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BUILDING ORDINANCES

OF

The City of Seattle

AND

Other Information for Architects, Builders and the Employes of the Department of Buildings

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JUNE, 1909

Lowman & Hanford S. and P. Co.
Seattle, Wash.

Building Ordinances

OF THE

City of Seattle

Ordinance 17240 approved Oct. 26, 1907, as amended to June, 1909, by Ordinances 17494, 17602, 17666, 17974, 18158, 18182, 18308, 18752, 18884, 18927, 19356, 19533, 19536, 19584.

Published by authority of the Superintendent of Buildings for the convenience of Inspectors, official ordinances being rearranged and abbreviated slightly to that end.

SECTION 1. Wherever used in this ordinance the following words, terms and phrases shall be defined, respectively as follows:

Alley. Any public thoroughfare not exceeding sixteen feet in width.

Alley Line. The line between an alley and private property.

Alteration. The change, modification, or removal of or addition to any part of an existing building.

Apartment House. A building containing separate housekeeping apartments for three or more families, and having a street entrance common to all, or a building any portion of which is used for other than residence purposes, and containing separate housekeeping apartments for one or more families.

Area. An opening below the surface of the ground, adjacent to, but not beneath a building, and used in connection therewith.

Area Way. A means of access to an area from outside the building.

Armored Concrete. Concrete containing iron or steel bearing, stiffening or tension bars, rods or cables uniformly spaced and latticed or woven, or containing expanded metal of uniform mesh.

Assembly Hall. A room for public assemblages, other than theatres, and having a total seating capacity of one hundred or more persons, and including churches, convention halls, auditoriums, exposition buildings, music halls, lecture rooms, school rooms, court rooms and railroad depots.

Attic. A story situated wholly or partly in the roof of a building, or a partial story, immediately beneath the roof.

Basement. A lower story, any part less than one-half the height of which is below the level of the street, or streets, on which it faces, or of the general level of the ground.

Bearing Wall. A wall on which either or both the floor and roof construction rest.

Boarding House. A building used for boarding and lodging purposes, and containing not less than five nor more than twenty sleeping rooms for guests.

Building. Any structure built for the support, shelter or enclosure of persons, animals or chattels; and when separated by division walls, without openings, then each portion of such building so separated, shall be deemed a separate building.

Building Line. The line formed by the intersection of the outer face of the enclosing walls of a building and the surface of the ground.

Cellar. A story, more than one-half the height of which is below the lowest grade of the lot or street.

Cement. Portland cement of either domestic or foreign manufacture.

Cement Mortar. A mixture of not less than one part Portland cement to three parts sand.

Club House. A building used or intended for use by an organization or society for mutual entertainment

or recreation, having common rooms of utility and recreation, and containing more than five rooms for lodging apartments for the use of the members of the organization only.

Concrete. See armored Concrete and Reinforced Concrete.

Corner Lot. One bounded on two or three sides by intersecting street lines.

Curtain Wall. A non-bearing wall built between columns and extending through two or more stories without intermediate supports.

Dead Load. The actual weight of walls, floors, roofs, bearing partitions and all permanent construction of a building.

Dead Wall. A wall without openings.

Detention Building. A public or private hospital, reformatory, prison, jail or police station.

Division Wall. A wall, other than an exterior wall or a party wall, which extends the full height of a building and through the roof.

Dwelling. A building designed and used only for the residence of not over two separate and distinct families.

Established Grade. The grade of the street curb lines fixed by the City of Seattle.

Exterior Wall. An outer wall or vertical enclosure of a building.

Factory. A building used for the manufacture of goods, wares and merchandise by machinery.

Filler Wall. A non-bearing wall built between columns and supported at each floor by girders.

Fireproof Door. A door set in a metal or metal covered frame, and constructed of wood completely covered with sheet metal with lock joints, except that such door may have wire glass panels not less than ¼″ thick set and fixed in metal frames riveted or bolted together.

Fireproof Partition. A partition constructed of brick, not less than 4″ thick, or of tile or reinforced concrete

not less than 3″ thick, the stiffening bars of metal in reinforced concrete to be not less than ¼″ from the surface; or constructed of bars of metal lathed on both sides with metal lath and plastered on both sides with hard plaster not less than ⅝″ thick and the whole not less than 2″; or constructed of bars of metal lathed on one side with metal lath and plastered solid with hard plaster not less than 1¾″ thick; or constructed of wire glass not less than ¼″ thick set and fixed in metal frames or sash, riveted or bolted together, with panes not to exceed 18″ in their least dimension or six square feet in area.

Flat Building. A building of two or more stories containing independent dwellings, each having its own street or private entrance.

Garage. A building in which one or more automobiles are kept for any purpose.

Grade. The surface of the ground or sidewalks adjoining a building. See Established Grade and Natural Grade.

Hall. See Assembly Hall, Public Hall and Stair Hall.

Half Story. A story in which the exterior perpendicular wall does not exceed one-half the total height of a story.

Hard Plaster. Plaster made of mortar composed of not less than one part cement and three parts of lime mortar, or commercial "hard plaster" having a tensile strength, when made into briquettes, of not less than one hundred and fifteen pounds to the square inch when exposed to the air for seven days, and a tensile strength of not less than two hundred and seventy pounds to the square inch when exposed to the air for twenty-eight days.

Height of a Building. The perpendicular distance measured on the center line of the principal front from the established or natural grade at the building line to the highest ceiling line of a building having a flat or mansard roof, or to the center height of the highest gable in a building having a pitched roof, or to half the height

of a hipped roof; provided, however, that no part of the roof or coping shall be more than 8′—0″ above the ceiling line, but pent houses over stairways, not over 10′—0″ in height, or over elevators for housing machinery, not more than 28′—0″ in height, may be built above the roof. If the grade of the lot or adjoining street in the rear or along the side of the building falls below the grade of the front, the height shall be taken in the center of side showing the greatest fall. If the total fall on any side exceeds 10′—0″ in the length of the building, the height shall be measured at the lowermost corner, and when the height of a building is limited, it shall be terraced or stepped off at every 10′—0″ change of grade.

Height of a Story. The perpendicular distance from top to top of two successive tiers of floor beams or joists, or "top of floor to top of floor."

Hotel. A building or part thereof intended, designed or used for lodging purposes and having more than twenty sleeping rooms for guests.

Incombustible Roofing. Not less than three 3 thicknesses of roofing felt and a good coat of tar and gravel, or slate, tin, corrugated iron or other metal with standing-seams or lap-joints, or commercial roofing approved by the Board of Public Works.

Incombustible Stud Partition. A partition constructed of wood studding not less than 2″ by 4″ in dimensions, set not more than 12″ from center to center, and fire stopped, between the studs with masonry not less than 8″ from the floor and not less than 4″ below the ceiling, and with wood fire stops of the same size as the studding midway between the floor and ceiling, or fire stopped at the floor with two courses of brick, or 4″ of concrete and one-third and two-thirds the height of each story, and at the ceiling with wood fire stops of the same dimensions as the studding, and lathed on both sides with metal lath for the full height, and plastered on both sides with hard plaster not less than ⅝″ thick; or constructed of wood studding not less than 1″ by 2″ in dimensions, set not more than 16″

from center to center, with a strip of metal lath the full length of and 1″ wider than each stud, securely fastened to one side of each stud, and wood lath laid ½″ apart, on the opposite side of the studding, and plastered solid not less than 2¼″ thick, and not less than ½″ thick outside the studding and lath.

Inspector. The Superintendent of Buildings of the City of Seattle, or any of his duly authorized assistants.

Interior Lot. One fronting on but one street line and the remaining sides bounded by lot or alley lines.

Lime Mortar. A mixture of lime and sand.

Lime and Cement Mortar. A mixture of not less than 1 part of Portland cement to 4 parts of lime mortar.

Live Load. All non-bearing partitions and all imposed, fixed, or transient loads, other than dead, due to the occupancy of a building or its exposure to wind pressure.

Lodging House. A building or part thereof intended, designed or used for lodging purposes, and having not less than five nor more than twenty sleeping rooms for guests.

Lot Line. The line of demarkation between public and private property, or between private properties, or the boundary line of a lot as shown by a recorded plat.

Masonry. Brick, stone or tile laid in mortar, or concrete, reinforced concrete or armored concrete.

Mezzaine Floor. A partial floor not built on the level of the main floors.

Natural Grade. The undisturbed natural surface of the ground.

Office Building. A building, the whole or larger part of which is intended for office purposes, and no part of which is used for living purposes except by the janitor and his family.

Open Lot. One bounded on all sides by street lines.

Owner. Any person having title to a building or

property, including, when necessary, guardians or trustees.

Panel. The floor space included between the intersection of parallel rows of columns or walls at right angles to each other, or the face of a wall between two pilasters or piers.

Partition Wall. An interior wall, other than a division wall.

Party Wall. A wall used, or built to be used, in common by two buildings.

Person. One or more natural persons of either sex, associations, copartnerships or corporations, whether acting by themselves or by a servant, gent or employe; the singular number shall be held and construed to include the plural, and the masculine pronoun to include the feminine.

Public Building. A building containing United States, State, County, School District or City administrative offices, or court rooms, libraries, museums, art galleries, armories or council chambers.

Public Hall. A corridor or passageway used in common by all the occupants of a building.

Reinforced Concrete. Concrete containing iron or steel bearing, stiffening or tension bars, rods or cables, uniformly spaced and running in one direction only, but with intermediate ties in case of columns.

Repairs. The reconstruction or renewal of any part of an existing building for the purpose of its maintenance in its present form of construction and class of occupancy.

Retaining Wall. A wall built to resist lateral pressure.

School Building. A building containing class or lecture room or rooms for any purpose of education or instruction.

Stable. A building designed or used for a public livery, boarding or transfer stable or private barn, or any building for the feeding or sheltering of animals or fowls.

Stair Hall. A hall including the stairs, stair landings and those portions of the public halls through which it is necessary to pass in using stairways.

Store Buildings. A building used wholly or in part for the purpose of the sale of goods, wares or merchandise.

Story. Any part of a building between floors or between the ceiling of the top floor and the roof.

Street. Any public thoroughfare more than **16′—0″** in width.

Street Line. The line between private property and a street or other public place other than an alley.

Theatre. A room designed or used for the entertainment of spectators, having a permanent stage upon which stage scenery and theatrical apparatus is employed.

Tenement House. Any house, building, structure or portion thereof, occupied, or adapted for occupation, as a dwelling by more than three families living independently of one another and doing their cooking upon the premises, or by more than two families above the first story so living and cooking. A family living in a tenement house may consist of one or more persons.

Through Lot. One running through and fronting on two street lines and the remaining sides bounded by lot lines.

Veneer. An outer facing of brick, stone, concrete, tile or metal placed on a wall for the protection of the backing, or for ornamental purposes.

Warehouse. A building used for the storage of goods, wares or merchandise.

Wire Glass. Wire woven glass not less than one-quarter ¼ of an inch thick.

Workshop. A building designed or used for the manufacture of goods, wares and merchandise by hand.

Yard. The space left in the rear of a building between the building line and the lot lines for the full width of the lot.

SECTION 2. The words **"Class A Building"** or **"Building of Class A,"** wherever used in this ordinance shall be held and construed to mean and include a building constructed according to the following specifications:

All material used in construction, except as hereinafter specified, shall be incombustible, fire and water proof material, and such building shall have a **skeleton framework of steel or iron or of reinforced concrete.**

All **floors** shall be constructed of brick, terra cotta, reinforced concrete, with iron or steel rods to prevent the spreading of beams, and the flanges of the beams or girders fireproofed by at least **1″** of concrete or tiling, and the top of all arches filled with concrete to the level of the top of the beams supporting the arch, **or** shall be made of reinforced concrete floor slabs not less than **5″** thick, with the reinforcing metal at least **1″** above the bottom of the slab, and the slabs resting on **floor beams** not more than **8′—0″** from center to center. **Finish floors** shall be of marble, tiling or concrete, and shall be at least **2″** thick above the top of the supporting beams. In concrete finish floors a strip of wood not to exceed **1″** by **2″** in dimensions may be imbedded around the edges of each room or hallway for the purpose of furnishing a means of fastening carpets.

Every **column** in the outer wall of every such building shall have not less than **4½″** of brick, stone, tile or concrete beyond its outer flanges. Where a facing of granite, marble or other stone which is subject to disintegration by heat is used, every **beam and column** shall be protected independently of such facing with not less than **2″** of brick, tiling or concrete. Walls of exterior **light courts** shall be constructed in the same manner as outer walls. All interior **construction metal** and the inner surface of outer construction metal, with the exception of the frame for elevators and staircases, **shall be protected** from rust and fire by brick, terra cotta or concrete as follows: All such structural iron or steel before being fireproofed shall be cleaned of dirt and scale, and unless incased with concrete, shall be

coated with an efficient preservative to prevent rust; **all iron or steel** columns, girders and beams, including lugs and brackets for same, used in construction of the frame, or supporting the floors or masonry walls, shall be entirely covered with **2″** in thickness of well-burned brick or tile laid in and having all spaces between the brick or tile and the metal filled with cement mortar, or not less than **2″** of concrete, with no space next to the metal; the outer edges of lugs, brackets and similar supporting metal may project to within **⅞″** of the surface of the fireproofing; the shells and webs of **hollow tile blocks** more than **6″** thick, shall not be less than **¾″** thick, and said blocks shall be thoroughly **tied and anchored** together. All exterior **structural metal** parts of the framework **shall be** thoroughly **protected** by concrete, or brick, or tile laid in and having all spaces between the brick or tile and the metal filled with cement mortar, said protection to be in no case less than **3″** thick.

All **roofs** shall be constructed of either concrete, brick or hollow tile arches, the upper surface of which may be covered with cement, concrete, tile asphaltum and gravel, or other fireproof roofing. All **skylights** shall be of corrugated, prismatic or wire glass not less than **¼″** thick, set in a metal frame. Every skylight not glazed with wire glass shall be protected above and below by a **wire screen** supported on an iron frame at a distance of not less than **4″** nor more than **6″** from the glass. Every such screen shall be made of galvanized wire not smaller than **No. 12,** with a mesh not greater than **1¼″,** and shall have a galvanized iron rim **⅜″** in diameter at each outer side, and all the wire forming the mesh shall be turned over and securely fastened to said rim.

All **interior partitions** shall be fireproof partitions. All **elevators** shall be **enclosed** by a prtition of **brick** or tile not less than **8″** thick, or of reinforced concrete not less than **6″** thick, extending from the lowest basement or cellar floor to the underside of the first floor, and provided with **fireproof doors.**

Interior **casings, baseboards, mouldings, door** and **window frames** and **sashes** may be constructed of **wood,** provided the same is completely covered with metal with lock joints, **except** that such doors may have wire glass panels not less than **¼″** thick set in metal frames.

All **glass, except** glass in store fronts in the first story and which face the street, **shall be wire glass** not less than **¼″** in thickness, provided that transoms may be glazed with small glass prisms.

SECTION 3. The words **"Class B Building"** or **"Buildings of Class B,"** wherever used in this ordinance, shall be held and construed to mean and include a building constructed according to the specifications provided for the construction of Class "A" buildings, except as follows:

Reinforced concrete **floor slabs** resting on beams not more than **10′—0″** from center to center may be used, and **wooden sleepers** not to exceed **2″** by **3″** in dimensions may be laid upon such floor slabs and imbedded in concrete, and **wooden floors** laid thereon in all rooms **except** halls, passageways or stairways.

The doors, frames, sashes, bases, casings and mouldings **may be of** ordinary **wood** construction with no open space behind the wood, **provided** that wood bases shall not be used in halls, passageways and stairways, and **wire glass** shall **not** be **required** in exterior windows and exterior doors and door and window frames, window sashes and pilasters, mullions and transom bars not more than **6″** wide **may be** constructed **of wood.**

SECTION 4. The words **"Class C Building"** or **Buildings of Class C,"** wherever used in this ordinance shall be held and construed to mean and include a building constructed according to the specifications provided in the preceding section for the construction of Class "B" buildings, except that the floor beams for supporting the reinforced concrete floor slabs may be, but shall not exceed **16′—0″** from center to center.

SECTION 5. The words **"Class D Building"** or **"Building of Class D,"** wherever used in this ordinance,

shall be held and construed to mean and include a building constructed according to the following specifications:

The **exterior walls** and piers **shall be** constructed of **masonry,** or of masonry and steel or iron, and all interior loads shall be carried to the foundations by **columns** and **girders of iron or steel** or of masonry; the walls of **exterior light courts** or light wells open to streets, alleys or private property shall be considered as exterior walls.

The walls of **interior light court** shall be constructed of **masonry, or** may be constructed of **2″ matched lumber** not to exceed **8″** in width, free from loose knots or shakes, and kiln dried, and put on vertical, and doubled, with broken joints; provided, however, that where these walls are bearing walls the inside plank shall be not less than **3″** thick, and the joists shall rest directly on them; in all cases the outside plank shall be covered with tin or galvanized iron with lock joints or lapped **1½″ or** with metal lath, plastered with cement mortar not less than ½″ thick; **or** such walls may be constructed of **3″** by **4″** studs not more than **12″** from center to center, firestopped at the floors with two courses of brick or **4″** of concrete, and one-third and two-thirds the height of such story and at the ceiling with **2″** by **4″** lumber, and covered on both sides with metal lath and plastered with cement mortar not less than ⅝″ thick.

Elevator shafts below the first floor level shall be constructed as required for Class "A" buildings and above the first floor shall be completely enclosed with a fireproof partition, if within twenty feet of a stairway, unless there is another stairway or fire escape that can be reached without passing any open light well or other elevator shaft.

All **iron, steel,** or reinforced concrete girders and columns shall be **fireproofed** the same as in Class "A" buildings. All exposed parts of other structural metal shall be covered as required in Class "A" buildings, or by metal lath, on metal furring, allowing ½″ air space, and plastered **1″** thick with hard plaster.

All **floor, ceiling** and **roof joists** may be of wood not less than **2⅝″** thick. Every floor shall be composed of two layers of flooring, each layer not less than ⅞″ thick, with **1″** of mortar or mineral wool placed between the same and extending over the entire area between the furring strips and solid up to all columns, pipes or flues which pass through the floors, and under such layer of mortar or mineral wool there shall be placed a sheet of waterproof paper; **or** the floor may be constructed with two layers of **2″** tongued and grooved planking with a layer of **waterproof paper** between, **or** of two thicknesses of ⅞″ flooring with two thicknesses of **1-16″ asbestos** paper between the flooring, laid so as to break joints at least **2″**. All **waterproof paper** shall be turned up at least **2″** where it comes in contact with the walls or any column pipe or flue passing through the floor.

All wooden joists shall have at least one row of **2″** by **3″** cross **bridging** to each twelve feet of span or major fraction thereof; provided, however, that the bridging shall not be spaced more than twelve times the depth of the joists apart where the joists are less than **12″** deep. All **spaces between joists** shall be blocked at each bearing partition with blocks of the thickness and depth of the joists, and such blocking shall be used over all partitions on both sides of any public hall or passage.

All **roofs** shall be constructed of **2″** shiplap or matched lumber laid close and covered with tin, slate, galvanized iron, copper, tar and gravel or other approved incombustible roofing; provided, however, that roofs having a rise of **12″** or more to the foot shall be constructed as required in Class "A" buildings.

Finishing and trimmings may be of ordinary **wood** construction with no open air space behind the wood; **provided,** however, that wainscoting in **halls** and **stairways** shall be of slate, marble, tile, hard plaster or metal backed with mortar.

Exterior doors and **door and window frames,** window sashes and pilasters, mullions and transom bars

not more than **10″** wide may be constructed of **wood,** but no wood wainscoting, panel work or other like construction shall be used on the exterior. All **ceilings over exterior entrances** shall be of slate, marble or tile, or covered with metal or with metal lath and plastered.

All studding **partitions,** except hall partitions, shall have studs not less than **2″** by **4″,** set not more than **12″** from center to center, lathed with **metal lath** and plastered, not less than **½″** thick, and shall have **2″ bridging** the full width and placed every **6′—0″** in height between the floor and ceiling, and a **2″** sill and a **2″** plate. If the stud partition rests upon the plate of the partition next below, there shall be **2″ bridging** cut in at the floor level, and if the studding is more than one story in length, the same kind of bridging shall be cut in both at the floor and ceiling lines. **All ceilings** shall be lathed with **metal lath** and plastered not less than **½″** thick.

All partitions enclosing **public** and stair **halls** shall be either fireproof or incombustible stud partitions, and all ceilings in public and stair halls, and all soffits of stairs shall be lathed with **metal lath** and plastered with hard plaster not less than **½″** thick.

SECTION 6. The words **"Class E Building"** or **Building of Class E,"** wherever used in this ordinance, shall be held and construed to mean and include a building constructed according to specifications provided in the preceding section for the construction of Class "D" buildings, except as follows:

All interior loads may be carried to the foundations by **wooden posts and girders** not less than **10″** in their least dimension, and floor **joists** shall be **not less than 6″** in their least dimension, and roof joists not less than **4″** in their least dimension.

The **roof covering** shall not be less than **1¾″** thick of matched or splined lumber, with no loose knots.

The **floor joists** shall be covered with **2¾″** matched or splined dry lumber not more than **6″** wide and this **covered with** two thicknesses of **1-16″ asbestos paper,**

or one thickness of asbestos paper and one thickness of **waterproof paper,** and a **finish floor** of **⅞″ dry** matched flooring, **or** the floor joists may be **covered with 1¾″** by **3⅝″** matched dry flooring with two thicknesses of asbestos paper, as previously provided, and **1¾″** square strips placed **16″** center to center, with the space filled with **mineral wool** or plaster to the under side of the finish floor, and covered with a finish floor of **⅞″** dry matched flooring.

Partitions may be built of matched lumber not less than **¾″** thick, doubled, with broken joints, and with **1-16″** asbestos paper between, or they may be built of not less than **1⅜″** thick matched lumber, doubled, with broken joints. No partition shall be built of a single thickness of lumber.

The **ceilings,** if lathed and plastered, shall be lathed with metal lath attached to the entire under surface of the flooring and joists, with no open spaces behind.

SECTION 7. The words **"Class F Building"** or **"Building of Class F,"** wherever used in this ordinance, shall be held and construed to mean and include a building constructed according to the specifications provided in the preceding section for the construction of Class "E" buildings, except as follows:

Interior loads **above the first floor** may be carried on bearing partitions.

Floor **joists** shall not be less than **1⅝″** thick.

Partitions shall be constructed of not less than **2″** by **4″** studding, set not less than **16″** from center to center for wood lath, or **12″** for metal lath; provided, that in bearing partitions carrying more than the roof and one floor **3″** by **4″** or **2″** by **6″** studding shall be used, and all studding partitions shall be fire stopped and bridged as required in Class "D" buildings.

All walls, partitions and ceilings, including the basement ceiling, if any, shall be **lathed and plastered** throughout with **metal lath,** and not less than **⅜″** of hard plaster; provided, that in buildings not to exceed two stories in height above the lowest street or alley

wood lath may be used, except on partitions, adjoining public halls, passages and stairways and on stair soffits and hall ceilings.

Floors may be constructed of ordinary shiplap under floor and at least 7/8″ matched finish flooring.

Roof joists shall be covered with at least 7/8″ shiplap free from loose knots, laid close, and covered with incombustible roofing.

SECTION 8. The words **"Class G Building"** or **"Building of Class G,"** whereever used in this ordinance, shall be held and construed to mean and include a building constructed according to the following specifications:

The **exterior walls** and interior **bearing partitions** may be of either solid wood construction, balloon frame, posts and girders or posts and girts, and the exterior walls may be covered with either wood or masonry veneer.

Bearing walls and **partitions** shall be of not less than **2″** by **4″** studs, and if carrying more than one floor and the roof, not less than **3″** by **4″** or **2″** by **6″** studs, and shall have solid **bridging** not less than **2″** thick and the full width of the studding cut in between the studding at each floor and not more than six feet in height apart, and the studding shall be set not more than **12″** from center to center for metal lath, or not more than **16″** from center to center for wood lath or other covering, and **bridging** shall be cut in between the studding at all ceilings and just below the ceiling joists where the same are connected to the rafters. Non-bearing partitions may be constructed of **2″** by **3″** studding, set flat, and spaced as required for bearing partitions.

Floor and roof joists shall be at least **1 5/8″** thick, and shall have solid bridging not less than **2″** thick the full width of the joists cut in between the joists, with close fitting joints over all bearing partitions and over all partitions adjoining public halls or passages, and shall have at least one row of **1″** by **3″ cross-bridging**

to every twelve feet of span or major fraction thereof in spans exceeding twelve feet; provided, however, that where joists are less than **12″** deep, the space between the bridging and between the bridging and walls shall not exceed twelve times the depth of the joists; and provided, further, that when the designed live load is more than seventy-five pounds to the square foot, the cross-bridging shall be made of **2″** by **3″** material. **Cement mortar** shall be placed around all pipes or flues at the floor and ceiling line in such a manner as will completely fill the opening and at least **2″** thick.

No part of any building hereafter erected, except the eaves and cornice, shall be nearer than **3′—0″** to the line of any **adjoining lot,** and if built on land of the same owner nearer than **6′—0″** to **any other building,** unless the side wall of such building is constructed as a masonry wall.

Every wooden building hereafter constructed to form a block of **two or more houses** shall have a brick or concrete party wall between adjoining houses.

The **walls of all light shafts** less than ten feet across in any direction, shall be covered with **metal lath** and hard plaster not less than 1/2″ thick, or with sheet metal with lock joints or lapped **1 1/2″**, and all **elevator shafts** shall be constructed as required in Class "D" buildings.

Buildings having the **upper story** or stories **of wood** construction, or having wooden **gabled or hipped roofs,** and the lower stories constructed with masonry walls, shall be considered as Class "G" buildings.

SECTIONS 9, 10, 11, and 12 define the several Building Districts. For this information consult Building District Map or the Official Code.

SECTION 13. The **Inspector shall have charge of,** inspect, examine and exercise a general supervision over **all building operations,** and shall, from time to time, visit each building or structure in course of erection, construction, alteration, repair or demolition, and require said building or structure to be erected, con-

structed, altered, repaired or demolished according to the provisions of this ordinance, and whenever notified by the Mayor, any member of the City Council or of the Board of Public Works, the Chief of the Fire Department, the Chief of Police, the Sanitary Inspector, the Fire Marshal or any officer of the City of Seattle, or whenever he shall receive a written notice signed by any citizen that any building or structure, or part thereof, is **unsafe, or** is being used or occupied **in violation** of the provisions **of this ordinance, or** has been destroyed or **damaged by fire,** he shall, within twenty-four hours after receiving such notice, visit and examine such building or structure, and shall, upon receiving any application for a permit to alter or repair any existing building, except in case of minor repairs, **visit and examine** such building **before issuing** a **permit for** such **alteration or repairs.**

The **Inspector is hereby authorized** and empowered **to,** at all reasonable times, **enter** and inspect **all buildings** and premises for the purpose of ascertaining whether the provisions of this ordinance are being complied with, or whether said building or premises are safe for use and occupancy; provided, however, that the Inspector shall not enter occupied private dwellings or apartments without the consent of the occupant thereof, without first giving such occupant twenty-four hours' written notice of his intention to inspect such dwelling or apartment, stating clearly for what purpose such inspection will be made; and it shall be **unlawful** for any person **to hinder or prevent** or attempt to hinder or prevent any **such entrance or inspection,** or to obstruct or interfere with the Inspector while engaged therein.

The Inspector shall make and keep a rcord in his office of all visits to and examinations of buildings, giving the date and hour when made, the street and number where such building was located, the name of the owner, agent or occupant of such building, if known, and the condition of the building at the time of such examination.

It shall be the **duty of the Inspector to enforce** the provision of **this ordinance,** and to, when necessary for such enforcement, institute proceedings in a court of competent jurisdiction for violation thereof.

SECTION 14. Whenever the Inspector shall find any building or structure, or part thereof, being erected, altered, repaired or demolished in violation of, or not in compliance with any of the provisions of this ordinance, he may, and **he is hereby authorized** and empowered **to direct the suspension of** any **building operations** thereon until such time as the provisions of this ordinance are complied with, by posting in a conspicuous place upon said building or premises a written or printed notice, signed by the Inspector, notifying all persons to cease all work upon such building or structure, except such work as shall be necessary to comply with the provisions of this ordinance, which work shall be specified in the notice, and thereafter it shall be unlawful for any person to perform any work upon or to continue the construction, alteration, repair or demolition of such building, except in the manner specified in such notice, until such building shall have been made to in all respects conform to the provisions of this ordinance, and such notice to suspend work shall be removed by the Inspector.

It shall be **unlawful** for any person **to remove, mutilate, destroy or conceal** any **notice** to suspend work issued and **posted** as provided in this section.

Nothing in this section contained shall be so construed as to require such notice to suspend work to be given or posted before any prosecution for violations of the provision of thihs ordinance can be begun.

SECTION 15. Wherever the Inspector shall find any building or structure hereafter erected, altered or repaired which shall have been erected, altered or repaired in violation of, or not in compliance with any of the provisions of this ordinance, or any building or structure, or part thereof, hereafter erected, altered or repaired, or the use or occupation of which has been

changed without a permit for such change, and which is used or occupied for certain purposes and is not constructed, arranged or equipped as buildings are required by this ordinance to be constructed, arranged and equipped, when used or occupied for such purpose, he may, and **he is hereby authorized** and empowered **to direct the suspension of the occupation** of such building until such time as the same shall be made in all respects to conform to the provision of this ordinance, by posting in a conspicuous place upon such building or premises a written or printed notice, signed by the Inspector, and bearing the date when the same is posted, notifying all persons to cease to occupy such building or structure until such notice is complied with, which notice shall specify the changes, alterations and repairs or change of occupancy which will be required to be made in such building or structure to comply with the provisions of this ordinance; and it shall be **unlawful** for any person **to occupy said building** or structure **or any part thereof**, for the purpose specified in such notice after a date specified in such notice, which date shall be not more than twenty days from the date of posting such notice, until said building or structure shall have been made to, in all respects, conform to the provisions of this ordinance relating to the construction, arrangement and equipment of buildings for such use and occupancy, and until such notice shall have been removed by the Inspector.

It shall be **unlawful** for any person **to remove, mutilate, destroy or conceal** any **notice** issued and posted as provided in this section, and every day that any person shall continue to occupy or use any building, or part thereof, in violation of this section will be deemed a separate offense.

SECTION 16. Whenever the Inspector shall find that **any building** or structure, or any part thereof, is **dangerous to persons or property,** or unsafe for the purpose for which it is used, or in **danger from fire,** or in **danger of falling** or collapsing from any defects in its construction or from decay of any of its parts, or that

the doors, passageways or stairways of any building are insufficient for the escape of the occupants of such building in case of fire, it shall be the **duty of the Inspector** to determine the alterations or repairs necessary to be made to make such building safe and free from danger, and **to notify** the **owner, or agent** in charge, of such building in writing **to make** the **alteration or repairs** necessary to render such building safe, which alteration or repairs shall be clearly specified in such notice, a copy of which said notice shall be posted by the Inspector in a conspicuous place in said building, and said notice shall be dated and signed by the Inspector and shall specify the time within which said alterations or repairs shall be made, and shall, **except in case of emergency,** as hereinafter provided, state that if the owner or agent in charge of such building deem the requirements of the Inspector, or any of them, unneccessary he shall have the right, within five days from the service of such notice, to **appeal** therefrom **to** the **Board of Public Works.**

The person entitled to take such an appeal shall file with the Secretary of the Board of Public Works, within five days after the service or posting of said notice by the Inspector, a written notice of appeal, stating the notice and requirements appealed from and the reasons for taking an appeal, and shall serve a copy of such notice of appeal upon the Inspector.

Upon the filing of such notice of appeal, the Secretary of the Board of Public Works shall set a date for hearing thereon, which shall be not less than ten nor more than twenty days from the time of filing such notice of appeal, and shall notify the person appealing and the Inspector of the time of such hearing.

At the time of such hearing the Inspector shall appear before the Board of Public Works and state his reasons for requiring such alterations or repairs and the particulars wherein he considers said building unsafe, and may produce witnesses or other evidence in support thereof, and the person appealing shall be permitted to controvert the statements and evidence of the Inspector by any competent evidence. Upon the

submission of all the evidence, after the arguments of counsel, if any, the Board of Public Works shall determine whether the requirements of the Inspector are, in whole or in part, reasonably necessary for the protection of life and property, and shall enter its findings in the premises of record, and make an order directing the person taking the appeal to make such repairs or alterations in such building as in the reasonable discretion of the Board of Public Works, are deemed necessary for the protection of life and property, which order shall specify the time within which such alterations or repairs shall be made, and shall be entered upon the records of the proceedings of the Board of Public Works, and a copy thereof served upon the person taking the appeal; and it shall be **unlawful** for the owner or other person in charge of such building **to fail, refuse or neglect to comply** with such notice of the Inspector, or in case of an appeal, with such order of the Board of Public Works within the time therein specified, and in case the owner or other person in charge of such building shall fail, refuse or neglect to comply with such notice or order, it shall be **unlawful** for any person, after the expiration of the time specified in such notice or order, **to use or occupy** any portion of said building **for any purpose whatsoever** and **each day** that the owner or other person in charge of such building shall fail, refuse or neglect to make the required alterations or repairs, after the time specified in such notice or order, and **each day** that any person shall continue to occupy any portion of said building as hereinafter prohibited, shall be **deemed a separate offense.**

Whenever, in the exercise of a reasonable discretion, the Inspector shall determine that a building is **so unsafe** in any of the particulars in this section specified **as to render it immediately dangerous** to human life, he shall notify the owner or person in charge of such building of such fact, and require all persons occupying such building to **immediately remove therefrom,** which notice shall be posted in the building as hereinabove provided and shall have printed thereon in red letters

not less than 1" in height and of proportionate width the words **"Danger-Emergency Notice."** From and after the posting of such notice, it shall be **unlawful** for any person **to occupy any portion of such building;** and it shall be **unlawful** for the owner or other person in charge thereof **to fail, refuse or neglect to immediately begin** the alterations or repairs required in such notice, and to prosecute the same to completion with reasonable diligence, and such emergency notice shall be final and there shall be **no appeal therefrom** to the Board of Public Works.

SECTION 17. It shall be **unlawful** for any person **to construct, erect, alter, repair, raise, add to, remove** or **demolish** any building, or part thereof, **or to begin** or perform work on the construction, erection, alteration, repair, raising, addition to, removal or demolition of any building, or any part thereof, in the City of Seattle, **without complying with** all of the provisions of **this ordinance** in relation thereto **and** obtaining and **having a permit** from the Superintendent of Buildings of the City of Seattle so to do, or to fail, refuse or neglect to comply with the terms and provisions of this ordinance in relation to the construction, erection, alteration, repair, raising, addition to, removal or demolition of buildings.

SECTION 18. In order to obtain the permit provided for in the preceding section the owner of the premises, or his authorized agent, or the contractor employed to do the work, shall file in the office of the Inspector, on a blank to be furnished for that purpose, an application in writing for such permit, signed by the applicant, and stating thereon the **lot and block number** and the name of the addition or plat **or other accurate description** of the land upon which the proposed work is to be done, and the **portion of** such **lot** or parcel of land **to be** devoted to and **used** with such building for the purpose of furnishing light and air, the general **dimensions of the building,** the **number and height of stories** thereof, the **names** of the **owner**

of the premises, the **architect** of the building, if any, and the **contractor** employed to do the work, an **estimate of the cost** of the proposed work and the **purpose** for which such building **when erected,** constructed, altered or repaired is to be used, and such other matters **as the Inspector may require,** and containing an agreement that such work is to be done in accordance with the charter and ordinances of the City of Seattle, and **shall file** with such application **plans** and **specifications** of the work to be done as hereinafter provided.

SECTION 19. At the time of filing an application for a permit for the erection or construction of any building, and at the time of filing an application for the alteration or repair of any building, **if** so **required by** the **Inspector,** the **applicant shall file** in the office of the Inspector with such application, blue or other printed **plans and** typewritten or printed **specifications, in duplicate,** showing in detail the construction, alterations or repairs for which the permit is applied for, and where construction is to be used requiring special engineering skill or knowledge of the strength of materials, **if** the **Inspector demands** it, there shall be filed full and complete **strain sheets** showing the amount and kind of strain to which each member will be subjected; provided, however, that **no plans** will be **required** for **one story frame** buildings having **less than 500 superficial feet** of floor space and unfinished interiors, **but** the structural specifications giving the dimensions and distances from center to center of all piers, posts, sills, girders, floor joists, studding, ceiling joists, rafters and collar beams shall be filed for approval.

Upon the filing of such application, accompanied by plans and specifications as hereinabove provided, the **Inspector shall, within a reasonable time,** examine such plans and specifications, and in case the same shall be found to be **incomplete, indefinite or unintelligible or contrary** in any respect **to** the provisions of this **ordinance,** the Inspector shall indicate in writing the respects wherein such plans and specifications are incomplete, indefinite or unintelligible or contrary to the

provisions of this ordinance and return such plans and specifications, together with a memorandum of the corrections required, and the **applicant shall cause** such plans and specifications **to be** so **corrected** as to conform to the requirements of the Inspector and the provisions of this ordinance, and if such plans and specifications, or such corrected plans and specifications shall be found to conform in general to the provisions of this ordinance, the Inspector shall stamp on each sheet of such plans and specifications the word "Approved."

Permits shall be consecutively numbered and dated and shall be **valid for** the period of **time stated** in such permit and no longer, unless extended as hereinafter provided, but in **no case** shall a permit be issued for a **longer** period **than one year,** and the time limit of such permit **may be extended** in the **discretion of** the **Inspector** upon application being made therefor before the expiration of the time stated in the permit, and **if the** work upon any building shall be conducted **in violation** of any of the provisions of this ordinance, the **Inspector shall revoke** the **permit.**

At the time of the issuance of the permit the Inspector shall furnish to the applicant a card giving the number of the permit, the date of its expiration and stating the class of work to be done, which **card shall be kept conspicuoulsy posted** on the premises where the work is to be done until the work is completed.

SECTION 20. Upon the issuance of the permit one set of approved **plans and specifications** shall be delivered to the applicant and the duplicate shall remain in the office of the Inspector until the completion of the work for which the permit is issued, and **shall be returned** to the applicant if demanded within thirty days thereafter.

The duplicate approved **plans and specifications shall at all** times during working hours **be kept within the building** under construction, alteration or repair **or** in an office **near the building and accessible** and subject to examination by the Inspector, and no work shall be

done on such building unless the plans and specifications are in the building or the office.

After the issuance of the permit **no change in the plans or specifications** upon which such permit was issued shall be made **without the written approval of the Inspector.** If such change increases the cost of the proposed work the Inspector shall, before approving the same, require the payment of an **additional fee** for such change in accordance with the schedule of fees hereinafter prescribed.

The issuance of a **permit shall not be** considered as **an adoption** by the Inspector of the manifested technical **construction contained** in the **plans and specifications, if** thereafter it shall appear that any portion of such plans or specifications is **in conflict with** any of the provisions of this **ordinance.**

SECTION 21. It shall be **unlawful** for any person **to change the use or occupancy** of the whole or any part of any building heretofore or hereafter constructed and used for any purpose, or of any building hereafter constructed under a permit specifying a certain use, **unless,** prior thereto, **a permit for such change of use or occupancy** shall have been issued by the Inspector, and such building, or part thereof, shall have been altered (to the extent that any alterations shall be necessary) to make the construction, arrangement and equipment of such building, or part thereof, conform in all respects to the provisions of this ordinance relating to the construction, arrangement and equipment of buildings, and parts thereof, for the new use or occupancy.

SECTION 22. In order to obtain a permit for **change of occupancy,** the owner of a building, or his authorized agent, shall file in the office of the Inspector, on a blank to be furnished for that purpose, an application in writing for such permit, signed by the applicant stating the purpose for which it is proposed to use or occupy such building, or part thereof, and specifying the particular part or parts of such building in which it is proposed to change the use or occupancy, and thereupon it shall be the duty of the Inspector to examine such building and determine what alterations are necessary to be made therein in order to make it conform to the provisions of this ordinance relating to the construction, arrangement and equipment of buildings for the proposed use or occupancy, and to notify the applicant in writing of the alterations required to be made, if any, or, in case no alterations are required to be made, to issue a permit in writing, describing the building, or part thereof, the use or occupancy of which is to be changed, and specifying the purpose for which such building, or part thereof, may be used or occupied.

SECTION 23. The **fees for** the issuance of **permits** shall be determined by the superficial area of the floors of the buildings as follows:

	Per 100 superficial feet
Class "A," "B" or "C," first floor	20c.
Class "A," "B," or "C," each additional floor	5c.
Class "D," first floor	15c.
Class "D," each additional floor	4c.
Class "E," first floor	12c.
Class "E," each additional floor	3c.
Class "F," first floor	15c.
Class "F," each additional floor	4c.
Class "G," first floor	10c.
Class "G," each additional floor	2c.

The **fees for** permits for **alterations or repairs** shall be fixed by the Inspector in proportion to the cost of the work as compared with new construction of like character.

When a building is a combination of different classes of construction, the fee shall be fixed for each floor according to the class of construction thereon.

The **minimum fee** for the issuance of a permit for new construction, alteration or repairs, or removal or demolition of a building, shall not be less than fifty cents.

The **fee** for examination of buildings for the purpose of determining whether alterations are required **for** a **change of** use or **occupancy** shall be one dollar.

If any person shall begin the construction, alteration, repair, removal or demolition of any building without first taking out a permit thereof, he shall, when subsequently taking out such permit, be required to pay **double the fees** hereinabove provided, and shall be subject to all the penal provisions of this ordinance.

SECTION 24. The Inspector shall enter in a well-bound book to be kept for that purpose, an accurate account of all fees charged, giving the name of the person to whom charged, the amount charged and the location of the building for which the charge is made and upon the presentation of the Treasurer's receipt showing the payment of such fee, shall enter the same in said book, giving the date and number of the permit, which book shall at all times be open to public inspection.

SECTION 25. All buildings hereafter constructed **within** the **First Building District**, except as otherwise in this ordinance provided, **shall be** Class "A," "B," or "C" buildings.

SECTION 26. All buildings hereafter constructed **within** the **Second Building District**, except as otherwise in this ordinance provided, **shall be** Class "A," "B," "C," "D," "E" or "F" buildings.

SECTION 27. All buildings hereafter constructed **within** the **Third Building District, except** as otherwise in this ordinance provided, **shall be** Class "A," "B," "C," "D," "E" or "F" buildings, or Class "G" buildings with all basement walls built of masonry up to the first floor level and **6″** above the highest ground level, and with all interior walls, partitions and ceilings, if covered, lathed and plastered, and with all roofs, except on dwellings having less than **13** rooms above the lowest street or alley grade and situated at least ten feet from property lines, covered with incombusible roofing; provided, however, that **buildings on**

the water front resting on pile foundations and subject to swaying from the action of tides, waves or vessels, shall not be required to be lathed and plastered or have any masonry walls, flues or chimneys, but when such buildings have smoke flues, such flues shall be of metal, made double with **1″** ventilating space and five thicknesses of corrugated asbestos paper outside the second pipe, and the asbestos protected by tin or galvanized iron covering.

SECTION 28. All buildings hereafter constructed **within** the **Fourth Building District,** except as otherwise in this ordinance provided, **shall be** Class "A," "B," "C," "D," "E," "F" or "G" buildings.

SECTION 29. The provisions of this ordinance relating to the construction, arrangement and equipment of buildings shall be held to apply to all buildings and parts of buildings hereafter constructed, and shall also be held to apply to all reconstruction, rearrangement, alteration, addition and installation of equipment hereafter made of, to or in any building or part of building heretofore or hereafter constructed, except as otherwise in this ordinance specifically provided; provided, however, that nothing in this ordinance contained shall be construed as requiring buildings heretofore constructed to be reconstructed, rearranged, altered or provided with equipment unless specifically required by the terms of this ordinance.

SECTION 30. Buildings shall not exceed the following number of stories and heights, respectively:

Class	Stories	Height in feet
"A"	16	200
"B"	14	176
"C"	13	164
"D"	8 (and basement)	100
"E"	6 (and basement)	80
"F"	4 (and basement)	60
"G"	3 (and basement)	40
Reinforced concrete	10	120

Frame buildings veneered with masonry or any building with gable or hipp roof of wood must conform to requirements applied to "G" class buildings as to height.

Two stories or **32′—0″** on Class "G" Buildings **may be veneered,** the foundation or basement walls of this class of building shall not exceed **5′—0″** above the grade nor shall any roof appendage thereof, except on a building occupied as a church, extend more than fifteen feet above the roof, and in no case over fifty-five feet above the grade; provided, however, that church spires, shot towers, water towers, grain elevators and smoke stacks may exceed the above limits, but in no case shall exceed two hundred feet in height, and shall be so constructed and anchored to a masonry foundation as to withstand a computed lateral wind pressure of thirty pounds to the square foot.

SECTION 31. No building or other structure, **except** a church spire, shot tower, water tower, grain elevator, or smoke stack, **shall be of a height exceeding** two and one-half times the width of the widest street upon which the building faces, and **no building** shall be **over two hundred feet high.**. If a building is set or recessed back from the street, the measurement for the width of the street may be taken from the face of such set back or recessed line to the street line on the opposite side of the street. When a building is both set back and recessed, the recessed portion back of the recessed building line may be carried up above the other portion, but no higher than the two hundred feet limit. The space between the street and building line of any such set back or recess may be built over to the height of not more than two stories or thirty feet.

SECTION 32. No building, except a church spire, shot tower, water tower, grain elevator or smoke stack, **shall** be of any greater height in proportion to its least dimension at the base than as follows:

Buildings of Class "A," "B," or "C," five times; Class "D" or "E," three times; Class "F," two and one-half times; Class "G," one and three-fourths times, and the same proportions shall apply to wings of buildings whose length exceeds two and one-half times their width, provided no building shall exceed the maximum height established for its respective class.

SECTION 33. Any person **excavating for** the purpose of laying the **foundation** of any building, **or** for **any other purpose** whatever, **shall protect** and support all **adjoining** land, buildings, streets, alleys and sidewalks from damage, by underpining, cribbing or shoring or such other device as will prevent all settling, cracking or damage whatsoever.

SECTION 34. Excavations in any building for the foundations of any machinery or for any cistern or pit of any kind, or for a tunnel or sewer, or other pipe line running parallel with a foundation wall or the side of any supporting pier, **shall not** be cut below the bottom of the footings of such wall or pier when such excavation extends within **1′—0″** of the angle of repose or natural slope of the foundation soil underneath such footings. The excavations for the foundation of any vibratory machinery, engine or dynamo shall not be made within **1′—0″** of the footings of any wall or pier.

SECTION 35. When piles are required for a subfoundation they shall be driven to a firm and solid bearing, and the tops shall be cut off at an elevation to insure constant immersion of the piles and wood capping, if any. The piles shall be of sufficient number and so spaced as to equalize the loads and make a stable foundation for the proposed load; computing the load by Major Sander's formula for piles driven in soft ground, and by C. Shaler Smith's formula for piles reaching hardpan. The piles shall be capped with timber not less than **8″** by **12″** in dimensions, or with concrete capping, enclosing the heads of the piles to a depth of not less than **6″**. Where piles are spaced more than **3′—0″** from center to center, metal reinforcements must be used in the concrete.

SECTION 36. The **foundations** of Class "A," "B," "C," "D," "E" or "F" buildings **shall rest upon** base or **footing courses.** Footings of stone shall have the upper and lower surfaces of each approximately parallel, and the stones shall be close fitted and bedded solid. Footings of brick shall be of hard burned brick and shall not be reduced more than 2″ to each course. Footings of stone or concrete shall not be reduced more than 8″ to the foot in height, and all foundations shall rest upon solid ground or piling.

SECTION 37. When **buildings** are not more than **two stories** in height, with no cellar or basement, the **foundation walls shall be** brick 8″ thick, **or** other masonry walls of such proportionate thickness as provided by Section 40 hereof, **or** masonry piers; all such walls or piers to be carried not less than 6″ above the surface of the highest ground within 2′—0″ of the wall or pier; provided, however, that **if** the building is to be **veneered** with masonry, the foundation must be of a masonry wall of such proportionate thickness as provided in Section 40 hereof, on which the veneer shall rest. **If** there is a **cellar or basement,** the **foundation shall be** a wall of brick 8″ thick, or other masonry wall of such proportionate thickness as provided in Section 40 hereof, and built 6″ above the highest ground level within 2′—0″ of the wall; when the building is **more than two stories** in height, either with or without a cellar or basement, the **foundation shall be** a brick wall at least 12″ thick, or other masonry wall of such proportionate thickness as provided by Section 40 hereof and built up to the first floor sills.

SECTION 38. Every building erected without cellar or basement shall have **all sod and** all **soil containing organic matter** beneath the same removed before the joists are laid and shall have in the external walls below the first floor level not less than four **ventilators,** distributed **on opposite sides** of the building, and each not less than 5″ by 12″, and no sill or floor joists shall be less than 6″ above the ground.

SECTION 39 and 40 (TABULATED).

THICKNESS OF WALLS (In Inches).

For uncoursed rubble multiply by	1.4
Coursed rubble or 6″ ashler backed with brick by	1.2
8″ ashler backed with brick by	1.
Granite ashler, full beds, vertical joints, by	.75
Chuckanut ashler, full beds, vertical joints, by	.80
Tenino ashler, full beds, vertical joints, by	.875
Concrete, 1.3.5, by	.875
Reinforced concrete by	.75

	Maximum Height of Stories in Feet.								
For walls of dwellings, apartment houses, hotels, flat buildings and lodging houses, and for divisions and non-bearing walls which would be 16″ thick or more.	12 Basement	16 1st Story	14 2nd Story	12 3rd Story	12 4th Story	12 5th Story	12 6th Story	12 7th Story	14 8th Story
1-story buildings	12	8							
2-story "	12	12	8						
3-story "	16	12	12	12					
4-story "	16	16	12	12	12				
5-story "	16	16	16	12	12	12			
6-story "	20	16	16	12	12	12	12		
7-story "	20	20	16	16	12	12	12	12	
8-story "	24	20	20	16	16	12	12	12	12
For walls less than 40′—0″ long.									
1-story buildings	16	12							
2-story "	16	16	12						
3-story "	20	16	16	12					
4-story "	20	20	16	16	12				
5-story "	20	20	20	16	16	12			
6-story "	24	20	20	16	16	16	12		
7-story "	24	24	20	20	16	16	16	12	
8-story "	28	24	24	20	20	16	16	16	12

	Maximum Height of Stories in Feet. Thickness in Inches.								
	12 Basement.	16 1st Story...	14 2nd Story...	12 3rd Story...	12 4th Story...	12 5th Story...	12 6th Story...	12 7th Story...	14 8th Story...
For walls 40′—0″ long and less than 80′—0″ without one cross wall or equivalent lateral support.									
1-story buildings	20	16							
2-story "	20	20	16						
3-story "	24	20	20	16					
4-story "	24	24	20	20	16				
5-story "	24	24	24	20	20	16			
6-story "	28	24	24	20	20	20	16		
7-story "	28	28	24	24	20	20	20	16	
8-story "	32	28	28	24	24	20	20	20	16
For walls 80′—0″ long and less than 120′—0″ without two cross walls or equivalent lateral support.									
1-story building	24	20							
2-story "	24	24	20						
3-story "	28	24	24	20					
4-story "	28	28	24	24	20				
5-story "	28	28	28	24	24	20			
6-story "	32	28	28	24	24	24	20		
7-story "	32	32	28	28	24	24	24	20	
8-story "	36	32	32	28	28	24	24	24	20

Modifications.

Pilasters with a projection of **8″** more than the thickness of the wall and located not more than **20′—0″** from center to center will be considered equivalent to the cross wall above referred to.

No wall shall have a height of more than **16** times its thickness in any story.

No **12″** exterior wall shall be built below the third story from the top.

When the height of any story is increased by more than **4′—0″** but not exceeding **8′—0″** from the heights above given, the thickness of the walls of that story and all stories below shall be increased **4″** or strengthened by pilasters **24″x8″**.

SECTION 41. Hard burned brick, stone or concrete shall be used for all **exterior walls and all** interior **and** exterior **piers below** the surface of the **ground,** and hard burned brick, stone, concrete or terra cotta for all exterior walls exposed to the weather. All brick shall be well burned and well shaped.

The **bond in brickwork** shall be formed by laying one course of headers for every six courses of stretchers. If pressed brick facing is used, it must be bonded into the backing every nine courses or less if the courses coincide oftener. Bonds shall be made by solid headers or by blind headers or by means of galvanized metal anchors.

Where the **facing of any wall** is **4″** or more in thickness, it shall not be considered in the thickness of the wall unless it is solidly bonded with the backing every **20″**. No facing less than **4″** thick shall be counted in the thickness of the walls. In the case of piers faced with pressed brick, solid headers, bond stones or iron bond plates shall be used.

Pressed Brick must in all cases be so laid as to have a full bed of mortar under the entire surface. Exterior walls **faced with stone,** shall have a backing of hard brick work laid in mortar composed of one part cement and three parts sand; but in no case shall the thickness of the **stone and backing taken together** be less than the thickness required for a brick wall of the same height.

All stone or other facing of a wall shall be **securely tied** to the brick backing by means of metal clamps, or shall have alternate courses bonded at least **4″** with the brickwork.

The backing of any **iron front** that is not wholly self sustaining shall be treated as an independent wall. If the iron is self sustaining then the party and division walls shall extend to meet the outer plate of the iron,

All **fire-walls** shall be covered with weatherproof **coping of** metal, concrete, or granite or tiling set in cement mortar.

SECTION 48. No **masonry** wall shall rest upon or be **supported by** any **wooden support,** unless a masonry **arch** is turned above such support of sufficient strength to carry the wall; provided, that in one story masonry buildings not more than eleven feet high in the clear, cornices and fire-walls may be carried on wooden lintels covered on the face and underside with galvanized iron, or furring and metal lath with cement plaster.

SECTION 49. All masonry walls shall be anchored to each tier of floor joists and girders, at intervals of not more than ten feet apart, with wrought iron anchors not less than ⅜″ thick by 1½″ wide, built into the walls, and not less than 4″ from the opposite side of the wall, and anchored with ¾″ **round iron** tees not less than 8″ long, or wrought or cast iron washers not less than 4″ in diameter, securely fastened to the end, and such anchors shall extend not less than 24″ along the joist or girder and be turned down at least ¾″ at right angles to the anchor and notched in but not fastened to the joist or girder with more than one eight penny nail, and all lines of anchored joists and girders shall be securely fastened together from wall to wall with wrought iron straps, bolts or other means of equal strength with the anchors.

SECTION 50. During the construction of a building **no wall shall be carried** to a **greater height than** one scaffold above any other connected wall of the same building, except by the approval of the Inspector, and in no event higher than one story. All walls of buildings shall be securely braced during construction.

SECTION 51. All brick shall be wet at the time they are laid, and shall be laid with full joints, both vertically and horizontally, and in piers with shoved joints, and no brick shall be laid in freezing weather.

SECTION 52. All posts, columns, girders, floor joists and structural parts resting on **masonry and transmitting** a greater load per square inch than allowed on masonry by this ordinance, shall be **carried on stone, cast or wrought iron** or **steel** bearing **plates** of sufficient size and thickness to distribute the load so as not to exceed the safe load per square inch on masonry allowed by this ordinance.

All posts or columns must be wrought to a true bearing at right angles with their axes and set plumb without wedging.

All **iron columns** shall have straight cores.

No granite or marble column shall carry a wall exceeding one story in height.

SECTION 53. Bearing partitions of wood shall rest on walls or girders, or be placed directly over other bearing partitions, or the floor joists of the floor below shall be of such size as will support the concentrated load.

SECTION 54. Floor joists shall have a **bearing of** at least 4″ at each end, and the ends of all floor joists and rafters entering a masonry wall shall be cut on a splay of 1″ less than the depth of the recess, and their ends, tops and sides shall be left ½″ clear of all mortar or masonry, except firestops, and not less than 4″ of masonry shall be left between the recesses, or rafters or floor joists entering a wall from opposite sides.

On all plastered masonry walls where furring is used the spaces between the furring shall have **fire-stops** not less than 2″ deep at every floor and ceiling and midway between.

SECTION 55. No wooden **girder, joist** or **rafter** shall be **cut or bored** at a depth of more than 2″ from the top, or in case it is not more than 10″ deep at a depth of more than one-fifth its depth from the top, or at a point more than three times its depth from the end, without being doubled and securely spiked or bolted sufficiently to restore its original strength; provided,

however, that it may be bored in its middle third by a bore not more than one-eighth its depth in diameter.

No stud, post or plate in a bearing partition shall be cut into in any direction, except that plates may be cut to a depth of not to exceed one-third their width and not exceeding one-fourth of their area between supporting studs for the passage of water, gas or other pipes, electrical wires or tubing, and that studs may be bored near their centers for electrical work if the diameter of the bore does not exceed one-fifth the width of the studs and the bores are not less than **12″** from center to center.

SECTION 56. All **cellar and basement ceilings,** except in Class "A," "B," "C" or "E" buildings and in dwellings, shall be lathed and plastered or covered with metal with lock joints or lapped **2″**, and no wooden ceilings shall be used in any cellar or basement, except between the floor joists and nailed on to the under side of floors in Class "E" buildings.

SECTION 57. All buildings two stories or more in height and having **wood posts** and girders, shall have on the top of each post a **cast or wrought iron or steel cap** so constructed as to form a base for the next post above and a bearing for the girder, and of such size and thickness, that the load will not exceed four hundred pounds per square inch of the bearing surface of the girder.

All girders built up of more than one piece shall be bolted together by **⅝″** bolts placed not more than four times the depth of the girders apart, and no space shall be left between the members unless such space is filled solid the full width of the opening, and not less than **2″** thick from the under side, to prevent fire from burning beween the members.

SECTION 58. All **floor joists supporting header or trimmer** beams shall be increased in size sufficiently to carry the extra load transmitted to them.

All **header or trimmer** beams more than **4′—0″** in length in buildings designed to carry a live load of more than sixty pounds to the square foot, when not resting on a wall or post, shall be hung in steel or wrought iron hangers of suitable strength.

All **tail beams** more than **8′—0″** in length or required to carry a load of sixteen hundred pounds or more, shall be hung as required for headers or trimmers.

SECTION 59. Wherever a wall or partition is lathed and plastered, the **lath and plaster shall extend** to the floor and on stairways to the stair carriages.

SECTION 60. All **clothes chutes, dumb waiters, wire shafts, pipe shafts** and other **enclosed spaces** extending from one story to another, shall be built of metal or lined on the inside with sheet metal with lock joints or lapped **1½″**, and shall have a tight-fitting metal lined covering or door over each opening, and no woodwork of any such chute or shaft shall be within less than **2″** of any masonry smoke flue or within less than **12″** of any metal smoke flue.

SECTION 61. All buildings two or more stories in height having roofs with a rise of not exceeding **5″** to the foot, shall have, in every portion thereof between division walls at least one **scuttle** not less than **2′—0″x3′—0″** in dimensions, with a **stationary ladder** leading thereto from the top floor, or **at least one stairway** leading from the top floor to a pent house, having a door not less than **2′—0″x6′—0″** in dimensions, which stairway, if enclosed, shall be provided with substantial handrail and if not enclosed shall be provided with substantial guards or handrails on both sides, and all ladders and stairways shall be of such material as allowed in the class of buildings in which they are constructed.

All **ladders and stairways** shall lead out of a public hall if the top floor is divided into rooms.

All **scuttle covers,** pent houses and doors on buildings having incombusible roofs, shall be of incombustible roofing or **covered with tin or galvanized iron,**

and such covers and doors shall be fastened on the inside only, with a movable hook or bolt, which can be withdrawn without the use of a key.

SECTION 62. It shall be **unlawful** for any person to construct, alter or repair the roof of any building, or any skylight, scuttle, pent house, stair enclosure or other appendage thereon, situated within the First or Second Building Districts, and **leave uncovered or** in any way **exposed,** any **tar, tar paper, resin, felt or woodwork thereon.**

SECTION 63. All **attics** or unfinished spaces between the ceiling of the top story and the rafters of any building shall be **divided into compartments** or rooms, having a floor area of not to exceed twenty-five hundred square feet, by partitions of dry shiplap or matched lumber not less than 7/8" thick and not more than 6" in width with no loose knots and made double with broken joints, or by fireproof or incombustible stud partitions, and each of such compartments shall be connected with all adjoining compartments, except those separated by division walls, by doors not less than 2'—0" in their smallest dimensions of the same material as the partition, which doors shall be kept closed and so fastened as to be opened from either side without the use of a key.

SECTION 64. Every building more than two stories in height, **except** dwellings, **shall be provided with ventilators** having a clear opening above the roof equal to one-fourth of one per cent of the ground area of the building, **for** the **escape of smoke** in case of fire, which ventilators shall be located over an elevator, stairway or main corridor and shall be provided and connected with an efficient device whereby they can be readily opened and closed from every floor of the building.

SECTION 65. All **chimneys** and all **vent flues** over ranges shall be built **of** some good **brick, stone,** or **concrete** blocks laid in mortar with flush struck joints, or

of concrete not less than 4" thick, **except** that in the **Forth Building District** terra cotta flues may be used in unfinished one story buildings.

In all buildings in the First and Second Building Districts and in all hotels, lodging houses, apartment houses and flat buildings in all districts, **all chimneys** and all vent flues over ranges shall have **terra cotta flue linings** not less than 1" thick, or shall have walls not less than 8" thick.

In the Third and Fourth Building Districts all interior **chimneys** and all **flues** not lined with terra cotta shall be **plastered** on the outside, except the portion above the roof. The inside of no chimney or flue shall be plastered.

No chimney flue shall have less than one square inch of sectional area to each one and one-half square inches of sectional area of the smoke pipes entering it.

All chimneys not built from the ground, **shall be supported** directly from floor timbers or from the ground, by posts, and no floor timbers or posts shall be less than 3½" in their least dimension.

Where a chimney passes through a floor or ceiling, all floor beams, joists and headers shall be kept at least 1½" clear of the wall of the chimney, and the space between the wood and such chimney shall be filled solid with gauged mortar resting on a course of brick set out 1" to hold it in place, or the space shall be covered with metal to prevent the passage of fire through the floor or ceiling.

All chimneys shall be so built that **thimbles** for smoke pipes shall be not less than 6" from any plastered partition or 12" from any wood partition, or ceiling, or floor. **At all thimbles** the brick shall be corbelled out to the face of the flurring around the chimney and for at least 4" around the thimble; provided, however, that the brick may be left ½" back from the face of the furring if sheet iron or metal lath with a hole cut 1½" larger than the thimble be put on the furring to cover the brickwork and prevent cracking of plaster.

All flues resting on wood shall have at least three courses of solid brickwork at the bottom. In racking over flues or chimneys, each course of brick shall be offset not more than ½", and no racking shall be made so that the total overhang shall be more than one-third of the base of the chimney. No nails shall be driven into any chimney.

All chimneys shall extend to at least 4'—0" above flat roofs and 2'—0" above the ridge of pitched roofs, and any chimney within 8'—0" of an adjacent building shall have the flues extended at least 2'—0" above the nearest wall of such building, and any chimney 8'—0" or more above the roof shall be stayed with two iron rods or angles.

SECTION 66. All brick **flues for boilers, except in private residences** and those not exceeding fifteen horse power and for furnaces and ovens, shall be 8" in thickness to the height of twenty-five feet above the smoke inlet. All brick flues for boilers exceeding fifteen horse power shall be not less than 12" in thickness to the height of twenty-five feet above the smoke inlet, or lined with terra cotta with joints well cemented, and walls not less than 8" thick.

SECTION 67. All **iron smoke stacks** from boiler furnaces shall extend fifteen feet above the highest point of the roof of any building within fifty feet of such smoke stack, and shall, when wood is used for fuel, and the draft is either a forced or direct natural draft, be provided with spark arrestors having not more than ¼" mesh.

Smoke stacks less than 12" in diameter shall not be nearer than 16" to any wood work, and if more than 12" in diameter shall have an additional distance from all woodwork of ¼" for each additional inch in the diameter of the stack up to 36".

Iron cupola chimneys of foundries shall extend at least ten feet above the highest point of any roof within fifty feet of such cupola, and shall not be placed within 2'—0" of any woodwork. Iron or steel smoke stacks

from boiler furnaces or coffee roasters, where passing through any floor, ceiling or roof, shall be provided with a metal jacket 12" from the stack and supported by it, and with an additional metal jacket 18" from the stack and secured to the floor, ceiling or roof, which jackets shall extend not less than 12" below and 12" above each such floor, ceiling or roof, and be provided with a metal umbrella covering at the roof opening not less than 12" above the top of the jackets.

SECTION 68. No iron, terra cotta or earthen pipe **smoke flue** shall be so erected as to **project through** an exterior **wall or window**, or through the roof of any skylight, except as hereinbefore provided.

SECTION 69. Whenever a smoke pipe passes **through** a **hollow wall** or a **clothes closet**, or any **concealed space** between the face of a partition in any room and the chimney it shall be of galvanized iron with riveted joints covered with five thicknesses of not less than 1" in thickness of cell corrugated asbestos paper and an outer iron pipe to protect the asbestos, and shall be securely built into the chimney.

SECTION 70. All **flues in party walls** shall be separated by at least 4" of masonry throughout the entire length, and shall have openings for smoke pipes upon one side only.

SECTION 71. All **chimneys having 400** or more **square inches** of sectional area, shall be lined with fire brick laid in fire clay at least 2'—0" below and 6'—0" above the entrance of any smoke pipe.

SECTION 72. In all cases where **smoke pipes** pass **through** stud or wood **partitions** of any kind, whether the same be plastered or not, they shall be surrounded by masonry not less than 4" in thickness and extending through the partition, **or** by a solid coat of plaster of paris 4" thick, **or** by a double metal collar with air chamber not less than 3" and perforated for the passage of air, and when such partition is of uncovered

wood it shall be further protected by a sheet of metal on each side five times the diameter of the pipe across.

SECTION 73. All **hearths for fire places,** whether used for wood, coal or gas, shall rest on trimmer arches of masonry, or tile, and all wood floor construction shall be removed for at least **18″** from the face of the finished fire place and for at least **15″** on either side. The **back and jambs of all fire places** shall be not less than **8″** thick. After the hearth arch is set the wooden false arch shall be removed.

SECTION 74. In all cases where **hot water, steam, hot air** or other **furnaces** are used for heating a building, or any portion thereof, no furnace **smoke pipe** shall run within less than **8″** below any wooden joists or below any ceiling of wood or of wooden lath and plaster, or within less than **18″** thereof, unless such joists or ceiling shall be protected by a shield of tin plate suspended above such smoke pipe and not less than **1½″** or more than **2″** from such ceiling or joists, which shield shall have a width of not less than five times the diameter of such smoke pipe.

All **pipes** and **register boxes** used **for** the distribution of **hot air** from furnaces shall, when the air is heated directly from a fire box, be made of bright tin, and double, with not less than **½″** space between the inner and outer pipes, or of bright tin covered with asbestos paper weighing not less than two and one-half ounces to the square foot, and shall have double reamed joints, and shall not be soldered.

Where the air is heated with hot water or steam, other sheet metals may be used for pipes and register boxes.

All **hot air registers** placed in any floor or wall, and heating ducts or pipes, shall be provided with **1-16″** thick asbestos paper or other non-conductor between all metal and woodwork.

When a **register box** is placed **in** the **floor** over a portable furnace, the open space on all sides of said

box shall be at least **3″** wide. When only one register is connected with the furnace such register shall have no valve.

Hot air pipes shall be secured in place by clips riveted to the pipe and nailed to the woodwork, but no nail or tack shall be driven through the pipe of any hot air furnace.

SECTION 75. The tops of all **furnaces** set in brick **shall be covered with** brick, slate, galvanized iron or tin, supported by iron bars and so constructed as to be perfectly tight. No **range, candy furnace or kettle** set in brick shall be built against a brick wall with any combustible material between it and the wall, or upon said wall for a height of **2′—0″** above such range, furnace or kettle.

All wood lath and plaster, or wood ceilings or joists over **ranges in hotels, restaurants** or **boarding houses,** shall be guarded by metal **hoods** placed at least **12″** below the ceilings or joists, and any ventilating pipe connected with a hood over such range shall be **12″** from any wood lath and plaster or any combustible material, or said pipes shall be covered with **1″** thickness of asbestos paper on wire mesh, and no such pipe shall pass through any floor or partition. Such metal hoods shall have all joints and seams riveted or interlocked, and shall have a ventilating pipe of metal with riveted or interlocked joints venting into an independent flue, when possible, and at least **12″** from any unprotected woodwork, unless provided with double collar of metal with a **3″** air space.

SECTION 76. All **steel ranges** in **hotels** or **restaurants,** and all **steam boilers** not exceeding ten horse power, **furnaces, ovens, coffee roasters** and other structures in which fires are maintained, when set over a wooden floor, **shall be set** on **1½″** "T" irons, resting on one solid layer of brick laid flat and with cement mortar, or on **3″** of concrete, and no such structure shall be set within **12″** of any unprotected woodwork, and the

floor in front of fire boxes shall be protected with a sheet of metal not less than 3′—0″ square.

Brick ranges shall rest on a foundation of not less than three layers of hollow brick set in cement mortar, and if built against a wooden or plastered frame partition or wall, shall have the back of the range **12″** thick to the top of the range, and extended **4″** thick at least **2′—0″** above the top of the range and shall have the floor in front of the fire box protected with sheet metal not less than **3′—0″** square.

All **shelves over ranges** shall be of metal on metal brackets. All heating stoves shall be at least **2′—0″** from any unprotected woodwork, wood lath and plaster or other combustible material, or any such combustible material within **2′—0″** of the stove shall be protected with a sheet metal shield leaving at least **1″** of air space between the shield and the exposed woodwork, and such heating stove shall rest upon a metal board extending not less than **1′—0″** in front of the stove.

SECTION 77. All burners on **gas stoves,** plates or other gas heated apparatus shall be at least **4″** from any woodwork, and all woodwork within **6″** shall be protected by sheet metal, backed by asbestos paper **1-16″** thick, and securely attached to the exposed wood, or by **2″** of brick or tile.

All woodwork subject to spattering grease shall be covered with metal, and all gas connections shall be of solid iron pipe or flexible metallic tubing. All gas heated **candy ketttles** shall have gas connections of solid pipe, and the burners shall be not less than **10″** from any woodwork. The kettle shall rest upon **3-16″** sheet iron if over wooden floor.

All kettles using coal or coke fuel must be at least **3′—0″** from unprotected woodwork, and must be set on incombustible floor or on wood flooring protected by heavy sheet iron extending **12″** beyond the sides and **2′—0″** in front of the kettle, and the kettle shall rest upon two layers of hollow brick.

SECTION 78. All **steam boilers** exceeding ten horse power, if placed upon any floor above the cellar, **shall be set** upon metal beams and masonry arches, and such beams shall be built into the walls. **All steam boilers** shall be provided with a **tank** of sufficient capacity to hold a supply of water for such boiler for at least six hours.

All boiler rooms in any building, other than a dwelling, **shall be enclosed** with fireproof or incombustible stud partitions, and have a floor and ceiling of like construction, and all openings between said boiler rooms and other parts of the building in which it is placed shall be provided with automatic self closing fireproof doors.

SECTION 79. All **smoke houses** shall be constructed with masonry walls, and all interior parts, including floors and roof, of iron or steel, and shall have ventilators at or near the top, and guards not less than **3′—0″** above the fire bed sufficient to prevent the meats from falling into the fire, and if they open into other buildings, all openings shall be protected by iron doors or shutters.

SECTION 80. All **dry rooms,** dry boxes and enclosures used for drying by artificial heat shall be enclosed in fireproof or incombustible stud partitions, with a floor and ceiling of like construction, and be provided with a fireproof door, or may be lined throughout with tin and asbestos paper **⅛″** thick, and such dry rooms, dry boxes or enclosures shall have wire netting of not more than **1″** mesh, so placed as to prevent any contact between inflammable materials and the steam or heating pipes, stoves or other heaters.

SECTION 81. All buildings heretofore or hereafter erected in the First, Second or Third Building Districts, and which are or shall be used in whole or in part as planing, shingle or saw mills; sash, door, blind, part as wood working factories or shops, or in

which **shavings, saw dust, excelsior, straw, hay loose paper** or similar **inflammable material** is used for **packing purposes,** shall have a **vault room** of sufficient size to contain the same, and all such combustible material shall be removed from such premises to such vault room at the close of each day's work. Such vault room shall be enclosed in fireproof partitions with floor and ceiling of like construction, or in case the same contains less than four hundred cubic feet of space may have either walls, floors and ceilings, or either of them, constructed of not less than two thicknesses of matched dry lumber with broken joints, with a total thickness of not less than **2¾″**, which said wood construction shall be covered on both sides with sheet metal with lock joints, and all openings to such vault room shall be closed by fireproof doors, which doors shall be kept closed at all times except when such material is being placed in or removed from such vault.

SECTION 82. Wherever in this ordinance the **width of stairways** is specified or referred to, it shall mean the shortest distance in the clear between any walls, hand rails, newel posts or other enclosing structures, and unless otherwise specified the width and increase of widths given shall be for stairs with **straight runs** or flights, and when curved or **winding stairs** are used their width shall be no less than one and one-fourth times that of a straight run stair built under the same conditions; and the widths of treads in curved or winding stairs shall be measured **1′—0″** from the narrow end of such tread, and the width of the narrowest end of treads in public stairways shall not be less than the height of the risers. The height of the riser shall be understood to mean the perpendicular distance from top to top of treads, and the width of treads the horizontal distance from nosing to nosing or riser to riser.

SECTION 83. Risers of stairs shall never exceed; and treads of stairs shall never be less than the following dimensions:

	Treads	Risers
In public buildings, detention buildings, school buildings, assembly halls, theaters, hotels, office buildings, store buildings, warehouses, factories and workshops	10½″	7½″
Apartment houses, club houses, lodging houses and flat buildings	9½″	7¾″
Dwellings	8 ″	8 ″
Garages, stables, sheds and unclassified buildings	6 ″	10 ″

The provisions of this section shall apply to all interior, exterior or emergency stairs, unless otherwise specifically provided in this ordinance.

SECTION 84. In public buildings, detention buildings, school buildings, assembly halls, hotels, office buildings, store buildings, warehouses, factories, workshops, apartment houses, club houses, lodging houses and flat buildings, the stairways shall be **not less than 3′—0″** wide and shall have **not more than nineteen risers** in a run without an intermediate landing, and there shall be not less than three risers between any two landings, and the dimensions of treads and risers shall not be changed more than ½″ in any flight between two floors and there shall be at least **7′—0″** in the clear between the soffits of the stairs, or ceilings of floors and the nosings of treads and landings.

If a **landing** is in the direction of its run, its depth shall not be less than the sum of two of its risers and two of its treads; at angle turns the landings shall have no winders, and the depth of the landing shall never be less than the width of the stairway; for stairways returning directly upon themselves, the landing shall be the full width of both flights and shall have a depth of not less than the width of the stairs, and when two side flights connect with one main flight, the width of the main flight shall be equal to the aggregate width of the side flights, and the depth of the landing shall

not be less than three-fourths of the width of the main flight.

Whenever any stairs are enclosed on all sides, the landings at the top and bottom, **if** the **doors swing outwardly** from the stairs, shall not be less than as above prescribed, and **if** the **doors swing inwardly** towards the stairs, the landings shall be at least the width of two treads wider than the door; provided, that in no case shall such landing be less than one and one-fourth times the width of the stairs, and in case of the door swinging directly upon a return landing, such landing shall be increased in width by the additional width of the door, and no door shall swing on to a landing in a straight run.

SECTION 85. All stairways over three risers in height shall have **substantial banisters** and **hand rails** along all sides of flights and landings not adjoining walls and around all well holes. All stairs in public buildings, detention buildings, school buildings and assembly halls and all stairs over **3′—6″** in width in hotels, office buildings, store buildings, apartment houses, club houses, lodging houses and flat buildings, and all stairs more than **3′—6″** in width having open wells on the left hand side ascending, shall have **hand rails on both sides** of the stairways, and all stairways in all buildings shall have at least one continuous hand rail throughout all flights and landings, except that on landings and level platforms of a greater length than the width of the stairs in buildings other than theatres, a **wall hand rail** shall not be required.

SECTION 86. The construction and material of **all stairs shall conform to** the **requirements of** the **class** of building in which they are placed. In **Class "A"** buildings the stairs may be either of solid masonry construction or of iron or steel stringers with treads and landing of slate, marble or other stone, supported directly underneath for their entire length and width by wrought iron or steel plates, either solid or with openings not exceeding four square inches in dimensions, or

adequate strength to sustain a safe load of one hundred pounds to the square foot, and securely fastened to the stringers, or with treads and landings of corrugated, ribbed or otherwise roughened iron or steel, resting on wrought iron or steel supports.

In **Class "B" or "C"** buildings stairs shall be constructed as required in Class "A" buildings, except that the treads and landings may be of oak not less than one and five-eights **1⅝** inches thick.

SECTION 87. Whenever in buildings of **"Class "D," "E" or "F" stairways** are enclosed, such enclosures shall include such portion of the stair hall as is necessary for the proper return of the floor landings, and the walls of such enclosures shall be of fireproof or incombustible stud partitions.

All **doors to enclosed stairways** in Class "A," "B," "C," "D," "E" or "F" buildings shall be **fireproof doors,** and all windows in such enclosed stairways shall be of **¼″ wire woven glass,** no pane of which shall exceed **18″** in width and six square feet in area, set in metal frames, fixed in position, and there shall be no openings between such stair enclosure and any other part of a non-fireproof building, except doors constructed as above provided.

SECTION 88. All **stairs** in all buildings, except dwellings, **shall be continuous** from the ground floor to the topmost floor, and when two or more stairs are required, they shall be located not less than **thirty feet** apart.

In all cases the **stairs shall be** located at as great a **distance** as practicable **from each other,** and in cases where the persons so occupying such buildings are not all on one floor, the widths and number of stairways in the several stories shall be governed as above by the total number of persons above any given floor.

SECTION 89. In all buildings of Class "D," "E," "F" or "G" used for hotels, stores, warehouses, factories or workshops in which above the second floor there

are, or in which provision is made for the occupancy of the same at times by fifty to one hundred persons employed, transient guests therein, there shall be **not less than two stairs** not less than **3′—6″** in width each, and the width of stairs shall be increased **6″** for every additional fifty persons or major fraction thereof over one hundred up to **5′—0″** in width. If the number of persons so occupying the premises exceed eight hundred, **three stairs, 5′—0″** in width each, shall be constructed. If the number of persons so occupying such premises exceeds twelve hundred, the number and size of the stairways required shall be as required for theatres and assembly halls.

All **office buildings of Class "F" or "G,"** and of a less second floor area than two thousand square feet, shall have one flight of stairs not less than **5′—0″**, or two flights of stairs not less than **3′—0″** wide each, and if of a greater second floor area than two thousand square feet, shall have an additional flight of stairs for each additional two thousand square feet of second floor area or fractional part thereof.

Office buildings of Class "D" or "E" shall have at least one flight of stairs **5′—0″** wide, or two flights of stairs not less than **3′—0″** each for the first three thousand square feet of second floor area, and an additional flight of stairs for each additional three thousand feet of second floor area, or fractional part thereof.

Office buildings of Class "A," "B" or "C" shall have not less than one flight of stairs **4′—0″** wide for the first five thousand square feet of second floor area, and an additional flight for each additional five thousand square feet of second floor area, or fractional part thereof.

SECTION 90. Irrespective of the number of persons occupying the same, in all buildings of Class **"D," "E," "F"** or **"G"** used for hotels, stores, warehouses, factories or workshops covering a second floor area exceeding five thousand square feet and not exceeding seven thousand two hundred square feet, there shall be

provided **at least two** continuous lines of **stairs,** and every such building shall have **at least one** continuous line of **stairs** for each five thousand square feet of second floor area covered, or part thereof, in excess of that required for seven thousand two hundred square feet of second floor area.

All buildings of Class **"A," "B"** or **"C"** used for hotels, stores, warehouses, factories or workshops, shall have **one flight of stairs if** the second floor area does not exceed seven thousand two hundred square feet, and an **additional flight of stairs for** each additional seven thousand two hundred square feet, or fraction thereof.

SECTION 91. Every apartment house, club house, lodging house or flat building shall have **at least two flights of stairs** not less than **3′—6″** wide each, which shall extend from the entrance floor to the top story, and every apartment shall have at least two of such flights of stairs or one flight of stairs and one **fire escape** available without passing any open stairway, elevator shaft or open light well, and **if** there are **more than sixteen rooms** above the second floor exclusive of bath and toilet rooms, the width of the stairs shall be increased **6″** for every additional sixteen rooms, or fraction thereof, up to the width of **5′—0″**.

Every building of Class "D," "E," "F" or "G" used as an apartment house, club house, lodging house or flat building and containing over eighty rooms, exclusive of bath and toilet rooms, shall have one additional flight of stairs (over and above the flights hereinabove provided for), for every additional eighty rooms, or fraction thereof, exclusive of bath and toilet rooms; but if such building contains not more than one hundred and twenty rooms, exclusive of bath and toilet rooms, in lieu of such additional stairway, the stairs and public halls throughout the entire building may be at least one and one-half times the width hereinabove provided for stairways.

Every building of Class "A," "B" or "C" used as an apartment house, club house, lodging house or flat

building containing over one hundred and twenty rooms, exclusive of bath and toilet rooms, shall have one additional flight of stairs (over and above the flights hereinabove provided for) for every additional one hundred and twenty rooms, or fraction thereof; but if such building contains not more than one hundred and eighty rooms, exclusive of bath and toilet rooms, in lieu of such additional stairway the stairs and public halls throughout the entire building may be at least one and one-half times the width herein first above provided for stairways.

SECTION 92. All buildings of **Class "D," "E," "F"** or **"G"** used as **dwellings,** except of not more than ten rooms and not exceeding two stories in height, and dwellings containing not more than eight rooms above the first floor, shall have at least **two flights of stairs,** which stairs for buildings having **2,000** square feet or less of second floor area, or containing fifteen rooms or less above the second floor, shall be at least **3′—0″** wide each, and shall be increased **6″** in width for each additional five hundred square feet of second floor area, or there shall be an **additional flight of stairs** not less than **3′—0″** for each additional two thousand square feet, or for each additional ten rooms, or fractional part thereof.

In buildings of **Class "A," "B" or "C"** used as dwellings, the number of stairs herein provided may be reduced by one flight.

SECTION 93. In all buildings used for stores, warehouses, factories and workshops, all **stairways** shall be **enclosed;** provided, that nothing in this section contained shall be construed as to prevent the use of an independent iron monumental stair in stores or sales rooms extending from the basement to the second floor, in addition to the other required stairways.

SECTION 94. All **school buildings** of more than one story in height and having more than three rooms above the first floor, shall have at least **two** separate

and distinct **stairways** as remote from each other as practicable, and so located as to be accessible from all rooms above the first floor.

All public buildings, detention buildings, school buildings, assembly halls and other buildings, containing a general assembly room having accommodation for over one hundred people, shall have stairs and fire escapes proportioned as prescribed for assembly halls and theatres.

SECTION 95. Every **cellar** or **basement** in which boilers or machinery is placed, or which is used for storing goods, shall have at least **two independent means of exit,** one of which shall be a flight of stairs leading directly to a street, alley or yard, or in case such basement or cellar is connected with an area, a stationary ladder leading directly to a manhole in the sidewalk.

Every basement which is used for living rooms, salesrooms, manufacturing purposes, restaurants or places of assembly or resort, shall have a stairway at least **3′—0″** in width leading directly to a street, alley or yard for every five thousand square feet, or part thereof, covered by the building.

Every basement used as an **assembly hall,** shall have as many separate and independent stairways leading directly to the outside as are required for assembly halls above ground in proportion to the seating capacity of such halls.

SECTION 96. All **stairways** constructed **around** or along side of **elevator shafts,** shall be separated from such elevator shaft by a fireproof partition, and all elevator shafts adjoining such stairways shall be enclosed by fireproof partitions and self-closing fireproof doors.

SECTION 97. All **stairways,** landings and approaches thereto shall at all times be kept **free from obstructions,** and all doors leading thereto shall be kept unlocked.

SECTION 98. In the following named classes of buildings, the entrance halls, public halls, entrance doors, doors in halls, and transoms, shall be not less than the respective dimensions hereafter set forth.

In public buildings, detention buildings, school buildings and assembly **halls;** entrance halls, **5′—0″** wide; stairs and public halls, **4′—0″** wide; entrance doors to entrance halls, **4′—0″** wide; other doors to hallways, **2′—10″** wide; all doors **7′—0″**, and transoms **18″** high.

In hotels, office buildings, store buildings, warehouses, factories and workshops: entrance halls, **4′—0″** wide; stairs and public halls, **3′—6″** wide; entrance doors to entrance halls, **3′—6″** wide; other doors to hallways, **2′—8″** wide; all doors, **6′—10″**, and transoms **16″** high.

In apartment houses, club houses, lodging houses and flat buildings: entrance halls, **3′—6″** wide; stairs and public halls, **3′—0″** wide; entrance doors to entrance halls, **3′—0″** wide; other doors to hallways, **2′—6″** wide; all doors, **6′—8″**, and transoms **14″** high.

In dwellings, garages, stables, sheds and unclassified buildings: entrance halls, **3′—0″** wide; stairs and public halls, **2′—8″** wide; entrance doors to entrance halls, **2′—8″** wide; other doors to hallways, **2′—4″** wide; all doors, **6′—4″**, and transoms, **12″** high.

All passageways leading to or from stairs shall be not less than the width of the stairs with which they connect, and hallways into which any door swings shall be at least **6″** wider than the widest door.

The aggregate width of the entrance and exit doors opening at the street level in public buildings, detention buildings, school buildings, assembly halls, hotels, office, store, warehouse, factory and workshop buildings, apartment, club and lodging houses and flat buildings, shall be at least **equal** to the **aggregate width of** the **stairways** leading to such door openings, and such doors shall not be fastened during business hours or when the building is occupied so that they cannot be opened from the inside without a key, and all **exit doors**

in public buildings, detention buildings, school buildings, assembly halls, hotels, office buildings, store buildings, warehouses, factories and workshops **shall** be so hung that they will **swing outward.**

SECTION 99. All **entrance halls** leading to stairways shall lead **directly from a street** or alley, or a courtway or yard connected directly with a street or alley, and shall be as short and direct as possible between the street lines and stairways, and every flight of stairs required shall have such an entrance hall on the ground floor, and when they pass through a first floor occupied for mercantile or manufacturing purposes with different tenants or grades of occupancy above them, they shall be enclosed entirely with fireproof partitions. In Class "D," "E," "F" or "G" buildings such enclosures shall be of masonry extending from the foundation up to the top level of the second tier of joists. There shall be no openings into the first floor or basement from such enclosures and no openings from the first floor to the basement shall be underneath such stairs unless the street entrance floor and the soffits of the first flight of stairs and the ceilings are made fireproof and completely cut off from the well holes, and no passenger elevator in such an entrance or stair hall shall extend to the basement without being enclosed with fireproof walls, and, except where such basement is used exclusively for restaurant, saloon, billiard or pool room or salesroom purposes, such fireproof walls shall have no openings in them, and no combustible material shall be stored in any such enclosure.

SECTION 100. If the **entrance** to the **main public hall** of any building is the only entrance to more than one flight of stairs, the several portions of such main entrance hall which separate the entrance of the building from several flights of stairs, respectively, **shall be increased** at least **1′—0″** in width over the required minimum width for each such additional flight of stairs, provided, that if the length of such entrance or public

hall is greater than fifteen feet, the width shall be at least 1′—0″ greater than the prescribed minimum for the first twenty-five feet of length of hall, and shall be further increased at least 6″ for each and every twelve and one-half feet, or fraction thereof, of increase in length in excess of twenty-five feet.

SECTION 101. Every **public hall** shall be **lighted** in each story by at least **one window,** having a glass area of at least twelve square feet, opening directly on street, alley, yard or court, and so placed that light may pass directly through it and the hall to the opposite end of the hall, or by at least one such window opening directly upon a street, alley, yard, court or light shaft, in every twenty-five feet in length, or fraction thereof, of such hall, except in so much of any entrance hall as lies between the entrance and the flight of stairs nearest the entrance, or by **equivalent skylights** or by **equivalent borrowed light** through prism glass panels in wall or doors of adjoining rooms or the ceiling of such hall, and each such hall shall have an **equivalent** of **artificial light** for night service while the building is occupied.

In any such public hall, recesses or returns not exceeding in length twice the width of the hall will be permited without additional windows, but otherwise each recess or return shall be regarded for the purpose of this section, as if it were a separate hall. And any part of a public hall which is shut off from any other part by a door or doors shall be deemed a separate public hall within the meaning of this section.

SECTION 102. All elevator shafts shall, when enclosed, be enclosed with fireproof partitions, and shall have self-closing fire doors at each floor. All open elevator shafts shall be protected at all floors and landings with metal grille work not less than 7′—0″ in height, and shall have self-closing doors. All doors to elevator shafts shall be so fastened that they cannot be opened from the outside except with a Key.

All **passenger elevators** shall have an enclosed cage

of metal grille work, with not more than two openings. If there are two openings in the cage there shall be a metal grille gate at each opening and fitted so that the opening of one gate will close the other. All passenger elevators shall have safety clutches, brakes or other approved devices for stopping the elevator in case of accident to the cables or machinery.

All **freight elevators** shall be provided with self-closing gates or doors at each floor, which shall close automatically when the elevator leaves the level of the floor, and shall have more than one cable with suitable equalizer to equalize the bearings. Wherever a freight elevator adjoins a wall which is reduced in thickness, the shaft shall be protected next the wall by metal grille work not more than 3″ from the floor of the elevator. No freight elevator shall be used for carrying passengers unless the same be provided with an enclosed cage as required for passenger elevators.

The provisions of this section relating to freight **elevators** shall apply to elevators and elevator shafts **heretofore as well as hereafter constructed,** and all freight elevators and elevator shafts heretofore constructed shall be made to conform to the provisions of this section.

SECTION 103. All **open hoistways** or well holes through the floor of any building shall, when not in actual use, be surrounded by a substantial railing not less than 3′—0″ high, and be securely closed at night by **trap doors** of sufficient strength to sustain a safe load of one hundred pounds to the square foot.

Section 104. Whenever a **Class "E"** building heretofore or hereafter erected and not at the time of taking effect of this ordinance so used, shall be used for a public building, detention building, school building, assembly hall, hotel, apartment house, club house, lodging house or flat building, all **public and stair halls and partitions** shall be constructed as required in **Class "D"** buildings, and all **ceilings** shall be lathed with **metal lath** attached to the entire under surface of the floor-

ing and joists, with no open space behind, and plastered.

SECTION 105. All **stairways** leading from first floors **to basements** used for the storage of goods shall be enclosed in **masonry walls** or fireproof partitions, and provided with automatic self-closing **fireproof doors** which will operate at a temperature of not more than 165° Fahrenheit; provided, however, that in Class "E" or "G" buildings where the first floor and floors above are used exclusively for warehouse, factory or workshop purposes, such enclosures and doors may be of two thicknesses of matched lumber not less than **1⅜"** with broken joints.

SECTION 106. All **Class "G"** buildings two stories or more in height above the lowest street or alley grade, except those used for dwellings, garages, stables or workshops employing less than five persons, shall have all **passageways, public halls and stairways,** except as provided in the preceding section, enclosed in **fireproof** or incombustible stud **partitions;** provided, however, that, except as provided in the preceding section, in buildings used exclusively as stores, warehouses, factories or workshops, such enclosing partitions may be constructed of not less than two thicknesses of **⅝"** thick matched lumber, with broken joints; and all **Class "G"** buildings used in whole or in part as public buildings, detention buildings, school buildings, assembly halls, theatres, hotels, office buildings, apartment houses, club houses, lodging houses or flat buildings, shall have all walls, partitions and ceilings lathed and plastered not less than ½" thick; and all Class "G" buildings more than two stories in height used as detention buildings, shall have all walls, partitions and ceilings lather with **metal lath** and plastered with hard plaster not less than ½" thick.

SECTION 107. All **dormer windows, bay windows, cornices, towers, spires, ventilators, pent houses, balconies, mouldings, and other like appendages** on buildings of Class "D," "E" or "F" in the Second Building

District shall be constructed of either masonry, iron or steel, or of wood with all exposed surfaces completely covered with sheet metal, with lock joints, or with slate, or lathed with metal lath and plastered with hard plaster not less than ½" thick, and all masonry cornices and all cornices on buildings more than four stories in height, shall be built with masonry, iron or steel lookouts or supports, and shall be well secured to the walls with metal ties, and shall be built solid against the wall, and the wall shall in all cases be carried up to the top of the roof behind the cornice, and where the cornice projects above the roof, the wall shall be carried up to the top of the cornice, and all **cornices** built **of wood** and covered with metal, slate or metal lath and hard plaster as hereinabove provided, shall have **fireproof divisions** built in opposite each division or fire wall in the building; and in all cases where a wall is finished with a stone cornice, said cornice shall be constructed of solid pieces of stone, and not less than **60%** of the weight of each stone of such cornice shall be back of the face of the wall.

Whenever any wooden cornice, dormer window, bay window, tower, spire, ventilator, pent house, balcony, moulding or other like appendage on any building heretofore erected within the First or Second Building Districts shall hereafter be **replaced** or **reconstructed,** it shall be constructed as hereinabove provided for new buildings, and whenever any such appendage shall be damaged by fire or act of God to a greater extent than one-half the value thereof, it shall be removed, and if replaced or reconsructed shall be constructed in accordance with the provisions of this section for new buildings.

SECTION 108. No **balcony, or bay window** shall be more than eleven feet in width, or extend more than **2'—0"** beyond the street line, or be less than fifteen feet above the established grade, or extend to within less than **4'—0"** of any party line, or project into any alley or any street less than fifty feet in width.

Balconies or bay windows on Class "A," "B" or "C"

buildings shall be constructed throughout of the same material as the building, and on Class "D" or "E" buildings more than four stories in height, shall have all supports constructed as required for Class "A" buildings, and all exterior woodwork of balconies or bay windows on Class "D" or "E" buildings more than four stories in height, except doors, sash and frames shall be covered with slate, or metal with lock joints, or with metal lath and hard plaster not less than ½" thick.

No cornice or belt course shall project past a line drawn from a point **2'—0"** over and fifteen feet above the established grade, to a point **3'—0"** over and thirty feet above the established grade, and from the last named point to a point **5'—0"** over and one hundred and forty-four feet above the established grade, and in no case shall a cornice project more than **5'—0"** over the street line, and no cornice or belt course shall be less than fifteen feet above the established grade, or shall project more than **1'—0"** over any alley line, except returns of not more than **6'—0"**.

Brackets projecting more than **14"** over a street line shall not be less than ten feet above the established grade, and no part of any hood over any entrance shall project more than **2'—0"** over a street line or be less than ten feet above the established grade.

Projections into the line of a public **street,** not exceeding **8"**, in the form of buttresses, **pilasters** or similar architectural embellishments may be permitted in the discretion of the Superintendent of Buildings providing that no such projection shall be in the nature of a show window or the lower or upper steps of a flight of stairs.

SECTION 109. No story of **any building** hereafter erected or altered and used in whole or in part as a hotel, lodging house, apartment house, flat building, detention building, school building, club house or office building, **shall cover** more of the ground area of the lot or parcel of land on which the building is situated than as herein specified:

On corner lots facing on three streets, not less than fifty feet in width each **92%**.

On corner lots facing two streets, not less than fifty feet in width each, and on an alley not less than sixteen feet in width, **90%**.

On corner lots facing on a street not less than fifty feet in width, and on an alley not less than sixteen feet in width, **85%**.

On through lots facing on a street not less than fifty feet in width at each end, **85%**.

On through lots more than one hundred twenty feet in length or interior lots, **80%**.

On open lots containing not more than seven thousand square feet, only such open area will be required as will give each room such an amount of light and air as is required by this ordinance;

Provided, that any portion of the width of a corner lot or parcel of land more than forty feet from the street or alley corner, shall be regarded as an interior lot; provided, also, that for every story above the third **1%** additional open lot area shall be required for each additional story up to and including thirteen stories in height, and each such building shall have at least one public entrance opening upon a street.

Nothing in this section contained shall be construed to prohibit the first story, when used as stores, dining room and office for the building, with no sleeping rooms below the second floor, from covering the entire lot area, except as provided in Section **110** of this ordinance.

SECTION 110. Except in those cases hereinafter provided for, there shall be, **behind every tenement house** hereafter erected, a **yard** extending across the entire width of the lot, and at every point open from the ground to the sky unobstructed, except by fire escapes or unenclosed outside stairs.

The **depth of** said **yard** shall be measured from the extreme rear wall of the house to the rear line of the lot, and at right angles to said line, except that where there is an alley or open passageway in the rear of

the lot the depth of the yard may be measured to the middle of said alley or open passageway. On the irregular lot of several depths, where there is more than one rear line to the lot, such yard may extend across the entire width of the lot in sections, provided that each section of the yard is in every part and at every point of the minimum depth hereinafter prescribed. Where the side lines of a lot converge toward the rear, the depth of the yard shall be such as to give it an area equal to the greatest width of the yard multiplied by the depth hereinafter prescribed.

Except on a corner lot, the depth of the yard behind every tenement house hereafter erected fifty feet in height or less shall be not less than eight feet in every part. All yards without exception shall be increased in depth at least one foot for every additional ten feet of height of the building, or fraction thereof, above fifty feet.

Except as hereinafter or otherwise provided, the depth of the **yard** behind every tenement house hereafter erected **upon a corner lot** shall be not less than six feet in every part. But where such corner lot is more than sixty feet in width, the depth of the yard shall be not less than eight feet in every part, and shall increase in depth as above provided.

Whenever a tenement house is hereafter erected upon a lot which runs **through from street to street,** or from a street to an alley or open passageway, and said lot is one hundred and fifty feet or more in depth, said yard space shall be left midway between the two streets, and shall extend across the entire width of the lot, and shall be not less than sixteen feet in depth from wall to wall, and shall be increased in depth at least two feet for every additional ten feet in height of the building, or fraction thereof, above sixty feet. Neither the yard behind one tenement house nor any part thereof shall be deemed to satisfy in whole or in part the requirement of a yard in front of another tenement house.

No yard shall be **required** behind a tenement house hereafter erected upon a lot entirely surrounded by

streets, or by streets, alleys or open passageways, not less than fourteen feet in width, or by such streets, alleys and passageways and a railroad right-of-way, a cemetery or a public park.

No yard shall be **required** behind a tenement house hereafter erected upon a lot less than one hundred and fifty feet deep and running through from street to street, or from a street to an alley or open passageway running through from street to street, or from a street to such an alley or open passageway.

In the case of tenement houses built upon corner lots, except as hereinbefore provided, exterior courts open and unobstructed from the ground upwards, except by fire escapes or unenclosed stairways, may be substituted for yards as hereinbefore provided, such courts must be of area equivalent to that of a yard otherwise required for a lot of the same width.

SECTION 111. No court in any building hereafter erected or altered and used as a school, flat or detention building, apartment or lodging house, or hotel, **shall be of less area or width** in proportion to the number of stories in such building above the bottom of such court as herein specified:

Stories—	Area, sq. ft.	Width, feet.
2	**30**	**3**
3	**40**	**3**
4	**50**	**5**
5	**65**	**5**
6	**80**	**8**
7	**100**	**8**
8	**125**	**10**
9	**150**	**10**
10	**200**	**10**

Courts enclosed on all sides by walls of buildings, shall have **not less than five square feet** of area for each window opening into such court, and shall be provided with openings at the bottom for **ventilation,** opening to the outer air, and having a sectional area of not less

than 3% of the area of the court, and if covered with a skylight, shall have **louvres** or other permanent openings at the top equal in area to the court.

No open or enclosed court shall be **obstructed** in any manner from the bottom to the top, except by fire escapes, and shall in all cases if containing a fire escape, have at least one side opening directly upon or shall be connected by a fireproof passageway with a street, alley or yard.

Whenever any such court shall contain a porch, the unobstructed space in such court shall be exclusive of space occupied by stairs and porches.

SECTION 112. Whenever any building is **ready to lath,** the owner, contractor or other person in charge of the work shall **notify** the **Inspector** of such fact, giving the number of the building permit under which work is being performed; and it shall be the duty of the Inspector, **within three calendar days** after receiving such notice to inspect the building and ascertain whether or not firestops, bridging, chimneys, fire places and other parts which would be concealed by lath and plaster have been constructed in accordance with the provisions of this ordinance, and **no lathing shall be done** on such building within **three calendar days** after the giving of the notice above provided for, unless the building has been sooner inspected and approved by the Inspector.

SECTION 113. Concrete for **reinforced concrete** construction shall be mixed as specified in this section: (For non-reinforced work, see Section **124.**)

In footings, foundations, piers, walls, columns, girders and beams the concrete shall be mixed in proportion of **one** part cement, solid bulk, to not more than **two** parts of sand and not more than **four** parts of broken basaltic stone or cleaned, screened, coarse gravel free from loam or other foreign matter; provided, however, that the proportions of sand and stone or gravel must be so varied as to fully fill all voids, but the total quantity shall not be increased.

In floor construction and fireproofing within a building, crushed hard burned brick or tile, furnace slag or vitrified cinders, free from dust or other foreign matter, may be substituted for broken stone or gravel.

(For "Mixing" see Section **120.**)

(For quality of aggregates, see Section **124.**)

SECTION 114. All **cement** used in reinforced concrete construction **shall** be submitted to and satisfactorily **pass** the following **test:**

At least one barrel selected at random in every ten barrels to be used, shall be tested by an expert employed by the person having charge of the work, or by an expert employed by the City, and said expert shall file with the Inspector a verified certificate of the result of tests made by him, or the Inspector may require that all or any portion of the required tests be made by an expert employed by the City of Seattle.

The **specific gravity** of cement thoroughly dry at **100°** Centrigrade shall not be less than **3.10;** it shall leave a residue of not more than **8%** by weight on a number one hundred or of not more than **25%** by weight on a number two hundred screen; it shall develop initial set in not less than thirty minutes, and develop hard set in not less than one hour or more than ten hours.

Tensile Strength 1 to 1. As mortar mixed one part sand and one part cement by measure, after one day in air and six days' immersion in clear water, briquettes of the same shall not break under a tensile strain of **300** pounds per square inch, and after one day in air and twenty-seven days immersion they shall not break at **400** pounds per square inch.

Tensile Strength 1 to 3. As mortar mixed one part cement and three parts sand by weight, after one day in air and six days immersion in clear water, briquettes of the same shall not break under a tensile strain of **160** pounds per square inch, and after one day in air and twenty-seven days immersion they shall not break at **225** pounds per square inch.

The **sand** used in testing shall pass a number twenty screen, but be retained upon a number thirty screen.

All cement shall be delivered upon the work in the original unbroken packages, and no cement shall be used from a package which, upon being opened, shows evidences of having set, and all cement after having been tested and approved shall be stored in such manner as to be protected from the weather, and not to come in contact with the ground or any moist surface. Cement shall not contain more than **1.75%** of anhydrous sulphuric acid, not more than **4%** of magnesia.

SECTION 115. Wherever certain **thicknesses of concrete walls,** or fireproofing, or floor construction is required in this ordinance, it shall be understood to refer to the full solid thickness of the material only, exclusive of plastering or floor ballast.

SECTION 116. All **reinforcing steel** shall be completely enclosed by the concrete and such steel shall be **1½″** from the exterior surface in columns and girders, **1¼″** from the exterior surface in beams, and **½″** from the exterior surface in floor slabs.

All vertical and horizontal bars, when used as compression members, shall be tied with suitable steel or iron ties not more than fifteen times the diameter of the reinforcing rods apart; provided, however, that no tie rods shall be at any greater distance apart than the least diameter of the column, and in no case more than **12″** apart. Every third tie shall run diagonally from corner to corner of any column or beam. Such ties shall be proportioned in size the same as in ties for lattice columns.

Reinforced concrete shall be so designed that the **stresses in concrete and** in the **steel** shall not exceed the following limits: **Extreme fibre stresses** on concrete in compression in floor construction, **500** pounds per square inch; **shearing stress** in concrete, **50** pounds per square inch; concrete in **direct compression** in columns and piers, **450** pounds per square inch; the **tensile stresses** in the concrete will not be considered; the **tensile stresses** in steel, one-third of the elastic limit; **shearing stress** in steel **10,000** pounds per square inch; **compression** in steel, **12,000** pounds per square inch; **compression** in iron, **10,000** pounds per square inch; the **adhesion** of concrete to steel shall be assumed to be **75** pounds per square inch of surface; the ratio of the **moduli of elasticity** of concrete and steel shall be taken as **1** to **15.**

The following assumptions shall guide in the determination of the bending moments due to external forces: **Beams and girders shall be considered** as simply supported at the ends, no allowance being made for continuous construction over supports. The **bending moment** of beams shall be computed by multiplying the total distributed load by the length of the beam from center to center of the bearing supports, and dividing the result by eight. When floor slabs are of **continuous construction** and provided with reinforcement at the top over supports, they may be treated as **continuous beams,** and the **bending moment** for uniformly distributed loads shall be computed as not less than the total distributed load, multiplied by the span of the floor, and divided by twelve. When the **floor slabs** are **square** with reinforcement in both directions and supported on all sides, the **bending moment** shall be computed as not less than the total distributed load, multiplied by the span of the slab, and divided by twenty. When beams and floor slabs are built at the same time as a unit, the **floor slab,** to the extent of not more than five times its depth, may be taken as a **part of the beam** in computing its moment of resistance.

The **moment of resistance** of any reinforced concrete construction under tranverse loads shall be determined by formulas based on the following assumptions: That the bond between the concrete and steel is sufficient to make the two materials act together as a homogeneous solid; that the strain in any fibre is directly proportionate to the distance of that fibre from the neutral axis; that the modolus of elasticity of the concrete remains

constant within the limits of the working stresses fixed in this ordinance.

The **dimensions of a beam or girder** and its reinforcements shall be determined and fixed in such a way that the strength of the metal in tension shall measure the strength of the beam or girder. If the concrete in compression, including the allowable concrete in adjoining floor construction, does not afford sufficient strength for the purpose, the compression side of the beam or girder in question shall also be reinforced with metal.

All beams or girders shall be **reinforced** with metal **for shear.** Other reactions, if necessary, shall likewise be reinforced. Neither the reinforcing metal nor the concrete shall be subject to the combined stresses so as to exceed in combination the stresses allowable separately.

Wherever possible, beams and girders and also their intermediate floor construction, shall be made **continuous.** Reinforcing metal shall be used for that purpose in the top of all connecting members at the point of support, and it shall be sufficient both in section and length to prevent fracture at the point of support, assuming the connecting members are carrying twice their calculated loads.

The **reinforcing** metal in the **bottom of floor slabs** may be deflected to the top of the slab along the line of support, or separate reinforcing material may be used for the reinforcement in the top of the slab. In either case, however, if a part of a slab is considered as a part of a beam or girder, the reinforcing material used in the slab must cross the full width of both the beam or girder and the part of the slab so considered.

The **forms of centering** for floor beams and girders shall be constructed in conjunction with the forms or centering of the floor slabs which they support, and no forms or centering shall be removed in less than twelve days, or until the cement has thoroughly set.

SECTION 117. Reinforced concrete columns shall not be less than **10″** in their least dimension or exceed

fifteen times their least dimension in length, and the reinforcing rods shall be tied together at intervals of not more than fifteen times the diameter of the rods, or not more than the least diameter of the column, or not more than **12″** in any event.

When **vertical reinforcing rods** are used, they shall have full perfect bearings at each joint, and such joints shall occur only at floors or other points of lateral support, and a tight fitting sleeve, not less than **4″** in length, shall be provided at all joints; provided, that in case of buildings in which allowance must be made for wind pressure, the rods shall be connected by threaded sleeves or turnbuckles.

The **concrete** shall **cover** the **reinforcing** at all points at least **1½″** and in calculating the support of the reinforced column the outside **1″** of concrete shall not be counted as a part of the section of the column. The axes of several columns, acting continuously through two or more stories, shall accurately coincide.

All columns in outside walls shall have not less than **4″** of masonry between the reinforcing metal and the outside face of the wall.

SECTION 118. All reinforced concrete construction, **when required by** the **Inspector,** but in no case within twenty-eight days after construction, **shall be subjected to** a load **test** which shall show that the construction will sustain a load of twice that for which it is designed without any sign of failure, or in case of beams, girders or floors without deflecting more than **.00143** of the span.

SECTION 119. All **forms, falsework and centering** used in erecting **reinforced concrete** construction, shall be made with tight joints and rigid. **All column forms** shall have a removable section at the base to permit the cleaning out of dirt and chips and for convenient inspection. Forms for columns, beams and girders shall be made of plank not less than **1¼″** thick.

SECTION 120. All buildings involving the use of more than **100** cubic yards of reinforced concrete shall

have the material **mixed in a batch mixing machine.** When the quantity to be used is less than **100** cubic yards, it **may be mixed by hand,** in which event the sand and cement shall be mixed and turned over twice before the stone or other inerts and water are added, and the water shall in all cases be added through a hose provided with a spraying nozzle, after which it shall be turned over not less than three times.

When the water rises to the surface in wheeling concrete from the place where mixed to the place of deposit, the concrete shall be turned over in the barrow with a shovel before it is deposited in the forms.

All concrete mixtures for reinforced concrete construction shall be what are termed **wet mixtures,** that is to say, a mixture containing sufficient water to make it puddle into place and have the water show upon the surface upon working and light tamping in the forms.

SECTION 121. Every **reinforced concrete column** shall be filled at least from floor to floor at the same time, and every **reinforced concrete girder or beam** shall be filled throughout the length of each span at the same time.

No water, steam, soil or vent pipe shall be built into the structural part of any concrete column or girder.

SECTION 122. All **veneer facings on reinforced concrete** construction shall be bonded by metal ties, in the form of staples, equal to ⅛″ in diameter. The ties shall be bedded into the wall or structural part of the building not less than **4″**, with the ends turned over to give a mechanical anchorage, and shall not be more than **12″** apart horizontally, and shall be placed in every piece of veneering in every horizontal joint between courses of stone or terra cotta veneering, and between every five courses of brick veneering.

SECTION 123. Cement for mortar and concrete, whenever used, **shall be a standard Portland** cement, and shall, whenever required by the Inspector, be submitted to and meet the **tests** heretofore required for

testing cement to be used in reinforced concrete construction. **(See Sec. 114).**

SECTION 124. All materials used in building **shall be of good quality** for the purpose for which they are intended to be used, and shall conform to trade and manufacturer's standards. Each material must be free from imperfections whereby its strength or durability may be impaired, and no material will be classed as good when its strength falls more than **10%** below the best of its kind. For the purpose of this ordinance the following standards shall be regarded as the minimum standard of their respective kinds of material, except as otherwise specified.

All **brick** shall be of a quality that will stand all ordinary or usual handling, hauling, dumping and delivery on the scaffolds or work, without suffering more than **5%** of breakage.

Stone or gravel used for making non-reinforced concrete for footings or foundations shall be clean and free from dirt and dust, and no particle shall exceed in its greatest dimension the size that will pass through a **2″** ring, or be smaller than will pass through a ¼″ ring.

Stone, gravel, **crushed** hard burned **brick, tile** or **vitrified cinders** used in making concrete for **fireproofing** shall be clean and free from dirt and dust, and no particle shall exceed in its greatest dimension the size that will pass through a ¾″ ring, or be smaller than will pass through a ¼″ ring, and care shall be taken that these substances shall range uniformly between the sizes specified.

Sand shall be clean, coarse and sharp, and shall be thoroughly washed until free from loam, clay or earthly particles.

Lime shall be fresh burned quick lime of commerce which will thoroughly slake in forty-eight hours.

The **proportions** of cement, sand, gravel, broken stone, or brick for **non-reinforced** concrete used for footings or foundations shall be as follows: **One** part of cement to not more than **three** parts of sand and

not more than **five** parts of broken stone or brick, or clean washed gravel. These parts to be thoroughly mixed, with the proper amount of water to make the mass work into place with shovels and light tamping and have the water show on top of the concrete.

All non-reinforced concrete shall be **used within thirty minutes** after it is mixed, and if not so used shall be remixed, being treated as sand and gravel and having the required quantity of cement added.

Terra cotta, either plain or ornamental, shall be well burned and sufficiently stiffened with webs to keep it out of wind.

Wood used for studs, joists, posts, beams, or trusses and other bearing parts may be of rough common stock, provided, if a truss is of such size that it requires iron rods and bolts, the principal members shall be of select common stock. No large knots shall be allowed in the lower half of any floor joist or girder.

All **wrought iron** shall be fibrous, tough and ductile.

Cast iron shall be of good foundry mixture, producing a clean, tough gray iron.

Structural steel shall be that made either by the Bessemer or open hearth process.

SECTION 125. All structural wrought or cast **iron, or steel,** in quality, requirements of tests, workmanship, and in assemblage and inter-connections of shapes shall be in accordance with the standard specifications of the Association of American Steel Manufacturers as given in the hand books of the respective standard manufacturers.

For buildings of Class "A," "B," "C" or "D" the Inspector may at any time require the owner to engage recognized experts to supervise the mill, shop and field work, who shall file certified copies of their reports on the progress of the work for the approval of the Inspector, and no work shall be concealed or built upon until the Inspector has been

furnished satisfactory proof that it is up to the accepted standards.

SECTION 126. The **Inspector may require** structural material of whatever nature to be subjected to **test** to determine its character and quality by methods established by the standard modern authorities, such tests to be made under the supervision of the Inspector, or he may direct the owner to file with him a verified statement of the results of tests such as he may direct shall be made.

No new variety of structural **material** shall be used in any structure until it has been tested and found to fulfill the minimum conditions and tests required by this ordinance for materials used for like purposes.

SECTION 127. The **stresses allowed on materials** used in construction shall be the computed stresses due to the dead load which they will be required to carry, plus the full live load allowed by the provisions of this ordinance, except as herein otherwise specifically provided.

The allowable **factors of safety** or the dimensions of each piece or combination of materials required in a building or structure, if not given in this ordinance, shall be ascertained by computation according to the rules prescribed by Carnegie's or Cambria's Handbooks, F. E. Kidder's Architects and Builders Pocketbook, J. K. Freitag's or W. H. Berkmire's Works on Fireproof Construction, or such other standard works as shall be approved by the Inspector and the Board of Public Works.

SECTION 128. All buildings or parts of buildings hereafter erected and not in this ordinance specifically described shall be of **good workmanship,** of **sound material, abundantly strong** for the purpose intended.

SECTION 129. The **loads** per square foot which may be applied to **soil, stone, brickwork** and **concrete shall** not be greater than as given below, viz.:

	Tons.
Wet sand, soft clay or alluvial soil	1
Clean dry sand or moderately dry clay	2
Compact sand, well cemented, or clay which is always dry	4
Coarse sand, well cemented, or gravel	6
Well cemented gravel hardpan, rock or shale unexposed to the action of the air or water	8
Concrete, composed of cement, 1 part, clean sharp coarse sand, 3 parts, and clean hard broken stone or washed gravel, 5 parts	15
Dimension sandstone in foundations	10
Dimension sandstone with beds dressed to uniform surface, having 1″ joints laid in cement mortar	15
Dimension granite in foundations	15
Dimension granite, with beds dressed to uniform surface, having 1″ joints laid in cement mortar	30
Rubble stone, laid in cement mortar	6
Common brick, laid in lime mortar	6
Common brick, laid in cement mortar	8
Hard burned brick, laid in lime mortar	8
Hard burned brick, laid in cement mortar	12
Tenino sandstone, dressed, uniform beds, laid in cement mortar, with ¼″ joints	17
Chuckanut sandstone, dressed, uniform beds, laid in cement mortar, with ¼″ joints	25
Granite, dressed, uniform beds, laid in cement mortar, with ¼″ joints	60

The **loads** permitted **for isolated** masonry **piers** whose heights are greater than six and less than ten times their least diameters, shall be **20%** less than those given above.

SECTION 130. All **brick piers** less than **28″** in diameter shall have **bond stones,** spaced every four times the least diameter of the pier in height, and either of sandstone, **8″** thick; granite, **4″** thick· cast iron, **1″** thick, **or steel plate** ¼″ thick.

The bonds shall be the full size of the pier, except that steel plates may be made **1″** smaller than the pier.

The pier in every case shall be made perfectly level before the bond is put in place.

SECTION 131. The following shall be the **safe loads** allowed **on timber** perpendicular to the grain, per square inch: Douglas fir, **500** pounds; spruce, **300** pounds; hemlock, **250** pounds.

The following shall be the safe loads allowed on Douglas fir posts per square inch:

On any post not more than sixteen times its least diameter in length ..... 1250 pounds

On any post more than sixteen times its least diameter in length, **1,000** lbs., minus ten times the length in inches, divided by the least diameter of the Post; provided, however, that no wooden post shall be more than twenty-four times the least diameter in length.

The **safe loads** for Douglas fir **beams or joists** shall be computed by Kidder's formula, to-wit: The square of the depth multiplied by twice the breadth, multiplied by **100** and divided by the span in feet. In concentrated loads, beams shall be computed according to the rules of Kidder's Architect and Builders Handbook.

The safe loads of other material shall be determined by tests made by the United States or any State University, or the City of Seattle.

SECTION 132. All **floors** shall be constructed to bear a **safe live load** per superficial square foot of not less than the following amounts:

	Pounds.
Public buildings	100
Detention buildings, in cells or wards	60
Churches, chapels, theatres, assembly halls or court rooms with permanent seats	80
Lobbies, passageways, corridors and stairways of the same	100
Assembly halls with movable seats	100
Halls used for dancing, or roller skating	150

Lobbies, passageways, corridors and stairways of the same	100
Stables	80
Dwellings, apartment houses, flat buildings and lodging houses	50
Class rooms in schools	60
Assembly rooms in schools	80
Office building and hotels, ground floor	125
For floors above the ground floor	75
Store buildings for light merchandise, ground floor	125
For floors above the ground floor	100
Store buildings for heavy merchandise, such as grocery stores or hardware stores	150
Warehouses	200
Factories and workshops, when the nature of the work is general	125
Machine shops, armories, drill rooms and riding schools	250

In cases where the building is to be used for the sale, storage or manufacture of **heavy machinery,** the floors shall be proportioned to the load they may have to carry.

SECTION 133. All **roofs** shall be constructed to bear a **safe live load** per superficial square foot, measured on the horizontal, as follows:

Roofs having less than **6″** rise to the foot .....**50** lbs.
Roofs having **6″** rise or more to the foot .....**40** lbs.

Any rafter which has no greater angle than **45°** need not be strengthened, but where the roof is steeper than an angle of **45°**, it shall be braced so as to resist a load of thirty pounds to the square foot of roof surface.

SECTION 134. In computing the **live loads** which are to be **borne by columns** in buildings five stories or more in height, used for any other purpose than warehouses, in addition to the dead loads actually carried, it

shall be assumed that the columns will be required to carry the full live load allowed by Sections **132** and **133** for the top floor and the roof, but for all floors below the top floor it may be assumed that the columns will only be required to carry the live loads allowed by Section **132, reduced 5%** for the next floor below the top floor, and an additional **5%** for each floor below until the reduction reaches **50%**, when the assumed load of all floors below shall be taken as **50%** of the load allowed by Section **132.**

SECTION 135. Before any building hereafter erected or altered and not at the time of the taking effect of this ordinance occupied as a **store building, warehouse, factory or workshop,** shall be **occupied** or used for any such purpose, the owner of such building shall procure from the Inspector a certificate in writing **certifying** to the amount of **live load** per superficial foot which each floor of said building is **designed to sustain** with apparent safety, and a copy of such certificate shall be kept constantly posted in a conspicuous place on each floor; and it shall be **unlawful** for any person **to place** any **greater live load** upon any floor of such building than that specified in such certificate.

Whenever the Inspector shall have reason to believe that any **building heretofore erected** and at the time of the taking effect of this ordinance used or occupied for the purposes above mentioned is being **subjected to greater loads** upon any floor than said floor is designed to carry with apparent safety, it shall be his duty to make an examination of such building and compute the loads which each floor thereof is designed to safely carry, and to issue his **certificate** as hereinabove provided, and cause the same to be **posted in a conspicuous place** on each floor of such building, and it shall thereafter be unlawful for any person to place any greater live load upon any floor of such building than that specified in such certificate.

It shall be **unlawful** for any person **to remove, mutilate, destroy** or **conceal** any certificate issued by the Inspector and posted as provided in this section.

SECTION 136. It shall be **unlawful** for any person **to erect,** maintain, use or occupy within the First or Second Building Districts, or to use or occupy for any purpose other than lodging, or within fifteen feet of any building in the Third Building District, any **tent, or covered wagon** or other vehicle.

SECTION 137. (Repealed).

SECTION 138. Sleeping rooms and **kitchens,** in buildings other than dwellings, shall be **not less than 8′—0″ in height** from floor to ceiling, and shall have not less than one window **864** square inches in area for each **512** cubic feet of air space in sleeping apartments and for each **300** cubic feet of air space in kitchens, and doors not less than **2′—6″** wide, one of which must open upon the outer air, provided, that the back room of the suite may have a door and transom, the latter not less than **16″** by **30″** opening into a ventilating hallway, but no door shall be hung between the rooms of such suite, and no such sleeping room or kitchen shall be enclosed in partitions of wood or other combustible material unplastered.

No such sleeping room or kitchen shall be located in a **cellar,** or in a **basement,** unless such basement shall be rendered damp and waterproof by a coating of cement plaster composed of **1** part cement and not more than **1½** parts sand, and **½″** thick, or a coating of hot asphalt extending from not less than **6″** above the ground level down the outside of and through the wall and over a concrete floor. When hot asphalt is used, all voids in the walls and floor shall be filled with **cement before** the asphalt is applied.

SECTION 139. Fences between lots shall in no case be more than **6′—0″** high above the grade of the highest lot, unless constructed of wire netting with not less than a **2″** mesh.

SECTION 140. All buildings now or hereafter erected fronting on a street shall be kept provided with proper **leaders for conducting water from the roof** to the ground, and connected with the sewer, street gutter or a dry well in such manner as to protect the walls and foundations of any buildings from damage, and in no case shall water from roofs be allowed to flow upon the sidewalks.

SECTION 141. All **flag poles** shall have a diameter at base of not less than one-fiftieth of their height, and a diameter at the top of not less than five-twelfths of the diameter at the base, and shall, if of wood, be of straight grain and free from loose knots, and shall be so braced, supported or stayed as to be capable of withstanding a computed wind pressure of **100** pounds to the square foot of pole surface.

SECTION 142. No sign shall hereafter be constructed, placed, affixed or maintained **over or above the roof** of any building, unless the same be constructed of galvanized iron, or some other non-combustible material, and placed not less than **3′—0″** from the inner line of the fire walls and not less than **6′—0″** above the roof of the building, and having a space of not less than **6′—0″** between all uprights and between all braces thereof, and a clear space of not less than **5′—0″** between each end of such sign and any fire wall or edge of roof adjacent thereto, and having all frame work and bracing of angle iron or wood covered with galvanized iron, or other non-combustible material, and being so braced and fastened to the roof and so constructed throughout as to be capable of withstanding a computed wind pressure of not less than **40** pounds to the superficial foot.

SECTION 143. No attachable **sign,** framework, boards, cloth or other material to or on which any sign, advertisement, picture or notice is painted, printed, posted, made, impressed, affixed or fastened shall hereafter be constructed, affixed or maintained **upon** the **outer wall** of any building **higher than** the **fire wall, or in front of any standpipe or fire escape** or across or in front of any exterior window or other exterior opening above the first story thereof, and no cloth sign shall be placed

on any building, except upon the written permit of the Fire Marshal, and in no case shall a permit for such cloth sign be issued for a longer period than fifteen days, or for the erection of such sign above the second story of any building, and such permit shall be issued only in the reasonable discretion of the Fire Marshal.

SECTION 144. All signs placed on any building, or part thereof, above the sills of the third story windows, shall be made with a facing of metal or asbestos board, and no sign of wood, cloth or other combustible material shall be more than **2'—0"** in width, and no sign other than electric sign shall extend more than **3'—0"** over or be less than **8'—0"** above the sidewalk.

SECTION 145. All **billboards** and other structures for posting, painting, tacking or exhibiting advertising of any kind within the First and Second Building Districts shall be faced with metal or other non-combustible material.

All **billboards** shall be so constructed, braced and maintained as to withstand a lateral wind pressure of **30** pounds to the square foot.

Before any permit for the erection of a **billboard** shall be issued, the person applying for such permit shall execute and file with the City Comptroller a **bond** with good and sufficient sureties, to be approved by the Mayor and City Comptroller, in the **sum of** not less than **$1,000,** conditioned to save the city harmless from all claims, actions and damages of every kind which may accrue to or be suffered by any person by reason of the defective construction or maintenance of such billboard, or by reason of the negligent use and occupation thereof.

SECTION 146. Within the First and Second Building Districts **storage sheds** may be erected and occupied as in this section provided, but not otherwise.

Such sheds shall not exceed fifteen feet in height above the lowest street or alley grade adjoining the property upon which such shed is located.

The **framework** of such sheds shall be constructed **entirely of iron or steel,** resting on masonry footing or piers, extending not higher than the floor of such shed, or upon piles and capping over tide water.

The **roof** covering shall be of galvanized iron or of shiplap not less than **7/8"** thick, and covered with incombustible roofing as required in Class "E" buildings.

The outside **walls** may be covered with galvanized iron, fastened to the frame with metal fastenings, and shall extend to the ground.

The **floors** may be constructed of not less than **2"** plank, resting on floor joists not less than **2¾"** in their least dimension, and supported by masonry piers, or piles and capping over tide water.

No partitions shall be allowed **in such sheds except** for an office for the shipping clerk, not more than ten feet square, and the partitions enclosing such office shall be of galvanized iron, fastened to an iron or steel framework with metal fastenings.

Such **sheds** shall be used **only for** the purpose of **storing** therein of incombustible merchandise, and in no case shall such sheds be used for any other purpose, or for retailing therefrom the articles allowed to be stored therein.

The **permit** for the erection or occupancy of such sheds shall specify the goods allowed to be stored therein.

SECTION 147. The Board of Public Works is hereby authorized and empowered, upon application being made in writing therefor, stating the purpose for which said building or structure is to be used, and accompanied by plans and specifications showing in detail the construction of such building or structure, and the means of exit therefrom, and of sanitation and fire protection to be provided therein, to authorize the Inspector to issue permits for the erection, use and occupancy of **temporary wooden buildings, tents and other structures** not more than one story in height, to be used for the

purpose of holding religious services therein, convention halls, carnival, fair or exposition purposes and other public assemblages, or for stables, workshops, boarding houses or sleeping apartments used in connection with the grading of streets or other public works; to specify in detail how such building or other structure shall be erected, used and occupied; to provide that such building or structure shall be demolished and all material therein contained or used in connection therewith, and all debris resulting from such use, shall be removed from the premises where such building or structure is located within a time specified in such permit, which time shall be not more than ninety days from the granting of such permit; and to provide and specify the means of fire protection to be installed and maintained in connection with such building or structure, and the means for securing and maintaining sanitary conditions in connection therewith.

In the event that such permit for the erection of such temporary building or structure shall be authorized by the Board of Public Works, the applicant therefor shall file with the City Comptroller a **bond** to the City of Seattle with good and sufficient sureties, to be approved by the Mayor and Comptroller, in a penal **sum to be fixed** by the Board of Public Works, and conditioned that he will, on or before the date set in such permit for the demolition and removal of such building or structure, demolish such building or structure and remove from the premises where the same is erected all material therein contained and used in connection therewith, and all debris resulting from the use thereof, place the said premises in a sanitary condition, and restore them, as near as may be, to the condition in which they existed prior to the erection of such building or structure; and conditioned further, that in case the principal on said bond shall fail, refuse or neglect to comply with the conditions thereof and of the permit for the issuance of which such bond is executed, the City of Seattle, by its duly authorized officers may enter upon the premises and demolish said building or structure and remove the same and all material used in connection therewith and restore said premises to a sanitary condition, and that the cost and expense thereof may be recovered from the principal and sureties on said bond.

Nothing in this section contained shall be construed as requiring or directing the **Board of Public Works** to issue any permit for the erection of any temporary building or structure as in this section provided, but the Board of Public Works may in all cases refuse to issue or grant such permit.

SECTION 148. Stables. All **stable floors** shall be constructed of **concrete** at least **4″** thick, with a smoothly-trowelled wearing surface at least **¾″** thick composed of Portland cement and an equal quantity of sand; provided, that in lieu of a cement wearing surface vitrified paving brick with grouted joints may be substituted. No concrete or brick stable floor shall be supported by wood joists or be laid on plank;

Provided, however, that in case said **stable floors** are placed so that no part of the under portion thereof is less than **18″** above the ground thereunder, and the same or a greater distance above the ground adjacent to the said stable, they may be constructed **of wood** not less than **3½″** thick, composed of two thicknesses of tongued and grooved or splined plank driven tight, with white lead paste in all joints, or of one thickness, with all joints calked with oakum and pitch. All wood floors in stables must be built and maintained so as to be water tight; must have provision of adequate nature made against expansion, if within masonry walls; must have thorough cross ventilation beneath same and must in no case be built directly upon the ground.

All **stall floors** shall have a gradient to the rear of at least **¼″** to **1′—0″** and **drain into gutters;** the said gutters and all sumps for washing of vehicles shall be connected to a drainage system of cast iron pipe leading to a catch basin, which shall be so constructed as to form a trap, and from such catch basin proper connection shall be made to a public sewer, or to a cesspool. Openings from gutters and sumps to drains

shall be protected by iron strainers set in iron frames so as to be removable. No portion of the cast iron drainage pipe system shall be of less than 4″ pipe, except that laterals draining but one stall may be of 3″ pipe. Catch basin must be constructed of masonry or iron and be at least 2′—0″ in any internal dimension, and be provided with vent pipe not more than 8″ from the seal.

A ¾″ **hose bib** or tap, equipped **with hose,** shall be provided, and so placed that the drainage system may readily be flushed, and it shall be required that all stable floors be thoroughly cleansed and flushed at least twice each week.

Stables capable of accommodating **ten or more horses,** mules or cattlte shall be provided with **fire hose reels** or racks connected to the city water mains through not less than 1½″ pipe; said reels or racks shall be of such number and so placed that with fifty feet of hose and ¾″ nozzle with a water pressure of twenty lbs. per square inch all parts of the building may be reached. All such reels or racks must be at all times fully equipped and ready for use.

All stables must be provided with water-tight and tightly closed **receptacles for manure,** of such dimensions as to contain all accumulations of manure during periods of at least two weeks' time, and no manure shall be allowed to accumulate on the floors of stables or on adjacent grounds; provided, however, that on premises in the Fourth Building District of one acre or more in extent, manure may be stacked with the approval of the Commissioner of Health. Receptacles for manure located within any building shall be vented, through an air-tight shaft of at least 48″ sectional area leading to and above the level of the roof and to a point more than twenty feet from any adjacent property.

All stables capable of accommodating **ten animals** shall have at least **two exits.** Each such exit shall be 5′—0″ or more in width and at least thirty feet apart, or at opposite ends of the building. All stables capable of accommodating more than ten animals, or less than fifty animals, shall have exits as hereinabove required, except that the width thereof shall be increased in the proportion of 1′—0″ for each additional ten animals. All stables capable of accommodating more than fifty animals shall, in addition to the exits hereinbefore required, have an additional exit, or exits, as, in the judgment of the Superintendent of Buildings, the exigency of the case may require.

Stables located above the ground level shall have **runways** in no case less in number, or in width, than the exits required by this ordinance, and the said runways shall be without turns, and shall terminate directly at the exits; said runways to have no greater pitch than six to twelve.

No portion of the **ground adjacent to** any **stable** shall be used for the purpose of allowing the animals to stand or run at large therein.

It shall be **unlawful** to erect a stable or to convert a building to be used as a stable within the **Third** or **Fourth Building Districts** to be used to house animals for hire or as a boarding stable, or community stable, or for dairy purposes, **without** there be secured and filed with the Board of Public Works the written **consent** thereto of the **owners** of at least two-thirds of the **remaining property located in** the same **block** as the proposed stable.

SECTION 149. No permit for the erection or alteration of a building to be used as a **stable** shall be issued **unless** the same be authorized by the Board of Public Works **after a hearing** as hereinafter provided.

Whenever any person shall apply for a permit to build, or to alter or convert any building into a stable the application shall, in addition to the other matters required to be stated in applications, state the number and kind of animals to be sheltered therein, and the plans and specifications shall show the manner in which water and sewer connections are to be made, and the number and location of water taps for fire protection, and it shall be the duty of the Inspector, upon the

filing of such applications to notify the Secretary of the Board of Public Works, the **Sanitary Inspector** and the **Fire Marshal** in writing that such permit has been applied for, stating the name of the applicant, the lot and block number and the name of the addition or plat, or other description of the land upon which the proposed building is to be erected, or altered and thereupon it shall be the duty of the Secretary of the Board of Public Works to set a date for hearing before the Board of Public Works upon said application, which shall be not less than two weeks nor more than four weeks from the date of the filing of such application, and to cause to be posted upon the premises described in such application a notice of such hearing, giving the time and place thereof and the purpose for which such hearing shall be had.

It shall be the **duty of** the **Sanitary Inspector** and the **Fire Marshal** to carefully examine said application and inspect said premises where it is proposed to erect or alter said building to be used as a stable, and to, at the time of said hearing, report to the Board of Public Works their findings in the premises, together with such recommendations as to changes in the plans and specifications as will, in their judgment, conduce to the preservation of the public health and protection of the premises and adjoining property from fire.

That at said hearing **any person interested may** appear and **object** to the granting of said permit on the ground that the establishment and maintenance of a stable at the point designated and in the manner specified in the said application would be a public nuisance or injurious to the health of the neighborhood or dangerous to the surrounding property from fire.

If at said hearing it shall appear to the satisfaction of the Board of Public Works that said stable can be erected and maintained at the place designated in the application without injury to the sanitary condition of the neighborhood, or danger to the surrounding property from fire, and that the same will not be a public nuisance, it **shall authorize** the **Inspector to issue a permit** for the erection or alteration of such building

in compliance with the provisions of this ordinance, but if it shall appear to the Board of Public Works that the erection and maintenance of such stable at the place designated will be injurious to the sanitary condition of the neighborhood, or dangerous to the surrounding property from fire, or a public nuisance, it **shall refuse to authorize** the issuance of such permit for the erection, alteration or maintenance of such stable.

SECTION 150. All buildings used for **hospitals, sanitariums** or **places for nursing,** treating or caring for three or more sick, injured, insane, imbecile or idiotic persons, or inebriates or persons suffering from the effects of excessive use of alcoholic liquors, or epileptics or persons addicted to or suffering from the excessive use of morphine, cocaine or other similar drugs or narcotics, if more than three stories in height above the lowest street or alley grade, shall be Class "A," "B" or "C" buildings, and no such buildings used as such hospital shall exceed six stories in height above the lowest street or alley grade.

SECTION 151. Every **assembly hall** shall have at least one means of entrance and exit on a public street.

No portion of the main floor of any assembly hall, within the limits of the First and Second Building Districts, except in Class "A," "B" or "C" buildings, shall be more **than ten feet** above the street grade at the main entrance if such hall shall accommodate **1,000** persons, or **more than sixteen feet** above the street grade at the main entrance if such hall shall accommodate more than **500** and less than **1,000** persons, or **more than twenty-five** feet above the street grade at the main entrance if said hall shall accommodate less than **500** persons.

No portion of the main floor of any assembly hall within the limits of the Third and Fourth Building Districts shall be **more than forty-five feet** above the street grade at the main entrance; provided, however, that no such assembly hall shall accommodate more than four hundred persons.

Stairways in or leading to assembly halls and serving for the exit of fifty persons or less, shall be at least **4'—0"** wide, and for every additional fifty persons to be accommodated **6"** shall be added to their width.

No circular or winding stairs for the use of the public shall be permitted in any **assembly hall** accommodating more than **300** persons.

Every **assembly hall** with accommodations for **500** or more persons shall have at least two separate and distinct **exits,** located as far apart as is practicable, and with accommodations for **700** or more persons shall have at least three separate and distinct exits.

All **egress openings in assembly halls** shall have the word "EXIT" conspicuously placed over them. Doorways of exits or entrances shall not be less than **5'—0"** in width, and for every additional **100** persons, or portion thereof, to be accommodated in excess of **500** an aggregate of **12"** additional exit width shall be provided, and in no case shall the exit be less than the aggregate width of all stirways leading thereto.

All **aisles in assembly halls** shall be at least **3'—0"** wide, and if having seats on both sides, shall be increased in width towards the exit in the ratio of **1"** to **5** running feet. No seat shall be more than thirteen feet from an aisle.

All **seats on** the **main floor** of assembly halls, shall be at least **31"** from back to back measured in a horizontal direction, and in all **galleries** or **balconies** at least **30",** and all platforms for seats on inclined floors shall be not more than **21"** in height of risers, and of a width not less than the distance between seats, and **all seats** in galleries, having platforms on inclined floors, shall be **firmly fixed to the floors.**

In computing the accommodations of assembly halls having movable seats, **six square feet** shall be allowed for **each person.**

All assembly halls with accommodations for **1,000** or more persons, shall be provided with at least one **standpipe and fire escape** on the outside of the building in a street or alley, extending to the roof, with hose attachment close to a window or door at each floor or gallery.

No assembly hall shall be opened to the public until the same shall have been inspected and found to comply with all the provisions of this ordinance in relation thereto, and a **permit for** such **opening** shall have been issue by the Inspector; and it shall be the **duty of the Mayor to prevent** the opening of such assembly hall to the public until a written permit therefor has been issued by the Inspector.

SECTION 152. All **aisles and passageways** in and leading to assembly halls shall be kept free from camp stools, chairs, sofas, benches and other obstructions during all services, performances, exhibitions, lectures, concerts, balls or other public assemblages therein, and the **Fire Marshal,** the **Chief and Assistant Chiefs** of the **Fire Department,** and any **police officer,** shall have the right to enter any assembly hall at any time while the same is occupied by a public assemblage for the purpose of enforcing this provision.

SECTION 153. All buildings containing a **theatre** having a seating capacity of **1,000 or more,** hereafter erected or altered, shall be Class "A," "B" or "C" buildings, except that buildings not more than one story in height above the lowest street or alley grade, with masonry walls, may contain a theatre having a seating capacity of **1,000** or more, provided such theatre has no balcony or gallery and has the auditorium floors constructed as required in Class "D" buildings, and all interior walls, partitions and ceilings lathed with metal lath and plastered with hard plaster, and has for a seating capacity of **1,000** or more, at least one, and for a seating capacity of **1,500** or more, at least two exits on each of three sides of the building, which exits shall open directly upon a street or alley, or unoccupied lot not less than sixteen feet in its least dimension adjoining a street or alley, or open into passageways with fireproof walls and ceilings, leading directly to a street, alley or unoccupied lot, and each exit and passageway shall

be at least **5′—0″** in width and the combined width of such exits shall be equal to not less than **2′—0″** for each **100** of the seating capacity of such theatre.

SECTION 154. All buildings containing a theatre having a seating capacity of **less than 1,000,** hereafter erected or altered, shall be Class "A," "B" or "C" buildings, or Class "D," "E" or "F" buildings with all walls and ceilings covered with metal lath and hard plaster, and all partitions fireproof or incombustible stud partitions, except that Class "G" buildings not more than one story in height above the lowest street or alley grade may contain a theatre having a seating capacity of less than **500,** provided such theatre has no balcony or gallery and has the auditorium floors constructed as required in Class "D" buildings, and all walls, partitions and ceilings lathed with metal lath and plastered with hard plaster, and has the auditorium floor not more than **3′—0″** above the lowest street or alley grade; provided, that no theatre in a Class "D," "E" or "F" building shall be located over, under or adjoining any room used for any other purpose without being separated therefrom by fireproof floors and walls, having no openings through them connected with the theatre, and no theatre in a Class "D," "E" or "F" building shall have any portion of the main auditorium floor more than sixteen feet above the lowest street or alley grade.

SECTION 155. Every building containing a **theatre** shall have at least **one front entrance to** the **theatre,** opening directly upon a street or into an unobstructed passageway leading directly to a street, which said front entrance and passageway, if any, shall be not less than ten feet in width, and every theatre shall have at least **two exits** for theatres having a seating capacity of less than **500,** and at least **three exits** for theatres having a seating capacity of **500** or more, opening directly upon a street or into an unobstructed passageway leading directly to a street and not through a court, hall or corridor at the side of the theatre, one of which exits

may be through the entrance above required, and said exits and passageways, if any, shall be not less than **5′—0″** in width each, and the aggregate width of said exits opening into streets shall be increased **1′—0″** for each additional **100** seating capacity, or fraction thereof, over **500.**

All **doors** of exits or entrances shall **open outwardly** and shall be hung to swing in such a manner as not to become an obstruction in a passage or corridor, and no such doors shall be closed or locked when the building is open to the public or during any performance therein.

All **exits** above the first floor shall have **independent stairs** and exits to the street; provided, however, that a common place of exit and entrance may serve for the main floor of the auditorium and the first gallery, provided its capacity be equal to the aggregate capacity of the outlets from the main floor and the said gallery.

No passage leading to any stairway communicating with any entrance or exit shall be **less than 4′—0″** in width in any part thereof.

At least two independent exits shall be provided from the stage, located on opposite sides of the same and leading directly to a street or alley, or through a fireproof passage, or in Class "A," "B" or "C" buildings through a hall in an office building in no way connected with any hall connecting with the auditorium.

SECTION 156. In addition to the entrance and exits on the street required by the preceding section, in all **theatres** having a seating capacity of **500 or more,** there shall be provided an **open court, or a corridor,** hall or space on the side not bordering on a street or alley when the building is located on a corner lot, and on both sides of the building where there is but one frontage on the street, with exits thereto from the auditorium floor and each gallery as hereinafter provided, but **no exit** opening to such court, corridor or hall shall be located **back of** the **proscenium** wall.

The **width of** such open **court,** or courts, **corridors** or **halls** shall be not less than **5′—0″** where the seating ca-

pacity is less than **1,000; 1,000** and less than **1,800, 6′—0″** in width, and if **1,800** or more, **7′—0″** in width.

Said **open courts, corridors** or **halls** shall begin on a line with or near the proscenium wall, or with the rear wall of the theatre, and shall extend the length of the auditorium proper, to or near the wall separating the same from the entrance lobby or vestibule. Each such court, corridor or hall, or a separate corridor therefrom, shall continue to a street or alley through such superstructure as may be built on the street side of the auditorium, with walls of masonry on each side of the entire length of said court or corridors, and the ceilings, floors and stairways therein shall be fireproof. Said separate corriors shall not be more than **2′—0″** narrower than the open court or courts, halls or corridors and there shall be no projection in the same.

Where separate and distinct exits equal in width to such court or courts, halls or corridors can be provided through a street or alley frontage of the building, in addition to the above required street exits, they may **take the place of** the court or courts, halls or corridors.

The **outer openings of** all such **courts, halls or corridors** shall be provided with doors or gates opening toward the street. During the performance the doors or gates **shall be kept open** by proper fastenings; at other times they may be closed and fastened on the inner side by movable bolts or latches which can be opened without a key.

The said **court, halls or corridors,** or passages used for exits through any adjoining buildings, **shall not be used for storage** purposes or for any purpose whatever, except for exit and entrance from and to adjoining Class "A," "B" or "C" buildings used exclusively for offices, and for exit from the auditorium and galleries, and they must be kept clear and free during performances.

The **level of all said courts, halls** and **corridors,** at the entrance to the building, shall not be greater than one step above the level of the sidewalk where they begin at the street entrance. The entrance of the main front of the building shall not be on a lower level than the sidewalk, and shall not be more than **28″** above the sidewalk. Gradients with a rise of not more than one to six shall be used exclusively in all exits and approaches from the first floor level to a street or alley.

SECTION 157. Every theatre shall have, if the seating capacity is **less than 1,000,** at least **one,** and if the seating capacity is **1,000 or more,** at least **two emergency exits** opening from each side of each floor or gallery of the auditorium, either on to a street frontage of the building, or on to a side street or an alley or into a court, corridor or hall.

These exits shall be closed with **fireproof doors** set in fireproof frames and fastened only by a device which will readily yield to the direct outward pressure of one man, and said doors shall be at least **3″** narrower than the court, hall, corridor or balcony upon which they open, and shall be hung with hinges on the side toward the exit from the building or toward the stairway leading downward from such balcony, unless the doorway is so located that persons issuing from the other doorway on the same side would not have to pass it to reach the outer exit, in which case the hinges shall be on the opposite side. All doors above described shall open outward from an aisle. All balconies and stairways leading from such exits shall be constructed of iron or steel throughout, and shall be of such strength as to sustain a load of **100** pounds to the square foot, and shall be not less than **2′—6″** in width, and where such stairways are on the outer side of a building adjoining a street or alley, they shall be carried to the ground on private property.

SECTION 158. That portion of any **building containing a theatre,** bordering on the streets and not required for the use of the theatre, **may be used for other purposes, provided** there are fireproof division walls separating such portion of the building from the portion used as a theatre, and there shall be no openings in

such division walls except into a hall or corridor of Class "A," "B" or "C" buildings where the other portion of the building is used only as an office building, and in such cases all openings shall be closed with automatic self-closing fireproof doors, which will close at a temperature of not more than **165°** Fahrenheit.

SECTION 159. In all theatres there shall be a **masonry division wall** separating the stage from the auditorium, which wall shall extend at least **4′—0″** above the highest roof of the stage or auditorium.

Above the **proscenium opening** there shall be an iron, steel or reinforced concrete beam thoroughly fireproofed as required in Class "A" buildings. If an orchestra is constructed above the proscenium opening it shall be placed on the auditorium side of the division wall, and there shall be **no opening** therefrom **to** the **stage.** The moulding around the proscenium opening shall be built solid of masonry, plaster or stucco, but may be faced with metal securely fastened to the wall with iron anchors and with no open space behind.

The **proscenium opening** shall be provided with a **fireproof asbestos curtain,** sliding at each end within iron grooves, securely fastened to the division wall, and extending into such iron grooves to a depth of not less than **6″** on each side of the opening, which fireproof curtain shall be raised at the commencement of each performance and lowered at the close of said performance, and be operated by approved machinery for that purpose. Non-fireproof curtains shall not be placed nearer than **2′—0″** to the footlights.

No **doorway or opening** through the proscenium wall from the auditorium shall be allowed above the level of the stage floor, and such openings, if any, shall have fireproof doors on each side of the wall and the doors shall be hung so as to be opened from either side at all times without keys.

SECTION 160. In all theatres all **aisles** on the respective floors in the auditorium, balcony and galleries, having seats on both sides of the same, **shall not be less**

than **3′—0″** wide and shall be increased in width towards the exit in the ratio of **1″** to five running feet. Aisles having seats on one side only shall not be less than **3′—0″** wide at any place except that aisles in front of the boxes may be **2′—0″** wide. No seat in the auditorium, balcony or galleries shall have more than six seats intervening between it and an aisle, except that in each of the last four rows next to the foyer on the main floor there may be seven seats intervening.

No seats in the auditorium, excepting those contained in the boxes, shall be less than **31″** from back to back measured in a horizontal direction, nor less than **30″** in the balcony, nor less than **28″** in any gallery, and all must be firmly secured to the floor.

No platforms in the balcony and galleries formed to receive the seats shall be more than **21″** in height of riser, nor less than **28″** in width of platform, and the riser of any platform shall be covered with metal or metal lath and hard plaster.

SECTION 161. In **all theatres** in Class "A," "B" or "C" buildings the **fronts of galleries** shall be formed of masonry or iron and steel, and in Class "D," "E" or "F" buildings may be of wood construction covered on both sides with metal or metal lath and hard plaster. The capping of all gallery fronts may be of oak, maple or other hard wood.

SECTION 162. In all theatres all stairs shall be of masonry or iron or steel, except that in Class "D," "E" or "F" buildings they may be of wood construction, provided all treads, risers and other exposed parts are of oak, maple or other hard wood not less than **1¼″** thick.

No stairway shall lead **to** a **basement** or cellar from any part of a theatre **in front of** the **proscenium** wall.

All **stairways serving for** the **exit** of **50** people or less shall be at least **4′—0″** wide, and for every additional **50** people to be accommodated shall be increased at least **6″** in width. No circular or winding stairs for the use of the public shall be permitted.

Where the **seating capacity** is **more than 1,000** there shall be at least **two** independent **stairways,** with direct exterior outlets, provided for each gallery where there are not more than two galleries, and the same shall be located on opposite sides of said galleries.

Where there are more than two galleries, one or more **additional stairways** shall be provided, which shall communicate directly with exterior outlets. Where the **seating capacity** is **1,000 or less, two** direct lines of **stairways** only shall be required, located on opposite sides of the gallery, and in both cases shall extend from the sidewalk level to the upper gallery, with outlets from each gallery to each of said stairways.

All **inside stairways** in Class "D," "E" or "F" buildings leading to the upper galleries of the auditorium **shall be closed** on both sides **with masonry** walls or incombustible stud partitions. Stairs leading to the front or lower gallery may be left open on one side, but in no case shall stairs leading to any gallery be left open on both sides.

When straight **stairs return** directly **upon themselves,** a landing of the full width of both flights, without steps, shall be provided. The outer line of such landing shall be curved to a radius of not less than **2′—0″** to avoid square angles. **Stairs turning in an angle** shall have a landing **without winders** at said turn. In stairs where two flights connect with one main flight, there shall be no winders, and the width of the main flight shall be at least equal to the aggregate width of the side flights. All stairs shall have **landings** not exceeding **12′—0″ apart** perpendicularly.

All **enclosed stairways** shall have on both sides strong and continuous **hand rails** firmly secured to the walls, not less than **2″** distant therefrom, and about **3′—0″** above the stairs. All staircases **8′—0″** and over in width shall be provided with a **center hand rail** of metal, not less than **2″** in diameter, placed at a height of about **3′—0″** above the center of the treads, and supported on wrought iron, steel or brass standards not less than **2″** in diameter, placed not less than **4′—0″** nor more

than **6′—0″** apart, and securely fastened or bolted to the treads or risers, or both, and at the head of each such flight of stairs, and at each landing there shall be a post or standard at least **6′—0″** in height to which the said hand rail shall be securely fastened.

SECTION 163. In all theatres the walls separating the **actors' dressing rooms** from the stage, and the **partitions** dividing the dressing rooms, together with the partitions of every passageway, from the same to the stage, **and all other partitions** on or about the stage, shall be **fireproof partitions.** All doors in any of the said partitions shall be **fireproof doors.** All shelving and cupboards in dressing rooms, property rooms or other storage rooms shall be constructed of metal, slate, or of asbestos board not less than **3′—16″** thick.

All **dressing rooms** shall have an independent **exit** leading directly into a street or alley or to a hall, corridor or court opening into a street or alley, and shall not be more than **one story below** the **street** or alley level, and may be located in fly galleries provided with independent exits, and **all stairs** leading **to dressing** or other **rooms** above or below the stage shall be of **iron** or **steel,** and not less than **2′—0″** in width.

All **windows back of** the **proscenium** wall shall be arranged to open and none of the windows in outside walls shall have fixed sashes, iron griles or bars.

No **workshop, storage or general property** room shall be located on the auditorium side of the proscenium wall, nor in any of the fly galleries.

SECTION 164. In **all theatres** the **stage floor** shall be constructed as required for floors in Class "A," "B" or "C" buildings, except that openings may be left therein for the working of scenery, traps and other mechanical apparatus, provided, said openings, when not in use, shall be covered with boards or trap doors of maple, oak or other hard wood not less than **1½″** thick.

SECTION 165. In **all theatres** having a seating capacity of **500** or more the **rigging loft** and **fly galleries** shall be constructed of iron or steel throughout, with

floors of iron or steel. In theatres having a seating capacity of less than **500** the **rigging loft** and **fly galleries** may be of **wood,** with no supports or floor joists less than **2¾″** in their least dimension, and floors not less than **1¾″** thick.

SECTION 166. In **all theatres** all stage **scenery** and framing, curtains and decorations made of combustible material, and all exposed woodwork throughout the entire theatre, shall be painted or saturated with a **paint or chemical** solution which will render it **non-inflammable,** and shall be **tested** and approved **by the Inspector.**

SECTION 167. All theatres shall be provided with **stand pipes** not less than **4″** in diameter, as follows: One on each side of the auditorium with hose attachments on each floor and gallery; at least one on each side of the stage with hose attachment on each floor and one in the carpenter shop if the same be contiguous to or in the building. **All** such **stand pipes** shall be kept **clear from obstructions.** Said stand pipes shall be separate and distinct, receiving their **supply** of water **direct from** the **street main** through a connection of at least the same area as the stand pipes, and shall be fitted with the regulation couplings of the Fire Department, and shall be kept constantly filled with water and ready for immediate use at all times, and at least **100** feet of **2½″** hose, fitted with the regulation couplings of the Fire Department, and with nozzles attached thereto, and with hose spanners at each outlet shall always be kept attached to each hose attachment.

In addition to the above required stand pipes, there shall be provided a **4″ stand pipe** running from the cellar to the roof, with a two way, **2½″ Siamese connection** placed **on** the **street** above the curb level, and with a **2½″** outlet, with a **2½″** hose attached thereto at each floor, and placed as near the stairs as is practicable.

A **separate** and distinct **system of pipes** shall be placed behind the proscenium wall, not connected in any manner with the stand pipe, but **supplied** with water

from a **tank** or tanks located **on** the **roof** over the stage, and containing not less than one gallon of water for each square foot of floor area to be sprinkled, which tanks shall be at all times filled with water, and said pipes shall connect with automatic sprinklers which will operate at a temperature of **165°** Fahrenheit, and so arranged as to sprinkle every square foot of floor area behind the proscenium wall, including the stage, the rigging loft and fly galleries, all dressing rooms, property rooms, store rooms, paint rooms and the carpenter shop.

There shall be provided at least two portable liquid chemical **fire extinguishers,** at least four **axes,** and two twenty-five foot **hooks,** two fifteen foot **hooks,** and two ten foot **hooks,** on **each tier** or floor **of** the **stage.**

SECTION 168. In every building containing a **theatre** every portion of the building devoted to the use of the public and all outlets leading to the streets, including the open courts, halls and corridors, shall be **well lighted with electricity** during every performance, and shall remain lighted **until** the **audience has left** the premises. All said lights in the halls, courts, corridors, lobbies or any other part of said building used by the audience, except the auditorium, must be controlled by a **separate shut-off** located in the box office and controlled only in that particular place.

Gas mains supplying the building shall have **independent connections** in front of and behind the proscenium wall, and provision shall be made for shutting off the gas of each system from the outside of the building.

All ducts or shafts used for conducting heated air from the main chandelier, or from any other light or lights, shall be constructed **of metal** and made double with an air space between, vented at the top.

A **diagram or plan** of each gallery or floor, each occupying a space not less than sixteen square inches and showing distinctly the exits thereon, shall be printed in black lines in a legible manner **on the program** of each performance.

Every exit shall have over the same on the inside, the word "EXIT" painted in legible letters not less than **6″** in height, and also a **red light** of not less than sixteen candle power, on a circuit independent from all other lights in the building.

SECTION 169. In **every theatre** there shall be provided over the stage and in direct and open communication through any ceiling thereof, a metal framed **skylight** or skylights of an area or combined area of not less than **one-tenth** of the area of the stage, fitted with rolling sash having brass wheels not less than **2½″** in diameter, with brass journals and resting on brass tracks extending the entire length of the sash and an equal distance, beyond the opening, on the roof, and having an incline of not less than one to sixteen. The sash shall be glazed with glass not more than **⅛″** thick, in panes not less than **300** square inches in area, and in no case shall the glass be wire glass, and shall be set on curbs so located that the lowest portion of the tracks on which they run will be not less than **1′—0″** above the roof. **All such skylights** shall be so constructed that the entire area of each will **open instantly** upon the cutting, burning or releasing of a loose twisted hemped cord not more than **¼″** in diameter, which cord shall be so arranged as to hold said skylights closed, and shall be carried downward to the lowest level that will not interfere with scenery or rigging, and then carried through pulleys not less than **3″** in diameter, with flanges not less than **1″** wide, so arranged that the cord will cross the full width and length of the stage in both directions, and each of the portions of the cord crossing the stage shall be provided with two or more **fusible link** devices, one on each side of the stage, which will operate and release said cord at a temperature of **165°** Fahrenheit.

In addition to the above required hempen cord, there shall extend from he skylights to each fly gallery and to the stage manager's desk, metal cords or wires, so arranged that when pulled they will **instantly** cut off release the hempen cord at the skylight and allow the

sash to open, and there shall be provided in each fly gallery and at the stage manager's desk, a permanent sign in plain letters not less than **1″** high, bearing the words **"To ventilate the stage and clear smoke pull this cord."**

Immediately underneath the glass of all said skylights there shall be **wire netting** of not more than **1″** mesh.

SECTION 170. In **all** buildings containing **theatres, all boiler and fuel rooms** shall be **enclosed in masonry** walls, and all floors and ceilings thereof shall be of masonry, and all doorways in said walls shall be provided with automatic self closing fireproof doors, which will close at a temperature of **156°** Fahrenheit.

No floor register for heating purposes shall be used, and no coil or radiator shall be placed **in any aisle,** or hall, corridor or passageway used as an exit, but the same shall be placed in recesses formed in walls or partitions.

All supply, return or exhaust **pipes** containing **hot water or steam** shall be encased and protected by not less than **2″** of concrete, or metal collars with not less than **½″** open space around the pipe where the same pass through any floor or woodwork.

SECTION 171. The Mayor, members of the City Council, members of the Board of Public Works, the Fire Marshal, the City Electrician and the Chiefs of the Fire and Police Departments, and the Inspector **shall have** the **right to enter** any building heretofore or hereafter erected and containing a **theatre,** and **all parts thereof,** at any reasonable time and **at all times** when occupied by the public, for the purpose of ascertaining whether the provisions of this ordinance are being complied with.

SECTION 172. All theatres shall be provided with an auxiliary **electrical fire alarm system,** which shall be connected with and operate a main fire alarm box located outside of, but within fifty feet of the theatre

building, and **connected with** the **city fire alarm system,** and said auxiliary system shall be installed under the supervision of the **City Electrician,** and all electrical wiring and equipment throughout the building shall be installed and operated subject to inspection and approval by the City Electrician.

SECTION 173. The owner, agent or lessee, of every theatre shall employ one or more **competent and experienced firemen,** approved by, and who shall report to and be subject to the orders of the **Chief of the Fire Department,** and who shall be in constant attendance at such theatre during all times when the same is open to the public, and shall wear such uniform as will indicate that they are firemen under the provisions of this section.

Such firemen shall, before every performance in such theatre, examine and **test all fire apparatus** required by this ordinance to be installed and kept in theatres.

No theatre shall be **opened** to the public **unless** such fire apparatus is in its proper place and in good working order, and such firemen shall, during every performance, keep diligent watch for fires and take prompt measures for extinguishing any fires that may occur, and shall not be required or allowed, while on duty as such firemen, or during any time when such theatre is open to the public, to act as scene shifters or stage hands or do any other work or perform any other duties than as are required in this section.

SECTION 174. No theatre, hereafter erected or altered to the extent of **40%** of the original cost, **shall be used** as a place of public entertainment **unless** the same shall in all respects conform to the provisions of this ordinance relating to the construction of theatres; provided, however, that theatres for which building permits have been issued prior to the taking effect of this ordinance, may be completed and used under the provisions of the permit and the ordinance under which the same was issued; and no theatre hereafter erected or altered shall be open to the public for public entertainment of any kind until the **Inspector** shall have examined the same and issued and recorded in his office a written **certificate signed by** the **Inspector,** to the effect that such theatre conforms to the provisions of this ordinance, or to the permit under which the same was built and no license for any public entertainment in such theatre shall be granted or issued except upon presentation to the City Comptroller of such certificate.

SECTION 175. All buildings heretofore or hereafter erected three stories in height from the lowest street or alley grade, except dwellings, shall be provided with at least one **public fire escape ladder,** constructed as hereinafter provided; all buildings heretofore or hereafter erected four, five or six stories in height from the lowest street or alley grade, and all buildings heretofore erected seven or more stories in height from the lowest street or alley grade, shall be provided with at least one public **stairway fire escape** or enclosed fireproof stairway, constructed as hereinafter provided, and all buildings hereafter erected seven or more stories in height from the lowest street or alley grade, shall be provided with at least one public enclosed fireproof stairway, constructed as hereinafter provided.

SECTION 176. All buildings more than two stories in height from the lowest street or alley grade, hereafter erected or altered to the extent of more than **50%** of their original cost, shall be provided with at least one public **fire escape ladder, stairway fire escape** or **enclosed fireproof stairway,** constructed as hereinafter provided, and with additional fire escapes, enclosed fireproof stairways or open stairways sufficient in number and so located that from every room or connected suite of rooms, in such building there shall be at least two of the above mentioned means of exit available without passing any open stairway, elevator shaft or open light well; provided, however, that one of such means of exit available from any room or connected suite of rooms may be a private fire escape available only for

the occupants of such room or connected suite of rooms;

Provided, however, that where one of every two stairways required in a building is constructed throughout of iron, steel or masonry, or a combination of these materials, and with risers, treads and landings as required for interior stairways, but is built on the outside of the building, and has an entrance on every floor from a masonry or iron or steel balcony or loggia free and open to the outside air, and where all stair halls, elevator shafts and other openings through the floor from the ground entrance to the roof in the interior of the building are enclosed in fireproof walls with self closing fire doors, **all fire escapes** except one **may be omitted.**

SECTION 177. All fire escapes and enclosed fireproof stairways shall be kept **clear of** all **obstructions** whatsoever. All public fire escape ladders or stairway fire escapes shall open directly from a hall or passageway extending to the outer wall of the building, with a door or window on each floor to each fire escape in the building; provided, however, that in buildings used for office or business purposes heretofore erected, and in which no one sleeps except the janitor and his family, and in such buildings six or less stories in height hereafter erected, such fire escape ladders or stairway fire escapes may be located in such manner and position as to make the same easily and readily accessible through some passage or open room leading thereto form the main hallways, the door of which such room shall have no lock or bolt or other device whereby the same can be fastened. **No door or window** leading to a fire escape shall have attached thereto or connected therewith any bolt, lock, catch or other fastening device that cannot be easily opened from the inside without a key, and no door or window leading to a fire escape shall be so constructed that when open it shall obstruct any part of the fire escape or balcony. **No window or door** leading to a fire escape shall have a sill more than **24″** above the floor or an opening less

than **30″** high and **24″** wide in the clear. In all cases where a fire escape **passes** a window in an elevator or other shaft, such window shall consist of a metal frame and sash and wire glass. **All fire escape** ladders and stairway fire escapes shall be constructed entirely of wrought iron and steel. All exterior fire escape ladders or stairway fire escapes and all balconies, hand rails and grille work shall be at all times kept painted with an efficient paint to prevent rusting.

SECTION 178. Fire escape ladders shall have side rails **⅜″** by **1½″** in dimensions, and placed not less than **14″** apart, and rounds **⅝″** in diameter, placed not more or less than **14″** apart and passing through the side rails and well headed.

The ladder shall extend from the height of **9′—0″** above the ground to a distance of **2′—0″** above and over the fire wall, and shall be placed parallel with and not less than **6″** from the wall of the building, and there shall be a hinged or other efficient form of extension to all ladders where the first balcony is more than twelve feet from the ground and is so situated that a fixed ladder would interfere with doors or windows below, which extension shall reach from within **9′—0″** of the ground to the first balcony.

Balconies not less than **2′—6″** wide and extending the full width of the window or door and width of the ladder space, shall be constructed on each floor at each ladder, with floors made strong enough to carry a load of **100** pounds to the square foot, which floors, in case the opening from the building is a doorway, shall be on the level with the sill of the door, and in case the opening is a window shall be **1′—0″** below the window sill. Ladder openings in floors of balconies shall be not less than **20″** by **24″**. The floor rail of all balconies shall be of **⅝″** by **2″** wrought iron or its equivalent, and shall be supported by braces **½″** by **2″**. Hand rails of balconies shall be made of iron or steel not less than **½″** by **1½″**, or of angle iron of equal strength, securely fastened together and to the wall, and not less than **3′—0″** above the floor of the

balcony, and braced every **5′—0″** with braces extending not less than **4″** outside the uprights. The space from the hand rail to the floor shall be filled with grille work or additional rails and uprights.

All **ladders and balconies**, including brackets and hand rails, shall be securely **fastened to masonry** buildings by means of bolts or rods at least **⅝″** in diameter, running through the entire thickness of the wall and fastened on the inside with nuts or heads over **4″** washers; on wooden buildings they shall be fastened to studs by means of lag bolts or wood screws at least **½″** in diameter and **4″** long, and shall be of sufficient strength to sustain a live load of **100** pounds to the square foot.

SECTION 179. Stairway fire escapes shall lead from within **9′—0″** of the ground to the top floor, and shall have a fire escape ladder from the top floor to **2′—0″** above and over the fire wall; provided, that where a stairway fire escape is over an alley the lower balcony shall be placed not less than twelve feet above the ground, and a fire escape ladder shall extend from within **5′—0″** above the lower balcony to within **9′—0″** of the ground.

Such stairways shall be not less than **2′—0″** wide in the clear and shall be provided with **balconies 4′—2″** wide, not more than twelve feet apart perpendicularly and at each floor level, placed and constructed as required for ladder balconies, except that the bolts securing the brackets to the wall shall be at least **¾″** in diameter, and the entire outer side of the stairway and balconies from the top to the bottom shall be protected by wire netting of **3-16″**wire, or strong grille work having a mesh of not greater than **4″**, or by sheet or plate iron or steel, built **4′—0″** above the balcony floor and **4′—0″** perpendicularly above the outer edge of the steps of the stairs, and all stairways shall also have a strong hand rail on the inner side **3′—0″** perpendicularly above the center of the steps.

Treads of stairways shall **not** be **less than 6″** wide and the run shall not be less than **6″**, and **risers** shall

not exceed 12″. Stringers for stairs shall be of **6″** steel channels weighing not less than eight pounds per foot, or of steel plates **6″x¼″**, stiffened by a **2½″** by **2½″** angle bar **¼″** thick, fastened to stringers with not less than **½″** rivets, spaced not more than **6″** from center to center. Treads shall be formed of five **½″** iron rods or bars, or of diapered steel plates securely fastened to stringers with two bolts or rivets at each end of treads.

Stairways shall be securely fastened to the balconies and of sufficient strength to sustain a live load of **100** pounds to the square foot.

SECTION 180. Enclosed fireproof stairways shall be constructed next to an exterior wall and not more than thirty feet from a street or alley line, and shall open directly upon a street or alley or into a fireproof passageway extending to such street or alley, which passageway shall not be less than **3′—0″** in width and **7′—0″** in height in the clear, and not over thirty feet in length, and shall have no opening except to the stairway and street or alley.

Such stairways shall be enclosed throughout their entire height by a masonry wall not less than **4″** in thickness, and all windows of such stairways shall have metal sash set in metal frames and glazed with wire glass.

Such stairways shall have at each floor, a **fireproof door** not less than **2″—6′** in width and **6′—0″** in height, opening from a public hall or passageway into the stairway, except that the lower door of such stairway shall open outward from such stairway upon the street or alley or into the fireproof passageway above mentioned.

All doors shall be **kept closed** and shall be provided with self closing devices, which shall at all times be kept in efficient repair, and no such door leading into a fireproof stairway shall have attached thereto or connected therewith any bolt, lock, catch or other device that cannot be easily opened from the outside of such

stairway without a key, and no lower door leading out of such stairway shall have attached thereto or connected therewith any fastening device that cannot be easily opened from inside such stairway without a key. **Such stairways** shall be provided with stairs leading from such street or alley floor to the roof of the building, which stairs shall be not less than **2'—6"** wide in the clear from the roof to the sixth floor from the top and not less than **3'—0"** wide in the clear from the sixth floor from the top to the street or alley floor, and shall have landings not less in width than the width of the stairs at each floor, and a landing leading thereto from each door of sufficient width to prevent the door when open from obstructing the stairs or landing.

Such stairs shall have a run of not less than **7"** and a rise not more than **9"**, and shall be provided with a continuous hand rail on both sides, except at doorways, not less than **3'—0"** in height above the center of the steps. Said stairs and landings shall be constructed throughout of masonry or of iron or steel, and shall be at all points of sufficient strength to sustain a live load of **100** pounds to the square foot.

SECTION 181. **Every** building heretofore or hereafter erected, four stories or more in height above the lowest street or alley grade, shall have at least one galvanized wrought iron **stand pipe** for each separate division of the building, situated not more than **1'—0"** from the fire escape on an exterior wall and extending from **4'—0"** above the ground to and above the roof, and provided at each floor and on the roof with branches with good valves and at the bottom with an automatic Siamese inlet, all of proper dimensions to connect with the hose of the Fire Department. There shall be **one such stand pipe** for each public fire escape. The dimensions of stand pipes shall be as follows: **5"** in diameter for four story buildings, with a two way connection at the bottom; **5"** in diameter for buildings from five to ten stories in height with a three way connection at the bottom, and **6"** in diameter for buildings over ten

stories in height, with a four way connection at the bottom.

SECTION 182. The owner of any building more than two stories in height from the lowest street or alley grade, heretofore or hereafter erected and used or occupied as a hotel, lodging house, apartment house or flat building, or the agent having charge thereof, shall at all times **keep conspicuously posted** in each and every room and hallway of such building when used as a hotel or lodging house, and in each and every public hall of such building when used or occupied as an apartment house or flat building, a **white placard** not less than **4"** by **6"**, **printed in red** in conspicuous type, and giving full information as to the location of each fire escape in such building and the means of reaching the same, and directions to be observed by tenants in event of fire on the premises, and distinctly stating that a red light indicates the location of a fire escape.

SECTION 183. The owner or the agent having charge of any building more than two stories in height from the lowest street or alley grade, heretofore or hereafter erected and used or occupied as a hotel, lodging house, apartment house or flat building, shall cause to be placed and maintained at the end of each hall leading to or at the entrance of each room through which it is necessary to pass in order to reach any fire escape, **a red light,** which shall **always** be kept **burning** at night and which shall be on a separate service, and shall also cause to be posted and maintained on the door of every room through which it is necessary to pass to reach any **fire escape,** a conspicuous notice directing persons to pass through such door for the purpose of reaching the fire escape.

SECTION 184. In all buildings heretofore or hereafter erected in the City of Seattle, any **cellar, basement or sub-basement** of which is intended to be used, or shall be used **for the storage of goods** or merchandise, there **shall be provided** through the center of each division of such cellar, basement or sub-basement, and also

every **40′—0″** across the width where such cellar, basement or sub-basement is not subdivided by brick, stone or concrete walls without openings, three **2½″** interior diameter **iron pipes,** each ending in a turn to which is attached a **distributing nozzle,** one of which nozzles shall be located midway between the front and rear walls of such cellar, basement or sub-basement, one midway between the central nozzle and the front wall and one midway between the central nozzle and the rear wall, and which lines of pipe shall be so arranged that they shall project together through the wall of the building above the sidewalk or pavement a **sufficient distance to allow** the **Fire Department** to connect hose therewith, and each shall be provided with an elbow, a **Seattle standard 2½″ female coupling, a screw plug and a chain,** the pipe connecting with the nearest nozzle to be placed on the right; that with the central nozzle in the center; and that with the farthest nozzle on the left; **provided,** that in any cellar, basement or sub-basement where the said system of three pipes with distributing nozzles is installed in the center of each division, or every **40′—0″** across the width where not subdivided, but where said pipe system is directly connected with a main of the city water system, and properly maintained, and where in any cellar, basement or sub-basement **there is a complete automatic sprinkler system** so constructed as to protect every square foot of floor area and to operate at a temperature of **165°** Fahrenheit, connected with a water supply at all times under pressure, and with a **two-way Siamese connection** located at some point outside the building convenient for the **use of the Fire Department** and fitted with Seattle standard female couplings, screw plugs and chains, the provisions of **this section shall not apply.**

SECTION 185. All buildings hereafter erected in the Second Building District **adjoining the Third Building District,** unless separated by a street sixty feet or more in width, shall be provided on the side or sides facing the Third Building District, with exterior fire doors

or shutters of steel or iron, or shall have all windows of wire glass set in metal frames.

SECTION 186. All buildings to be used as stores, factories, warehouses or office buildings, shall be divided by **masonry division walls,** so located that the floor area in any space so formed shall not exceed the number of square feet indicated in the following table:

	A, B, C.	D, E.	F.	G.
On open corner or through lots	**20,000**	**15,000**	**10,000**	**8,000**
On interior lots	**18,000**	**13,500**	**9,000**	**7,200**

Provided, however, that the area betwen fire walls **may be increased 50%** over that above specified when the height of the building does not exceed sixty feet and **33 1-3%**, when the height of the building exceeds sixty feet, **in all buildings** which are **completely equipped** with an independent system of **automatic** galvanized iron **sprinkler** for each **14,000** square feet of ground floor area or fraction thereof, so constructed as to protect every square foot of floor area in such building, and to operate at a temperature of **165°** Fahrenheit, and connected with a tank or tanks having a capacity of not less than one gallon to each square foot of ground floor area of such building, located on the roof of such building and at all times filled with water; said sprinkler system being also connected with a galvanized iron pipe leading to the outside of the building, and there provided with automatic Siamese inlets which pipe and inlets shall be of the dimensions and numbers required for stand pipes on buildings of similar heights.

SECTION 187. In all buildings of Class "D," "E" or "F," three stories or more in height, used in whole or in part as **hotels, apartment houses, flat buildings, lodging houses** or **detention buildings,** there shall be **masonry division walls** not less than **4″** in thickness if built as filler walls and not less than the thickness re-

quired by this ordinance if built as curtain walls, and not more than sixty feet apart in any direction.

In Class "G" buildings, three stories in height, used in whole or in part for the above mentioned purposes, there shall be **division walls** built of masonry as above specified or of **2″** plank, doubled, with broken joints, placed vertically, and then stripped with not more than **½″** of furring, and lathed with wooden lath, not less than **½″** apart, on both sides, and plastered with hard plaster.

In case any story of such building shall have a room of such size as to prevent any division wall extending through such story, the **masonry division walls** above such story shall be **carried on steel beams** or girders, and such room, and the story below, if any, shall have the **ceilings** lathed with **metal lath** and plastered with hard plaster, and there shall be **mineral wool** or masonry fire stops put in between the under floor and the finish floor at least **1½″** thick.

Where such division walls cross halls or passageways, all openings shall be provided with **automatic** self-closing, sliding **fireproof doors,** which will operate at a temperature of **165°** Fahrenheit.

SECTION 188. All buildings heretofore or hereafter erected shall have on each side of all **openings through division walls,** or through exterior or party walls into adjoining buildings, wooden tin clad self closing **fire doors,** constructed of two thicknesses of matched dry lumber **⅞″** thick, crossed at right angles, and nailed with clinched nails and completely covered with tin plates not larger than **10″** by **14″**, with lock joints hammered down over all nail heads, and with all hinges, hangers, latches and appurtenances bolted to the door after tinning, and all tracks and stops bolted through the wall or into the wall with expansion bolts, and all eyes or lugs built into the wall. All such doors shall be hung on iron or steel eyes, hinges or tracks securely fastened to the wall, independently of any woodwork.

Sliding doors shall be hung with iron or steel trucks on an iron or steel track inclined **¾″** to **1′—0″**, and shall, when closed, rest not more than **½″** from the wall, and shall overlap on the top and sides at least **3″** and on the bottom **1½″** against a brick, stone, concrete or iron sill.

Swinging doors shall shut into a brick rabbet in the wall or into a **3″** by **3″** by **¼″** angle iron rabbet secured through the wall by **1¼″** by **¼″** iron bars, spaced not over **24″** apart, or shall overlap the wall not less than **4″** at sides and top.

All such sliding and swinging **doors** shall at all times be provided with an efficient **automatic self-closing device,** which will operate at a temperature of **165°** Fahrenheit.

SECTION 189. Whenever any building shall be provided with **exterior fire shutters** above the first story, such shutters shall be securely fastened to the building and so hung as to be readily opened or closed from either the inside or the outside, and all fire doors and shutters to openings on the first floor shall be securely hung, and at least one of such fire doors or shutters on the front, on either side, if any, and in the rear shall be so fastened that it can be opened from the outside by firemen.

SECTION 190. All that portion of any building heretofore or hereafter erected and used as a **garage** wherein is kept any **automobile** carrying or operated by the use of volatile inflammable liquid that will emit an inflammable vapor at a temperature of less than **100°** Fahrenheit, shall be separated from all portions of such building used for other purposes by fireproof floors, walls and ceilings.

No such garage shall be located in any building used as a detention building, school building, assembly hall, theatre, hotel, apartment house, club house, lodging house or flat building.

No stove, forge, torch, boiler, furnace, fire or **fire heat** or **electric dynamo, motor, hoist** or other exterior

sparking electric appliance, or any artificial light other than an incandescent electric light, shall be used or allowed, and no volatile inflammable liquid shall be used for cleaning or any other purpose, except for the filling of tanks of automobiles, in any such garage.

SECTION 191. It is hereby made the **duty of the Fire Marshal** to inspect and examine all buildings heretofore or hereafter erected, for the purpose of ascertaining whether fire escapes, stand pipes, hose connections, sprinkling apparatus, fireproof walls, partitions and doors, smoke ventilators, and fire resisting or fire fighting apparatus is installed and maintained as required in this ordinance, and for the purpose of making such inspection the Fire Marshal shall at all reasonable times, have the right to enter all buildings, and it shall be unlawful for any person to obstruct or interfere with the Fire Marshal in the performance of such duties.

SECTION 192. Whenever any building heretofore erected is used or occupied for any purpose which, under the provisions of this ordinance would require a building hereafter erected and used for such purpose to be provided with certain means of exit, fire escapes, stand pipes, hose connections, sprinkling apparatus, fireproof walls or partitions, fireproof doors, smoke ventilators, or fire resisting or fire fighting apparatus of any kind, and such building is not provided with the above mentioned means of fire protection, and is, **in the opinion of the Fire Marshal,** by reason of the lack of such means of fire protection, or by reason of its construction, or the purposes for which it is used, **dangerous to persons or property,** or unsafe for the purposes for which it is used, without the installation and maintenance of means of fire protection in addition to or different from those, if any, already provided, and whenever any building hereafter erected and provided with the minimum means of fire protection as required in this ordinance, is, **in the opinion of the Fire Marshal,** by reason of its construction or the purposes for which it is used,

dangerous to persons or property, or unsafe for the purposes for which it is used, without the installation and maintenance of additional means of fire protection, it shall be the **duty of the Fire Marshal** to determine the kind, character, number and location of the means of fire protection which will render such building safe for occupancy, and **to notify the owner,** or the agent in charge, of such building, in writing, **to provide** such building with the necessary means of **fire protection** to render it safe, which means shall be clearly specified in such notice, which notice shall be dated and signed by the Fire Marshal, and shall specify the time within which such building shall be provided with the required means of fire protection, and shall state that if the owner, or the agent in charge, of such building, deem the requirements of the Fire Marshal, or any of them, unnecessary, **he shall have the right,** within ten days from the service of such notice, **to appeal** therefrom to the **Board of Public Works.**

The person entitled to take such appeal shall, within the time specified for taking an appeal, file with the secretary of the Board of Public Works a written notice of appeal, stating the notice and requirements appealed from and the reasons for taking an appeal, and shall serve a copy of such notice of appeal upon the Fire Marshal.

Upon the filing of such notice of appeal the Secretary of the Board of Public Works shall set a date for hearing thereon, which shall not be less than ten nor more than twenty days from the time of filing such notice of appeal.

At the time of such hearing the Fire Marshal shall appear before the Board of Public Works and state his reasons for requiring such building to be provided with means of fire protection and the particulars wherein he considers said building unsafe, and may produce witnesses or other evidence in support thereof, and the person appealing shall be permitted to controvert the statements or evidence of the Fire Marshal by any competent evidence.

Upon submission of all the evidence and after the arguments of counsel, if any, the Board of Public Works shall determine whether the requirements of the Fire Marshal are in whole or in part reasonably necessary for the protection of persons or property, or to render such building safe for occupancy, and shall enter its findings in the premises of record, and make an order directing the person taking the appeal to install and thereafter maintain such means of fire protection as in the reasonable discretion of the Board of Public Works, are necessary for the protection of life and property, and to render such building safe for occupancy.

Such order shall state the time within which such means of fire protection shall be installed, **and shall be entered** upon the records of the proceedings of the Board of Public Works, and a copy thereof served upon the person taking the appeal; and it shall be unlawful for the owner, or other person in charge, of such building, to fail, refuse or neglect to comply with such notice of the Fire Marshal, or, in case of an appeal, with such order of the Board of Public Works within the time therein specified.

In case the owner, or other person in charge of such building, shall fail, refuse or neglect to comply with such notice or order, it shall be **unlawful** for any person, after the expiration of the time specified in such notice or order, **to use or occupy** any portion of **said building** for any purpose requiring such means of fire protection.

Each day that the owner, or other person in charge, of such building shall fail, refuse or neglect to install such means of fire protection after the time specified in such notice or order, and each day that any person shall continue to occupy any portion of said building as hereinafter prohibited, shall be deemed **a separate offense.**

SECTION 193. No alterations or repairs other than those rendered necessary by condemnation or regrading of streets, shall be made to any frame building existing in the **First or Second Building Districts** at the time of the taking effect of this ordinance, **except** as in this section provided. Alterations of store fronts and alterations to interiors which do not affect the structural parts, or bearing walls or partitions, may be made of such material as required in Class "F" buildings for such purposes, but in no case shall any such alterations, or series of alterations, made within a period of twelve months, exceed in cost **15%** in the First Building District or **20%** in the Second Building District, of the value of such building. Repairs to such buildings may be made with like material as the original construction, provided the cost of the repairs, made within a period of twelve months, does not exceed **20%** in the First Building District or **25%** in the Second Building District, of the value of such building; and provided, further, that all roofs shall, when repaired, be covered with incombustible material, and all partitions, walls, and ceilings shall, when repaired, be lathed with metal lath and plastered.

SECTION 194. No alterations or repairs, other than those rendered necessary by condemnation or regrade of streets, shall be made to any frame building existing in the **Third or Fourth Building Districts** at the time of the taking effect of this ordinance, **except** as in this section provided.

Alterations and repairs may be made with like material and construction as required by this ordinance for new buildings, provided that in the Third Building District all roofs shall, when altered or repaired, be covered with incombustible material except that shingle roofs may be reshingled to the extent of **40%** of their area in any period of twelve months at any time within five years from the taking effect of this ordinance, and partitions, walls and ceilings shall, when repaired, be lathed and plastered.

SECTION 195. No alterations or repairs, other than those rendered necessary by condemnation or regrading of streets, shall be made to a Class "D" or "F"

building existing in the **First Building District** at the time of the taking effect of this ordinance, **except** as in this section provided.

Alterations of **store fronts** and alterations to the interior of buildings, which do not affect the columns, girders, bearing walls **or** partitions, may be made with such material and construction as required in Class "D" buildings for like purposes, and alterations which change any existing columns, girders, bearing partitions or walls, or increase the loads thereon, may be made, if all interior loads shall be transmitted to the foundation by columns, girders and walls as required for Class "D" buildings; provided, however, that no such building shall be increased in height to more than seven stories above the lowest street or alley grade adjoining such building; and provided further, that when any such building is to be altered and different portions thereof are to be used for purposes requiring, in new buildings, a different class of construction, all floors and walls separating such different portions shall be of masonry, and such building shall be made to conform in all respects to the requirements of this ordinance for the construction of new buildings for such purposes. Repairs to such buildings may be made with like material as the original construction; provided, however, that all roofs, dormer windows, bay windows, cornices, towers, spires, ventilators, pent houses, balconies, mouldings and other like appendages shall, when repaired, be covered with like material and construction as required for Class "D" buildings, and all partitions, walls and ceilings shall, when repaired, be lathed and plastered as required in Class "D" buildings; provided, however, that this section shall not be construed as requiring the lathing and plastering of refrigerators or cooling rooms.

SECTION 196. Buildings of **Class "A," "B" or "C"** erected prior to the taking effect of this ordinance, shall have **alterations or repairs** made with like material and construction as required by the provisions of this ordinance for new buildings of the respective classes,

and all **Class "E"** buildings heretofore erected shall have all alterations or repairs made with material and construction equal in strength and fire resisting qualities to that required for new buildings of Class "E;" provided, however, that no Class "E" buildings in the First Building District shall be increased in height to more than five stories above the lowest alley or street grade.

All other masonry buildings heretofore erected in the **Second or Third Building Districts,** if more than four stories in height, shall have all alterations or repairs made with material and construction as required for Class "D" buildings, and if four stories or less in height, or of any height in the Fourth Building District, may be altered or repaired with material and construction as required for Class "F" buildings.

SECTION 197. Whenever any part of any existing building is taken for **public use by condemnation,** the remaining portion of such building **may be repaired** with the same material or materials of the same or similar kind to those of which such remaining portion is constructed, or, if there is sufficient ground on the same lot or premises upon which such building exists, the same **may be moved** as far as may be necessary to clear that portion of the lot or premises taken for such public purpose.

Whenever any **street is regraded** in such manner as necessitates the **adjustment of** existing **buildings** to the **new grade,** such buildings may be raised, lowered or have stories added above or below the same, provided such additional stories do not increase the height of such building or the number of stories beyond that allowed by this ordinance; and provided, further, that in the First and Second Building Districts any such additional lower story or stories shall have masonry walls as required for new buildings in such districts; and provided, further, that buildings of frame construction in the First and Second Building Districts, in case of condemnation or regrade, may be **moved** elsewhere outside of the First or Second Building Districts.

Section 198. When any building, other than a Class "A," "B" or "C" building, heretofore erected and existing at the time of the taking effect of this ordinance within the First or Second Building Districts, shall be **damaged by fire** or the act of God, it shall be the **duty of the Inspector**, within twenty-four hours after such damage occurs, to visit and inspect the premises where such building existed and the remaining portions, if any, of such building, and, within three days thereafter, to make an **estimate of** the actual **value** of such building at the time such damage occurred and of the amount of damage sustained by such building, and enter such estimates in the records of his office, and if the name and address of the owner, or agent, of such building is known, or with reasonable diligence can be ascertained by the Inspector, he shall mail a copy of such estimate signed by the Inspector, addressed to such owner in a sealed envelope, postage thereon being fully prepaid, and in case the name and address of the owner is unknown, shall post a copy of such estimate, signed by the Inspector, in a conspicuous place upon the premises occupied by such building.

In case the estimated **damage** to buildings having masonry walls, and situated within the First Building District, shall **exceed 50%** of the estimated value of the building, and in case the estimated damage to buildings without masonry walls, situated in the First Building District, shall exceed **30%** of the estimated value of the building, it shall be **unlawful** for any person **to repair, reconstruct, or use** such building, unless such building shall be reconstructed as a Class "A," "B" or "C" building, and in case the estimated damage to buildings having masonry walls, and situated within the Second Building District, shall exceed **50%** of the estimated value of the building, and in case the estimated damage to buildings without masonry walls, situated in the Second Building District, shall exceed **40%** of the estimated value of the building, it shall be **unlawful for any person to repair, reconstruct or use** such building **unless** such building shall be reconstructed as a Class "D," "E" or "F" building; provided, however, that if

the owner of any such building shall consider that the estimates made by the Inspector, as hereinabove provided, are not in accordance with the facts, and that the building is not in fact damaged to the proportionate extent as estimated by the Inspector, he shall have the **right to appeal** from such estimate to the **Board of Public Works**, by filing with the Secretary of the Board of Public Works, within ten days from the service or posting of the Inspector's estimate, a written statement of his grounds for appeal, which appeal shall be heard and determined in the manner provided in Section **16** hereof, and if upon the determination of such appeal the action of the Inspector shall be sustained by the Board of Public Works, it shall be unlawful for any person to proceed with the repair or reconstruction of, or to use such building.

SECTION 199. Whenever any **building** shall be **demolished,** the roof and each upper story shall be completely removed before the demolition of the next lower story is begun, and no material in excess of fifty pounds to the square foot shall be placed upon any floor of any such building in course of demolition, and all brick, stone, timbers and other structural parts of each story shall be lowered to the ground immediately upon displacement, and all dry mortar, lime, brick dust or other fine material, shall, before and during removal, be wet sufficiently to prevent it from floating or being blown into the street or upon adjoining property, and all sidewalks shall be protected by fences and scaffolds as required by the ordinances of the City of Seattle relating to the protection of sidewalks during the erection of buildings.

SECTION 200. Except in Class "A" buildings **temporary partitions or screens** may be constructed in buildings heretofore or hereafter erected, in the manner prescribed in this section. No such partitions or screen, if constructed of wood or wood and glass, shall exceed **8′—0″** in height, nor shall there be more than thirty feet in length of such partitions or screens in any room. If the space enclosed by such

partition or screen is covered, the underside of such covering shall be lathed and plastered, or covered with metal, or with asbestos paper, weighing not less than ten pounds to **100** square feet, pasted on wood.

Partitions or screens more than **8′—0″** in height, may be constructed of wire glass set in metal frames.

SECTION 201. Balconies may be constructed in rooms used for stores, warehouses, factories, workshops and offices, subject to the following conditions: There shall not be less than **8′—0″** of perpendicular space in the clear, when the space is to be used for offices or for continuous occupation by laborers of any class. When such balconies are used for storage of goods, they shall have not less than **6′—6″** of perpendicular space in the clear.

No balcony shall cover more than **30%** of the floor area of the room in which it is constructed.

Balconies shall be so constructed as to sustain fifty pounds or more of **live load** to the square foot.

Balconies and stairs leading thereto, in Class "A," "B" or "C" buildings, may be constructed with iron or steel beams and suports, with a floor of not less than **1¾″**tongued and grooved flooring, covered directly on the underside with metal or metal lath and hard plaster.

Balconies in Class "D," "E," "F" or "G" buildings, may be constructed with wood floor beams and supports not less than **4″** in their least dimension, or hung to the floor beams above with iron rods, if such floor beams are of sufficient strength to carry the added load, and the floors of such balcony may be of not less than **⅞″** matched flooring, and stairs leading to such balcony may be constructed of wood with stringers and treads not less than **1¾″** thick.

No partition shall be constructed **in any balcony, except** the same is constructed same as other partitions in the building.

SECTION 202. In all buildings having more than three stories whether above or below the street grade,

and in which **permanent floors** are **not constructed** at the time the frame or walls are constructed, not more than two stories of the frame or wall shall be constructed without constructing a **temporary floor** of plank laid close, for the protection of workmen or others above, below or on such temporary floors, and such temporary floors shall be constructed as the building progresses at each alternate floor, and no permanent floor of masonry shall be constructed unless there be the permanent floor or a temporary floor in the story immediately below it.

SECTION 203. During the **construction or alteration** of all buildings more than thirty feet in height, all **stairways,** elevator openings, flues and all other openings in the floors and roofs, **shall be covered, or protected** by railings or wire nettings at least **4′—0″** in height at all times, except when such openings are being used for hoisting or lowering material.

SECTION 204. During the construction of all buildings over three stories in height, **temporary plank stairs** of not less than **5″** run and not more than **12″** rise, protected with hand rails, shall be constructed and kept in good repair and clear from material until the permanent stairs are constructed.

SECTION 205. No workman or other **person shall ride** up or down on any **hoisting elevator** used for hoisting material during the construction, alteration, repair or demolition of any building except before or after working hours, and then only when the foreman or contractor is in charge of such elevator.

SECTION 206. During the construction, alteration or demolition of any building which shall extend two stories or more above any other portion of such building or any adjoining building, the **roof of** such other portion or of such **adjoining building** and all skylights therein, **shall be protected** by covering said roof with planks or boards laid close to prevent injury to the roof covering, and by suspending over any skylights,

on stout timbers properly secured a stout wire netting with a mesh of not over ½", which netting shall be not less than 1'—0" above the glass in any such skylight, and shall be stretched taut and securely fastened to the supports.

SECTION 207. All scaffolds erected for use in the erection, repair, alteration or demolition of buildings, **shall be** well and **safely constructed** and supported, and of sufficient width to secure the safety of persons walking thereon, or passing under or by the same, and to prevent the falling thereof, or of any material that may be used, placed or deposited thereon.

When **scaffolds** are forty-five feet or more in height, whether pole or thrust-out scaffolds, there shall be erected on the outer edge and ends an **enclosure of wire netting** of not more than **2"** mesh, or of boards not less than ¾" thick, placed not over **1½"** apart, well secured to uprights not less than **2"** by **4"** in dimensions, fastened to planks or timbers, and resting on putlogs or thrust-outs. Such enclosures shall be carried up at least **5'—0"** in advance above the level on which the workmen are working. The thrust-outs shall be strong enough to sustain a distributed load of thirty pounds per square foot of staging surface, and be made stronger as required if material is to be left thereon.

The flooring on thrust-outs and putlogs shall be tightly constructed with plank, and floor and enclosure shall not be removed until a like floor and enclosure is in position on the story above. If another story or other stories are being raised above any scaffold while the same is being used, such scaffold shall be covered for the full width above the workmen with well secured plank.

SECTION 208. All sheds, enclosures, scaffolds, stagings, ropes, blocks, tackle, swinging scaffolds, temporary floors and stairs, and other **building appliances** erected or used during the construction, alteration, painting or repair of any building, shall be of **good quality,** adapted to the purpose for which used, erected

and maintained in a workmanlike manner and **subject to inspection by the Inspector.**

SECTION 209. Any person who shall violate or fail to comply with any of the provisions of this ordinance, shall be deemed guilty of a misdemeanor, and, upon conviction thereof, shall be punished by a fine in any sum not exceeding **$100,** or by imprisonment in the city jail for a term not exceeding thirty days, or by both such fine and imprisonment, and **each day** that any person shall continue to violate or fail to comply with any of the provisions of this ordinance, shall be **deemed and considered a separate offense.**

SECTION 210. In addition to the penalties provided in the preceding section for violations of this ordinance, **any building** or structure, or part thereof erected, altered, repaired, removed, arranged, equipped, used or occupied **in violation** of any of the provisions **of this ordinance,** shall be deemed and is hereby **declared** to be **a nuisance** and such nuisance may be abated in the manner provided by law.

SECTION 211. Nothing in this ordinance contained shall be **constructed** as in anywise **invalidating** any permit, heretofore issued under the provisions of any **former ordinance,** for the erection, alteration or repair of any building, but such building may be erected, altered or repaired under such permit in accordance with the provisions of such former ordinance as though this ordinance had not been passed.

Nothing in this ordinance contained shall be constructed as in anywise affecting any act done or committed in **violation of any former ordinance** relating to th same subject as any of the provisions of this ordinance, but such violation shall be prosecuted, and the person violating such former ordinance, if found guilty, shall be punished as provided in such former ordinance as though this ordinance had not been passed.

Nothing in this ordinance contained shall be construed as in anywise affecting any prosecution or pro-

ceedings now pending in any court for violations of the provisions of any former ordinance relating to the same subject as any of the provisions of this ordinance, but all proceedings or prosecutions now pending for such violations shall be conducted to final judgment or determination in any court having jurisdiction as though this ordinance had not been passed.

SECTION 212. The provisions of this ordinance shall not apply to structures or buildings constructed or hereafter to be constructed on lands belonging to the State of Washington, situated outside of the First, Second and Third Building Districts, as defined, respectively, in **Sections 9, 10** and **11** of this ordinance; Provided, however, that the plans for the construction of any building, or alterations thereto, together with the estimated cost thereof, shall be filed with the Inspector, and permits shall be issued as in other cases.

INDEX

DEPARTMENT OF BUILDINGS
CITY OF SEATTLE

Francis W. Grant, Superintendent. (Also Superintendent of Public Buildings and Grounds, except parks, and member of Board of Public Works. Term expires March, 1911.)

PUBLIC BUILDINGS DIVISION

Room 222 Municipal Building

M. H. Strouse, Auditor
H. W. Adams, Draughtsman
George Mapel, Stenographer
L. T. Tilton, Property Clerk
J. Garbutt, Foreman

INSPECTION DIVISION

Rooms 109-114 Municipal Building

S. W. Whittington, Chief Clerk
Miss Mary Junghany, Stenographer
Thomas Irving, Construction Engineer.
A. L. Hartridge, Plan Inspector
C. W. Litt, Inspection Clerk
J. E. Valentine, Street Number Clerk

Counter Clerks—

L. B. Mosher **C. A. Altman** **M. D. Johnson**

Field Inspectors—

C. E. Gifford **P. Hammer** **G. A. Jones**
A. A. Walker **C. F. Hanson** **C. S. Kirshner**
F. G. Winchell **I. B. Johnson** **Henry Meins**

BOARD OF APPEAL

C. H. Bebb (of Bebb & Mendel, Architects)
J. C. Redward, Builder
Meredith Parsons, Business Agent Carpenters' Union

TELEPHONES:

Superindendent's Office—Sunset Main 8500; Local 4. Independent 4100; Local 44.

Inspection Division—Sunset Main 8500; Local 5. Independent 3716.

APPENDIX

INSTRUCTIONS FOR SECURING A BUILDING PERMIT.

1. The owner of the premises or the lawful representative of the owner must make the application.

2. Application blanks will be supplied at the counter of the Inspection Division, located in Room 111, Municipal Building.

3. Correct street number must be given. If street number is not known to applicant it must be ascertained from the Street Number Clerk in Room 210.

4. To secure street number applicant must be prepared to show the lot, block and tract in which building is to be constructed and the number of feet from side line of lot to entrance door.

5. No fee is charged for the giving of house numbers.

6. Application must show: (a) External dimensions of structure; (b) distance from lot lines; (c) distance from alley lines; (d) width of alley; (e) size of lot; (d) number of stories; (e) how building is to be occupied; (f) number of thousand brick required; (g) number of yards plaster required; (h) number of barrels cement required; (i) whether water for building operations is to be from the city mains and whether through a meter or not; (j) estimated total cost; (k) estimated time for completion; (l) name of architect; (m) name and address of owner; (n) name and address of builder.

7. Plans and specifications must be filed in duplicate with application if building exceeds 500 square feet in area unless waived by the Department.

8. Strain sheets showing the amount and kind of strain computed for each member, and the method of computation must be furnished if demanded by the Department.

9. In the case of small one-story buildings for which drawings are not required, a complete showing must be made of structural parts including dimensions and spacings.

INSTRUCTIONS FOR SECURING A PERMIT TO ERECT A STABLE.

1. Petition must be made to the Board of Public Works on form supplied by Building Department.

2. Stable must be accurately located by street and number, or by lot, block and addition.

3. Petition is passed by Building Department to Health and Sanitation Department, and by that department to Fire Marshal, and by that office to Secretary of Board of Public Works, who causes the matter to be advertised, fixing a time, generally two weeks later, for a public hearing before the Board. He also has a notice posted on the premises announcing the hearing.

4. If result of hearing is favorable to the petition the Board approves the location and so informs the Building Department.

5. Party desiring to build then makes application on regular form for building permit and pays the fee therefor.

6. Plans and specifications sufficiently complete to fully describe all matters concerning the stable must be submitted in **duplicate** with the petition to Board.

7. Upon issuance of permit, plans are stamped approved and given a number; one set is returned to applicant.

8. **Prohibitions are as follows:**—(a) Concrete floors not allowed over wood; (b) brick floors not allowed over wood; (c) animals not allowed to stand or run in yards; (d) public or community stable not allowed in Third or Fourth Districts without consent of two-thirds of remaining property owners of the block (this to accompany petition to Board); (e) wooden stables must not be nearer than 3 ft. to party lines. (This must be shown on plans.)

9. **Requirements.**—(a) Must have hose bib or tap with hose; (b) must be connected to sewer if one is available, otherwise to a cesspool; (c) must have a water-tight, ventilated manure box, sufficient in size for holding two weeks' accumulations; (d) must have water-tight floor of concrete, if directly on solid ground, and of two thicknesses of plank or 4 in. calked floor if not directly on solid ground; (e) must drain stalls through a vented catch basin; (f) must have fire hose and reels if for ten or more animals; (g) must have two or more exits if for ten or more animals, no such exit smaller than 5 ft., and this size increased 1 ft. for each ten animals more than ten; (h) upper story stalls to have runways same number and width as exits leading direct to exits, and pitched 6 to 12.

EXCERPTS FROM OTHER ORDINANCES MORE OR LESS RELATED TO BUILDING OPERATIONS.

ORDINANCE NO. 4635.

Section 3. **Buildings to Be Legibly Numbered—Old Number to Be Removed.**—The owner or occupant of any building or premises fronting upon any way, avenue, street, drive, place or square in the City of Seattle shall, upon receiving 3 days' notice from the Inspector of Street Numbering, place a correct number of such building or premises upon or over the doorway or entrance of the same in legible figures not less than two inches in length and one inch in width. If any number shall have been heretofore placed upon or over the doorway or entrance of any such building or premises which said number does not conform with the provisions of this ordinance, upon like notice from the Inspector of Street Numbering, the owner or occupant of any such building or premises shall forthwith remove and correct such number.

ORDINANCE NO. 5675.

Section 1. **Draining and Cleaning Private Premises, Owner and Occupant Responsible For.**—Every owner and occupant of any land, building or premises within the city shall, at his own expense, properly drain and clean any and all vaults, cesspools, ditches, pipes or drains in or on any such land, building or premises used as a receptacle or conductor of filth or refuse matter. Every person owning, controlling, or occupying any such land, building or premises shall be responsible for the proper draining and cleaning thereof, and of the vaults, cesspools, ditches, pipes and drains in and upon the same, and shall constantly keep the same in a healthy condition.

ORDINANCE NO. 6702.

Section 4. **Duties with Reference to Buildings, Premises, Etc.**—It shall be the duty of the Fire Marshal to examine the dwellings and other buildings in said City of Seattle for the purpose of ascertaining whether the stoves and pipes thereto, boilers, ranges, chimney flues, and also chemicals and chemical apparatus which in his opinion may be dangerous in causing or promoting fires, and also the places where ashes may be deposited, and all places used for the storage or sale of inflammable oils, combustible stocks of merchandise or explosive compounds.

He shall personally inspect all buildings and enforce the ordinances regulating the same, and on finding them defective or dangerous, or any of the city ordinances regulating such matters violated, said Marshal shall direct the owner or occupant, either by printed or written notice, to alter, remove, or amend the same in such manner or within such reasonable time as he may deem necessary.

Sec. 5. **Duties with Reference to Fire Protection.**—It shall be the duty of the Fire Marshal to enforce all ordinances regulating fire escapes, street stand pipes, fire hydrants, fire shutters and doors, elevators, depositing refuse or combustible matter in the streets, alleys, or upon any open ground in said city, with a jurisdiction over all matters looking to the prevention of fires.

ORDINANCE NO. 15957.

Section 41. **Sleeping Apartments, Size and Ventilation.**—It shall be unlawful for any person to use, conduct or keep any lodging house, tenement house, hotel, or any house or building containing sleeping apartments, or to allow or permit persons to occupy as sleeping apartments any room or place which shall contain less than 512 cubic feet of air or space, or less than 64 square feet of floor space for each and every person over 14 years of age lodging or sleeping in any such sleeping apartments, or less than 300 cubic feet of air or space or 40 square feet of floor space for each child under 14 years of age, or which is not provided, while in use as such sleeping apartment, with a system of ventilation in continuous operation, so contrived as to provide 25 cubic feet per minute of outer air for each occupant thereof, exclusive of air consumed by combustion.

Sec. 42. **Occupying Unlawful Sleeping Apartments.**—It shall be unlawful for any person over 14 years of age to voluntarily and continuously occupy or use as a sleeping apartment any room or place in any lodging house, tenement house, or in any house or building whatsoever, containing less than 512 cubic feet of air or space, or less than 64 square feet of floor space for each person occupying or using such room as a sleeping apartment.

Sec. 43. **Air Space in School Rooms, Offices, Work Shops, Factories and Living Apartments.**—It shall be unlawful for any person to use or permit the use of any room for the purposes hereinafter designated, unless such room shall contain the following amount of cubic feet of air space and of square feet of floor space for each person occupying said room: School room, for adults, 350 cubic feet and 20 square feet; for children, 200 cubic feet and 15 square feet; hospitals, adults, 1,000 cubic feet and 75 square feet; children, 600 cubic feet and 50 square feet; offices, work shops and factories, day workers, 300 cubic feet and 25 square feet; night workers, 480 cubic feet and 40 square feet; living apartments or dwelling houses, 600 cubic feet, outside of closets and bath rooms, for each individual occupying the apartment or dwelling.

ORDINANCE NO. 16003.

Section 2. **Maintenance of Laundries, Permit for, Required—Application.**—Any person, persons, firm or corporation desiring to establish, maintain, operate or carry on a public laundry or public wash-house, as described in Section 1 hereof, shall, before engaging in said business, file with the Secretary of the Board of Public Works an application for a permit so to do, which application shall contain a description of the premises where it is proposed to establish said business, together with plans and specifications showing how it is proposed to construct and carry on the washing, drying and ironing of clothes and other articles, and of caring for and disposing of the sewage resulting from said business. Said application shall be made in triplicate and signed by the person, persons, firm or corporation applying for the permit.

Sec. 5. * * * The Said Board of Public Works may make such reasonable rules and regulations and changes in the plans and specifications of the establishment and maintenance of said business as will in its judgment afford better sanitary conditions and protection from fire, which such rules and regulations and amended plans and specifications shall be set forth in said permit.

ORDINANCE NO. 16081.

Section 2. **Awnings, Permit for, Required.**—It shall be unlawful for any person to construct or maintain, in or over any public place, any awning, without complying with all the provisions of this ordinance in relation thereto, and obtaining and having a permit from the Board of Public Works so to do.

Sec. 4. **Awnings, How Constructed and Maintained.**—All awnings to be constructed or maintained under the provisions of this ordinance shall be constructed either of a metal frame with canvas covering, or of wire glass and other fire-proof materials. The lowest point of any awning shall not be less than 8 feet above the sidewalk, and no cloth, drapery, sign or other thing shall be attached to or suspended from such awning. The frames and supports of all awnings shall be securely attached to the walls of the building from which they project, by wrought iron or steel brackets or steel chains, but shall not receive their support from beneath by the use of posts or other similar devices, except as herein provided. All awnings, other than canvas covered awnings, shall be provided with mental conductors for water, draining back to the property line and connected with the sewer in the manner provided by the plumbing ordinances of the city, and shall be constructed of wire glass and other fire-proof materials, reasonably uniform in appearance and ornamental in design, and shall project as nearly horizontal from the building to which they are attached as is practicable, and shall be well lighted by electricity, according to the directions of the Board of Public Works, and shall project from the property line not more than 9 feet; provided, that such awnings erected over the entrances of assembly halls, theatres, hotels, railway stations or department stores may project to the curb line. The roofs of all such awnings shall be of wire glass, and in case of awnings over the entrances to theatres and similar buildings, above referred to, where the awnings extend to the curb line, the use of not to exceed two ornamental metal posts may be permitted at the curb line. Whenever any assembly hall, theatre, hotel, railway station or department stores is altered or reconstructed to be used for business or other purposes, the awning over the entrance to said building extending to the curb line shall be removed and made to conform to the restrictions and rules governing the construction of such awnings in front of business and other property, as herein provided. In the wholesale district awnings under the same general provisions as apply in front of places of retail business may be constructed to the curb line, with or without sustaining posts, in the reasonable discretion of the Board of Public Works. Plans and specifications shall accompany all applications for permit, and the Board of Public Works shall not issue a permit unless this provision is complied with.

Sec. 5. **Area Ways, Permit for, Required.**—It shall be unlawful for any person to construct or maintain, in or under any public place, any area way, area way entrance, area way opening or light well, without complying with all the provisions of this ordinance in relation thereto, and obtaining and having a permit from the Board of Public Works so to do.

Sec. 7. **Area Ways, How Constructed and Maintained.**—No area way shall be constructed or maintained under or beneath any public place, unless the same shall be constructed and covered in such manner and with such material, and of such strength as hereinafter provided. A brick, stone or concrete retaining wall shall be constructed at the curb line, not less than 17 in. thick on top, and increased 4 in. in thickness for every 4 ft. of depth, resting on footings 50 per cent thicker than the base of the wall, and not less than 8 in. high or reduced more than 6 in. for each foot of height of the footing. Cross walls of brick, stone or concrete at least 12 in. thick shall be constructed every 20 ft., or when cross walls cannot be constructed the retaining wall shall increase 4 in. in thickness for every 2 ft. in depth. Concrete used in arch or reinforced walks shall be mixed in the following proportion, viz.: 1 barrel of cement, 8 cubic ft. of sand, and 16 cubic ft. of gravel. The wearing surface shall consist of 1 part cement and 1½ parts sand, and shall be ¾ of an in. thick, colored to a uniform color with ¾ of a pound of lamp black to 1 barrel of cement. Where "I" beams or expanded metal is used, there shall be at least 4 in. of concrete and topping in the clear between the iron and surface of the walk. Reinforced walks in all cases shall not be less than 6 in. thick, including concrete and topping. Arches constructed to carry walks shall be at least 4 in. thick at the crown of the arch for a 4-ft. span or less, and shall be increased 1 in. at the crown for every additional foot of span. The spring of any arch shall not be less than 1¼ in. for every foot of span. All brick arches shall have two courses of hard-burnt brick laid on edge in cement mortar. No brick arch shall have a greater span than 8 ft. Where the walk surface and arch is constructed in one monolythic mass, the thickness of the crown of the arch shall be increased 1 in. over the figures given above for carrying arches. All area way sidewalks must be designed to carry a safe load of 350 lbs. to the square foot, exclusive of material, and wherever construction is not familiar to the Board of Public Works tests must be made to the satisfaction of the Board. Prism lights shall not be over 3 in. square and not less than 1 in. thick, and when set in the walk on grades exceeding 8 per cent shall have at least 3 in. of cement in the face of the walk. Ventilators may be constructed if securely covered by wrought iron gratings or other substantial metal covering, with opening not to exceed 1 in. in width, and placed next to the property line and not extending more than 18 in. therefrom. On grades exceeding 8 per cent lights must be placed on the property line and not extend over 3 ft. 6 in. into the wall. No lights shall be placed in front of entrances where trucking is necessary, and all lights shall be assembled and built at the time when and the place where the walk is constructed. No area way entrance, light well or opening, except sidewalk elevators or doors, constructed and maintained as provided for in this ordinance, shall be constructed or maintained, except as hereinafter provided. In that certain district lying between Union Street on the north,

Ninth Avenue on the east, Yesler Way on the south and Post Street and Post Street produced on the west, area way entrances, light wells and openings may be constructed and maintained in sidewalks adjacent to the lot line of buildings of brick or stone or other first-class permanent structures, now or hereafter erected, 3 stories and over in height above the main entrance, on side-hill streets running northeasterly and southwesterly, where the grade of such street is more than 8 per cent. Such area way entrances, light wells and openings shall not extend in any case over 30 in. from the property line, nor to within less than 30 in. of the edge of any street or alley intersection, and shall be guarded by a substantial metal railing of such strength as to afford protection to pedestrians. No coal chutes or openings for fuel shall be constructed or maintained in any area way. No boiler or other dangerous apparatus, or any explosive, shall be placed or stored in any area way or space under any public place.

Sec. 8. **Sidewalk Elevators and Doors, Permit for, Required.**—It shall be unlawful for any person to construct, maintain or operate in any sidewalk area, and sidewalk elevator or door, without complying with all the provisions of this ordinance in relation thereto, and obtaining and having a permit from the Board of Public Works so to do.

Sec. 9. **Sidewalk Elevator and Door Permit, How Obtained.**—* * * The Board of Public Works may, in their reasonable discretion, grant a permit for the construction, operation and maintenance thereof in accordance with the provisions of the next preceding section.

Sec. 10. **Sidewalk Elevators and Doors, How Constructed and Maintained—Wholesale and Retail Districts Defined.**—The words "Wholesale District" as hereinafter used shall be held and construed to mean and include that certain portion of the City of Seattle lying within the following described limits, viz.:

Beginning at the center line of Yesler Way opposite the east margin of Fourth Avenue South, and running thence south along the east margin of said Fourth Avenue South to the north margin of Jackson Street; thence east along the north margin of Jackson Street to the east margin of Fifth Avenue South; thence south along the east margin of Fifth Avenue South to the north margin of King Street; thence east along the north margin of King Street to the east margin of of Sixth Avenue South; thence south along the east margin of Sixth Avenue South to the south margin of Massachusetts Street; thence west along the south margin of Massachusetts Street to the west margin of Railroad Avenue; thence northerly along the westerly margin of Railroad Avenue South to the center line of Yesler Way; thence east along the center line of Yesler Way to the place of beginning. The words "Retail District" shall be held and construed to mean and include all that part of the City of Seattle lying outside of the limits of the "Wholesale District" as above described.

Size and Location.—The maximum size of any sidewalk elevator in the "Wholesale District" shall not exceed 5 ft. square, and the same shall be placed immediately adjoining the curb, and when a less width than the maximum is used the said lesser width shall be placed at right angles to the curb. The sides of such elevator shall be closed with gates, and ingress to and egress from the same shall be had through gates opened so as not to obstruct travel upon the sidewalk. The maximum size of any such

elevator in the "Retail District" shall be 3½ ft. in width and 5 ft. in length, and the same shall be constructed immediately adjoining the curb, and the maximum width of 3½ ft. shall be at right angles to the curb; provided, however, that in those cases where the area wall has been already built and there are physical conditions which render it practically impossible to place an elevator immediately adjoining the curb, the Board of Public Works may, in their discretion, after an examination of the premises, allow the frame of the elevator door to be placed not more than 15 in. in from the curb, the especial conditions being properly endorsed upon the permit therefor. Within the "Retail District," instead of elevators, permits may be granted for trap doors, not exceeding 3 ft. in width, measured at right angles to the curb, and not exceeding 5 ft. in length, and constructed immediately adjoining the curb, which doors shall be opened and used for the removal of freight, only during such hours and in such manner and under such terms as are hereinafter described for the operation of elevators in said "Retail District."

When May Be Operated, and How.—No elevator in the "Retail District" shall be operated between the hours of 9 o'clock a. m. and 9 o'clock p. m., except in a case of emergency, in which case said elevators may be operated for a period not exceeding 15 minutes within the time between 9 o'clock a. m. and 12 o'clock noon, or a similar period of fifteen minutes between the hours of 12 o'clock noon and 3 o'clock p. m., and during such operation there must be stationed on the sidewalk at such elevator opening, a man charged with the care of such elevator, whose sole and only duty shall be to guard such elevator. Said man shall also be on duty at any and all times when said elevator is in use, whether by night or by day.

How Covered and Closed When Not in Use.—All elevators and trap doors constructed or maintained under the provisions of this ordinance shall, when not in use, be securely closed by metal doors of sufficient weight and thickness and so constructed as to sustain a safe weight of 350 lbs. per square foot, and all doors and hinges shall be so constructed that their surface will lie flat with the surface of the sidewalk, and will present no obstruction to traffic whatever, and shall be so roughened as to occasion no danger whatever to pedestrians.

Sec. 11. **Use of Street for Building Operations, Permit for, Required.**—It shall be unlawful for any person to erect or maintain any staging, elevator or other structure, or deposit or leave any material, machinery, or tools used or to be used in connection with the erection, alteration or repair of any building, in any public place, without complying with all the provisions of this ordinance in relation thereto, and obtaining and having a permit from the Board of Public Works so to do.

* * * The Board of Public Works may, in their reasonable discretion, grant a permit to occupy such public place in accordance with the provisions of the next succeeding section. No permit issued under the provisions of this section shall be valid for a longer period than that specified in such permit, but such permit may be renewed or extended, in the reasonable discretion of the Board of Public Works, upon proper application being made therefor prior to the expiration of the time originally limited therein.

Sec. 13. **Portion of Street Obstructed.**—In no case shall any such permit allow or permit the obstruction of more than one-

third of any street, including sidewalks and parking strips, nor shall such obstruction be less than 7 feet from any street railway or railroad track along or over such public place, or close up any street or public place against the passage of vehicles.

Temporary Sidewalk.—In all cases where the building to be erected, altered or repaired shall be within 10 ft. of the marginal line of such public place, a temporary sidewalk, not less than 4½ ft. in width, shall be constructed on the outside of and around the material, tools or structures to be deposited or erected in such public place, and shall extend from the permanent sidewalk in front of each lot adjoining the sides of the lot on which the building is being erected. Said temporary sidewalk shall at all times be kept clear for the passage of pedestrians, except when materials are being handled over the same, and no person shall leave any material, tools, implements or machinery thereon. Said temporary sidewalk shall be constructed of 2 in. plank laid lengthwise on sleepers, not less than 3 in. thick, laid not more than 3 ft. apart, and the planks spiked to the sleepers with spikes not less than 3½ or more than 4½ in. long. The ends of said temporary sidewalk shall be laid even with the permanent sidewalk to which it is attached, and there shall be a tight board fence, not less than 6 feet high, separating said temporary sidewalk from the space occupied under such permit.

Staging Over Sidewalk.—Instead of such temporary sidewalk, as hereinabove provided, there may be constructed within the permanent sidewalk area a temporary sidewalk, not less than 8 ft. wide, or not less than 8 ft. in width of the permanent sidewalk may be kept open, under a staging extending from the property line to the curb, and covered over the full width of the building at a height of not less than 10 ft. from the walk, with 2-in. plank, resting on strong supporting joists, well fastened and braced to strong posts on both sides, and of sufficient strength to safely guard the sidewalk, taking into consideration the character of the building and the nature of the material to be carried over such staging. The supporting joists shall be placed not more than 4 ft. apart, and the passage way shall be enclosed on both sides by a tight board fence, of 1-in. boards, to a height of not less than 6 ft., and said passageway shall at all times be properly lighted and kept clear from obstruction of every kind and description; provided, however, that material and tools may be carried across the same into the building.

Gutters Free from Obstruction.—All gutters shall be kept open at all times for the free flow of water.

Use of Street After First Story Erected—Conveying Heavy Material Over Staging.—When the framework of any building shall have been constructed up to and including the first story above the street or public place, the temporary sidewalk constructed in the street, as hereinabove provided, shall be removed and a temporary or the permanent sidewalk shall be constructed under the staging within the sidewalk area, as hereinabove provided, and said sidewalk under the staging shall be kept clear of all obstructions, except that building material, tools and machinery may be carried across said sidewalk into the building, or such material, tools or machinery may be hoisted above and conveyed over the staging into the building; provided, however, that in case of heavy pieces of building material, machinery or tools being conveyed over said staging, a watchman shall be employed, whose sole duty it shall be to warn pedestrians from

passing beneath the point where such heavy articles are being conveyed over the staging.

Regulations in Third and Fourth Building Districts.—In all cases, in the Third and Fourth Building Districts, where the building is more than 10 ft. from the marginal line of the public place, the permanent sidewalk shall be kept open for the public, or a temporary sidewalk constructed around and outside of the space occupied by building material of structures, in the manner hereinabove provided.

Sidewalks, When Constructed—Staging, Inspection of.—The sidewalks and fences hereinabove provided for shall be constructed before building operations shall be begun. All staging over sidewalks shall be constructed subject to inspection by an inspector of buildings.

Temporary Use of Streets in Connection with Repair of Buildings—Cash Deposit Required—Inspection—Restoration of Street.—In case a permit is desired for the use and occupation of a portion of a public place for the purpose of depositing material or tools and performing work in connection with the repair of any building for a period of not to exceed one week, such permit may be granted in the discretion of the Board of Public Works, upon the applicant therefor depositing with the City Treasurer the sum of $50 to insure the removal of such material and tools within the time prescribed in such permit, and in no case shall such repair permit allow the obstruction of any sidewalk, or more than one-third of any roadway, or the deposit of any material or tools within 7 ft. of any street railway or railroad track; provided, however, that no such permit shall relieve the person accepting the same, or any person, from liability over to the city for any damages accruing to or suffered by any person by reason of the occupation or obstruction of such public place. Upon the expiration of the permit, or sooner completion of the work, the holder of the permit shall remove all material from the street and restore the same to its former condition, and apply to the Board of Public Works for an inspection of the same. In case, upon inspection, it shall appear that all provisions of this ordinance have been complied with, the Treasurer shall return the deposit of $50 upon the presentation of the proper certificate from the Board of Public Works. In case of the failure or neglect of the holder of the permit to comply with the provisions of this ordinance, the Board of Public Works shall cause the street to be cleaned and restored and pay the cost thereof from the deposit with the City Treasurer.

Sec. 14. **Electric Signs, Permit for, Required.**—It shall be unlawful for any person to construct or maintain, in or over any public place, any electric sign, without complying with all the provisions of this ordinance in relation thereto, and obtaining and having a permit from the Board of Public Works so to do. * * * And the Board of Public Works, if they shall find that such sign can be constructed or maintained without unduly interfering with or obstructing the use of such public place, may, in their reasonable discretion, grant a permit to construct and maintain such sign in accordance with the provisions of the next succeeding section.

Sec. 16. **Electric Signs, Attachment of.**—All electric signs extending over any public place shall have two individual steel hinge attachments to each building or pole.

Weighing Less Than One Hundred Pounds, How Supported.—

Signs weighing less than 100 pounds shall have 1 main support in the form of a bolt through the building wall, where possible anchored by a washer plate of at least 24 square inches of surface and ⅛ in. in thickness, unless the supporting chain or cable is located at an angle greater than 45 deg., in which case approved expansion bolts may be used; if the cable or chain be attached to a bolt located at a distance greater than 1 ft. from the building wall, said bolt shall be supported with a brace. For signs weighing less than 100 pounds the minimum size of chain allowed shall be 3-16ths of an inch in diameter; where the angle of the supporting cable or chain is less than 45 deg. the steel cable shall be 5-16ths of an inch in diameter and the chain ¼ of an inch in diameter.

From One Hundred to Two Hundred Pounds, How Supported.—Signs weighing between 150 and 250 pounds shall have one main support in the form of a bolt through the building wall, where possible, anchored by a washer plate of at least 24 square inches of surface and ⅛ in. in thickness; if not possible, two main supports, anchored by approved expansion bolts, may be used; if the cable or chain be attached to a bolt located at a distance greater than 6 in. from the building wall, the bolt shall be supported with a brace. For signs weighing between 100 and 250 pounds, the minimum size of steel cable allowed shall be ⅜ths of an inch in diameter; the minimum size of the chain allowed shall be 5-16ths of an inch in diameter; where the angle of the supporting chain or cable is less than 45 deg., the steel cable shall be ½ in. in diameter and the chain shall be ⅜ths of an inch in diameter.

From Two Hundred and Fifty to Three Hundred and Fifty, How Supported.—Signs weighing between 250 and 350 pounds shall have two main supports in the form of bolts through the building wall, anchored by washer plates at least 24 square inches of surface and ⅛ of an inch in thickness; if not possible, two main supports, anchored by two approved expansion bolts each, may be used. For signs weighing between 250 and 350 pounds, the minimum size of steel cable allowed shall be 9-16ths of an inch in diameter; the minimum size of chain allowed shall be ⅜ of an inch in diameter; where the angle of the supporting chain or cable is less than 45 deg., the steel cable shall be ⅝ of an inch in diameter and the chain 9-16 of an inch in diameter. For signs of this weight or greater, plans in detail shall be submitted, if desired, with the application, for approval or rejection of the Board of Public Works.

Weights to Be Marked on All Signs.—All signs erected under this ordinance shall have the weights marked on the sign box in plain figures.

Guys and Side Supports, Material, Size and Spread.—Signs having 30 square feet or less of side surface, and guys spread at an angle greater than 45 deg., shall be supported by steel cables ¼ of an inch in diameter, or chains 3-16ths of an inch in diameter; signs of this area and supported by guys spread at an angle less than 45 deg. shall be supported by steel cables ½ of an inch in diameter, or chains ⅜ of an inch in diameter. No guys shall be spread at an angle less than 25 deg. Where the side guys can be attached to only one side of the sign of this area, a stiff brace consisting of gas pipe ¾ of an inch in diameter, and of standard thickness, shall be used. Side guys spread at angles greater than 45 deg. shall be fastened with

approved expansion bolts in a solid brick or stone wall, or by a machine screw in an iron front, or by a lag bolt in solid woodwork.

Bolts or Screw Fastenings.—Bolts or screws shall not be fastened to window frames. Lag bolts in solid woodwork shall not be smaller than ¼ of an inch in diameter, and shall enter woodwork at least 3 in. Machine screws in iron front shall not be less than ½ in. in diameter, and shall enter clear through the iron work. Expansion bolts shall be at least ⅜ of an inch in diameter, and shall enter brick or stone wall at least 2½ in.

Fire Escapes, Not Obstructed.—Signs shall not obstruct or be attached to any part of a fire escape, and where any sign is hung near any fire escape, it shall be arranged to swing away from such fire escape.

Cables and Cable Fastenings.—All cables shall be provided with sleeves, and two cable clips must be provided for each cable and placed near the sleeve. Turn-buckles of suitable size shall be provided for all the side guys and for one of the supporting cables, where more than one is used.

Signs Out of Repair Must Be Rehung.—All signs now in existence that shall become dangerous or necessary to repair, shall be rehung to comply with these rules.

All Wording Illuminated—Panel Signs.—No wording will be allowed on any sign which is not illuminated. Panel signs 3x10 ft. will be allowed, provided they are illuminated with lights every 6 in. around same. If, however, this spacing does not give required candle power, more lights must be added. Small panels may be added to regular illuminated letter signs providing 2-candle power lights are used every 6 in. around outside of same.

Sign May Extend to Curb, When.—When one word requires more space than 10 ft. in length, the sign will be allowed to extend to curb line, providing letters larger than 16 in. are not used. In no case will they be allowed to project further.

Flash Signs Prohibited.—No sign constructed so as to be lighted intermittently, commonly known as "flash signs," will be allowed.

Height, Length, Candle Power—Must Burn Until Midnight—Removal on Notice.—No electric sign shall be lower than 10 ft. from the sidewalk, and shall not extend out over the same more than 10 ft. Each sign shall burn at least 200-candle power until 12 o'clock every night, and shall be removed upon 30 days' notice so to do from the Board of Public Works.

Sec. 17. **Moving Buildings, Permit for, Required.**—It shall be unlawful for any person to move any building along, over or through any public place, without complying with all the provisions of this ordinance in relation thereto, and obtaining and having a permit from the Board of Public Works so to do.

Sec. 18. **Moving Building Permit, How Obtained.**—In order to obtain the permit provided for in the preceding section, the applicant therefor shall file with the Board of Public Works an application in writing therefor, which application shall contain an accurate description of the building desired to be moved, giving the size, dimensions and material of which it is constructed, a legal description of the premises upon which the said building is situated and of the premises to which the same is to be moved, a description of the route over which it is proposed to move the same, and a full description of the means to be employed in moving such building, and shall pay a fee of $1 to cover the cost of advertising.

Hearing on Application.—Upon the filing of such application the Board of Public Works shall set a date for hearing thereon, which shall not be less than 3 days from the day of filing of such application, and shall cause to be published in the official newspaper a notice of said hearing, containing a statement of the particular items set forth in said petition. At the time of said hearing, or at the time to which the same may be adjourned, all persons interested, including the owners or occupants of property along the route over which it is proposed to move said building, or the owners of any franchise for a public utility in, along or across any of the streets over or across which it is proposed to move said building, may appear and object to the granting of such permit. The Board of Public Works may hear such evidence or arguments to be subserved by the granting of such permit.

Board May Prescribe Route and Require Bond—May Refuse Permit.—After such hearing the Board of Public Works may, in their reasonable discretion, grant the permit for moving the building described in the application, along the route and by the means set forth, or along some other route or by some other route or by some other means to be designated in such permit, which permit shall fully describe the manner in, the route by and the time within which said building shall be moved, and said Board of Public Works may, as a condition precedent to the granting of such permit, require the execution and delivery to the City of Seattle of a good and sufficient bond, in an amount to be fixed by the Board, to save and protect the city harmless from all damages to the streets or other property of the city, or the Board of Public Works may, in their reasonable discretion, in case they shall find that the moving of such building will unduly interfere with the rights of the public or other persons in any public place, refuse to grant such permit.

No Permit Along Street Car Lines for More Than One Block.—And in no case shall a permit be granted to move any building along any street on which there is a street car line, for a greater distance than one block, but permits may be granted to move buildings across such streets.

ORDINANCE NO. 20651.

Section 1. That there shall be and hereby is created and established the Board of Appeals in the Department of Buildings of the City of Seattle. Said Board shall consist of three members, appointed as follows:

First—One person who shall be appointed by the Mayor and confirmed by the City Council, and who shall hold office of the term of three years from the date of his appointment.

Second—One competent architect who has practiced in Seattle not less than two years, who shall be appointed by the Mayor and confirmed by the City Council, who shall hold office for the term of two years from the date of his appointment.

Third—One competent builder who has been engaged in that business for at least two years in Seattle, who shall be appointed by the Mayor and confirmed by the City Council, such appointee to hold office for the term of one year from the date of his appointment.

Fourth—The terms of the several members of said Board shall be three years each after the expiration of their first term.

Section 2. No member of the Board of Appeals shall sit in a case in which he is interested, and in case of such disqualification, or in the necessary absence of any member, the Mayor shall appoint a substitute from the class to which the disqualified or absent member belongs. All vacancies in the membership of the Board of Appeals shall be filled by the Mayor in the manner prescribed in the case of disqualification or absence of a member.

Section 3. The Board of Appeals shall meet once a month on stated days, or oftener at the call of the chairman or notice from the Superintendent of Buildings of any special appeal.

Section 4. Any member or members of the Board of Appeals may be removed by the Mayor for malfeasance in office, incapacity or neglect of duty.

Section 5. Any applicant for a permit whose application has been rejected by the Superintendent of Buildings, or a person who has been ordered by the Superintendent of Buildings to incur an expense in the alteration, repair or construction of any building may, within fifteen days thereafter, appeal therefrom by giving to the Superintendent of Buildings notice in writing of such appeal. Such notice, or a certified copy thereof, shall at once be transmitted by the Superintendent of Buildings to the Board of Appeals. After notice to such parties as the Board shall direct, a hearing shall be had, and the Board shall affirm, annul or modify said action of the Superintendent of Buildings The Board may vary the provisions of the building ordinances in specific cases which appear to them not to have been contemplated by said ordinances, though covered by it, or in cases where manifest injustice is done; provided, that the decision of the Board in such a case shall be unanimous and shall not conflict with the spirit of any provision of the said ordinances. The decision shall specify the variations allowed and the reasons therefor, and shall be filed in the office of the Superintendent of Buildings within ten (10) days after such hearing. A certified copy shall be sent by mail, or otherwise, to the applicant and a copy kept publicly posted in the office of the Superintendent of Buildings for two weeks thereafter. If the action of the Superintendent of Buildings is affirmed, such action shall have full force and effect. If the action of the Superintendent of Buildings is modified or annulled, a permit shall issue accordingly.

Any person appealing from a decision of the Superintendent of Buildings shall be required to pay to the City Treasurer the sum of ten dollars, which said amount shall be required to be paid in all cases as a fee at the time of service of notice of appeal on the Superintendent of Buildings, said amount to be returned to said appellant in case the decision of the Board of Appeals sustains his contention.

Section 6. Materials and methods equivalent to those required by the provisions of ordinances relating to buildings may, with the written approval of the Board of Appeals, be permitted by the Superintendent of Buildings. A record of the required and equivalent material or method allowed shall be kept in the office of the Superintendent of Buildings.

Any requirement deemed by the Superintendent of Buildings necessary for the strength of stability of any structure, or for

the safety of the occupants thereof, not specifically covered by ordinances in force, shall be determined by the Superintendent of Buildings subject to appeal to the Board of Appeals in the manner hereinbefore provided.

It shall be the duty of the Board of Appeals to submit to the City Council on or before the first of February in each year, a report giving a summary of all decisions of the Board, a list of equivalents consented to and a record of such other business as may have come before them, together with such recommendations as to desirable legislation pertaining to buildings as may to them seem advisable.