

Bibliography

1. Central Housing Committee on Research, Design, and Construction; Subcommittee on Fire Resistance Classifications, "Fire-Resistance Classifications of Building Constructions," *Building Materials and Structures*, Report BMS 92, National Bureau of Standards, Washington, Oct. 1942. (Available from NTIS No. COM-73-10974)
2. Foster, H. D., Pinkston, E. R., and Ingberg, S. H., "Fire Resistance of Structural Clay Tile Partitions," *Building Materials and Structures*, Report BMS 113, National Bureau of Standards, Washington, Oct. 1948.
3. Ryan, J. V., and Bender, E. W., "Fire Endurance of Open-Web Steel-Joist Floors with Concrete Slabs and Gypsum Ceilings," *Building Materials and Structures*, Report BMS 141, National Bureau of Standards, Washington, Aug. 1954.
4. Mitchell, N. D., "Fire Tests of Wood-Framed Walls and Partitions with Asbestos-Cement Facings," *Building Materials and Structures*, Report BMS 123, National Bureau of Standards, Washington, May 1951.
5. Robinson, H. E., Cosgrove, L. A., and Powell, F. J., "Thermal Resistance of Airspace and Fibrous Insulations Bounded by Reflective Surfaces," *Building Materials and Structures*, Report BMS 151, National Bureau of Standards, Washington, Nov. 1957.
6. Shoub, H., and Ingberg, S. H., "Fire Resistance of Steel Deck Floor Assemblies," *Building Science Series*, 11, National Bureau of Standards, Washington, Dec. 1967.
7. Davey, N., and Ashton, L. A., "Investigations on Building Fires, Part V: Fire Tests of Structural Elements," *National Building Studies*, Research Paper, No. 12, Dept. of Scientific and Industrial Research (Building Research Station), London, 1953.
8. National Board of Fire Underwriters, *Fire Resistance Ratings of Beam, Girder, and Truss Protections, Ceiling Constructions, Column Protections, Floor and Ceiling Constructions, Roof Constructions, Walls and Partitions*, New York, April 1959.
9. Mitchell, N. D., Bender, E. D., and Ryan, J. V., "Fire Resistance of Shutters for Moving-Stairway Openings," *Building Materials and Structures*, Report BMS 129, National Bureau of Standards, Washington, March 1952.
10. National Board of Fire Underwriters, *National Building Code; an Ordinance Providing for Fire Limits, and Regulations Governing the Construction, Alteration, Equipment, or Removal of Buildings or Structures*, New York, 1949.
11. Department of Scientific and Industrial Research and of the Fire Offices' Committee, Joint Committee of the Building Research Board, "Fire Gradings of Buildings, Part I: General Principles and Structural Precautions," *Post-War Building Studies*, No. 20, Ministry of Works, London, 1946.
12. Lawson, D. I., Webster, C. T., and Ashton, L. A., "Fire Endurance of Timber Beams and Floors," *National Building Studies*, Bulletin, No. 13, Dept. of Scientific and Industrial Research and Fire Offices' Committee (Joint Fire Research Organization), London, 1951.
13. Parker, T. W., Nurse, R. W., and Bessey, G. E., "Investigations on Building Fires. Part I: The Estimation of the Maximum Temperature Attained in Building Fires from Examination of the Debris, and Part II: The Visible Change in Concrete or Mortar Exposed to High Temperatures," *National Building Studies*, Technical Paper, No. 4, Dept. of Scientific and Industrial Research (Building Research Station), London, 1950.
14. Bevan, R. C., and Webster, C. T., "Investigations on Building Fires, Part III: Radiation from Building Fires," *National Building Studies*, Technical Paper, No. 5, Dept. of Scientific and Industrial Research (Building Research Station), London, 1950.
15. Webster, D. J., and Ashton, L. A., "Investigations on Building Fires, Part IV: Fire Resistance of Timber Doors," *National Building Studies*, Technical Paper, No. 6, Dept. of Scientific and Industrial Research (Building Research Station), London, 1951.
16. Kidder, F. E., *Architects' and Builders' Handbook: Data for Architects, Structural Engineers, Contractors, and Draughtsmen*, comp. by a Staff of Specialists and H. Parker, editor-in-chief, 18th ed., enl., J. Wiley, New York, 1936.
17. Parker, H., Gay, C. M., and MacGuire, J. W., *Materials and Methods of Architectural Construction*, 3rd ed., J. Wiley, New York, 1958.
18. Diets, A. G. H., *Dwelling House Construction*, The MIT Press, Cambridge, 1971.
19. Crosby, E. U., and Fiske, H. A., *Handbook of Fire Protection*, 5th ed., The Insurance Field Company, Louisville, Ky., 1914.
20. Crosby, E. U., Fiske, H. A., and Forster, H. W., *Handbook of Fire Protection*, 8th ed., R. S. Moulton, general editor, National Fire Protection Association, Boston, 1936.
21. Kidder, F. E., *Building Construction and Superintendence*, rev. and enl., by T. Nolan, W. T. Comstock, New York, 1909-1913, 2 vols.
22. National Fire Protection Association, Committee on Fire-Resistive Construction, *The Baltimore Conflagration*, 2nd ed., Chicago, 1904.
23. Przetak, L., *Standard Details for Fire-Resistive Building Construction*, McGraw-Hill Book Co., New York, 1977.

RESOURCE A

24. Hird, D., and Fischl, C. F., "Fire Hazard of Internal Linings," *National Building Studies*, Special Report, No. 22, Dept. of Scientific and Industrial Research and Fire Offices' Committee (Joint Fire Research Organization), London, 1954.
25. Menzel, C. A., *Tests of the Fire-Resistance and Strength of Walls Concrete Masonry Units*, Portland Cement Association, Chicago, 1934.
26. Hamilton, S. B., "A Short History of the Structural Fire Protection of Buildings Particularly in England," *National Building Studies*, Special Report, No. 27, Dept. of Scientific and Industrial Research (Building Research Station), London, 1958.
27. Sachs, E. O., and Marsland, E., "The Fire Resistance of Doors and Shutters being Tabulated Results of Fire Tests Conducted by the Committee," *Journal of the British Fire Prevention Committee*, No. VII, London, 1912.
28. Egan, M. D., *Concepts in Building Firesafety*, J. Wiley, New York, 1978.
29. Sachs, E. O., and Marsland, E., "The Fire Resistance of Floors being Tabulated Results of Fire Tests Conducted by the Committee," *Journal of the British Fire Prevention Committee*, No. VI, London, 1911.
30. Sachs, E. O., and Marsland, E., "The Fire Resistance of Partitions being Tabulated Results of Fire Tests Conducted by the Committee," *Journal of the British Fire Prevention Committee*, No. IX, London, 1914.
31. Ryan, J. V., and Bender, E. W., "Fire Tests of Precast Cellular Concrete Floors and Roofs," *National Bureau of Standards Monograph*, 45, Washington, April 1962.
32. Kingberg, S. H., and Foster, H. D., "Fire Resistance of Hollow Load-Bearing Wall Tile," *National Bureau of Standards Research Paper*, No. 37, (Reprint from *NBS Journal of Research*, Vol. 2) Washington, 1929.
33. Hull, W. A., and Ingberg, S. H., "Fire Resistance of Concrete Columns," *Technologic Papers of the Bureau of Standards*, No. 272, Vol. 18, Washington, 1925, pp. 635-708.
34. National Board of Fire Underwriters, *Fire Resistance Ratings of Less than One Hour*, New York, Aug. 1956.
35. Harmathy, T. Z., "Ten Rules of Fire Endurance Rating," *Fire Technology*, Vol. 1, May 1965, pp. 93-102.
36. Son, B. C., "Fire Endurance Test on a Steel Tubular Column Protected with Gypsum Board," *National Bureau of Standards*, NBSIR, 73-165, Washington, 1973.
37. Galbreath, M., "Fire Tests of Wood Door Assemblies," *Fire Study*, No. 36, Div. of Building Research, National Research Council Canada, Ottawa, May 1975.
38. Morris, W. A., "An Investigation into the Fire Resistance of Timber Doors," *Fire Research Note*, No. 855, Fire Research Station, Boreham Wood, Jan. 1971.
39. Hall, G. S., "Fire Resistance Tests of Laminated Timber Beams," *Timber Association Research Report*, WR/RR/1, High Sycombe, July 1968.
40. Goalwin, D. S., "Fire Resistance of Concrete Floors," *Building Materials and Structures*, Report BMS 134, National Bureau of Standards, Washington, Dec. 1952.
41. Mitchell, N. D., and Ryan, J. V., "Fire Tests of Steel Columns Encased with Gypsum Lath and Plaster," *Building Materials and Structures*, Report BMS 135, National Bureau of Standards, Washington, April 1953.
42. Ingberg, S. H., "Fire Tests of Brick Walls," *Building Materials and Structures*, Report BMS 143, National Bureau of Standards, Washington, Nov. 1954.
43. National Bureau of Standards, "Fire Resistance and Sound-Insulation Ratings for Walls, Partitions, and Floors," *Technical Report on Building Materials*, 44, Washington, 1944.
44. Malhotra, H. L., "Fire Resistance of Brick and Block Walls," *Fire Note*, No. 6, Ministry of Technology and Fire Offices' Committee Joint Fire Research Organization, London, HMSO, 1966.
45. Mitchell, N. D., "Fire Tests of Steel Columns Protected with Siliceous Aggregate Concrete," *Building Materials and Structures*, Report BMS 124, National Bureau of Standards, Washington, May 1951.
46. Freitag, J. K., *Fire Prevention and Fire Protection as Applied to Building Construction; a Handbook of Theory and Practice*, 2nd ed., J. Wiley, New York, 1921.
47. Ingberg, S. H., and Mitchell, N. D., "Fire Tests of Wood and Metal-Framed Partition," *Building Materials and Structures*, Report BMS 71, National Bureau of Standards, Washington, 1941.
48. Central Housing Committee on Research, Design, and Construction, Subcommittee on Definitions, "A Glossary of Housing Terms," *Building Materials and Structures*, Report BMS 91, National Bureau of Standards, Washington, Sept. 1942.
49. Crosby, E. U., Fiske, H. A., and Forster, H. W., *Handbook of Fire Protection*, 7th ed., D. Van Nostrand Co., New York 1924.
50. Bird, E. L., and Docking, S. J., *Fire in Buildings*, A. & C. Black, London, 1949.
51. American Institute of Steel Construction, *Fire Resistant Construction in Modern Steel-Framed Buildings*, New York, 1959.

52. Central Dockyard Laboratory, "Fire Retardant Paint Tests - a Critical Review," CDL Technical Memorandum, No. P87/73, H. M. Naval Base, Portsmouth, Dec. 1973.
53. Malhotra, H. L., "Fire Resistance of Structural Concrete Beams," *Fire Research Note*, No. 741, Fire Research Station, Borehamwood, May 1969.
54. Abrams, M. S., and Gustafarro, A. H., "Fire Tests of Poke-Thru Assemblies," *Research and Development Bulletin*, 1481-1, Portland Cement Association, Skokie, 1971.
55. Bullen, M. L., "A Note on the Relationship between Scale Fire Experiments and Standard Test Results," *Building Research Establishment Note*, N51/75, Borehamwood, May 1975.
56. The America Fore Group of Insurance Companies, Research Department, *Some Characteristic Fires in Fire Resistive Buildings*, Selected from twenty years record in the files of the N.F.P.A. "Quarterly," New York, c. 1933.
57. Spiegelhalter, F., "Guide to Design of Cavity Barriers and Fire Stops," *Current Paper*, CP 7/77, Building Research Establishment, Borehamwood, Feb. 1977.
58. Wardle, T. M. "Notes on the Fire Resistance of Heavy Timber Construction," *Information Series*, No. 53, New Zealand Forest Service, Wellington, 1966.
59. Fisher, R. W., and Smart, P. M. T., "Results of Fire Resistance Tests on Elements of Building Construction," *Building Research Establishment Report*, G R6, London, HMSO, 1975.
60. Serex, E. R., "Fire Resistance of Alta Bates Gypsum Block Non-Load Bearing Wall," Report to Alta Bates Community Hospital, *Structural Research Laboratory Report*, ES-7000, University of Calif., Berkeley, 1969.
61. Thomas, F. G., and Webster, C. T., "Investigations on Building Fires, Part VI: The Fire Resistance of Reinforced Concrete Columns," *National Building Studies*, Research Paper, No. 18, Dept. of Scientific and Industrial Research (Building Research Station), London, HMSO, 1953.
62. Building Research Establishment, "Timber Fire Doors," *Digest*, 220, Borehamwood, Nov. 1978.
63. *Massachusetts State Building Code; Recommended Provisions*, Article 22: Repairs, Alterations, Additions, and Change of Use of Existing Buildings, Boston, Oct. 23, 1978.
64. Freitag, J. K., *Architectural Engineering; with Especial Reference to High Building Construction, Including Many Examples of Prominent Office Buildings*, 2nd ed., rewritten, J. Wiley, New York, 1906.
65. Architectural Record, *Sweet's Indexed Catalogue of Building Construction for the Year 1906*, New York, 1906.
66. Dept. of Commerce, Building Code Committee, "Recommended Minimum Requirements for Fire Resistance in Buildings," *Building and Housing*, No. 14, National Bureau of Standards, Washington, 1931.
67. British Standards Institution, "Fire Tests on Building Materials and Structures," *British Standards*, 476, Pt. 1, London, 1953.
68. Lönberg-Holm, K., "Glass," *The Architectural Record*, Oct. 1930, pp. 345-357.
69. Structural Clay Products Institute, "Fire Resistance," *Technical Notes on Brick and Tile Construction*, 16 rev., Washington, 1964.
70. Ramsey, C. G., and Sleeper, H. R., *Architectural Graphic Standards for Architects, Engineers, Decorators, Builders, and Draftsmen*, 3rd ed., J. Wiley, New York, 1941.
71. Underwriters' Laboratories, *Fire Protection Equipment List*, Chicago, Jan. 1957.
72. Underwriters' Laboratories, *Fire Resistance Directory; with Hourly Ratings for Beams, Columns, Floors, Roofs, Walls, and Partitions*, Chicago, Jan. 1977.
73. Mitchell, N. D., "Fire Tests of Gunite Slabs and Partitions," *Building Materials and Structures*, Report BMS 131, National Bureau of Standards, Washington, May 1952.
74. Woolson, I. H., and Miller, R. P., "Fire Tests of Floors in the United States," *Proceedings International Association for Testing Materials*, VIth Congress, New York, 1912, Section C, pp. 36-41.
75. Underwriters' Laboratories, "An Investigation of the Effects of Fire Exposure upon Hollow Concrete Building Units, Conducted for American Concrete Institute, Concrete Products Association, Portland Cement Association, Joint Submitters," *Retardant Report*, No. 1555, Chicago, May 1924.
76. Dept. of Scientific & Industrial Research and of the Fire Offices' Committee, Joint Committee of the Building Research Board, "Fire Gradings of Buildings. Part IV: Chimneys and Flues," *Post-War Building Studies*, No. 29, London, HMSO, 1952.
77. National Research Council of Canada. Associate Committee on the National Building Code, *Fire Performance Ratings*, Suppl. No. 2 to the National Building Code of Canada, Ottawa, 1965.

RESOURCE A

78. Associated Factory Mutual Fire Insurance Companies, The National Board of Fire Underwriters, and the Bureau of Standards, *Fire Tests of Building Columns; an Experimental Investigation of the Resistance of Columns, Loaded and Exposed to Fire or to Fire and Water, with Record of Characteristic Effects*, Jointly Conducted at Underwriters Laboratories, Chicago, 1917-19.
79. Malhotra, H. L., "Effect of Age on the Fire Resistance of Reinforced Concrete Columns," *Fire Research Memorandum*, No. 1, Fire Research Station, Borehamwood, April 1970.
80. Bond, H., ed., *Research on Fire; a Description of the Facilities, Personnel and Management of Agencies Engaged in Research on Fire*, a Staff Report, National Fire Protection Association, Boston, 1957.
81. *California State Historical Building Code*, Draft, 1978.
82. Fisher, F. L., et al., "A Study of Potential Flashover Fires in Wheeler Hall and the Results from a Full Scale Fire Test of a Modified Wheeler Hall Door Assembly," *Fire Research Laboratory Report*, UCX 77-3; UCX-2480, University of Calif., Dept. of Civil Eng., Berkeley, 1977.
83. Freitag, J. K., *The Fireproofing of Steel Buildings*, 1st ed., J. Wiley, New York, 1906.
84. Gross, D., "Field Burnout Tests of Apartment Dwellings Units," *Building Science Series*, 10, National Bureau of Standards, Washington, 1967.
85. Dunlap, M. E., and Cartwright, F. P., "Standard Fire Tests for Combustible Building Materials," *Proceedings of the American Society for Testing Materials*, vol. 27, Philadelphia, 1927, pp. 534-546.
86. Menzel, C. A., "Tests of the Fire Resistance and Stability of Walls of Concrete Masonry Units," *Proceedings of the American Society for Testing Materials*, vol. 31, Philadelphia, 1931, pp. 607-660.
87. Steiner, A. J., "Method of Fire-Hazard Classification of Building Materials," *Bulletin of the American Society for Testing and Materials*, March 1943, Philadelphia, 1943, pp. 19-22.
88. Heselden, A. J. M., Smith, P. G., and Theobald, C. R., "Fires in a Large Compartment Containing Structural Steelwork; Detailed Measurements of Fire Behavior," *Fire Research Note*, No. 646, Fire Research Station, Borehamwood, Dec. 1966.
89. Ministry of Technology and Fire Offices' Committee Joint Fire Research Organization, "Fire and Structural Use of Timber in Buildings; Proceedings of the Symposium Held at the Fire Research Station, Borehamwood, Herts on 25th October, 1967," *Symposium*, No. 3, London, HMSO, 1970.
90. Shoub, H., and Gross, D., "Doors as Barriers to Fire and Smoke," *Building Science Series*, 3, National Bureau of Standards, Washington, 1966.
91. Ingberg, S. H., "The Fire Resistance of Gypsum Partitions," *Proceedings of the American Society for Testing and Materials*, vol. 25, Philadelphia, 1925, pp. 299-314.
92. Ingberg, S.H., "Influence of Mineral Composition of Aggregates on Fire Resistance of Concrete," *Proceedings of the American Society for Testing and Materials*, vol. 29, Philadelphia, 1929, pp. 824-829.
93. Ingberg, S. H., "The Fire Resistive Properties of Gypsum," *Proceedings of the American Society for Testing and Materials*, vol. 23, Philadelphia, 1923, pp. 254-256.
94. Gottschalk, F.W., "Some Factors in the Interpretation of Small-Scale Tests for Fire-Retardant Wood," *Bulletin of the American Society for Testing and Materials*, October 1945, pp. 40-43.
95. Ministry of Technology and Fire Offices' Committee Joint Fire Research Organization, "Behaviour of Structural Steel in Fire; Proceedings of the Symposium Held at the Fire Research Station Borehamwood, Herts on 24th January, 1967," *Symposium*, No. 2, London, HMSO, 1968.
96. Gustaferro, A. H., and Martin, L. D., *Design for Fire Resistance of Pre-cast Concrete*, prep. for the Prestressed Concrete Institute Fire Committee, 1st ed., Chicago, PCI, 1977.
97. "The Fire Endurance of Concrete; a Special Issue," *Concrete Construction*, vol. 18, no. 8, Aug. 1974, pp. 345-440.
98. The British Constructional Steelwork Association, "Modern Fire Protection for Structural Steelwork," *Publication*, No. FPI, London, 1961.
99. Underwriters' Laboratories, "Fire Hazard Classification of Building Materials," *Bulletin*, No. 32, Sept. 1944, Chicago, 1959.
100. Central Housing Committee on Research, Design, and Construction, Subcommittee on Building Codes, "Recommended Building Code Requirements for New Dwelling Construction with Special Reference to War Housing; Report," *Building Materials and Structures*, Report BMS 88, National Bureau of Standards, Washington, Sept. 1942.
101. De Coppet Bergh, D., *Safe Building Construction; a Treatise Giving in Simplest Forms Possible Practical and Theoretical Rules and Formulae Used in Construction of Buildings and General Instruction*, new ed., thoroughly rev. Macmillan Co., New York, 1908.

102. *Cyclopedia of Fire Prevention and Insurance; a General Reference Work on Fire and Fire Losses, Fireproof Construction, Building Inspection...*, prep. by architects, engineers, underwriters and practical insurance men. American School of Correspondence, Chicago, 1912.
103. Setchkin, N. P., and Ingberg, S. H., "Test Criterion for an Incombustible Material," *Proceedings of the American Society for Testing Materials*, vol. 45, Philadelphia, 1945, pp. 866-877.
104. Underwriters' Laboratories, "Report on Fire Hazard Classification of Various Species of Lumber," *Retardant*, 3365, Chicago, 1952.
105. Steingiser, S., "A Philosophy of Fire Testing," *Journal of Fire & Flammability*, vol. 3, July 1972, pp. 238-253.
106. Yuill, C. H., Bauerschlag, W. H., and Smith, H. M., "An Evaluation of the Comparative Performance of 2.4.1 Plywood and Two-Inch Lumber Roof Decking under Equivalent Fire Exposure," *Fire Protection Section, Final Report*, Project No. 717A-3-211, Southwest Research Institute, Dept. of Structural Research, San Antonio, Dec. 1962.
107. Ashton, L. A., and Smart, P.M. T., *Sponsored Fire-Resistance Tests on Structural Elements*, London, Dept. of Scientific and Industrial Research and Fire Offices. Committee, London, 1960.
108. Butcher, E. G., Chitty, T. B., and Ashton, L. A., "The Temperature Attained by Steel in Building Fires," *Fire Research Technical Paper*, No. 15, Ministry of Technology and Fire Offices. Committee, Joint Fire Research Organization, London, HMSO, 1966.
109. Dept. of the Environment and Fire Offices' Committee, Joint Fire Research Organization, "Fire-Resistance Requirements for Buildings - a New Approach; Proceedings of the Symposium Held at the Connaught Rooms, London, 28 September 1971," *Symposium*, No. 5, London, HMSO, 1973.
110. Langdon Thomas, G. J., "Roofs and Fire," *Fire Note*, No. 3, Dept. of Scientific and Industrial Research and Fire Offices' Committee, Joint Fire Research Organization, London, HMSO, 1963.
111. National Fire Protection Association and the National Board of Fire Underwriters, *Report on Fire the Edison Phonograph Works*, Thomas A. Edison, Inc., West Orange, N.J., December 9, 1914, Boston, 1915.
112. Thompson, J. P., *Fire Resistance of Reinforced Concrete Floors*, Portland Cement Association, Chicago, 1963.
113. Forest Products Laboratory, "Fire Resistance Tests of Plywood Covered Wall Panels," Information reviewed and reaffirmed, *Forest Service Report*, No. 1257, Madison, April 1961.
114. Forest Products Laboratory, "Charring Rate of Selected Woods - Transverse to Grain," *Forest Service Research Paper*, FLP 69, Madison, April 1967.
115. Bird, G. I., "Protection of Structural Steel Against Fire," *Fire Note*, No. 2, Dept. of Scientific and Industrial Research and Fire Offices' Committee, Joint Fire Research Organization, London, HMSO, 1961.
116. Robinson, W. C., *The Parker Building Fire*, Underwriters' Laboratories, Chicago, c. 1908.
117. Ferris, J. E., "Fire Hazards of Combustible Wallboards," *Commonwealth Experimental Building Station Special Report*, No. 18, Sydney, Oct. 1955.
118. Markwardt, L. J., Bruce, H. D., and Freas, A. D., "Brief Description of Some Fire-Test Methods Used for Wood and Wood Base Materials," *Forest Service Report*, No. 1976, Forest Products Laboratory, Madison, 1976.
119. Foster, H. D., Pinkston, E. R., and Ingberg, S. H., "Fire Resistance of Walls of Gravel-Aggregate Concrete Masonry Units," *Building Materials and Structures*, Report, BMS 120, National Bureau of Standards, Washington, March 1951.
120. Foster, H. D., Pinkston, E.R., and Ingberg, S. H., "Fire Resistance of Walls of Lightweight-Aggregate Concrete Masonry Units," *Building Materials and Structures*, Report BMS 117, National Bureau of Standards, Washington, May 1950.
121. Structural Clay Products Institute, "Structural Clay Tile Fireproofing," *Technical Notes on Brick & Tile Construction*, vol. 1, no. 11, San Francisco, Nov. 1950.
122. Structural Clay Products Institute, "Fire Resistance Ratings of Clay Masonry Walls - I," *Technical Notes on Brick & Tile Construction*, vol. 3, no. 12, San Francisco, Dec. 1952.
123. Structural Clay Products Institute, "Estimating the Fire Resistance of Clay Masonry Walls - II," *Technical Notes on Brick & Tile Construction*, vol. 4, no. 1, San Francisco, Jan. 1953.
124. Building Research Station, "Fire: Materials and Structures," *Digest*, No. 106, London, HMSO, 1958.
125. Mitchell, N. D., "Fire Hazard Tests with Masonry Chimneys," *NFPA Publication*, No. Q-43-7, Boston, Oct. 1949.
126. Clinton Wire Cloth Company, *Some Test Data on Fireproof Floor Construction Relating to Cinder Concrete, Terra Cotta and Gypsum*, Clinton, 1913.
127. Structural Engineers Association of Southern California, Fire Ratings Subcommittee, "Fire Ratings, a Report," part of *Annual Report*, Los Angeles, 1962, pp. 30-38.

RESOURCE A

128. Lawson, D. I., Fox, L. L., and Webster, C. T., "The Heating of Panels by Flue Pipes," *Fire Research, Special Report*, No. 1, Dept. of Scientific and Industrial Research and Fire Offices' Committee, London, HMSO, 1952.
129. Forest Products Laboratory, "Fire Resistance of Wood Construction," Excerpt from 'Wood Handbook - Basic Information on Wood as a Material of Construction with Data for its Use in Design and Specification,' *Dept. of Agriculture Handbook*, No. 72, Washington, 1955, pp. 337-350.
130. Goalwin, D. S., "Properties of Cavity Walls," *Building Materials and Structures*, Report BMS 136, National Bureau of Standards, Washington, May 1953.
131. Humphrey, R. L., "The Fire-Resistive Properties of Various Building Materials," *Geological Survey Bulletin*, 370, Washington, 1909.
132. National Lumber Manufacturers Association, "Comparative Fire Test on Wood and Steel Joists," *Technical Report*, No. 1, Washington, 1961.
133. National Lumber Manufacturers Association, "Comparative Fire Test of Timber and Steel Beams," *Technical Report*, No. 3, Washington, 1963.
134. Malhotra, H. L., and Morris, W. A., "Tests on Roof Construction Subjected to External Fire," *Fire Note*, No. 4, Dept. of Scientific and Industrial Research and Fire Offices' Committee, Joint Fire Research Organization, London, HMSO, 1963.
135. Brown, C. R., "Fire Tests of Treated and Untreated Wood Partitions," *Research Paper*, RP 1076, part of *Journal of Research of the National Bureau of Standards*, vol. 20, Washington, Feb. 1938, pp. 217-237.
136. Underwriters' Laboratories, "Report on Investigation of Fire Resistance of Wood Lath and Lime Plaster Interior Finish," *Publication*, SP. 1. 230, Chicago, Nov. 1922.
137. Underwriters' Laboratories, "Report on Interior Building Construction Consisting of Metal Lath and Gypsum Plaster on Wood Supports," *Retardant*, No. 1355, Chicago, 1922.
138. Underwriters' Laboratories, "An Investigation of the Effects of Fire Exposure upon Hollow Concrete Building Units," *Retardant*, No. 1555, Chicago, May 1924.
139. Moran, T. H., "Comparative Fire Resistance Ratings of Douglas Fir Plywood," *Douglas Fir Plywood Association Laboratory Bulletin*, 57-A, Tacoma, 1957.
140. Gage Babcock & Association, "The Performance of Fire-Protective Materials under Varying Conditions of Fire Severity," Report 6924, Chicago, 1969.
141. International Conference of Building Officials, *Uniform Building Code* (1979 ed.), Whittier, CA, 1979.
142. Babrauskas, V., and Williamson, R. B., "The Historical Basis of Fire Resistance Testing, Part I and Part II," *Fire Technology*, vol. 14, no. 3 & 4, Aug. & Nov. 1978, pp. 184-194, 205, 304-316.
143. Underwriters' Laboratories, "Fire Tests of Building Construction and Materials," 8th ed., *Standard for Safety*, UL263, Chicago, 1971.
144. Hold, H. G., *Fire Protection in Buildings*, Crosby, Lockwood, London, 1913.
145. Kollbrunner, C. F., "Steel Buildings and Fire Protection in Europe," *Journal of the Structural Division*, ASCE, vol. 85, no. ST9, Proc. Paper 2264, Nov. 1959, pp. 125-149.
146. Smith, P., "Investigation and Repair of Damage to Concrete Caused by Formwork and Falsework Fire," *Journal of the American Concrete Institute*, vol. 60, Title no. 60-66, Nov. 1963, pp. 1535-1566.
147. "Repair of Fire Damage," 3 parts, *Concrete Construction*, March-May, 1972.
148. National Fire Protection Association, *National Fire Codes; a Compilation of NFPA Codes, Standards, Recommended Practices and Manuals*, 16 vols., Boston, 1978.
149. Ingberg, S. H. "Tests of Severity of Building Fires," *NFPA Quarterly*, vol. 22, no. 1, July 1928, pp. 43-61.
150. Underwriters' Laboratories, "Fire Exposure Tests of Ordinary Wood Doors," *Bulletin of Research*, no. 6, Dec. 1938, Chicago, 1942.
151. Parson, H., "The Tall Building under Test of Fire," *Red Book*, no. 17, British Fire Prevention Committee, London, 1899.
152. Sachs, E. O., "The British Fire Prevention Committee Testing Station," *Red Book*, no. 13, British Fire Prevention Committee, London, 1899.
153. Sachs, E. O., "Fire Tests with Unprotected Columns," *Red Book*, no. 11, British Fire Prevention Committee, London, 1899.
154. British Fire Prevention Committee, "Fire Tests with Floors a Floor by the Expended Metal Company," *Red Book*, no. 14, London, 1899.
155. *Engineering News*, vol. 56, Aug. 9, 1906, pp. 135-140.

156. *Engineering News*, vol. 36, Aug. 6, 1896, pp. 92-94.
157. Bauschinger, J., *Mittheilungen de Mech.-Tech. Lab. der K. Tech. Hochschule, München*, vol. 12, 1885.
158. *Engineering News*, vol. 46, Dec. 26, 1901, pp. 482-486, 489-490.
159. *The American Architect and Building News*, vol. 31, March 28, 1891, pp. 195-201.
160. British Fire Prevention Committee, First International Fire Prevention Congress, *Official Congress Report*, London, 1903.
161. American Society for Testing Materials, *Standard Specifications for Fire Tests of Materials and Construction (C19-18)*, Philadelphia, 1918.
162. International Organization for Standardization, *Fire Resistance Tests on Elements of Building Construction (R834)*, London, 1968.
163. *Engineering Record*, vol. 35, Jan. 2, 1897, pp. 93-94; May 29, 1897, pp. 558-560; vol. 36, Sept. 18, 1897, pp. 337-340; Sept. 25, 1897, pp. 359-363; Oct. 2, 1897, pp. 382-387; Oct. 9, 1897, pp. 402-405.
164. Babrauskas, Vytenis, "Fire Endurance in Buildings," PhD Thesis. *Fire Research Group*, Report, No. UCB FRG 76-16, University of California, Berkeley, Nov. 1976.
165. The Institution of Structural Engineers and The Concrete Society, *Fire Resistance of Concrete Structures*, London, Aug. 1975.

