COOK COUNTY BUILDING CODE AMENDMENTS-ADOPTING ORDINANCE

BE IT ORDAINED, by the Cook County Board of Commissioners that Chapter 66 ROADS AND BRIDGES, ARTICLE I – IN GENERAL, is hereby amended as follows:

ARTICLE I –IN GENERAL

Sec. 66-1. Consent for use of highways.

(a)

All applications and petitions for consent to use a County highway shall be directed to the attention of the County Superintendent of Highways for review and further recommendation for action by the County Board.

(b)

To the end that the safety and convenience of highway traffic will be promoted and that the interest of the public, relative to construction, maintenance and operation of County highways, will be ~~sub~~served thereby and that new entrances, to adjoining premises from County highways, are increasing daily, which require the installation of culverts in said entrances, that the County Superintendent of Highways shall ascertain and act for and on behalf of the County and the County Board in the determination of the size, location and grade of said entrance culverts in accordance with 605 ILCS 5/5-205.2 (duty of County Highway Superintendent to supervise maintenance of County highways) and 605 ILCS 5/9-105 (ditches and culverts). A report will be rendered to the County Board four times annually as of March 31, June 30, September 30 and December 31, concerning said act or acts of the County Superintendent of Highways for confirmation and record.

Sec. 66-2. Private Roads.

All proposals for new private road construction must adhere to this Chapter 66, ROADS AND BRIDGES, and to the Minimum Requirement Standards of the Cook County Subdivision Manual (Chapter 122, SUBDIVISION CONTROL) of this Code.

BE IT FURTHER ORDAINED, by the Cook County Board of Commissioners that Chapter 102 BUILDINGS AND BUILDING REGULATIONS, ARTICLE I – BUILDING CODE, Section 102-1 is hereby amended as follows:

ARTICLE I – ~~BUILDING CODE~~ IN GENERAL

Section 102-1. ~~Ordinances saved from repeal~~Repealer and Transition Clause.

a. ~~Nothing in this Code or the ordinance adopting this Code affects the validity of the Cook County Building Ordinance, adopted originally on March 11, 1949, as amended through the adoption date of this Code. Such ordinance, as amended, continues in full force and effect as if set out at length in this Code.~~ The following provisions of the 1997 Cook County Building and Environmental Ordinance are hereby repealed: Article I; Articles VI through XXXVII; Appendices 2 through 8; and the City of Chicago

Electrical Code printed in the code book; provided that any violations pending at the time of the date of this repeal shall be enforced pursuant to the terms of the 1997 Cook County Building and Environmental Ordinance as provided in Section 102-1(c).

b. The following provisions of the 1997 Cook County Building and Environmental Ordinance are hereby superseded: Articles II through V; Articles XXXVIII, XXXIX, and XXXX (XL); Appendix 1; and the Cook County Department of Environmental Control ordinance printed in the code book (the Cook County Environmental Control Ordinance, set forth in Chapter 30, Articles I through X of this Code, remains in full force and effect).

c. This Code shall be effective upon adoption, and the provisions of this Code shall have prospective application and effect, subject to the following: 1) holders of permits that were issued under the terms of the 1997 Cook County Building and Environmental Ordinance as amended that are actively engaged in the construction authorized by such a permit at the effective date of this Code shall be allowed to complete the work authorized by such a permit and approved revisions thereto under the terms of the 1997 Cook County Building and Environmental Ordinance; 2) applications for permits pending at the effective date of this Code shall be subject to the terms of the 1997 Cook County Building and Environmental Ordinance or this Code at the election of the permit applicant, except that, in no event, shall such person be able to elect to be subject to the terms of the 1997 Cook County Building and Environmental Ordinance more than 180 days after the effective date of this Code, provided that the work authorized by a permit issued under the terms of the 1997 Cook County Building and Environmental Ordinance must be completed as provided in the permit and approved revisions thereto; 3) violations pending at the effective date of this Code shall be subject to the terms of the 1997 Cook County Building and Environmental Ordinance unless compliance with this Code is authorized by the Building Commissioner after a request in writing by the person in violation; and 4) persons contemplating applying for permits that are in the design or development phase at the effective date of this Code shall be subject to the terms of the 1997 Cook County Building and Environmental Ordinance or this Code at the election of the permit applicant, except that, in no event, shall such person be able to elect to be subject to the terms of the 1997 Cook County Building and Environmental Ordinance more than 180 days after the effective date of this Code, provided further that the work authorized by a permit issued under the terms of the 1997 Cook County Building and Environmental Ordinance must be completed as provided in the permit and approved revisions thereto.

BE IT FURTHER ORDAINED, by the Cook County Board of Commissioners that Chapter 102 BUILDINGS AND BUILDING REGULATIONS, ARTICLE III – BUILDING CODE, Sections 102-102, 102-103, 102-104, and 102-105 are hereby enacted as follows:

ARTICLE III – BUILDING CODE

Section 102-102. INTENT AND PURPOSE.

The Cook County Building Code is adopted pursuant to Cook County's Home Rule powers to secure the following purposes:
102-102.1 To promote and safeguard the public health, safety, comfort, convenience, and the general welfare of the people.
102-102.2 To ensure optimum living and working conditions and prevent blight and slums.
102-102.3 To provide minimum standards for containing and controlling soil erosion and sediment produced by soil erosion.
102-102.4 To prescribe reasonable rules and regulations governing the erection, construction, alteration, demolition, or relocation of all buildings and structures, and camps or parks accommodating persons in

house trailers, house cars, cabins, or tents.
102-102.5 To permit, to the fullest extent feasible, the use of materials and technical methods, devices, and improvements which tend to reduce the cost of construction without affecting the minimum requirements for the health, safety, and security of the occupants or users of buildings or structures.
102-102.6 To encourage, as far as may be practicable, the standardization of construction practices, methods, equipment, materials, and techniques.
102-102.7 To insure the maintenance of buildings and structures in a condition reasonably safe from hazards of fire, explosion, collapse, electrocution, flooding, asphyxiation, contagion, and the spread of infectious disease.
102-102.8 To establish adequate standards of light, air, and sanitation in dwellings, business and commercial establishments, and places of employment.
102-102.9 To provide standards and requirements, as far as is practicable, in terms of performance objectives.
102-102.10 To define the powers and duties of administrative offices and bodies established by the Code.
102-102.11 To establish penalties for the violation of any provision of the Code.

Section 102-103. RULES AND DEFINITIONS.

102-103.1 RULES

In the construction of this Code, the rules and definitions should be observed and applied, except when the context clearly indicates otherwise.
102-103.1-1 Words used in the present tense shall include the future tense, and words used in the singular number shall include the plural number, and the plural the singular.
102-103.1-2 The word "shall" is mandatory and not discretionary.
102-103.1-3 The word "may" is permissive.
102-1031-4 The masculine gender includes the feminine and the neuter.
102-103.1-5 The phrase "use for" shall include the phrases "arranged for," "designed for," "intended for," "maintained for," and "occupied for."

102-103.1-6a. The definitions contained in Section 102-103.2 of this section shall apply only to words, terms, and phrases that are not defined in the Cook County Electrical Code, the Cook County Plumbing Code, the 2009 International Building Code, the 2012 International Mechanical Code, the 2009 International Residence Code, and the 2012 International Energy Code, (collectively, “the new Cook County building regulations”). If a word, term, or phrase is defined in one of the new Cook County building regulations, the word, term, or phrase in such new Cook County building regulations shall control over the same word, term, or phrase in Section 102-103.2 of this section. For words, terms, or phrases defined in more than one of the new Cook County building regulations, the priority for authority and control shall be as follows: for words, terms, or phrases pertaining to electricity, the Cook County Electrical Code shall prevail; for words, terms, or phrases pertaining to plumbing and sanitation, the Cook County Plumbing Code shall prevail; for all other words, terms, or phrases, the 2009 International Building Code shall prevail.
b. If a dispute arises with respect to whether a word, term, or phrase pertains to electricity or to plumbing and sanitation, the Building Commissioner has the authority to make such a determination and that determination shall be made by considering the common usage and understanding of the various trades that are subject to the Cook County Building Regulations, and the Building Commissioner may also consult with the Department Officers listed in Section 102-105.1 of this ordinance in making the decision that resolves such a dispute. The Building Commissioner’s determination under this Section 102-103.1-6b shall be final.

102-103.2 DEFINITIONS

Absorber is that part of the low side of an absorption system used for absorbing refrigerant vapor.
Absorption System is a refrigeration system in which the refrigerant gas evolved in the evaporator is taken up in an absorber and released in a generator upon the application of heat.
Accepted Engineering Practice shall be the compliance with the provisions of this ordinance, or in the absence of such provisions, with the standards, tests, or principles which are accepted as representing good practice in the building profession by accredited agencies.
Accessory is any subordinate part, object, or device added or attached to a building or structure for convenience or attractiveness.
Accessory Building or Use is one which:
a. is subordinate in area, extent, and purpose to the principal building or use which it serves; b. contributes to the comfort, convenience or necessity of occupants of the principal building or use served; and c. is located on the same zoning lot as the principal building or use served, with the single exception of such accessory off-street parking facilities as are permitted to locate elsewhere than on the same zoning lot with the building use served.
Accredited Agency is an authoritative agency which is approved and accepted by this Ordinance. Conformance with the standards and specifications established by such "accredited agency" shall be accepted as meeting the requirements of this ordinance within the limitations and conditions inherent in the provisions of this ordinance.
Addition is any change to a building or structure which increases the area of such building or structure or any of its exterior dimensions.
Admixture is a material other than water, aggregate, or Portland cement, that is used as an ingredient of concrete or mortar and is added to the batch immediately before or during mixing.
Aggregate, in the case of materials of construction, is designated inert material which when bound together into a conglomerated mass by a matrix forms concretes, mastic, mortar, plaster, etc.
Agriculture is the use of land for agricultural purposes, including farming, dairying, pasturage, apiculture, horticulture, floriculture, viticulture, animal and poultry husbandry, truck farming, growing of nursery stock, raising of fruit and berries, beekeeping, and the retail sale of products grown or raised on the premises though one growing season. Such retail sales shall only be allowed in a roadside stand (farmstand) as an accessory use. Agriculture also includes necessary accessary uses for packing, treating, or storing the produce; provided, however, that the operation of any such accessory uses shall be secondary to that of the normal agricultural activates. “Agriculture” shall not include the commercial feeding of garbage or offal to swine or other animals, operations for the disposal of garbage, sewerage, rubbish, or offal, mechanized industrial animal farms, commercially operated greenhouses (where retail sales are occurring), commercial milk farms, and commercial dog kennels. The minimum land area necessary to constitute an agricultural use shall be five (5) acres.
Agricultural Building or Structure, for the purposes of this ordinance, shall imply any building or structure existing or erected on land used principally for agricultural purposes, including farm residences.
Air Compressor is a device for supplying air under pressure to the pressure tanks or the cushion tank of a sprinkler system, or to the cushion tank of an inside standpipe system, or to a dry pipe sprinkler system, or to a pneumatic domestic water supply system.
Air Conditioning is the process by which, simultaneously, the temperature, moisture content, movement, and quality of the air in enclosed spaces intended for human occupancy may be maintained within required limits.
Air Duct is a tube or conduit or an enclosed space or chamber, used for conveying air.
Air Gap, in a water supply system, is the unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe of faucet supplying water to a tank, plumbing fixture , or other device and the flood -level rim of the receptacle.
Aisle is the clear width and length of an area which is provided for ingress and egress between rows of fixed or movable seats and a wall, or between seats, desks, tables, counters, machines, or other equipment

or materials, or between such articles or materials and a wall or part of the building structure.
Aisle, Longitudinal, in a place of assembly, is an aisle approximately perpendicular to the rows of seats served thereby.
Aisle, Transverse, in a place of assembly, is an aisle approximately parallel to the rows of seats.
Alarm Sending Station is a manually actuated device used to sound an alarm signal.
Alarm Signal is a signal indicating an emergency requiring immediate action, as an alarm from an alarm sending station or from an automatic fire alarm system.
Alarm Sounding Device is an approved horn used to signal an alarm, and which shall be distinguishable from all other sounding devices in the building.
Alcove is a recess adjoining, and connected with a larger room, with an unobstructed opening into such room.
Alley is a public right-of-way which normally affords a secondary means of access to abutting property.
Alteration is any change, rearrangement, or modification in construction or in building equipment, other than repairs, which does not increase the area or any of the exterior dimensions of the building or structure.
Amusement Building is a building, other than an Open Air Assembly Building, constructed to contain amusements in which the public takes an active part.
Amusement Device is a mechanically operated device or structure by which individuals are conveyed or moved in an unusual manner for diversion.
Amusement Structure is a structure supporting an amusement device.
Anesthetizing Locations are areas in hospitals or medical buildings in which flammable anesthetics are or may be administered to patients. Such locations include operating rooms, delivery rooms, and anesthesia rooms, and also include any corridors, utility rooms, or other areas which are or may be used for administering flammable anesthetics to patients. Recovery rooms are not classed as anesthetizing locations unless also used for administering flammable anesthetics.
Anesthetic Storage Location is any room within a consuming facility used for the storage of flammable anesthetic or disinfecting agents or anesthetic machines to which cylinders of flammable gases are attached.
Annunciator, Car is an electrical device in an elevator car which indicates visually the landings at which an elevator landing signal registering device has been actuated.
Apartment is a dwelling unit in a multiple-family dwelling.
Apartment Building is a multiple-family dwelling.
Appendage is a cornice, moulding, dormer, bay or oriel window, balcony marquee, canopy, or any other accessory projecting from and attached to a building.
Appliance shall mean a device supplied with fuel or electric power, having as its primary usage something other than space heating.
Appliance, Sealed Combustion Type is an appliance so constructed and installed that all air for combustion is derived from outside the space being heated and all flue gases are discharged to the outside atmosphere . Such appliance, having integral venting, shall be considered as being properly vented when it is installed in accordance with its listing and the manufacturer’s instructions.
Approved means passed upon favorably by the Building Commissioner or other specified authoritative body referred to in the provisions of this ordinance.
Architectural Terra Cotta is plain or ornamental (molded or extruded) hard burned building units usually larger in face size than brick, consisting of mixtures of plastic clays, fusible materials, and grog, and having a glazed or unglazed ceramic finish. (See Ceramic Veneer.)
Area Drain is a receptacle designed to collect surface or rain water from an open area.
Area of Special Flood Hazard The land which is subject to a one percent chance of flooding annually. This area may also be identified as that which is subject to the 100 year flood. The area is designated as Zone "A, Al-A30, AH, or AO," on the maps provided by the Federal Emergency Management Agency.
Areaway is an open subsurface space, adjacent to a building, used as an exitway, or to provide light or air; such areaway may be uncovered or covered with grating.

Artificial Barricade is an artificial mound or revetted wall of earth of a minimum thickness of three (3) feet.
Ashlar Masonry is masonry composed of rectangular units usually larger in size than brick, properly bonded, having sawed, dressed, or squared beds, and mortar joints.
Attic is the space between the ceiling beams of a top habitable story and the roof rafters.
Automatic, as applied to fire protection assemblies such as doors, windows, or other other protections for an opening, shall mean that such door, window, or other protection is so constructed and arranged that if open it will automatically close when actuated by an approved fire detection device, under a fire condition.
Automatic Detector, Thermostatic Type is a fire detector with an integral assembly of heat-responsive elements and non-coded electrical contacts which function automatically under an increase in air temperature, and either of the fixed temperature or combination fixed-temperature and rate-of-rise type.
Automatic Fire Alarm System is a system which automatically detects a fire condition and actuates an approved fire alarm signal device.
Automatic Fire Assembly is a fire assembly which may remain in an open position and will close automatically if subjected to an increase in temperature. The closing device shall be activated at a maximum temperature of 165℉., unless otherwise specified in this ordinance.
Automatic Fire Door is a door designed to prevent the passage of fire, normally in an open position but arranged to close automatically in the event of fire, with closing mechanism released by the melting of a fusible link or other release device actuated by fire or smoke.
Automatic Sprinkler System is a standard approved system consisting of one or more sources of supply of water through a controlling valve with an alarm sending device to indicate system operation, with piping, valves, controls, and devices for automatically distributing water upon a fire in sufficient quantities ether to extinguish it or to hold it in check until it can be manually extinguished, and conforming to the requirements of this ordinance.
Automobile Service Station is a building, structure, or premises designed or used for the retail sale and dispensing of fuel, lubricants, tires, batteries, accessories, and supplies, including installation and minor services customarily incidental thereto; facilities for chassis and gear lubrication and for the washing of motor vehicles are permitted only if enclosed in a building.
Auxiliary Use is a room or space normally provided· and incidental to the principal use of a building and under the same management and control.
Awning, Fixed is a non-retractable shelter supported by cantilevering or bracketing from the face of the building, and covered with canvas, wood, metal, or other approved materials to provide protection from the elements.
Awning, Retractable is a shelter fastened to the face of the building which, when opened by the operation of folding arms or other retractable supports, provides protection from the elements under canvas, metal, or other approved materials.
Backflow is the flow of water or other liquids or substances into the distributing pipes of a potable supply of water from any source or sources other than its intended source. (See Back-Siphonage.)
Backflow Connection or condition, is any arrangement whereby backflow can occur.
Backflow Preventer is a device or means to prevent backflow into the potable water system.
Back-Siphonage is the flowing back of used contaminated, or polluted water from a plumbing fixture or vessel into a water supply pipe due to a negative pressure m such pipe. (See Backflow.)
Balcony is:
a. An exterior auxiliary floor space projecting from the exterior wall of an enclosed structure and unenclosed by other than a railing or parapet wall.
b. As applied to places of assembly, a seating level located above the main floor of an auditorium.
Bar, Deformed, is a concrete reinforcing steel member with an irregular surface designed to increase its bond with the concrete.
Bar, Plain, is a concrete reinforcing steel member not qualifying as a deformed bar.
Barricaded shall mean that a building containing explosives is effectually screened from a magazine,

building, railway, or highway, either by a natural barricade, or by an artificial barricade of such height that a straight line from the top of any sidewall of the building containing explosives to the eave line of any magazine, or building, or to a point 12 feet above the center of a railway or highway, will pass through such intervening natural or artificial barricade.

Base Flood The flood having a one percent chance of being equaled or exceeded in any given year. The base flood is also known as the 100 year flood . If the 100 year flood information is not available, the base flood shall be the flood of record.

Base Flood Area The land subject to inundation by waters of the base flood.

Base Flood Elevation, also Regulatory Flood Elevation, is that surface elevation of the water level at the highest flood of record, except in areas where the elevation of the one hundred (100) year flood is depicted. In such cases, the base flood elevation is the elevation of the one hundred (100) year flood. The base flood elevation is generally the highest elevation of the base flood and usually marks the line between the land designated in the floodplain as the floodway fringe and the flood table land. The base flood elevation, the floodway and the floodway fringe shall be described by maps, profiles, elevation data and other sources of information which are listed and on file in the Department of Building and Zoning. The "Sources of Information" are listed according to priority of use in Article 8.95 Flood Damage Prevention Regulations of the Cook County Zoning Ordinance.

Basement is a portion of a building or structure, having one-half (1/2) or more of its ceiling height below the finished lot grade level. When single-family dwellings and townhouse buildings have a split-elevation below-grade floor, the level that has one-half (1/2) or more of its ceiling height below finished grade shall not be counted as a story, but rather as a basement.

Battery of Fixtures (Plumbing) is any group of two (2) or more similar adjacent fixtures which discharge into a common horizontal waste or soil branch.

Bay Window is a window in a wall which projects beyond the wall line of the building.

Bearing-Type Connection is a bolted connection in which stress is transferred in bearing from the bolt shank to the side of a hole in which the bolt is placed.

Blasting Agent is any material or mixture, consisting of a fuel and oxidizer, intended for blasting, not otherwise classified as an explosive, in which none of the ingredients are classified as explosives, provided that the finished product, as mixed and packaged for use or shipment, cannot be detonated by means of a No.8 test blasting cap when unconfined. Materials or mixtures classified as nitro-carbo-nitrates by Interstate Commerce Commission regulations shall be included in this definition .

Boat House, Private, is a boathouse for four (4) or less motor boats with no provision for repairing or servicing such vehicles for profit.

Boat House, Commercial, is a boat house for more than four (4) motor boats, and/or a boat house having provision for repairing or servicing such vehicles for profit.

Boiler is a closed vessel used to heat a fluid, usually water, or for the application of heat to generate steam or vapor.

Boiler Blow-Off is an outlet on a boiler to permit emptying or the discharge of sediment.

Boiler, High Pressure is a boiler in which steam is generated at pressures exceeding 15 pounds per square inch above atmospheric pressure.

Boiler, Hot Water Supply is a boiler having a volume exceeding 120 gallons, or a heat input exceeding 200,000 Btu per hour, or an operating temperature exceeding 200° F., that provides hot water to be used externally of itself.

Boiler, Low Pressure Hot Water is a boiler in which water is heated for the purposes of supplying water at a working pressure not exceeding 30 pounds per square inch and at temperatures not exceeding 250° F.

Boiler, Low Pressure Steam is a boiler in which steam is generated at pressures not exceeding 15 pounds per square inch above atmospheric pressure.

Bonder (Header) is a masonry unit which ties two (2) or more wythes of the wall together by overlapping.

Branch (Plumbing) is any part of the piping system other than a main, riser, or stack.

Branch Interval is a length of soil or waste stack corresponding in general to a story height, but in no

case less than eight (8) feet, within which the horizontal branches from one floor or story of a building are connected to the stack.

Branch Vent is a vent connecting one or more individual vents with a stack or stack vent.

Brazed Joint is a gas-tight joint obtained by the joining of metal parts with alloys which melt at temperatures higher than 1,000"F. but less than the melting temperatures of the joined parts.

Breeching is a primarily horizontal pipe used to convey the products of combustion from a heating appliance to a flue.

Brick is a solid masonry unit. The word "brick" used without qualification indicates that its composition is primarily of clay, shale or a mixture thereof, and that these ingredients have been fused together as a result of exposure to heat. Brick may be compsed of other materials when so designated, as, for example, "concrete brick" and "sand lime brick".

Brine is any liquid used for the transmission of heat without a change in its state, having no flash point above 150"F., determined by ASTM D93-52.

Brine Cooler is an evaporator for cooling brine in an indirect system.

Building is a structure, or part thereof, built for the support, shelter, or enclosure of persons, animals, chattels, or movable property of any kind and which is permanently affixed to the land. When separated by fire walls, each unit so separated shall be deemed a separate building.

Building Code means the provisions adopted and referred to in Chapter 102 BUILDINGS AND BUILDING REGULATIONS, Section 102-130. Whenever the words “Building Code” are used, it shall mean those provisions, whether independently or collectively, as the context provides.

Building Drain is that part of the lowest piping of a drainage system which receives the discharge from soil, waste, and other drainage pipes inside the walls of the building and conveys it to the building sewer, beginning three (3) feet outside the building wall.

Building, Existing is a building or structure which has been completed and ready for occupied prior to the adoption of the Building Code.

Building Height is the vertical distance measured from the curb level, or its equivalent, opposite the center of the front of the building to the highest point of the underside of the ceiling beams in the case of a flat roof; to the deck line of a mansard roof; and to the mean level of the underside of the rafters between the eave and the ridge of a gable, hip shed, gambrel, or any other pitched roof. Where no curb level has been established, the height of a building shall be measured from the mean elevation of the finished lot grade at the front of the building.

Building, Inhabited is a building regularly occupied in whole or in part as a habitation for human beings, or any church, school, railway station, store, or other structure where people are accustomed to assemble except any building or structure occupied in connection with the manufacture, transportation storage, or use of explosives.

Building, Pre-Ordinance is a building which was completed, or for the construction of which a permit was issued, prior to the effective date of this ordinance.

Building, Principal is a non-accessory building in which the principal use of the lot on which it is located is conducted.

Building Sewer is that part of the horizontal piping of a drainage system which extends from the end of the building drain and which receives the discharge of the building drain and conveys it to a public sewer, private sewer, central sewage disposal system, individual sewage disposal system, or other point of disposal.

Building Storm Drain is a building drain used for conveying rain water, surface water, ground water, subsurface water, condensate, cooling water, or other similar discharge to a building storm sewer or a combined building sewer, extending to a point not less than three (3) feet outside the building wall.

Building Storm Sewer is the extension from the building storm drain to the public or central storm sewer, combined sewer, or other point of disposal.

Building Subdrain is that portion of a drainage system which cannot drain by gravity into the building sewer.

Building Trap is a device fitting, or assembly of fittings installed in the building drain to prevent

circulation of air between the drainage system of the building and the building sewer.
Buffer is a device designed to stop a descending elevator car or counterweight beyond its normal limit of travel by storing or by absorbing and dissipating the kinetic energy of the car or counterweight.
Oil Buffer. A buffer using oil as a medium which absorbs and dissipates the kinetic energy of the descending car or counterweight.
Oil Buffer Stroke. The oil-displacing movement of the buffer plunger or piston, excluding the travel of the buffer-plunger accelerating device.
Spring Buffer. A buffer which stores in a spring the kinetic energy of the descending car or counterweight.
Spring Buffer Load Rating. The load required to compress the spring an amount equal to its stroke.
Spring Buffer Stroke. The distance the contact end of the spring can move under a compressive load until all coils are essentially in contact.
Bulk Storage Plant is a location where gasoline or other volatile flammable liquids are stored in tanks having an aggregate capacity of one car load or more, and from which such products are distributed.
Bumper is a device, other than an oil or spring buffer, designed to stop a descending elevator car or counterweight beyond its normal limit of travel by absorbing the impact.
Buttress is a projecting part of a masonry wall built integrally therewith to furnish lateral stability.
Canopy is a roof-like structure projecting from a wall and supported in whole or in part by vertical supports to the ground, and erected for the major purpose of shelter from the weather.
Car, Elevator is the load-carrying unit including its platform, car frame, enclosure, and car door or gate.
Car, Enclosure is the top and the walls of the elevator car, resting on and attached to the car platform.
Car Frame (Sling) is the supporting frame to which the elevator car platform, upper and lower sets of guide shoes, car safety, and the hoisting ropes or hoisting-rope sheaves, or the plunger of a direct plunger elevator are attached.
Car Frame, Overslung. A car frame to which the hoisting-rope fastenings or hoisting-hope sheaves are attached to the crosshead or top member of the car frame.
Car Frame, Underslung. A car frame to which the hoisting-rope fastenings or hoisting-rope sheaves are attached at or below the car platform.
Car Frame, Sub-Post A car frame all of whose members are located below the car platform.
Car Platform is the structure which forms the floor of the car and which directly supports the load.
Cast-In Place Construction is construction in which concrete is deposited in its final position.
Cement, Portland is the product obtained by finely pulverizing clinker consisting essentially of hydraulic calcium silicates, to which no additions have been made subsequent to calcination other than water or untreated calcium sulfate, except that additions not to exceed one percent, of other material , may be interground with the clinker at the option of the manufacturer, provided such materials in the amounts indicated have been shown by tests to be not harmful.
Ceramic Veneer is a type of architectural terra cotta, characterized by thinner sections ranging from one and one-eighth (1 1/8) to two and one-half (2 1/2) inches in thickness.
Certified Test Reports are reports by any approved independent testing laboratory.
Chase is a continuous recess in a wall, to receive pipes, ducts, conduits, etc.
Check Valve is a valve allowing flow in one direction only, and specifically designed for the fluid handled.
Child Day Care Center is any child care facility receiving three (3) or more children for care or supervision during part or all of a day, between the hours of 6:00 a.m. and 9:00p.m. Day nurseries nursery schools, play group centers, and centers for mentally retarded children shall be included in the general term " Child Day Care Centers".
Chimney is a primarily vertical enclosure or structure containing one or more flues.
a. Interior Chimney. A chimney built within the walls of a building and having lateral support from the building structure.
b. Exterior Chimney. A chimney built outside the walls of a building but receiving lateral support from the exterior walls of the building.

c. Isolated Chimney. A chimney that is not built within the walls of a building and does not receive lateral support from the building. Guys or struts shall not be considered as lateral support for the purpose of this definition.

Cinema is an Assembly Building designed or used exclusively for the presentation of motion pictures and having a stage depth less than 15 feet.

Circuit Vent (Plumbing) is a branch vent that serves two (2) or more traps and extends from in front of the last fixture connection of a horizontal branch to the vent stack.

Classroom is a room used for the instruction of students in a group.

Closed Cup Flash Point is the lowest temperature at which a combustible liquid, under prescribed conditions, will give off a flammable vapor which will burn momentarily.

Coal Silo or Pocket is a separate structure used for the receiving, storage, or disposing of coal.

Code means the provisions adopted and referred to in Chapter 102 BUILDINGS AND BUILDING REGULATIONS, Sections 102-130, 102-135, 102-140, and Section 102-150. Whenever the word "Code" is used, it shall mean those provisions, whether independently or collectively, as the context provides.

Collapsible Revolving Door is a revolving door which is designed, supported and constructed so that the wings will release and fold back in the direction of egress under pressure exerted by persons under panic conditions, providing a legal passageway on both sides of the door pivot.

Column is an upright compression member the length of which exceeds three (3) times its least lateral dimension.

Combination Fixture (Plumbing) is a fixture combining one sink and tray or a two- or three-compartment sink or tray in one unit.

Combination Waste and Vent System (Plumbing) is a special designed system of waste piping embodying the horizontal wet venting of one or more sinks or floor drains by means of a common waste and vent pipe adequately sized to provide free movement of air above the flow line of the drain.

Combined Building Sewer is a sewer that receives both storm water and sewage.

Combustible Material is a material which does not comply with the definition of incombustible material.

Common Vent (Plumbing) is a vent connecting at the junction of two (2) fixture drains and serving as a vent for both fixtures.

Compact Section is a steel flexural member so proportioned that local buckling will not occur before the full plastic moment is reached.

Companion or Block Valves are pairs of mating stop valves, valving off sections of systems and arranged so that these sections may be joined before opening these valves, or separated after closing them.

Compensating-Rope Sheave Switch is a device which automatically causes the electric power to be removed from an elevator driving-machine motor and brake when the compensating sheave approaches its upper or lower limit of travel.

Compensatory Storage An artificially excavated volume of storage within the base flood areas used to balance the loss of natural flood storage capacity when artificial fill or structures are placed within the floodplain. (Uncompensated loss of natural floodplain storage can increase off-site floodwater elevations and flows.)

Compressor is any device having one or more pressure imposing elements in a refrigerating system to increase the pressure of the refrigerant in its gas or vapor state for the purpose of liquefying the refrigerant.

Compressor Relief Device is a valve or rupture member located between the compressor and the stop valve on the discharge side arranged to relieve the pressure at a predetermined point.

Compressor Unit is a condensing unit, less the condenser and liquid receiver.

Concrete is a mixture of cement, aggregates, and water.

Concrete, gypsum is a combination of aggregate or aggregates with calcined gypsum as a binding medium, which after mixing with water sets into a conglomerate mass. (Gypsum Fiber Concrete-gypsum concrete in which the aggregate consists of shavings, fiber, or chips of wood.)

Concrete Masonry Unit is a building unit made from cement and suitable aggregates, such as sand,

gravel, crushed stone, cinders, burned clay, or shale, or blast furnace slag.

Concrete, Plain is a concrete without metal reinforcement, or having been reinforced only for shrinkage or temperature changes.

Concrete, Pneumatically Placed is a mixture of fine aggregate and cement pneumatically applied by suitable mechanism, and to which water is added immediately prior to discharge from the applicator.

Concrete, Precast is construction whereby concrete members are cast in a place prepared for this purpose, to be moved to their final position.

Concrete Prestressed is construction of concrete members, cast-in-place or precast, in which controlled forces create controlled internal stresses. The following terms are used in this ordinance in the application of provisions governing prestressed concrete:

a. Tendons. Steel members which generally are used to exert the prestressing force onto the concrete.

b. Transfer. The act of application of the prestressing force to the concrete.

c. Pretensioning. The system of prestressing concrete members whereby tendons are stressed prior to pouring of the concrete and the prestressing force is transmitted to the concrete by bond.

d. Post-Tensioning. The system of prestressing concrete members whereby tendons are stressed after the concrete has obtained a required strength and the prestressing force is transmitted to the concrete generally by anchoring the stressed tendons to the member.

e. Gradual Losses. The reduction from the initial force to the working force, due to shrinkage, creep of the concrete, and relaxation of the steel.

f. Elastic Shortening Losses. Those losses due to the elastic deformation of the concrete at the time of transfer.

g. Tensioning Losses. Those losses incurred in post-tensioned concrete at the time of stressing and anchoring the tendons which are due to tendon friction and anchorage set, and vary with the system used.

h. Forces: Jacking Force. The force exerted by the ram on the tendon.

i. Initial Force. The force left in the tendon immediately after transferring the prestressing force to the concrete.

j. Working Force. The final force left in the tendons after all losses have occurred.

Concrete, Reinforced is concrete in which metal other than that provided for shrinkage or temperature changes is embedded in such a manner that the two (2) materials act together in resisting forces.

Condenser is a vessel or arrangement of piping or tubing in which vaporized refrigerant is liquefied by the removal of heat.

Condensing Unit is a specific refrigerating machine combination for a given refrigerant, consisting of one or more power driven compressors, condensers, liquid receivers (when required), and any regularly furnished accessories; and the individual components are designed to operate as one system.

Conflagration Hazard is the fire risk involved in the spread of fire by exterior exposure to, and from, adjoining buildings and structures.

Conflagration Hazard District is a geographical area in Cook County within which certain types of construction are limited or prohibited due to conflagration or high fire hazard.

Construction Equipment is the construction machinery, tools, derricks, hoists, scaffolds, platforms, runways, ladders, and all material-handling equipment, safeguards, and protective devices used in construction operations.

Construction Operation is the erection, alteration, repair, renovation, demolition, or removal of any building or structure; and the excavation, filling, and grading of lots in connection therewith.

Container (Refrigeration) is a cylinder for the transporation of refrigerant as prescribed by the regulations of the Interstate Commerce Commission for the transportation of such refrigerants.

Continuous Vent (Plumbing) is a vertical vent that is a continuation of the drain to which it connects.

Continuous Waste (Plumbing) is a drain from two (2) or three (3) fixtures connected to a single trap.

Controlled Materials are materials which are selected or tested to meet the special strength, durability, and the resistance requirements upon which the design is based, as provided in Section 102-104.6.

Conveyor is a mechanical apparatus for carrying material from one point to another, as by an endless belt, chain of receptacles, or the like.

Cooling Tower is a structure designed or used for the cooling, by exposure to the open air, of liquids used in the operation of a refrigeration or air conditioning installation.
Coping is a cap or finish on top of a wall, pier, or pilaster to protect the masonry below from penetration of water from above.
Corbel is a shelf or ledge formed by projecting successive courses of masonry out from the face of the wall.
Corridor (Hallway) is a horizontal passageway which connects various rooms, apartments, or any interior spaces of a building or structure, and which provides a common way of travel to an exit or to another passageway leading to an exit.
Corrosive Liquid shall include those acids, alkaline caustic liquids, and other corrosive liquids which when in contact with living tissue, will cause severe damage of such tissue by chemical action; or, in case of leakage, will materially damage or destroy other containers of other hazardous commodities by chemical action and cause the release of their contents; or are liable to cause fire when in contact with organic matter or with certain chemicals.
Course is a continuous horizontal layer of masonry.
Court is an open, unobstructed space on the same lot with a building and bounded on two (2) or more sides by the walls of such building.
Court, Inner is a court surrounded on all sides by the exterior walls of a structure or by such walls and an interior lot line.
Court, Outer is a court open on one end to an open space not less than 30 feet wide. The open space shall be a public way, yard, or through court, or any combination of two (2) or more such areas.
Court, Through is a court open at both ends to two (2) open spaces, one of which shall be not less than 30 feet wide, the opposite not less than 10 feet wide. The open spaces shall be public ways, yards, permanent easements, outer courts, or another through court, or a combination of two (2) or more such areas.
Cross-Connection is any physical connection or arrangement between two (2) otherwise separate piping systems, one of which contains potable water and the other water of unknown or questionable safety, whereby water may flow from one system to the other, the direction of flow depending on the pressure differential between the two (2) systems. (See Backflow and Back-Siphonage.)
Cushion Tank is a tank holding water under air pressure, connected to the discharge from a fire pump, and supplying a sprinkler system or an inside standpipe system.
Datum is a level surface, real or assumed, having an established elevation and used as a reference to establish the relative elevations of other surfaces or points.
Dead End (Plumbing) is a branch leading from a soil, waste, or vent pipe, building drain, or building sewer, which is terminated at a developed distance of two (2) feet or more by means of a plug or other closed fitting.
Dead Load is the weight of all permanent construction, including walls, floors, roofs, partitions, stairways, and fixed service equipment.
Deck shall mean floor surfaces, unroofed and open to the sky, above grade level and may be attached or unattached to a principal building.
Deluge System is a sprinkler system employing open sprinklers attached to a piping system connected to a water supply through a valve which is opened by the operation of a heat responsive system installed in the same areas as the sprinklers. When this valve opens, water flows into the piping system and discharges from all the sprinklers attached thereto.
Design Working Pressure is the maximum allowable working pressure for which a specific part of a system is designed.
Development Any man-made change to improved or unimproved real estate, including but not limited to construction of or substantial improvements to buildings or other structures, the placement of mobile homes, mining, dredging, filling, grading, paving, excavation or drilling operations.
Direct-Expansion System is a system in which the evaporator is in direct contact with the refrigerated material or space refrigerated, or is located in an air-circulating passage or duct connected with the space.

Dispensing Islands are areas elevated above surrounding surfaces and on which are mounted dispensing pumps or other dispensing devices. Where an individual pump or dispensing device is not mounted on an elevated island, an area extending 18 inches in all directions from the base of the pump or device shall be considered to be a dispensing island.

Double Indirect Vented Open-Spray System is one in which a liquid, such as brine or water, cooled by an evaporator located in a vented enclosure, is circulated through a closed circuit to a second enclosure where it cools another supply of a liquid, such as brine or water, and this liquid in turn is circulated to a cooling chamber and is sprayed therein.

Double (or Secondary) Refrigerant System is one in which an evaporative refrigerant is used in a secondary circuit. Each system enclosing a separate body of an evaporative refrigerant shall be considered as a separate direct system.

Downspout See Leader.

Draft Hood or Damper is a device placed in the breeching or vent pipe, or in an appliance, and which is designed to insure the ready escape of the products of combustion in the event of no draft, back-draft, or stoppage, or prevent a back-draft from entering the appliance.

Drain is any pipe which carries waste water or water-borne wastes in a building drainage system.

Drainage System (Drainage Piping) includes all the piping within public or private premises, which conveys sewage, rain water, or other liquid wastes to a legal point of disposal, but does not include the mains of a public or central sewerage system or private or public sewage treatment or disposal plant.

Dressing Room, as applied to Assembly Buildings, is a room used or intended to be used by a performer or performers for dressing or changing of clothing.

Dry Cleaning is the process of removing dirt, grease, paints, and other stains from wearing apparel, textiles, fabrics, rugs, etc., by the use of non-aqueous liquid solvents, flammable or non-flammable. Methods of dry cleaning include:

a. Immersion and agitation with the solvent in open vessels.

b. Immersion and agitation with the solvent in closed machines.

c. "Brushing", or "scouring" with cleaning solvents.

Dry Cleaning Plant is a plant in which dry cleaning is conducted.

Dry Cleaning Room is a room in which the dry cleaning operations are conducted, including all additional sections containing solvent or solvent handling equipment.

Dry Dyeing is the process of dyeing clothes or other fabrics or textiles in a solution of dye colors and non-aqueous liquid solvents.

Dry-Pipe System is a sprinkler system employing automatic sprinklers attached to a piping system containing air under pressure, the release of which, as from the opening of sprinklers, permits the water pressure to open a valve known as a "dry-pipe valve". The water then flows into the piping system and out the opened sprinklers.

Dual Vent See Common Vent.

Dumbwaiter is a hoisting and lowering mechanism equipped with a car which moves in guides in a substantially vertical direction, the floor area of which does not exceed nine (9) square feet, whose total inside height, whether or not provided with fixed or removable shelves, does not exceed four (4) feet, the capacity of which does not exceed 500 pounds, and which is used exclusively for carrying materials.

Dwelling is a building, or portion thereof, designed or used exclusively for residential occupancy.

Dwelling, Attached is one which is joined to another dwelling at one or more sides by a party wall or walls.

Dwelling, Detached is one which is entirely surrounded by open space on the same lot.

Dwelling, Multiple-Family is a Residential Building, or portion thereof, containing two (2) or more dwelling units.

Dwelling, Single-Family is a Residential Building containing one (1) dwelling unit only.

Dwelling, Two-Family is a Residential Building containing two (2) dwelling units only.

Dwelling Unit consists of one or more rooms which are arranged, designed, or used as living quarters for one family only.

Efficiency Unit is a dwelling unit consisting of one principal room, exclusive of bathroom, kitchen, hallway, closets, or dining alcove directly off the principal room.

Elastic Theory and Design refers to methods based upon use of a material within its elastic range, where a maximum working stress is used.

Electrical Code means the provisions adopted and referred to in Chapter 102 BUILDINGS AND BUILDING REGULATIONS, Section 102-150. Whenever the words "Electrical Code" are used, it shall mean those provisions, whether independently or collectively, as the context provides.

Electrical Equipment shall mean conductors and equipment installed for the utilization of electricity supplied for heat or power, and signal light, heat, or power, not including radio apparatus or equipment for wireless reception of signals and does not include apparatus, conductors, and other equipment installed for or by public utilities, including common carriers, which are under the jurisdiction of the Illinois Commerce Commission, for use in their operation as public utilities.

Elevation is the vertical distance of a point above or below a known datum. The difference in elevation between two points is the vertical distance between two level surfaces in which the points lie. For the purposes of this Code, elevations should be referenced to United States Geological Survey Datum or City of Chicago Datum (0 .00 CCD = 579.48 USGS).

Elevator is a hoisting and lowering mechanism equipped with a car or platform which moves in guides in a substantially vertical direction, and which serves two (2) or more floors of a building or structure; "elevator" is further defined as one of the following types:

a. Freight Elevator. An elevator primarily used for carrying freight, and on which only the operator and the persons necessary for unloading and loading the freight are permitted to ride.

b. Gravity Elevator. An elevator utilizing gravity to move the car.

c. Hand Elevator. An elevator utilizing manual energy to move the car.

d. Passenger Elevator. An elevator used primarily to carry persons other than the operator and persons necessary for loading and unloading.

e. Power Elevator. An elevator utilizing energy other than gravitational or manual to move the car.

(1) Electric Elevator - A power elevator where the energy is applied by means of an electric motor.

(2) Hydraulic Elevator - A power elevator where the energy is applied, by means of a liquid under pressure, in a cylinder equipped with a plunger or piston.

(a) Direct-Plunger Elevator - A hydraulic elevator having a plunger or piston directly attached to the car frame or platform.

(b) Electro-Hydraulic Elevator- A direct-plunger elevator where liquid is pumped under pressure directly into the cylinder by a pump driven by an electric motor.

(c) Roped-Hydraulic Elevator- A hydraulic elevator having its piston connected to the car with wire ropes.

f. Sidewalk Elevator. A freight elevator which operates between a sidewalk or other area exterior to the building and floor levels inside the building below such area, which has no landing opening into the building at its upper limit of travel, and which is not used to carry automobiles.

Elevator Control is a system of regulation by which the starting, stopping, direction of motion, acceleration, speed, and retardation of an elevator are governed, and further defined as one of the following types:

a. Generator-Field Control. A system of control which is accomplished by the use of an individual generator for each elevator or dumbwaiter, wherein the voltage applied to the driving-machine motor is adjusted by varying the strength and direction of the generator field.

b. Multi-Voltage Control. A system of control which is accomplished by impressing successively on the armature of the driving·-machine motor a number of substantially fixed voltages such as may be obtained from multi-commutator generators common to a group of elevators.

c. Rheostatic Control. A system of control which is accomplished by varying resistance and/ or reactance in the armature and/or field circuit of the driving-machine motor.

d. Two-Speed Alternating Current Control. A control for a two-speed driving-machine induction motor which is arranged to run at two (2) different synchronous speeds by connecting the motor windings

so as to obtain different number of poles.

Elevator Landing is that portion of a floor, balcony, or platform used to receive and discharge passengers or freight.

a. Landing Zone. A zone extending from a point 18 inches below a landing to a point 18 inches above the landing.

b. Landing, Bottom Terminal. The lowest landing served by the elevator, which is equipped with a hoistway door and hoistway-door locking device which permits egress from the hoistway side.

c. Landing, Top Terminal. The highest landing served by the elevator, which is equipped with a hoistway door and hoistway-door locking device which permits egress from the hoistway side.

Emergency Relief Valve is a manually operated valve for the discharge of refrigerant in case of fire or other emergency.

Engines are such prime movers as internal combustion engines, external combustion engines, gas turbine engines, and free piston engines, using either gaseous fuels or liquid fuels, or combinations thereof.

Equipment consists of all mechanical, electrical, or storage devices and fixtures requiring conformance with the Code in regard to construction, installation, operation, alteration, maintenance, and inspection. It shall include, among others: elevators, plumbing, ventilation systems, heating apparatus, refrigeration systems, boilers, and electrical equipment.

Evaporator is that part of the refrigeration system in which liquid refrigerant is vaporized to produce the refrigerating effect.

Excavation is any act by which organic matter, earth, sand, gravel, rock or any other similar material is cut into, dug, quarried, removed, displaced, relocated or bulldozed and shall provide conditions resulting thereof.

Exit is a means of egress from a building, structure, or premises.

Exit Area is that area of a drive-in theater which is used for holding cars which are exiting from the spectator area and are awaiting passage onto the public highway.

Exit Connections shall include doorways, aisles, corridors, foyers, lobbies, and other horizontal means of exit leading to a vertical exit, a horizontal exit, or an outside exit.

Exit, Horizontal is a protected opening through or around a fire wall, or is a bridge or link connecting two (2) buildings or structures.

Exit, Outside is an exit from the building to a public way, to an open area leading to a public way, or to an enclosed fire-resistive passage leading to a public way.

Exit, Vertical is a means of exit used for ascension or descension between two or more levels of a building or structure.

Explosive is any chemica1 compound, mixture, or device, the primary or common purpose of which is to function by explosion. The term "explosive" includes all materials classified as Class A, Class B, or Class C explosives by Interstate Commerce Commission regulations; and includes but is not limited to, dynamite, black powder, pellet powders, initiating explosives, blasting caps, electrical blasting caps, safety fuse, fuse igniters, fuse lighters, squibs, cordeau detonant fuse, instantaneous fuse, igniter cord and igniters.

Exterior Trim shall be construed to include exterior wall decorations cornices gutters leaders, balconies, storm enclosures, and all ornamental elements accessory to the structural building frame.

Family consists of one or more persons, each related to the other by blood (or adoption), together with such blood relatives' respective spouses, who are living together in a single dwelling unit and maintaining a common household. A "family" shall include any domestic servants and not more than one gratuitous guest residing with said "family".

Fence is a structure forming a barrier at grade between lots, between a lot and a street or alley, or between portions of a lot or lots. A "screen fence", in contra-distinction to a solid fence, is any fence that affords visibility at right angles to any surface of such fence of 50 percent or more.

Fill is any act by which earth, sand, gravel, rock or any other material is deposited, placed, replaced, pushed, dumped, pulled, transported or moved by man or machine to a new location and shall include the conditions resulting thereof.

Filling Pump is a pump used to supply water to the gravity or pressure tanks of a sprinkler system.
Finish, Interior Wall and Ceiling is defined as those materials applied over wall, partition, and ceiling constructions on the inside of a building, or subdivision thereof, including finishes utilized for decoration, acoustical correction, surface insulation, and similar purposes. Wall finishes and ceiling finishes not exceeding 10 percent of the wall or ceiling area, respectively, shall be classified as interior trim. Surface decoration consisting of paint, paper, or similar surface treatment applied directly to the finish without intervening air space shall not be considered as a part of interior wall and ceiling finish unless such surface treatment is required for the purpose of increasing fire resistance.
Finishing Processes are locations where paints, lacquers, or other flammable solvents or thinners are used, or where readily ignitable deposits or residues from such paints, lacquers, or finishes may occur.
Fire Alarm System, Automatic is a system which automatically detects a fire condition and actuates a fire alarm signal device.
Fire Alarm System, Manual is an interior alarm system composed of sending stations and signaling devices in a building, operated on an electric circuit so arranged that the operation of any one station will ring all signals throughout the building or at one or more approved locations. Signals may be either non-coded or coded to indicate the floor area in which the signal originated, and may be transmitted to an outside central station.
Fire Alarm System, Standard is a manually operated fire alarm system equipped with automatic detectors, meeting the requirements of this ordinance. Such system shall be installed in a building for the purpose of notifying the occupants of the building of conditions due to fire or other cause which necessitates that the building be vacated immediately by the occupants. Such system and all equipment and devices used in the installation of such a system shall be tested by and bear the label of approval of Underwriter's Laboratories, Inc. The workmanship, equipment, and quality of installation shall conform to the electrical requirements of this ordinance.
Fire Area is the floor area enclosed and bounded by fire walls or the exterior walls of a building.
Fire Assembly is the assembly of a fire door, fire window, or fire shutter, including all required hardware, anchorage, door frames, and sills.
Fire Damper is an approved automatic or self-closing incombustible barrier designed to prevent the passage of air, gases, smoke, or fire through an opening, a duct, or plenum chamber.
Fire Division is the interior means of separation of one part of a floor area from another part, together with fire-resistive floor construction, to form a complete fire barrier between adjoining or superimposed floor areas in the same building or structure.
Fire Door is a door and its assembly, so constructed and assembled in places as to give specified protection against the passage of fire.
Fire Escape is an exterior vertical exit used primarily as an emergency means of egress.
Fire Extinguisher, Standard is a portable fire extinguisher which bears the label of approval of Underwriter's Laboratories, Inc.
Fire Pump is a pump used for supplying water to a sprinkler system or to an inside standpipe system at the pressure required by the system.
Fire Resistance, as applied to building materials and construction, means the ability to withstand fire or give protection from it for given periods under prescribed test conditions, according to Standard Fire Test.
Fire-Resistive Construction is that construction in which all structural elements, including walls, bearing partitions, floors, ceilings, roofs, and their supports are of incombustible materials, providing fire resistance as specified in this ordinance.
Fire-Resistive Rating is the degree of fire resistance of a fabricated unit or assembly of units of construction, determined by an approved standard fire test expressed in hours and/or fractions of an hour.
Fixture Branch is a pipe connecting several plumbing fixtures.
Fixture Drain is the drain from the trap of a plumbing fixture to the junction of that drain with any other drain pipe.
Fixture Supply is a water supply pipe connecting the plumbing fixture with the fixture branch.
Fixture Unit is a quantity in terms of which the load-producing effects on the plumbing system of

different kinds of plumbing fixtures are expressed on some arbitrarily chosen scale.

Fixture Unit Flow Rate is the total discharge flow in gallons per minute of a single plumbing fixture divided by 7.5, which provides the flow rate of that particular plumbing fixture as a unit of flow. Fixtures are rated as multiples of this unit of flow.

Flameproof or Flame proofing refer to materials which will not readily ignite and will not propagate flame under test conditions. Flameproofed materials are usually combustible materials with the addition of some treatment or coating to modify their burning properties. Flameproof denotes a lower degree of resistance than fire-retardant.

Flame Spread is the propagation of flame over a surface.

Flame Spread Rating is the measure of flame spread on the surface of materials or their assemblies, as determined by tests conducted in accordance with ASTM Designation: E84.

Flammable refers to any material which is very easily ignited and burns with unusual rapidity. The form or condition of a material, as well as its inherent properties, affects flammability, e.g., fine dry wood shavings would be considered flammable, whereas a large solid piece of wood would not. Flammable is used in a general sense without reference to specific limits of ignition temperature, flash point, or other properties.

Flammable Anesthetics are gases or vapors such as cyclopropane, divinyl ether, ethyl chloride, ethyl ether, and ethylene, which may form flammable or explosive mixtures with air, oxygen, or nitrous oxide.

Flammable Liquid is any liquid having a flash point below 200°F and having a vapor pressure not exceeding 40 pounds per square inch (absolute) at 100°F.

Flammable liquids shall be divided into three classes as follows:

Class I shall include those having flash points at or below 20°F.

Class II shall include those having flash points above 20°F but at or below 70°F.

Class III shall include those having flash points above 70°F.

The volatility of flammable liquids is increased when artificially heated to temperatures equal to or higher than their flash points. When so heated Class II and III liquids shall be subject to the applicable requirements for Class I or II liquids. These standards may also be applied to high flash point liquids when so heated even though these same liquids when not heated are outside of its scope.

Flammable Refrigerant is any refrigerant that will burn when mixed with air.

Flash Point is the minimum temperature in degrees Fahrenheit at which a flammable liquid will give off flammable vapor as determined by appropriate test procedure and apparatus, as specified below. The flash point of flammable liquids having a flash point below 175°F. (79°C.) shall be determined accordance with the Standard Method of Test for Flash Point by means of the Tag Closed Tester, A.S.T.M. D56. The flash point of flammable liquids having a flash point of 175°F. or higher shall be determined in accordance with the Standard Method of Test for Flash Point by means of the Pensky-Martens Closed Tester, A.S.T.M. D93.

Flight of Steps is a series of steps between successive landings or between a landing and a floor.

Flood is a temporary increase in normal water level (surface water elevation) that results in water inundating land or other surfaces not normally under water.

Flood Frequency A period of years, based on a statistical analysis, during which a flood of a stated magnitude may be expected to be equaled or exceeded.

Flood Insurance Rate Map (FIRM) An official map of a community, on which the Administrator of the Federal Insurance Administration has delineated both the Special Hazards Areas and the risk Premium Zones applicable to the community. (In Cook County Zone "A".)

Flood Insurance Study (FIS) An examination and evaluation of hydrologic and hydraulic data sponsored by the Federal Insurance Administration to determine base flood flows, elevations, areas, and flood ways. The FIS also determine flows, elevations and areas of flood having lesser and greater frequencies of occurrence.

Flood Level Rim is the top edge of receptacle on a plumbing fixture from which water overflows.

Flood of Record An actual historical flood event for which sufficient records are available to establish its extent. No uniform probability of occurrence is associated with floods of records. However, the

probability of occurrence may be determined for the event at specific locations.

Flood Plain is the continuous area adjacent to a lake, stream, or stream bed, the elevation of which is greater than the normal water level (surface water elevation) or pool elevation but equal to or lower than the flood base elevation. Natural depressions and storm water retention or detention areas which periodically are inundated by storm water shall be considered flood plain, if so designated by the County or an agency appointed by the County. Also, any land of higher evaluation than the flood base elevation but having an area less than the minimum residential lot size established for the zone in which it is located, and surrounded by lands having an elevation equal to or less than the flood base elevation, shall be considered flood plain. The flood plain comprises both the "Floodway" and floodway fringe.

Flood Profile Graphical representations of the elevations of the water surface of the 100 year flood along the watercourses of unincorporated Cook County.

Floodproofing Modifications to structures made to reduce flood damages. These changes may be made to existing structures or incorporated in the design of new structures. In all instances, floodproofing must be watertight and must be adequate without the need for human intervention.

Flood Protection Elevation The elevation to which uses regulated by this ordinance are required to be elevated or floodproofed.

Flood Return Period A period of years, based on a statistical analysis, during which a flood of a stated magnitude may be expected to be equaled or exceeded.

Flood Table Land is the continuous land area adjacent to the flood plain, having an elevation no greater than two (2) feet nor less than one (1) foot above the base flood elevation.

Floodway A "floodway" is the channel of watercourse and those portions of the adjoining floodplains which are required to carry and discharge the 100 year flood with no significant increase in the base flood elevation.

Floodway Encroachment Lines The lateral boundaries of the floodway which separate it from the floodway fringes.

Floodway Fringe is that portion of the flood plain which is immediately adjacent to the floodway. Although this area is prone to flooding, it is not used to transport flood water flows. The highest elevation of the floodway fringe is coterminous to the highest elevation of the flood plain.

Floor Area (as applied to area limitations) is the sum of the gross horizontal areas of the several floors of the building, measured from the exterior faces of the exterior walls or from the center line of walls separating two (2) buildings. The "floor area" of a building shall include elevator shafts and stairways at each floor, penthouses, attic space having headroom of seven (7) feet, six (6) inches or more, interior balconies and mezzanines, enclosed porches, and floor space used for mechanical equipment, (except equipment, open or enclosed, located on the roof). However, basement floor area, unless specifically included, shall be excluded from the determination of "floor area".

Floor Area (as applied to occupancy content)

a. Gross Floor Area is the area in square feet of any individual story of a building including the area within the perimeter of the outside walls of the building or section under consideration, with no deduction for elevators, stairs, mechanical shafts, closets, columns, or wall thickness, for the purpose of determining exit facilities or classification of occupancy by the number of occupants.

b. Net Floor Area is the area in square feet of any individual story of a building exclusive of elevators, stairs, mechanical shafts, closets, columns, and thickness of walls or other similar accessory unoccupied areas.

Floor Area Ratio (as established in the Cook County Zoning Ordinance) of the building or buildings on any zoning lot is the floor area of the building or buildings on that zoning lot divided by the area of such zoning lot, or, in the case of planned developments, by the net site area.

Floor Area Ratio Method is a method of providing natural lighting or ventilation openings as a percentage of the floor area of the spaces served by such openings.

Flue is an enclosed passageway used for the removal of the products of combustion.

Flush Valve is a device located at the bottom of the tank for the purpose of flushing water closets and similar fixtures.

Flushometer Valve is a device which discharges a predetermined quantity of water to fixtures for flushing purposes and is actuated by direct water pressure.
Foundation Pier is a subsurface structure for the support of columns, above-ground piers, or other concentrated loads, extending from the surface of the ground downward to suitable bearing.
Foundation Wall is a wall below the floor nearest grade, serving as a support for a wall, pier, column, or other structural part of a building or structure.
Foyer is a room adjoining the auditorium of a theater or other place of assembly, and serving as the principal entrance to any seating level thereof.
Freeboard An increment of elevation added to the base flood elevation to provide a factor of safety for uncertainties in calculations, unknown localized conditions, wave actions and unpredictable effects such as may be caused by ice or debris jams.
Friction Type Connection is a high strength bolt connection in which bolts do not bear on their shanks but serve primarily to exert pressure on two (2) members of a connection held in contact by the bolt.
Furnace, Forced Air is a fuel burning device which supplies heat to a body of air moving through it by a motor driven fan or blower and to which ducts are connected for the purpose of conveying the heated air to the space to be heated.
Fusible Plug is a device having a predetermined temperature fusible member for the relief of pressure.
Garage is a building in which one or more motor vehicles are stored, housed, kept, repaired, or serviced.
Garage, Attached is a portion of a building used as a **Garage, Private** that provides direct access from the garage to the main structure of a single-family residence or dwelling unit, and whose area is considered part of both the basic and total area of the main structure.
Garage, Private is a garage for four (4) or less passenger motor vehicles, with no provision for repairing or servicing such vehicles for profit.
Garage, Public or Commercial is a building or structure used for the storage, servicing, or repair of motor vehicles, and not included in the term "garage, private".
Gas Vent is a flue for removing products of combustion from gas appliances.
General Alarm is an alarm signal sounded on all alarm sounding devices throughout the building.
Generator is a device, equipped with a heating element, used in a refrigerating system to increase the pressure of refrigerant in its gas or vapor state for the purpose of liquefying the refrigerant.
Geodesic Dome is a dome-like structure having triangulated ribs and commonly referred to in engineering terminology as a geodesic dome.
Grade:
Natural Grade is the elevation of the ground surface that existed prior to any known changes caused or made by man.
Existing Grade is the elevation of the surfaces of the existing ground features (including pervious and impervious surfaces) before any new excavation, filling, construction or any other changes or alterations are made.
Finished Grade is the elevation of the surfaces of the ground features after they have been changed or altered as a result of new work such as excavation, filling, sodding, paving, or any other construction.
Grade (Lumber) refers to the classification of lumber in regard to strength and utility.
Gravity Tank is a container holding water to supply a sprinkler system at gravity pressure.
Grease Interceptor See Interceptor.
Grease Trap See Interceptor.
Grout is mortar to which sufficient water has been added to make a consistency that will flow without segregation of the ingredients.
Grouted Masonry is masonry in which the interior joints are filled by pouring grout therein as the work progresses.
Habitable Room is a room occupied by one or more persons for living, sleeping, eating, or cooking; and includes kitchens serving dwelling units, but does not include bathrooms, water closet compartments, laundries, pantries, storage rooms, or below grade recreation rooms.
Hall, Vestibule, or Foyer in a Residence is a room or passageway at the entrance of a house or

apartment.
Handrail is a member at approximately waist height, paralleling the slope of a stairway or ramp, used to aid persons in ascending or descending such stairs or ramp.
Hangar is a building or structure designed or used for the shelter, storage, or servicing of one or more aircraft.
Hazardous Chemical is any chemical listed as hazardous in Hazardous Chemicals Data, NFPA No. 49, plus chemicals not mentioned, having similar toxic, explosive, and flammable hazardous properties under similar conditions. The Building Commissioner shall have the right to make determinations as to which chemicals are hazardous.
Header See Bonder.
Heating System, Forced Air is a central warm air heating system that is equipped with a fan or blower which provides the primary means for the circulation of air.
Heating System, Forced Hot Water is a central hot water system consisting of boiler, pipes, radiation, equipped with pump or pumps which provide positive circulation of hot water throughout the system.
Heating System, Gravity is a central warm air heating system through which air is circulated by gravity. Wall furnaces and floor furnaces shall not be considered "gravity heating systems" under this definition.
Heating System, Gravity Hot Water is a central hot water system consisting of boiler, pipes, and radiation through which heated water is circulated by gravity.
Heating System, Steam is a central heating system consisting of boiler, piping, and radiation where steam generated in the boiler is circulated through the system piping and radiation either by pump or gravity flow.
Heat Pump is a refrigeration system arranged to provide either heating or cooling.
Helicopter Landing Pad is an area designed solely for the landing and take-off of rotary wing aircraft and other aircraft capable of approximately vertical landing and take-off, and providing no facilities for storage, servicing, or repair of such aircraft.
Helicopter Landing Pad, Elevated is an area located on a building or structure one or more stories above ground level, designed solely for the landing and take-off of the abovementioned aircraft.
Heliport is an area, located on land or water, but not upon a building, designed for the landing and take-off of rotary wing aircraft and other aircraft capable of approximately vertical landing and take-off, and providing facilities for the storage, servicing, and repair of such aircraft. One or more subgrade levels of use pertinent to the heliport operation may be located beneath such landing and take-off area.
Highly Flammable Solid shall include a solid substance, other than one classified as an explosive, which is liable to cause fires through friction, through absorption of moisture, through spontaneous chemical changes, or as a result of retained heat from manufacturing or processing.
Highly Toxic Material is a material so toxic to man as to afford an unusual hazard to life and health during fire-fighting operations. Examples are: parathion, TEPP (tetraethyl phosphate), HETP (hexaethyl tetraphosphate), and similar insecticides and pesticides.
High Side refers to those parts of a refrigeration system under condenser pressure or higher.
Hoistway, Elevator or Dumbwaiter is a shaftway for the travel of one or more elevators or dumbwaiters. It includes the pit and terminates at the underside of the overhead machinery space floor or grating, or at the underside of the roof where the hoistway does not penetrate the roof.
a. Multiple Hoistway. A hoistway for more than one elevator or dumbwaiter.
b. Single Hoistway. A hoistway for a single elevator or dumbwaiter.
Hoistway Enclosure is the fixed structure, consisting of vertical walls or partitions, which isolates the hoistway from all other parts of the building or from an adjacent hoistway, and in which the hoistway doors and door assemblies are installed.
Hold-Out Area (Reservoir Parking) is that area of an open air drive-in theater used exclusively for holding cars which are awaiting admittance into the auditorium area of the theater.
Hollow Masonry Unit is a masonry unit whose net cross-sectional area in any plane parallel to the bearing surface is less than 75 percent of its gross cross-sectional area measured in the same plane.
Hood is that portion of a local exhaust ventilation system which confines hot gases or air contaminants at

the point of emission and guides them into the duct work of the system.

Horizontal Branch (Plumbing) is a drain pipe extending laterally from a soil or waste slack or building drain, with or without vertical sections or branches, which receives the discharge from one or more plumbing fixture drains and conducts it to the soil or waste stack or to the building (house) drain.

Horizontal Pipe is any pipe or fitting which makes an angle of more than 45 degrees with the vertical.

Hospitals A building or part thereof used for medical, psychiatric, obstetrical or surgical care on a 24-hour basis, for 4 or more inpatients. Hospital, wherever used in this ordinance, shall include general hospitals mental hospitals, tuberculosis hospitals, children's hospitals, and any such facilities providing inpatient care.

Hotel or Motel is an establishment which is open to transient guests, in contradiction to a lodging house or apartment house, and is commonly known as a hotel or motel in the community in which it is located; and which provides customary hotel or motel services, such as maid service, furnishing and laundering of linen, telephone and secretarial or desk service, and the use and upkeep furniture. For the purposes of this ordinance, hotels and motels shall be classified as 'Multiple-Family Dwellings".

Humanly-Occupied Space is space normally frequented or occupied by people but excluding machinery rooms and walk-in coolers used primarily for refrigerated storage.

Hydrostatic Pressure The upward pressure exerted on floor slabs or an entire structure by standing water or groundwater; which tends to float a structure or crack the floor. It is based on the difference in elevation between the surface level of the water and the structure on which it is acting. Hydrostatic pressure may also be horizontal, imposing forces on walls causing them to crack or fail.

Incombustible Construction is that construction in which all structural elements, including walls, bearing partitions, floors, ceilings, roofs, and their supports are of incombustible materials, but which are generally not fire protected.

Incombustible Material implies material which does not in itself constitute an active fuel for the spread of combustion. A material which will not ignite nor actively support combustion during an exposure for five (5) minutes to a temperature of 1200 degrees Fahrenheit shall be designated "incombustible".

In addition, materials having a structural base of incombustible material (as defined herein), with a surfacing not more than one-eighth (1/8) inch thick which has a flames-spread rating not greater than 15 when tested in accordance with the method of test for surface burning characteristics of building materials (ASTM Designation: E84), shall be acceptable as "incombustible".

The term incombustible does not apply to the flamespread characteristics of interior finish or trim materials. No materials shall be classed as incombustible material which is subject to increase in combustibility or flamespread rating beyond the limits herein established through the effects of age, moisture, or other conditions.

Indirect Closed- Surface Refrigeration System is one in which a liquid, such as brine or water, cooled by an evaporator located in an enclosure external to a refrigerated room, is circulated to and through such a refrigerated room in pipes or other closed circuits.

Indirect Open-Spray Refrigeration System is one in which a liquid, such as brine or water, cooled by an evaporator located in enclosure external to a refrigerated room, is circulated to such refrigerated room and is sprayed therein.

Indirect Refrigeration System is one in which a liquid, such as brine or water cooled by the refrigerant, is circulated to the material or space refrigerated, or is used to cool air so circulated.

Indirect Vented Closed-Surface Refrigeration System is one in which a liquid such as brine or water, cooled by an evaporator located in a vented enclosure external to a refrigerated room, is circulated to and through such refrigerated room in pipes or other closed circuits.

Indirect Waste Pipe is a pipe that does not connect directly with the drainage system but conveys liquid wastes by discharging into a plumbing fixture or receptacle which is directly connected to the drainage system.

Individual Vent (Plumbing) is a pipe installed to vent a fixture trap and which connects with the vent system above the fixture served or terminates in the open air.

Individual Wastes are liquid wastes resulting from the processes employed in industrial establishments

and are free of fecal matter.
Industrial Refrigeration System is a refrigerating system used in the manufacture, processing, or storage of materials located in a building used exclusively for industrial purposes.
Interceptor (Plumbing) is a device designed and installed so as to separate and retain deleterious, hazardous, or undesirable matter from normal wastes and permit normal sewage or liquid wastes to discharge into the disposal terminal by gravity.
Interior Trim shall include moldings, cornices, wainscoting, and other wall and ceiling finishes not exceeding 10 percent of the wall area nor 10 percent of the ceiling area of a room or space, excluding doors and frames, and window sash and frames.
Interior Wall and Ceiling Finishes See Finish, Interior.
Internal Gross Volume is the volume as determined from internal dimensions of the container, with no allowance for volume of internal parts.
Irritant Refrigerant is any refrigerant that has an irritating effect on the eyes, nose, throat, or lungs.
Lake is any natural or man-made body of water surrounded by land.
Landing (Stair) is a platform between two (2) flights of stairs.
Leader (Downspout) is the water conductor from the roof to the building storm drain, combined building sewer, or other means of disposal.
Light Gage Formed Steel Members are structural members formed to shape from sheet or strip steel less than three sixteenths (3 /16) inch thick, generally used for studs, floor joists, arch ribs, rafters, or decks.
Lightweight Metal Alloys are magnesium and aluminum alloys.
Limited Charge System is a refrigeration system in which, with the compressor idle, the internal volume and total refrigerant charge are such that the design working pressure will not be exceeded by complete evaporation of the refrigerant charge.
Lintel is the structural member placed over an opening in a wall, and supporting the wall construction above.
Liquid Receiver is a vessel permanently connected to the high pressure side of a system for the storage of refrigerant.
Liquid Waste is the discharge from any fixture, appliance, or appurtenance, in connection with a plumbing system which does not receive fecal matter.
Liquefied Petroleum Gases: LPG and LP -Gas shall include any material which is composed predominantly of any of the following hydrocarbons, or mixtures of them: propane propylene, butanes (normal butane or iso butane), and butylenes.
Live Load is the weight superimposed by the use and occupancy of the building or structure, not including the wind load, snow load, earthquake load, or dead load.
Load, Dead is the weight of all permanent construction, including framing, walls, floors, roofs, partitions, stairways, and all fixed service equipment.
Load Factor (Plumbing) is the percentage of the total connected fixture unit flow rate which is likely to occur at any point in the drainage system. It varies with the type of occupancy, the total flow unit above this point being considered, and with the probability factor of simultaneous use.
Load, Impact is the load resulting from moving machinery, elevators, craneways, vehicles, and other similar forces and kinetic loads.
Load, Lateral Soil is the lateral pressure exerted by the weight of the adjacent soil, including due allowance for hydrostatic pressure.
Load, Wind is the lateral pressure on the building or structure exerted by the wind.
Lobby is the enclosed vestibule between the principal entrance to the building and the doors to the main floor of the auditorium or assembly room of a theater or place of assembly, or to the main floor corridor of a business building.
Local Ventilating Pipe (Plumbing) is a pipe on the fixture side of the trap, through which vapor or foul air is removed from a room or fixture.
Lodge Hall is a hall or meeting place of a local branch of a fraternal order or society such as the Masons,

Knights of Columbus, Moose, American Legion, and other similar organizations.

Lodging House is a building originally designed for or used as a single-family or two family dwelling, all or a portion of which contains lodging rooms which accommodate persons who are not members of the keeper's family. Lodging or meals, or both, are provided for compensation on a weekly or monthly basis.

Loop Vent (Plumbing) is the same as a circuit vent except that it loops back and connects with a stack vent instead of a vent stack.

Lot is a zoning lot as defined herein, except as the context shall indicate a lot of record, in which case a "lot" is a lot of record.

Lot of Record is a lot which is part of a subdivision, the plat of which has been recorded in the office of the Recorder of Deeds of Cook County; or a parcel of land, the deed to which was recorded in the office of said Recorder prior to the adoption of the Cook County Zoning Ordinance.

Lot Area, Gross is the area of a horizontal plane bounded by the front, side, and rear lot lines, but not including any area occupied by the waters of a duly recorded lake or river.

Lot, Corner is a lot situated at the intersection of two (2) streets, the interior angle of such intersection not exceeding 135 degrees.

Lot, Depth is the mean horizontal distance between the front lot line and the rear lot line, measured within the lot boundaries.

Lot Line, Exterior is a boundary line between a lot and a street, alley, public way, or railroad right-of-way.

Lot Line, Front shall be that boundary of a lot which is along an existing or dedicated public street, or, where no public street exists, is along a public way; where such public way is not a dedicated street the right-of-way of such public way shall be deemed to be 66 feet, unless otherwise provided. The owner of a corner lot may select either street lot line as the front lot line.

Lot Line, Interior is a boundary line between two (2) adjoining lots.

Lot Line, Rear shall be that boundary of a lot which is most distant from, and is, or is most nearly, parallel to the front lot line.

Lot Line, Side shall be any boundary of a lot which is not a front lot line or a rear lot line.

Lot, Through is a lot having a pair of opposite lot lines along two substantially parallel streets, and which is not a corner lot. On a "through lot" both street lot lines shall be deemed front lot lines.

Lot Width is the mean horizontal distance between the side lot lines of a lot, measured within the lot boundaries.

Lot, Zoning is a single tract of land located within a single block, which (at the time of filing for a building permit) is designated by its owner or developer as a tract to be used, developed, or built upon as a unit, under single ownership or control. Therefore, a "zoning lot or lots" may or may not coincide with a lot of record.

Low Side refers to those parts of a refrigeration system at or below evaporator pressure.

Machinery (Refrigeration) is the refrigerating equipment forming a part of the refrigerating system, including any or all of the following: compressor, condenser, generator, absorber, liquid receiver, connecting pipes, or evaporator.

Machinery Room (Refrigeration) is a room other than a boiler room, in which a refrigerating system is permanently installed and operated but not including evaporators located in a cold storage room, refrigerator box, air cooled space, or other enclosed space. Closets solely contained within, and opening only into, a room shall not be considered machinery room but shall be considered a part of the machinery room in which they are contained or open into. It is not the intent of this definition to cause the space in which a self-contained system is located to be classified as a machinery room.

Machinery Room, Class T (Refrigeration) is a room having machinery, but no flame producing apparatus, permanently installed and operated and also conforming to the following:

a. Any doors, communicating with the building, shall be approved self-closing tight-fitting Class B fire doors.

b. Walls, floor, and ceiling shall be tight and of not less than one-hour fire-resistive construction.

c. Exterior openings, if present shall not be under any fire escape or any open stairway.

d. All pipes piercing the interior walls, ceiling, or floor of such room shall be tightly sealed to the walls, ceiling, or floor through which they pass.
e. Emergency remote controls to stop the action of the refrigerant compressor shall be provided and located immediately outside the machinery room.
Magazine is any building or structure used for the storage of explosives.
Main of any system of continuous piping is the principal artery of the system, to which branches may be connected.
Main Vent (Plumbing) is the principal artery of the venting system, to which vent branches may be connected.
Marine Service Station is that portion of a property where flammable liquids used as motor fuels are stored and dispensed from fixed equipment on shore piers, wharves, or floating docks into the full tanks of motor craft.
Marquee is a roof-like structure of a permanent nature which projects horizontally from the wall of a building and derives its support from said building.
Marquee Sign is a display sign attached to, or hung from, a marquee.
Masonry is a built-up construction or combination of building units of such materials as clay, shale, concrete, glass, gypsum, or stone, set in mortar; or plain concrete.
Mechanical Joint (Refrigeration) is a gas-tight joint, obtained by the joining of metal parts through a positive-holding mechanical construction.
Mechanical Ventilation is the process of supplying or removing air, by mechanical means, to or from any space.
Mezzanine is an intermediate or fractional story between the floor and ceiling of any story of a building, used for a purpose accessory to the principal use, and extending over only part of such floor.
Mixed Occupancy refers to a building designed or used for two (2) or more occupancies representing different occupancy classifications.
Mixer is a vessel or device for the mixing of refrigerant or other liquids with another substance.
Mortar is a plastic mixture of cementations materials, fine aggregates, and water, used to bond masonry or other structural units.
Motel See Hotel.
Motion Picture Trial Exhibition Room is a room used to preview, edit, or view motion pictures, with a limited audience of 20 or less persons, and without charge to the audience.
Motor Vehicle is any passenger vehicle, truck, truck-trailer, trailer, or semi-trailer propelled or drawn by mechanical power.
Moving Stairway is a moving inclined continuous stairway or runway for raising or lowering passengers.
Multiple System is a refrigeration system employing the direct system of refrigeration in which the refrigerant is delivered to two (2) or more evaporators in separately refrigerated spaces.
Natural Barricade is a natural feature of the ground, such as a hill, or timber of sufficient density that the surrounding exposures which require protection cannot be seen when the trees are bare of leaves.
Newel Post is an upright post at the end of a stair railing.
Non-positive Displacement Compressor is a compressor in which increase in vapor pressure is attained without changing the internal volume of the compression chamber.
Normal Loading (of Wood) is a design load that stresses a member or fastening to the full allowable stress tabulated in this ordinance. This loading may be applied for approximately 10 years, either continuously or cumulatively, and 90 percent of this load may be applied for the remainder of the life of the structure.
Nursery Day See Child Day Care Center.
Nursery School See Child Day Care Center.
Nursing Home A building or part thereof used for the lodging, boarding and nursing care on a 24-hour basis, for 4 or more persons who, because of mental or physical incapacity, may be unable to provide for their own needs and safety without the assistance of another person. Nursing home, wherever used in this Code, shall include nursing and convalescent homes, skilled nursing facilities, intermediate care facilities,

and infirmaries or homes for the aged.

Occupancy is the use of any building or structure for any one of, or combination of, the following purposes: residential, institutional, assembly, educational, office, commercial, industrial, storage, high hazard, or unclassified.

Occupancy Content is the maximum allowable number of persons occupying a building, floor, room, or space: the maximum number of persons to be provided for on any floor or part thereof shall be in accordance with the actual occupancy for which the floor or part thereof is designed, as prescribed in this Code.

Occupied (as used to determine exit requirements) refers to the presence of persons in a building or space for normal purposes, subject to ruling by the Building Commissioner in case of doubt as to whether an area is occupied. Examples: a crawl space under a building is not an occupied space even though on occasion a plumber may enter to repair pipes. However, an open space under a building regularly used for storage purposes, or by children at play, is occupied. A department store is occupied as such only during business hours. After closing time when no customers are present but some employees remain for cleaning, arranging stock, etc., the building is no longer occupied as a department store and all the exits required for department store occupancy do not necessarily need to be kept unlocked. However, as a place of employment the building is still occupied, and under the general provisions of this ordinance sufficient exits may be kept available for use to provide for the number of employees actually present.

Offset in a line of piping is a combination of elbows or bends which brings one section of the pipe out of line but into a line parallel with the other section.

One Hundred Year Flood A flood magnitude with a one percent statistical chance of being equaled or exceeded during any year. A flood this large would be reached once during a 100 year period, on the average. However, the occurrence of such an event does not diminish the chance of its reoccurring again at any time.

Open Air Parking Structure is an unenclosed or partially enclosed structure which is at least 50 percent open on two (2) or more sides and is used exclusively for the parking or storage of passenger motor vehicles.

Open Space is a street, alley, waterway, park, yard, court, or other permanent unobstructed space open to the sky.

Open Web Steel Joists are open web, load-carrying, shop-fabricated, truss type secondary structural steel members.

Ordinary Construction is that construction, other than heavy timber construction, in which the structural elements of the interior framing are entirely or in part of wood or other elements not more combustible than wood, and the exterior structural elements are composed of masonry or other incombustible materials.

Ordinary Materials are materials meeting the requirements of this ordinance for minimum strength, durability, and fire resistance for materials, without special selection, testing, and supervision, as required for "Controlled Materials". Section 102-104.6.

Oriel Window is a window projected beyond and suspended from the wall of the building, or cantilevered therefrom.

Overhead Sewer: A plumbing system which incorporated a device or apparatus by which sewage, liquid waste or other water-borne waste is lifted by mechanical or other means for further discharge into the building sewer and conveyance to the receiving sewer system.

Overhead Structure is all of the structural members, platforms, etc., supporting elevator machinery, sheaves, and equipment at the top of a hoistway.

Oxidizing Material includes substances such as chlorates, permanganates, peroxides, or nitrates, that yield oxygen readily to stimulate combustion.

Panel is the section of a floor or wall contained between the supporting frame of two (2) adjacent rows of columns and girders or column bands of floor construction.

Parapet, Roof is that part of any wall entirely above the roofline, and designed primarily to deter the spread of fire from building to building.

Partition is a vertical separating construction between rooms or spaces; such partition, being not over one story in height.
Partition, Bearing is a partition used to support loads other than its own weight.
Passageway (Hallway, Grade) is an enclosed hallway, exit way, or corridor connecting an exit to a street or to an open space or court communicating with a street.
Patient Care Facility is a building designed or used for the temporary or permanent housing of persons who require medical, mental, physical, or emotional care and treatment.
Patio shall mean floor surfaces, unroofed and open to the sky, at grade level and may be adjacent to or separated from a principal building.
Penthouse is an enclosed structure on or above the roof of a building-other than a "roof structure" -used primarily for living or recreational accommodations. Penthouses occupying an aggregate area exceeding one-third (1/3) of the roof area shall be considered a story of the building and shall be subject to all applicable requirements of this ordinance.
Permit is an authorization by the Building Commissioner to proceed with construction, alteration, installation, or demolition.
Person includes any individual or group of individuals, corporation, partnership, trust, association, or any other organized group of persons, including governmental agencies.
Pier is an isolated column of masonry or concrete. A bearing wall not bonded at the sides into associated masonry shall be considered a pier when its horizontal dimension measured at right angles to the thickness does not exceed four (4) times its thickness.
Piping refers to the pipe or tube mains for interconnecting the various parts of a system.
Plastic shall include any of various nonmetallic compounds, synthetically produced (usually from organic compounds by polymerization), which can be molded into various forms at some point in their manufacture.
Plastic Theory and Design refers to design methods based upon the ultimate strength of a material and shape, where the working load is a fraction of the ultimate load.
Plenum Chamber is an enclosed air compartment for the purpose of retaining and distributing air under pressure.
Plumbing Code means the provisions adopted and referred to in Chapter 102 BUILDINGS AND BUILDING REGULATIONS, Sections 102-135 and 102-140. Whenever the words "Plumbing Code" are used, it shall mean those provisions, whether independently or collectively, as the context provides.
Plumbing Fixtures are installed receptacles, devices, or appliances which are supplied with water or which receive or discharge liquids or liquid-borne wastes, with or without discharge into the drainage system with which they may be directly or indirectly connected.
Plumbing System includes the water-supply and distribution pipes; plumbing fixtures and traps; soil, waste, and vent pipes; building drains and building sewers including their respective connections, devices, and appurtenances within the property lines of the premises, and water-treating or water-using equipment
Poisonous Gas shall include any noxious gas of such nature that a small amount of the gas when mixed with air is dangerous to life. Examples are chloropicrin, cyanogen, hydrogen cyanide, nitrogen peroxide, and phosgene.
Position Indicator is a device that indicates the position of an elevator car in the hoistway. It is called a hall position indicator when placed at a landing, or a car position indicator when placed in the car.
Positive Displacement Compressor is a compressor in which increase in vapor pressure is attained by changing the internal volume of the compression chamber.
Potable Water is water which is satisfactory for drinking, culinary, and domestic purposes, and meets the requirements of the Cook County Health Department.
Potentially Explosive Chemical shall include any chemical substance, other than one classified as an explosive or blasting agent, which has a tendency to be unstable and which can be exploded by heat or shock or a combination thereof.
Pre-Action System is a sprinkler system employing automatic sprinklers attached to a piping system containing air that may or may not be under pressure, with a supplemental heat responsive (thermostatic)

system of more sensitive characteristics than the automatic sprinklers themselves, installed in the same areas as the sprinklers; actuation of the heat responsive system, as from a lire, opens a valve which permits water to flow into the sprinkler piping system and to be discharged from any sprinkler which is open.

Pre-Signal Alarm is an alarm signal sounded on the pre-signal alarm sounding devices only.

Prefabricated means fabricated prior to erection or installation in a building or structure.

Prefabricated or Factory-Assembled Building is a completely assembled and erected building or structure, including the service equipment, of which the structural parts consist of prefabricated individual units or subassemblies using ordinary or controlled materials; and in which the service equipment may be of either prefabricated or at-site construction.

Pressure Imposing Element (Refrigeration) is any device or portion of the refrigerating equipment used for the purpose of increasing the refrigerant vapor pressure.

Pressure Limiting Device (Refrigeration) is a pressure-responsive mechanism designed to automatically stop the operation of the pressure-imposing element at a predetermined pressure.

Pressure Relief Device (Refrigeration) is a pressure-actuated valve or rupture member designed to automatically relieve excessive pressure.

Pressure Relief Valve (Refrigeration) is a pressure-actuated valve held closed by a spring or other means, and designed to automatically relieve pressure in excess of its setting.

Pressure Tank is a container holding water to supply a sprinkler system at a pressure greater than that due to gravity.

Pressure Vessel is a refrigerant-containing receptacle of a refrigerating system, other than expansion coils, headers, and pipe connections.

Primary Structural Member is any member of the structural frame of a building used as a column, grillage beam, girder, beam framing between columns, beam used to support masonry walls, truss, isolated lintel spanning eight (8) feet or more, and any member required to brace a column or truss.

Private or Private Use in the classification of plumbing fixtures, applies to fixtures in residences and apartments and to fixtures in private bathrooms of hotels and similar installations where the fixtures are intended for the use of a family or an individual.

Private Sewer is a sewer privately owned and not directly controlled by public authority.

Projection Block is that portion of a theater or assembly room containing a projection room alone or in combination with other rooms incidental to its operation.

Property Room is a room used for the storage of any accessory materials used in conjunction with a theatrical or similar performance, except scenery, commonly known and described as stage properties.

Proscenium is the vertical plane of separation between an auditorium and a stage.

Public or Public Use in the classification of plumbing fixtures, applies to fixtures in general toilet rooms of schools, gymnasiums, hotels, railroad stations, public buildings, bars, public comfort stations, and other installations (whether pay or free) where a number of fixtures are installed so that their use is similarly unrestricted.

Public Sewer is a central sewer directly controlled by public authority.

Public Way is any sidewalk, street, alley, highway, or other thoroughfare.

Pyroxylin (Cellulose Nitrate Plastic) shall mean any plastic substance, material, or compound, other than cellulose nitrate film or explosives having cellulose nitrate as a base, by whatever name known, when in the form of blocks, slabs, sheets, tubes, or fabricated shapes.

Pyroxylin Plastic Factory is any building or portion of a building where articles are manufactured in whole or part from pyroxylin plastics in quantities above 25 pounds.

Pyroxylin Plastic Storage Building is any building, not a pyroxylin factory as defined above, which is used to store pyroxylin plastics, whether alone or as parts of other objects, in quantities above 25 pounds.

Radioactive Material shall include any material or combination of material that spontaneously emits radiation.

Railing is a member at the edge of a drop-off, serving the purpose of preventing people from falling over the edge.

Ramp is an inclined passageway connecting two (2) levels.
Receiver (Refrigeration) is a vessel permanently connected to a system by inlet and outlet pipes for storage of a liquid refrigerant.
Refrigerant is a substance which produces a refrigerating effect by its absorption of heat while expanding or vaporizing.
Refrigerating System is a combination of interconnected refrigerant-containing parts constituting one closed refrigerant circuit in which a refrigerant is circulated for the purpose of extracting heat.
Refrigeration is the process of removing heat from a substance or an enclosed space of a building or structure.
Refrigerating System, Commercial is a refrigerating system assembled or installed in building used for business or commercial purposes.
Reinforced Brick Masonry is brick masonry in which steel reinforcing bars are embedded in such a manner that the two (2) materials act together in resisting forces.
Reinforced Concrete is concrete in which reinforcement other than that provided for shrinkage or temperature changes is combined in such manner that the two (2) materials act together in resisting forces.
Relief Vent (Plumbing) is a vent the primary function of which is to provide circulation of air between drainage and vent systems.
Remote System (Refrigeration) is a refrigerating system in which the compressor or generator is located in a space other than the cabinet, fixture, or space containing the evaporator.
Repair is the replacement or renewal, excluding additions or alterations, of any part of a building, structure, device, or equipment with like or similar materials or parts, for the purpose of maintenance of such building, structure, device, or equipment.
Residential-Custodial Care Facility A building, or part thereof, used for the lodging or boarding of 4 or more persons who are incapable of self-preservation because of age or physical or mental limitation. This includes facilities such as homes for the aged, nurseries (custodial care for children under 6 years of age) and mentally retarded care institutions. Day care facilities that do not provide lodging or boarding for institutional occupants are not to be included under this section of the ordinance.
Residential Restrained Care Institutions A building, or part thereof, used to house occupants under some degree of restraint or security.
Return Offset (Plumbing) is a double offset installed so as to return the pipe to its original alignment.
Revent Pipe (Plumbing) (sometimes called an individual vent) is that part of a vent pipe line which connects directly with an individual waste or group of wastes, underneath or back of the fixture, and extends either to the main or branch vent pipe.
Rigid Frames are continuous structural frames of buildings or structures in which the beam-to-column connections are assumed to have sufficient rigidity to hold the angles between intersecting members virtually unchanged.
Riser (Plumbing) is a water supply pipe which extends vertically one full story or more to convey water to branches or fixtures.
Riser (Stair) is the vertical surface of a step between two (2) successive treads or between a tread and a landing or floor.
Risk Premium Rate Zones Flood hazard areas designated according to the degrees of flooding they would experience during the base flood. The symbols used to designate these zones are as follows:

Zone Sym.	Description
"A"	Areas of 100 year flood; base flood elevation and flood hazard factors are not determined.
"AO"	Areas of 100 year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundations are shown, but no flood hazard factors are determined.
"AH"	Areas of 100 year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
"A1-A30"	Areas of 100 year flood; base flood elevations and flood hazard factors determined.

"B" Areas between limits of the 100 year flood and 500 year flood; or certain areas subject to 100 year flooding with average depths less than (1) foot or where the contributing drainage areas is less than one square mile; or areas protected by levees from the base flood (medium shading).

"C" Areas of minimal flood (no shading).

Riverine Relating to, formed by, or resembling a river (including tributaries), stream, creek or brook.

Roof is the roof slab or deck with its supporting members, not including vertical supports.

Roof Covering is the covering applied to the roof for weather resistance or fire resistance.

Roof Drain is a drain installed to receive water collecting on the surface of a roof and to discharge it into the leader (downspout).

Roof Structure is a structure erected above the roof for supporting or enclosing a stairway or equipment used in the operation of a building, such as tanks, fans, or elevator machinery, but containing no habitable space for living or recreational accommodations.

Roughing-In (Plumbing) is the installation of all parts of the plumbing system which can be completed prior to the installation of fixtures. This includes drainage, water supply, and vent piping, and the necessary fixture supports.

Row of Seats is a group of adjoining seats arranged side by side.

Rubble is any one of the following:

a. Coursed Rubble. Masonry composed of roughly shaped stones fitting approximately on level beds, well bonded, and brought at vertical intervals to continuous level beds or courses.

b. Random Rubble. Masonry composed of roughly shaped stones, well bonded, and brought at irregular vertical intervals to discontinuous but approximately level beds or courses.

c. Rough or Ordinary Rubble. Masonry composed of nonshaped or field stones laid without regularity of coursing, but well bonded.

Runway is any aisle or walkway constructed and maintained as a temporary passageway for pedestrians or vehicles during construction, demolition, or alteration of a building.

Rupture Member, in a refrigeration system, is a pressure relief device having a diaphragm of member which will rupture or blow out at a predetermined pressure.

Safety Clearance is a space open to the sky, continuous on all sides of a building or structure, between such building and any other building, or property line, or the near side of every adjoining and adjacent public way or public park, or the right-of-way line of any railway, or the shore line of any navigable stream or river. Where two (2) or more of the above apply, the condition providing the larger safety clearance shall be meant.

Sanitary Sewer is a pipe which carries sewage and excludes storm, surface, and ground water.

Scaffold is any temporary elevated platform which is used for supporting workmen, materials, or both.

Sealed Absorption System (Refrigeration) is a system in which all refrigerant-containing parts are made permanently tight by welding or brazing against refrigerant loss.

Sealed Unit (Refrigeration) is a pressure imposing element which operates without stuffing box, or which does not depend upon contact between moving and stationary surfaces for refrigerant retention.

Secondary Structural Member is any member of the structural framework other than a primary member (see Primary Structural Member) including joists, and fill-in beams framed into other beams or girders.

Sediment is solid material both mineral and organic that is in suspension, is being transported, or has been moved from its site of origin by air, water, gravity or ice and has come to rest on the earth's surface.

Self-Closing Door is one which closes upon release by the person passing through. A self-closing door may be an automatic-closing door also, and an automatic-closing door may be self-closing.

Self-Closing Fire Assembly is a fire assembly which is kept in a normally closed position and is equipped with an approved device to insure closing and latching after having been opened for use.

Self-Closing Fire Door is one which is kept normally in the closed position and which if opened is returned to the closed position by a spring or weight or other closing device.

Self-Contained System is a refrigerating system the components of which including the piping or tubing connecting the components, the motive force therefore, and the necessary controls, are enclosed in a

single enclosure of one or more compartments.
Septic Tank is a watertight receptacle which receives the discharge of a drainage system or part thereof, and is designed and constructed so as to separate solids from the liquids, digest organic matter through a period of detention, and allow the liquids to discharge into the soil outside of the tank through a system of open-joint or perforated piping, or disposal pit.
Sewage is any liquid waste containing animal or vegetable matter in suspension or solution, and may include liquids containing chemicals in solution.
Shaft is a vertical opening or enclosed space extending through two (2) or more floors of a building, or through a floor and a roof.
Shell Type Apparatus (Refrigeration) is a refrigerant-containing vessel having tubes for the passage of a heating, cooling, or refrigerating fluid.
Siamese Connection is an inlet fitting installed on the outside of a building and connected to the system main of a sprinkler system or to the standpipe main of an inside standpipe system for the use of the fire department only, to supply water to the system.
Side Vent (Plumbing) is a vent connecting to the drain pipe through a fitting at an angle not greater than 45 degrees to the vertical.
Sign is a name, identification, description, direction, display, or illustration which is affixed to, or represented directly or indirectly upon, a building, structure, or piece of land; and which directs attention to an object, project, place, activity, person, institution, organization, or business.
Sign, Directional, is a sign that indicates the direction or location of an exit stairway or fire escape.
Sign, Exit is a sign which is located over, or immediately adjoining a means of egress from a building or structure.
Sign Facing is the opaque or transparent surface or surfaces of the sign upon, against or through which the message of the sign is exhibited.
Sign, Ground is a sign supported by uprights or braces upon the ground.
Sign, Outdoor shall include all fabricated signs and their supporting structures erected on the ground or attached to or supported by a building or structure.
Sign, Projecting is a sign which is attached to a wall of a building and projects therefrom.
Sign, Roof is a sign erected on the roof of a building.
Sign Structural Trim Of shall consist of the molding battens, cappings, nailing strips, latticing, and platforms which are attached to a sign structure.
Sign Structure consists of the supports, uprights, bracing, and framework of the sign.
Sign, Wall is a sign which is affixed flat to, or painted on, a wall of a building. However, incidental lighting reflectors may project from such wall a distance not exceeding eight (8) feet, within the meaning of this definition.
Signal System, Elevator Separate is one consisting of buttons or other devices located at the landings, which, when actuated by a waiting passenger, illuminate a flash signal or operate an annunciator in the car indicating floors at which stops are to be made.
a. Signal Device, Elevator Car Flash. One providing a signal light in the car, which is illuminated when the car approaches the landings at which a landing signal registering device has been actuated.
b. Signal Registering Device, Elevator Landing. A button or other device, located at the elevator landing, which when actuated by a waiting passenger, causes a stop signal to be registered in the car.
c. Signal Transfer Device, Elevation Automatic. A device by mean of which a signal registered in a car is automatically transferred to the next car following, in case the first car passes a floor for which a signal has been registered without making a stop.
d. Signal Transfer Switch, Elevator. A manually operated switch, located in the car, by means of which the operator can transfer a signal to the next car approaching in the same direction, when he desires to pass a floor at which a signal has been registered in the car.
Site is a lot or parcel of land, or a contiguous combination thereof, where construction work is or is to be performed.
Skylight is a single light-admitting section of a roof.

Sleeping Accommodations means a room, space, or portion thereof, used primarily for sleeping purposes.
Slidescape is a straight or spiral chute erected on the interior or exterior of a building, and which is designed as a means of human egress to the street or other open space.
Smoke Detector is a device which will detect the presence of smoke and which will automatically actuate an alarm or other device.
Smokepipe is a primarily horizontal pipe or breeching used to convey the products of combustion from a heating appliance to a flue.
Smokeproof Tower is an enclosed stairway with access from the floor area of the building either through outside balconies, landings, or ventilated fire-resistive vestibules, opening on a street or yard or open court, and with a direct exit or exit passageway to the street at the grade level.
Smokestack is a primarily vertical enclosed passage, used for the removal of the products of combustion.
Soil Erosion is the detachment and movement of soil from the land's surface by wind or water.
Soil Pipe is any pipe which conveys the discharge of water closets or fixtures having similar functions, with or without the discharge from other fixtures, to the building drain or building sewer.
Soldered Joint is a gas-tight joint obtained by the joining of metal parts with metallic mixtures or alloys which melt at temperatures below 1000°F. and above 400°F.
Solid Masonry is masonry consisting wholly of solid masonry units laid contiguously in mortar, or plain concrete.
Solid Masonry Unit is a masonry unit whose net cross-sectional area in every plane parallel to the bearing surface is 75 percent or more of its gross cross-sectional area, measured in the same plane.
Special Industrial Explosive Device is any explosive power-pack containing an explosive charge in the form of a cartridge or construction device. The term includes but is not limited to, explosive rivets, explosive bolts, explosive charges for driving pins or studs, cartridges for explosive-actuated power tools, and charges of explosive used in jet tappings of open hearth furnaces and jet perforation of oil well casings.
Special Industrial High Explosive Material shall include sheets, extrusions, pellets, and packages of high explosives, containing dynamite, trinitrotoluol, pentaerythritrolte-tranitrate, cyclotrimethhylene-trinitramine, or other similar compounds used for high energy-rate forming, expanding, and shaping in metal fabrication, and for dismemberment and quick reduction of scrap metal.
Spectator Area (Drive-In Theater) shall mean that area of an open air drive-in theater where automobiles are parked so that spectators within them may view the screen.
Spray Booth is a power-ventilated structure provided to accommodate a spraying operation, designed to confine and limit the escape of spray, vapor, and residue and to safely conduct or direct them to an exhaust system.
Sprinkler Alarm is a local alarm unit installed so that any flow of water from a sprinkler system will result in an audible alarm signal on the premises.
Stack (Plumbing) is the vertical main of a system of soil, waste, or vent piping.
Stack Group (Plumbing) is a term applied to the location of fixtures in relation to the stack so that by means of proper fittings, vents may be reduced to a minimum.
Stack Vent (Plumbing) (sometimes called a waste vent or soil vent) is the extension of a soil or waste stack above the highest horizontal drain connected to the stack.
Stack Venting (Plumbing) is a method of venting a fixture or fixtures through the soil or waste stack.
Stage is the space in a theater or assembly room separated from the auditorium, equipped for theatrical or similar performances that provide for the use of curtains, portable or fixed scenery, lights, or mechanical appliances.
Stage Block is that portion of a theater or assembly room containing only the stage or the stage in combination with dressing rooms, storage and property rooms, workshops, and other rooms incidental to its operation.
Stage Workshop is any shop or room in which carpentry, electrical work, painting, or any other work incidental to the preparation, operation or maintenance of any stage is done.

Stairway consists of one or more flights of stairs with connecting landings, forming a continuous and uninterrupted passage from one floor to another.
Stairway, Enclosed is a stairway separated from the rest of the building by fire resistive walls or partitions.
Stairway, Exterior is a stairway on the outside of a building or structure.
Stairway, Interior is a stairway within a building or structure.
Standard Fire Test is the test method and conditions of acceptance of the Standard Methods of Fire Tests of Building Construction and Materials, ASTM E119.
Standpipe System is an arrangement of piping installed in a building, with outlets located in such a manner that water can be discharged in streams through hose attached to such hose outlets for the purpose of extinguishing a fire and so protecting the building and its contents; pumps, tanks, and other equipment necessary to provide an adequate supply of water to the hose outlets shall be provided.
Standpipe, Dry is a system in which a portion of the piping nearest the hose outlets normally is kept filled with air and so arranged that the operation of an outlet will automatically admit water to the system.
Standpipe Main is the pipe which conveys the water from the fire pump to the standpipe risers.
Standpipe, Wet is a system in which the pipes are kept filled with water.
Stop Valve is a shut-off valve for controlling the flow of refrigerant.
Storm Drain See Building Storm Drain.
Storm Sewer is a sewer used for conveying rain water, surface water condensate cooling water, or similar liquid wastes.
Story is the space between any two (2) floors or between the topmost floor and the ceiling. For the purposes of this ordinance, a basement shall not be considered a story.
Stream is any natural, artificial, or channelized water course that transports continuous or periodic flowing water.
Street is a public or private right-of-way which affords a primary means of access to abutting property, but does not include driveways to buildings.
Street Floor includes any story or floor level accessible from the street, or from outside the building at grade, with the floor level at main entrance not more than four (4) feet above nor more than one foot below street or grade level at these points, and so arranged and utilized as to qualify as the main floor. Where due to differences in street levels there are two (2) or more stories accessible from the street, each is a street floor for the purpose of determining exit requirements. Where there is no floor level within the specified limits for a street floor above or below grade, the building has no street floor.
Stressed-Grade (Lumber) is a lumber grade defined in such terms that a definite working stress may be assigned to it.
Structural Alteration is any change, other than incidental repairs, which would prolong the life of the supporting members of a building. The addition, removal or alteration of bearing walls, columns, beams, girders, or foundations would constitute structural alteration.
Structural Clay Tile is a hollow masonry unit composed of burned clay, shale, fire clay, or mixtures thereof, and may be load-bearing (designed to carry super-imposed loads), or non -load-bearing.
Structural Glued Laminated Lumber shall mean any member comprising an assembly of laminations of lumber in which the grain of all laminations is approximately parallel longitudinally, and in which the laminations are bonded with adhesives.
Structural Steel Members are primary or secondary members of rolled steel structural shapes other than light gage steel or steel joist members.
Structure is an assembly of materials forming a construction for occupancy or use, including among others; buildings, stadia, reviewing stands, platforms, antenna towers, observation towers, radio towers, and other communication towers, windmills, open sheds, shelters, coal silos, gas or liquid storage tanks, display signs, piers, fences and trestles.
Subsoil Drain is a drain which receives only subsurface or seepage water and conveys it to a place of disposal.
Substantial Improvement For the purposes of this definition "substantial improvement" is considered to

occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimension of the structure.

Sump is a tank or pit which receives sewage or liquid waste, located below the normal grade of the gravity system, and which must be emptied by mechanical means.

Surface Water Elevation is the normal water level elevation of a lake, stream, or stream bed as depicted on maps as described under the definition of "flood base elevation".

Swimming Pool, Private, shall be defined to include pools and auxiliary structures and equipment at private residences intended only for the use of the owner or friends.

Swimming Pool, Public, shall mean an artificial basin of water which has been modified, improved, constructed or installed primarily for the purpose of public swimming, and auxiliary structures including dressing and locker rooms, toilets, showers and other areas and enclosures that are intended for the use of persons using the pool. Public swimming pools shall include: pools for community use, pools at apartments, condominiums, and other groups or associations having five or more living units, clubs, churches, camps, schools, institutions, Y.M.C.A.'s, Y.W.C.A.'s, parks, recreational areas, motels, hotels and other commercial establishments.

Tank Heater is a device for heating the water in a gravity tank or pressure tank to prevent the water from freezing.

Tent is any portable structure or enclosure, the roof of which and/or one half or more of the sides of which are constructed of fabric, or a similar light pliable material.

Terminal Grain Elevator is any grain elevator with a capacity of 125,000 bushels or more, or any gram elevator where grain is received by rail and/or water.

Terminal Stopping Device, Elevator Emergency is a device which automatically causes the power to be removed from an electric elevator driving-machine motor and brake, or from a hydraulic elevator machine, at a predetermined distance from the terminal landing, and independently of the functioning of the operating device and the normal-terminal stopping device, if the normal-terminal stopping device does not slow down the car as intended.

Terminal Stopping Device, Elevator or Dumbwaiter, Final is a device which automatically causes the power to be removed from an electric elevator or dumbwaiter driving machine motor and brake, or from a hydraulic elevator or dumbwaiter machine, independent of the functioning of the normal-terminal stopping device, the operating device, or any emergency terminal stopping device, after the car has passed a terminal landing.

Terminal Stopping Device, Elevator Machine Final (Stop-Motion Switch) is a final terminal stopping device operated directly by the driving machine.

Terminal Stopping Device, Elevator or Dumbwaiter Normal is a device or devices to slow down and stop an elevator or dumbwaiter car automatically at or near a terminal landing independently of the functioning of the operating device.

Test Blasting Cap is a cap containing two (2) grams of a mixture of 80 percent mercury fulminate and 20 percent potassium chlorate, or a cap of equivalent strength.

Theater is an Assembly Building designed or used primarily for theatrical or motion picture performances and containing a stage or a projection block.

Thermoplastic Material is a solid plastic material which is capable of being repeatedly softened by increase of temperature and hardened by decrease of temperature.

Thermosetting Material is a solid plastic material which is capable of being changed into a substantially infusible and insoluble product when cured under the application of heat.

Tower is a building or structure high in proportion to its lateral dimensions either isolated or forming part of any building.

Trap (Plumbing) is a fitting or device so designed and constructed as to provide, when properly vented, a liquid seal which will prevent the back passage of air without materially affecting the flow of sewage or waste water through it.

Trap Seal (Plumbing) is the maximum vertical depth of liquid that a trap will retain, measured between the crown weir and the top of the dip of the trap.

Travel Distance is the distance from a point on a floor of a building or structure to a vertical exit, a horizontal exit, or an outside exit, measured along the line of travel, except that in one-story Low or Moderate Hazard Industrial and Storage Building travel distance may be considered as the distance from any point to an aisle, passageway, or other exit connection.
Treads are the horizontal surfaces in a flight of steps.
Trouble Signal is a signal indicating trouble of any nature, such as a circuit break or ground, occurring in devices or wiring.
Unfired Pressure Vessel is a closed container having an inside diameter larger than six (6) inches, designed for a pressure in excess of 15 psig., other than pressure from the water mains, and constructed in accordance with the American Society of Mechanical Engineers Code (Section VIII) for Unfired Pressure Vessels and so stamped or tagged in accordance therewith.
Unit System is a refrigerating system which can be removed from the users premises without disconnecting any refrigerant-containing parts, water connections, or fixed electrical connections.
Vacuum Breaker See Backflow Preventer.
Variance means grant of relief from the requirements of this ordinance which permits construction in a manner that would otherwise be prohibited by this ordinance.
Vent Duck is a tube, pipe, conduit, or continuous enclosed passageway used for the conveying of air, gases, vapors, or entrained particles.
Ventilating Opening is an aperture opening upon a public way, yard, court, public park, public waterway, or onto the roof of the building or structure in which the opening is situated. It shall be a window, skylight, or other opening which is provided for ventilating purposes and which is equipped with adjustable louvers, dampers, or other devices to deflect or diffuse the air currents.
Ventilation is the process of supplying or removing air by natural or mechanical means to or from any space in a building.
Ventilation, Mechanical is a process of supplying or removing air, by mechanical means, to or from any space in a building.
Ventilation, Natural is a process of supplying or removing air through windows, transoms, or other openings in the exterior of a building by non-mechanical means.
Ventilation Opening Area is the free open area of a ventilation device (window louver, etc.) in its most open position.
Vent Opening is the net free area of an opening used to vent a structural space for heat or explosion.
Vent Pipe is an enclosed passageway used for the removal of the products of combustion from a gas-fired appliance.
Vent Stack (Plumbing) is a vertical vent pipe installed primarily for the purpose of providing circulation of air to and from any part of the drainage system.
Vent System (Plumbing) is a pipe or pipes installed to provide a flow of air to or from a drainage system or to provide a circulation of air within such system to protect trap seals from siphonage and back pressure.
Vertical Openings are openings through floors, such as for stairways, elevators, or conveyors, or for purposes of light and ventilation.
Vertical Pipe is any pipe or fitting which is installed in a vertical position or which makes an angle of not more than 45 degrees with the vertical.
Walkway, Moving is a level or inclined conveyor belt-like system designed for the transporting of persons.
Wall, Apron is that portion of a skeleton or panel wall below the sill of a window.
Wall, Bearing is a wall which supports any vertical load in addition to its own weight.
Wall, Cavity is a wall built of masonry units or of plain concrete, or a combination of these materials, arranged to provide an air space within the wall, and in which the inner and outer parts of the wall are tied together with metal ties.
Wall Composite is a wall built of a combination of two (2) or more masonry units of different materials bonded together one forming the back-up and the other the facing elements.

Wall, Curtain is a non-bearing enclosure wall.
Wall, Faced is a wall in which the masonry facing and backing are of different materials and are so bonded as to exert a common reaction under the load.
Wall, Fire is a wall which subdivides a building into limited fire areas or which separates two (2) or more buildings to restrict the spread of fire and which extends continuously through all stories to a level above the roof.
Wall, Fire Separation is a wall used to divide the floor area of a building or structure into separate parts for fire protection, for different uses, for restricted occupancy, or other purposes specified in this ordinance.
Wall, Hollow is a wall built of masonry units so arranged as to provide an air space within the wall between the inner and outer parts of a wall.
Wall, Hollow Unit is a wall composed entirely of hollow masonry units.
Wall Hydrant is a multiple outlet fitting installed on the outside of a building and connected to the standpipe main of an inside standpipe system, for the use of the fire department only, to obtain an additional supply of water from the fire pump in the building.
Wall, Non-bearing is a wall which supports no vertical load other than its own weight.
Wall, Parapet is a low wall primarily designed for protection of roofs from exposure fires.
Wall, Party is a wall on an interior lot line used or adapted for joint service between two (2) buildings.
Wall, Retaining is a wall designed to support adjacent earth or soil.
Wall, Skeleton or Panel is a non-bearing wall supported at each story.
Wall, Spandrel is that portion of a wall above the top of a window in one story and below the sill of the window in the story above.
Wall, Veneered is a wall having a facing of masonry or other material securely attached to the backing, but not so bonded as to exert a common reaction under load.
Waste Pipe is a pipe which conveys only liquid waste, free of fecal matter.
Watercourse A river, stream, creek, brook, branch or other drainage way in or into which storm water runoff and floodwaters flow either regularly or intermittently.
Water Curtain is a system of approved open or closed sprinkler heads or perforated pipes installed on the exterior of a building at eaves, cornices, window openings, and on mansard or peak roofs, with water supply under manual control; or installed around openings in floors or walls of a building with water supply under thermostatic control. Such water curtain is designed to prevent the spread of fire through unenclosed interior and exterior openings.
Water Distributing Pipe in a building or premises is a pipe which conveys water from the water service pipe to the plumbing fixtures and other water outlets.
Water Main is a water-supply for public or community use.
Water Outlet, as used in connection with the water distributing system, is the discharge opening for the water (1) to a fixture; (2) to atmospheric pressure except into an open tank which is part of the water-supply system); (3) to a boiler or heating system; (4) to any water-operated device or equipment requiring water to operate, but not a part of the plumbing system.
Water Service Pipe is the pipe from the water main or other source of water supply to the building served.
Water Supply System of a building or premises consists of the water service pipe, the water distributing pipes, and the necessary connecting pipes, fittings, control valves, and all appurtenances in or adjacent to the building or premises.
Water Supply Piping Sprinkler System refers to the piping from the source of supply to the sprinkler heads. The different sections of piping are:
a. Branch line. A horizontal pipe which conveys the water from a branch main to the sprinkler heads.
b. Branch main. A horizontal pipe which conveys the water from a system main or riser to the branch lines.
c. Standpipe risers or standpipe. A vertical pipe which extends upward through a building and conveys the water from the standpipe main to the hose outlets.

Welded Joint is a gas-tight joint obtained by the joining of metal parts in the plastics or molten state.
Wet Vent (Plumbing) is a vent which receives the discharge from wastes other than water closets.
Window, Fire is a window and its assembly, so constructed and assembled in place as to give specified protection against the passage of fire.
Window Glass Area shall mean the nominal area of the window disregarding muntins, but not check rails or frame.
Wood Frame Construction is construction in which the structural members are composed of wood (or other combustible materials), having dimensions less than those required for heavy timber construction.
Wythe, Chimney is a partition between two (2) chimney flues in the same stack or chimney.
Wythe, Masonry, is each continuous vertical section of a wall one masonry unit in thickness.
Yard is an open space, on the same zoning lot with a building or structure unoccupied and unobstructed from its lowest level to the sky, except as may otherwise be permitted in the Cook County Zoning Ordinance. A "yard" extends along a lot line, and to a depth or width specified in the yard requirements of the Cook County Zoning Ordinance.
Yoke Vent (Plumbing) is a pipe connecting upward from a soil or waste stack to a vent stack for the purpose of preventing pressure changes in the stacks.
Zoning Ordinance is the Cook County Zoning Ordinance, as amended.

Section 102-104. GENERAL PROVISIONS.

102-104.1-1 In their interpretation and application, the provisions of this ordinance shall be held to be the minimum requirements for the promotion of the public health, safety, and welfare.
102-104.1-2 Where the conditions imposed by any provision of this ordinance upon the construction, alteration, or maintenance of building or structures are either more restrictive or less restrictive than comparable conditions imposed by any other provision of this ordinance or of any other applicable law, ordinance, resolution, rule or regulation, the regulations which are more restrictive (or which impose higher standards or requirements) shall govern.
102-104.1-3 This ordinance is not intended to abrogate any easement, covenant or any other private agreement provided that where the regulations of this ordinance are more restrictive (or impose higher standards or requirements) than such easement, covenant, or other private agreement, the requirements of this ordinance shall govern.
102-104.1-4 No building or structure which was not lawfully existing at the time of the adoption of this ordinance shall become or be made lawful solely by reason of the adoption of this ordinance; and to the extent that, and in any manner that, such building or structure is in conflict with the requirements of this ordinance, said building or structure remains unlawful hereunder.
102-104.1-5 Nothing contained in the Code shall be deemed to be a consent, license, or permit to locate, construct, or maintained any building, structure, or facility, or to carry on any trade, industry, occupation, or activity.
102-104.1-6 The provisions in the Code are accumulative and additional limitations upon all other all other laws and ordinances heretofore passed or which may be passed hereafter, covering any subject matter in the Code.
102-104.1-7 Wherever a publication or standard is specified or referred to in this ordinance, the edition implied shall be that listed in one of the appendices 102-130

102-104.2 SEVERABILITY

It is hereby declared to be the intention of the President and Board of Commissioners of Cook County that the several provisions of this ordinance be separable in accordance with the following:
102-104.2-1 If any court of competent jurisdiction, including an administrative proceeding, shall adjudge any provisions of this ordinance to be invalid, such judgment shall not affect any other provision of this ordinance not specifically included in said judgment.

102-104.2-2 1f any court of competent jurisdiction, including an administrative proceeding, shall adjudge invalid the application of any provision of this ordinance to a particular building or structure, such judgment shall not affect the application of said provision to any other building or structure not specifically included in said judgment.

102-104.3 SCOPE OF REGULATIONS

102-104.3-1 All buildings and structures erected, constructed, altered, demolished, or relocated within the boundaries of Cook County and located outside the limits of cities, villages, and incorporated towns shall be subject to all regulations of the Code pertaining to such buildings and structures. In addition, all camps or parks accommodating persons in mobile homes, manufactured homes, house trailers, house cars, cabins, or tents, within the boundaries of Cook County and located outside the limits of cities, villages, and incorporated towns shall be subject to the Code. Furthermore, all existing buildings and structures shall comply with the Code governing installation, alteration, addition, repair, and maintenance and all other requirements of the Code that are applicable specifically to existing buildings and structures.
102-104.3-2a. Buildings and structures used for agricultural purposes on farms, including farm residences, shall be exempt from the Code. The determination of farm exempt status shall be made solely by the Building Commissioner who may seek assistance from other persons and agencies, including but not limited to the Cook County Zoning Administrator, the Cook County Assessor, and such other federal, state, and local agencies, as well as any private agencies such as the Cook County Farm Bureau, that the Building Commissioner determines are helpful to his determination.
b. Retail sales of products grown or raised on the premises though one growing season shall only be allowed in a roadside stand (farmstand) as an accessory use. Members of the general public shall not be allowed in any building exempt from the Code, except a roadside stand (farmstand) used for retail sales, unless otherwise allowed by the Building Commissioner.
102-104.3-3 Where a building permit for a building or structure has been issued in accordance with law prior to the effective date of this ordinance, and provided that construction is begun within six (6) months of such effective date and diligently prosecuted to completion, said building or structure may be completed in accordance with the approved plans on the basis of which the building permit has been issued.

102-104.4 SAFEGUARDS DURING CONSTRUCTION AND DEMOLITION

The provisions of this section shall apply to all work in connection with the erection, alteration, repair, relocation, servicing, and demolition of buildings and structures. In addition, Part I of the Health and Safety Rules of the Illinois Department of Labor, issued under the provisions of the Health and Safety Act of 1936, where additional to the herein contained provisions, or more stringent, shall apply.
The American Standard Safety Code for Building Construction A10.2 shall be considered accepted engineering practice with respect to the provisions of this Section.

Scaffolds

102-104.4-1 a. Construction
All scaffolds shall be designed and constructed in accordance with accepted engineering practice to support the loads that may be imposed thereon, with a safety factor of at least four (4). In no case shall scaffolds be designed for a live load of less than 125 pounds per square foot.
b. Guard Rails and Toe boards
Every scaffold, the platform level of which is more than eight (8) feet above the ground or above a permanent or temporary floor, other than ironworkers' scaffolds; carpenters' bracket scaffolds; and scaffolding wholly within the interior of a building and covering the entire floor space of any room there in and not having any sides exposed to a hoistway, elevator shaft, or stairwell; shall be provided with guard rails not less than 36 inches above the platform level and with solid toe boards not less than six (6)

inches high, extending the entire length and along the ends, except where ramps or runways connect with them, unless otherwise enclosed or guarded. If material on the platform of exterior scaffolds is piled higher than the toe boards, the space between guardrails and toe boards shall be filled with wire mesh screens securely attached.

c. Overhead Protection.

Where there is danger of objects falling onto a scaffold from above substantial overhead protection shall be provided not more than 10 feet above the scaffold platform.

d. Planking

When planks are used for the platforms of scaffolds they shall be not less than two (2) inches thick nominal dimensions of sound seasoned lumber.

e. Scaffolding

Where the extent or location of scaffolding used is such as to create a fire hazard the Building Commissioner may require the use of incombustible material or of approved fire-retardant treated lumber that has been treated by a pressure impregnation process. The Building Commissioner may also require the use flame proofing of tarpaulins. However, scaffolding in connection with one story residential buildings shall be exempt from this regulation.

Sidewalk Sheds and Walkways

102-104.4-2 a. Sheds Required

Whenever a building or structure within 10 feet of a street line is to be erected to exceed 40 feet in height, or whenever such a building or structure more than 25 feet in height is to be demolished, unless the street is officially closed during the construction or demolition, the owner or the person doing or causing such work to be done shall erect and maintain during such work adjacent to the street lines, sheds of sufficient strength and stability, in accordance with accepted engineering practice, to sustain safety the weight of materials that maybe placed thereon, and to withstand the shocks incident to the handling of such materials or their preparation for use, and to the accidental jars from trucks delivering material.

b. Railings and Toe Boards

When the roofs of such sheds are used for the storage of material or for the performance of work of any kind, substantial railings not less than three (3) feet high and solid toe boards not less than six (6) inches high shall be placed along the open sides and end of such roofs.

c. Walkways

(1) Where deemed necessary by the Building Commissioner, sidewalk sheds shall be constructed to afford an unobstructed walkway for pedestrians not less than eight (8) feet high and four (4) feet wide.

(2) When the area occupied by the sidewalk or temporary walkway is to be excavated, such walk shall be designed to support a load of not less than 150 pounds per square foot and shall be provided with suitable ramps at each end. Such walkways shall be not less than four (4) feet wide and provided with a fence or a handrail of dressed lumber not less than three (3) feet high.

(3) Those sections of temporary sidewalks or walkways over which motor vehicles may pass shall be designed to support a load of not less than 250 pounds per square foot.

Temporary Fence, Barricade, and Construction Fencing

102-104.4-3a. Where the interior wall of a building is within eight (8) feet of a public sidewalk, or the Building Commissioner deems necessary due to the proximity of a building operation to a street line, during such building operation the owner or person doing or causing such work to be done, shall erect and maintain a fence not less than six (6) feet high. The fence shall extend along the sidewalk or street line for the entire length of the building and each end shall be turned and extended to the building line. Such fence may extend not more than eight (8) feet from the street line into the street and shall be built solid for its full length except for such openings, provided with gates, sliding doors, or doors swinging inward as may be necessary for a proper prosecution of the work.

b. If a permit authorizes demolition, construction, or substantial excavation, the permit holder shall cause a safety fence to be installed around the property, in a location and manner approved by the Building Commissioner. The construction fencing herein shall be the same height and construction type as provided in section 102-104.4-3a.
c. Fences required in this section shall be erected not more than seven (7) days nor less than four (4) days before the commencement of any work, including site prep, grading work, and installation of utilities. The fencing shall remain in place until a Certificate of Compliance under section 102-105.3-3 has been issued for the structure, or the work has been otherwise completed to the satisfaction of the Building Commissioner.
d. "No Trespassing" signs shall be mounted on the fencing in conspicuous locations around the construction site.
e. Gates and doors must be closed at all times except to allow ingress and egress into the construction site. The gate or doors must be locked at all times not within the permitted hours of construction stated in section 102-104.5.
f. Fencing required by this section shall also be required for public construction projects that do not require a building permit.

Hoists--Materials Only

102-104.4-4 Temporary interior and exterior hoists shall be constructed, installed, and maintained in accordance with accepted engineering practice on matters not covered in this ordinance. Such temporary construction hoists shall not be used to haul passengers.
a. Interior Hoists
Temporary construction hoists on the interior of buildings or structures shall have the car substantially constructed, the guides rigidly secured, and overhead machinery safety supported. The floor openings or other spaces through which they operate shall be enclosed on all sides and for their full height, except for the necessary doors for loading and unloading, with barriers so constructed that loose material cannot fall through.
b. Exterior Hoists
Temporary construction hoists on the exterior of buildings or structures shall be erected on sufficiently solid foundations to avoid injurious settlement or distortion.
c. Hoisting Machinery
(1) Hoisting machinery, including boilers, if any, shall be placed to avoid unnecessary hazards and to provide ample room for free and safe movements of operation.
(2) Such machinery shall be enclosed to exclude unauthorized persons and, if placed outside the building, further protection against falling objects shall be provided.
(3)When such hoisting machinery is placed within a building or structure, or within 10 feet of any part thereof, only incombustible materials shall be used for the exterior covering of the enclosures.
(4) If hoisting machinery is operated by steam with boiler on or adjacent to premises, suitable spark guards shall be provided for the smokestack.

Temporary Use Elevators

102-104.4-5 a. An elevator being installed for permanent use, or a temporary use elevator, may be used during construction of the building for carrying workmen or other authorized persons when it is specifically approved for such use by the Building Commissioner. To be approved for use such elevator and its hoistway shall be provided with the following equipment:
(1) An approved type governor and car safety;
(2) A car with solid top and sides, except at car openings;
(3) A suitable hoist way enclosure for the full height of the shaft;
(4) Approved-type gates at least six (6) feet high at all hoist way openings;

(5) An approved locking device on the hoistway door or gate, operable only from the hoistway side of the enclosure; and
(6) Car safety and terminal stopping devices which have been tested with rated load in the car, in the presence of an Inspector from the Building Department, to determine that they are in safe and proper operating condition.
b. Capacity of said elevator shall be governed by the maximum horizontal free area inside the car in accordance with the Code. Car speed shall not be over 250 feet per minute. Car and counter weight buffers, counter weights and weight frame, car sling, and platform may remain as part of the permanent installation.
c. A competent operator shall be in charge of such elevator.

Flooring

102-104.4-6 a. Temporary Working Floors
In buildings where construction of the super-structure precedes the construction of the permanent floor panels, a substantial temporary floor shall be constructed and maintained at a level not more than two (2) floors below the level at which erection work is being performed. This floor shall be planked over, except spaces required for construction work, for raising or lowering materials, and for stairways or ladders.
b. Permanent Floors
In buildings or structures the permanent structural floor, except for necessary temporary openings, shall be installed as the construction progresses. There shall be not more than four (4) unfilled floors above the highest permanent floor, nor more than one unfilled floor between permanent floors.

Floor Openings

102-104.4-7 All floor openings, unless guarded by permanent enclosures or full-height temporary barriers, shall be covered with substantial temporary flooring, or guarded on all sides by substantial railing not less than four (4) feet high set at least two (2) feet from the edges of the openings, and by toe boards not less than six (6) inches high set along the edges of the openings, except for such parts of the opening as are necessarily open for traffic purposes.

Roofs and Skylights of Adjoining Buildings

102-104.4-8 When a building or structure is to be carried above the roof of an adjoining building, protection for the skylights and roof of such adjoining building shall be provided, at his own expense, by the person constructing or causing the construction of such building or structure; provided that if the owner, lessee, or tenant of the adjoining building should refuse permission to have the roofs and skylights protected, the responsibility and expense for the necessary protection shall devolve on the person refusing such permission.

Stair Facilities

102-104.4-9 a. Temporary Stairs
When the construction of a building has progressed to a height exceeding 60 feet above grade or when a building exceeding 60 feet in height is undergoing alterations, unless one or more permanent stairways have been installed, at least one temporary stairway shall be provided, continued in height as rapidly as the work progresses to the highest floor that has been installed, and maintained in serviceable condition until a permanent stairway has been completed.
b. Ladders
Until either permanent or temporary stairways are installed, suitable substantial ladders securely fastened at top and bottom, shall be provided and maintained to provide means of reaching the various levels.

Fire Protection

102-104.4-10 a. Reinforced Concrete Construction
In every building of reinforced concrete construction, forms of combustible material shall be stripped from the concrete and removed from the building as soon as practicable.
b. Standpipes
In all buildings in which stand pipes are required, such stand pipes shall be installed as the construction progresses, in such a manner that they are always ready for fire department use to the topmost floor that has been installed. Such stand pipes shall be provided with a fire department connection on the outside of the building at the street level, and with one outlet at each floor. All outlets, connections, and fittings shall be designed to fit standard fire department equipment.
c. Fire Extinguishers
(1) In every building operation, wherever a tool house, storeroom, or other shanty is placed, or a room or space is used for storage, dressing room, or workshop, at least one approved hand pump tank or portable chemical extinguisher of non-freezing type or protected against freezing shall be provided and maintained in an accessible location.
(2) When a water supply of not less than 100 gallons per minute at 25 pounds nozzle pressure, ready for use at all times, is installed as the building operation progresses, a small hose, at least 50 feet in length, with a one-half (112) inch nozzle, may be substituted for each such fire extinguisher.
d. Access to Fire Extinguishing Equipment
During building operations, free access from the street to fire hydrants and to outside connections for stand pipes, sprinklers, or other fire extinguishing equipment, whether permanent or temporary, shall be provided and maintained at all times. No material or construction equipment shall be placed within 10 feet to such hydrant or connection, nor between it and the center line of the street.

Heating

102-104.4-11 a. Permanent Heat
The permanent heating equipment shall be installed and put in operation as soon as practicable.
b. Temporary Heat
(1) When salamanders or other temporary heating devices are used, if a temporary heating plant is impracticable and until a permanent heating plant is installed, they shall not be set on combustible flooring or platforms unless thoroughly insulated therefrom by a bed of sand or cold ashes not less than four (4) inches thick, or by other efficient protection, extending at least two (2) feet horizontally beyond such devices on all sides. The legs of such devices, which shall be at least 12 inches long, shall rest on the insulation and shall not extend through it.
(2) Such devices shall be so located that there is a clearance of not less than six (6) feet above nor less than two and one-half (2-1/2) feet on all sides, between such device and unprotected woodwork or combustible material, equipment, or construction. Nor shall such device be placed within 10 feet in any direction of tarpaulins or other covers, except assuch tarpaulins or covers are flame-proofed in an approved manner.
(3) Salamanders and similar heating devices shall be of a substantial type with protective screen covers, and shall be under constant supervision so long as they are in use.

Welding and Cutting

102-104.4-12 a. Protective Shield
When gas cutting is done within 25 feet of combustible material, or when any welding or cutting is done above combustible material or above a place where workers are employed or where persons are likely to pass, incombustible shields shall be interposed to protect such materials and persons against sparks and

hot metal or slag.
b. Welding Equipment.
Welding equipment, including but not limited to such items as regulators torches, and hoses, when not attached to cylinders ready for use, shall be stored in clean locations away from grease, oil, and excessive heat.
c. Cylinders for Oxygen and Fuel Gases
(1) Oxygen and fuel gas cylinders, unless secured on a special truck, shall not be moved unless the cylinder caps, if provided for in the cylinder design, are in place, nor shall cylinders be stored without the caps in place.
(2) Suitable cradles shall be used for lifting or lowering oxygen or fuel gas cylinders. Ordinary rope slings or electromagnets shall not be used.
(3) Cylinders shall be placed away from the welding position so that they will not be unduly heated by radiation from heated materials, by sparks or slag, or by misdirection of the torch flame. Cylinders shall be stored away from combustible materials and in locations where they are not liable to excessive rise in temperature, physical damage, or tampering.
(4) Closed spaces shall be ventilated properly while welding or cutting is being done therein.
d. Oxygen Equipment
Oxygen cylinders, valves, regulators, hoses, and other apparatus and fittings shall be kept free from oil or grease.
e. Acetylene
Under no circumstances shall acetylene gas be brought in contact with unalloyed copper, except in a blowpipe or torch.
f. Cutting Structural Members
Before steel beams or other structural shapes or elements of construction are severed by flame cutting or other means, they shall be secured by ropes or chains to prevent dropping or swinging.
g. Protective Equipment
Welders and cutters shall be protected from the rays of the arc or flame and from hot metal by proper protective clothing and by helmets, hand shields, or goggles equipped with suitable filter lenses.

Storage of Material

102-104.4-13 a. Within Building
Materials or equipment needed in a building operation, if stored within the building, shall be so placed that they will not load any part of the construction in excess of the design load, nor interfere with the safe prosecution of the work.
b. Outside Building
(1) Materials and equipment shall not be stored in a street, alley, sidewalk, or any other public space except by special permission of the Cook County Superintendent of Highways.
(2) In whatever manner building material may be stored or equipment set up in a street, a safe walkway not less than four (4) feet wide, unobstructed for its full length and adequately lighted at all times, shall be maintained for use of the public.
c. Covering Material
Materials stored within the building, or within 10 feet of the building, which require covering, shall be protected by incombustible material.

Disposal of Waste

102-104.4-14 Waste material and rubbish shall not be stored nor allowed to accumulate within the building or in the immediate vicinity, but shall be removed from the premises as rapidly as practicable. No material shall be disposed of by burning on the premises or in the immediate vicinity. Dry material or rubbish shall be wetted down, if necessary, to lay dust or prevent being blown about.

Warning Lights

102-104.4-15 All pits, excavations, fences, barriers, builder's equipment, building materials, or rubbish in or upon a street, alley, sidewalk, or any other public space, shall have placed upon or by them, illuminated lamps with red globes, flares, or other approved lights, in such manner that there shall be one light at each end, and at intermediate points as may be necessary to afford proper warning after darkness.

Lighting

102-104.4-16 All parts of buildings or structures under construction and all sheds, scaffolds, and other equipment in connection therewith, where work is being performed or persons must necessarily pass, shall be adequately lighted to insure safety.

Temporary Wiring

102-104.4-17 Transformers, wiring, equipment, and over-current protection shall be installed in accordance with the requirements of Section 102-150 (2014 Cook County Electrical Code).

Sanitation

102-104.4-18 Until permanent provision is made, every building or structure in the course of erection, alteration, repair, or demolition shall be provided with suitable and adequate toilet and drinking water facilities, consisting of not less than one water-closet type fixture and one urinal for each 30 workers, and one drinking fountain for each 75 workers. An equivalent mobile water supply system may be used in lieu of drinking fountains.

Accidents

102-104.4-19 a. First Aid
On every building operation, a first aid cabinet containing, among other things a supply of iodine or mercurochrome and aseptic gauze bandages shall be provided and maintained.
b. Medical Attention
Arrangements shall be made for prompt medical attention in case of need.

Demolition

102-104.4-20 a. Procedure
Except where there is adequate space and special permission has been received from the Building Commissioner in the demolition of buildings, one story at a time shall be completely removed. No wall, chimney, or other construction shall be allowed to fall in mass on an upper floor. Bulky material, such as beams and columns, shall be lowered and not allowed to fall.
b. Chutes
Chutes for the removal of material and debris shall be provided in all such parts of demolition operations that are more than 20 feet above the point where the removal of material is affected. Such chutes shall be completely enclosed. They shall not extend in an unbroken line for more than 25 feet, but shall be equipped at intervals of 25 feet or less with substantial stops to prevent descending material from attaining dangerous speeds. The bottom of each chute shall be equipped with a gate or stop, with suitable means for closing or regulating the flow of material.

102-104.5 CONSTRUCTION HOURS

Hours of construction shall between the hours of 7:00 o'clock in the morning (7:00am) and 8:00 o'clock in the evening (8:00pm), except for emergency work on public improvements or public utilities, and except for the operation of pumps when continuous pumping is necessary for removal of water from the construction area.

102-104.6 MATERIALS, METHODS, STANDARDS, AND TESTS

Scope

102-104.6-1 The provisions of this Section shall govern the quality and strength of materials and the methods of design and construction hereafter used in the construction of buildings and structures. Materials and methods of design and construction shall conform to the requirements of accepted engineering practice and the recognized standards and tests consistent therewith.

Used Materials

102-104.6-2 Unless otherwise required herein, used materials which meet the minimum requirements for new materials and all other special requirements of this ordinance shall be permitted.

New Materials

102-104.6-3 All new building materials, equipment, appliances, systems, or methods of construction not provided for in this ordinance and not previously approved for use by the Building Commissioner or certified by the Building Ordinance Commission, as established in Section102-105.2, shall be subject to the tests prescribed in this Section, and shall require application to, and approval by, the Building Commissioner. See Section 102-105.2 for the procedure for approval of new materials and methods.

Classification of Construction Materials

102-104.6-4 All materials and methods used in the design and construction of buildings and structures shall be classified as "controlled materials" or "ordinary materials" as defined herein.
a. Controlled Materials
(1) Controlled materials, as applied to the requirements of this ordinance, means materials which have been designed or constructed under the following conditions:
(a) All controlled materials shall be selected or tested to meet the specific strength, durability, and fire resistance requirements upon which the design is based.
(b) The design, preparation of working drawings, including details and connections, the checking and approval of all shop and field details, and the inspection of the work during construction shall be under the supervision of a registered architect or structural engineer.
(2) The records of all tests, inspections, and detail approvals shall be made available to the Building Commissioner at all times during the progress of the work, and such records as he may designate shall be filed with the Building Department.
b. Ordinary Materials
Ordinary materials are materials meeting the requirements of this ordinance for minimum strength, durability, and fire resistance for materials, without special selection testing, and supervision, as required for "controlled materials".

Accepted Engineering Practice

102-104.6-5 The regulations, specifications, standards, and tests of the technical organizations which

are referred to in the Code are hereby incorporated herein by such reference with the same effect as though set forth. Authenticated copies of all such regulations, specifications, standards, and tests shall be kept on file in the office of the Building Commissioner, available for public inspection and use.
Adopted Standards
For the purpose of this section, the publications listed in Chapter 35 of the 2009 International Building Code shall be deemed to represent accepted engineering practice with respect to the materials, equipment, systems, and methods of construction respectively specified therein, except as may otherwise be specifically provided in the Code or in any regulation adopted pursuant thereto.

Exterior Wall Materials

102-104.6-6 Materials other than solid wood used for the outer surface of exterior walls shall be weather resistant and durable and shall not be subject to damage by continued exposure to moisture or frost. Such materials shall be not less resistant to moisture absorption than Grade MW clay or shale brick as determined by the Standard Specifications for Building Brick ASTM C62. Veneers of metal shall be of non-corrosive materials or shall be protected on all sides with porcelain enamel or equally effective corrosion resistive treatment.

Welded Construction

102-104.6-7 a. When welded construction is used, the owner or his representative shall furnish to the Building Commissioner a certificate from a laboratory of recognized standing, certifying that all welding of all structural members was done under its inspection and meets all requirements of the architect's or structural engineer's design drawings and specifications, and, further, that all welders were certified by a laboratory of recognized standing.
b. Upon completion of all structural welding operations, the contractor responsible for the fabrication and erection of the structure shall furnish to the Building Commissioner a certificate showing that the fabrication and erection of such welded structure has fulfilled the requirements of the architect's or structural engineer's design drawings and specifications.

Prefabricated Construction

102-104.6-8 Prefabricated buildings, structures, and components shall comply with all requirements of the Code, and with accepted engineering practice, as to structural strength, fire resistance, weather resistance, safety, durability, sanitation, and other required qualities, and shall meet all the requirements of the Code concerning plans and specifications and materials and methods of construction.
a. Accessibility to Inspection
All construction elements, components, and details, including plumbing, heating, and wiring installation, shall be readily visible to the building inspector at the site prior to completion of the structure. Prefinished panels containing plumbing, heating, or wiring elements concealed from inspection are expressly prohibited.
b. Prefabricated Construction Tests
Tests for prefabricated construction shall be required as specified in Section 102-104.6-9. The Building Commissioner may also require, when not available from existing authoritative test data, comparative tests of standard types of construction for similar uses.

Tests

102-104.6-9 Tests of structural materials, when required, shall comply with the provisions of this Section.
a. Test Specimens
The selection and construction of all test specimens and the details of test procedure herein shall conform

to the applicable standards of authoritative testing agencies and laboratories. All test specimens and construction shall be truly representative of the materials, workmanship, and details to be normally applied in practice.

b. Tests of Materials

(1) When the strength, durability, weather-resistance, and other qualities of a material necessary to the conditions of its use have not been established by accepted engineering practice, or are in reasonable doubt, tests shall be made as hereinafter provided.

(2) Tests of materials shall also be made where specifically required by the provisions of this ordinance.

(3) Materials, when required, shall be subjected to sustained and repetitive loading to determine resistance to fatigue, and to tests for durability and weather-resistance when applicable to the use of the material.

(4) When not otherwise required in this ordinance, the applicable standards and specifications of the American Society for Testing Materials shall be deemed accepted practice in the conduct of tests of materials, assemblies, and systems.

c. Tests of Structural Assemblies

(1) When a structural assembly is not capable of design by accepted engineering analysis, or when there is reasonable doubt as to its strength or stability, the safe loadbearing capacity of such structural assembly shall be determined by tests acceptable to the Building Commissioner.

(2) Such tests shall simulate the loads and conditions of application to which the complete structure will be subjected in normal use.

d. Conditions of Acceptance

In evaluating the physical properties of structural assemblies, the structural requirements shall be based on the following conditions of acceptance.

(1) Floor, Wall, and Roof Transverse Tests

(a) Test Load. The test assembly shall sustain, without failure, super-imposed loads equal to two and one-half (2 ½) times the design live load for floors, and two and one-half (2 ½)times all loads other than dead loads of roofs.

(b) Deflection. Under design live load, the deflection shall be not greater than one three-hundred sixtieth (1/360) of the span for plastered construction and one two-hundred fortieth (1/240) of the span for unplastered construction.

(c) Residual Deflection. If the deflection is greater than the computed theoretical deflection after 24 hours under the total static test load, upon removal of the load the construction shall recover not less than three quarters (3/4) of the total test load deflection.

(2) Wall and Partition Compression Tests

(a) Test Load. The assembly, both with and without window framing, shall sustain, without failure, superimposed loads equal to two and one-half (2 ½) times the vertical design live loads.

(b) Recovery. After 24 hours under the static test load, and after removal of the superimposed load, the specimen shall recover not less than one-half (1/2) of all vertical and horizontal distortion and strain.

(3) Wall Racking Tests

(a) Test Load. The assembly shall sustain the design live load without excessive distortion and not less than two and one-half (2 ½) times the design live load without failure.

(b) Recovery. After 24 hours under the total static load, upon removal of the load, the construction shall recover not less than one-half (1/2) of the total deflection.

(c) Comparative Tests. When not available from existing authoritative test data, the Building Commissioner may require comparative tests of standard traditional forms of construction assemblies of similar dimensions and sizes, to assist in determining the adequacy of the new construction.

(4) Concentrated Load Tests

Where design for concentrated loads is required, floor construction not capable of design shall be subjected to a concentrated load test when such loading exceeds in stress effect the prescribed uniformly distributed load.

e. Workmanship Tests

(1) Whenever there is reasonable doubt as to the stability of structural safety of a completed building or

structure, or part thereof, for the intended use, the Building Commissioner may require a load test of the building unit or portion of the structure.
(2) Unless otherwise provided for in this ordinance, the structure under consideration shall be subjected to a superimposed load equal to two (2) times the design live load, which shall be left in position for a period of 24 hours. If during the test, or upon removal of the test load, the structure shows evidence of failure, the Building Commissioner shall order such reinforcements or modifications deemed necessary to insure adequacy of the structure for the rated capacity; or in lieu thereof, he may determine the safe load capacity to which the structure shall be limited.
(3) The structure shall be considered to have successfully passed the test if the total deflection does not exceed the theoretical deflection computed by accepted engineering formulae; or if the total deflection exceeds the theoretical value, the structure shall be considered safe for the design load if it recovers 75 percent of the maximum deflection within 24 hours after removal of the test load.

102-104.7 MAINTENANCE, REPAIR, AND ALTERATION

Maintenance

102-104. 7-1 All buildings and structures, both existing and new, and all parts thereof, shall be maintained in a safe and sanitary condition. All devices or safeguards which are required by the Code in a building or structure when erected, altered, or repaired shall be maintained in good working order. The owner or his designated agent shall be responsible for the maintenance of buildings and structures.

Application of Provisions-Existing Buildings

102-104.7-2 Every existing building or structure shall comply with the requirements of the Code in effect and applicable to such building of structure at the time of its construction or alteration, and shall comply with such provisions of the Code that are specifically made applicable to existing buildings.

Relocation of Buildings or Structures

102-104.7-3 It shall be unlawful for any person to move any building from one location to another unless such building is altered or reconstructed so as to conform to the provisions of the Code governing such building in its new location.

Change of Occupancy

102-104. 7-4 When the occupancy of an existing building is so changed as to transfer it from one occupancy classification to another, the provisions of the Code which are higher for the new occupancy than for the former occupancy shall be fully comprehend with.

Alterations, Additions, and Repairs

102-104.7-5a. Costing More Than 50 Percent
The provisions of the Code for new buildings shall apply to an entire existing building on which, during a 12 month period, alterations, additions, and repairs are made costing more than 50 percent of the value of the building before alteration, addition, and repair; and shall apply to a building which is destroyed or damaged by fire or other casualty or act of God to the extent that the cost of restoring the building to its condition prior to the occurrence shall exceed 50 percent of the value of the building before such destruction or damage. Repair work done to maintain structural integrity of the foundations shall not be included when calculating the cost of repairs.

b. Costing less than or equal to 50 Percent

Structural and non-structural alterations, additions, and repairs, costing not more than 50 percent (excluding cost of repair work done to maintain the structural integrity of the foundations) of the value of the building before alteration, addition, and repair, may be made within a 12 month period without making the entire building comply with the requirements of the Code for a new building, provided the alterations, additions, and repairs in themselves comply fully with applicable requirements of the Cook County building regulations.

c. Affidavits Required

Before the issuance of a permit for the alteration, addition, repair, or replacement of any part of an existing building or structure, the Building Commissioner shall require that the owner or his agent file with the Building Commissioner an affidavit stating the estimated cost of the proposed alteration, addition, repair, or replacement and the current value of the building or structure. Upon completion of the work covered by the permit, the Building Commissioner shall require that the owner or his agent file with the Commissioner an affidavit stating the actual cost of the work performed under the permit.

Section 102-105. ADMINISTRATION AND ENFORCEMENT

102-105.1 THE BUILDING DEPARTMENT

There is hereby created the Building Department of the County of Cook, vested with the administration of the Code and consisting of the Building Commissioner, Deputy Building Commissioner, and such other officers and employees as are herein designated and such as the county board of Commissioners may provide for in its annual appropriation ordinance.

Said Building Department shall include the office of the Commissioner, administrative services, engineering services, and inspection services.

All officers and employees of said department shall be under the direction and supervision of the Building Commissioner, and shall perform such duties as may be required of them by said building commissioner and by provisions of this ordinance.

Department Officers-Qualifications and Functions
Building Commissioner

102-105.1-1 a. The Building Commissioner shall be the head of said Building Department and may be a registered architect, registered structural engineer, registered professional engineer, or an administrator with at least 10 years responsible experience in the construction industry or a related field. While he serves as Building Commissioner he shall not be actively engaged in any other business. He shall be appointed by the President of the Board by and with the advice and consent of the County Board and shall serve at the pleasure of said Board.

b. The Building Commissioner shall institute such measures and prescribe such rules and regulations for the control and guidance of his officers and employees and shall secure maximum working efficiency, including the careful examination of drawings and plans and diligent inspection of all buildings, structures, or premises and mechanical installations.

c. The Building Commissioner may, also, adopt rules not inconsistent with the provisions of this ordinance with reference to materials and workmanship in construction, repair, or maintenance of building, structures, or premises, and the installation and operation of equipment therein, except when the administration of any provision is specifically placed in another official or department. Said rules shall be published and shall be kept on file in the office of the Building Commissioner and copies of all such rules shall be transmitted to the County Board at the first regular meeting held after the adoption of same.

d. No "acting" appointment shall be made for the position of Building Commissioner unless such person shall possess the full qualifications required for Building Commissioner.

Deputy Building Commissioner

102-105.1-2 a. The Building Commissioner may appoint a Deputy Building Commissioner. The person certified to fill this office may be a registered architect, registered structural engineer, registered professional engineer, or an administrator with at least five (5) years responsible experience in the construction industry or a related field.
b. The Deputy Building Commissioner shall act as Building Commissioner in the absence of the Building Commissioner, and while so acting shall discharge all the duties and possess all the powers imposed upon, or vested in, the Building Commissioner. The Deputy Building Commissioner shall, under the direction of the Building Commissioner, have general supervision of all matters pertaining to the work of the Building Department.

Chief Plan Examiner

102-105.1-3 The Building Commissioner shall appoint a Chief Plan Examiner who shall have charge of all plan examination, engineering, cost estimating, and all other related matters. He shall be a registered architect, registered structural engineer, or a registered professional engineer in the State of Illinois, with at least five (5) years experience in the design and construction of buildings.

Inspection Supervisor

102-105.1-4 The Building Commissioner may appoint an Inspection Supervisor. The person certified to fill this position may be a registered architect, registered structural engineer, or a registered professional engineer, with at least five (5) years experience in the design and construction of buildings, or a qualified building mechanic with at least 10 years responsible experience in the construction and/or inspection of buildings. He shall be in charge of supervising and coordinating all inspection activities of the department.

Chief Building Inspector

102-105.1-5 The Building Commissioner may appoint a Chief Building Inspector. The person certified to fill this position may be a registered architect, registered structural engineer, or a registered professional engineer, with at least five (5) years experience in the design and construction of buildings, or a qualified building mechanic with at least 10 years responsible experience in the construction and/or inspection of buildings. The Chief Building Inspector shall be in charge of all general building inspections which are not the responsibility of other chief inspectors established by this ordinance.

Chief Electrical Inspector

102-105.1-6 The Building Commissioner may appoint a Chief Electrical Inspector. The person certified to fill this position may be a registered electrical engineer with a minimum of five (5) years practical experience, or an electrician with a minimum of 10 years experience in electrical installation work. The Chief Electrical Inspector shall be in charge of all electrical inspections.

Chief Plumbing Inspector

102-105.1-7 The Chief Plumbing Inspector may be appointed by the Building Commissioner. The Person certified to fill this position shall be a licensed plumber with at least 10 years experience in plumbing installation work. He shall be in charge of all plumbing inspections, tank and water heater installations, and plumbing plan examination.

Chief Elevator Inspector

102-105.1-8 The Building Commissioner may appoint a Chief Elevator Inspector. The person certified to fill this position may be a registered professional engineer with at least (5) years experience in the design or construction of elevators, or a qualified person with at least 10 years responsible experience in the construction, installation, design, and/or inspection of elevators; at least five (5) years of which shall have been inspection experience. The Chief Elevator Inspector shall be in charge of the inspection of all elevators an similar mechanical devices.

Chief Ventilation Inspector

102-105.1-9 The Building Commissioner may appoint a Chief Ventilation Inspector. The person certified to fill this position may be a registered professional engineer with at least five (5) years experience, or a qualified mechanic with at least 10 years responsible experience, in the design, installation, and/or inspection of warm air heating systems, air conditioning systems, ventilating units, and industrial sanitation ventilation installations. He shall be in charge of all air conditioning and ventilation, industrial sanitation ventilation, and warm air furnace inspections.

Fire Prevention Inspector

102-105.1-10 The Building Commissioner may appoint a Fire Prevention Inspector. The person certified to fill this position may be a registered architect, registered structural engineer, or a registered professional engineer, with at least five (5) years experience in the design and construction of fire protection systems, or a qualified building mechanic with at least 10 years responsible experience in the design, installation, and/or inspection of fire protection systems. He shall be in charge of all fire safety and prevention inspections.

Chief Boiler and Refrigeration Inspector

102-105.1-11 The Building Commissioner may appoint a Chief Boiler and Refrigeration Inspector. The person certified to fill this position may be a registered professional engineer with at least five (5) years experience, or a steam engineer, pipe fitter, boiler maker, or boiler inspector with at least 10 years experience, such experience in both instances being in the design, construction, maintenance, repair or operation of steam and hot water boilers, unfired pressure vessels and refrigeration equipment. Such person shall, in addition to the previous qualifications, hold a valid Commission or Certification of Competency as an inspector of boilers from the State of Illinois, or from a state having a standard of examination substantially equal to that of the State of Illinois, or from the National Board of Boiler and Pressure Vessel Inspectors. He shall be in charge of all steam and hot water boiler, unfired pressure vessel, and refrigeration equipment inspections.

102-105.2 THE BUILDING ORDINANCE COMMISSION

Creation and Membership

102-105.2-1 For the purpose of considering amendments, appeals, and the approval of new building materials or methods, there is hereby created a Building Ordinance Commission. The commission shall consist of eight (8) members appointed by the President of the County Board of Commissioners. They shall serve without compensation. One member of the Commission shall be the chairman of the Building Committee of the County Board, who shall be the chairman of the Building Ordinance Commission; another member shall be the County Building Commissioner, who shall be the secretary of the commission. He shall be an ex officio member without the privilege of vote in those matters requiring

voting. Of the six (6) other members, one shall be a registered architect, one shall be a registered structural engineer, and one shall be a registered professional engineer, all of whom shall be licensed by the State of Illinois, and each shall have been a resident of Cook County for a period of at least six (6) months preceding the date of appointment.

Establishment of Sub-Committees

102-105.2-2 The chairman of the full commission shall establish three (3) standing sub-committees, each consisting of three (3) members, as listed below, and such other sub-committees as he may deem necessary. The standing sub-committees shall be:
a. Sub-Committee on Appeals
b. Sub-Committee on Amendments
c. Sub-Committee on Standards and Tests
The chairman of each sub-committee shall be appointed by the chairman of the full commission. The sub-committees shall review and make recommendations on those matters forwarded to them by the secretary of the full commission.

Appeals and Variations

102-105.2-3 a. An appeal may be taken to the Building Ordinance Commission by any person, firm or corporation, or by any officer, department, board, or bureau aggrieved by a decision of the Building Commissioner. Application for appeal may be made when it is claimed that:
(1) The true intent of the Cook County Building Ordinance or the regulations adopted thereunder have been incorrectly interpreted; or
(2) The provisions of the ordinance do not fully apply.
The appeal shall be taken within such time as shall be prescribed by the Building Ordinance Commission by filing with the Building Commissioner a notice of appeal specifying the grounds thereof. The Building Commissioner shall, within seven (7) days of the receipt thereof, transmit to the Sub-Committee on Appeals all of the papers constituting the record upon which the action appealed from was taken. This Sub-Committee shall thereupon hold a public hearing on the appeal within 60 days of the receipt thereof.
b. The Sub-Committee on Appeals shall make written findings of fact and shall submit same, together with its recommendations, to the Building Ordinance Commission for final action. Such final action shall be taken not more than 60 days from the date of termination of the public hearing.
c. All decisions and findings of the Building Ordinance Commission, on appeals, shall in all instances be final administrative determinations and shall be subject to review by court as by law may be provided. A copy of such findings shall remain on file in the Office of the Building Commissioner as public records.
d. In addition to the remedies provided in this subsection pertaining to appeals, any person, firm, or corporation, aggrieved by a decision of the Building Commissioner may seek a variation of the provisions of the Code governing construction, installation, alteration, addition, repair, and maintenance of buildings and structures. The variation shall be heard before the Building Ordinance Commission as set forth in Section 102-105.2-3d(5) below. In order to qualify for a variation, the following requirements shall apply:
(1)The applicant for a variation shall meet the requirements set forth in Section 102-105.2-3a.(1) and (2) herein;
(2)The applicant for a variation shall also establish that there are practical difficulties and particular hardships that prevent the applicant from strictly following the provisions of the Code;
(3)The applicant for a variation shall also establish and meet the standards for zoning variations set forth in Section 13.6.3 of the 2001 Cook County Zoning Ordinance;
(4)The Building Commissioner shall have the exclusive authority to determine which provisions of the Coded are subject to variation;
(5)The procedure for a variation shall be conducted pursuant to Section 102-105.2-3a. and b herein; and

(6)The decision and findings of the Building Ordinance Commission is a final administrative decision pursuant to Section 102-105.2-3c. herein.

Amendments

102-105.2-4 a. Proposed amendments to the Cook County Building Ordinance shall be filed with the Building Commissioner, in such form and accompanied by such information as shall be required by the Building Commissioner and the Building Ordinance Commission. Such amendments shall be forwarded by the Building Commissioner to the Sub-Committee on Amendments. This Sub-Committee shall thereupon hold a public hearing on the proposed amendment, within 60 days of the receipt thereof, and report its subsequent findings to the full Commission.
b. The Building Ordinance Commission shall not recommend the adoption of a proposed amendment unless it finds that the adoption of such an amendment is in the public interest and is not solely for the interest of the applicant.
c. The Building Ordinance Commission shall make written findings of fact and shall submit same, together with its recommendations, to the County Board for final action. If an application for a proposed amendment is not acted upon finally by the Board of Commissioners of Cook County within 60 days of the time of receipt of the Building Ordinance Commission's recommendations, it shall be deemed to have been denied.

Application for Approval of New Materials or Methods

102-105.2-5 a. Submission of New Materials or Methods
Any person desiring to submit any building materials, methods, or systems of construction, or arrangements of material to determine the adaptability or safety of such materials, methods, systems, or arrangements for building purposes, or to establish the safety qualifications of any substance for occupancy purposes-such materials, methods, systems, or arrangements not having been provided for in the provisions of this ordinance and not having been previously approved for use by the Building Commissioner or certified the Building Ordinance Commission- shall make application in writing to the Building Commissioner setting forth the merits claimed, the purposes desired, together with such laboratory tests and other supporting data as the applicant may wish to furnish. If, in the judgment of the Building Commissioner, further evidence is necessary to ensure the adaptability or safety of such materials, methods, systems, arrangements or safety qualifications, he may require further tests to be made or additional data to be submitted by the applicant.
b. Recommendation by the Building Commissioner
Upon the completion of his investigation of the tests and data submitted the Building Commissioner shall report to the Sub-Committee on Standards and Tests the results of such investigation and recommend whether or not the use of such materials methods, systems, or arrangements of materials for construction should be permitted in buildings erected under the provisions of this ordinance. Such recommendation shall be in writing and shall set forth the reasons relied upon in making such recommendation.
c. Certification by the Building Ordinance Commission
(1) If, on consideration of the report and recommendation of the Building Commissioner, and on the basis of such further investigation as it may deem necessary, the Sub- Committee on Standards and Tests shall determine that such materials, methods, systems, or arrangement of materials for construction are satisfactory for use in buildings constructed under this ordinance, it shall report such findings to the Building Commissioner, who shall record such certification in the records of the Building Department. The Commission may, in its judgment, also submit such recommendations as it deems necessary to the County Board.
(2) In addition, the Sub-Committee on Standards and Tests, upon the request of the Building Commissioner, is empowered and authorized to make such other analyses and recommendations of combinations of materials of standard practice in the building industry, and of mechanical equipment,

devices, and appurtenances relative to building construction and maintenance.

Meetings and Rules

102-105.2-6 All meeting of the Building Ordinance Commission, and respective Sub Committees, shall be held at the call of the chairman and at such times as the Commission may determine. A copy of every report or recommendation of the Building Ordinance Commission shall be file immediately in the office of the Building Commissioner and shall be a public record. The Building Ordinance Commission shall adopt its own rules and procedure, not in conflict with the provisions of this ordinance or with applicable Illinois Statutes.

Periodic Review of the Ordinance

102-10 5.2-7 a. In. addition to the called meetings of the Commission, the Building Ordinance Commission shall meet not less frequently than annually, commencing two (2) years from the date of adoption of this ordinance, for the purpose of reviewing the ordinance in its entirely and suggesting necessary amendments to keep the provisions current and coordinated with contemporary practice. The Building Commissioner and his staff shall assist the Commission in this task.
b. The secretary of the Building Ordinance Commission shall be responsible for preparing an annual report to the County Board of Commissioners appraising the current status of the Building Ordinance and the actions of the building Ordinance Commission.

102-105.3 PERMITS, CERTIFICATES AND PLANS

Building Permits

102-105.3-1a. Permit Required
(1) It shall be unlawful to erect, construct, alter, relocate, or demolish, or to commence the erection, construction, alteration, relocation, or demolition of any building or any structure, including but not limited to decks, sheds, fences, roofs, driveways, and windows, install equipment for the operation of a building or structure, including but not limited to plumbing, electrical, heating, ventilation, and air conditioning (HVAC), and mechanical equipment, elevators, sprinklers, and similar equipment, and the installation of insulation requiring the cutting or removing of drywall, without first filing with the Building Commissioner an application in writing and obtaining a permit, make site improvements that change surface topography or affect storm water drainage, or install or modify storm water infrastructure, except as provided in c., below.
(2) Permit shall also be required for all proposed construction, substantial improvements, or other development, including the placement of mobile homes within floodplain areas having special flood hazards.
(3) The building permit application will be reviewed to assure that any proposed construction within flood plain areas are:
(a) Designed and anchored to prevent flotation, collapse or lateral movement of the structure.
(b) Constructed with materials and utility equipment resistant to flood damage.
(c)Constructed by methods and practices that minimize flood damage.
(d) At the time of issuance and/or prior to complying such building permits, the following information shall be noted and recorded:
(i) Elevation of the lowest floor (including basement)
(ii) Where the elevation of the lowest floor is below grade, on one or more sides, the elevation of the floor immediately above,
(iii) Where a structure has been floodproofed; the elevation to which the structure was floodproofed.
(e) The Building Commissioner may, at his discretion, request additional drawings and documented

sources of information to verify that construction location will be outside the floodplain or flood table areas.

(4) Such permits, or placard indicating the possession of same, shall be posted in a conspicuous place upon the exterior of the premises for which it is issued, and shall remain so posted at all times until the work is completed and approved.

b. Prior Approval of Other Authorities

(1) Central or Public Sewage Treatment Plants. No Building permit shall be issued for the construction of a central or public sewage treatment plant until approval of the plans has been secured from the Metropolitan Sanitary District and the Cook County Department of Public Health.

(2) Hospitals and Nursing Homes. No building permit shall be issued for the construction of a hospital or nursing home until a permit for such construction has been granted by the State of Illinois Department of Public Health.

(3) No Building permit shall be issued for construction in a floodplain until Plan approval (when applicable) has been secured from the following agencies:

United States Corps of Engineers
Illinois Department of Transportation, Division of Water Resources
Illinois Environmental Protection Agency
Metropolitan Sanitary District of Greater Chicago
North Cook County Soil and Water Conservation District
Cook County Clerk's Office Map Department
Cook County Health Department
Cook County Highway Department
Cook County Zoning Board of Appeals

(4) No building permit shall be issued until approval has been obtained from all authorities with jurisdiction.

c. Exceptions

(1) Ordinary repairs to buildings and structures may be made without application or notice to the Building Commissioner, subject to the provisions of Section 102-104.7; however, such repairs shall not include the cutting away of any wall, partition, or portion thereof, the removal, replacement or cutting of any structural support, or the removal or change of any required means of egress, or rearrangement of parts of a structure affecting the exit requirements; nor shall ordinary repairs affect the light or ventilation, room size requirements, sanitary or fire-resistive requirements; nor shall ordinary repairs include the use of materials not permitted by the provisions of this ordinance; nor shall ordinary repairs increase the height, area, or capacity of the building, nor shall ordinary repairs include any alteration or repair of any electrical wiring or equipment, other than ordinary repairs to portable lamps and appliances.

(2) Except as otherwise provided in this subsection with respect to ordinary repairs, the following work or installations shall not require a permit: sidewalks not more than 30 inches above adjacent grade, provided such sidewalks is not over any basement or story below, and are not part of an accessible route; painting, papering, tiling, carpeting, cabinets, counter tops, and similar finish work, however, such finish work shall be subject to applicable fire safety and fire resistive regulations in the Code; swings, swing sets, and other playground equipment as accessory uses to detached single-family dwellings; prefabricated, above-ground swimming pools less than 24 inches deep as accessory uses to detached single-family dwellings; prefabricated storage containers less than 81 square feet in size; non-fixed and movable fixtures, cases, racks, counters, and partitions; and residential exterior siding.

d. Completion of Work Authorized by a Permit

The work authorized by a permit issued under the 1997 Cook County Building and Environmental Ordinance shall be governed by Section 102-1c. The work authorized by a permit issued under this Code shall be governed by this Code, as amended.

e. Application Form

An application for a permit shall be submitted in such form as the Building Commissioner may prescribe. Such application shall contain, the full names and addresses of the applicant and of the owner, and, if the

owner is a corporate body, of its responsible officer, the complete legal description of the property to which the permit application pertains, the real estate index number of the legally described property, performance, demolition, or other required bonds, proof of insurance, and proof of compliance with applicable Cook County ordinances pertaining to alimony, child support, and County taxes and fees, as well as such additional information as the Building Commissioner shall require from time to time. The application shall also describe briefly the proposed work and shall give such additional information as may be required by the Building Commissioner.

f. Those Authorized to Make Application

Applications shall be made by the professional responsible for the design of the proposed work, the owner, the owner's agent, the owner's contractor, or such other person authorized by the owner and allowed by the Building Commissioner to make application.

g. Amendments to Application.

(i) Nothing in this ordinance shall prohibit the filing of amendments to an application or to a plan or other record accompanying same, at any time before the completion of the work for which the permit was issued. Such amendments shall be filed with, and be deemed a part of the original application if approved before the certificate of compliance has been issued otherwise a new application for the alteration shall be made and a permit secured.

(ii) All proposed amendments or changes to work authorized in a permit that has been issued, must be made by submitting an application for a revised building permit for such amendments or changes. No such changed work shall begin until the revised building permit has been issued. Such a revised permit shall be treated as an original permit for purposes of application of the Code.

h. Plans to Accompany Application

Applications for permits shall be accompanied by drawings of the proposed work, drawn to scale showing when necessary, floor plans, sections, elevations structural details, computations, and stress diagrams, as the Building Commissioner may require, and as specified in Section 102-105.3-2, herein.

i. Approval of Zoning Administrator

Applicants shall obtain the approval of the Zoning Administrator, in the form of a zoning certificate, on all drawing and plans for the construction, erection, addition to relocation, or alteration of any building or other structure for which a building permit is required, prior to the issuance of such building permit by the Building Commissioner.

j . Action on Application.

The Building Commissioner shall examine or cause to be examined all applications for permits and amendments thereto within a reasonable time after filing. If the application or the plans do not conform to the requirements of all pertinent ordinances and laws, said commissioner shall reject such application in writing stating the reasons therefor. It the proposed work conforms to the requirements of the Cook County Building Ordinance, and all laws and ordinances applicable thereto, he shall issue a permit. The permit shall contain the complete legal description of the area to which the permit pertains and, also, the real estate index number of the legally described property. One copy of the permit shall be submitted to the applicant, one copy shall be retained in the files of the Building Department, and within 15 days, one copy of the permit shall be submitted to the Township Assessor of the township in which the property is located and one copy to the County Assessor.

k. Revocation of Permit

The Building Commissioner may revoke a permit in the event there has been any false statement or misrepresentation as to a material fact in the application of plans on which the permit was based.

l. Approval of Plan in Part and Temporary Permit Issuance

The Building Commissioner may issue a temporary permit for alterations, relocation or demolition of existing structures and for the construction of foundations before the entire plans and specifications for the whole building have been submitted, provided adequate information and detailed statements have been filed complying with all the pertinent requirements of this ordinance. The holder of such permit shall proceed at his own risk with the building operation and without assurance that a final permit for the entire structure shall be granted.

m. Permit for Demolition or Relocation

(1) Service Connections. Before a building may be demolished or relocated, the owner or agent shall notify all utilities having service connections within the building, such as water, electric, gas, sewer, and any other connections. A permit to demolish or relocate a building shall not be issued until a release is obtained from the utilities concerned, stating that their respective service connections and appurtenant equipment, such as meters and regulators, have been removed or sealed and plugged in a safe manner.

(2) Relocation. No permit to relocate a building or structure shall be issued until notice of application thereof shall have been given to the owners of cables, wires, or other impediments the temporary removal of which will be necessary, and an opportunity has been given said owners to be heard upon such application.

(3) Bond for Demolition

(a) Before any permit is issued granting authority to demolish a building or structure, the person engaged in such work shall file with the County Clerk a bond with sureties to be approved by the County Comptroller to indemnify, keep, and save harmless the County of Cook against any loss, cost, damage, expense, judgment, or liability of any kind whatsoever which the County may suffer, or which may accrue against, be charged to, or be recovered from said County or any of its officials from or by reason or on account of accidents to persons or property during any such demolition operations, and from or by reason or on account of anything done under or by virtue of any permit granted for any such demolition operation. However, the required bond shall be waived in the event the building or structure to be demolished does not exceed 20 feet in height nor 625 square feet in area, and is to be demolished by the owner of such building or structure.

(b) Such bond in each case shall extend to and cover all such demolition operations carried on through permits obtained thereunder by such person during any year beginning January first and ending December thirty-first, and no permit shall be issued for any wrecking work, except as hereinbefore otherwise provided, during such year until such bond is filed. Said bond shall be in the penal sum of twenty thousand dollars ($20,000.00) for all wrecking operations on such buildings and other structures not more than three (3) stories in height, and there shall be an additional bond filed in the penal sum of twenty thousand dollars ($20,000.00) or a bond in the penal sum of forty thousand dollars ($40,000.00) shall be filed in the first instance, in case of wrecking operations on buildings and other structures four (4) or more stories in height, and there shall be an additional bond filed in the penal sum of five hundred dollars ($500.00), conditioned upon the restoring and leveling of the premises upon which such wrecking operations have been completed.

(c) Upon the filing of such bond or bonds, the person engaged in the work of demolishing such buildings and other structures may obtain permits for such wrecking operations as are authorized under the said bond or bonds as hereinabove provided for during the year in which the same is or are filed; provided, however, that in case of accident or casualty in the progress of any wrecking operations carried on under any permit so issued, or the happening of any circumstance which might, in the opinion of the Building Commissioner, render such bond or bonds inadequate, the said Building Commissioner may, in his discretion, require such additional bond as he may deem necessary to fully protect the County of Cook from loss resulting from the issuance of such permits before he allows the work to proceed or before any additional permits are issued by him.

n. Compliance with Permit

(1) All work performed under a permit issued by the Building Commissioner shall conform to the approved application and plans, and any approved amendments thereto. It shall be unlawful for any owner, agent, architect, structural engineer, contractor, or builder engaged in erecting, altering, or repairing any building to make any departure from the drawings or plans as approved by the Building Commissioner, of a nature which involves any violation of the provisions of the Code on which the permit has been issued. Any such departure from the approved drawings or plans involving a violation of requirements shall operate to annul the permit which has been issued for such work and shall render the same void.

(2) Where any work done under a permit authorizing erection, alteration, or repair of a building or

structure is being done contrary to the approved drawings and plans, the Building Commissioner shall have power to stop such work at once and to order all persons engaged thereon to stop and desist therefrom The work shall not be resumed until satisfactory assurance has been given to the building commissioner that it will be according to the approved drawings and plans.
(3) No person shall begin any work for which a building permit is required or any work of excavation in preparation therefore until the permit has been obtained. If any person violates this Section the Building Commissioner shall order the work stopped at once and enforce that order in addition to the penalty for violation.
o. Commissioner's Signature
Every permit issued by the Building Commissioner under the provisions of this ordinance shall have his signature affixed thereto; but this shall not prevent him from authorizing a subordinate to affix the Building Commissioner's signature.
p. Expiration of Permit
If, after a building permit or other required permit or other have required permit, shall been granted the operations called for by such permit are not begun within l2 months after the date thereof, such permit shall be void and no operations thereunder shall be begun until an extended permit shall be taken out by the Owner or his agent. An extended permit shall be valid for six (6) month following the date of expiration of the original permit and must be applied for within 10 days after the expiration of the original permit. One extension only shall be granted, and if work is not begun within 18 months after he date of issuance of the original permit, all rights under the permit shall thereupon terminate. Where, under authority of a permit or extended permit, work has begun and has been abandoned for a continuous or cumulative period of 12 months, all rights under such permit shall thereupon terminate.

Building Plans and Drawings

102-105.3-2 a. Submission of Plans
All plans and drawings for buildings, structures, and equipment shall be presented to the Building Commissioner for his approval. Each set of plans presented shall be approved by the Building Commissioner before a permit will be granted. All such plans and drawings shall be submitted in accordance with the requirements of this Section and applicable requirements specified in the Code; in addition, all plans and drawings shall comply with any rules and regulations established by the Building Commissioner. However, plans may be waived for minor alterations not involving structural changes and for residential accessory buildings of not over 625 square feet in area, if sufficiently described in the application.
b. Signature of Architect or Engineer
No plans shall be approved for permit unless such plans are signed and sealed either by a registered architect, a registered structural engineer, or a registered professional engineer, licensed by the State of Illinois; provided, however, that the person who signs and seals such plans shall be permitted to do so within the limitations of the particular act under which he is licensed to practice; and each licensed professional shall sign and seal those portions of drawings for which he is responsible.
c. Compliance with Ordinance
It shall be the duty of the Building Commissioner to require that all drawings and plans submitted to him for approval, for any building or structure, shall be accompanied by a certificate of the architect, structural engineer, or professional engineer preparing such drawings and plans, that said drawings and plans comply with the requirements of the provisions of the Code.
d. Preliminary Drawings and Plans
The Building Commissioner may, in his discretion, review and approve preliminary drawings and plan, a true copy of which shall be filed with the Building Commissioner, before the entire working drawings and plans and detailed statements of said building have been completed and submitted for permit, if such preliminary drawings and plans and detailed statements shall be of sufficient clarity to indicate the nature

and character of the work proposed and to show their compliance with the provisions of this ordinance; provided, however, that the complete working drawings and plans shall be submitted to the Building Commissioner before actual construction is begun. The Building Commissioner shall examine the completed drawings and plans and, if approved, shall issue a permit therefor.

e. Filing of Plans

True copies of the drawings and plans bearing the approval stamp of the Building Commissioner shall be filed with the Building Department and shall remain on file in that office for a period of six (6) months after the occupation of such building, after which, upon demand, such drawings and plans shall be returned by the Building Commissioner to the person by whom they have been deposited. It shall not be obligatory upon the Building Commissioner to retain such drawings and plans in his custody for more than six (6) months after the certificate of compliance has been issued.

f. Plans and Permit at Construction Site

In all construction work for which a permit is required, the approved and stamped drawings and plans shall be kept on file, and the permit posted, at the construction site while the work is in progress, and the permit shall remain posted until the work is completed and approved.

g. Altering Approved Drawings

It shall be unlawful to erase, alter, or modify any lines, figures, or coloring contained upon drawings or plans bearing the approval stamp of the Building Commissioner. If, during the progress of such work, it is desired to deviate in any manner affecting the construction or other essentials of the building from the terms of the application, drawing, or plan, notice of such intention to alter or deviate shall be given to the Building Commissioner and an amended drawing or plan showing such alteration or deviation shall be submitted for his approval; his written approval shall first be obtained before such alteration or deviation shall be made.

h. Accompanying Plats

Every application for a permit for the erection of, alteration of, addition to, demolition of, or relocation of any building or structure shall be accompanied by:

(1) a plat of the piece or parcel of land, lot, lots, block, or blocks, or parts or portions thereof, drawn to a scale showing the actual dimensions and certified by a Registered Land Surveyor licensed by the State of Illinois as a true copy of the piece or parcel, land, lot, lots, block, or blocks, or portions thereof, according to the registered or recorded plat of such land; and

(2) a plat drawn to scale in such form as may, from time to time, be prescribed by the County Zoning Administrator, after consultation with the Building Commissioner, showing the ground area, height, and bulk of the building or structure and such other information as may be required for the proper enforcement of the Code and the Cook County Zoning Ordinance~~.~~

Required plats may be submitted in electronic form, and be otherwise consistent with the current submission requirements established by the Building Commissioner.

Certificate of Compliance

102-105.3-3a. Contents of Certificate

No building or structure shall be occupied or used, in whole or in part, until a certificate of compliance shall have been issued by the Building Commissioner and posted on the premises stating the purpose for which such building may be used in its several parts, the maximum permissible live loads of the several floors, the number of occupants that may be accommodated in the several stories, in case such number is limited by a provision of law or by the permit, and all special stipulations of the permit, if any.

b. Temporary Certificate

Upon request of the holder of a permit, or of the owner, the Building Commissioner may issue a temporary certificate of compliance for building or structure, or part thereof, before the entire work covered by the permit shall have been completed, provided such portion or portions may be occupied safely prior to full completion of the building without endangering life or public welfare.

Whenever a building is occupied under the provisions of this section, all objections outstanding on said Temporary Certificate shall be corrected within 30 days, weather conditions permitting. The building permit holder or owner or his agent shall be present on all inspections necessary to assure compliance with the County Ordinances. The Building Commissioner or his assigned deputy is authorized to make reasonable inspections of the premises at reasonable hours to assure completion of all outstanding work.
The fee to be charged for a Temporary Certificate of Occupancy hereunder shall be as established by separate resolution of the County Board of Commissioners, and as set forth in Section 32.1 of the Code.
c. Certificate for Altered Buildings or Structures
No building or structure enlarged or extended, or altered, wholly or in part, as to change its classification or occupancy, and no altered building or structure for which a certification of compliance has not been heretofore issued, shall be occupied or used in whole or in part until a certificate of compliance shall have been issued by the Building Commissioner; provided that if the occupancy or use of such building was not discontinued during the work or alteration, the occupancy or use of the building or structure shall not continue for more than 30 days after completion of the alterations unless such certificate shall have been issued.
d. Certificate for Change of Occupancy
(1) No change of occupancy shall be made in a building or structure, including the change of ownership or the change of the use of any building or structure for which a business license has been issued, unless a new certificate of compliance is secured.
(2) The occupancy of a building or structure shall not be deemed to have changed because of a vacancy of six (6) months or less so long as the identical occupancy is re-established.
e. Issuance of Certificate of Compliance
No certificate of compliance shall be issued until construction has been completed and the premises inspected and certified by the Building Department to be in conformity with the plans and drawings upon which the building permit was based. All facilities relating to water and sewerage system shall have been completed before the issuance of a certificate of compliance. A certificate of compliance shall be issued, or written notice shall be given to the applicant stating the reasons why a certificate cannot be issued, not later than 14 days after the Building Department is notified in writing that the building or premises is ready for occupancy.

Registration of Buildings

102-105.3-4. For the purpose of this Section only, the following words shall have the following meanings:
(a) “Building” shall mean a structure, or part thereof, enclosing space designated or used for four or more family units, or designed or used for sleeping accommodations for ten persons or more, not exclusively used for family units, including condominiums.
(b) "Condominium" shall mean buildings subject to the Illinois Condominium Property Act, 765 IL S 605/1 t seq .
(c) "Cooperative" shall mean a multiple dwelling complex owned by a cooperative corporation, organized pursuant to 805 ILCS 310/1 et seq.
(d) "Department" means the Cook County Department of Building and Zoning.
(e) "Mortgage" shall mean any consensual interest or consensual lien created by a written instrument which grants or retains an interest in realty to secure a debt or other obligation. Real estate installment sales contracts shall be deemed mortgages for the purposes of this section.
(f) "Owner" shall mean the legal title holder or contract purchaser if ownership of the property is subject to a real estate installment sales contract.
II. Regulations of Condominiums and Cooperatives
In addition to the registration requirements in subsection III., Condominiums and Cooperatives shall be registered by providing the name(s) of the owner(s) of each of the condominium or cooperative units, as well as the name(s) of the condominium or cooperative association, and the management company.

III. Registration Required

The owner of any building shall file a registration statement with the Department of Building and Zoning on forms provided by the Department for such purpose for each building owned. Registration statements shall be deemed prima facie proof of the statement therein in any administrative enforcement proceeding or court proceeding instituted by the County against the owner of the building.

The registration statement shall include the following information:

(a) The name, street address and telephone number of each owner of the building. If the owner is a partnership, corporation, trust or voluntary unincorporated association the statement shall also include the name, street address, telephone number and shall identify a responsible partner or officer. If the owner is a corporation, the statement shall also include the name, street address and telephone number of the registered agent of the corporation;

(b) The name, street address and telephone number of a mature person, 21 years of age or older, designated by the owner as the authorized agent for receiving notices of Ordinance violations and for receiving process in any court proceeding or administrative enforcement proceeding on behalf of the owner in connection with enforcement of this Ordinance. This person must reside within Cook County, Illinois or in a county contiguous with Cook County. An owner who is a natural person and who meets the requirements of this subsection as to location of residence may designate himself as agent;

(c) The name, street address and telephone number of any person other than the owner who, on behalf of the owner, manages or controls the building. The name, street address and telephone number of any person other than the owner who, on behalf of the owner, or acts as an agent for the owner by being authorized to have physical control over the building, and who is available by telephone on a 24 hour basis to respond to building maintenance emergency calls. This person must reside within Cook County Illinois or in a county contiguous with Cook County;

(d) The name, street address and telephone number of each lending institution or party holding a mortgage on the property, if any;

(e) The street address and property index number of the building and the number of family dwelling units contained in the building.

For the purposes of this section, a post office box is not sufficient as an address.

IV. Time of Registration

The owner of a building shall register the building with the Department no later than June lst for the initial year and no later than September 15th for each year thereafter. The registration fee shall be shall be as established by separate resolution of the County Board of Commissioners, and as set forth in Section 32.1 of the Code. The registration fee shall not be prorated and is not refundable: If registration shall lapse for more than one year, the fee will revert to the initial registration fee. The owner shall certify to the Department of Building and Zoning that the information provided on the registration is true and correct.

Upon any change of ownership, or change of any other person required to be included in the registration statement filed pursuant to Section III, the owner or the new owner shall submit a new registration and initial registration fee within 45 days of becoming the owner of record.

Upon registration and payment of the fee, the Building Commissioner shall issue a certificate of registration to the owner which shall certify that the owner has registered the building in compliance with Section III.

V. Amended Registrations

The owner of a building required to register under this Section shall notify the Department of Building and Zoning of any change in registration information, other than change of owner, by filing an amended registration statement on a form provided by the Department for that purpose within twenty business days of the occurrence of the change. There shall be no additional fee for filing an amended registration statement.

VI. Registration Records

The Building Commissioner shall maintain all building registration records. These records shall consist of the registration information obtained under this Section and shall be solely and exclusively gathered and maintained by the Department for administrative and enforcement purposes consistent with the Code. The

information shall be held as confidential information and shall be exempt from public disclosure, except as may be required by law, and shall he provided only to authorized County Officials and employees and their agents.

VII. Notice of Violations

By designing an authorized agent under this Section the owner consents to receive any and all notices of violations concerning the registered building, and all process in any court proceeding or administrative proceeding brought to enforce the Code concerning the registered building by service of notice or process on the authorized agent.

Any owner who has designed an authorized agent shall be deemed to consent to the continuation of that agent's designation for the purposes of the Code until the owner notifies the Department of Building and Zoning of a change of authorized agent.

Any owner who fails to register a building or fails to name an authorized agent shall be deemed to consent to receive, by posting at the building, any and all notices of Code violations concerning the building.

VIII. Enforcement

(a) The Building Commissioner shall enforce the provisions of this Section and, in addition to any other remedies provided by law including institution of proceedings in the Violations Division of the Department of Building and Zoning, may request prosecution by the Cook County State's Attorney of owners who fail to comply.

(b) The Building Commissioner may refuse to issue any permit for any construction, alternation, installation, razing or other work requiring a permit under any other provisions of the Code, or may refuse to grant any certificate of compliance in accordance with any other provisions of the Code, for failure to register a building under this Section. Presentation of a current certificate of registration shall be proof of compliance.

IX. Penalties

(a) Each day that any building is not registered in accordance with as required by this Section shall constitute a separate and distinct offense.

(b) In addition to any other penalties provided in this Section, any person convicted of violating this Section shall be fined as provided in Section 32.1 of the Code.

(c) The intentional submission of false information on a registration statement or an amended registration statement shall be an offense punishable by a fine as provided in Section 32.1 of the Code. Each day that such information remains uncorrected by the owner shall constitute a separate and distinct Offense.

X. Severability

If any section, subsection, paragraph, sentence, clause or word of this ordinance shall be held to be invalid, either on its face or as applied, the invalidity of such provision shall not affect the other sections, subsections, paragraphs, sentences, clauses or words of this Ordinance, and the applications thereof; and to that end the sections, subsections, paragraphs, sentences, clauses and words of this ordinance shall be deemed severable.

102-105.4 ENFORCEMENT

General

102-105.4-1 No building permit or certificate of compliance shall be approved or issued until all applicable provisions of this ordinance have been complied with.

Department Liability

102-105.4-2. In all cases where any action is taken by the Building Commissioner, or his duly appointed representative, to enforce the provisions of this ordinance such acts shall be done in the name of on behalf of Cook County, and the said Building Commissioner or representative in so acting for the County shall

not render himself liable personally. He is hereby relieved from all personal liability from any damage that may accrue to persons or property as a result of any such act committed in good faith in the discharge of his duties. Any such suit brought against said Building Commissioner or his representative by reason thereof shall be defended by the State's Attorney's office. The Building Commissioner or his representative shall be saved harmless from all costs or fees arising from such legal action.

Methods of Enforcement

102-105.4-3a. Registration for Building Work

(1)Every person, firm, or corporation engaged in the business of constructing, altering, repairing, relocating, or demolishing the whole or any part of buildings or structures, or appurtenances thereto, within the unincorporated area of Cook County, shall, before undertaking the erection, enlargement, alteration, repair, relocation, or demolition of any building or structure for which permits are required by this ordinance, register in person with the Building Commissioner at the offices of the Cook County Department of Building and Zoning, the name and address of such person, firm or corporation in a book kept by the Building Commissioner and used for this purpose. In the case of a firm or corporation, the names of each individual comprising the firm and the names of each officer or a corporation shall be so registered. No permit shall be granted for the erection, enlargement, alteration, repair, relocation, or demolition of any building or structure unless the name and address of the person that is about to undertake such work is contained in the registration book kept for that purpose. The registration requirement for "in-person" registration of persons, firms, and corporations engaged in the business of constructing, altering, repairing, relocating, or demolishing buildings or structures set forth herein, shall be for the original or initial registration of such person, firm, or corporation. Any subsequent registration or re-registration of a person, firm, or corporation, whose name is contained in the registration book, may be done in person or electronically by signature affidavit as provided by the Code, the Building Commissioner, or the policy of the Cook County Department of Building and Zoning.

(2)Installation or alteration of electrical equipment shall be done only by a registered electrical contractor, regardless of who is issued a permit.

(3) When application is made for a permit for excavating work only, the provisions of this Section shall not apply.

(4) Prior to the commencement of actual construction for which a permit has been issued, the permit shall file with the Building Commissioner, on a form provided by the Building Commissioner, the name of the person(s), firm(s), or corporation(s), engaged to perform the work. When the work is to be subcontracted, the party engaged for each subcontract shall also be listed. The Building Commissioner shall then determine that the name and address of this person(s), firm(s), or corporation(s) is (are) contained in the registration book. No construction work shall commence until the Building Commissioner certifies that the contractor(s) is (are) duly registered .

(5) In addition to the requirements of paragraph (4) above, a person desiring to be registered as an electrical contractor shall be registered for the current year as an electrical contractor in a city or village within the State of Illinois in conformity with the appropriate state statutes.

(6) If any person, firm or corporation registered as provided by this section, shall fail in the execution of any work or fail to comply with the provisions of this ordinance relative to the erection, enlargement, alteration, repair, relocation, or demolition of any building, or part thereof, at least three times within two calendar years, the Building Commissioner, after notice to such person, firm or corporation that he, she, or it has three such failures or violations, shall remove or strike such person's, firm's, or corporation's name from the registration book. For persons, firms, or corporations that have one such failure or violation, the Building Commissioner shall request the State's Attorney to bring suit and to prosecute such person, firm or corporation for such failure or violation, and in the case of a finding of guilty, his name shall be removed or stricken from the registration book. In either case, such person's, firm's, or corporation's name shall not be re-entered or reinstated during such time as the failure or violation exists or any judgment remains unsatisfied with regard to said finding, or until the Building Commissioner

determines that such person, firm, or corporation should be re-entered or reinstated.
(7) Any person, firm, or corporation that shall have been found guilty under the preceding Section may have his name re-entered on the registration book upon filing with the Building Commissioner a certificate signed by the State's Attorney, the Building Commissioner and the Health Officer to the effect that all violations of the Code with reference to which the finding of guilty was secured have been corrected or are nonexistent and that all claims and judgments arising from such convictions have been paid.
(8)(i) Prior to the registration of any contractor, the contractor shall present to the Building Commissioner at the time of registration, proof of liability insurance in the amount of one million dollars ($1,000,000.00).
(ii) Prior to the registration of a plumbing contractor, the contractor shall file with the Cook County Clerk, and present to the Building Commissioner at the time of registration, an indemnifying bond with good and sufficient sureties in the penal sum of twenty thousand ($20,000.00), such bond being payable to the County of Cook, for the use of any persons with whom such contractor may thereafter contract to do work, to indemnify any such persons and the County of Cook for damages sustained due to the failure of such contractor to perform the work so contracted for in accordance with the provisions and requirements of the Cook County building regulations, the approved permit plans, or the contract between the contractor and such person(s). In addition, such contractor shall present to the Building Commissioner at the time of registration, proof of liability insurance in the amount of one million dollars ($1,000,000.00).
b. Inspection
The Building Commissioner shall provide for preliminary, final, and periodic inspections of such buildings, structures, equipment, sites, or parts thereof as shall be provided by this Section or as otherwise required in the provisions of this ordinance, or as may be prescribed by an administrative rule of the Building Commissioner.
(1) Preliminary Inspection
The Building Commissioner shall conduct preliminary inspections from time to time during construction of the work for which he has issued a permit; and he shall maintain a record of such examinations and inspections and of all violations of this ordinance. The holder of the permit shall be notified of any violation found.
(2) Final Inspection
Upon completion of the building or structure, and before issuance of the certificate of compliance required in Section 102-105.3-3, a final inspection shall be made and any violations of the approved plans and permit, if any, shall be noted and the holder of the permit shall be notified of the discrepancies. All violations shall be corrected before issuance of the certificate of compliance.
(3) Periodic Inspection
The Building Commissioner shall cause to be inspected annually, semi-annually, or otherwise, such buildings, structures, equipment, sites, or parts thereof, as shall be provided in this Section, or as may otherwise be required in the Code.
(a) Periodic Inspection of Buildings
(i) The Building Commissioner and his assistants shall make an annual inspection of all buildings, structures, and uses for which a certificate of compliance (occupancy) or business license has been issued; except single-family dwellings. It shall be the duty of every owner, agent, lessee, or occupant of any such building and of the person in charge or control of same to permit the making of such annual inspection by the Building Commissioner or by a duly authorized building inspector at any reasonable time upon demand being duly made.
(ii) Whenever any such inspection shows the building to be in compliance with all applicable requirements of the Code, it shall be the duty of the Building Commissioner to issue, or cause to be issued, a certificate setting forth the result of such inspection, containing the date thereof, and a statement to the effect that such building complies in all respects with the provisions of this Section or complies with all building provisions of the Code under which such building was constructed, upon the payment of the inspection fee established by resolution of the County Board of Commissioners.

(iii) It shall be the joint and several duty of the owner, agent, lessee, or occupant of the building so inspected, and of each and every person in charge and control of the same to frame the said certificate and place it in a conspicuous place near the main entrance of such building.

(iv) It shall be the joint and several duty of the owner, agent, lessee, or occupant or every building described above to provide a typical floor plan of such building reproduced on a sheet eight and one-half by eleven (8 1/2 x 11) inches in size. Said plan shall be drawn on as large a scale as will be practicable on such sheet, and said sheet shall also state the street address of such building and shall give the occupancy class and construction type of the building, and the height and number of stories contained therein. It, shall also be the joint and several duty of such owner, agent, lessee or occupant to deliver a copy of said sheet and plan to the Building Commissioner and to frame a copy of said sheet and place the same near the framed certificate hereinabove required. It shall also be the joint and several duty of the said owner agent, lessee, occupant to substitute a new sheet framed the sheet on file with the Building Commissioner, and also the sheet framed as above required, whenever such changes Or alterations are made in the building as will affect the substantial accuracy of the sheet, previously furnished said commissioner and framed as above required.

(v) Where the result of such inspection shall show that such building fails in any respect: to comply with the provisions of this ordinance, it shall be the duty of the Building Commissioner to notify the owner, agent, lessee, or occupant of such building to this effect and to specify wherein such building fails to comply with the requirements of the provisions of this ordinance; and it shall thereupon become the joint and several duty of such owner, agent, lessee or occupant to proceed forthwith to make whatever changes or alterations may be necessary to make such building comply in all respects with the requirements of the provisions of this ordinance and to complete such changes and alterations within 30 days after the receipt of such notice.

(b) Periodic Inspection of Amusement Parks and Devices

(i) The Building Commissioner shall inspect, or cause to be inspected all building; or structures to be used for purposes of exhibition amusement, or entertainment, which are attended by the public, that are within or connected with an amusement park, each year before said buildings are open to the public, for the purpose of ascertaining whether they comply with the provisions of this ordinance and the rules and regulations of the Building Department. The fee for such annual inspection shall be as established by resolution of the County Board of Commissioners.

(ii) The Building Commissioner shall inspect, or cause to be inspected annually, all amusement devices, mechanisms, and structures within an amusement park, for the purpose of ascertaining whether they comply with the provisions of this ordinance and the rules and regulations of the Building Department. The fee for such annual inspection shall be established by resolution of the County Board of Commissioners. The Building Commissioner shall inspect annually, or cause to be inspected, all amusement devices operated by motive power and all riding, sliding, sailing, swinging, or rolling devices Situated on any lot tract of land outside of any amusement park before said devices are opened to the public. Where said devices are taken down, removed, and reassembled or re-erected in another location, the Building Commissioner shall inspect or cause said devices to be re inspected after each removal and before said l devices are opened to the public, for the purpose of ascertaining whether they comply with the provisions of this ordinance and the rule s and regulations of the Building Department.

(c) Periodic Inspection of Elevators, Dumbwaiters, Moving Stairs, and Platform Lifts

(i) Every elevator, movable stage , movable orchestra floor, platform lift, dumbwaiter, or moving stairway or walkway now in operation, or which may hereafter be installed, together with the hoistway and all equipment thereof, shall be inspected under and by the authority of the Building Commissioner at least once every six (6)months, and in no case shall any new equipment be placed in operation until an inspection of the same has been made. It shall be duty of every owner, agent, lessee, or occupant of any building wherein any such equipment is installed, and of the person in charge or control of any such equipment to permit the making of a test and inspection of such elevator, dumbwaiter, or moving stairway or walkway, and all devices used in connection therewith upon demand being made by the Building Commissioner, or by his authorized elevator inspector within five (5) days after such demand has been

made, or sooner if deemed necessary by the Building Commissioner.

(ii) Whenever any elevator, movable stage, movable orchestra floor, platform lift, dumbwaiter or moving stairway or walkway has been inspected and the tests herein required have been made of all safety devices with which such equipment is required to be equipped, and the result of such inspection and tests shows such equipment to be in good condition, and that such safety devices are not good working condition and in good repair, it shall be the duty of the Building Commissioner to issue or cause to be issued a certificate setting forth the result of such inspection and tests and containing the date of inspection, the weight which such equipment will safely carry, and a statement to the effect that the shaft doors, hoistway, and all equipment, including safety devices, comply with all applicable provisions of this ordinance, upon the payment of the inspection fee required. It shall be the joint and several duty of the owner, agent, lessee, or occupant of the building which such equipment is located, and of each person in charge or control of such equipment, to frame the certificate and place the same m a conspicuous place in each elevator and near each dumbwaiter, movable stage, movable orchestra floor, platform lift, or moving stairway or walkway.

(iii) Where the result of such inspection or tests shows that such elevator, movable stage, movable orchestra floor, platform lift, dumbwaiter, or moving stairway or walkway is in an unsafe condition or in bad repair, or shows that any of the safety devices which are required by the provisions of this ordinance have not been installed, or if installed, are not in good working order or not in good repair, such certification shall not be issued until such elevator, its hoistway, and its equipment, or such dumbwaiter, movable stage, movable orchestra floor, platform, lift, or moveable stairway or walkway, or such device or devices, shall have been put in good working order.

(iv) Whenever any elevator inspector finds any elevator or dumbwaiter, its equipment and hatchway, including doors, or any moving stairway or walkway, moveable stage, movable orchestra floor, or platform lift man unsafe condition, he shall immediately report the same to the Chief Elevator Inspector who shall, upon receiving a report of the unsafe condition of such equipment and hatchway, including doors, order the operation of such equipment to be stopped and to remain inoperative until it has been placed in a safe condition; it shall be unlawful for any agent, owner, lessee, or occupant of any building, wherein any such equipment is located, to permit or allow the same to be used after the receipt of a notice from the Building Department, which notice is in writing, that such equipment is in an unsafe condition and until it has been restored to a safe and proper condition as required by the provisions of this ordnance.

(v) The fee for semi-annual inspection of an elevator, movable stage, orchestra floor, platform lift, dumbwaiter, or moving stairway or walkway shall be as established by resolution of the County Board of Commissioners.

(d) Periodic Inspection of Boilers

(i) All steam or hot water boilers, hot water supply boilers, and. unfired pressure vessels shall be subject to regular annual internal and external inspection under and by the authority of the Building Commissioner, with the exception of the following:

Boilers subject to federal inspection and control:

Boilers bearing a current and proper State of Illinois boiler inspection certificate.

Boilers with less than 100 square feet of water heating surface.

Boilers operating at a maximum of 15 pounds per square inch.

(ii) Further, all boilers subject to periodic inspection by an approved insurance company may be exempted from annual inspection by the Building Department, under the following conditions:

The insurance company's boiler inspector shall hold a commission from the National Board of Boiler and Pressure Vessel Inspectors.

The insurance company's regulations shall be at least as stringent as the boiler requirements of this ordinance.

The inspection report shall be forwarded to the Building Department within 14 days after the inspection.

The inspection report on boilers for which insurance is refused shall include the reasons therefore.

(iii) It shall be the duty of the owner, agent, lessee, or user of every boiler subject to inspection to prepare the boiler for inspection. The Chief Boiler Inspector may require a hydrostatic pressure test where he

deems it necessary.
(iv) When an inspection has been made and the installation has been approved, the Chief Boiler Inspector shall deliver to the owner or agent, upon the payment of the fee established by the resolution of the County Board of Commissioners, a certificate of inspection together with a general description of such equipment stating for what purpose it is to be used and the pressure in points at which is may be safely used. This certificate shall be framed and placed in a conspicuous place near the equipment.
(v) Any boiler or unfired pressure vessel that has been in use eight (8) years or more may, at the request of the Chief Boiler Inspector, be required to be drilled in order to determine the exact thickness and condition of the apparatus. The owner or agent shall be served with a written notice, and may show cause to the Chief Boiler Inspector why such boiler or vessel should not be drilled. If, after the owner or agent has been heard, or at the end of five (5) days the Chief Boiler Inspector deems it necessary, then such boiler or vessel shall be drilled at points near the water line, at the bottom of the boiler shell, or at such other points as the Chief boiler Inspector may direct, and the thickness of material determined. The pressure allowed shall be governed by the ascertained thickness and the general conditions of the equipment. The drilling and plugging shall be done at the expense of the owner.
(e) Periodic Inspection of Grandstands
The Building Commissioner shall inspect, or cause to be inspected, all tiers of seats and grandstands each year before such seats and grandstands are opened to the public, for the purpose of ascertaining whether they comply with the provisions of the Code and the rules and regulations of the Building Department. A fee shall be charged for such annual inspections as established by resolution of the County Board of Commissioners.
(f) Periodic Inspection of Billboards, Signs, **and** Signboards, ~~**and Wireless Telecommunication Towers**~~
(i) It shall be the duty of the Building Commissioner to exercise supervision over all outdoor non-illuminated billboard signs, signboards more than 120 square feet in area, all outdoor illuminated billboards, signs, and signboards more than six (6) square feet in area, ~~**and all wireless telecommunication towers**~~, erected or being maintained under the provisions of the Code, and to cause inspection of all such billboards, signs, **and** signboards, ~~**and wireless telecommunication towers**~~ to be made once each year.
(ii) The name of the owner of any outdoor non-illuminated billboard or signboard more than 120 square feet in area, any outdoor illuminated billboards or signboards more than six (6) square feet in area, ~~**or any wireless telecommunication towers**~~, shall appear on all such structures. Whenever it shall appear to the Building Commissioner that any such billboard, sign, **or** signboard, ~~**or wireless telecommunication tower**~~ has been erected in violation of the provisions of the Code or is in an unsafe condition or has become unstable or insecure, or is in such a condition as to be a menace to the safety or health of the public, he shall thereupon issue, or cause to be issued, a notice in writing to the owner of such billboard, sign, **or** signboard~~**, or wireless telecommunication tower**~~, or person in charge, possession, or control thereof, informing him of the violation of the provisions of this ordinance, and directing him to make such alterations or repairs thereto as shall be necessary to place such billboard, sign, **or** signboard~~**, or wireless telecommunication tower**~~ in a safe, substantial, and secure condition, and to make the same comply with the requirements of the provisions of the Code within such reasonable time as may be stated in said notice, not to exceed 30 days.
(iii) If the owner or person in charge, possession, or control of any billboard, sign, **or** signboard, ~~**or wireless telecommunication tower**~~, when so notified, shall refuse, fail, or neglect to comply with and conform to the requirements of such notice, the billboard, sign, **or** signboard, ~~**or wireless telecommunication tower**~~ shall constitute a public nuisance and the Building Commissioner shall, upon the expiration of the time therein mentioned, abate said nuisance by tearing down, or causing to be torn down, any part or parts of the billboard, sign, **or** signboard, ~~**or wireless telecommunication tower**~~ which is constructed or maintained in violation of the provisions of the Code, and shall charge the expense to the owner or person in possession, charge, or control of the billboard, sign, **or** signboard, ~~**or wireless telecommunication tower**~~; and the expense incurred shall be recovered from the owner or person by appropriate legal proceedings.

(iv) If the owner of the billboard, sign, **or** signboard, ~~**or wireless telecommunication tower**~~, or the person in charge, possession, or control thereof cannot be found, the Building Commissioner shall attach, or cause to be attached to the billboard, sign, **or** signboard, ~~**or wireless telecommunication tower**~~, a notice of the same import as that required to be sent to the owner or the person in charge, possession, or control thereof, where the owner is known; and if the billboard, sign, **or** signboard, ~~**or wireless telecommunication tower**~~, shall not have been made to conform to the provisions of the Code and placed in a secure, safe, and substantial condition, in accordance with the requirements of the notice, within 30 days after the notice shall have been attached to the billboard, sign, **or** signboard, ~~**or wireless telecommunication tower**~~, it shall be the duty of the Building Commissioner thereupon to cause the billboard, sign, **or** signboard, ~~**or wireless telecommunication tower**~~ or such portion thereof which is constructed or maintained in violation of the provisions of the Code to be torn down. Provided, however, that nothing contained herein shall prevent the Building Commissioner from adopting such precautionary measures as may be necessary or advisable in case of imminent danger in order to place the billboard, sign, **or** signboard, ~~**or wireless telecommunication tower**~~ in a safe, secure, and substantial condition, the expense of which shall be charged to and recovered from the owner of the billboard, sign, **or** signboard, ~~**or wireless telecommunication tower**~~, or the person in charge, possession, or control thereof in any appropriate proceedings therefor.

(v) Every person constructing and erecting billboards, signs, **or** signboards, ~~**or wireless telecommunication towers**~~ shall file with the County Clerk a bond, with sureties to be approved by the Building Commissioner, in the penal sum of twenty-five thousand dollars ($25,000.00), conditioned upon the fact that such person shall faithfully comply with all the provisions of this Section with respect to the construction, alteration, location and safety of billboards, signs, **or** signboards, ~~**or wireless telecommunication towers**~~ and for the payment of the inspection fees established by resolution of the County Board of Commissioners; and conditioned further to indemnify, save, and keep Cook County and its officials harmless from any claims, damages, liabilities, losses, actions, suits, or judgments which may be presented, sustained, brought, or obtained against Cook County or any of its officials because of the construction, maintenance, alteration, or removal of any part or parts of said billboards, signs, **or** signboards, ~~**or wireless telecommunication towers**~~, or by reason of any accidents caused by or resulting in any manner therefrom.

(vi) The fee for such annual inspections of billboards, signs, **and** signboards, ~~**and wireless telecommunication towers**~~ shall be as established by separate resolution of the County Board of Commissioners, and as set forth in Section 32.1 of the Code.

(g) Periodic Inspection of Canopies and Marquees.

The Building Commissioner shall make or cause to be made an annual inspection of canopies and marquees attached to buildings or other structures to determine that such canopies or marquees are in a safe condition and constitute no menace to the public health or safety. The annual inspection fee to be charged for the inspection of canopies and marquees shall be as established by resolution of the County Board of Commissioners.

(h) Periodic Inspection of Revolving Doors

Every revolving door now in operation or which may hereafter be installed, together with all the equipment and mechanism thereof, shall be inspected annually under the authority of the Building Commissioner, to determine that such revolving door is in good working order and in compliance with this ordinance. The fee for such annual inspection shal1 be as established by resolution of the County Board of Commissioners.

(i) Periodic Inspection of Mechanical Ventilating System

Every mechanical ventilating system shall be inspected annually by the Building Commissioner, to determine continued compliance with applicable provisions of the Code. The fee for such annual inspection shall be as established by resolution of the County Board of Commissioners.

(h) Periodic Inspection of Gas Containers

Every tank or gas container containing more than 2,500 cubic feet of fire or explosive hazard gas shall be inspected at least once every five (5) years, under the direction of a building inspector appointed by the

Building Commissioner. For every such five (5) year inspection and subsequent certificate of compliance, a fee shall be charged as established by resolution of the County Board of Commissioners.

(4) Right of Entry .

(a) In the discharge of his duties, the Building Commissioner or his authorized inspector shall have the authority to enter, at any reasonable hour, any building, structure, or premises within the unincorporated areas of Cook County to enforce the provisions of the Code.

(b) The Building Commissioner shall adopt an official identification card for himself and his representatives which shall be displayed for the purpose of identification .

(c) The assistance and co-operation of health, police, legal and other officers shall be available to the Building Commissioner as required in the performance of his duties.

c. Complaints and Reports

(1) Investigation

It shall be the duty or the Building Commissioner to cause an investigation to be made of all complaints made to the department which come within its jurisdiction. A record of such investigation shall be kept on file together with the reports and findings signed by the inspector or inspectors.

(2) Compliance

(a) When such investigation, whether upon complaint or otherwise, shall disclose that violations of the Code do, in fact, exist, the Building Commissioner shall give notice in writing to the owner, occupant, lessee, or person in possession, charge, or control of such building, structure, premises, or place to make such changes, alterations, or repairs, or to perform such work, or to take such action as the provisions of the Code may require within such time as shall be designated by the Building Commissioner which shall in no event be less than 30 days after the service of such notice.

(b) In the event that satisfactory changes, alterations, repairs, or requirements ordered by notice of the Building Commissioner are not commenced within the time specified in said notice, the Building Commissioner shall advise the State's Attorney of such violations of the Code or of any default of such notice, and shall recommend legal prosecution.

d. Stop Order

If any construction, alteration, installation, relocation, or demolition is done in or on any building, structure, or premises, or any part thereof, which construction alteration installation, relocation, or demolition is in violation of any of any provisions of the Code or is being done, or has been done, without the permit or permits required therefor by any of the provisions of the Code, or is being done, or has been done, contrary to the drawings or plans as approved by the Building Department in issuing such permit or permits; or if any building, structure, mechanical installation, or equipment thereof is maintained or operated without or contrary to, the certificate or certificates required therefor by any of the provisions of the Code, the Building Commissioner is hereby empowered an required forthwith to issue a stop order, directing such construction, alteration, installation, relocation, or demolition, or such maintenance or operation to cease immediately. If, after a stop order has been issued, there is any reason to believe that further work on such construction, alteration, installation, relocation or demolition is being carried on, said official shall request the State’s Attorney to proceed forthwith to obtain an injunction as provided by law against the continuing of such work, or the continuing of maintenance or operation.

e. Injunction to Secure Compliance

If the Building Commissioner shall determine, upon due investigation, that any building or structure fails to conform to the minimum standards of health and safety as set forth in the provisions of the Code, and the owner or owners of such building or structure shall fail, after due notice, to cause such property to conform with the provisions of the Code, the Building Commissioner may, in addition to any other remedies, penalties, or means of enforcement, request the State’s Attorney to make application on behalf of the County of Cook to any court of competent jurisdiction for an injunction requiring compliance with said provisions of the Code or for such order as the court may deem necessary or appropriate to secure such compliance. The State’s Attorney may then institute such proceedings on behalf of the County of Cook as provided by law.

f. Closing Building or Premises

(1) The Building Commissioner shall have the power, and it shall be his duty to order any building or premises vacated and closed, or any structure or equipment thereof removed or its operation stopped, where it is discovered that there is any violation of any of the provisions of this ordinance which imperils life, safety, or health, and to keep same closed, removed, or shut down until such provisions are complied.
(2) When the Building Commissioner has ordered a building or structure vacated and closed he shall post or cause to be posted in a conspicuous place near each entrance to the building or structure, in letters not less than two (2) inches high, a notice substantially as follows:

"THIS BUILDING IS IN DANGEROUS
CONDITION AND ITS USE OR
OCCUPANCY HAS BEEN
ADMINISTRATION AND ENFORCEMENT
PROHIBITED BY THE
BUILDING COMMISSIONER"

(3) Whenever any building, structure, or part thereof shall have been vacated and shall have been posted with a sign as hereinbefore specified, it shall be unlawful for any person or persons to enter such building.
(4) It shall be unlawful for any person to remove, cover, or obliterate any notice or notices lawfully posted by the Building Commissioner.
g. Demolition, Repair, or Enclosure of Dangerous and Unsafe Buildings
If any building shall be found to be in a dangerous and unsafe condition or uncompleted and abandoned, the Building Commissioner shall notify in writing the owner or owners thereof, directing said owner or owners to put such building in a safe condition or to demolish it. Where, upon diligent search, the identity or whereabouts of the owner or owners of any such building shall not be ascertainable such notice shall be mailed to the person or persons in whose name such real estate was last assessed. If, after 30 days subsequent to the giving of such notice, said owner or owners fail to put such building in a safe condition or to demolish it, the Building Commissioner shall notify the State's Attorney and recommend initiation of proceedings in accordance with this Section. Upon receipt of such notification and recommendation, the State's Attorney is hereby authorized to apply to the Circuit Court of Cook County, or any court of competent jurisdiction, for an order authorizing the County to demolish, repair, or enclose or to cause the demolition, repair, or enclosure of said building, and further, to request the court to enter a judgment in favor of the County of Cook for any expenses incurred in the demolition, repair, or enclosure of the building or structure.
h. Open Excavations
Whenever an open excavation exists which constitutes a danger to the public by reason of its depth or proximity to public ways or walks, the Building Commissioner shall have power to order the owner, in writing, to fill such open excavation with solid dry fill only, or to fence such open excavation adequately, setting forth in said order a period of 15 days for compliance therewith.
i. Construction Without Permit
Any person who causes any construction repairs, or alterations to be made in or for any building, structure, or any part thereof, without first obtaining the permit or permits required therefor by any of the provisions of this ordinance; or fails to post such permit, or placard indicating the possession of same, as provided in Section 102-105.3-1; or causes any construction, repair, or alterations to be made in or for any building, structure, or any part thereof, contrary to the drawings or plans as approved in issuing such permit or permits under the Code; or causes any building, structure, or equipment thereof to be maintained or operated without, or contrary to, the certificate or certificates required therefor by any of the provisions of the Code, shall be fined as provided in Section 102-105.4-5, hereunder.
j. Bond Required for Septic Tank Installation and Performance.
(1) No building permit shall be issued for the construction, erection or installation of any building or structure to be used for human habitation in the unincorporated area of Cook County, Illinois, where the plans and specifications provide for a sewage disposal unit through the media of a septic tank system,

unless and until at the time of application for such unit the installer files with the County Clerk a performance bond payable to the Board of Commissioners of Cook County in the penal sum of Ten Thousand Dollars ($10,000.00).

Said bond shall be based upon the satisfactory and adequate performance of the septic tank system (installed pursuant to plans approved by the Cook County Department of Public Health) for a period of two years from date of approval of said septic tank installation based on inspection by duly authorized representatives of the Cook County Building Department (or the Cook County Department of Public Health).

(2) The septic tank system shall not be deemed to be adequate to protect public health of the residents unless the design of such system shall be made or designed to accommodate modern appliances, such as disposals, washing machines, dishwashers, and other appliances whose principle of operation depend upon the use of water to be discharged through said septic tank system.

(3) The performance bond provided for in paragraph (1) hereof shall not be deemed to be in compliance with this ordinance and shall not be accepted for filing unless and until:

(a) Said bond shall be issued by a surety licensed to do business in the State of Illinois as such.

(b) Said bond shall provide by its terms that 'adequate and satisfactory performance' shall mean a sewage disposal system free of noxious odors within the area of the subject living unit which services the home or building and which carries away waste water from said home or building immediately upon release.

(4) The existence or appearance of any ground water or effluent directly attributable to the inadequacy of said septic tank system shall be deemed to be prima-facie evidence that said septic tank system is inadequate, unsatisfactory and a menace to the public health of persons residing on said property and served by said septic tank system.

(a) Upon written notice to the installer of any septic system of any home or structure from the Cook County Department of Public Health or the Building Department that said septic tank system is inadequate and unsatisfactory and in the opinion of the County Health Department constitutes a menace to health of the people residing on said property and served by said septic tank systems, said principal or surety may have 48 hours within which to determine the cause of failure or inadequacy of said septic tank system, and no more than 30 days from date to such notification within which to make the necessary repairs or corrections.

(b) In the event of failure of the principal after due notice to investigate and to make the necessary corrections and repairs as set forth by the Building Commissioner or the Cook County Department of Public Health, the County of Cook, a Body Politic and Corporate may undertake corrections or repairs of said septic tank system in that manner most practicable and expedient designed to alleviate the said health hazard.

(c) Payment of said repairs or corrections of said septic tank system shall not be withheld, but be made promptly, and any matters not disposed of shall thereafter be settled in accordance with the law.

Persons Liable

102-105 4.4 a. Unless otherwise specifically provided, the owner, his agent for the purpose of managing, controlling, or collecting rents, and any other person managing or controlling a building premises, in any part of which there is a violation of the provisions of the Code enumerated in this Section 102-105, shall be liable for any violation therein, existing or occurring, or which may have existed or occurred, at or during any time when such person is or was the person owning or managing, controlling, or acting as agent in regard to said buildings or premises. Wherever used in said provisions of this ordinance, the "owner" shall include any person entitled under any agreement to the control or direction of the management or disposition of the building or premises or of any part of the building or premises where the violation in question occurs.

b. The liabilities hereunder imposed on an owner shall attach to a trustee under a land trust, holding title to such building, structure, or premises without the right of possession, management, or control, unless said trustee in a proceeding under said provisions of the Code discloses in a verified pleading or in an

affidavit filed with the court, the name and last known address of each person who was beneficiary of the trust at the time of the alleged violation and of each person, if any, who was then acting as agent for the purpose of managing, controlling, or collecting rents, as the same may appear on the records of the trust.
c. Any architect, structural engineer, contractor, or builder, individual or corporate, who has designed, constructed, repaired, altered, removed, or demolished any building or any part or equipment thereof in violation of or in a manner which fails to conform with the provisions of this ordinance enumerated in this Section shall each be subject to the fine established in Section 102-105.4-5, hereunder for each and every violation of any of the said provisions existing in such design, construction, repair, alteration, removal, or demolition.

Penalty for Violation

102-105.4-5 Any violation of, or resistance to, or interference with the enforcement of any of the provisions of this ordinance shall be punished by a fine of not less than one hundred dollars ($100.00) nor more than one thousand dollars ($1,000.00) for each offense; and each day a violation continues to exist shall constitute a separate offense.

102-105.5 AMENDMENTS

The Cook County Board of Commissioners may, from time to time, in the manner set forth in Section 102-105.2 of this Article, amend the provisions or regulations contained in this ordinance, for the purpose of promoting the public health, safety, comfort, and general welfare.

102-105.6 FEES

a. Fees required for all applications, permits (including but not limited to plumbing, electrical, carpentry, HVAC, and other required fixtures and installations), certificates, and inspections administrated by the Department of Building and Zoning shall be as established by the Cook County Board of Commissioners in Section 32.1 of the Code. All fees shall be collected by the Building Commissioner for deposit with the County Treasurer.
b. The Cook County Building and Zoning Commissioner be, and is hereby authorized, empowered and directed upon request to collect a fee of an amount per page for each copy the Department's Building and Zoning records as established by the Cook County Board of Commissioners in Section 32.1 of the Code.

102-105.7 RELATED COOK COUNTY DOCUMENTS

102-105.7-1 The documents listed herein are official Cook County regulatory ordinances, codes, and documents that are referred to in the Code and that relate to building construction and regulation:

Cook County Zoning Ordinance;
Cook County Zoning Book of Maps;
Cook County Comprehensive Land Use and Policy Plan; and
Cook County Environmental Control Ordinance (Chapter 30, ENVIRONMENT).

BE IT FURTHER ORDAINED, by the Cook County Board of Commissioners that Chapter 102 BUILDINGS AND BUILDING REGULATIONS, ARTICLE III – BUILDING CODE, Sections 102-110, 102-115, 102-120, 102-125, 102-130, and 102-135 are hereby enacted as follows:

ARTICLE III – BUILDING CODE

Section 102-110. Regulation of Buildings and Structures.

The following provisions of the 2009 International Building Code are hereby adopted by reference to provide the regulations of buildings and structures in unincorporated Cook County, Illinois:

Chapter 1, Part 1; Chapters 2 through 26; Chapter 28; Chapters 30 through 35; Appendices C through I; and Sections J101, J102, and J106 through J108, of Appendix J. The above provisions are applicable in full force and effect as if set out at length in this Code. Any provision of the 2009 International Building Code not specifically listed above, is specifically excluded and not adopted.

Section 102-115. Regulation of Buildings and Structures.

The following provisions of the 2012 International Mechanical Code are hereby adopted by reference to provide additional regulations of buildings and structures in unincorporated Cook County, Illinois:

Chapter 1, Part 1; Chapters 2 through 9; Chapter 10 (except to the extent there is a conflict with Section 102-135. Regulation of Buildings and Structures With Respect to Plumbing); Chapter 11; Chapter 12 (except to the extent there is a conflict with Section 102-135. Regulation of Buildings and Structures With Respect to Plumbing); Chapters 13 through 15; and Appendix A. The above provisions are applicable in full force and effect as if set out at length in this Code. Any provision of the 2012 International Mechanical Code not specifically listed above, is specifically excluded and not adopted.

Section 102-120. Regulation of Residential Buildings and Structures.

The following provisions of the 2009 International Residential Code are hereby adopted by reference to provide the regulations of residential buildings and structures in unincorporated Cook County, Illinois:

Chapter 1, Part 1; Chapter 2; Chapter 3, Sections R301 through R312 and Sections R314 through R323; Chapters 4 through 18; Chapter 21; Chapter 23; Chapter 44; Appendices B through F; Appendix H; Appendices J through M; and Appendix Q. The above provisions are applicable in full force and effect as if set out at length in this Code. Any provision of the 2009 International Residential Code not specifically listed above, is specifically excluded and is not adopted.

Section 102-125. Regulation of Buildings and Structures With Respect to Energy Conservation.

The following provisions of the 2012 International Energy Conservation Code are hereby adopted by reference to provide the regulations with respect to energy conservation of buildings and structures in unincorporated Cook County, Illinois:

Of the IECC-Commercial Provisions: Chapter 1, Part 1; and Chapters 2 through 5. Of the IECC-Residential Provisions: Chapter 1, Part 1; and Chapters 2 through 5. The above provisions are applicable in full force and effect as if set out at length in this Code. Any provision of the 2012 International Energy Conservation Code not specifically listed above, is specifically excluded and not adopted.

Section 102-130. Title of Codes.

The provisions of Sections 102-102, 102-103, 102-104, 102-105, the 2009 International Building Code set forth in Section 102-110, the 2012 International Mechanical Code set forth in Section 102-115, the

2009 International Residential Code set forth in Section 102-120, and the 2012 International Energy Conservation Code set forth in Section 102-125, shall be collectively known as and referred to as "the Cook County Building Code."

Section 102-135. Regulation of Buildings and Structures With Respect to Plumbing.

The 2014 State of Illinois Plumbing License Law, Plumbers Licensing Code, and Plumbing Code are hereby adopted by reference to provide the regulations of residential buildings and structures in unincorporated Cook County, Illinois:

The Illinois Plumbing License Law, codified at 225 ILCS 320; the Illinois Plumbers Licensing Code, codified at 68 Illinois Administrative Code, Part 750; and the Illinois Plumbing Code, codified at 77 Illinois Administrative Code, Part 890. The above provisions are applicable in full force and effect as if set out at length in this Code. The above provisions shall be collectively known as and referred to as "the Cook County Plumbing Code." Any provision of the 2014 State of Illinois Plumbing License Law, Plumbers Licensing Code, and Plumbing Code not specifically listed above, is specifically excluded and not adopted.

BE IT FURTHER ORDAINED, by the Cook County Board of Commissioners that Chapter 102 BUILDINGS AND BUILDING REGULATIONS, ARTICLE III – BUILDING CODE, Section 102-140 of the Cook County Code is hereby enacted as follows:

ARTICLE III – BUILDING CODE

Section 102-140. Cook County Plumbing Code, Appendix A, Table A, Regulation of Buildings and Structures With Respect to Plumbing.

102-140.890.APPENDIX A Plumbing Materials, Equipment, Use Restrictions and Applicable Standards

102-140.890.TABLE A Approved Materials and Standards

All materials must meet at least one of the approved standards listed.

	Approved Building Drainage/Vent Pipe	
1)	Brass Pipe	ASTM B 43-2009
2)	Cast Iron Pipe	ASTM A 74-2009 ASTM A 888-2011 ASTM C 564-2011
3)	Copper/Copper Alloy Pipe	ASTM B 42-2010 ASTM B 302-2012
4)	Copper/Copper Alloy Tubing (K-L-M)[2]	ASTM B 75-2011 ASTM B 88-2009 ASTM B 251-2010 ASTM B 306-2009
5)	Galvanized Steel Pipe[2]	ASTM A 53-2012
6)	High Silicon Content Cast Iron Pipe[3]	ASTM A 377-2008e1 CSA B70-2008
7)	Polypropylene Pipe[3]	CSA B137.1-2010 in B137
8)	Polyvinyl Chloride (PVC) Pipe	ASTM D 2665-

	and Fittings[5]	2012 ASTM D 2949-2010 CSA B137.2-2009 in B137 CSA B181.2-2007 in B137
9)	Polyvinyl Chloride (PVC) Pipe with Cellular Core[45]	ASTM F891-2010 ASTM F 1760-2011
	Joints	ASTM D 2855-2010
	Primer	ASTM F 656-2010
	Solvent Cement[1]	ASTM D 2564-2009 ASTM D 3138-2011
10)	Polyvinylidene Fluoride[3]	ASTM D 3222-2010
11)	Solder	ASTM B 32-2008
12)	Stainless Steel – types 304 and 316L	ASME A112.3.1-2007
13)	Stainless Steel Butt-weld Fittings	ASTM A774/A774M-2009 ASTM A 403/A403M-2012
14)	Stainless Steel Flanges	ASTM A-240/A241M-2012

Agency Notes:

[1]Solvent cement must be handled in accordance with ASTM F 402-1993.

[2]Type M copper tubing, DWV copper tubing, and galvanized steel pipe are approved for above-ground uses only.

[3]Approved for corrosive waste or corrosive soil conditions.

[4]PVC pipe with cellular core is approved only for gravity drainage and venting.

[5]Approved for three stories or less in height for single family occupancy only.

Approved Materials for Building Sewer

1)	Cast Iron Soil Pipe/Fittings	ASTM A 74-2009 CSA B70-2011
	Rubber Gaskets	ASTM C 564-2011 CSA B70-2011 CSA B602-2010 ASTM D4161-2010
2)	Copper/Copper Alloy Tubing	ASTM B 88-2009
3)	Concrete Pipe 24” or Larger	ASTM C 14-2011 ASTM C 76-2012 CSA B602-2010 ASTM C 443-2012

4)	Polyvinyl Chloride (PVC) Pipe	ASTM F 1866-2007 ASTM D 2665-2012 ASTM D 2949-2010 ASTM D 3034-2008 CSA B182.1-2007 in B1800 CSA B182.2-2007 in B1800 CSA B182.4-2007 in B1800 CSA B181.2-2007 in B1800
	Joints	ASTM D 2855-2010 CSA B602-2010 ASTM D 3212-2007
	Primer	ASTM F 656-2010
	Solvent Cement[1]	ASTM D 2564-2010 CSA B181.2-2009el in B1800
5)	Vitrified Clay Pipe[2] 21" or Smaller	ASTM C 4-2009 ASTM C 700-2011 ASTM C425-2009
6)	Solder	ASTM B 32-2008

Agency Note:
[1]Solvent cement must be handled in accordance with ASTM F 402-1988.
[2]PVC pipe with cellular core and vitrified clay pipe are approved only for gravity drainage.

Approved Materials for Water Service Pipe

1)	Brass Pipe[2]	ASTM B 43-2009
2)	Cast Iron (ductile iron)[2] Water Pipe	ASTM A 377-2008el CSA B70-2012 AWWA C151/A21.51-2009
3)	Copper/Copper Alloy Tubing[2,3]	ASTM B 88-2009
4)	Solder	ASTM B 32-2008

Agency Note:
[1]Solvent cement must be handled in accordance with ASTM F 402-1988.
[2]Water service pipe must meet the appropriate NSF standard for potable water.
[3]Type K or L copper may be installed underground.

Approved Materials for Water Distribution Pipe

1)	Brass Pipe[2]	ASTM B 43-2009
3)	Copper/Copper Alloy Pipe[2]	ASTM B 42-2010 ASTM B 302-2012 AWWA C606-2011
4)	Copper/Copper Alloy Tubing[2]	ASTM B 88-2009
6)	Galvanized Steel Pipe[2]	ASTM A 53-2012 AWWA C606-2011
9)	Welded Copper Water Tube[2]	ASTM B 447 WK, WL, and WM-2012
10)	Solder	ASTM B 32-2008

Agency Notes:

[1]Water distribution pipe must meet the appropriate NSF standard for potable water.

Approved Materials and Standards for Plumbing Fixtures and Fixture Fittings

1)	Bathtub Liners (plexiglass/ABS or acrylic/plastic)	ANSI Z124.8-1990
2)	Bathtubs, Plastic	ANSI Z124.1-2005 and CSA B45.5-2011 in B45
3)	Bidets	ASME/ANSI A112.19.2M-2008 CSA B45.1-2008
4)	Enameled Cast Iron Plumbing Fixtures	ASME/ANSI A112.19.1-2008 CSA B45.2 -2008
5)	Fittings:	
	Plumbing Fixture Fittings (metering valves, faucets, etc.)	ASME/ANSI A112.18.1-2011 CSA B125-2011
	Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, Hot Tubs and Whirlpool Bathtub Appliances	ASME/ANSI A112.19.8-2007 CSA C22.2 No. 218.1-M(R2011) CSA C22.2 No. 218.2-93(R2008)
6)	Floor Drains	ASME A112.6.3-2007 CSA B79-2008
7)	Flushometer Bowls	ASME/ANSI A112.19.2M-1998 CSA B125-2001
	Flushometers	ANSI/ASSE 1037-1990 CSA B125-2001
8)	Grease Interceptors	PDI /ASME/ANSI A112.14.3-2000
9)	Low Consumption (1.6 gpf) Water Closets[1]	ASME/ANSI A112.19.2M-1998 CSA B45.1-1999 in

		B45 CSA B45.4-1999 in B45
10)	Plastic Lavatory	ANSI Z124.3a-1995 CSA B45-1999
11)	Plastic Shower Receptors/Shower Stalls	ANSI Z124.2a-1995 CSA B45-1999
12)	Plastic Water Closets Bowls/Tanks	ANSI Z124.4-1996 and ANSI Z124.4a-1996 CSA B45.5-1999 in B45
13)	Porcelain Enameled Formed Steel Plumbing Fixtures, including Bathtub Liners	ASME/ANSI A112.19.4M-1994 CSA B45.3-1999 in B45
14)	Stainless Steel Plumbing Fixtures (Residential)	ASME/ANSI A112.19.3M-1996 CSA B45.4-1999 in B45
15)	Vitreous China Plumbing Fixtures	ASME/ANSI A112.19.2M-1998 CSA B45.1-1999 in B45
16)	Whirlpool Bathtub Appliances	ASME/ANSI A112.19.7M-1995 CSA C22.2 No. 0-M1991 CSA C22.2 No. 14-1995 CSA C22.2 No. 100-1995 CSA C22.2 No. 218.2-1993 CSA B45-1999 CSA B45.10-2001 CSA B125-2001 CSA B137-1999

Agency Notes:
The water pressure at each fixture installation shall meet the manufacturer's minimum recommended level for the fixture.

Approved Standards for Plumbing Appliances/Appurtenances/Devices

1)	Anti-Backflow Freeze less Wall Hydrants	ANSI/ASSE 1019-1997 CSA B125-2001
2)	Anti-Scald Control Valve	ANSI/ASSE 1016-1996 CSA B125-2001
3)	Anti-siphon Self Drawing Frost Proof	ANSI/ASSE 1019-

	Sillcock	1997 CSA B125-2001
4)	Automatic Ice Making Equipment	NSF #12-1993 CSA C22.2 No. 120-M1991
5)	Automatic Storage Type Water Heater Less Than 75,000 BTU/HR	ASHRAE 90A-1980/ ANSI Z21.10.1a-1994 CSA 4.1-M1998 CSA 4.1a-2000
6)	Back Water Valves	ASME/ANSI A112.14.1-1998 CSA B181.1-1999 in B1800 CSA B181.2-1999 in B1800 CSA B182.1-1999 in B1800 CSA B70-1997
7)	Circulating Tank, Instantaneous	ANSI Z21.10.1a-1994/UL 499 CSA 4.1-M1998 CSA 4.3 M1998 CSA 4.9-2000 CSA B140.12-1976 CSA C22.2 No. 110-1994
8)	Circulating Tank, Instantaneous, Automatic	ANSI Z21.10.3a-1990/UL 174-1977 CSA 4.1-M1998 CSA 4.3-M1998 CSA 4.9-2000 CSA B140.12-1976 C22.2 No. 110-1994
9)	Detergent/Chemical Feeders for Commercial Use	ANSI/ASSE 1055-1997 CSA C22.2 No. 0-M1991 CSA C22.2 No. 0.4-M1982 CSA C22.2 No. 68-1992 CSA C22.2 No. 142-M1997
10)	Dishwashing Machine (Commercial)	ANSI/ASSE 1004-1990 CSA C22.2 No. 0-M1991 CSA C22.2 No. 0.4-M1982 CSA C22.2 No. 168-M1981

11)	Dishwashing Machine (Residential)	ANSI/ASSE 1006-1989 CSA C22.2 No. 167-1997
12)	Diverters for Residential – Anti-Siphon	ASSE 1025-1978 CSA B125-2001
13)	Double Check Detector Assembly	ANSI/ASSE 1048-1995 CSA B64-2001
14)	Double Check With Atmospheric Vent	ASSE 1012-1995 CSA B64-2001
15)	Double Check Valve Assembly	ASSE 1015-1999 CSA B64-2001
16)	Drinking Fountains	ARI 1010-1985 or ASME A112.19.2M-1998 CSA B45-1999
17)	Drinking Water Treatment Units – Health Effects	NSF #53-1999a
18)	Drinking Water Treatment Units – Aesthetic Effects	NSF #42-1999
19)	Drinking Water Treatment Chemicals	NSF #60-1999
20)	Dual Check Valve	ANSI/ASSE 1024-1998 CSA B64-2001
21)	Duel Check Valve (Carbonated Beverage) (Relief Port Required)	ASSE 1022-1996 CSA B64-2001
22)	Food Waste Disposal (Commercial)	ANSI/ASSE 1009-1990 CSA C22.2 Nos. 0-M1991 CSA C22.2 No. 68-1992
23)	Food Waste Disposal (Residential)	ASSE 1008-1989 CSA C22.2 Nos. 0-M1991 CSA C22.2 No. 68-1992
24)	Gas Water Heater Above 75,000 BTU	ANSI Z21.10.3a-1990/AGA CSA 4.3-M1998
25)	Gas Water Heater 75,000 BTU or Less	ANSI Z21.10.1a-1991 AGA CSA 4.1-M1998
26)	Gas Water Heater (Continuous Use)	ANSI Z21.10.1a-1991 CSA 4.1-M1998
27)	Gas Water Heater – Space Heating	ANSI Z21.10.1a-1991 CSA 4.1-M1998
28)	Grease Interceptors	PDI-G 101-1985
29)	Handheld Showers	ASSE 1014-1990 CSA B125.-2001

30)	Home Laundry Equipment	ASSE 1007-1992 CSA C22.2 No. 0-M1991 CSA C22.2 No. 0.4M-1982 CSA C22.2 No. 53-1968 CSA C22.2 No. 169-1997
31)	Hot Water Dispensers-Electrical	ANSI/ASSE 1023-1979 CSA C22.2 No. 64-M1991
32)	Hot Water Generating/Heat Recovery Equipment	NSF #5-1992
33)	Ice Makers	UL 563-1975 CSA B45-1999 CSA C22.2 No. 0-M1991 CSA C22.2 No. 0.4M-1982 CSA C22.2 No. 63-1993 CSA C22.2 No. 120-M1991
34)	Individual Pressure Balancing In-line valves for individuals fixture fittings	ASSE 1066-1997 CSA B125-2001
35)	Mixing Valves	ANSI/ASSE 1016-1996
	Individual Thermostatic Pressure Balancing and Combination Control Valves	CSA B125-2001
	Temperature Actuated Mixing Valves, Domestic Use	ANSI/ASSE 1017-1999 CSA B125-2001
36)	Oil Fired Water Heaters	UL 732-1975/ASME 1975 CSA B140.0-M1987 CSA B140.12-1976 CSA C22.2 No. 0-M1991 CSA C22.2 No. 3-M1988
37)	Pressure Relief Valve	ANSI Z21.22-1986 CSA 4.4-M1999 CSA 4.4a-2000 CSA 4.4b-2001
38)	Pressurized Flushing Device	ANSI/ASSE 1037-1990 CSA B125-2001

39)	Reduced Pressure Detector Assembly	ANSI/ASSE 1047-1999 CSA B64-2001
40)	Reduced Pressure Principle Backflow Preventer	ASSE 1013-1999 CSA B64-2001
41)	Refuse Compactors/Compactor System	NSF #13-1992 CSA C22.2 No. 0-M1991 CSA C22.2 No. 68-1992
42)	Relief Valves For Hot Water System	ANSI Z21.22-1986 CSA 4.4-M1999 CSA 4.4a-2000 CSA 4.4b-2001
43)	Reverse Osmosis Drinking Water Treatment System	NSF #58-1999
44)	Spray Type Dishwashing Machine for Commercial Use	NSF #3-1996 CSA C22.2 No. 0-M1991 CSA C22.2 No. 0.4-M1982 CSA C22.2 No. 53-1968 CSA 22.2 No. 168-M1981
45)	Trap Seal Primer Valve	ASSE 1018-1986 CSA B125-2001
46)	Vacuum Breakers, Anti-siphon	ANSI/ASSE 1001-1990 CSA B64-2001
47)	Vacuum Breakers Hose Connection	ANSI/ASSE 1011-1995 CSA B64-2001
48)	Vacuum Breaker (Laboratory Faucet)	ANSI/ASSE 1035-1995 CSA B64-2001
49)	Vacuum Breakers Pressure Type	ASSE 1020-1997 CSA B64-2001
50)	Vacuum Relief Valve	ANSI Z21.22-1986 CSA B64-2001
51)	Vending Machine for Food/Beverage	NSF #25-1997 CSA 22.2 No. 0-M1991 CSA C22.2 No. 120-M1991 CSA C22.2 No. 128-1995
52)	Water Closet Tank Ball Cock	ASSE 1002-1999

		CSA B125-2001
53)	Water Hammer Arresters	ASSE 1010-1998 CSA B125-2001
54)	Water Heater Drain Valve	ASSE 1005-1986 CSA B125-2001
55)	Water Pressure Reducing Valves (Domestic)	ANSI/ASSE 1003-1995 CSA B356-2000

Approved Standards for Fittings

1)	Cast Iron Threaded Drainage Fittings	ASME/ANSI B16.12-1991
2)	Cast Copper Alloy Solder Pressure Fittings	ANSI B16.18-1994
3)	Cast Copper Alloy Solder Drainage Fitting (DWV)	ANSI B16.23-1992
4)	Copper Fittings	ASME B16.15-1994 ANSI B16.18-1994 ASME/ANSI B16.22-1995 ANSI B16.23-1992 ASME/ANSI B16.26-1988 ASME/ANSI B16.29-1994 ASME/ANSI B16.32-1984
5)	Forged Steel Fittings, Socket, Welded, Threaded	ASME/ANSI B16.11-1997
6)	Gray Iron/Ductile Iron	AWWA C 110-1998 AWWA C 151-1996
7)	Malleable Iron	ASME/ANSI B 16.3-1992
8)	Plastic	ASTM D 2466-1997 ASTM D 2467-1996a ASTM D 2468-1996a ASTM D 2564-1996a ASTM D F409-1998 ASTM D F438-1997 ASTM D F439-1997 CSA B137.3-1999 in B137

		CSA B181.2-1999 in B1800 CSA B182.1-1999 in B1800 CSA B182.2-1999 in B1800 CSA B125-2001 CSA B137.6-1999 in B137 CSA B137.6-1999 in B137
9)	Plumbing Fixture Fittings (Metering valves, faucets, etc.)	ASME A112.18.1M-1996 CSA B125-2001
10)	Steel	ASME/ANSI B 16.9-1993 ASME/ANSI B 16.11-1997 ASME/ANSI B 16.28-1994
11)	Wrought Copper/Bronze Solder Pressure Fitting	ASME/ANSI B 16.22-1995
12)	Wrought Copper and Wrought Copper Alloy Solder (Drainage Fittings)	ASME/ANSI B16.29-1994 ASME/ANSI B16.22-1995
13)	Wrought Steel Buttwelding Fittings	ASME/ANSI B16.9-1993
14)	Wrought Steel Buttwelding Short Radius Ells	ASME/ANSI B16.28-1994

(Source: Amended at 28 Ill. Reg. 4215, effective February 18, 2004)

BE IT FURTHER ORDAINED, by the Cook County Board of Commissioners that Chapter 102 BUILDINGS AND BUILDING REGULATIONS, ARTICLE III – BUILDING CODE, Section 102-150 of the Cook County Code is hereby enacted as follows:

ARTICLE III – BUILDING CODE

Section 102-150. Regulation of Buildings and Structures With Respect to Electricity.

The 2014 Cook County Electrical Code is hereby adopted and is fully set forth in Cook County, Illinois Code of Ordinances, Part II-Land Development Ordinances, Appendix B-Electrical Code. The above provisions are applicable in full force and effect. The above provisions shall be collectively known as and referred to as "the Cook County Electrical Code."

BE IT FURTHER ORDAINED, by the Cook County Board of Commissioners that Chapter 118 STORM WATER, Section 118 is hereby enacted as follows:

ARTICLE I – STORM DRAINAGE

118-1 General

118-1.1 Scope. The provisions of this Article shall govern the materials, design, construction and installation of **storm drainage**.

118-1.1.1 License Plumber. All storm Drainage shall be installed by a license plumber.

118-1.2 Where required. Storm drainage shall be provided pursuant to this Article I.

118-1.2.1 Roof drainage and downspouts. All roofs exceeding 750 square feet (69.7 m^2) in area shall be drained to a storm sewer, where such is available in any adjoining public way, or public place. Every connecting roof downspout having the open roof connection, located nearer than 12 feet (3.66 mm) to an inside lot line or any door or window on the same premises, shall be trapped on the downspout side of the connection to any sanitary sewer or any combined sewer or drain, and shall be set where not subject to frost.

Exceptions:

1. Nothing in this provision shall prohibit the temporary disconnection of the roof downspout of a building from the sewer or combined sewer so long as the disconnection does not result in the drainage of water beyond the property lines, of the lot on which the building is located.

2. Roofs of single-family and multiple-family buildings may be provided with external downspouts discharging onto a paved or landscaped area, provided the water thus discharged can be drained directly to an area drain, catch basin or street gutter connected to a public sewer, without spilling over Onto adjacent property, creating a public hazard or nuisance.

118-1.2.2 Drainage of areas and yards. Outside areas other than roof areas may be drained to a sewer and when paved shall be so drained where necessary to avoid the discharge of water onto adjoining premises. Paved areas of 400 square feet or less where connected to the sewer, shall be provided with trapped connections before connecting to any sanitary sewer or combined sewer, with traps placed where not subject to frost. Outside areas exceeding 400 square feet (37.2 m^2), and not more than 5,000 square feet (1524 m^2), where connected to sewers, shall be connected through a catch basin, not less than 3 feet (915 mm) in diameter and not less than 3 feet (915 mm) deep below the bottom of the trap. Areas of more than 5,000 square feet (1524 m^2) shall be provided with a catch basin not less than 4 feet (1220 mm) in diameter and not less than 3 feet 6 inches (1067 mm) deep below the bottom of the trap.

118-1.2.3 Storm runoff. Construction which is tributary to the combined sewer system shall be designed to minimize and/or delay runoff inflow contributions to the combined sewer system in accordance with the following:

Exceptions:

1. Disconnection: For sites of 5,000 square feet (1524 m^2) in area and smaller, except multiple unit developments, storm runoff will be minimized or delayed by the disconnection of downspouts, temporary or otherwise, in accordance with Section 118-1.2.l .

2. Detention: For sites greater than 5,000 square. feet (1524 m^2), and multiple unit developments, storm runoff shall be detained in accordance with, and is required by the Building Commissioner. The releases rate of detained storm runoff shall be managed on the available capacity of the combined, sewer system as determined by the Building Commissioner.

118-1.3 Prohibited drainage. Storm water shall not be drained into sewers intended for sewage only.

118-1.4 Tests. The conductors and the building storm drain shall be tested in accordance with Subpart M.

118-1.5 Change in size. The size of a drainage pipe shall not be reduced in the direction flow.

118-1.6 Fittings and connections. All connections and changes in direction of the storm drainage system shall be made with approved drainage-type fittings in accordance with 77 Illinois Administrative Code, Part 890. The fittings shall not obstruct or retard flow in the system.

118-1.7 Roof design. The structural integrity of roofs shall be designed fur the maximum possible depth of water that will pond thereon as determined by the relative levels of roof deck and overflow weirs, scuppers, edges or serviceable drains in combination with the deflected structural elements.

118-1.8 Cleanouts required. Cleanouts shall be installed in the storm drainage system and shall comply with the provisions of this Article I for sanitary drainage pipe cleanouts.

118-1.9 Backwater valves. Backwater valves installed in a storm drainage system shall conform to Article I.

118-2 Materials

118-2.1 General. The materials and methods utilized for the construction and installation of storm drainage systems shall comply with this Article I and the applicable provisions of 77 Illinois Administrative Code, Part 890.

118-2.2 Inside storm drainage conductors. Inside storm drainage conductors installed above ground shall conform to one of the standards listed in Section 102-140.

118-2.3 Underground building storm drain pipe. Underground building storm drain pipe shall conform to one of the standards listed in Section 102-140.

118-2.4 Building storm sewer pipe. Building storm sewer pipe shall conform to one of the standards listed in Section 102-140 .

118-2.5 Subsoil drain pipe. Subsoil drains shall be open-jointed, horizontally split or perforated pipe conforming to one of the standards listed in Table 118-2.5.

TABLE 118-2.5 SUBSOIL DRAIN PIPE

MATERIAL	STANDARD
Cast-iron pipe	ASTM A 74; ASTM A 888; CISPI 301
Polyvinyl chloride (PVC) plastic	ASTM D 2729; ASTM D 3034; ASTM F891;
Vitrified clay pipe	ASTM C 4; ASTM C 700

118-2.6 Roof drains. Roof drains shall conform to ASME A112.21.2.

118-2.7 Fittings. Pipe fittings shall be approved for installation with the piping material installed, and shall conform to the respective pipe standards or one of the standards listed in Appendix A Table A. The fittings shall not have ledges, shoulders or reductions capable of retarding or obstructing flow in the piping. Threaded drainage pipe fittings shall be of the recessed drainage type.

118-3 Traps

118-3.1 Main trap. Leaders and storm drains connected to a combined sewer shall be trapped. Individual storm water traps shall be installed on the storm water drain branch serving each conductor, or a single trap shall be installed in the main storm drain just before its connection with the combined building sewer or the public sewer. One trap may serve more than one downspout, and any such trap shall be on the Upstream side of the connection to any sanitary sewer or any combined sewer or drain, and shall be set where not subject to frost.

118-3.2 Material. Storm water traps, when required, shall be of the same material as the piping system to which they are attached.

118-3.3 Size. Traps for individual conductors shall be the same size as the horizontal drain to which they are connected.

118-3.4 Cleanout. An accessible cleanout shall be installed on the building side of the trap.

118-4 Conductors and connections

118-4.1. Prohibited use. Conductor pipes shall not be used as soil, waste or vent pipes, and soil, waste or vent pipes shall not be used as conductors.

118-4.1.1 Distinct Sewer Lines. In service areas where separate sanitary and storm sewers are constructed, drain connections for buildings shall have separate sanitary waste water and storm water connections.

118-4.2 Combining storm with sanitary drainage. The sanitary and storm drainage systems of a structure shall be entirely separate except where combined sewer systems are utilized. Where a combined sewer is utilized, the building storm drain shall be connected in the same horizontal plane at or down stream of where the building drain exits the building.

118-4.2.1 Separate Sewer System. Where feasible, storm water inflows to the existing combined sewer in the public right-of-way shall be directed to a separate storm sewer, should a separate public storm sewer become available. Such re-direction of storm water inflows shall take place within five years of the establishment and availability of a separate public storm sewer, or such reasonable longer period of time as in the judgment of the Building Commissioner is necessary to accomplish such re-direction.

118-4.3 Floor drains. Floor drains shall not be connected to a storm drain.

118-5 Roof Drains

118-5.1 Strainers. Roof drains shall have strainers extend not less than 4 inches (100mm) above the surface of the roof immediately adjacent to the roof drain. Strainers shall have an available inlet area, above roof level, of not less than 1 1/2 times the area of the conduct or leader to which the drain is connected. All downspouts from gravel roofs shall be fitted with serviceable devices to screen out loose gravel.

118-5.2 Flat decks. Roof drain strainers for use on recreational decks, sun decks, parking decks and similar areas that are normally serviced and maintained shall comply with Section 118-5.1 or shall be of the flat-surface type, installed level with the deck, with an available inlet area not less than two times the area of the conductor or leader to which the drain is connected.

118-5.3 Roof drain flashing. The connection between roofs and roof drains which pass through the roof and into the interior of the building shall be made water tight by the use of approved flashing material. Refer to Section 118-5.7.

118-5.4 Maximum area. A single roof drain head shall not exceed 13,000 square feet (1208 m^2).

118-6 Size of Conductors, Leaders and Storm Drains

118-6.1 General. The size of the vertical conductors and leaders, building storm drains, building storm sewers, and any horizontal branches of such drains or sewers shall be in compliance with Sections 118-6.2 through 118-6.6.

118-6.2 Vertical conductors and leaders. No downspout shall be of smaller size than shown in Table 118-6.2, based on the maximum horizontal projected roof area drained. Downspouts that are offset at 90 degrees shall be sized as a horizontal storm drain and shall be full size to the storm drain or sewer or combined drain or sewer. The above sizes of downspouts are based on the diameter of circular downspouts and other shapes shall have equivalent cross-sectional area.

Vertical Storm

TABLE 118-6.2 DOWNSPOUTS	
DIAMETER OF DOWNSPOUTS (inches)	**MAXIMUM HORIZONTAL PROJECTED ROO**
2	720
2 1/2	1300
3	2150
4	4600
5	8300
6	13000
8	29000

10	52000
12	83000
13	155000

118-6.3 Building storm drains and sewers. The size of the building storm drain, building storm sewer and their horizontal branches shall be based on the maximum projected roof area in accordance with Table 118-6.3. The minimum slope of horizontal branches shall be one-eighth unit vertical in 12 units horizontal (1-percent slope) unless otherwise approved.

Horizontal Storm Drain

Table 118-6.3 SIZE OF HORIZONTAL STORM DRAINAGE PIPING

PIPE SIZE	Slope in Inches Per Foot					
	1/2	1/4	1/8	1/16	1/32	1/64
	Sq. Ft.	Sq. Ft.	Sq. Ft.	Sq. Ft.	Sq. Ft.	Sq. Ft.
3	1644	1160	822	NP	NP	NP
4	3760	2650	1800	NP	NP	NP
5	66	47	33	N	N	N

	80	20	40	P	P	P
6	10700	7550	5350	NP	NP	NP
8	23000	16300	11500	NP	NP	NP
10	41400	29200	20700	NP	NP	NP
12	66600	47000	33300	NP	NP	NP
15	11900	8400	5950	NP	NP	NP
16	-	-	7050	50000	36000	NP
18	-	-	10350	73000	52000	NP

			0			
20	-	-	128000	910000	640000	NP
21	-	-	-	110000	780000	560000
24	-	-	-	158000	112000	800000
30	-	-	-	285000	202000	145000

N.P. = NOT PERMITTED

118-6.4 Vertical walls. In sizing roof drains and storm drainage piping, 25% of the area of any vertical wall that diverts rainwater to the roof shall be added to the projected roof area for inclusion in calculating the required size of vertical conductors, leaders and horizontal storm drainage piping.

118-6.5 Parapet wall scupper location. Parapet wall roof drainage scupper location shall comply with the requirements of Section 118-1.7.

Exception: Scuppers are not permitted in fire walls and lot-line parapets.

118-6.6 Size of roof gutters. The size of semi-circular gutters shall be based on the maximum projected roof area in accordance with Table 118-6.6.

TABLE 118-6.6 SIZE OF SEMICIRCULAR ROOF GUTTERS							
DIAMETER OF GUTTERS (inches)	Square Feet	DIAMETER OF GUTTERS (inches)	Square Feet	DIAMETER OF GUTTERS (inches)	Square Feet	DIAMETER OF GUTTERS (inches)	Square Feet
1/16 unit Vertical in 12 Units Horizontal (0.5-percent slope)		1/16 unit Vertical in 12 Units Horizontal (0.5-percent slope)		1/16 unit Vertical in 12 Units Horizontal (0.5-percent slope)		1/16 unit Vertical in 12 Units Horizontal (0.5-percent slope)	
3	170	3	240	3	340	3	480

4	360	4	510	4	720	4	1020
5	625	5	880	5	1250	5	1770
6	960	6	1360	6	1920	6	2770
7	1380	7	1950	7	2760	7	3900
8	1990	8	2800	8	3980	8	5600
10	3600	10	5100	10	7200	10	10000

118-7 Combined Sanitary and Storm System

118-7.1 Size of combined drains and sewers. Whenever a combined sewer system ms employed, the required size of the combined house sewer shall be determined by adding the total drained area in square feet in Table 118-6.2 and equivalent area for the number of fixture units in accordance with Table 118-7.1.

TABLE 118-7.1 COMBINED SANITARY AND STORM SYSTEM	
Number of Fixture Units	**Equivalent Area Square Foot**

1	165
2	325
3	475
5	750
6	875
7	1000
8	1115
9	1225
10	1330
11	1435
12	1530
13	1620
14	1710
15	1800
16	1880
17	1960
18	2040
19	2110
20	2180
21	2250
22	2310
23	2360
24	2440
25	2500
26	2550

27	2600
28	2660
29	2710
30	2770
31	2820
32	2870
34	2955
38	3125
40	3200
42	3270
44	3340
46	3400
48	3465
50	3350
55	3530
60	3790
65	3900
70	4000
75	4090
80	4175
85	4250
90	4320
95	4390
100	4450
105	4500

110	4550
115	4600
120	4645
125	4690
130	4725
140	4800
145	4830
150	4850

For more than 150 drainage fixture units, the equivalent area shall be determined by adding 7.2 square feet for each fixture unit over 150 to 4850 square feet.

118-8 Values for Continuous Flow

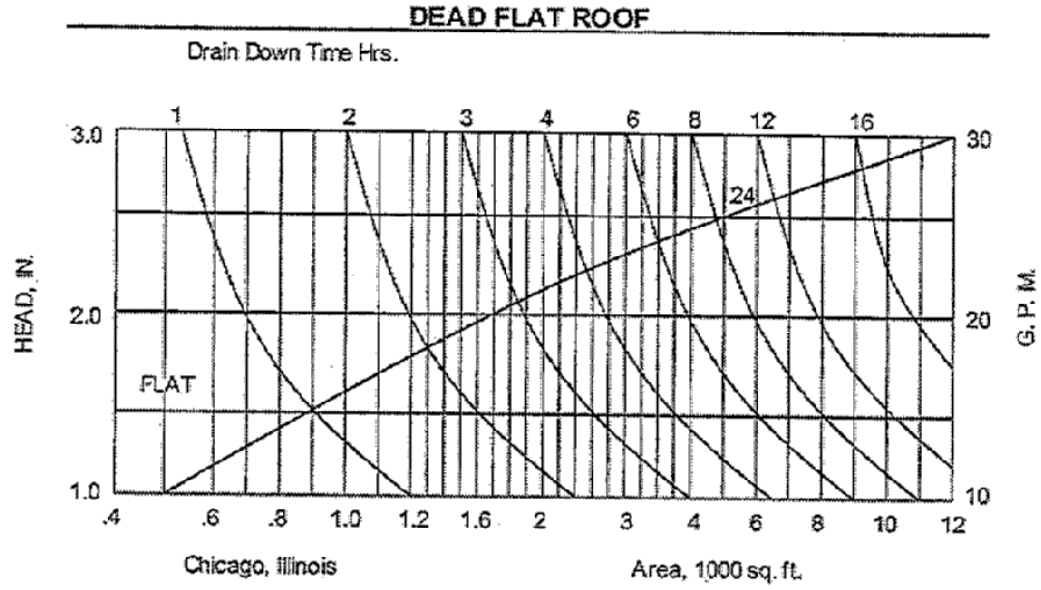
118-8.1 Equivalent roof area. Where there is a continuous or semi-continuous discharge into the building storm drain or building storm sewer, such as from a pump, ejector, air conditioning plant or similar device, each gallon per minute (L/m) of such discharge shall be computed as being equivalent to 24 square feet (2.25 m^2) of roof area. (See Table 118-7.1)

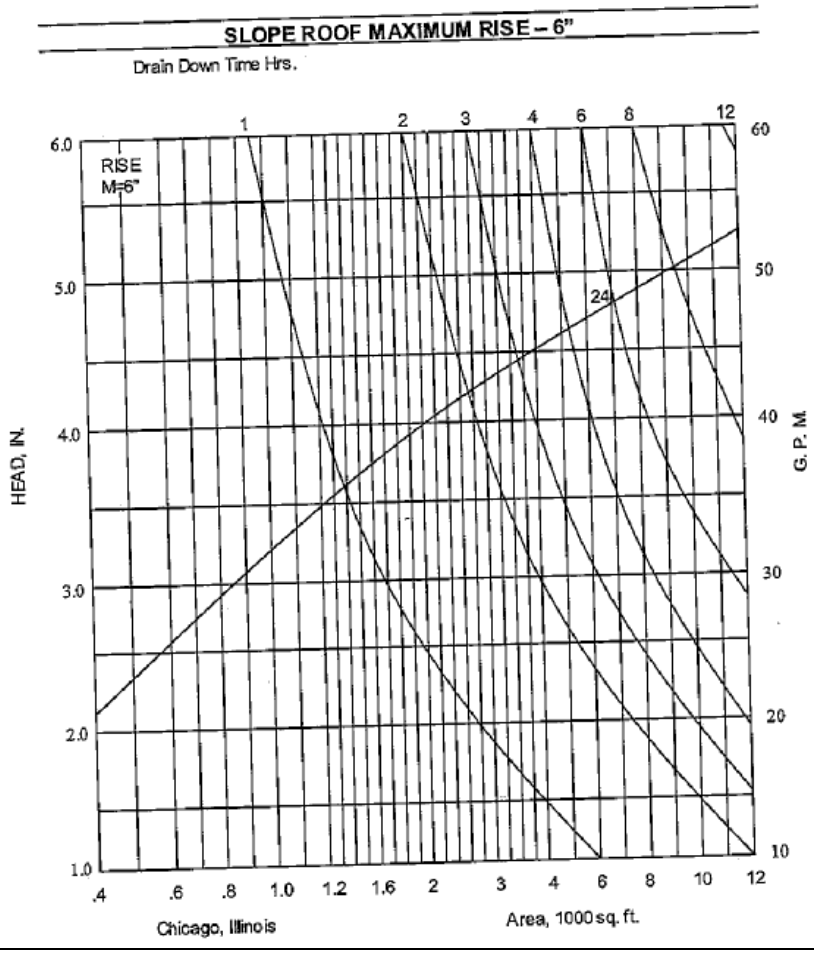
118-9 Controlled Flow Roof Drain Systems

118-9.1 General. The roof of a structure shall be designed for the storage of water where the storm drainage system is engineered for controlled flow. The controlled flow roof drain system shall be an engineered system in accordance with this Section and the design, submittal, approval, inspection and testing requirements of Section 118-5.4. In lieu of the conventional down spout requirements of Section 118-6, controlled flow roof drainage may be used. The water of a 25 year frequency shall not be stored on the roof for more than 24 hours. The water depth on flat roofs shall not exceed 3 inches (75 mm) during the above storm and 3 inches (75 mm) average depth on sloped roofs not exceeding 6 inches (32 mm) rise or depth of slope.

118-9.1.1 Design. The flow rate (gpm) shall be determined by the use of Chart 29(18-29-1110.1.1A) for flat roofs and 29(18-29-1110.1.1B) for sloped roofs. The size of the vertical pipe and horizontal pipe shall be determined by the use of Tables 118-9.1.1C for vertical pipe and Table 118-9.1.1D for horizontal pipe and in no case shall be less than 3 inches (75 mm). The capacity rating (gpm) of any controlled flow down spout, branch or storm drain shall be converted to an equivalent square foot area by multiplying the gallons per minute (gpm) by 24 (24 square feet of roof area equals 1 gpm) before connecting to any combined house drain or house sewer, and add this value to the total drained area of Section 118-6 of this Chapter. Downspouts that are offset at 90 degrees shall be full size to the storm drain or sewer or combined drain or sewer.

CHART 29(18-29-1110.1.1A) and
CHART (29 18-29-1110.1.1B)





118-9.2 Control devices. The control devices shall be installed so that the rate of discharge of water per minute shall not exceed the values for continuous flow as indicated in Chart 29(18-29-1110.1.1A) for flat roofs and 29(18-29-1110.1.1B) for sloped roofs. A scupper drain or drains shall be placed in the parapet wall at an invert elevation 1/2 inch (12 mm) above the maximum designed head. The scupper shall have a cross sectional area equal to that as required for conventional roof drainage. Control of runoff from roofs shall be by pre-calibrated tamper proof weirs; no valves or mechanical devices shall be permitted.

Exception: Scuppers are not permitted in fire walls.

118-9.3 Installation. Runoff control shall be by control devices. Control devices shall be protected by strainers.

118-9.4 Minimum number of roof drains. Not less than 2 drains shall be installed in roof areas 10,000 square feet (930 m^2) or less and not less than 4 roof drains shall be installed in roofs over 10,000 square feet (930 m^2) in area.

TABLE 118-9.1.1 C VERTICAL

DIAMETER OF DOWNSPOUT	SQUARE FEET
3"	88
4"	190
5"	345
6"	560
8"	1210
10"	2185
12"	3570
15"	6450

TABLE 118-9.1.1 D HORIZONTAL					
Pipe Diameter in Inches		**Slope in inches in GPM**			
		1/2	**1/4**	**1/8**	**1/16**
	3"	72	51	N.P.	N.P.
	4"	156	110	78	N.P.
	5"	282	200	140	N.P.
	6"	460	325	230	N.P.
	8"	990	700	495	N.P.
	10"	1795	1265	895	630
	12"		2065	1460	1030
	15			26	18

"	50	70

(Title)

118-10.1 Subsoil drains. Subsoil drains shall be open jointed, horizontally split or perforated pipe conforming to one of the standards listed in Table 118-2.5. Such drains shall not be less than 4-inch (100 mm) diameter. Where the building is subject to backwater, the subsoil drain shall be protected by an accessibly located backwater valve. Subsoil drains shall discharge to a trapped sump or approved location above ground. The subsoil sump shall not be required to have either a gas-tight cover or a vent. Access for the purpose of cleaning and removing obstructions in subsoil drains shall be provided at every change of direction.

118-10.2 Building subdrains. Building subdrains located below the public sewer level shall discharge into a sump or receiving tank, the contents of which shall be automatically lifted and discharged into the drainage system as required for building sumps.

118-10.3 Pumping system. The sump pump, pit and discharge piping shall conform to Sections 118-10.3.1 through 118-10.3.4. No sump or receiving tank shall be less than 30 inches (762 mm) deep and shall be in an accessible location.

118-10.3.1 Pump capacity and head. The sump pump shall be of a capacity and head appropriate to anticipated use requirements.

118-10.3.2 Construction. The sump pit shall not be less than 18-inch (457 mm) diameter by 30-inch deep and shall be constructed of plastic, fiberglass, vitrified clay tile, cast iron, steel, reinforced concrete pipe, cast-iron or other approved material, with a removable cover adequate to support anticipated loads in area of use. Approved plastic or fiberglass liners may be used in connection with any of the above. The pit floor or cover shall provide permanent support for the pump.

118-10.3.3 Electrical. Electrical service outlets, when required, shall meet the requirements of Cook County Electrical code.

118-10.3.4 Piping. Discharge piping shall meet the requirements of Section 118-2.2, Section 118-2.3, or Section 118-2.4 and shall include a full flow check valve. Duplex pump systems shall include a gate valve and a full flow check valve on discharge of each pump. Size and fittings shall be the same size as, or larger than, pump discharge tapping, nominal or standard sizes as designated in the referenced materials standards.

ARTICLE II – SOIL EROSION AND SEDIMENT CONTROL

118-21 SCOPE

118-21.1 Any activity of construction or development which results in excavation or fill on land situated in the unincorporated areas of the County of Cook, Illinois.
118-21.2 Any activity related to changing the topography.
118-21.3 The effective regulation and control of soil erosion, increased runoff and sedimentation caused by changing the topography from entering the natural and manmade drainage systems.
118-21.4 Any construction of use of soil erosion and sediment control measures as herein defined in these regulations.
118-21.5 Where a building permit for a building or structure has been issued in accordance with law prior to the effective date of this ordinance, and provided that construction is begun within six (6) months of such effective date and diligently prosecuted to completion, said building or structure may be completed in accordance with the approved plans on the basis of which the building permit has been issued.
118-21.6 Any fill deposited on parcels or lots shall require permit approval unless such fill is related to grading in conjunction with an approved building permit site.

118-22 PLAN AND BUILDING PERMIT REQUIRE

118-22.1 In instances where building or special use permits are required, before land is tilled, cleared, filled, graded, transported or otherwise disturbed for any reason, by any person, said person shall submit a "Soil Erosion and Sediment Control Plan" to the Cook County Department of Building and Zoning for approval by the Building Commissioner before said permits will be granted.
118-22.2 A "Soil Erosion and Sediment Control Plan" and approval of same shall not be required for the following:
a. Tilling of soil for fire protection purpose.
b. Tilling of soil for agricultural purposes except measures for control of soil erosion and sediment which shall require a permit.
c. Excavations for the following:
(1) Septic tanks and field tile for single family residences.
(2) Single family room additions.
(3) Single family accessory use buildings.
(4) Single family swimming pools.
(5) Advertising and display signs above ground.
(6) Underground storage tanks.
(7) Public utility underground vaults, tunnels and service lines, except where such lines require excavations or other soil disturbing activity extending for a distance of approximately 100 feet.
D. Single-family dwelling unit on scattered lots.

118-23 WAIVER OF REQUIREMENTS

The Building Commissioner may waive the requirements for a Soil Erosion and Sediment Control Plan if an applicant submits engineering, technical and/or data which will give evidence that soil erosion or sediment will not occur.

118-24 SOIL EROSION AND SEDIMENT CONTROL PLANS

Soil Erosion and Sediment Control Plans submitted for approval shall be prepared, signed and sealed by either a (1) registered architect, (2) registered professional civil or agricultural engineer, (3) landscape architect, (4) registered surveyor, or (5) photogrammetrist that is licensed by the State of Illinois;

provided, however, that the person who signs and seals such plans shall be permitted to do so for those portions of the plans within the limitations of the particular act under which he is licensed to practice.

118-25 SOIL EROSION AND SEDIMENT CONTROL MEASURES

118-25.1 Plans submitted for approval shall show all soil erosion and sedimentations control measures needed to provide protection throughout all phases of construction.
118-25.2 Plans shall include detailed descriptions of any one, combination of, or all of the following as may be required to accurately describe the existing conditions and the work to be done to effectively control soil erosion and sediment:
a. "Natural Resource Review and Evaluation" report as prepared by the Soil and Water Conservation District, if such report is required by State Statures for subject project.
b. "Soil Survey Maps" if available showing existing predominant soil types as related tocontrol of soil erosion and sedimentation. "Soil Survey Maps" to be used are those prepared by the Soil Conservation Service" of the U.S. Department of Agriculture.
c. Existing and proposed storm sewers and natural storm drainage.
d. Existing vegetation and proposed temporary and permanent vegetation.
e. Existing and proposed topography of the site.
f. Limits of the flood plain, if applicable (See "Flood Damage Prevention Regulations" in the text amendment to the Cook County Zoning Ordinance).
g. Existing and proposed paved areas and drainage of same.
118-25.3 Plans shall include detailed descriptions of any one, combination of or all of the following control measures as may be required to minimize soil erosion and prevent sediment form leaving the site.
a. Critical area planting.
b. Debris basins.
c. Diversions.
d. Grade stabilization structures.
e. Grassed waterways or outlet
f. Heavy use area protection
g. Mulching.
h. Other technically adequate measures
118-25.4 A time schedule shall be submitted an made part of the plan, outlining the phases for carrying out the soil erosion and sediment control measures. The phases may include any one, combination of, or all of the following:
a. Stripping and/or clearing of site.
b. Installation of temporary soil erosion and sediment control measures.
c. Rough grading and construction.
d. Construction of permanent soil erosion and sediment control measures.
e. Installation of paving and permanent vegetation.
f. Other phases of construction not expressed herein.

118-26 EROSION AND SEDIMENT CONTROL MEASURES, STANDARDS AND SPECIFICATIONS

"Standards and Specifications of Soil Erosion and Sediment Control in Northeastern Illinois," 1st Edition 1973 or latest edition or latest edition or as subsequently amended or revised, prepared with the assistance of Northeastern Illinois Planning Commission; North Cook County and Will – South Cook County Soil and Water Conservation districts, and United States Department of Agriculture Soil Conservation service are hereby incorporated into this regulation and made part hereof, by this reference, for the purposes of exemplifying the considerations and factors of soil erosion and sediment control measures.

Other standards and specifications published by the U.S.D.A., Soil Conservation Service may be used for design, construction, and maintenance of Soil Erosion and Sediment Control Measures.

118-27 MAINTENANCE OF SOIL EROSION AND SEDIMENT CONTROL MEASURES

118-27.1 Soil Erosion and Sediment "Control Measures" shall be maintained after their construction. Maintenance shall be as required to prevent sediment and debris from accumulating and restricting passage of clear water or allowing sediment and/or debris from passing over, around, or through the "Control Measure" and be deposited downstream.
118-27.2 Sediment and debris shall be removed from the "Control Measures" when accumulation of same has caused the "Control Measure" not to function as it was originally designed.

ARTICLE III – FLOOD DAMAGE PREVENTION

118-41 PURPOSE

This Flood Damage Prevention ordinance is enacted in order to comply with the guidelines for the National Flood Insurance Program as published by the United States Federal Emergency Management Agency and to:

118-41.1 Diminish threats to the public health and safety that could result from flooding.
118-41.2 Reduce economic losses to individuals, businesses, and communities that result from flooding.
118-41.3 Protect and conserve environmentally fragile land and water resources.
118-41.4 Promote the orderly and proper development of land.
118-41.5 Prevent damage to personal property which results from flooding.
118-41.6 Encourage quality and defect free construction.
118-41.7 Maintain the capacity of flood plain to retain flood water.
118-41.8 Avoid the creation and exploitation of new flooding problems.
118-41.9 This Flood Damage Prevention ordinance is not intended to reduce or eliminate existing flooding, nor is it intended to impose a complete prohibition of construction in base flood areas. On the contrary, these regulations are designed to guide and control development in such a manner as to lessen the damaging effects of floods on developments proposed for the low-lying areas of unincorporated Cook County.
118-41.10 Wherever the areas expected to be inundated by the base flood have been specifically identified, it is the intention of this ordinance to provide protection in those areas against the high waters of that flood.
118-41.11 In the absence of specific information pertaining to the base flood, it is the intention of this ordinance to provide protection in the low-lying areas of unincorporated Cook County against the high waters of the historical flood of record.
118-41.12 Provisions of the Flood Damage Prevention ordinance further regulate, guide and control:
a. The use, layout and improvement of land located in the flood plains.
b. The excavating, filling and grading of lots and other land parcels or areas located in flood plains and the storing of certain materials thereon.
c. The location, construction and elevation of buildings and other structures or parts and appurtenances thereof-and of sanitary and storm sewers and appurtenances thereof located in flood plains.

118-42 SCOPE AND APPLICABILITY

Floodways: Nothing shall be constructed in the floodways that impedes the flow of water or causes increased flood heights

Floodways Identified

118-42.1 In base flood areas where the floodways have been identified, the following shall prevail:
a. In floodways that have been identified in Section 118-45 of this Flood Damage Prevention ordinance as elements of the base flood, only those uses and structures will be permitted which will not impede or increase the flow and passage of floodwaters.
b. Construction, filling, or use of these low-lying lands is severely limited by these regulations, and generally is subject to special use permit approval.
c. The issuance of a special use permit in no way negates the petitioner's responsibility to prevent the impediment of the flow of water.

Floodways Not Identified

118-42.2 In base flood areas where the floodways are not identified, the following provisions shall prevail:
a. In the base flood area, no development shall be permitted unless the cumulative effect of the proposals, when combined with all other existing and anticipated uses and structures, shall not significantly impede or increase the flow and passage of the floodwaters, nor significantly increase the base flood elevation.
b. Development in and use or filling of the base flood area will be permitted if protection is provided against the base flood by proper elevation, compensatory storage and other provisions of this Flood Damage Prevention ordinance.
c. No use will be permitted which will adversely affect the ability of a flood plain to convey the base flood or the capacity of channels or drainage facilities or systems.

Floodways Fringes

118-42.3 a. Construction, filling, or use of floodway fringes may be permitted if in accordance with provisions specified herein.
b. Compensatory storage must be provided whenever any portion of a floodway fringe is authorized for construction, filling, or use.
c. The volume of space which will be occupied by the authorized fill or structure shall be compensated for and balanced by at least an equal volume of excavation to be taken from below the base flood elevation.
d. In the case of streams or other water courses, such excavation shall be made opposite to or immediately upstream from the areas so filled or occupied.

Flood Table Lands

118-42.4 a. Uses normally permitted in the specific zoning district in force are allowed on flood table lands; however, any new structure located on flood table land shall have no basement, habitable floor, or wall opening at an elevation less than two (2) feet above the base flood elevation.
b. Development in and use or filling of flood table land will be permitted if protection is provided against the base flood by proper elevation, compensatory storage and other provisions of this Floor Damage Prevention ordinance.
c. No use will be permitted which adversely affects the capacity of channels, the floodway or drainage facilities or systems.

118-43 REGULATIONS

These regulations do not in any way alter or eliminate the responsibility of a petitioner, developer, or owner to comply with all regulations of this and other applicable County Ordinances including flood damage prevention regulations specified in the Code, Ch. 106 of this Code, and the Subdivision Regulations. All district requirements specified in this Ordinance are in full force for land designated as flood plain, floodway (identified and not identified), floodway fringe and flood table land. A requested use for any land designated to be within these categories must be allowed both in the zoning district in force on the property, and in the flood damage prevention regulations use list.

Occupation and Use of Floodways, Identified and Unidentified

118-43.1 The construction, filling, or use of floodways is subject to provisions specified in the Cook County Zoning Ordinance. All uses are conditioned upon the issuance of a use, whether permitted or special, must not impede or increase the flow or passage of floodwaters within the floodway or in any manner cause increased flood heights. All buildings, whether principal or accessory, are prohibited. Apparatus such as playground equipment, basketball standards, signs, tennis courts, etc., may be allowed provided they do not impede floodwater flows and pose no safety or sanitary hazards. Required water supply and sanitary sewer systems to be located in the floodways shall be designed to minimize or eliminate discharges from the systems into the floodwaters and prevent the infiltration of floodwaters into the water system; and prevent or minimize infiltration into sewer systems. On site waste disposal systems shall be located so as to avoid impairment of them or contamination from them during or subsequent to flooding.

a. Permitted Uses – The following uses have a low frequency flood damage potential and will be permitted above the surface water elevation if they do not in any way obstruct water flows:

(1) General agriculture or horticulture.
(2) Industrial/commercial use for loading or parking areas.
(3) Automobile parking lots.
(4) Private and public recreation.
(5) Lawns, gardens, parking, or play areas, as accessory residential uses.
(6) Golf courses.
(7) Public land.

b. Special Use – The following uses which involve temporary or non-obstructive structures may be permitted upon the issuance of a special use permit and upon meeting all other requirements of this and other applicable County Ordinances.

(1) Transient amusement enterprises.
(2) Mineral extraction.
(3) Drive-in theaters.
(4) Marinas, boat rentals, docks piers and wharves.
(5) Nurseries and orchards.
(6) Railroads, roads, highways, streets, bridges, utility lines and pipelines.
(7) Airports and heliports.
(8) Other uses similar in nature to those described in this Section or Section a. above which are consistent with this provision and other provisions of this Flood Damage Prevention ordinance.

c. Permit Requirements and Compensatory Storage – In addition, no building or structure of any kind shall be erected or maintained or moved within that area of a flood plain hereinafter described and designated as the floodway, and no fill, material or substance of any kind shall be deposited on any premises within the floodway without a permit issued by the Department of Building and Zoning and then only if an equivalent volume of materials is removed from the floodplain and the deposited material is spread or otherwise deposited outside of the flood plain.

Occupation and Use of Floodway Fringes

118-43.2 The construction, filling, or use of the floodway fringe is subject to all applicable Cook County Zoning provisions. All uses are conditioned upon the provisions of Compensatory Storage in the County Zoning Ordinance, Section 40.3-2, as well as compliance with all requirements of this and other applicable County Ordinances, including flood damage prevention specified in the Cook County Building Ordinance and in the Cook County Subdivision Regulations. No use is allowed which could adversely affect the capacity of channels, the floodways, streams, lakes, stream beds, or drainage facilities and systems.

a. Permitted Uses – Uses permitted by Section 118-43.1a and those which may be authorized under Section 118-43.1b are permitted uses in the floodway fringe.

b. Special Uses – Special Uses may be authorized if such uses will not be subject to flood damage, and further provided that such uses will not cause flood damage to other lands. In passing upon such special applications, the Zoning Board shall not issue a Special Use Permit that contrary to relevant factors specified in this Ordinance, and shall consider:

(1) The danger to life and property due to increased flood heights or velocities caused by encroachments.

(2) The danger that materials may be swept onto other lands or downstream to the injury of others.

(3) The proposed water supply and sanitation systems and the ability of these systems to prevent the occurrence of disease, contamination and unsanitary conditions.

(4) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner.

(5) The importance of the services provided by the proposed facility to the community.

(6) The requirements of the facility for a waterfront location.

(7) The availability of alternative locations not subject to flooding for the proposed use.

(8) The compatibility of the proposed use with existing development and development anticipated in the foreseeable future.

(9) The relationship of the proposed use to the Comprehensive Plan and flood plain management program for the area.

(10) The safety of access to the property in times of flood for ordinary and emergency vehicles.

(11) The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters expected at the site.

(12) Such other factors as are relevant to the purposes of this Ordinance including a flood warning system.

c. Permit Requirements and Compensatory Storage

(1) In addition, no new or existing building or structure shall be erected or moved within the Floodway Fringe Portion of the flood plain unless the lowest floor including the basement floor is at an elevation which is not less than two (2) feet above the Base Flood Elevation for the site.

(2) Further, no new or existing building shall be erected or moved within the Floodway Fringe without first obtaining a permit from the Department of Building and Zoning.

(3) The filing of lands where the existing ground elevation is less than the base flood elevation shall be permitted provided:

(a) That the filling of lands where the existing ground elevation is less than base flood elevation.

(b) That the fill material if obtained elsewhere is offset by the removal of an equivalent volume of material obtained in the immediate vicinity of the building site from elevations lower than the base flood elevation and this volume of material is spread or otherwise deposited outside of the flood plain.

(c) In the case of streams and channels, such excavation shall be made opposite or immediately adjacent to the areas filled or occupied and shall be constructed to drain freely and openly to the watercourse.

Occupation and Use of Flood Table Land

118-43.3 Occupation and use of flood table land is governed by the requirements set forth in Section 118-42.4.

Storage of Materials

118-43.4 The following regulations shall apply to open and underground storage:
a. Floatable Materials – Logs, wastes, lumber, products and other floatable materials or containers shall not be placed, displaced or stored in the floodway and may be stored in floodway fringes only upon the issuance of special use permits.
b. Non-Floatable Materials – The open storage or display on the floodway fringe of inoperable motor vehicles and similar non-movable machinery and other non-floatable materials and products where permitted by the regulations of the zoning district applicable to such land, shall be considered the same as the placement of fill on the flood plain and shall be subject to the regulations of this Ordinance relating to compensatory storage.
c. Hazardous Materials
(1) The open storage of materials anywhere in the flood plain which are flammable, explosive or which could be injurious to human, animal or plant life is prohibited.
(2) The design for underground storage of hazardous material shall not permit discharges from the system into the floodwater or permit infiltration of the floodwaters into the system.

Fences

118-43.5 Shall not be constructed of a type or in such a manner as to significantly impede or increase the passage of flood water, or to accumulate debris (unless built to protect open storage of floatable materials).

Streets and Roads Within Areas of Special Flood Hazard

118-43.6 a. **Streets and Roads** – When failure or interruption of service to streets or roads will endanger public health or safety, such streets and roads shall be protected to one (1) foot above the base flood elevation.
(1) The grade of such roadways shall be at one (1) foot above the base flood elevation or higher.
(2) The drainage systems for such roads shall be designed, using accepted hydraulic principles and practices so as to minimize overflow conditions due to the drainage system.

Planned Unit Development, Subdivision and Zoned Lot Design

118-43.7 The following rules shall govern the design of land improvement with respect to floodplain:
a. General – All proposed planned unit, zoned lot and sub-division developments within the base flood area shall be reviewed by the Cook County Map & plat Officer and the Cook County Highway Department to assure that the proposed developments are consistent with the need to minimize flood damages; and, that all public utilities (such as, sewer, gas, electrical, and water systems) are located an constructed to minimize or eliminate flood damage; and, that adequate drainage, conforming to current engineering practices and current drainage codes and statures, is provided.
b. Design – Streets, blocks, depth of lots, parks and other public ground shall be reviewed by the Cook County Map & Plat Officer and the Cook County Highway Department to assure that they shall be located an laid out in such a manner as to preserve and utilize natural streams, channels, and detention basins. Wherever possible , the larger streams and floodplains shall be included within parks or other public grounds.
c. Channel Straightening – Sharply meandering streams ot channels may be partially straightened and minor changes made in other channels are subject to review and approval bt the Cook County Highway Department, also provided:
(1) The hydraulic capacity of the floodway is maintained.

(2) The velocity increase is kept to a minimum.
(3) The volume of floodwater storage outside the floodway is not reduced.
(4) Provision is made to stabilize the banks of the modified channel to control erosion.
(5) And, any additional permits for the work that are required by the Illinois Department of Transportation, Division of Water Resources and/or the Corps of Engineers and obtained.
d. Lots in Base Flood Areas – Land lying wholly or partially in the base flood area may be laid out and platted as building lots or parcels, provided that the finished grade of the available building site shall not be lower than two (2) feet above the base flood elevation, and provided:
(1) The site exists on the high part of the lot or parcel.
(2) Or will be built up during execution of the improvement plan through general excavation or filling.
(3) Or can be filled with excavation taken from within the area of the lot or parcel.
e. Compensatory Storage
(1) The filling of lands where the existing ground elevation is less than the base flood elevation shall be permitted provided:
(a) The fill material, equal in volume, is obtained from adjacent areas lying below the base flood elevation, and/or
(b) The fill material if obtained elsewhere is offset by the removal of an equivalent volume of material obtained in the immediate vicinity of the building site from elevations lower than the high water elevation and this volume of material is spread or otherwise deposited outside of the floodplain.
(2) In the case of streams and channels, such excavation shall be made opposite or immediately adjacent to the areas so filled or occupied and shall be constructed to drain freely and openly to the watercourse.
f. Streets and Roads – Where failure or interruption of service on streets or roads will endanger public health or safety such streets and roads shall be protected to one (1) foot above the base flood elevation or higher.
(1) The drainage systems for such streets and roads shall be designed using accepted hydraulic principles and practices so as to minimize overflow conditions due to the drainage system.
(2) In other instances, protection shall be provided to extent practical.
g. Drainageways – Wherever the plans call for the passage and/or storage of surface runoff or excess stromwater on lots, the grading of all such lots shall be prescribed and established as part of the planned unit development, subdivision plat or zoned lot.
(1) The areas so designated for the passage and/or storage of such waters shall not be obstructed.
(2) The limits of the high water levels resulting from the passage and/or storage of surface runoff or excess stormwater on lots shall be recorded and shall be covered by an easement.
h. Manholes – All sanitary sewer manholes constructed in a floodplain must have a rim elecation at a minimum of one (1) foot above the base flood elevation or be provided with a locking watertight manhole cover.

Existing, New and Reconstructed Mobile Homes Facilities

118-43.8 Within areas of special flood hazard for new mobile homes; new mobile home parks and for existing mobile home parks where the repair, reconstruction or improvement of streets, utilities and pads equal or exceed fifty percent (50%) of the value of such streets, utilities and pads then the following provisions shall be required:
a. Ground Anchors – Mobile homes to be placed within areas of special flood hazard shall be anchored to resist floatation, collapse or lateral movement by providing over-the-top and frame ties to ground anchors. Specific requirements shall be that:
(1) Over- the-top ties are provided at each of the four corner of the mobile homes, with two additional ties per side at intermediate locations; and, one additional tie per side for mobile homes less than fifty (50) feet in length.

(2) Frame ties are to be provided at each corner of the homes with five additional ties perside at intermediate points; and, with mobile homes less than fifty (50) feet in length requiring four additional ties per side.
(3) All components of the anchoring system shall be capable of carrying a force of 4,800 pounds.
(4) Any additions to a mobile home shall be similarly anchored.
b. Floor Elevation – Stands or wheel lot pads, shall be elevated on compacted fill or on piers so that the lowest floor of the home will be at an elevation not less than that of the base flood elevation plus two (2) feet.
c. Drainage – Adequate surface drainage and easy access for a hauler shall be provided.
d. Piers – Where piers are used, steps to the homes shall be provided and piers (no more than ten (10) feet apart) shall be placed on stable soil. Steel reinforcement shall be provided for piers more than 6 feet high.
e. Fences – Shall not be constructed of a type or in such a manner as to significantly impede or increase the passage of flood waters or accumulate debris (unless built to protect open storage of floatable materials) .

118-44 NON-CONFORMING USES IN FLOOD PLAIN

All non-conforming use provisions, as specified in Article 10 of this Ordinance, are in full force.

118-45 SOURCE OF INFORMATION

The base flood elevation, the floodway, the floodway fringe and flood table lands shall be described by the following sources of information which are listed according to the priority of use. When data is not available on a higher order source of information then the succeeding shall be used. The sources to to be used are on file and available for inspection in the Office of the Cook County Department of Building and Zoning. They are as follows:

MAP NO. 1 AND PROFILES

Certified Federal Emergency Management Agency (FEMA), Flood Insurance Studies (FIS).

MAP NO. 2 AND PROFILES

Certified Illinois Department of Transportation, Division of Water Resources (IDOT/DOWR) Regulatory Flood Plain Maps.

MAP NO. 3 AND PROFILES

United States Soil Conservation Service (SCS) in cooperation with the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC), Flood Plain Information Maps. (The MWRDGC requires that the “without project” elevation date shown thereon be used).

MAP NO. 4 AND PROFILES

Other detailed 100 year Flood Studies if reviewed an found acceptable by Illinois Department of Transportation, Division of Water Resources(IDOT/DOWR).
NOTE: In the event a conflict arises between the information depicted by the official Cook County flood plain maps and the official related Cook County Profiles, and in the absence of any overriding information to the contrary, the data prescribed by the profiles will govern.
When no separate map or related profile designation exists for a floodway, then the flood plain shall also mean floodway, and floodway regulations shall apply to the entire flood plain.

Official Elevations – The system of official bench marks and elevations already established in the area by the U.S. Coast and Geodetic Survey (1st order level network) or the U.S. Geological Survey shall hereafter be taken by engineers, surveyors, architects and contractors when making topographical surveys and maps, and when setting grades and elevations of buildings, pavements, drainage facilities and other structures or works constructed or regulated by the Department of Building and Zoning. Where bench marks are shown on official maps they shall be used.

Determination of Base Flood Area Location and Elevations – The Official maps described in Section 118-45 shall be used as an aid in determine whether a specific parcel of land lies within the base flood area. The final decision, however, shall be based on the relation of the surveyed ground elevation and the base flood elevation. For the purposes of this Ordinance, the base flood elevation applicable to a specific parcel of land, if not otherwise depicted by the Official Maps and Profiles described above, shall be that elevation established for the adjoining stream or channel measured at right angles to the general direction of flow in that stream or channel. In riverine situations, where a bend in the stream exists and more than one line can be placed at right angles to the parcel of lands, the highest base flood elevation determined shall prevail.

118-46 VARIANCES

Variances from these flood control provisions may be granted in the following instances:

Maps and Profiles

118-46.1 Where evidence exists that the conditions described by the Official Maps and Profiles no longer exist to the degree, extent, frequency, elevation, or area described therein, a proponent for a waiver will be permitted to submit technical and factual information justifying issuance of a variance. Such evidence must be supported by a competent engineering survey. Provided that the petitioner can document a change in the delineation of the flood plain and such change is verified by the Cook County Highway Department; and appropriate state and federal agencies such as the Illinois Department of Transportation, Division of Water Resources (IDOT/DOWR) and the Federal Emergency Management Agency (FEMA); and, provided that the Zoning Board acknowledges the new delineation of the flood plain, through the approval of a variation in conformance with procedures specified in Article 13, of the Cook County Zoning Ordinance. Then the Cook County Department of Building and Zoning shall make appropriate map revisions indicating the new flood plain delineation.

Hardship

118-46.2 Variances from the terms of these Flood Damage Prevention Provisions may be allowed by a Cook County Zoning Special Use permit, if the proposal will not be contrary to the public interest, upon a showing by the proponent of undue hardship caused by a literal enforcement of these provisions, provided that the spirit of this Ordinance shall be observed and substantial justice will be done. No variance shall have the effect of allowing uses which are otherwise prohibited or which will cause a lower level of flood protection or which will permit standards which are lower than those otherwise prescribed. Written notice shall be given to an applicant that the cost of flood insurance will be commensurate with the increased risk resulting from a variance granted permitting the lowest floor of the structure below the base flood elevation. Written notice shall also be submitted by an applicant that the applicant is aware of the increased risks to life and property when constructing below the base flood elevation.

Historical Structures

118-46.3 Variances requested in connection with the reconstruction, rehabilitation or restoration of structures listen on the National Register of Historical Places or documented as worthy of preservation by

the Illinois Department of Conservation may be granted using criteria more permissive than the above requirements.

118-47 SUBMISSION REQUIREMENTS

Zoning petitions for any purpose, dealing with land designated to any extent as flood plain as depicted on a Source of Information, specified in Section 118-45 herein – shall be accompanied by:

118-47.1 Six (6) copies of a current survey of topography with a maximum contour interval of two (2) feet. Said survey shall clearly delineate (where data is available): the flood plain, floodway, floodway fringe, flood table and surface water elevation, and base flood elevation.
a. A small contour interval may be required for accurate delineation of relevant features.
b. Topographic maps accompanying preliminary plans of land to be developed as a planned unit development, zoned lot or to be subdivided and such adjoining land whose topography may affect the layout or drainage of the proposal shall show the following:
(1) The location of streams and other floodwater runoff channels, their normal channels, the extent of their flood plains at the established high water elevations, and the limits of the floodway, all properly identified.
(2) The normal shoreline of lakes, ponds, swamps, and detention basins, their flood plains and lines of inflow and outflow, if any.
(3) The location of farm drains and their inlets and outlets.
(4) Storm, sanitary and combined sewers, and any sewer outfalls.
(5) Septic tank systems and outlets, if any.
(6) Seeps, springs, and flowing and other wells.
(7) Location of existing structures that will remain.
(8) 100 year flood elevation and limits, including floodway, data for the portion of the development (if larger than 5 acres or 50 lots) which is in the base flood area.
c. Profile drawings of each stream, channel, pond, and basin showing elevations accompanying preliminary plans of the land to be developed as a planned unit development, zoned lot or to be subdivided shall show the following:
(1) The stream bed.
(2) Channel banks, if any.
(3) Waterway openings of existing culverts and bridges within and near the tract.
(4) Size and elevation of sewer and drain outlets into the stream channel or basin.
(5) The base flood elevations established by this ordinance.
d. Submitted surveys of topography shall be prepared under supervision of and certified by a State Licensed engineer or surveyor.

118-47.2 Six (6) copies of a site plan which contains:
a. The location and quality of all proposed dill and/or excavations.
b. The elevations of the lowest floor, including the basement, cellar, or crawl space of all proposed buildings.

118-47.3 At the option of the petitioner, additional information relating to anticipated flood proofing measures may also be submitted.

118-48 WARNING AND DISCLAIMER OF LIABILITY

The degree of flood protection required by this Ordinance is considered reasonable for regulatory purposes and is based on the engineering and scientific methods of study. Larger floods may occur on rare occasions or the flood height may be increased by man-made or natural causes, such as ice jams and

bridge openings restricted by debris. This Ordinance does not imply that areas outside the flood plain districts or land uses permitted within such district will be free from flooding or flood damages. This Ordinance shall not create liability on the part of the County of Cook or any officer or employee thereof for any flood damages that result from reliance on this Ordinance or any decision lawfully made thereunder.

118-49 DISCLOSURE STATEMENT

A disclosure statement indicating that "the land in question is all or partially designated, by the County of Cook on a source of information specified in its Zoning Ordinance, as being in the flood plain and hence is vulnerable to periodic flooding," must be provided by the seller to each potential purchaser of property which appears as flood plain as indicated on a Source of Information delineated in Section 118-45 herein.

Approved: November 19, 2014