i>Engineering Journal</i> , Second Quarter 1985. "Prying Action - A General Treatment," Thornton, W. A.	AISC
<i>Engineering Journal</i> , Fourth Quarter 1992. "Strength and Serviceability of Hanger Connections," Thornton, W. A.	AISC
Quality Control/Quality Assurance (see also Inspection and Structural Testing; Welding Quality and Inspection)	
<i>Code of Standard Practice for Steel Buildings and Bridges</i> (2005); Section 8.	AISC
<i>Certification Standard for Steel Building Structures</i> , 2002.	AISC
AWS D1.1 <i>Structural Welding Code—Steel</i> . Miami: American Welding Society (AWS), 2002.	AWS
Repair, Rehabilitation and Restoration	
<i>Steel Design Guide No. 12, Modifications of Existing Welded Steel Moment Frame Connections for Seismic Resistance</i> . Gross, J.L., Engelhardt, M.D., Uang, C.M., Kasai, K. and Iwankiw, N.R., 1999.	AISC
<i>Steel Design Guide No. 15, AISC Rehabilitation and Retrofit Guide, A Reference for Historic Shapes and Specifications</i> . Brockenbrough, R.L., 2002.	AISC
AISC Search Utility for Structural Steel Shapes, Version 13.0H—Steel Sections Produced from 1873 to 2001 (2005).	AISC
<i>Engineering Journal</i> , First Quarter 1988. "Field Welding to Existing Steel Structures," Ricker, D. T.	AISC
<i>Engineering Journal</i> , Fourth Quarter 1990. "Reinforcing Steel Members and the Effects of Welding," Tide, R.H.R.	AISC
Rabun, J.S. <i>Structural Analysis of Historic Buildings</i> . New York: John Wiley & Sons, 2000.	
<i>Guideline for Structural Condition Assessment of Existing Buildings</i> , SEI/ASCE 11-99. Reston, VA: American Society of Civil Engineers (ASCE).	ASCE
Residual Stress	
Bjorhovde, R. "Compression Members," Chapter 2.3, <i>Constructional Steel Design—An International Guide</i> , Dowling, P. J., Harding, J. E. and Bjorhovde, R., Eds. London: Elsevier Applied Science, 1992.	
Galambos, T. V., Ed. <i>Guide to Stability Design Criteria for Metal Structures</i> , Fifth Edition. New York: Wiley-Interscience, 1998.	
Geschwindner, L. F., Disque, R. O. and Bjorhovde, R. <i>Load and Resistance Factor Design of Steel Structures</i> , Chapter 6. Englewood Cliffs, NJ: Prentice-Hall, 1994.	OOP
Rigid Frames	
Blodgett, O. <i>Design of Welded Structures</i> , 1996 Edition. Cleveland: The James F. Lincoln Welding Foundation, 1966.	JFLF
Galambos, T. V., Ed. <i>Guide to Stability Design Criteria for Metal Structures</i> , Fourth Edition. New York: Wiley-Interscience, 1988.	
Salmon, C. G. and Johnson, J. E. <i>Steel Structures, Design and Behavior</i> , Fourth Edition, Chapter 16. New York: Harper Collins College Publishers, 1996.	
Riveted Joints	
<i>Guide to Design Criteria for Bolted and Riveted Joints</i> , Second Edition. Kulak, G. L., Fisher, J. W. and Struik, J. H. A., 2001.	RCSC/AISC
<i>Steel Design Guide 15—AISC Rehabilitation and Retrofit Guide: A Reference for Historic Shapes and Specifications</i> . Brockenbrough, R.L., 2002.	AISC
Safety	
<i>Steel Construction Manual</i> , 13th Edition, p. 2-6.	AISC
<i>General Safety Rules for Structural Steel Fabricators</i> , 2004.	AISC
<i>Modern Steel Construction</i> , May 2001. "New OSHA Erection Rules: How They Effect Fabricators, Contractors and Engineers," Barger, B.L. and West, M.A.	AISC
<i>Code of Federal Regulations</i> , Title 29, Part 1926, Subpart R. Washington D.C.: U.S. Government Printing Office, 2001.	OSHA
Second Order Analysis	
<i>Engineering Journal</i> , Fourth Quarter 1976. "A Practical Method of Second Order Analysis—Part One, Pin Joint Systems," LeMessurier, W.J.	AISC
<i>Engineering Journal</i> , Second Quarter 1977. "A Practical Method of Second Order Analysis—Part Two, Rigid Frames," LeMessurier, W.J.	AISC
Chen, W. F. and Toma, S. <i>Advanced Analysis of Steel Frames Theory Software and Application</i> . Boca Raton, FL: CRC Press, 1994.	
Chen, W. F. and Sohal, I. <i>Plastic Design and Second-Order Analysis of Steel Frames</i> . New York: Springer Verlag, 1995.	
Galambos, T. V., Ed. <i>Guide to Stability Design Criteria for Metal Structures</i> , Fifth Edition. New York: Wiley-Interscience, 1998.	
Seismic Design	
<i>Seismic Provisions for Structural Steel Buildings including Supplement No. 1</i> , 2005	AISC
<i>Steel Design Guide 12, Modifications of Existing Welded Steel Moment Frame Connections for Seismic Resistance</i> . Gross, J.L., Engelhardt, M.D., Uang, C.M., Kasai, K. and Iwankiw, N.R., 1999.	AISC
<i>Steel Design Guide 16, Flush and Extended Multiple-Row Moment End-Plate Connections</i> . Murray, T.M. and Shoemaker, W.L., 2002.	AISC
<i>Engineering Journal</i> , Third Quarter 1999. "Seismic Performance and Design of Bolted Steel Moment-Resisting Frames," Astaneh-Asl, A.	AISC
<i>Engineering Journal</i> , First Quarter 1997. "Ultimate Strength Considerations for Seismic Design of the Reduced Beam Section (Internal Plastic Hinge)," Iwankiw, N.	AISC
<i>Engineering Journal</i> , Third Quarter 1999. "Seismic Performance and Design of Bolted Steel Moment-Resisting Frames," Astaneh-Asl, A.	AISC
<i>Engineering Journal</i> , First Quarter 2000. "Design of Welded Steel Moment Connections Using Truss Analogy," Goel, S.C., Lee, K.H. and Stojadinovic, B.	AISC
<i>Engineering Journal</i> , Third Quarter 2000. "Panel Zone Yielding in Steel Moment Connections," El-Tawil, S.	AISC
<i>Recommended Lateral Force Requirements and Commentary</i> . Sacramento, CA: Structural Engineers Association of California (SEAOC), 1996.	SEAOC

TITLE	SOURCE
Seismic Design (continued)	
Englekirk, R. <i>Steel Structures Controlling Behavior Through Design</i> . New York: John Wiley & Sons, 1994.	
Naeim, F., Ed. <i>The Seismic Design Handbook</i> . New York: Van Nostrand Reinhold Company, 1989.	
<i>NEHRP Recommended Provisions for Seismic Regulations for New Buildings</i> . Washington D.C.: Federal Emergency Management Agency, 2000.	FEMA
FEMA-302— <i>Recommended Seismic Evaluation for New Buildings and Other Structures</i> . Federal Emergency Management Agency, 1997.	FEMA
FEMA-303— <i>Commentary to Recommended Seismic Evaluation for New Buildings and Other Structures</i> . Federal Emergency Management Agency, 1997.	FEMA
FEMA-350— <i>Recommended Seismic Criteria for New Steel Moment-Frame Buildings</i> . Federal Emergency Management Agency, 2000.	FEMA
FEMA-351— <i>Recommended Specifications and Quality Assurance Guidelines for Steel Moment-Frame Construction for Seismic Applications</i> . Federal Emergency Management Agency, 2000.	FEMA
FEMA-352— <i>Recommended Post-Earthquake Evaluation and Repair Criteria for Welded Steel Moment-Frame Buildings</i> . Federal Emergency Management Agency, 2000.	FEMA
FEMA-353— <i>Recommended Seismic Evaluation and Upgrade Criteria for Existing Welded Steel Moment-Frame Buildings</i> . Federal Emergency Management Agency, 2000.	FEMA
<i>Steel Tips</i> , "Design of Reduced Beam Section (RBS) Moment Frame Connections." Moore, K.S., Malley, J.O. and Engelhardt, M.D., 1999.	SSEC
<i>Steel Tips</i> , "Large Seismic Steel Beam-to-Column Connections." Popov, E.P. and Takhirov, S.M., 2001.	SSEC
<i>Steel Tips</i> , "Use of Deep Columns in Special Steel Moment Frames." Shen, J.H.J., Astaneh-Asl, A. and McCallen, D.B., 2002.	SSEC
<i>Steel Tips</i> , "Cost Considerations for Steel Moment Frame Connections." Hassett, P.M. and Putkey, J.J., 2002.	SSEC
<i>Earthquake Spectra</i> . Richmond, CA: Earthquake Engineering Research Institute, Vol. 16, 2000.	EERI
Hanson, R.D. and Soong, T.T. <i>Seismic Design with Supplemental Energy Dissipation Devices</i> . Richmond, CA: Earthquake Engineering Research Institute, 2001.	EERI
Iwankiw, N. and Zoruba, S. "Steel Moment Frames: Resolution of Recent Seismic Detailing and Material Shape Issues." <i>Journal of Constructional Steel Research</i> , Vol. 58, No. 5-8 (2002): p. 495-510.	Elsevier
Gilton, C.C. and Uang, C.M. "Cyclic Response and Design Recommendations of Weak-Axis Reduced Beam Section Moment Connections." <i>Journal of Structural Engineering</i> , American Society of Civil Engineers (ASCE), Vol. 128, No. 4, April (2002): p. 452-463.	ASCE
Semi-Rigid (PR) Frames and Connections	
<i>Steel Design Guide 8, "Partially Restrained Composite Connections."</i> Leon, R.T., Hoffman, J.J. and Staeger, T.S., 1996.	AISC
<i>Engineering Journal</i> , First Quarter 1999. "Semi-Rigid Frame Design Methods for Practicing Engineers," Christopher, J. E. and Bjorhovde, R.	AISC
<i>Engineering Journal</i> , Third Quarter 1997. "The Restraint Girder System—Local Web Buckling Behavior and Design Considerations," Wexler, N. and Lin, F.B.	AISC
<i>Engineering Journal</i> , Second Quarter 1993. "Composite Girders with Partial Restraints: A New Approach," Wexler, N.	AISC
Chen, W. F. and Toma S. <i>Advanced Analysis of Steel Frames Theory, Software, and Applications</i> . Boca Raton, FL: CRC Press, Boca Raton, 1994.	
Chen, W. F., Goto, Y. and Liew, J. Y. R. <i>Stability Design of Semi-Rigid Frames</i> . New York: John Wiley & Sons, 1995.	
Bjorhovde, R., Brozzetti, J. and Colson, A. <i>Connections in Steel Structures: Behavior, Strength and Design</i> . London: Elsevier Applied Science, 1988.	
Bjorhovde, R., Colson, A., Haaijer, G. and Stark, J. W. B. <i>Connections in Steel Structures II: Behavior, Strength and Design</i> . Chicago: AISC, 1992.	
Bjorhovde, R., Colson, A. and Zandonini, R. <i>Connections in Steel Structures III: Behavior, Strength and Design</i> . Oxford, England: Pergamon/Elsevier Science, 1996.	
Leon, R.T. and Easterling, W.S. <i>Connections in Steel Structures IV: Behavior, Strength and Design</i> . Chicago: AISC, 2002.	AISC
Serviceability	
<i>Steel Design Guide 3, Serviceability Design Considerations for Low-Rise Buildings</i> , Second Edition. Fisher, J.M. and West, M.A., 2003.	AISC
<i>Engineering Journal</i> , First Quarter 1993. "Serviceability Limit States Under Wind Load," Griffis, L.G.	AISC
<i>Engineering Journal</i> , First Quarter 1989. "Serviceability Guidelines for Steel Structures," Ellingwood, B. R.	AISC
<i>National Steel Construction Conference Proceedings</i> , 1990, Kansas City. "Serviceability Criteria for Load and Resistance Factor Design (LRFD) Composite Floors," Leon, R. T.	AISC
Shape Availability (see Material Specification and Availability)	
Shear Lag	
<i>Engineering Journal</i> , Third Quarter 1993. "Shear Lag Effects in Steel Tension Members," Easterling, W. S. and Gonzalez Giroux, L.	AISC
<i>Engineering Journal</i> , Fourth Quarter 2000. "Gusset Plate Connection to Round HSS Tension Members," Cheng, J.J.R. and Kulak, G.L.	AISC
<i>Engineering Journal</i> , Third Quarter 2000. "Examination of AISC LRFD Shear Lag Design Provisions," Kirkham, W.J. and Miller, T.H.	AISC
Chesson, E. and Munse, W.H. "Riveted and Bolted Joints: Truss-Type Tensile Connections." <i>Journal of the Structural Division</i> , American Society of Civil Engineers (ASCE), Vol. 89, ST1, February (1963): p. 67-106.	ASCE
Munse, W.H. and Chesson, E. "Riveted and Bolted Joints: Net Section Design." <i>Journal of the Structural Division</i> , American Society of Civil Engineers (ASCE), Vol. 89, ST1, February (1963): p. 107-126.	ASCE
Shear Walls (see Steel Plate Shear Walls)	
Single Angle Members	
<i>Specification for Structural Steel Buildings</i> (March 9, 2005)	AISC

see notes on p. 44

TITLE	SOURCE
Single Angle Members (continued)	
<i>Engineering Journal</i> , Third Quarter 2001. "Tables for the Design Strength of Eccentrically-Loaded Single Angle Struts," Sakla, S. S. S.	AISC
<i>Engineering Journal</i> , Second Quarter 1996. "A Closer Examination of the Axial Capacity of Eccentrically-Loaded Single Angle Struts," Lutz, L. A.	AISC
Special Truss Moment Frames	
<i>Engineering Journal</i> , Fourth Quarter 1997. "Steel Moment Frames with Ductile Girder Web Opening," Goel, S. C., Stojadinovic, B. and Leelataviwat, S.	AISC
<i>National Steel Construction Conference Proceedings</i> , 1994, Pittsburgh. "Seismic Behavior of Special Truss Moment Frames," Goel, S.C. and Itani, A.M.	AISC
Goel, S.C., Rai, D.C. and Basha, H.S. "Special Truss Moment Frames." Research Report UMCEE 98-44. Ann Arbor, MI: Department of Civil and Environmental Engineering, University of Michigan, 1998.	CEE UM
Stability (see also Bracing)	
<i>Steel Construction Manual</i> , 13th Edition, p. 2-13.	AISC
<i>Specification for Structural Steel Buildings</i> (March 9, 2005)	AISC
<i>National Steel Construction Conference Proceedings</i> , 1988, Miami. "Behavior and Simple Solutions to Stability Problems in the Design Office," Nair, R. S.	AISC
Galambos, T. V., Ed. <i>Guide to Stability Design Criteria for Metal Structures</i> , Fifth Edition. New York: Wiley-Interscience, 1998.	
Timoshenko, S. P. and Gere, J. M., <i>Theory of Elastic Stability</i> , Second Edition. New York: McGraw-Hill Book Company, 1961.	
Chen, W. F. and Lui, E. M. <i>Structural Stability Theory Implementation</i> . London: Elsevier Applied Science, 1997.	
Chen, W. F. and Toma, S. <i>Advanced Analysis of Steel Frames Theory, Software and Applications</i> . Boca Raton, FL: CRC Press, 1994.	
Bleich, F. <i>Buckling Strength of Metal Structures</i> . New York: McGraw-Hill Book Company, 1952.	OOP
Galambos, T. V., Ed. <i>Guide to Stability Design Criteria for Metal Structures</i> , Fifth Edition. New York: Wiley-Interscience, 1998.	
Chen, W.F. and Lui, E.W. <i>Stability Design of Steel Frames</i> . Boca Raton, FL: CRC Press, 1991, p. 350.	
Staggered Truss	
<i>Steel Design Guide 14, Staggered Truss Framing Systems</i> . Wexler, N. and Lin, F.B., 2002.	AISC
<i>Engineering Journal</i> , First Quarter 1983. "Calculation of Wind Drift in Staggered-Truss Buildings," Lefler, R. E.	AISC
<i>Engineering Journal</i> , Third Quarter 1986. "Design Solutions Utilizing the Staggered-Steel Truss System," Cohen, M. P.	AISC
<i>Engineering Journal</i> , Fourth Quarter 1971. "The Staggered Truss System—Structural Considerations," Scalzi, J. B.	AISC
"Staggered Truss Framing Systems For High-Rise Buildings," United States Steel (USS) Technical Report ADUSS 27-5227-02. Pittsburgh: US Steel, 1972.	AISC
"The Staggered Truss System—Design Considerations," United States Steel (USS) Technical Report ADUSS 27-7165-01. Pittsburgh: US Steel, 1977.	AISC
Stainless Steel	
<i>ASCE Specification for the Design of Stainless Steel Cold-Formed Structural Members</i> , American Society of Civil Engineers (ASCE) Standard No. ASCE-8-90. Reston, VA: ASCE, 1990.	ASCE
Pickering, F. B., Ed. <i>The Metallurgical Evolution of Stainless Steels</i> . Metals Park, OH: American Society for Metals, 1979.	OOP
AWS D1.6 <i>Structural Welding Code—Stainless Steel</i> . Miami: American Welding Society (AWS), 1999.	AWS
Specialty Steel Industry of North America, www.ssina.com	
Nickel Development Institute	NIDI
Stairs	
<i>Metal Stairs Manual</i> , Fifth Edition. Chicago: National Association of Architectural Metal Manufacturers, 1992.	NAAMM
<i>Stock Components for Architectural Metal Work</i> , Catalog 18. Carlstadt, NJ: Julius Blum & Company.	JB&C
<i>Code of Federal Regulations</i> , Title 29, Part 1926, Paragraphs 1926.500, 1926.1052, 1926.1053. Washington D.C.: U.S. Government Printing Office, 2001.	OSHA
National Association of Architectural Metal Manufacturers	NAAMM
Steel Plate Shear Walls	
<i>Steel Tips</i> , "Seismic Behavior and Design of Steel Shear Walls." Astaneh-Asl, A. and Structural Steel Education Council, 2001.	SSEC
<i>Steel Tips</i> , "Seismic Behavior and Design of Composite Steel Plate Shear Walls." Astaneh-Asl, A. and Structural Steel Education Council, 2002.	SSEC
<i>North American Steel Construction Conference Proceedings</i> , 2002, Seattle. "Cyclic Behavior of Steel Shear Wall Systems," Astaneh-Asl, A. and Zhao, Q.	AISC
<i>National Steel Construction Conference Proceedings</i> , 1999, Toronto. "Behavior and Design of Steel Plate Shear Walls," Kulak, G.L., Kennedy, D.J.L., Driver, R.G. and Medhekar, M.	AISC
<i>National Steel Construction Conference Proceedings</i> , 1990, Kansas City. "Steel Plate Shear Walls," El-gaaly, M. and Caccese, V.	AISC
<i>Modern Steel Construction</i> , September 2001. "Steel Plate Shear Walls Now Performing on the Main Stage." Driver, R.G. and Grondin, G.Y., p. 48-58.	AISC
Stepped Columns	
<i>Engineering Journal</i> , Third Quarter 1995. "Effective Length of Uniform and Stepped Crane Columns," Lui, E. M. and Sun, M.	AISC
<i>Engineering Journal</i> , Fourth Quarter 1980. "Calculation of Effective Length of Stepped Columns," Agrawal, K. M. and Stafiej, A. P.	AISC
<i>Engineering Journal</i> , Fourth Quarter 1972. "Calculation of Effective Lengths and Effective Slenderness Ratios of Stepped Columns," Anderson, J. P. and Woodward, J. H.	AISC
<i>Engineering Journal</i> , First Quarter 1997. "Load and Resistance Factor Design and Analysis of Stepped Crane Columns in Industrial Buildings," MacCrimmon, R. A. and Kennedy, D. J. L.	AISC

TITLE	SOURCE
Stepped Columns (continued)	
<i>Engineering Journal</i> , Second Quarter 2001. "Design of Mill Building Columns Using Notional Loads," Schmidt, J. A.	AISC
"Guide for the Design and Construction of Mill Buildings," Association of Iron and Steel Engineers (AISE) Technical Report, No. 13. Pittsburgh: AISE, 2003.	AIST*
Schmidt, J. A. "Design of Steel Columns in Unbraced Frames Using Notional Loads." <i>Practice Periodical on Structural Design and Construction</i> , American Society of Civil Engineers (ASCE), Vol. 4, No.1, February (1999): p. 24-28.	ASCE
Stiffeners	
<i>Specification for Structural Steel Buildings</i> (March 9, 2005): Chapter G.	AISC
<i>Steel Design Guide No. 13, Stiffening of Wide-Flange Columns at Moment Connections: Wind and Seismic Applications</i> . Carter, C.J., 1999.	AISC
Clean Columns Version 4.0	AISC
Storage Racks	
<i>Specifications for the Design, Testing and Utilization of Industrial Steel Storage Racks</i> . Rack Manufacturers Institute (RMI), 2005.	RMI
Surface Preparation (see Coatings)	
Tall Building Design and Performance	
<i>Engineering Journal</i> , Third Quarter 1986. "A Modified Tube Concept for Tall Buildings," Nair, R.S.	AISC
<i>Engineering Journal</i> , Fourth Quarter 1998. "Belt Trusses and Basements as "Virtual" Outriggers for Tall Buildings," Nair, R.S.	AISC
<i>Engineering Journal</i> , First Quarter 2000. "Modeling of Support Conditions at the Bases of Tall Buildings," Nair, R.S.	AISC
Taranath, B.S. <i>Steel, Concrete, and Composite Design of Tall Buildings</i> , Second Edition. McGraw-Hill Professional Publishing, 1997.	
<i>Developments in Tall Buildings</i> , Council on Tall Buildings and Urban Habitat. New York: Nostrand Reinhold, 1983.	OOP
Beedle, L.S., Ed. "Structural Design of Tall Steel Buildings." <i>Monograph on Planning and Design of Tall Buildings</i> , Vol. SB. Reston, VA: American Society of Civil Engineers (ASCE), 1979.	ASCE
Tension Members	
<i>Steel Construction Manual</i> , 13th Edition, Part 5.	AISC
McGuire, W. <i>Steel Structures</i> . Englewood Cliffs, NJ: Prentice-Hall, 1968.	OOP
Geschwindner, L. F., Disque, R. O. and Bjorhovde, R. <i>Load and Resistance Factor Design of Steel Structures</i> , Chapter 5. Englewood Cliffs, NJ: Prentice-Hall, 1994.	OOP
Thermal Movement (see Expansion Joints)	
Tolerances	
<i>Steel Construction Manual</i> , 13th Edition, p. 1-117.	AISC
<i>Code of Standard Practice for Steel Buildings and Bridges</i> , 2005.	AISC
ASTM A6/A6M-05e1, <i>Standard Specification for Rolled Structural Steel Bars, Plates, Shapes and Sheet Piling</i> , ASTM International.	ASTM
Torsional Design	
<i>Steel Construction Manual</i> , 13th Edition, Part 6.	AISC
<i>Steel Design Guide 9—Torsional Analysis of Structural Steel Members</i> . Seaburg, P.A. and Carter, C.J., 1996.	AISC
Salmon, C. G., and Johnson, J. E. <i>Steel Structures: Design and Behavior</i> , Fourth Edition, Chapter 8. New York: Harper Collins College Publishers, 1996.	
Brockenbrough, R.L. and Johnston, B.G. <i>USS Steel Design Manual</i> , Chapter 7. Pittsburgh: United States Steel Corporation, 1981.	OOP
Trusses	
<i>Steel Construction Manual</i> , 13th Edition, Part 13.	AISC
<i>Engineering Journal</i> , Fourth Quarter 1988. "Secondary Stresses in Trusses," Nair, R. S.	AISC
Tubular Structures (see Hollow Structural Sections [HSS])	
Vibration	
<i>Steel Design Guide 11—Floor Vibrations Due to Human Activity</i> . Murray, T. M., Allen, D. E. and Ungar, E. E., 1997.	AISC
<i>Engineering Journal</i> , Fourth Quarter 1998. "Experimental Implementations of Active Control to Reduce Annoying Floor Vibrations," Hanagan, L.M. and Murray, T.M.	AISC
<i>Engineering Journal</i> , Third Quarter 2002. "Dynamic Amplitude Prediction for Ballroom Floors," Hanagan, L.M.	AISC
Allen, D. E., Onysko, D.M. and Murray, T. M. <i>Design Guide 1: Minimizing Floor Vibration</i> . Redwood City, CA: Applied Technology Council (ATC), 1999.	ATC
<i>Modern Steel Construction</i> , August 1998. "Floor Vibrations and the Electronic Office." Murray, T.M., p. 24-28.	AISC
<i>Modern Steel Construction</i> , March 2001. "Tips for Avoiding Office Building Floor Vibrations." Murray, T.M., p. 24-31.	AISC
Murray, T.M. "Floor Vibrations: Tips for Designers of Office Buildings." <i>Structure Magazine</i> . Chicago: NCSEA, 2000.	NCSEA
Weathering Steel	
"Uncoated Weathering Steel Bridges." <i>Highway Structures Design Handbook</i> , Second Edition, Vol. 1, Chapter 9, 1993.	AISC
"Uncoated Weathering Steel In Structures." FHWA Technical Advisory T5140.22. Federal Highway Administration, 1989.	FHWA
A588/A588M-05 <i>Standard Specification for High-Strength Low-Alloy Structural Steel with 50 ksi [345 MPa] Minimum Yield Point to 4-in. [100-mm] Thick</i> , ASTM International.	ASTM
Web Openings	
<i>Steel Design Guide 2—Steel and Composite Beams with Web Openings</i> . Darwin, D., 1990.	AISC

see notes on p. 44

TITLE	SOURCE
Web Openings (continued)	
"Proposed Specification for Structural Steel Beams with Web Openings." ASCE Task Committee on Design Criteria for Composite Structures in Steel and Concrete. <i>Journal of Structural Engineering</i> , American Society of Civil Engineers (ASCE), Vol. 118, No. 12, December (1992): p. 3315-3324.	ASCE
"Commentary on Proposed Specification for Structural Steel Beams with Web Openings (with Design Example)." ASCE Task Committee on Design Criteria for Composite Structures in Steel and Concrete. <i>Journal of Structural Engineering</i> , American Society of Civil Engineers (ASCE), Vol. 118, No. 12, December (1992): p. 3325-3349.	ASCE
Welding Design	
<i>Steel Construction Manual</i> , 13th Edition, Part 8.	AISC
<i>Engineering Journal</i> , Third Quarter 1989. "What Structural Engineers and Fabricators Need to Know About Weld Metal," Miller, D. K.	AISC
<i>National Steel Construction Conference Proceedings</i> , 1990, Kansas City. "Box-Tube Connections; Choices of Joint Details and Their Influence on Costs," Post, J. W.	AISC
<i>Proceedings of the American Institute of Steel Construction (AISC) Special Task Committee on the Northridge Earthquake Meeting</i> . "Assuring Weld Quality by the Proper Application of the D1.1 Structural Welding Code—Steel." Miller, D. K., 1994.	AISC
Blodgett, O. <i>Design of Welded Structures</i> , 1996 Edition. Cleveland: The James F. Lincoln Welding Foundation, 1966.	JFLF
AWS D1.1 <i>Structural Welding Code—Steel</i> . Miami: American Welding Society (AWS), 2002.	AWS
Linnert, G. <i>Welding Metallurgy</i> , Second Edition. Miami: American Welding Society (AWS), 1995.	AWS
Julicher, A. J. "Weld Fundamentals for Structural Engineers." <i>Civil Engineering</i> , January (1981): American Society of Civil Engineers (ASCE), p. 60-61.	ASCE
James F. Lincoln Arc Welding Foundation	JFLF
Welding Procedures	
<i>National Steel Construction Conference Proceedings</i> , 1997, Chicago. "What Every Engineer Should Know about Welding Procedures," Miller, D.K.	AISC
<i>National Steel Construction Conference Proceedings</i> , 1989, Nashville. "Gaining Confidence with the Fabrication, Welding and Inspection of Tubular Connections," Post, J. W.	AISC
<i>National Steel Construction Conference Proceedings</i> , 1998, New Orleans. "Reviewing and Approving Welding Procedure Specifications," Funderburk, R.S. and Miller, D.K.	AISC
Blodgett, O., Funderburk, R. S., Miller, D.K. and Quintana, M. <i>Fabricators' and Erectors' Guide to Welded Steel Construction</i> . Cleveland: The James F. Lincoln Welding Foundation, 1999.	JFLF

TITLE	SOURCE
Welding Procedures (continued)	
<i>The Procedure Handbook of Arc Welding</i> , 13th Edition. Cleveland: The Lincoln Electric Company, 1994.	JFLF
Funderburk, R. S. "Selecting Filler Metals: Low Hydrogen." <i>Welding Innovation</i> , James F. Lincoln Arc Welding Foundation, Vol. XVII, No.1, (2000): p. 18-20.	JFLF
Funderburk, R. S. "Selecting Filler Metals: Matching Strength Criteria." <i>Welding Innovation</i> , James F. Lincoln Arc Welding Foundation, Vol. XVI, No.2 (1999): p. 10-12.	JFLF
James F. Lincoln Arc Welding Foundation	JFLF
Welding Quality and Inspection	
Miller, D.K. "Ensuring Weld Quality in Structural Application, Part I of III." <i>Welding Innovation</i> , James F. Lincoln Arc Welding Foundation, Vol. XIII, No.2, 1996.	JFLF
Miller, D.K. "Ensuring Weld Quality in Structural Application, Part II of III." <i>Welding Innovation</i> , James F. Lincoln Arc Welding Foundation, Vol. XIII, No.3, 1996.	JFLF
Miller, D.K. "Ensuring Weld Quality in Structural Application, Part III of III." <i>Welding Innovation</i> , James F. Lincoln Arc Welding Foundation, Vol. XIV, No.1, 1997.	JFLF
<i>Background Reports: Metallurgy, Fracture Mechanics, Welding, Moment Connections and Frame Systems Behavior</i> , FEMA-288, Chapter 2. Federal Emergency Management Agency, 1997.	FEMA
Whitmore Section (see Gusset Plates)	
Wind Design	
Simiu, E., and Scanlan, R. H. <i>Wind Effects on Structures: An Introduction to Wind Engineering</i> , Third Edition. New York: Wiley-Interscience, 1996.	
"Wind Loading and Wind-Induced Structural Response." The Committee on Wind Effects. New York: American Society of Civil Engineers (ASCE), 1987.	ASCE
Mehta, K. C. and Perry, D. C. <i>Guide to the Use of Wind Load Provisions of ASCE 7-02</i> . New York: American Society of Civil Engineers (ASCE), 2004.	ASCE
<i>Minimum Design Loads for Buildings and Other Structures</i> , SEI/ASCE 7, Chapter 6. Reston, VA: American Society of Civil Engineers (ASCE), 2002.	ASCE
Jesien, W., Stathopoulos, T. and Ha, H.K. "Dynamic Along-Wind Response of Buildings: Comparative Study." <i>Journal of Structural Engineering</i> , American Society of Civil Engineers (ASCE), Vol. 119, No. 5, May (1993): p. 1498-1515.	ASCE
Islam, M.S., Ellingwood, B. and Corotis, R. "Dynamic Response of Tall Buildings to Stochastic Wind Load." <i>Journal of Structural Engineering</i> , American Society of Civil Engineers (ASCE), Vol. 116, No. 11, November (1990): p. 2982-3002.	ASCE

NOTES

Contact information, including web sites and telephone numbers where available, are listed in the table at right.

References noted as "OOP" are out-of-print publications. See "Seeking Solutions" on the next page for suggestions for finding out-of-print publications.

References that have no source indicated are commonly available through book stores.

*AIST, the Association for Iron and Steel Technology, was formed in 2004. It is comprised of the former Association of Iron and Steel Engineers (AISE) and the Iron & Steel Society (ISS). Titles published prior to 2004 by AISE or ISS can now be obtained through AIST.

SOURCE	NAME	WEB SITE	TELEPHONE
AASHTO	American Association of State Highway and Transportation Officials	www.aashto.org	800.231.3475
AGA	American Galvanizers Association	www.galvanizeit.org	800.468.7732
AISC	American Institute of Steel Construction	www.aisc.org/bookstore	800.644.2400
AIST*	Association for Iron and Steel Technology	www.aist.org	412.281.6323
AISI	American Iron and Steel Institute	www.steel.org	202.452.7100
Arceleor	Arceleor	www.arceleor.com	212.520.7500
ArchRec	Architectural Record	www.archrecord.com	877.876.8093
ASCE	American Society of Civil Engineers	www.asce.org	800.548.ASCE
ASME	American Society of Mechanical Engineers	www.asme.org	800.843.2763
ASTM	ASTM International	www.astm.org	610.832.9585
ATC	Applied Technology Council	www.atcouncil.com	650.595.1542
AWS	American Welding Society	www.aws.org	800.443.9353
CASE	Council of American Structural Engineers	www.acsc.org/about/case.cfm	202.347.7474
CEE UM	Department of Civil and Environmental Engineering, University of Michigan	www.engin.umich.edu/dept/cee	734.764.8495
CISC	Canadian Institute of Steel Construction	www.cisc.ca	416.491.4552
CMAA	Construction Management Association of America	www.cmaanet.org	703.356.2622
CrSrce	Corrosion Source	www.corrosionsource.com	281.444.2282
EERI	Earthquake Engineering Research Institute	www.eeri.org	510.451.0905
Elsevier	Elsevier	www.elsevier.nl	888.4ES.INFO
FEMA	Federal Emergency Management Agency	www.fema.gov	202.566.1600
FHWA	Federal Highway Administration	www.fhwa.dot.gov	202.366.0537
ICBO/ICC	International Code Council	www.iccsafe.org	888.ICC.SAFE
IISI	International Iron and Steel Institute	www.worldsteel.org	
ITSNA	Intertek Testing Services NA Inc.	www.itsna.com	800.967.5352
JB&C	Julius Blum & Company	www.juliusblum.com	800.526.6293
JFLF	James F. Lincoln Arc Welding Foundation	www.jflf.org	216.383.2211
MBMA	Metal Building Manufacturers Association	www.mbma.com	216.241.7333
NAAMM	National Association of Architectural Metal Manufacturers	www.naamm.org	312.332.0405
NACE	National Association of Corrosion Engineers	www.nace.org	800.797.6223
NAS	National Academy of Sciences	www.nationalacademies.org	800.624.6242
NCSEA	National Council of Structural Engineering Associations	www.structuremag.org	312.372.8035
NFPA	National Fire Protection Association	www.nfpa.org	617.770.3000
NIBS	National Institute of Building Sciences	www.nibs.org	202.289.7800
NIDI	Nickel Development Institute	www.nidi.org	416.591.7999
NSBA/AISC	National Steel Bridge Alliance	www.nsbaweb.org	800.644.2400
NUCOR	Nucor Corporation	www.vulcraft.com	205.845.2460
OPL	Omega Point Laboratories, Inc.	www.opl.com	210.635.8100
OSHA	Occupational Safety and Health Administration	www.osha.gov	202.693.1888
PRKTD	Parking Today	www.parkingtoday.com	310.390.5277
PTC	Protective Technology Center	www.ptc.psu.edu	814.863.2932
RCSC/AISC	Research Council on Structural Connections	www.bolttcouncil.org	800.644.2400
RMI	Rack Manufacturers Institute	www.mhia.org	704.676.1190
SDI	Steel Deck Institute	www.sdi.org	847.458.4647
SEAO	Structural Engineers Association of California	www.seao.org	916.447.1198
SFPE	Society of Fire Protection Engineers	www.sfpe.org	301.718.2910
SJI	Steel Joist Institute	www.steeljoist.org	843.626.1995
SPFA	Steel Plate Fabricators Association	www.spta.org	513.469.0500
SSEC	Structural Steel Education Council	www.steeltips.org	925.361.1313
SSINA	Specialty Steel Industry of North America	www.ssina.com	800.982.0355
SSPC	Society for Protective Coatings	www.sspc.org	877.281.7772
SSRC	Structural Stability Research Council	web.umd.edu/~ssrc	573.341.4471
SSTC	Structural Steel Technology Center	www.steelstructures.com	248.893.0132
STI	Steel Tube Institute of North America	www.steeltubeinstitute.org	440.974.6990
UL	Underwriters Laboratories Inc.	www.ul.com	877.854.3577
USACE	United States Army Corps of Engineers	www.hnd.usace.army.mil	301.394.0081