

NORTH CAROLINA

BUILDING CODE

BY

NORTH CAROLINA

BUILDING CODE COUNCIL

1936

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AUGUST, 1936

NORTH CAROLINA STATE COLLEGE
OF
AGRICULTURE AND ENGINEERING
OF
THE UNIVERSITY OF NORTH-CAROLINA

North Carolina Building Code

PREPARED BY

The North Carolina Building Code Council



BULLETIN No. 10
ENGINEERING EXPERIMENT STATION
STATE COLLEGE STATION
RALEIGH

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OF AGRICULTURE AND ENGINEERING

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THE ENGINEERING EXPERIMENT STATION

The Engineering Experiment Station of the North Carolina State College of Agriculture and Engineering of the University of North Carolina was established in 1923, as provided by an act of the General Assembly of that year. It is an integral part of the School of Engineering, and is engaged in an organized program of research consisting of individual projects carefully defined and approved, which are carried on by engineering teachers. The Station fits uniquely into the program of instruction, research, and extension of State College.

PURPOSE

The work of the Engineering Experiment Station is directed along the following lines:

(a) The investigation of resources and processes, through experimentation and tests, with the object of opening and developing wider fields for the use of the natural resources of the State.

(b) Coöperation with industrial organizations in the solution of technical problems which require such facilities and equipment as are available at State College.

(c) The coördination of research work undertaken by the Engineering School.

(d) The publication of the results of experimental and research projects made by the Engineering Experiment Station and the several engineering departments of State College.

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NORTH CAROLINA STATE COLLEGE
OF AGRICULTURE AND ENGINEERING
OF
THE UNIVERSITY OF NORTH CAROLINA

RALEIGH
August, 1936



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INTRODUCTION

On November 28, 1931, a meeting was held at North Carolina State College at the instigation of W. G. Geile, Chairman of the Building Code Committee of the North Carolina Society of Engineers. Invited to this meeting were all officials of state organizations interested in the construction industry and all fire chiefs in the State. A short paper was presented by Professor Geile outlining the purposes of the meeting and explaining the necessity for a State Building Code. He was followed by Mr. Sherwood Brockwell, State Fire Marshal, who pointed out the possibilities of securing a State Code and giving a short history of previous experiences in formulating a Code. At this meeting a constitution was adopted and the following officers elected: Mr. Sherwood Brockwell, Chairman; Mr. Harry Barton, Vice Chairman; Mr. W. G. Geile, Secretary-Treasurer.

A number of meetings were held in the next two years, during which time a proposed Code for North Carolina was adopted. The total membership of the Council reached one hundred and twenty-four, and the proposed Code was endorsed by the following organizations: North Carolina Society of Engineers; North Carolina Chapter of the American Institute of Architects; North Carolina Branch of the American General Contractors of America; State Board of Health; North Carolina Chapter of the Society of Civil Engineers; and the North Carolina Association of Plumbing and Heating Contractors.

Before the General Assembly of 1933 a bill was introduced entitled: "An Act to Create a Building Code Council for North Carolina." This bill was passed without any opposition. It will be found on pages vij and viii of this bulletin. In substance, it created a State Building Code Council and authorized the Council, in coöperation with the Insurance Commissioner of the State, to prepare and adopt a Building Code.

The appointment by the Governor of the official Building Code Council provided for by the bill introduced by Senator Griffin did not take place until July 24, 1934. The appointed members were as follows:

George W. Kane, Durham; W. W. Hook, Charlotte; W. R. Doshier, Wilmington; R. R. Lawrence, Winston-Salem; Harry Tucker, Raleigh.

The Building Code Council held its first meeting in the office of the State Insurance Commissioner, Raleigh. At this meeting Mr. George W. Kane was elected chairman and Mr. W. W. Hook, acting secretary. At a meeting held at State College on August 9, 1934, W. W. Hook was elected permanent chairman and Harry Tucker, secretary and treasurer. Mr. W. R. Doshier, sometime after his appointment to the Building Code Council, was named Postmaster for the city of Wilmington. He thereupon resigned as a member of the Building Code Council, and the Governor appointed W. H. Sullivan of Greensboro in his place.

The Building Code Council, as soon as it had been officially appointed, proceeded to a thorough study of the Building Code as adopted by the unofficial Building Code Council of North Carolina. The Code was finally assembled in a satisfactory shape during the early part of 1935, and received the full approval of the Building Code Council. It was thereupon submitted to the Insurance Commissioner of the State and likewise was given his formal approval. There remained the task of having the Code printed and distributed to those individuals, companies, and public officials who were interested in seeing its provisions put into effect.

The printing of the code has been a real task. The Legislature in 1933 made no appropriation for financing the expenses of the Building Code Council, nor did it provide funds for printing the code. It was hoped that the Legislature of 1935 would not only provide a sufficient sum for printing and distributing the code, but would likewise make an appropriation to the Insurance Department for thorough enforcement of the provisions of the code. Neither was done. The publication of the code has, therefore, been delayed for over a year due to lack of the necessary funds. The printing has finally been made possible by securing a limited number of advertisers and through the coöperation of the Engineering Experiment Station of the North Carolina State College.

The code is presented with the hope that its adoption and use will protect the public from dangerous and unsanitary buildings, and will provide architects and engineers a set of minimum standards to follow in designing buildings. It should be pointed out that the code is, in its present form, necessarily far from perfect. The Building Code Council has authority, with the coöperation of the Insurance Department, to make such changes

in the code as are warranted by the wider use of new materials and methods. From time to time, therefore, it will be necessary to modify or to change certain requirements in the code.

The Building Code Council acknowledges the very fine assistance it has received from W. G. Geile, Professor of Construction at State College, and Sherwood Brockwell, State Fire Marshal. These two men have been largely responsible for the inception and preparation of the Building Code. The Council, since its formation, has had the full coöperation of Mr. Dan Boney, State Insurance Commissioner. His advice and assistance have been most valuable.

LAW CREATING BUILDING CODE COUNCIL

From the 1933 Supplement to the North Carolina Code of 1931

Containing all the General Laws of 1933

Chapter 126; Art. 2A. Building Code

#7494 (1). N. C. building code. This law shall be known and may be cited as the North Carolina building code. (1933, c. 392, s. 1.)

#7494 (2). Purpose of article. It is the purpose of this article to protect life, health, and property and all its provisions shall be construed liberally to that end. (1933, c. 392, s. 2.)

#7494 (3). Administration by Insurance Commissioner. The administration of such reasonable rules and regulations which may be hereafter adopted by the Building Code Council which is herein provided for shall be enforced by the Insurance Commissioner or his deputy or deputies in coöperation with local officials in accordance with the consolidated statutes of North Carolina, Sections 2738 to 2745, inclusive.

City ordinances may go more into detail, if desired, or may contain more stringent requirements, provided the same do not conflict with the rules and regulations hereafter adopted by the said Building Code Council. (1933, c. 392, s. 3.)

#7494 (4). Building Code Council created. There is hereby created a Building Code Council which shall consist of the following members registered in accordance with the laws of North Carolina where registration laws apply: One architect, one general contractor, one structural engineer, one plumbing and heating contractor, and one representative of organized labor. Members of the Building Code Council shall be appointed or removed by the Governor. The terms of office shall be as follows: One architect five years, one general contractor four years, one structural engineer three years, one plumbing and heating engineer two years, and one representative of organized labor one year. Vacancies caused by expiration of term of office shall be filled by the Governor and appointments made for a period of five years. Vacancies caused by resignation or otherwise shall be filled by the Governor for the unexpired term of the person leaving office.

Within thirty days after the passage and publication of this article, the Building Code Council shall meet and organize and shall have power to elect its own officers, to fix the times and places for its meetings, to adopt necessary rules of procedure, and to adopt all other rules and regulations not inconsistent herewith which may be necessary for the proper discharge of its duties and it shall keep an accurate record of all its proceedings. (1933, c. 392, s. 4.)

#7494 (5). Appeals to council. An appeal from the decision of the Insurance Commissioner upon any matter affecting the building code may be taken to the Building Code Council as hereinafter provided. (1933, c. 392, s. 5.)

#7494 (6). Pay of members. The members of the Building Code Council may each receive five dollars per day as compensation for the time given in the performance of his duty and may be reimbursed for compensation and actual traveling expenses from funds of the organization which he represents.

When the Insurance Commissioner shall reject or refuse to approve the mode or manner of construction proposed to be followed, or materials to be used in the erection or alteration of any building or structure, or when it is claimed that the provisions of this code do not apply, or that an equally good or more desirable form of construction can be employed in any specific case, the owner of such building or structure, or his duly authorized agent, may demand that the decision of the Insurance Commissioner be reviewed by

the chairman and two or more members of the Building Code Council who are qualified to render a fair and impartial decision where the amount in question shall exceed the sum of \$1,000.00. The members best qualified in the opinion of the chairman shall be selected to review the decision of the Insurance Commissioner.

After a review of the decision of the Insurance Commissioner the chairman shall forward the findings and recommendations to the Insurance Commissioner immediately. It is understood that the Building Code Council shall serve in an advisory capacity only and that the final decision and responsibility for such decision shall rest upon the Insurance Commissioner: Provided, nothing in this article shall prohibit the owner his right of appeal to the superior courts.

It shall be the duty of the council not only to make recommendations to the Insurance Commissioner relative to the proper construction of the pertinent provisions of the building code but it shall also recommend that he shall allow materials and methods of construction other than those required by the building code to be used, when in its opinion such other material and methods of construction are as good as those required by the code, and for this purpose the requirements of the building code as to such matters shall be considered simply as a standard to which construction should conform. (1933, c. 392, s. 6.)

§7494 (7). Violation of act subjects offender to fine. If any employer, owner, or other person shall violate any of the provisions of this article, or shall do any act prohibited herein, or shall fail to perform any duty lawfully enjoined within the time prescribed by the Insurance Commissioner or his deputy, or shall fail, neglect, or refuse to obey any lawful order given or made by the Insurance Commissioner, for each such violation, failure or refusal, such employer, owner or other person upon conviction thereof shall be fined in any sum not less than ten dollars (\$10.00), nor more than fifty dollars (\$50.00) for each offense. Each seven days neglect shall constitute a separate and distinct offense. (1933, c. 392, s. 7.)

NORTH CAROLINA BUILDING CODE

*Adopted by the North Carolina Building Code
Council and approved by the Insurance
Commissioner in accordance with
Act of the General Assembly
of 1933, Chapter 392*

PUBLISHED BY

THE NORTH CAROLINA BUILDING CODE COUNCIL

In Co-operation with the

ENGINEERING EXPERIMENT STATION

of the

NORTH CAROLINA STATE COLLEGE

North Carolina Building Code Council:

W. W. HOOK, *Chairman*
Charlotte

GEORGE W. KANE
Durham

R. R. LAWRENCE
Winston-Salem

W. H. SULLIVAN
Greensboro

HARRY TUCKER, *Secretary*
State College Station
Raleigh

Administration

Section 1.1. TITLE. These rules and regulations shall be known as the 1935 Edition of the North Carolina State Building Code, may be cited as such and will be referred to hereafter as "this code."

Section 1.11. Purpose. The purpose of the code is to provide certain minimum standards, provisions and requirements for safe and stable design, methods of construction and uses of materials in buildings and/or structures hereafter erected, constructed, enlarged, altered, repaired, moved, converted to other uses or demolished and to regulate the equipment, maintenance, use and occupancy of all buildings and/or structures.

Section 1.2. SCOPE.

Section 1.21. New Buildings and Additions — Exemptions. This code shall apply to all new buildings, structures and additions thereto except:

- (a) Dwellings and outbuildings in connection therewith, such as barns and private garages.
- (b) Apartment buildings used exclusively as the residence of not more than two families.
- (c) Buildings used for agricultural purposes other than schools or assembly halls which are not within the limits of a city or an incorporated village.
- (d) Temporary buildings or sheds used exclusively for construction purposes, not exceeding twenty feet in any direction, and not used for living quarters.

Section 1.22. Alterations. This code shall apply to all alterations which affect the structural strength, fire hazard, exits, lighting or sanitary conditions of any building except those exempted in Section 1.21. Within the fire limits of cities and towns where this article applies, as established and defined, no frame or wooden building shall be hereafter erected, altered, repaired, or removed except upon the permit of the building inspector, approved by the Insurance Commissioner.

Section 1.23. Change of Use. This code shall apply to all buildings which are to be devoted to a new use for which the requirements of this code are in any way more stringent than the requirements covering the previous use of the building.

Section 1.24. Local Regulations. This code shall not be understood to limit the powers of cities, villages and towns to

make or enforce additional or more stringent requirements and regulations, provided the same do not conflict with this code or any revision of this code.

NOTE: Every municipality is authorized to adopt, for its own benefit:

- (a) Regulations covering the construction of private residences.
- (b) Other fire-preventive and sanitary regulations which cannot be reasonably included in this code.

Section 1.3. GENERAL PROVISIONS.

Section 1.31. Design and Supervision of Buildings. For every building costing \$10,000 or more and/or designed to accommodate one hundred or more persons, except those exempted in Section 1.21, plans shall be prepared and copies thereof furnished the Insurance Commissioner. The plans and specifications so prepared shall be complete in every detail so that the work will comply with the provisions as set forth in this code and shall be constructed under the supervision of a competent superintendent or inspector, in accordance with the plans and specifications.

Section 1.32. Plans To Be Kept at Building. When permit has been issued for the construction of any building, the owner or contractor shall keep at the building a set of plans and specifications that have been approved, in order that any building inspector, whether state or city, may ascertain when he visits a building under construction, whether the construction is in accordance with the plans.

Section 1.33. Plans Approved by Building Department. Section 1.31 of this code shall not be construed to repeal any existing provisions of law requiring plans and specifications for building construction and work connected therewith to be filed with any state or local board or department, and to be previously approved by said state or local board or department.

Section 1.34. Building Permits. Before a building is begun the owner of the property shall apply to the inspector for a permit to build. This permit shall be given in writing and shall contain a provision that the building shall be constructed according to the requirements of this code and any other local ordinance pertaining to the construction. As the building progresses the inspector shall make as many inspections as may be necessary to satisfy him that the building is being constructed according to the provisions of this law. As soon as the building is completed the owner shall notify the inspector, who shall proceed at once to inspect the said building and determine whether or not the flues and the building are properly constructed in accordance with the building law. If the building meets the

requirements of the building law the inspector shall then issue to the owner of the building a certificate which shall state that he has complied with the requirements of the building law as to that particular building, giving description and locality and street number if numbered. The inspector shall keep his record so that it will show readily by reference all such buildings as are approved. The inspector shall report to the Insurance Commissioner every person neglecting to secure such permit and certificate, and so bring the matter before the mayor, recorder, or municipal court for their attention and action.

Section 1.35. Unsafe Buildings Condemned. Every building which shall appear to the inspector to be especially dangerous because of its liability to fire or in case of fire by reason of bad condition of walls, overloaded floors, defective construction, decay or other causes shall be held to be unsafe, and the inspector shall affix a notice of the dangerous character of the structure to a conspicuous place on the exterior wall of said building. No building now or hereafter built shall be altered, repaired or moved, until it has been examined and approved by the inspector as being in a good and safe condition to be altered as proposed, and the alteration, repair or change so made shall conform to the provisions of the law.

Section 1.36. Punishment for Allowing Unsafe Building to Stand.

(a) If the owner of any building which has been condemned as unsafe and dangerous by any local inspector, after being notified by the inspector in writing of the unsafe and dangerous character of such building, shall permit the same to stand or continue in that condition, he shall forfeit and pay a fine of not less than ten nor more than fifty dollars for each day such building continues after such notice.

(b) If after ninety days from legal notice from the inspector, the owner or owners of a building which has been condemned fails to answer such notice of condemnation, the Chief of the Fire Department or the local Building Inspector may, with and by a two-thirds vote of the City Council, order such building removed, with reasonable expense incurred by such removal charged against the property.

CHAPTER II.

Definitions

Section 2.1. DEFINITIONS. For the purpose of this code, certain terms, phrases and words and their derivatives shall be construed as set out in this section. Words used in the singular include the plural and the plural the singular. Words used in the masculine gender include the feminine, and the feminine the masculine. Wherever a chapter, section or part is referred to in this code by number it shall be understood to refer to a chapter, section or part of this code.

"Alteration." Alter or alteration means any change, addition or modification in construction or occupancy.

"Apartment" means a room, or a suite of two or more rooms, in a residence-building occupied as the home or residence of an individual, family, or household.

"Approved." The term "approved" refers to a device, material or construction which has been approved by the Building Code Council as a result of tests or investigations made under its direction; or approval issued by it upon satisfactory evidence of competent and impartial tests or investigations conducted by others.

"Area," as applied to a form of construction, means an uncovered sub-surface space adjacent to a building.

"Area," as applied to the dimensions of a building, means the maximum horizontal projected area of the building at grade.

"Automatic," as applied to a fire door or other opening protective, means normally held in an open position and automatically closed by a releasing device that is actuated by abnormal high temperature or by a predetermined rate of rise in temperature.

"Basement" means a story the floor of which is not less than two feet below and the ceiling of which is not less than four feet six inches above grade.

"Bearing-wall" means a wall which supports any vertical load in addition to its own weight.

"Building" means a combination of materials to form a construction that is safe and stable, and adapted to permanent or continuous occupancy for residence, business, assembly or storage purposes; the term "building" shall be construed as if followed by the words "or part thereof."

"Building-line" means the line, established by law, beyond which a building shall not extend, except as specifically provided by law.

"Building-official" means the officer or other person charged with the administration and enforcement of this code, or his duly authorized representative.

"Bulkhead" means a structure above the roof of any part of a building enclosing a stairway, tank, elevator machinery or ventilating apparatus, or such part of a shaft as extends above the roof.

"Cellar" means a story the ceiling of which is entirely below or less than four feet six inches above grade.

"Court" means an open, uncovered and unoccupied space within the lot-lines of a lot and includes a yard.

"Curb" shall be construed to mean the curb level or established grade at the center of the principal front of the building, fronting on one street; or, in the case of a building fronting on two or more streets, the curb level at the center of the front facing on the highest curb shall be taken, unless the highest curb is more than ten feet higher than the lowest curb, in which case the average level of the two curbs shall be taken.

"Curtain wall" means a non-bearing wall between columns or piers, which is not supported by beams or girders at each story.

"Dead-load" means the weight of walls, partitions, floors, roofs and all other permanent construction of a building.

"Display-sign" means a structure that is arranged, intended, designed or used as an advertisement, announcement or direction; and includes a sign, sign screen, billboard and advertising devices of every kind.

"Dwelling" means a building occupied exclusively for residence purposes and having not more than two apartments.

"Division-wall" means any interior load bearing wall in a building.

"Buildings—types of"

- (a) "Business building."
- (b) "Institutional building."
- (c) "Public building."
- (d) "Residence building."
- (e) "Storage building."
- (f) "Private building."

(a) "Business building" means a building occupied for the transaction of business, for the rendering of professional services, for the display, sale or storage, if not exclusively storage, of goods, wares or merchandise, for the supplying of food, drink or other bodily needs or comforts, or for the performance of work or labor; including among others, office buildings, stores, markets, restaurants, garages, hotels, factories, workshops, laboratories.

(b) "Institutional building" means a building in which persons are harbored to receive medical, charitable, or other care or treatment, or in which persons are held or detained by reason of public or civic duty, or for correctional purposes; including among others, hospitals, asylums, sanatariums, fire houses, police stations, jails.

(c) "Public building" means a building in which persons congregate for civic, political, educational, religious, social or recreational purposes; including among others, courthouses, schools, colleges, libraries, museums, exhibition buildings, lecture halls, churches, assembly halls, lodge rooms, dance halls, theatres, bath houses, armories, recreation piers.

(d) "Residential building," except when classed as an institutional building, means a building in which sleeping accommodations are provided; including among others, dwellings, tenements, multi-family houses, lodging houses, dormitories, convents, studios, club houses.

(e) "Storage building" means a building for the housing, except for purely display purposes, of airplanes, automobiles, carriages, railway cars or other vehicles of transportation, for the sheltering of horses, livestock or other animals, or exclusively for the storage of goods, wares or merchandise, not excluding in any case offices incidental to such uses; including among others, garages, carriage houses, stables, barns, hangars, storage warehouses, freight depots, grain elevators.

(f) "Private building" means a building not included within the term "public building."

"Elevator" means a device within or in connection with a building used for carrying persons or things upward or downward; and includes dumbwaiter, escalator, and similar devices.

(a) "Passenger elevator" means an elevator designed and used for carrying persons.

(b) "Freight elevator" means an elevator designed and used for the carrying of things and such persons only as are necessary for its safe operation or the handling of things carried by it.

"Firelimits" means that territory or those districts within a municipality in which, with certain specified exceptions, frame-construction and unprotected metal construction are prohibited. The fire limits as used in this code shall be that territory fixed as such by the governing body of any incorporated city or town, and which shall include the principal business portions of such city or town.

"Fireproof construction" as applied to buildings, means that in which walls are of approved masonry, reinforced concrete or

reinforced brick masonry; and the structural members of which have fire-resistive ratings sufficient to withstand the hazard involved in the occupancy, but not less than a four-hour rating for bearing walls, fire walls, party walls, isolated piers, columns and wall-supporting girders; a three-hour rating for walls and girders other than already specified, and for beams, floors, roofs and floor fillings; and a two-hour rating for fire partitions.

"Fire partition" means a wall or partition which subdivides a story of a building to restrict the spread of fire or to provide an area of refuge.

"Fire Resistive Ratings." The following table gives the minimum protection of structural parts based on time periods for various incombustible materials:

STRUCTURAL PARTS TO BE PROTECTED	INSULATING MATERIAL USED	MINIMUM THICKNESS OF MATERIAL IN INCHES FOR THE FOLLOWING FIRE-RESISTIVE PERIODS			
		4 Hrs.	3 Hrs.	2 Hrs.	1 Hr.
Steel or Cast Iron Columns; Projecting steel beam and girder flanges; top and bottom chords and all primary truss members.	*Grade A Concrete.....	3	2	1½	1
	†Grade B Concrete.....	4	3	2	1½
	Gunite.....	2½	1½	1	¾
	Brick of clay, shale, concrete, or sand-lime.....	4	4	2½	2½
	Clay tile or clay tile and concrete.....	3	3	1½	1½
	Solid gypsum blocks.....	4	3	2	1½
	‡Metal lath and gypsum or Portland cement plaster..	3	2½	2	1
Webs of steel beams and girders.	*Grade A Concrete.....	2½	1½	1	1
	†Grade B Concrete.....	3½	2½	1½	1
	Gunite.....	2	1	¾	¾
	Brick of clay, shale, concrete or sand-lime.....	4	2½	2½	2½
	Clay tile or clay tile and concrete.....	2	2	1½	1½
	Solid gypsum blocks.....	3	2	1½	1
	‡Metal lath and gypsum or Portland cement plaster..	2½	2	1½	¾

* Grade A concrete shall mean concrete with a coarse aggregate of limestone, calcareous pebbles or trap rock.

† Grade B concrete shall mean concrete with a coarse aggregate of granite, sandstone, chert pebbles or quartz.

‡ Provided there is an air space of one inch between the structural steel and the protective coat of metal lath and plaster.

"Fire walls" means a wall which subdivides a building or separates buildings to restrict the spread of fire, and which starts at the foundation and extends continuously through all stories to and above the roof.

"Foundation wall" means a wall or pier below curb level serving as a support for a wall, pier, column, or other structural part of a building.

"Frame Construction" includes frame buildings of metal construction and all those in which exterior or party walls are wholly or partly of wood.

NOTE: Buildings of exterior masonry veneer or stucco or wooden frame, constituting wholly or in part the structural supports of the building or its loads, are frame buildings within the meaning of this definition.

"Garage" means a building, shed or enclosure, or a part thereof, in which a motor vehicle containing volatile inflammable oil in its fuel storage tank, is stored, housed or kept.

"Private garage" means a garage, for not more than three motor vehicles, in which no business or industry connected directly or indirectly with motor vehicles is carried on.

"Public garage" means a garage not included within the term private garage.

"Grade," with reference to a building, means, when the curb level has been established, the mean elevation of the curb level opposite those walls that are located on, or parallel with and within fifteen feet of, street lines; or, when the curb level has not been established, or all of the walls of the building are more than fifteen feet from street lines, "grade" means the mean elevation of the ground adjoining the building on all sides.

"Gypsum mortar" means a mixture of one part of retarded gypsum and not more than two parts of sand, proportioned by weight, to which a fibrous binding material is added when necessary.

"Heavy timber or Mill Construction," as applied to buildings, means that in which walls are of brick, concrete, or reinforced concrete; and in which the interior structural elements, including posts, floor, and roof construction, consist of heavy timbers with smooth flat surfaces assembled to avoid thin sections, sharp projections and concealed or inaccessible spaces; and in which wall supporting girders and structural members of steel or of reinforced concrete, if used in lieu of timber construction, have a fire resistance rating of not less than three hours.

"Height," as applied to a building, means the vertical distance from grade to the highest point of such building.

"Height," as applied to a court, means the vertical distance from the level of the floor of the lowest story served by that court to the level under consideration.

"Height," as applied to a story, means the vertical distance from top to top of two successive tiers of floor beams.

"Height," as applied to a wall, means the vertical distance to

the top measured from the foundation wall, or from a girder or other immediate support of such wall.

"Hereafter" means after the time that this code becomes effective.

"Heretofore" means before the time that this code becomes effective.

"Hollow block" means a cellular building unit of burnt clay or concrete, the gross cubic content of which is not less than fifty per cent greater than the standard size of brick and the cellular spaces of which are in excess of twenty-five per cent of the gross cubic content of the unit.

"Lime mortar" means a mixture of one part slaked lime or hydrated lime and not more than four parts of sand, proportioned by volume.

"Cement mortar" means a mixture of one part of cement and not more than three parts of sand, proportioned by volume, with an allowable addition of hydrated lime not to exceed fifteen per cent of the cement by volume.

"Cement lime mortar" means a mixture of one part of cement, one part of slaked lime or dry hydrated lime, and not more than six parts of sand, proportioned by volume.

"Live load" means all loads except dead load.

"Lot corner." A corner lot is a lot situated at the junction of two streets, or of a street and public alley not less than ten feet in width.

"Lot, front of." The front of a lot is that boundary line which borders on the street. In the case of a corner lot the front shall be taken as that property line bordering on a street which is at right angles, or as nearly as possible, to the long dimension of the lot.

"Lot, interior." A lot other than a corner lot is an interior lot.

"Lot, rear of." The rear of a lot is the side opposite to the front. In the case of a triangular lot the rear shall be the boundary line not bordering on a street.

"Multi-family house" means a building occupied as the home or residence of individuals, families or households living independently of each other, of which three or more are doing cooking within their apartments; including tenement house, apartment house, flat, but does not include hotels.

"Occupied," as applied to a building, shall be construed as though followed by the words "or intended, arranged or designed to be occupied."

"Ordinary construction," as applied to buildings, means that in which the exterior walls are of approved masonry or of re-

inforced concrete; and in which the interior structural elements are, wholly or partly, of wood of smaller dimensions than required for heavy timber construction, or of steel or iron that is not protected as required for fireproof construction or semifireproof construction.

"Owner" includes his duly authorized agent or attorney, a purchaser, devisee, fiduciary, and a person having a vested or contingent interest in the property in question.

"Party wall" means a wall used or adapted for joint use between two buildings.

"Passageway" means an enclosed hallway or corridor connecting a required exit to a street or other open space communicating with a street when such required exit does not lead directly to a street.

"Pent house" means an enclosed structure, other than a bulkhead, extending not more than twelve feet above a roof.

"Person" includes corporation and copartnership as well as individual.

"Reinforced brick masonry" means brick masonry in which steel is embedded in such a manner that the two materials act together in resisting forces.

"Reinforced concrete" means a special Portland cement concrete in which steel is embedded in such a manner that the two materials act together in resisting forces.

"Repair" means the replacement of existing work with the same kind of material used in the existing work not including additional work that would affect the structural safety of the building, or that would affect or change required exit facilities, or that would affect a vital element of an elevator, plumbing, gaspiping, wiring or heating installations, or increase the total cubical contents.

"Required" means required by some provision of the code.

"Self closing," as applied to a fire door or other opening protective, means normally closed and equipped with an approved device which will insure closing after having been opened for use.

"Semi-fireproof construction," as applied to buildings, means that in which all walls are of approved masonry or of reinforced concrete; and the structural members of which have fire resistance rating not less than a four-hour rating for fire walls and party walls; a three-hour rating for other walls, isolated piers, columns, trusses, and wall-supporting girders; and a two-hour rating for fire partitions, girders not otherwise specified, exposed beams, floors, roofs, and floor fillings.

"Shaft" means an enclosed shaftway or space, extending through one or more stories of a building, connecting a series of two or more openings in successive floors, or floors and roof.

"Solid block" means a building unit of burnt clay or of stone, gravel or cinder concrete, the gross cubic content of which is not less than fifty per cent greater than the standard size of brick, and in which there are no cellular spaces exceeding in the aggregate twenty-five per cent of the gross cubic content of the unit.

"Sprinklered" means equipped with an approved automatic sprinkler system.

"Stairway" means one or more flights of stairs and the necessary landings and platforms connecting them, to form a continuous and uninterrupted passage from one story to another in a building or structure.

"Standard fire test" means the fire test formulated under the procedure of the American Standards Association as "American Standard" or as "Tentative American Standard" as approved by the National Board of Fire Underwriters and/or The United States Bureau of Standards.

"Story" means that part of a building comprised between a floor and the floor or roof next above, and includes basement and cellar.

"Street" means a highway or thoroughfare dedicated or devoted to public use by legal mapping, user or other lawful manner; and includes avenue, road, alley, lane, boulevard, terrace, concourse, driveway, sidewalk.

"Street line" means a lot line dividing a lot from a street.

"Structure" means a combination of materials, other than a building, to form a construction that is safe and stable; including among others, stadiums, gospel and circus tents, reviewing stands, platforms, stagings, observation towers, radio towers, sheds, coal bins, fences and display signs; the term "Structure" shall be construed as if followed by the words "or part thereof."

"Unprotected metal construction," as applied to buildings, is that in which the structural supports are metal and in which the roofing and walls or other enclosures are of sheet metal, or other incombustible materials, or of masonry deficient in thickness or otherwise not conforming to approved masonry.

"Width," as applied to a court, means the minimum average width taken along all sides, including lot lines, of the court, the widths along each side being measured at right angles or normal to and from such side to the opposite side at the point of measurement.

"Yard" means a court that extends along the entire length of a lot line.

CHAPTER III.

Classifications

Section 3.1. CLASSIFICATION OF BUILDINGS BY OCCUPANCY.

Section 3.11. Classes Designated. For the purposes of this code, buildings are classified, with respect to occupancy and use, as public buildings, institutional buildings, residence buildings, business buildings and storage buildings.

Section 3.12. Mixed Occupancy. In case a building is occupied for two or more purposes not included in one class, the provisions of this code applying to each class of occupancy shall apply to such parts of the building as come within that class; and if there should be conflicting provisions, the requirements securing the greater safety shall apply.

Section 3.13. Doubtful Classification. In case a building is not specifically provided for, or where there is any uncertainty as to its classification, its status shall be fixed by a ruling of the Building Code Council.

Section 3.2. CLASSIFICATION OF BUILDINGS BY TYPE OF CONSTRUCTION.

Section 3.21. Types Designated. For the purposes of this code, construction as used in buildings shall be classified as follows:

Class A	Fireproof construction
Class A'	Semi-fireproof construction
Class B	Heavy timber construction
Class C	Ordinary construction
Class D	Frame construction
Class E	Unprotected metal construction

Section 3.22. Partial Compliance. Nothing in this code shall require full compliance with a type of construction, if, under this code, a less restricted form of construction is permitted; but no building shall be deemed of a given type of construction unless it conforms with all specific provisions of this code applying to that type.