

APPENDIX I (1)

TYPE 1 BUILDINGS - FIRE RESISTIVE

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APPENDIX I (1)

CLASSIFICATION BY TYPES OF CONSTRUCTION

TYPE 1 BUILDINGS (FIRE RESISTIVE)

1. DEFINITION

The structural frame of Type I buildings or structures shall be of steel or reinforced concrete or masonry as noted below. Walls, permanent partitions, roofs and floors shall be of noncombustible fire-resistive construction, except as otherwise set forth herein.

2. GENERAL

- a) Allowable height and area shall be as specified in Section 3 Table 3-3.
- b) Loads and material stresses shall be as specified in Section 12.

3. STRUCTURAL FRAMEWORK

- a) The primary structural framework shall be of not less than the following fire-resistive construction: exterior frame four hours; interior frame three hours as per Table 3-4, Section 3.
- b) Unless specifically designed as a structural frame, the walls shall be considered as load-bearing and shall be constructed of masonry or reinforced concrete except that 8 inch masonry block walls shall be limited to 20 feet in height and 12 inch masonry block walls shall be limited to 30 feet in height. Bearing walls shall be of fire-resistive construction as set forth in Tables 3-4 to 3-7.

4. WALLS AND PARTITIONS

- a) Distance separations shall be measured at right angles from the wall or opening to the building line of continuous lot or any building on the same lot. The building line of a continuous lot shall be taken as that for the use of the contiguous lot which requires the least set back from the property line, and in no case shall this setback be taken as more than five feet from and parallel to the common lot line.
- b) Main exterior walls shall be of noncombustible four hour fire resistive construction as per Tables 3-4 to 3-7.
- c) Openings in main exterior walls shall be as follows:
 - i) Walls having a distance separation of less than five feet, or walls, except on street fronts, which are less than five feet from the building line of continuous lot, shall have no openings.

- ii) Openings in walls of buildings having a distance separation of from five to ten shall be protected by fire-resistive doors or windows. The total area of openings in any storey shall be limited to 30 percent with no single opening more than ten percent of such wall area. Walls having a distance separation of more than ten feet but less than 30- feet shall be protected by ordinary doors or windows not exceeding 50 percent of the wall area in any storey.
- d) Buildings having exterior walls without openings shall be provided with access panels along street fronts or walls otherwise accessible for fire-fighting entrance to the building as follows:
 - i) The access openings in each accessible side of a building not over 65 feet in height shall be not less than one suitably marked access opening not less than 32 inches wide and 48 inches high with still not over 32 inches above the floor spaced not more than 50 apart on each floor each side.
 - ii) The access openings in each accessible side of a building over 65 feet in height shall be not less than
 - (aa) windows spaced not more than 50 feet apart and equivalent to 10% or more of the wall area, on each floor of each such side, or
 - (bb) Smokeproof towers spaced not over 100 feet apart on each such accessible side. The smokeproof towers may serve as a required exit way.
- e) Fire walls shall be of the fire-resistive rating as required in Section 4.
- f) Interior bearing walls shall be of three-hour fire-resistive construction as per Tables 3-4 to 3-7, except that:
 - i) Corridor partitions shall also comply with Sub-section 503 Means of Escape.
 - ii) Partitions subdividing offices, stores, apartments and similar uses within the area occupied by a single tenant may be constructed without a fire-resistive rating provided the materials of construction are:
 - (aa) Noncombustible or
 - (bb) Fire-retarded treated wood or
 - (cc) Of other wood provided a space of not less than 18 inches, as measured down from the ceiling, shall be open or of transparent non-combustible material.
- g) i) Underground structures exceeding 2500 square feet in area shall be provided with at least two means of access so located and of such size as to permit their use by firemen at the time of fire.

- ii) Where 10 or more occupants use the underground structure and the required exits involve upward travel, a smoke proof tower shall be provided.

5. FLOORS

a) Material

- i) Floor systems shall be of noncombustible materials. Poured-in-place concrete slabs shall be not less than 2-1/2 inches thick where removable forms are used nor less than 2 inches thick where tile, metal decking or similar structural form element is to remain as a permanent component of the structure.
- ii) Where wood floors are laid over concrete slabs, the space between the floor slab and the underside of the finish floor shall be filled with noncombustible materials.

b) Fireproofing

Floors for buildings more than eight stories or more than 100 feet in height shall be of not less than three-hour fire-resistive construction; floors for buildings eight stories or less or 100 feet or less in height shall be of not less than two-hour fire-resistive construction. The use of bar joists shall be limited to buildings for four stories.

6. ROOFS

a) Materials

Roof systems shall be of noncombustible materials. Poured-in-place concrete slabs shall be not less than 2-1/2 inches thick where removable forms are used nor less than 2 inches thick where tile, metal decking or similar structural-form element is to remain as a permanent component of the structure.

- ii) Where wood floors are laid over concrete slabs, the space between the floor slab and the underside of the finish floor shall be filled with noncombustible materials.

b) Fireproofing

Roofs for buildings more than eight stories or more than 100 feet in height shall be of not less than three-hour fire-resistive construction; roofs for buildings eight stories or less or 100 feet or less in height shall be of not less than two-hour fire-resistive construction.

c) **Roof Coverings**

Roof coverings shall be fire-retardant in accordance with the test [procedure of the BSI or ASTM. (See Part 3 Section 3.605.4 of CUBiC)

d) **Roof Drainage**

Roof drainage and the disposal of rainwater shall be as specified in Section 9 - Plumbing. In general, roof systems not designed to support accumulated water shall be sloped for drainage. Rain water drains or leaders where required shall be used and sized in conformance with the Section 9. (Chapter 36).

e) **Furred Spaces above a Ceiling**

Access trap doors, not less than 16 inches by 30 inches, shall be provided to all spaces above a furred ceiling having an minimum vertical distance of 36 inches. Such access trap doors shall be from common spaces such as corridors and no part of such furred space shall be more than 100 feet from an access trap door. Walkways shall be provided in such furred spaces above the ceiling.

7. ENCLOSURE OF VERTICAL OPENINGS

Enclosure of vertical openings shall be of noncombustible materials and not less than one hour fire-resistive construction, and where such openings exceed eight square feet in area shall be of not less than two-hour fire-resistive construction, with fire-resistive doors and/or windows.

8. STAIRWAYS

- a) Stairways shall be as required in Section 5.
- b) Stairs, stair platforms, treads and riser shall be constructed of non-combustible materials. Unprotected steel or iron stairways may be used only when enclosed.

9. DOORS AND WINDOWS

- a) Doors, windows and similar openings in exterior walls, fire walls and enclosure walls shall be protected or entirely prohibited. Section 4 Sub-section 404 provides information on the requirements for fire doors and fire windows assemblies.
- b) Doors and windows shall not project over public property or restricted areas.

10. PROJECTIONS FROM THE BUILDING

- a) Cantilevering projections outside of the main exterior walls of the building shall be of non-combustible materials and of not less than one-hour fire-resistive construction.

- b) Canopies, awnings and marquees forming part of the construction but outside of the main exterior walls of the building but not cantilevered from the building shall be constructed of non-combustible materials but need not have fire-resistive protection.

11. ROOF STRUCTURES AND SKYLIGHTS

- a) Towers, pylons, masts, signs and similar structures above a roof, when not enclosed, shall be of noncombustible materials.
- b) Roof structures, including bulkhead area, shall be limited in total combined area to 30 percent of the area of the roof, shall extend not more than 50 feet above the roof and any enclosure having a floor area of more than 15 square feet, shall be constructed as required for the main portion of the building.
- c) Minor roof structures having an area of 15 square feet or less, housing ventilating shafts or similar openings shall be constructed of non-combustible materials.
- d) Storage tanks, having a capacity of over 500 gallons, shall not be located over stairways or elevators.
- e) Skylights shall be constructed of non-combustible materials and transparent or translucent materials shall be fire-resistive.
- f) Where required to control rain water runoff, a curb not less than eight inches in height shall be provided.
- g) Where the public has access to roof areas, a guard rail not less than 36 inches above the roof shall be provided around all open wells or shafts and at all exterior walls.
- h) Skylights placed over shafts, vent shafts, stair enclosures, and exit ways, shall be glazed with glass or other approved non-combustible material which may be easily pierced by fire-fighting personnel.

12. COMBUSTIBLE MATERIALS

Combustible materials shall be permitted for the following uses unless otherwise specifically prohibited:

- a) Show-window bulkheads shall be of non-combustible materials, but show cases and other moveable appurtenances of stores or other buildings may be of wood.
- b) Trim, picture mouldings, furniture, and permanent seats, chair rails, wainscoting, baseboards, furring strips and blocking, handrails, show window backing, temporary partitions conforming to Sub-section 4 of this Appendix, floor finishes and sleeper may be of combustible materials. Wood doors or windows or frames may be used except where fire-resistive protection is required.

- c) Loading platforms, and roofs over loading platforms, for warehouses, freight depots and buildings of similar use may be of heavy timber construction provided such heavy timber construction does not penetrate the exterior walls.
- d) All materials used for interior finishes shall be in accordance with Part 3 Section 6 Paragraph 3.606.2 of CUBiC.
- e) In places of public assembly, all draperies, hanging and other decorative materials suspended from walls or ceilings shall be non-combustible or flame-resistant meeting the requirements of the code as herein specified.

Non-combustible: The permissible amount of non-combustible decorative hangings shall not be limited.

Flame-resistant: The permissible amount of flame-resistant decorative hangings shall not exceed ten (10) percent of the total wall and ceiling area.

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TYPE 2 BUILDINGS - SEMI-FIRE RESISTANT

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APPENDIX I (2)

TYPE 2 BUILDINGS (Semi-Fire-Resistive)

1. DEFINITION

- a) The structural frame of Type 2 buildings or structures shall be of steel or reinforced concrete or masonry as noted below.
- b) Walls, permanent partitions, roofs and floors shall be of non-combustible fire-resistive construction, except that permanent non-load-bearing partitions of one-hour fire resistive construction may use fire-retardant treated wood within the assembly.

2. GENERAL

- a) Allowable height and area shall be as specified in Section 3.
- b) Loads and material stresses shall be as specified in Section 12.
- c) Required fireproofing shall be as set forth in Section 4.

3. STRUCTURAL FRAMEWORK

- a) The primary structural framework shall be of not less than three-hour fire-resistive construction for members in exterior walls and of not less than one hour fire-resistive construction for members in the interior frame as per Tables 3-4 to 3-7.
- b) Unless specifically designed as a structural frame, the walls shall be considered as load-bearing and shall be constructed of masonry or reinforced concrete except that 8 inch masonry block walls shall be limited to 20 feet in height and 12 inch masonry block walls shall be limited to 30 feet in height. Bearing walls shall be of fire-resistive construction as set forth in Table 3-2.

4. WALLS AND PARTITIONS

- a) Exterior walls shall be as set forth in Tables 3-4 to 3-7.
- b) Fire walls shall be of the fire-resistive rating as required in Tables 3-2 and 3-4 to 3-7.
- c) Interior bearing walls shall be of noncombustible one-hour fire-resistive construction as per Tables 3-4 to 3-7.
- d) Partitions shall be of not less than one-hour fire resistive construction except as provided in Tables 3-4 to 3-7.

5. FLOORS

a) Material

- i) Floor systems shall be of noncombustible material or fire-retardant treated wood.

Exception: Fire retardant treated wood may not be used in buildings exceeding two stories in height.

- ii) Wood joists shall not be used to support concrete and cement-base tile or terrazzo floor surfaces other than for bathrooms or less than 100 square feet in area.
- iii) Spaces under a ground floor shall have the clearance and ventilation as set forth in the Section 14. Openings shall be provided to all space under the building.

b) Fireproofing

Floors and all parts thereof shall be of not less than two-hour fire-resistive construction as per Tables 3-4 to 3-7, except that where the space under a ground floor has clearance of less than three feet, such fire protection for the ground floor may be omitted.

6. ROOFS

a) Materials

Roof systems shall be of noncombustible materials or of fire-retardant treated wood.

b) Fireproofing

Roofs and all parts thereof shall be of not less than one-hour fire-resistive construction as per Tables 3-4 to 3-7, except as follows:

- i) Roofs, where every part of the structural framework is 20 feet or more above any part of the floor, balcony or gallery, may be on unprotected non-combustible materials or fire-retardant treated wood.
- ii) Roofs of one-storey open sheds not more than 75 percent enclosed by walls, in which the travel distance to the nearest exit does not exceed 40 feet, may be of unprotected noncombustible materials.

c) Roof Coverings

Roof coverings shall be fire-retardant and as specified in Part 3 Section 6 of CUBIC.

d) **Roof Drainage**

Roof drainage and the disposal of rainwater shall be as specified in the Section 9. In general, roof systems not designed to support accumulated water shall be sloped for drainage.

e) **Attic Spaces**

Attic spaces shall not be required, but where attic spaces are provided such spaces shall have a minimum vertical dimension of 18 inches clear distance and where unprotected combustible material is exposed, shall be divided, by fire-stops, into areas not exceeding 2500 square feet, or less depending on individual occupancy. Access trap doors, not less than 16 inches by 30 inches, shall be provided to all attic spaces. Such access trap doors shall be from common spaces such as corridors, and no part of an attic space shall be more than 100 feet from an access trap door.

7. ENCLOSURE OF VERTICAL OPENINGS

a) Enclosure of vertical openings shall be of noncombustible materials and where such openings exceed eight square feet in area shall be not less than one hour fire-resistive construction, with fire-resistive doors and/or windows.

(b) Where the enclosure of vertical openings is required to be of not less than one-hour fire-resistive construction the materials of construction shall be noncombustible or fire-retardant treated wood.

8. STAIRWAYS

a) Stairways shall be as required in the Section 5.

b) Stairs, stair platforms, treads and riser shall be constructed of non-combustible materials. Unprotected steel or iron stairways may be used only when enclosed.

9. DOORS AND WINDOWS

a) Doors, windows and similar openings in exterior walls, fire walls and enclosure walls shall be protected or entirely prohibited as set forth in Section 5.

b) Doors and windows shall not project over public property or restricted areas.

10. PROJECTIONS FROM THE BUILDING

a) Cantilevering projections outside of the main exterior walls of the building shall be of non-combustible construction or fire-retardant treated wood, and shall be of not less than one-hour fire-resistive construction.

- b) Canopies, awnings and marquees forming part of the construction but outside of the main exterior walls of the building but not cantilevered from the building shall be constructed of non-combustible materials but need not have fire-resistive protection.

11. ROOF STRUCTURES AND SKYLIGHTS

- a) Towers, pylons, masts, signs and similar structures above a roof, when not enclosed, shall be of noncombustible materials. Roof structure extending more than 25 feet above the roof or signs more than 100 square feet in area shall be supported to the ground by a non-combustive frame, unless already incorporated into the building frame design.
- b) Roof structures, including bulkheaded areas, shall be limited in total combined area to 30 percent of the area of the roof, shall extend not more than 20 feet above the allowable height and any enclosure having a floor area of more than 15 square feet shall be constructed as required for the main portion of the building.
- c) Minor roof structures having an area of 15 square feet or less, housing ventilating shafts or similar openings shall be constructed of non-combustible materials.
- d) Storage tanks, having a capacity of over 500 gallons, shall not be located over stairways or elevators.
- e) Skylights shall be constructed of non-combustible materials and transparent or translucent materials shall be fire-resistive.
- f)
 - i) Parapets shall be required on exterior walls except where the roof is of noncombustible, fire-resistive construction.
 - ii) Parapets shall be not less than 20 inches above the roof immediately adjacent thereto where located 20 feet or less to\from the building line of a contiguous lot or any building on the same lot, and shall be constructed as set forth in Section 15.
 - iii) Where required to control rain water runoff, a curb not less than eight inches in height shall be provided.
- g) Where the public has access to roof areas, a guard rail not less than 36 inches above the roof shall be provided around all open wells or shafts and at all exterior walls.

12. COMBUSTIBLE MATERIALS

- a) Combustible materials shall be permitted except where specifically prohibited in this Appendix.

- b) Loading platforms for warehouses, freight depots and buildings may be of heavy timber construction with wood floors not less than one and five-eighths inches thick. Such wood construction shall not be carried through the exterior walls.
- c) Interior finishes shall be as set forth in Part 3 Section 6 of CUBiC.

APPENDIX I (3)

TYPE 3 BUILDINGS - ORDINARY MASONRY

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APPENDIX I (3)

TYPE 3 BUILDINGS - ORDINARY MASONRY

1. DEFINITION

- a)
 - i) Type 3 buildings or structures shall have an exterior structural frame of steel or reinforced concrete or of fire-retardant treated wood, or shall have exterior loadbearing walls of non-combustible, fire-resistive construction.
 - ii) Type 3 buildings or structures shall have an interior structural frame of steel, reinforced concrete, wood, or interior load bearing walls of non-combustible materials or wood.
 - iii) Partitions, floors and roof framing may be of wood.
- b) Walls, permanent partitions, roofs and floors shall be of non-combustible fire-resistive construction, except that permanent non-load-bearing partitions of one-hour fire resistive construction may use fire-retardant treated wood within the assembly.

2. GENERAL

- a) Allowable height and area shall be as specified in Section 3.
- b) Loads and material stresses shall be as specified in Section 12.
- c) Required fireproofing shall be as set forth in Section 4.

3. STRUCTURAL FRAMEWORK

- a) Materials
 - i) Unless specifically designed as a structural frame with panel walls, the exterior walls shall be considered as load-bearing and shall be constructed of masonry or reinforced concrete, except that 8 inch masonry walls shall be limited to 20 feet in height and 12 inch masonry block walls shall be limited to 30 feet in height. Where designed as a structural frame, the materials shall be as specified in Sections 14, 15, 16 and 17.
 - ii) The interior structural support shall be of steel, reinforced concrete, or interior bearing walls of noncombustible materials or wood studs. (Tables 3-4 to 3-7).
- b) Fireproofing
 - i) Fireproofing shall be as required in Sections 3 or 4. Where required, or where otherwise referred to in this Code as being protected, the

structural framework or supports shall be of not less than one-hour fire-resistive construction except that members in the exterior walls shall have the fire protection as set forth in Tables 3-4 to 3-7.

- ii) All steel members supporting masonry in buildings over one storey in height shall be fire-proofed with not less than one-hour fire-resistive construction.
- iii) Heavy timber structures, designed and constructed in accordance with Section 14, shall be considered the equivalent of one-hour fire-resistive protection.

c) **Heavy Timber Construction**

i) **General**

Heavy timber construction is that type in which fire resistance is attained by placing limitations on minimum sizes of wood structural members including the thicknesses and compositions of wood floors and roofs and by the use of approved fastenings and construction details.

ii) **Heavy Timber Framing**

Heavy timber columns, floors sizes and framing, roof sizes and framing, and construction details shall be as specified in Section 14.

iii) **Heavy Timber Floors**

Heavy timber floors shall be constructed as specified in Section 14.

iv) **Heavy Timber Roof Decks**

Heavy timber roof decks shall be constructed as specified in Section 14.

4. WALLS AND PARTITIONS

- a) Exterior walls shall be as set forth in Tables 3-4 to 3-7.
- b) Fire walls shall be of the fire-resistive rating as required in Tables 3-4 to 3-7.
- c) Interior bearing walls shall be of noncombustible materials or of wood studs, and for Type 3 (protected) buildings, or for Type 3 (unprotected) buildings where supporting upper floors or where adjacent to common corridors shall be of one-hour fire-resistive construction.

5. FLOORS

a) **Material**

- i) Floors shall be of noncombustible material or woods.

ii) Wood joists shall not be used to support concrete and cement-base tile or terrazzo floor surfaces other than for bathrooms or less than 100 square feet in area.

iii) Wood post and girder construction shall not be permitted for a ground floor of buildings used by the public, and spaces under ground floors shall have the clearance and ventilation as set forth in Section 14.

b) Fireproofing

Floors and all parts thereof of Type 3 buildings shall not be constructed of materials and assemblies of less fire resistance than shown in Tables 3-4 to 3-7, except that where a ground floor has clearance of less than three feet, such fire protection may be omitted.

6. ROOFS

a) Materials

Roof systems shall be of non-combustible materials or wood.

b) Fireproofing

Roofs and all parts thereof of unprotected Type 3 buildings and protected Type 3 buildings shall be of not less than one-hour fire-resistive construction, except as follows:

i) Roofs, where every part of the structural framework is 18 feet or more above any part of any floor, may be of unprotected non-combustible materials or protected combustible materials

ii) Roofs of one-storey open sheds not more than 75 percent enclosed by walls, in which the travel distance to the nearest exit does not exceed 40 feet, may be of unprotected noncombustible materials or protected combustible materials.

c) Roof Coverings

Roof coverings shall be fire-retardant and as specified in CUBrC Part 3 Section 6.

d) Roof Drainage

Roof drainage and the disposal of rainwater shall be as specified in Section 9. In general, roof systems not designed to support accumulated water shall be sloped for drainage.

e) Attic Spaces

Attic spaces shall not be required, but where attic spaces are provided such spaces shall have a minimum vertical dimension of 18 inches clear distance and

where unprotected combustible material is exposed, shall be divided, by fire-stops, into areas not exceeding 2,500 square feet, or less depending on individual occupancy. Access trap doors shall be from common spaces such as corridors, and no part of an attic space shall be more than 100 feet from an access trap door.

7. ENCLOSURE OF VERTICAL OPENINGS

Enclosure of vertical openings shall be of noncombustible materials and where such openings exceed eight square feet in area shall be not less than one hour fire-resistive construction. Walls adjacent to open interior stairways and the soffits thereof shall be of not less than one hour fire-resistive construction.

8. STAIRWAYS

Stairways shall be as required in Section 5.

9. DOORS AND WINDOWS

- a) Doors, windows and similar openings in exterior walls, fire walls and enclosure walls shall be protected as per Section 4 Sub-section 405.
- b) Doors and windows shall not project over public property or restricted areas.

10. PROJECTIONS FROM THE BUILDING

Cantilevering projections outside of the main exterior walls of the building shall be of non-combustible construction and be fire-resistive as specified in this Appendix, except that the projection of wood roof rafters of residential occupancies over private property shall be permitted.

11. ROOF STRUCTURES AND SKYLIGHTS

- a) Towers, pylons, masts, signs and similar structures above a roof, when not enclosed, shall be of noncombustible materials. Roof structures extending more than 25 feet above the roof or signs more than 100 square feet in area shall be supported to the ground by a noncombustible frame, unless already incorporated into the building frame design.
- b) Roof structures, including bulkheaded areas, shall be limited in total combined area to 30 percent of the area of the roof, shall extend not more than 20 feet above the allowable height and any enclosure having a floor area of more than 15 square feet shall be constructed as required for the main portion of the building.

- c) Minor roof structures having an area of 15 square feet or less, housing ventilating shafts or similar openings shall be constructed of non-combustible materials.
- d) Storage tanks, having a capacity of over 500 gallons, shall not be located over stairways or elevators.
- e) Skylights shall be constructed of non-combustible materials and transparent or translucent materials shall be fire-resistive.
- f) Parapets shall be required on exterior walls except:
 - i) Where the roof is of non-combustible, fire-resistive construction.
 - ii) Where the walls of buildings for other than residential occupancy are 20 feet from the building of a continuous lot or any building on the same lot.
 - iii) Where the building is of residential occupancy.
- g) Parapets shall be not less than 20 inches above the roof immediately adjacent thereto and shall be constructed as set forth in Sections 15 or 16.
- h) Where required to control rain water runoff, a curb not less than eight inches in height shall be provided.

12. COMBUSTIBLE MATERIALS

- a) Combustible materials shall be permitted except where specifically prohibited in Section 3 and/or Section 4.
- b) Loading platforms for warehouses, freight depots and buildings may be of heavy timber construction with wood floors not less than 1-3/4 inches thick. Such wood construction shall not be carried through the exterior walls.
- c) Interior finishes shall be as set forth in CUBiC Part 3 Section 6.

APPENDIX I (4)

TYPE 4 BUILDINGS - NON-COMBUSTIBLE

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APPENDIX I (4)

TYPE 4 BUILDINGS - NON-COMBUSTIBLE

1. DEFINITION

All structural and other elements of Type 4 buildings shall be of non-combustible materials.

2. GENERAL

- a) Allowable heights and areas shall be as specified Section 3.
- b) Loads and material stresses shall be as specified in Section 12.
- c) Required fireproofing shall be as set forth in Sections 3 and 4.

3. STRUCTURAL FRAMEWORK

The structural framework shall be of steel, aluminum, or reinforced concrete, and fireproofing of structural members shall be required only when such members are a part of an exterior wall as set forth Tables 3-4 to 3-7.

4. WALLS AND PARTITIONS

- a) Distance separation shall be measured at right angles from the wall or opening to the building line or a continuous lot or any building on the same lot. The building line of a continuous lot shall be taken as that for the use of the continuous lot which requires the least set back from the property line, and in no case shall this set back be taken as more than five feet from and parallel to the common lot line.
- b) The main exterior walls shall be of non-combustible materials and such walls shall be of fire-resistive construction with opening protection where located as follows:
 - i) Main exterior walls having a distance separation of from five to ten feet shall be of not less than one-hour fire resistive construction and openings therein shall be protected by fire-resistive doors and windows and shall be limited in area to 30 percent of the wall area with no single openings or more than ten percent of such wall area.
- c) Fire walls shall be of non-combustible materials and shall be of the fire-resistive rating as required in the Section 3.
- d) Interior bearing walls shall be of non-combustible materials.

5. FLOORS

Floors shall be of non-combustible material, provided, however that a wood surface or finish may be applied over such non-combustible materials.

6. ROOFS

- a) Roof systems shall be of non-combustible materials and fire-proofing shall not be required.
- b) Roof coverings shall be as specified in the CUBiC Part 3 Section 6.
- c) Roof Drainage

Roof drainage and the disposal of rainwater shall be as specified in Section 9. In general, roof systems not designed to support accumulated water shall be sloped for drainage.

7. DOORS AND WINDOWS

- a) Doors, windows and similar openings in exterior walls, fire walls and enclosure walls shall be protected or entirely prohibited as set forth in Sections 3 and 4.
- b) Doors and windows shall not project over public property or restricted areas.

8. PROJECTIONS FROM THE BUILDING

Projections from the building shall be of non-combustible materials.

9. ROOF STRUCTURES AND SKYLIGHTS

- a) Roof structures may extend above the allowable height not to exceed 20 feet and shall be of non-combustible materials.
- b) Skylights shall be constructed of non-combustible materials and transparent or translucent materials shall be fire-resistive.
- c) Where the public has access to roof areas, a guard rail not less than 36 inches above the roof shall be provided around all open wells or shafts and at all exterior walls.

10. COMBUSTIBLE MATERIALS

A loading platform may be constructed of heavy timber with wood floors not less than 1-3/4 inches thick. A Type 4 building or structure erected over such platform shall be supported by non-combustible materials to the foundation.

APPENDIX I (5)

TYPE 5 BUILDINGS - WOOD FRAME

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APPENDIX I (5)

TYPE 5 BUILDINGS - WOOD FRAME

1. DEFINITION

All structural and other elements of Type 5 buildings shall be of non-combustible materials or wood or any materials allowed by this code.

2. GENERAL

- a) Allowable height and area shall be as specified in Section 3.
- b) Loads and material stresses shall be as specified in Section 12.
- c) Required fireproofing shall be as set forth in Sections 3 and 4.

3. WALLS AND PARTITIONS

- a) Distance separation shall be measured at right angles from the wall or opening to the building line or a continuous lot or any building on the same lot. The building line of a continuous lot shall be taken as that for the use of the continuous lot which requires the least set back from the property line, and in no case shall this set back be taken as more than five feet from and parallel to the common lot line.
- b) The main exterior walls shall be of non-combustible materials and such walls shall be of fire-resistive construction with opening protection where located as follows:
 - i) Main exterior walls having a distance separation of less than five feet, or walls except of street fronts which are less than five feet from the building of a contiguous lot, shall be of not less than two hour fire-resistive construction and have no openings therein.
 - ii) Main exterior walls having a distance separation of from five to ten feet shall be of not less than one-hour fire resistive construction and openings therein shall be protected by fire-resistive doors and windows and shall be limited in area to 30 percent of the wall area with no single openings or more than ten percent of such wall area.
- c) Fire walls shall be of non-combustible materials and shall be of the fire-resistive rating as required in Section 3.
- d) Interior bearing walls shall be of non-combustible materials or wood.

4. FLOORS

- a) Floors shall be of steel, concrete or wood.
- b) Wood posts shall not be permitted under a girder supporting a ground floor and spaces under ground floors shall have the clearance for ventilation.
- c) Access openings shall be provided to all space under the building.

5. ROOFS

- a) Roof systems shall be of noncombustible materials or wood.
- b) Roof coverings shall be as specified in CUBiC Part 3 Section 6.
- c) Roof drainage and the disposal of rainwater shall be as specified in Section. In general, roof systems not designed to support accumulated water shall be sloped for drainage.
- d) Attic spaces shall not be required, but where attic spaces are provided, such spaces shall have a minimum vertical dimension of 18 inches clear distance and, where unprotected combustible material is exposed, shall be divided by fire stops into areas not exceeding 5500 square feet or less depending on occupancy. Access trap doors shall be from common spaces such as corridors, and no part of an attic space shall be more than 100 feet from an access trap door. Minimum vertical dimension shall not be required for hip or gable roof construction.

6. FIREPROOFING

Bearing walls supporting floors shall not be less than one-hour fire-resistive protection except that where a ground floor has clearance of less than three feet, such protection may be omitted.

7. STAIRWAYS

- a) Stairways shall be as required in Section 3 and in Section 4.
- b) Stairways may be of non-combustible or combustible materials.

8. DOORS AND WINDOWS

- a) Doors, windows and similar openings in exterior walls, fire walls and enclosure walls shall be protected or entirely prohibited as set forth in Sections 3 or 4.
- b) Doors and windows shall not project over public property or restricted areas.

9. PROJECTIONS FROM THE BUILDING

Projections from the building may be of wood.

10. COMBUSTIBLE MATERIALS

No materials more combustible than wood shall be permitted in the construction of permanent portions of Type 5 buildings.