NFPA No.
501A
1972

STANDARD FOR
MOBILE HOME PARKS

$1.25

Mobile Homes Manufacturers Association
6650 North Northwest Highway, Chicago, Ill. 60631

National Fire Protection Association
60 Batterymarch Street, Boston, Mass. 02110

Trailer Coach Association
3855 E. La Palma Ave., Anaheim, Calif. 92806

Mobile Homes Manufacturers Association

The Mobile Homes Manufacturers Association (MHMA) is a non-profit trade organization to serve the mobile home industry and promote industry growth by providing better tools for successful operation. It is voluntarily supported by manufacturers, suppliers, and related service organizations, It has a Standards Division with field engineering personnel to visit member plants regularly, inspecting units and assisting when necessary in the correction of any deviations from the standards applicable to mobile homes. MHMA Manufacturers must comply with the provisions of this Standard as a condition of membership.

National Fire Protection Association

The National Fire Protection Association (NFPA) is a non-profit technical and educational organization to promote the science and improve the methods of fire protection. Organized in 1896, the Association has a broad-scale standards-making program to aid in its objective to reduce loss of life and destruction of property by fire. The Association publishes the standards developed under its aegis in pamphlet editions (such as this) and in what is known as the National Fire Codes (a ten-volume compilation annually updated, totaling approximately 8,900 pages). For full information about the Association and for a list of its publications, write to the Association's Headquarters.

Trailer Coach Association

The Trailer Coach Association represents the manufacturers of mobile homes and recreational vehicles, dealers and suppliers in the Western States while drawing its members from all sections of the country. Founded in 1936, the Association sponsors mobile home and recreational vehicle shows in the major western cities and has research programs dedicated to advance the proper use of mobile homes and recreational vehicles. It has a Standards Department which works with the enforcing officials in the various Western States to encourage compliance with the recommendations contained in this Standard. The Trailer Coach Association currently has a staff of 23 and a membership of nearly 1,000.

American National Standards Institute

The American National Standards Institute (ANSI) is the national coordinating institution for voluntary standardization in the U.S.A. through which organizations concerned with standardization may cooperate in recognizing, establishing and improving standards in this country. Approval of a standard by the Institute is based on a consensus of those essentially concerned with its scope and provisions. The Institute has a Member Body Council, a Consumer Council, and a Company Member Council. The Member Body Council is composed of non-profit technical, professional, scientific, trade, or other membership associates, societies, or organizations which are of national scope and recognition. The Mobile Homes Manufacturers Association, National Fire Protection Association, and the Trailer Coach Association are Member Bodies of the ANSI.

Standard for

Mobile Home Parks

NFPA No. 501A — 1972

Origin and Development

This standard was developed by the Subcommittee on Mobile Home Parks and processed through the Committee on Mobile Homes and Recreational Vehicles. The involved committees are organized under the aegis of the American National Standards Institute (ANSI) with the parent committee sponsored by the Mobile Homes Manufacturers Association, the National Fire Protection Association, the Recreational Vehicle Institute, and the Trailer Coach Association. A listing of the Committee and the Subcommittee membership is shown on the following pages.

This edition of the Standard was approved by the National Fire Protection Association at its Annual Meeting held in Philadelphia, Pa., May 16, 1972. NFPA activity in this general area commenced in 1937 when the NFPA organized its first Committee on Trailers and Trailer Courts. The first standard covering Trailer Courts appeared in 1939, with revisions in 1940, 1952, 1960, 1964, and 1971. This edition replaces the 1971 and earlier NFPA documents and is a companion standard to the Electrical Standard for Recreational Vehicle Parks (NFPA No. 501D — 1971).

Changes made in this edition differing from the 1971 text include: (1) revisions to Sections 2.7, 4.1, 5.2.1.4(c), 5.4.3, B2.3.2, and B2.8.1; (2) addition of new Section 5.4.8; and (3) deletion of old Section B3.3 (including B3.3.1 and B3.3.2) on the design and construction of awnings.

Approval of the 1971 edition of this Standard by the ANSI was requested in 1971 but to date (May 1972) no affirmative action has been taken. If the approval is received, the ANSI will be requested to act on this 1972 edition.

Particular attention is also called to the Standard for Mobile Homes [NFPA No. 501B — 1972; ANSI A119.1 — 1972 (R)] and to Article 550, Part B of the National Electrical Code (NFPA No. 70 — 1971; Proposed ANSI C1).

Committee on Mobile Homes and Recreational Vehicles

Personnel as of March 1972

Lloyd W. Garner, *Chairman,*
Dir., Inspection Div., State Fire Marshal Dept., 7 Hunter St. Bldg., Atlanta, Ga. 30334 (rep. Fire Marshals Association of North America)

George H. Tryon (SFPE),† *Administrative Secretary,*
National Fire Protection Association, 60 Batterymarch Street, Boston, Mass. 02110

Francis E. Greenleaf,† *Assistant Secretary,*
Standards Dir., Trailer Coach Assn., 3855 E. LaPalma Ave. Anaheim, Calif. 92806

Philip N. Shrake,† *Assistant Secretary,*
Standards Dir., Recreational Vehicle Institute, Inc. 2720 DesPlaines Ave., DesPlaines, Ill. 60018

Henry Omson,† *Assistant Secretary,*
Standards Dir., Mobile Homes Manufacturers Assn., 6650 North Northwest Highway, Chicago, Ill. 60631

Leroy V. Abbott, Insurance Co. of North America
Delevan J. Arnold, Recreational Vehicle Institute, Inc.
T. R. Arnold, The Craftsmen's Guild
Russell R. Bahr, State of California, Division of Building & Housing Standards
Louis C. Bell, Trailer Coach Assn.
C. E. Blome, American Assn. of Retired Persons
Keith D. Clotz, National Association of Plumbing-Heating-Cooling Contractors
David Curley, American Insurance Association
Fred J. Davis, Building Officials & Code Administrators International, Inc.
Edward J. Dwyer, American Society of Mechanical Engineers
William Earthman, Electric Light & Power Group
H. William Ewig, American Mutual Insurance Alliance
Tom S. Gable, National Sanitation Foundation
Hans R. Grigo, National Safety Council
Verne R. Groendal, American Gas Assn.
John H. Hast, U. S. Department of the Interior, National Park Service
Jordan Heiman, American Society of Heating, Refrigerating and Air-Conditioning Engineers
John C. Hewitt, State of Washington, Department of Labor & Industries
John D. Hosey, Foremost Insurance Company
Walter H. Johnson, National LP-Gas Assn.; Chairman, Subcommittee on Recreational Vehicles
J. Calvin Jureit, American Society of Civil Engineers; Chairman, Subcommittee on Mobile Homes
Aaron Kliewer, Mobile Home Manufacturers Assn.
R. E. Klingler, Recreational Vehicle Institute, Inc.
John P. Langmead, Gas Appliance Manufacturers Association, Inc.
Norman Latter, International Assn. of Plumbing & Mechanical Officials
Les Lynch, State of Oregon, Bureau of Labor
Tal Moore, Air Conditioning and Refrigeration Institute
Samuel J. Morano, American Society of Sanitary Engineering
Thomas M. Murphy, New York State Division of Housing
Marvin Nerem, Recreational Vehicle Institute, Inc.
Jack Pelham, State of Florida, Division of Motor Vehicles
Dr. Mary S. Pickett, Illuminating Engineering Society
William D. Rowe, Mobile Homes Manufacturers Assn.
W. J. Smith, Underwriters' Laboratories, Inc.
M. W. Smithman, National Assn. of Home Builders
Kent P. Stiner, National Electrical Code Committee
Harry A. Stuart, Trailer Coach Assn.
Earl W. Swett, Mobile Homes Manufacturers Assn.
Robert A. Tanner, Fire Marshals Assn. of North America
C. P. Van Zandt, Trailer Coach Assn.
R. E. Ward, International Association of Electrical Inspectors
John Wilford, New Jersey Dept. of Environmental Protection
Paul H. Winter, National Electrical Manufacturers Association
J. Herbert Witte, Gas Vent Institute
Robert S. Wyly, National Bureau of Standards

†Nonvoting Member

Alternates

Harry L. Baker, State of Oregon, Dept. of Commerce (Alternate to Les Lynch)
Artie O. Barker, International Assn. of Electrical Inspectors (Alternate to R. E. Ward)
Don Barrow, Mobile Homes Manufacturers' Assn. (Alternate to Aaron Kliewer)
W. E. Brenner, Mobile Homes Manufacturers' Assn. (Alternate to Earl W. Swett)
Wm. E. Dell, State of Washington, Department of Labor & Industries (Alternate to John C. Hewitt)
Philip Dykstra, National Safety Council (Alternate to Hans R. Grigo)
Robert J. Evans, Air Conditioning and Refrigeration Institute (Alternate to Tal Moore)
Howard L. Glasky, Trailer Coach Assn. (Alternate to Harry A. Stuart)
H. Kent Glenn, Electric Light & Power Group (Alternate to William Earthman)
John R. Gore, Jr., Fire Marshals Assn. of North America (Alternate to Lloyd W. Garner)
Paul K. Heilstedt, Building Officials & Code Administrators International, Inc. (Alternate to Fred J. Davis)
F. E. Hodgdon, American Gas Association (Alternate to Verne R. Groendal)
Eugene L. Kilbourn, Recreational Vehicle Institute, Inc. (Alternate to D. J. Arnold)
Nicholas A. Lacourte, American Society of Heating, Refrigerating & Air Conditioning Engineers, Inc. (Alternate to Jordan Heiman)
Neil MacLean, International Assn. of Plumbing & Mechanical Officials (Alternate to Norman Latter)
J. P. Markey, Electric Light & Power Group (Alternate to William Earthman)
W. P. Marshall, Recreational Vehicle Institute, Inc. (Alternate to Marvin Nerem)
W. G. Martin III, National Electrical Manufacturers Assn. (Alternate to Paul H. Winter)
L. W. Moses, Trailer Coach Assn. (Alternate to Louis C. Bell)
Jiyun Nakaji, Trailer Coach Assn. (Alternate to C. P. Van Zandt)
L. E. Palmer, National Electrical Manfacturers Assn. (Alternate to Paul H. Winter)
C. W. Phillips, National Bureau of Standards (Alternate to Robert S. Wyly)
F. M. Radigan, Recreational Vehicle Institute, Inc. (Alternate to R. E. Klingler)
Kenneth D. Rhoton, The Craftsmen's Guild (Alternate to T. R. Arnold)
Stephen E. Smallwood, National Association of Home Builders (Alternate to M. W. Smithman)
Paul Solomon, California State Dept. of Housing and Community Development (Alternate to Russell R. Bahr)
W. Thomas, American Insurance Assn. (Alternate to David Curley)
Harold Weaver, Mobile Homes Manufacturers Assn. (Alternate to W. D. Rowe)
Rene H. Yerke, Underwriters' Laboratories, Inc. (Alternate to W. J. Smith)

Nonvoting Members

Robert Buechner, National Recreation & Park Assn.
Weldon C. Fill, U. S. Public Health Service
Duane E. Keplinger, Federal Housing Administration, Dept. of Housing & Urban Development
Ronald R. Speedy, U. S. Public Health Service
Denis Temple, Canadian Standards Assn.
John H. Watt, National Fire Protection Assn. (Liaison, National Electrical Code Committee)

Scope: To develop performance standards for the construction of mobile homes and recreational vehicles and, working with the appropriate ANSI and NFPA standards committees, to prepare installation standards for electrical systems, heating systems, and plumbing and sanitary facilities in mobile homes and recreational vehicles. Highway safety considerations shall be included only to the extent deemed necessary with reference to applicable ANSI, industry and government standards. To develop standards for mobile home parks and recreational vehicle parks covering access and arrangements for fire protection and safety and the installation of on-premises services for fuel, power, water and sanitation, also working with the appropriate ANSI and NFPA standards committees. Specific coordination will be achieved with the ANSI Standards Committees C1, D7, D17, Z26 and Z97 and with the committees responsible for ANSI Standards Z21.30, Z95.1 and Z106.1, and with the NFPA Committees on Air Conditioning and on Safety to Life.

Subcommittee on Mobile Home Parks

Personnel as of March 1972

Harry L. Baker, *Chairman,*
Mobile Home & Recreational Vehicle Section, Department of Commerce, 617 Chemeketa St., Salem, Ore. 97310

Francis E. Greenleaf,† *Secretary*
Trailer Coach Association, 3855 East La Palma Ave., Anaheim, Calif. 92806

Thomas R. Arnold, The Craftsmen's Guild

Ted Balter, Texas Mobile Home Assn.

Herbert Behrend, Mobile Homes Manufacturers Assn.

Keith D. Clotz, National Assn. of Plumbing-Heating-Cooling Contractors

William L. Earthman, Electric Light & Power Group

Tom S. Gable, National Sanitation Foundation

Lloyd W. Garner (Ex-Officio) Fire Marshals Assn. of North America Chairman, Committee on Mobile Homes and Recreational Vehicles

Howard L. Glasky, Trailer Coach Assn.

Hans R. Grigo, National Safety Council

Charles J. Hart, National Electrical Contractors Assn.

S. R. Harmon, Utah State Dept. of Business Regulations, Mobile Home & Recreational Vehicle Division

D. E. Hughes, American Gas Assn.

J. Calvin Jureit (Ex-Officio), American Society of Civil Engineers Chairman, Subcommittee on Mobile Homes

Charles W. Lane, Communities International

Henry Omson (Ex-Officio), Mobile Homes Manufacturers Assn.; Secy., Subcommittee on Mobile Homes

Larry Philips, Trailer Coach Assn.

Stephen E. Smallwood, National Association of Home Builders

Paul L. Solomon, California Division of Building and Housing Standards

Kent P. Stiner, National Electrical Code Committee

Ted L. Strasser, Nebraska Mobile Housing Institute, Inc.

R. E. Ward, International Assn. of Electrical Inspectors

P. H. Winter, National Electrical Manufacturers Assn.

Alternates

H. Kent Glenn, Electric Light & Power Group (Alternate to William Earthman)

John R. Gore, Jr., Fire Marshals Assn. of North America (Alternate to Lloyd W. Garner)

Robert I. Gould, National Association of Home Builders (Alternate to S. E. Smallwood)

Kenneth D. Rhoton, The Craftsmen's Guild (Alternate to Thomas R. Arnold)

†Nonvoting.

Nonvoting Members

Weldon C. Fill, U.S. Public Health Service

Duane E. Keplinger, Federal Housing Administration, Dept. of Housing and Urban Development

John H. Watt, National Fire Protection Assn. (Liaison, National Electrical Code Committee)

Standard for

Mobile Home Parks

TABLE OF CONTENTS

FOREWORD

This Standard is sponsored by the Committees listed herein and the membership is inclusive of those having a substantial interest in the subject as consistent with the policies of the American National Standards Institute and the National Fire Protection Association. These Committees are standing committees which will periodically review this Standard in an effort to keep the recommendations contained herein up-to-date. Anyone interested is invited to make suggestions for revisions to the Chairman and Administrative Secretary of the parent Committee or the Chairman and Secretary of the Subcommittee.

The participation of the National Fire Protection Association as a sponsor of this project is administrative and undertaken in the sole interest of safety to life and property from fire and allied hazards. Some portions of this Standard cover areas outside the scope of NFPA's normal sphere of activity but are of interest and concern to the other sponsors and to the owners and occupants of mobile home parks. The NFPA Board of Directors has authorized the Association's participation with the understanding that its responsibility extends only to those areas within its scope.

The official Interpretations Procedures for the Committee on Mobile Homes and Recreational Vehicles are published herein.

Official Interpretations Procedure
Committee on Mobile Homes and Recreational Vehicles

1. General. There is hereby established an Official Interpretations Procedure for the Committee on Mobile Homes and Recreational Vehicles for the purpose of providing official explanations of the meaning or intent of any specific provisions of any standard developed under the jurisdiction of the Committee.

NOTE: This Official Interpretations Procedure does not prevent any Committee Chairman or Member from commenting on the meaning or intent of any provision of any such document, provided that the comment is clearly identified as not being an Official Interpretation of the Committee.

2. Nature of Official Interpretations. Two General forms of Official Interpretations shall be recognized:

(a) Those making an Interpretation of the literal text.
(b) Those making an Interpretation of the intent of the Committee when the particular text was adopted.

No judgments will be rendered by the Interpretations Committee regarding compliance with any of the Committee's standards of engineering drawings.

3. Procedures for Requesting Official Interpretations. Those desiring an Interpretation shall direct their requests to the Chairman or Secretary of the Committee, c/o National Fire Protection Association, 60 Batterymarch Street, Boston, Massachusetts 02110, supplying five identical copies of a statement in which shall appear specific references to a single problem, identifying article, section or paragraph of the document with which they are concerned. Such a request shall be on the business stationery of the inquirer and shall be duly signed. When applications involve actual field situations they shall so state, and all parties involved shall be named.

4. Committee Handling of Requests for Official Interpretations. The Committee shall not be under any obligation to process requests for Official Interpretations in any specified time period nor to issue an Official Interpretation except at its own convenience. The Committee officers may process the request for an Official Interpretation exactly the way it has been submitted, or they may rephrase the question, if desired, to clarify the intent, or they may refuse to consider the request if they find it not to be in proper form or consistent with Paragraph 2. If acceptable for consideration, the request for an Official Interpretation shall be submitted to an Interpretations Subcommittee made up of five or more individuals selected by the Chairman or by the Secretary (with the approval of the Chairman). In selecting those to serve the Chairman or the Secretary will select Members of the appropriate Subcommittee having jurisdiction over the question posed and may also include up to two members of the appropriate Task Group who are not Subcommittee members, but no Member, Alternate, or Task Group representative shall be eligible for such appointment if he is directly involved in the particular case prompting the request for the Interpretation. The Personnel of each Interpretations Subcommittee may be varied with each request.

5. Voting on Interpretations. In any case where there is not unanimous agreement in the Interpretations Subcommittee, the request for Interpretation shall be referred to the Subcommittee having primary jurisdiction for a decision. Under these conditions, adoption of an Official Interpretation requires approval by a three-quarters majority vote of that Subcommittee.

Where a three-quarters majority vote is not received, the item shall be placed on the docket for regular processing by the Subcommittee for subsequent possible action. If the Interpretations Subcommittee unanimously agrees or a three-quarters affirmative vote is secured from the Subcommittee having primary jurisdiction, the Executive Committee of the Committee on Mobile Homes and Recreational Vehicles shall be informed of the decision reached and shall be requested to ballot on said decision. If unanimous agreement is reached, the applicant shall be informed promptly and as soon as possible the Interpretation shall be published by the sponsors in the publications each distributes to its members and announced in a suitable news release by the Secretary which shall be sent to the American National Standards Institute for their information and guidance. If the Executive Committee does not concur unanimously, the question shall be placed before the full membership of the Committee on Mobile Homes and Recreational Vehicles, where a three-quarters majority vote must be secured to complete the processing of the Interpretation as indicated in the previous sentence.

6. Action Following Issuance of Official Interpretations. Following the issuance of an Official Interpretation, the Subcommittee shall be obliged to review the item on which the Interpretation has been issued with a view to determining whether any change may be desired in the standard to clarify or correct the condition which brought about the request for the Official Interpretation. If such a change is indicated, the Subcommittee shall process such a change in conformance with the usual procedures established under the rules of procedure of the Committee as a whole.

7. Time Limit on Interpretations. Any Official Interpretation issued shall apply only to the edition of the document for which the Interpretation is made.

Standard for
Mobile Home Parks

NFPA No. 501A — 1972

Part 1. Scope

1.1 General. This standard covers mobile home parks (contiguous parcels of land used for the accommodation of occupied mobile homes used for dwelling purposes) setting forth provisions related to mobile home lots, construction details for permanent structures, park plumbing (including water supply and sewage disposal), park electrical systems, and park gas systems. In addition, the standard includes, in Appendixes, some recommendations covering mobile home park design, mobile home accessory buildings and structures (including cabanas, awnings, carports, ramadas, porches, storage structures, and fences and windbreaks), and fire safety considerations.

1.2 Companion Standard. This standard is designed as a companion document to the Standard for Mobile Homes (NFPA No. 501B-1972; ANSI A119.1-1972) and it is recommended that all mobile homes located in parks covered herein meet the provisions of the latter reference.

NOTE: Recreational Vehicles are covered in a separate Standard (NFPA No. 501C-1972; ANSI A119.2-1972, and an Electrical Standard on Recreational Vehicle Parks is available for those interested (NFPA No. 501D-1971).

Part 2. Definitions

2.1 Approved. Means acceptable to the authority having jurisdiction.

2.2 Authority Having Jurisdiction. The organization, office or individual responsible for "approving" equipment, an installation, or a procedure.

2.3 Building. A roofed structure erected for permanent use.

2.4 Mobile Home. A factory-assembled structure or structures equipped with the necessary service connections and made so as to be readily movable as a unit or units on its (their) own running gear and designed to be used as a dwelling unit(s) without a permanent foundation.*

*The phrase "without permanent foundation" indicates that the support system is constructed with the intent that the mobile home placed thereon will be moved from time to time at the convenience of the owner.

2.5 Mobile Home Accessory Building or Structure. Any awning, cabana, ramada, storage structure, carport, fence, windbreak or porch established for the use of the occupant of the mobile home upon a mobile home lot.

2.6 Mobile Home Lot. A designated portion of a mobile home park designed for the accommodation of one mobile home and its accessory buildings or structures for the exclusive use of the occupants.

2.7 Mobile Home Park. A parcel (or contiguous parcels) of land which has been so designated and improved that it contains two or more mobile home lots available to the general public for the placement thereon of mobile homes for occupancy.

2.8 Mobile Home Stand. That area of a mobile home lot which has been reserved for the placement of a mobile home.

2.9 Occupied Area. The total of all of the lot area covered by a mobile home and roofed mobile home accessory buildings and structures on a mobile home lot.

2.10 Park Street. A private way which affords principal means of access to abutting individual mobile home lots and auxiliary buildings.

2.11 Permanent Building. Any building except a mobile home accessory building or structure.

2.12 Special Permission. The written consent of the authority having jurisdiction.

Part 3. Community Facilities

3.1 The restroom and laundry facilities, when provided, shall be installed within a permanent building conforming to the requirements of this standard.

3.2 Recreation buildings, when provided, shall conform to all of the requirements of this standard relating to permanent buildings.

Part 4. Mobile Home Lot Standards

4.1 Utility connections serving the mobile home shall be located to properly service the mobile home placed on the stand.

NOTE: For further guidance on location of utility connections, see NFPA No. 501B-1972, ANSI A119.1-1972, Part C, Sections 11.2.1 and 12.2.1; Part D, Sections 5.1.10.1 and 5.1.10.2; and Part E, Section 10.9.

Exception: By special permission other locations may be designated for specific types of mobile homes.

4.1.1 Mobile home utility services shall be connected to the mobile home park system by means of approved materials. No rigid utility connections shall be made.

4.2 No mobile home shall be permanently attached to a foundation. Stabilizing devices or piers may be used. Where specified by the manufacturer, they shall be installed in accordance with his instructions. (See Part B, Section 6.2 of NFPA No. 501B-1972; ANSI A119.1-1972). Where local conditions warrant, the following provisions shall apply.

4.2.1 The mobile home stand shall provide adequate support for the placement and tie-down of the mobile home, thereby securing the superstructure against uplift, sliding, rotation and overturning.

4.2.2 The mobile home stand shall be provided with anchors and tie-downs, such as cast-in-place concrete "dead-men", eyelets embedded in concrete slabs or runways, screw augers, arrowhead anchors, or other devices to be used to stabilize the mobile home.

4.2.3 Anchors and tie-downs shall be placed at each corner of the mobile home stand and shall be able to sustain a minimum load of 2,800 pounds.

Part 5. Construction Standards

5.1 Permanent Building Regulations

5.1.1 Construction. Every building, except a mobile home accessory building, shall be designed and constructed in accordance with the applicable provisions of nationally recognized building codes.

5.1.2 Electrical Regulations. Electrical wiring, fixtures and equipment installed in a building in a mobile home park shall comply with the applicable provisions of the National Electrical Code (NFPA No. 70-1971; ANSI C1-1971).

5.1.3 Fuel Gas Equipment and Installation. Fuel gas equipment and installations installed within a building in a mobile home park shall comply with nationally recognized appliance and fuel gas piping codes and standards. Where the state or other political subdivision does not assume jurisdiction, such fuel gas equipment and installation shall be designed and installed in accordance with the appropriate provisions of the Standard for the Installation of Gas Appliances and Gas Piping (NFPA No. 54-1969; ANSI Z21.30-1964); the Standard for the Installation of Gas Piping and Gas

Equipment on Industrial Premises and Certain Other Premises (NFPA No. 54A-1969; ANSI Z83.1-1968); or the Standard for the Storage and Handling of Liquefied Petroleum Gases (NFPA No. 58-1972; ANSI Z106.1-1972).

5.1.4 Plumbing Installations. Plumbing equipment, materials and installations in a building within a mobile home park shall comply with the applicable provisions of nationally recognized plumbing codes.

5.1.5 Materials, Fixtures, Devices, Fittings. Materials, fixtures, devices and fittings and their installation, shall conform to nationally recognized standards.

5.2 Mobile Home Park Plumbing Standards

5.2.1 Water Supply.

5.2.1.1 General Requirements. An accessible, adequate, safe and potable supply of water shall be provided in each mobile home park. Where a public supply of water of satisfactory quantity, quality and pressure is available at or within the boundary of the park site, connection shall be made thereto and its supply used exclusively. When a satisfactory public water supply is not available, a private water supply system shall be developed and used as approved by the authority having jurisdiction.

5.2.1.2 Source of Supply.

(a) The water supply shall be capable of supplying a minimum of 150 gallons per day per mobile home lot.

(b) Every well or suction line of the water supply system shall be located and constructed in such a manner that neither underground nor surface contamination will reach the water supply from any source. Minimum distances between wells and various sources of contamination shall be 50 feet for building sewers, septic tanks and dry wells, 100 feet for disposal fields and seepage pits, and 150 feet for cesspools.

(c) Well-casing, pumping machinery or suction pipes shall not be placed in any pit, room or space extending below ground level, nor in any room or space above ground which is walled in or otherwise enclosed, unless such rooms, whether above or below ground, have free drainage by gravity to the surface of the ground.

(d) The treatment of a private water supply shall be in accordance with applicable laws and regulations.

5.2.1.3 Water Storage Facilities. All water storage reservoirs shall be covered, water-tight and constructed of impervious mate-

rial. Overflows and vents of such reservoirs shall be effectively screened. Manholes shall be constructed with overlapping covers, so as to prevent the entrance of contaminated material. Reservoir overflow pipes shall discharge through an acceptable air gap.

5.2.1.4 Water Distribution System.

(a) All water piping, fixtures and other equipment shall be constructed and maintained in accordance with state and local regulations and requirements and shall be of a type and in locations approved by the authority having jurisdiction.

(b) The water piping system shall not be connected with non-potable or questionable water supplies, and where necessary, shall be protected against the hazards of backflow or back siphonage.

(c) System shall be so designed and maintained as to provide a pressure of not less than 20 pounds per square inch under all normal operating conditions at each mobile home stand. Also, the system shall be capable of supplying up to 50 mobile homes with a demand load of 100 gpm, 100 mobile homes with 180 gpm, and 300 mobile homes with 370 gpm. Greater design values may be required when the system is to provide fire protection.

5.2.1.5 Individual Water-Riser Pipes and Connections. Each mobile home stand shall be provided with a water riser or risers located and arranged to permit attachment in a workmanlike manner to a mobile home utilizing the stand. (See NFPA No. 501B, ANSI A119.1, Part C, Section 11.2.1). In addition:

(a) Water riser pipes shall extend at least 4 inches above ground elevation. The pipe shall be at least ¾ inch. The water outlet shall be capped when a mobile home does not occupy the lot.

(b) Adequate provisions shall be made to prevent freezing of service lines, valves and riser pipes and to protect risers from the heaving and thawing actions of ground during freezing weather. Surface drainage shall be diverted from the location of the riser pipe.

(c) A shutoff valve shall be provided on the water riser pipe on each mobile home lot. Where frost conditions occur, the shutoff valve shall be located below the frost line.

(d) Underground stop and waste valves shall not be installed on any water service.

(e) Each mobile home shall be connected to the park water service outlet by a flexible connector, such as copper tubing, not less than ½ inch interior diameter.

Exception: By special permission other locations may be designated for specific types of mobile homes.

5.2.2 Sewage Disposal. (See 5.2.1.)

5.2.2.1 General.

(a) An adequate and safe sewage collection system shall be provided in all mobile home parks for conveying and disposing of all sewage. Wherever feasible, connection shall be made for a public system. All new improvements shall be designed, constructed and maintained in accordance with applicable laws and regulations.

(b) Where the sewage collection lines of the mobile home park are not connected to a public sewer, all proposed sewage disposal facilities shall be approved by the authority having jurisdiction prior to construction.

5.2.2.2 Sewage Collection Lines. All sewage collection lines shall be located in trenches of sufficient depth to be free of breakage from traffic or other movements and shall be separated from the park water supply system at a safe distance. Sewage collection lines shall be at a grade which will insure a velocity of two feet per second when flowing full. The system shall be designed for a minimum flow of 150 gallons per day per mobile home lot.

5.2.2.3 Mobile Home Lot Sewage Collection-Inlet and Lateral.

(a) The sewage collection inlet shall have a nominal inside diameter of at least 3 inches. (See NFPA No. 501B, ANSI A119.1, Part C, Section 12.2.5.3).

(b) The lateral line from the inlet to the sewage collection line shall slope at least ¼ inch per foot. All joints shall be watertight.

(c) All materials used for sewer connections between a mobile home and the inlet shall be semirigid, corrosive resistant, non-absorbent and durable. The inner surface shall be smooth.

(d) Provision shall be made for plugging the sewage collection inlet when a mobile home does not occupy the lot. Surface drainage shall be diverted away from the inlet. The rim of the inlet shall extend not more than 4 inches above ground elevation.

NOTE: See NFPA No. 501B, ANSI A119.1, Part C, Section 12.2.1 for information relative to location of drain outlet on mobile homes.

5.3 Mobile Home Park Electrical Standards

5.3.1 Application and Scope. This section applies to electrical distribution systems in mobile home parks. It does not apply to the electrical systems of mobile homes or the feeder assembly used to connect them to the mobile home service equipment. Except as otherwise permitted or required by this standard, all electrical

installations in mobile home parks shall be designed and constructed in accordance with the applicable provisions of the National Electrical Code (NFPA No. 70; ANSI C1).

NOTE: See NFPA No. 501B, ANSI A119.1, Part E, Section 10.9 for information relative to location of point of entrance of the feeder assembly to a mobile home.

5.3.2 Definitions.

5.3.2.1 FEEDER ASSEMBLY. The overhead or under-chassis feeder conductors, including the grounding conductor, together with the necessary fittings and equipment, or a power supply cord listed for mobile home use, designed for the purpose of delivering energy from the source of electrical supply to the distribution panelboard within the mobile home.

5.3.2.2 MOBILE HOME SERVICE EQUIPMENT. That equipment containing the disconnecting means, overcurrent protective devices, and receptacles or other means for connecting a mobile home feeder assembly.

5.3.2.3 PARK ELECTRICAL WIRING SYSTEM. All of the electrical wiring, fixtures, equipment and appurtenances related to electrical installations within a mobile home park, including the mobile home service equipment.

5.3.3 Distribution System. The mobile home park secondary electrical distribution system to mobile home parks, shall be single phase 115/230 volts nominal.

5.3.4 Calculated Load.

5.3.4.1 Park electrical wiring systems shall be calculated on the basis of not less than 16,000 watts, (at 115/230 volts), per each mobile home service. The demand factors which are set forth in Table 1 are the minimum allowable demand factors which may be

Continued next page

Table 1

Demand Factors for Feeders and Service Entrance Conductors

Number of Mobile Homes	Demand Factor (Percent)
1	100
2	55
3	44
4	39
5	33
6	29
7-9	28
10-12	27
13-15	26
16-21	25
22-40	24
41-60	23
61 and over	22

used in calculating load on feeders and service. No demand factor shall be allowed for any other load, except as provided herein.

5.3.4.2 For the purpose of this Part where the park service exceeds 240 volts, transformers and secondary distribution panelboards shall be treated as services.

5.3.4.3 The demand factor for a given number of lots shall apply to all lots indicated.

For example: 20 lots calculated at 25 percent of 16,000 watts results in a permissible demand of 4,000 watts per lot or a total of 80,000 watts for 20 lots.

5.3.4.4 Mobile home lot feeder circuit conductors shall have adequate capacity for the loads supplied, and shall be rated at not less than 100 amperes at 115/230 volts.

5.3.5 Mobile Home Service Equipment.

5.3.5.1 Mobile home service equipment shall be rated at not less than 100 amperes, and provisions shall be made for connecting a mobile home feeder assembly by a permanent wiring method. Mobile home service equipment may also be provided with 50-ampere receptacles conforming to ANSI C73.17-1966.

5.3.5.2 Mobile home service equipment may also be provided with a means for connecting a mobile home accessory building or structure or additional electrical equipment located outside a mobile home by a permanent wiring method.

5.3.5.3 Additional receptacles may be provided for connection of electrical equipment located outside the mobile home.

5.3.5.4 Electrical equipment installed in a mobile home accessory building or structure shall comply with the applicable provisions of the National Electrical Code (NFPA No. 70; ANSI C1).

5.4 Mobile Home Park Gas Systems

5.4.1 General. Gas equipment and installations within a mobile home park shall be designed and constructed in accordance with the applicable codes adopted by the authority having jurisdiction. Where the state or other political subdivision does not assume jurisdiction, such installations shall be designed and constructed in accordance with the appropriate provisions of the standards referenced in Section 5.1.3 herein.

5.4.2 Required Gas Supply. The minimum hourly volume of gas required at each mobile home lot outlet or any section of the mobile home park gas piping system shall be calculated as shown in Table 2.

Table 2

Demand Factors for Use in Calculating Gas Piping Systems in Mobile Home Parks

No. of Mobile Home Sites	BTU Per Hour Per Mobile Home Site
1	125,000
2	117,000
3	104,000
4	96,000
5	92,000
6	87,000
7	83,000
8	81,000
9	79,000
10	77,000
11-20	66,000
21-30	62,000
31-40	58,000
41-60	55,000
Over 60	50,000

5.4.3. Installation. Underground piping shall be buried a sufficient depth or covered in a manner so as to protect the piping from physical damage. Consideration should be given to protect the piping from physical damage when it passes through flower beds, shrub beds, and other such cultivated areas.

5.4.3.1 Gas piping shall not be installed under any mobile home stand.

5.4.4 System Shutoff Valve. A readily accessible and identified shutoff valve controlling the flow of gas to the entire gas piping system shall be installed near to the point of connection to the service piping or supply connection of the liquefied petroleum gas tank.

5.4.5 Lot Shutoff Valve. Each mobile home lot shall have an approved gas shutoff valve installed upstream of the mobile home lot gas outlet and located on the outlet riser at a height of not less than 4 inches above grade. Such valve shall not be located under any mobile home. Whenever the mobile home lot outlet is not in use, the outlet shall be equipped with an approved cap or plug to prevent accidental discharge of gas.

5.4.6 Lot Connector. Each mobile home utilizing gas shall be connected to the mobile home lot outlet by an approved ¾ inch mobile home connector not more than 6 feet in length. Approved pipe and fittings may be used between the flexible connector and the mobile home lot gas outlet when the distance between the mobile home lot gas outlet and the mobile home gas service connection

exceeds that required to make a safe installation with only a mobile home connector.

NOTE: See NFPA No. 501B, ANSI A119.1, Part D, Section 5.1.10 for information on location of gas supply connections on mobile homes.

5.4.7 Mechanical Protection. All gas outlet risers, regulators, meters, valves or other exposed equipment shall be protected from mechanical damage by vehicles or other causes.

5.4.8. Maximum Pressure Permitted. Gas supplied into the mobile home shall not exceed 1/2 pounds per square inch gage or 14 inches water-column.

Appendix A — Mobile Home Park Design

A1. General. Condition of soil, ground water level, drainage and topography should not create hazards to the property or the health and safety of the occupants.

A2. Setbacks. Each mobile home should be located at least 25 feet from any park property boundary line abutting upon a public street or highway.

A3. Density. The density of mobile homes should be regulated by mobile home lot requirements and separation requirements set forth in this Standard.

A3.1 The occupied area of a mobile home lot should not exceed 75 percent of the lot area.

A3.2 Mobile homes should not be located closer than 10 feet from any other mobile home or permanent building within the mobile home park. No mobile home accessory building should be closer than 3 feet from a mobile home or building on an adjacent lot.

A4. Access to Park Streets. Each mobile home lot within a mobile home park should have direct access to a park street. The access should be an unobstructed area, not less than 12 feet in width.

A5. Park Streets. "Park Streets" should be of adequate widths to accommodate the contemplated parking and traffic load in accordance with the type of street. Traffic lanes should be 10 feet minimum width for collector streets, and 9 feet minimum width for minor streets. Lanes for parallel parking should be 7 feet minimum width. Collector streets, with guest parking allowances, should be 34 feet minimum width. Collector streets and all other streets, except minor streets without parking allowances, should be 24 feet minimum width. Minor streets serving less than 40 lots (no parking) should be minimum width 18 feet. One-way minor streets serving less than 20 lots (no parking), should be 12 feet minimum width.

A5.1 The street system should have direct connection to a public way.

A5.2 Streets and walkways designed for the general use of the mobile home park residents should be lighted during the hours of darkness. If provided, such lighting shall not be under the control of the mobile home occupant.

A6. Vehicle Parking. Mobile home parks should be designed to include two automobile parking spaces for each mobile home lot.

Appendix B —

Mobile Home Accessory Buildings and Structures

B1. General. Mobile home accessory buildings and structures have been included in this document as Appendix B in view of the comprehensive nature of these accessories and the wide variation of use throughout the United States. The definitions, therefore, will serve as a basis for identification of these accessory buildings and structures by the authority having jurisdiction.

B1.1 Definitions.

AWNING: A shade structure supported by posts or columns and partially supported by a mobile home installed, erected, or used on a mobile home lot.

AWNING, FREE STANDING: A shade structure supported entirely by columns or posts and not attached to or supported by a mobile home or other structure.

AWNING WINDOW: A shade structure supported wholly by the mobile home or building to which it is attached.

CABANA: A room enclosure erected or constructed adjacent to a mobile home for residential use by the occupant of the mobile home.

CARPORT: An awning or shade structure for a vehicle or vehicles which may be free-standing or partially supported by a mobile home.

FENCE: A vertical structure designed and erected as a free-standing unit, the surface of which is more than 50 percent open.

HABITABLE ROOM: Any room meeting the requirements of these regulations for sleeping, living, cooking, or dining purposes excluding such enclosed spaces as closets, pantries, bath or toilet rooms, service rooms, connecting corridors, laundries, unfinished attics, foyers, storage spaces, cellars, utility rooms, and similar spaces.

PORCH: An outside walking area having the floor elevated more than eight inches above grade.

RAMADA: Any free-standing roof, or shade structure, installed or erected above an occupied mobile home or any portion thereof.

STRUCTURE: That which is built or constructed, an edifice or building of any kind, or any piece of work artificially built up or composed of parts joined together in some definite manner.

STORAGE STRUCTURE: A structure located on a mobile home lot which is designed and used solely for the storage and use of personal equipment and possessions of the mobile home occupants.

WINDBREAK: A vertical wall structure designed and erected as a free-standing unit, the vertical surface of which is not more than 50 percent open.

B1.2 Scope. When mobile home accessory buildings and structures are erected, constructed or occupied on a mobile home lot, they should comply with this standard.

B1.3 Construction, General. Every mobile home accessory building or structure should be designed and constructed in accordance with the applicable provisions of nationally recognized building codes.

B1.4 Electrical Systems, General. Electrical equipment installed in a mobile home accessory building or structure should comply with the applicable provisions of the National Electrical Code (NFPA No. 70; ANSI C1).

B1.5 Plumbing Systems, General. Plumbing equipment, materials and installations in a mobile home accessory building or structure should comply with the applicable provisions of the nationally recognized plumbing codes.

B2. Cabanas.

B2.1 General. A cabana may be erected, constructed, occupied or maintained on a mobile home lot only as an accessory to a mobile home.

B2.2. Design and Construction. A cabana should be designed and constructed as a free-standing structure. A cabana may be attached to a mobile home with appropriate flashing or sealing materials to provide a weather seal.

B2.3 Dimensions:

B2.3.1 The height of a cabana should not exceed one story or the height of the mobile home, except when constructed in conjunction with a ramada.

B2.3.2. A cabana should have a minimum ceiling height of 7 feet 6 inches from the finished floor to the finished ceiling, or, if there is no finished ceiling, to the roof. If the ceiling or roof is sloped, one-half of the sloped ceiling area shall meet the minimum ceiling height. No portion of any room having a ceiling height of

less than 5 feet should be considered as contributing to the minimum area recommended in subsection B2.3.4. of this section.

B2.3.3 No habitable room should be less than 7 feet in any horizontal dimension and no toilet compartment less than 30 inches in width, and there should be not less than 21 inches clear space in front of each toilet.

B2.3.4 Each habitable room in a cabana should have a superficial floor area of not less than 90 square feet excluding a private toilet and bath compartment or other enclosed area.

B2.4 Foundations.

B2.4.1 Cabana may be set on piers and girders in lieu of continuous footings. Piers and girders should be designed to adequately support the weight imposed on them in accordance with standard engineering practice.

B2.4.2 A light-weight metal cabana may be erected or installed on a concrete floor slab. The minimum thickness of the slab should be 3½ inches. Where buildings or structures are designed for loads in excess of minimum requirements, this type of foundation should not be used.

B2.5 Floors. When a concrete floor on grade is used, it should have a thickness of not less than 3½ inches. The surface of the concrete floor should be not less than 2½ inches above the adjacent ground level. A wood floor, pressure treated with approved preservative, may be laid directly on moisture-proof concrete slabs.

B2.6 Walls. A cabana should be so constructed and maintained to provide shelter to the occupants and contents against the elements and to exclude dampness.

B2.7 Exits. Each room in a cabana should have access to at least one exterior door opening directly to the outside from the cabana without passing through the mobile home. The opening should be not less than 30 inches in width nor less than 6 feet, 2 inches in height. Two such door openings should be provided from the cabana at remote locations when the cabana encloses two doors of the mobile home.

B2.8 Light and Ventilation.

B2.8.1 Habitable Rooms. Habitable rooms should be provided with windows or doors having a total glazed area of not less than 10 percent of the floor area. An area equivalent to not less than 5 percent of the floor area should be available for unobstructed ventilation. Glazed areas need not be openable where a

mechanical ventilation system is provided and is capable of producing a change of air in the room(s) every thirty minutes with not less than 1/5 of the air supply taken from outside the cabana.

Exception: Kitchens may be provided with artificial light and mechanical ventilation capable of producing a change of air in the room every 30 minutes.

B.2.8.2 Windows and Doors Used for Light and Ventilation. Such windows and doors shall open directly to the outside.

B2.8.3 Bathroom. Each bathroom should be provided with windows or doors having a total glazed area of not less than one and one-half (1½) square feet of full openable window except where artificial light and an approved mechanical ventilation system is provided and capable of producing a change of air every twelve (12) minutes.

B2.8.4 Cabana Windows. Required windows of a cabana should open on a court, yard or street either directly or through a porch or awning having a minimum clear height of not less than 7 feet. Such porch or awning should be at least 50 percent open on the side opposite the windows.

B3. Awnings.

B3.1 General. An awning may be erected, constructed or maintained on a mobile home lot only as an accessory to a mobile home located on the same lot.

B3.2 Location. An awning supported in part by a mobile home may be erected on a lot line, provided such awning, when installed, is not less than three feet from a mobile home or mobile home accessory building or structure on an adjacent lot, or any other building or structure.

B3.3 Dimensions.

B3.3.1 An awning supported in part by a mobile home should not exceed 12 feet in width (projection) as measured from the wall of the mobile home to the outer edge of the awning roof.

B3.3.2 A free-standing awning is not limited as to width or length, except that the occupied area of a mobile home lot should not exceed 75 percent of the lot area.

B3.4 Foundations. Concrete slabs may be considered to have an allowable load bearing capacity of 350 pounds per column. The enforcement agency may accept a loading not to exceed 500 pounds per column, provided the slab is not less than 3½ inches

thick and in good condition. The weight of individual poured concrete footings should be one and one-half times the calculated uplift force. The weight of concrete should be assumed to be not more than 145 pounds per cubic foot.

B3.5 Enclosures.

B3.5.1 An awning should not be enclosed with rigid materials or walls, or converted for use as a habitable room or cabana.

B3.5.2 An awning with a roof of rigid material may be screened with open-mesh insect screening. Areas permitted to be screened may also be screened with readily removable transparent plastic.

B3.5.3 An awning with a roof of rigid material may have partial perimeter walls not exceeding 42 inches in height, as measured vertically from the ground or finished floor to the top of the partial walls.

B3.5.4 An awning may have drop or side curtains of cloth, canvas or similar flexible materials. Awning drop or side curtains should not be permanently fastened at the sides or bottom.

B3.6 Exits. An awning with enclosures as permitted should have at least one door in the enclosure opening directly to the outside of the enclosure. The opening should be not less than 30 inches in width nor less than 6 feet 2 inches in height. Two such door openings should be provided from the enclosure when the enclosure encloses two doors of the mobile home.

B4. Carports.

B4.1 General. A carport may be erected, constructed or maintained on a mobile home lot only as an accessory structure to a mobile home located on the same lot.

B4.2. Location.

B4.2.1 A carport supported in part by a mobile home may be erected on a lot line provided such carport, when installed, is not less than 3 feet from a mobile home or mobile home accessory building or structure on an adjacent lot, or any other building or structure.

B4.2.2 A free-standing carport or a common free-standing carport for the use by the occupants of the adjacent mobile home lots may be erected on a mobile home lot line, provided that such carport, or carports, are constructed of material which will not support combustion.

B4.3 Design and Construction. A carport should be designed and constructed in accordance with the structural requirements for awnings.

B4.4 Dimensions. A carport should not exceed the dimensions specified for awnings.

B4.5 Enclosures.

B4.5.1 The side opposite the mobile home and at least one side or one end of a carport should be maintained at least 50 percent open and unobstructed at all times.

B4.5.2 Sides or ends of a carport required to be maintained 50 percent open may be provided with partial enclosures not exceeding 50 percent of the area between the outer edge of the carport and the ground. Such partial enclosures may be arranged either vertically or horizontally and located at any intermediate location between the ground and the carport roof. A carport which is partially enclosed should be designed and constructed to withstand the additional lateral forces imposed by such an enclosure.

B4.5.3 Where a carport is erected immediately adjacent to or over a permanently constructed retaining wall, there should be not less than 18 inches clear ventilating opening between the underside of the carport roof and the top of wall extending the full length of the carport.

B5. Ramadas.

B5.1 General. A ramada may be erected, constructed or maintained on a mobile home lot only as an accessory to a mobile home located on the same lot.

B5.2 Location. A ramada or any portion thereof should have a clearance of not less than 18 inches in a vertical direction above any fuel-burning appliance vent or plumbing vent extending through the roof of a mobile home and not less than 6 inches in a horizontal direction from each side of a mobile home. Cross braces, architectural appurtenances of structural ties should not obstruct movement of any mobile home.

B5.3 Design and Construction. A ramada should be designed and erected as a free-standing self-supporting structure meeting structural requirements for cabanas.

B5.4 Enclosure Prohibited. A ramada should not be enclosed or partially enclosed on any side or end, except that one side may be enclosed when the ramada roof is continuous with the roof of a cabana constructed on one side only of the mobile home.

B5.5 Roof Venting. A ventilating opening should be installed at the highest point in the ramada roof to relieve products of combustion from vents or ducts of fuel-burning equipment. Vent openings should have a minimum cross sectional area of 28 square inches. Chimneys or vents of appliances burning solid or liquid fuel should extend through the ramada roof surface and should terminate in an approved roof jack and cap.

B6. Porches.

B6.1 General. A porch erected, constructed or maintained on a mobile home lot for the use of the occupants of the mobile home located on the same lot should comply with all the requirements herein.

B6.2 Design and Construction. The design and construction of all structural elements of a porch, stairs leading thereto, and rails should be in accordance with the applicable provisions of nationally recognized dwelling codes. Live loads applicable to porch floors should be not less than 40 pounds per square foot.

B6.3 Foundation. A porch foundation may be precast concrete piers when placed on undisturbed or compacted earth, provided the bearing surface is adequate for the designed load and no wood is placed within 6 inches of any earth.

B6.4 Railings. Railings should be provided around the perimeter of porches which are 30 inches or more above grade. Railings should be not less than 42 inches in height above the floor. Intermediate rails in open-type railings should be spaced not more than 9 inches apart. Railings should be designed and constructed to withstand a horizontal force of 20 pounds per lineal foot applied at the top of the railing.

B6.5 Handrails. Stairways serving porches having the finished floor 30 inches or more above grade should be equipped with handrails. Handrails should be not less than 30 inches nor more than 34 inches as measured vertically from the nosing of stair treads.

B7. Storage Structures.

B7.1 General. Not more than two individual storage structures may be located or maintained on one mobile home lot.

B7.2 Location. A storage structure may be located on a lot line or adjacent to a mobile home or mobile home accessory build-