

COA - New Commercial Construction Plan Review Checklist

This checklist shall be completed by the design professional pertaining to their expertise and shall accompany permit applications and is provided as a reference tool and is not intended to be exhaustive of all possible code requirements. It may also include more items than a specific set of construction documents may encompass. Fill-in every section of this checklist that is applicable.

*** Failure to obtain approval of drawings and permits prior to install will result in double permit fees, penalties per PA UCC 903, and license suspension or revocation.**

General Requirements:

This first page shall be copied and filled out by **EACH** design professional involved. All drawings shall be signed, sealed, and dated by a design professional (PA licensed architect and/or engineer). The only exception is when **ALL** the following apply per PA-UCC 403.42a(c):

1. The work only involves remodeling or alterations of an existing structure (must use alteration plan review checklist).
2. The work does not change the building's structure or means of egress.
3. The person preparing the plan is not compensated for preparations of the drawings.

All construction documents shall be clearly drawn and remain clear after scanning (by others). They shall indicate the location, nature and extent of the work proposed, and show in **DETAIL** that the work **will conform to the Uniform Construction Code** per PA-UCC 403.42a(e).

Project Name:

Project Address:

Design Professional:

License #:

Email:

Phone #:

Summary of Work Design Professional is Attesting to:

***Building & Construction Supervisor or BCO may refuse construction document submittals by design professionals at their discretion for lack of detail and/or code compliance required by the PA-UCC 403.42a(e) noted above.**

Signature:

Date: _____

Checklist

Have all other City of Allentown (COA) departments approved this project? A PA-UCC review will not begin until all these departments have approved this project when required?

- ☐ Planning – Ord. # Ch. 350, 355
- ☐ Historic – Ord. # Ch. 328
- ☐ Floodplain – Ord. # Ch. 298
- ☐ Engineering – Ord. # Ch. 411, Sewer Ord. Ch. 490, Water Ord. Ch. 633, Utilities Ord. Ch. 609
- ☐ Health – Ord. # 303 Food service/sanitation & # 213 Childcare

☐ Zoning – Ord. # Ch. 660

☐ Fire – Ord. # Ch. 285

Documents required (The COA does not scan documents over 5 pages):

☐ One (1) set of drawings are included in this permit application.

☐ One (1) set of submittals are included in this permit application.

☐ One (1) set of specifications are included in this permit application.

☐ One (1) Site plan is included in this permit application.

-OR-

☐ One (1) PDF of all documents required (with notations and review letter if 3rd party approved). Applicant is required to print a field copy of approved stamped plans to always keep on-site.

Code Requirements:

Y N/A

IBC Code Section

☐ ☐ Applicant shall provide a 911 addressing verification letter from the addressing section of the engineering department with any permit application for new construction.

☐ ☐ Finish grade around the structure/addition shall slope away from the foundation at a minimum of 5% for a minimum distance of 10 feet. Include a note on the site plan or show on a foundation detail. **1804.3**

☐ ☐ On graded sites, the top of any exterior foundation detail shall extend above the elevation of the street gutter at point of discharge at the inlet of an approved drainage device by at least 12 inches plus 2%. Provide elevations on the site plan to show compliance. **1808.7.4**

☐ ☐ Provide a statement on the title sheet of the plans that this project shall comply with 2018 IBC, IMC, IPC, IECC, IEBC (as applicable), 2017 NEC, 2018 IFGC, 2018 ISPSC (as applicable) **along with a detailed code summary.**

☐ ☐ Plans shall be dimensioned and drawn in a standard architectural or engineering scale.

☐ ☐ Proposed phased occupancy shall be submitted as a part of the initial plan review. **PHASING PLAN:** A sealed phasing plan must be submitted with the plan set and integrated into the fire sprinkler and fire alarm system shop drawings. Reference 2021 IFC 105.4.4.1. The graphic plan must show the following items: **1.** Numbered phase locations, **2.** Fire-rated separations, including firewalls, fire barriers, stair enclosures, fire partitions, and phase separation walls, 3. Exit stairs, 4. Locations of building exits other than stairwells, 5. Location of the fire sprinkler riser(s), 6. Locations of standpipes, 7. Locations of fire department connections, 8. Locations of the building fire alarm panel(s), 9. Knox box locations

Building Analysis:

Use and Occupancy Classification

Y N/A

IBC Code Section

☐ ☐ Structures or portions of structures shall be classified with respect to occupancy in one or more of the occupancy groups. Specify proposed occupancy classification. **302.1**

☐ ☐ A room or space that is intended to be occupied at different times for different purposes shall comply with all the requirements that are applicable to each of the purposes for which the room or space will be occupied. **302.1**

☐ ☐ Specify the existing and proposed use of all rooms and areas. **302.1**

Detailed Use and Occupancy Provisions:

Y **N/A** **IBC Code Section**

☐ ☐ Covered and Open Malls shall comply with IBC Section 402 **402**

☐ ☐ High-Rise buildings shall comply with IBC Sections 403 and 1007.1.1. Pressurized stairways and elevator hoist ways shall comply with 909.6.3, 909.10.2 as amended, and 909.20. **403, 1007.1.1, 909**

☐ ☐ Atriums shall comply with IBC Section 404 **404**

☐ ☐ Motor-vehicle-related occupancies shall comply with IBC Section 406. Ramps shall comply with IBC Section 406.4.3, as amended. **406**

☐ ☐ Hazardous materials in other than H-occupancies shall comply with IBC 414 and 414.1.3 of the local amendments. **414**

☐ ☐ Occupied roofs shall comply with Section 503.1.4 and 1006.3. **503.1.4, 1006.3**

☐ ☐ Ambulatory care facilities with the potential for fewer than four patients rendered incapable of self-preservation shall provide a notarized letter from the doctor in responsible charge of the facility stating that fewer than four patients will be rendered incapable of self-preservation at all times. **422**

General Building Heights and Areas:

Y **N/A** **IBC Code Section**

☐ ☐ Perform an analysis to verify that the maximum building area and height, occupancy, and type of construction are following Table 503, Sec. 504 & 506. Mixed-use and occupancies shall comply with sec.508. The analysis shall be performed for each floor and for the building. Provide this on the code analysis summary page of the plans. **503, 504, 506, 508**

☐ ☐ Clearly show if the lower level is a basement or story above grade plane, based on the definitions in referenced code. **503**

☐ ☐ Indicate how mezzanine complies with area, openness and exit requirements. **505**

Type of Construction:

Y **N/A** **IBC Code Section**

☐ ☐ The building elements based on type of construction shall have a fire-resistance rating not less than that specified in Table 601. **601**

☐ ☐ Exterior wall fire resistance rating and opening protection shall be determined based on fire separation distance as defined in referenced code.

703 and Tables 601 & 705.8

Fire Resistance Rated Construction and Protection System:

Y N/A

IBC Code Section

- ☐ ☐ Clearly label and identify on the plans the fire-resistive corridors, fire walls, shaft enclosures, fire barriers, fire partitions, smoke barriers and smoke partitions along with their hourly fire ratings. Link all labels to the partition schedule.
- ☐ ☐ Provide a partition schedule listing the approved testing agency assembly numbers for all fire-rated assemblies. Provide construction sections and details for all wall assemblies.
- ☐ ☐ Provide copy of complete fire-rated design data listing from UL or another approved testing agency for each fire-rated design specified in the plans. Each of the fire-rated assemblies must be keyed to the elements of construction that are required to be protected. Include the data in the drawing set.
- ☐ ☐ Provide details and the approved assembly numbers of the individual fire protection for structural members required to be fire-resistive that support more than 2 floors or one floor and roof, or support a load bearing or non-load bearing wall more than two stories high. **704.2 and 704.3**
- ☐ ☐ Provide details to show column impact protection in garages or other areas subject to impact damage by corner guards or steel jackets around the column to a height of at least 5 feet. **704.9**
- ☐ ☐ When two or more buildings are on the same property, the buildings shall have an assumed property line between them for the purpose of determining the required wall and opening protection and roof cover requirements. An exception is provided in 503.1.2 if the combined area of the buildings is within the limits specified in Chapter 5 for a single building, based on the most restrictive occupancy. **705.3**
- ☐ ☐ For buildings within 10 feet of the property line or assumed property line at any point, show the location of said (assumed) property line(s) on the floor plans for all floors of the building.
- ☐ ☐ For all walls, at or near a property line or assumed property line, provide a complete wall section from the foundation to the roof and locate the property line or assumed property line with distance to the building face.
- ☐ ☐ Where building is separated by fire walls, indicate the assumed property line from the termination of the fire walls at the building exterior wall to the legal property line. Indicate the fire separation distances from the assumed property line to the building face as defined in sec. 202. Verify compliance of percentage of permitted unprotected openings or provide protected openings. **Table 705.8**
- ☐ ☐ The maximum area of unprotected or protected openings permitted in an exterior wall in any story shall not exceed the values in sec. 705.8 and Table 705.8. No exterior openings are permitted with less than 3 feet of fire separation distance. When opening limitations are present due to proximity, provide a table with the exterior elevations showing the actual separation distance, the allowable percentage of openings for each applicable distance range, the actual total wall area per floor, the actual opening area per floor, and the actual percentage of openings per floor.

Table 705.8

Y N/A

IBC Code Section

- ☐ ☐ Projections shall not extend any closer to the line used to determine the fire separation distance:

0 feet to less than 2 feet - Projections not permitted.

2 feet to less than 3 feet - 24 inches

3 feet to less than 5 feet - two thirds of FSD

5 feet or greater- 40 inches Projection materials shall be in accordance with sec. **705.2.1 to 705.2.3.705.2 & Table 705.2**

☐ ☐ In un-sprinklered buildings over 3 stories in height, except for open parking garages, provide at least 3 feet of 1-hour fire-rated vertical separation between exterior openings in adjacent stories that are within 5 feet horizontally and when the lower opening is less than 1-hour protected. Also, may use flame barrier of 1-hour fire rating extending 30 inches beyond the exterior walls. **705.8.5**

☐ ☐ Provide 1-hour opening protection for openings that are less than 15 feet vertically above the roof of an adjacent building, when the fire separation distance between the imaginary line and the adjacent building is less than 15 feet, unless at least 10 feet of roof assembly and its supporting structure of the lower building is minimum. 1-hour fire rated. **705.8.6**

☐ ☐ Parapets shall be provided on exterior walls, unless one of the exceptions of section 705.11 applies. The parapet shall be at least 30 inches high and have noncombustible faces at the uppermost 18 inches. **705.11**

Firewalls:

Y N/A

IBC Code Section

☐ ☐ Openings are not permitted in party walls. (firewall on a property line) **706.1.1**

☐ ☐ Firewalls shall be continuous from exterior wall to exterior wall and shall extend 18 inches beyond the exterior surface of exterior walls. The firewall shall be permitted to terminate at the interior surface of non-combustible exterior sheathing when one of the exceptions of sec. 706.5 applies. **706.5**

☐ ☐ Where the firewall intersects the exterior walls, the exterior wall and opening fire protection shall comply with one of the following, unless the angle between the exterior walls at the firewall intersection is greater than 180 degrees:

☐ ☐ 1-hour fire rated exterior wall with 1-hour opening protection, where opening protection is required per sec. 705.8, extending 4 feet on each side of the intersection of the firewall and exterior wall. **705.8**

☐ ☐ exterior wall and opening fire protection shall meet the requirements in sec. 705.5 and 705.8, assuming an imaginary lot line at the firewall extending beyond the exterior of the firewall **706.5.1**

☐ ☐ Firewalls shall extend to the outer edge of horizontal projecting elements, such as balconies, roof overhangs, canopies, marquees, and similar projections that are within 4 feet of the firewall, unless one of the exceptions in sec. 706.5.2 applies. **706.5.2**

☐ ☐ Firewalls shall extend from the foundation to a termination point at least 30 inches above both adjacent roofs, unless one of the exceptions in sec. 706.6 applies. **706.6**

☐ ☐ Provide at least 4 inches between embedded ends of adjacent combustible members embedded into concrete or masonry firewall from opposite sides. **706.7**

☐ ☐ Each fire door through a firewall shall be less than 156 square feet (no limit in buildings with fire sprinklers), and the aggregate opening width shall be less than 25% of firewall length (applicable to all buildings); shall be protected in accordance with sec. 716. Window openings are not permitted in firewalls. **706.8**

Y N/A

IBC Code Section

- ☐ ☐ Window openings are not permitted in firewalls, unless glazing is labeled and tested as part of fire-resistance-rated wall assembly. **Table 716.1 (3), 716.1.2.3**
- ☐ ☐ No duct and air transfer opening penetrations are allowed in firewalls located on the lot line (party wall). Penetrations by ducts and air transfer openings in other firewalls shall comply with Section 717. **706.11, 717**

Fire Barriers:

Y N/A

IBC Code Section

- ☐ ☐ Provide details of the fire barrier at the floor and roof levels to show how the continuity of fire barrier is maintained. The supporting construction for the fire barriers shall have the same fire resistance rating as the fire barrier supported. **705, 707.5.1**
- ☐ ☐ Fire barriers shall be used for shaft enclosures, exit enclosures, exit passageways, horizontal exits, separation of mixed occupancies and incidental use areas. Openings shall be limited to a maximum width of 25% of the fire barrier length, with a maximum area of any single opening of 156 square feet. **707.3, 707.6**
- ☐ ☐ Shaft enclosures shall be 2-hour fire-rated when connecting 4 stories or more and 1-hour fire-rated when connecting fewer than 4 stories. The fire resistance rating shall not be less than the floor assembly penetrated but need not exceed 2 hours. **713.4**
- ☐ ☐ Provide detail of the shaft enclosure penetration at the floor level to show how the continuity of shaft construction is maintained as required. **713.5**
- ☐ ☐ Doors in shaft enclosure shall be self- or automatic closing by smoke detection. **713.7**
- ☐ ☐ A shaft enclosure containing a waste, recycling or linen chute shall not be used for any other purpose, shall be enclosed according to Section 713.4, with opening protections according to Section 716. Discharge doors shall be self- or automatic- closing upon actuation of a smoke detector. **713.4, 716**
- ☐ ☐ Refuse, recycling, and laundry chutes shall terminate in rooms separated from the remainder of the building by fire barriers and opening protectives equal to those of the refuse or laundry chute. Openings into chutes shall not be in corridors. Doors shall be self- or automatic closing. Automatic sprinkler system shall be installed in refuse chutes and termination rooms. **713.13.1, 713.13.4, 713.13.6**
- ☐ ☐ Access openings for refuse, recycling and laundry chutes shall be in not less than a 1-hour rated access room with 3/4-hour fire-rated opening protection. Doors in access rooms shall be self- or automatic closing by smoke detection. **713.13.3**
- ☐ ☐ Elevator shaft shall be enclosed in a shaft enclosure. Provide detail of the elevator shaft penetration at floor level to show how the continuity of shaft construction is maintained. **713.2, 713.5**
- ☐ ☐ An enclosed elevator lobby shall be provided to separate the elevator shaft from the rest of the building on each floor, where required by Section 3006.2 for construction complying with Section 3006.3 based on occupancy group classification. **3006.2, 3006.3**

Fire partitions:

Y N/A

IBC Code Section

- ☐ ☐ Provide details of fire partition to show that the continuity of the partition is maintained. **708.4**

- ☐ ☐ The supporting construction for fire partition shall be protected with minimum 1-hour fire rating where required by Section 708.4. **708.4**

Smoke Partitions & Smoke Barriers:

- | Y | N/A | <u>IBC Code Section</u> |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | Smoke barrier shall be minimum 1-hour fire rated. <u>709.3</u> |
| <input type="checkbox"/> | <input type="checkbox"/> | Provide details of smoke barriers to show that the continuity is maintained. <u>709.4</u> |
| <input type="checkbox"/> | <input type="checkbox"/> | Provide details of smoke partition to show that the continuity is maintained. <u>710.4</u> |
| <input type="checkbox"/> | <input type="checkbox"/> | Doors in smoke partitions shall not include louvers. <u>710.5.2.1</u> |
| <input type="checkbox"/> | <input type="checkbox"/> | Air transfer openings in smoke partitions shall be provided with smoke dampers. <u>710.8</u> |

Penetrations, Fire Resistant Joint Systems, and Opening Protections:

- | Y | N/A | <u>IBC Code Section</u> |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | Provide approved protection details for through penetrations and membrane penetrations in fire-resistive assemblies. Also, provide a note on the plans stating: Penetrations of fire-resistive walls, floor-ceiling and roof-ceiling assemblies shall be protected as required by IBC Sec. 714.4 & 714.5. Penetrations are a Special Inspection item. Third-party inspection is required. <u>714.4, 714.5</u> |
| <input type="checkbox"/> | <input type="checkbox"/> | Provide approved assembly numbers for all fire-resistant joint systems. <u>715.1</u> |
| <input type="checkbox"/> | <input type="checkbox"/> | Fire-protection-rated-glazing in fire doors shall not exceed 100 square inches Fire-resistance-rated glazing in excess of 100 sq. in. shall be permitted in fire doors. Listed fire-resistance-rated glazing in a fire door shall have a maximum transmitted temperature rise in accordance with Section 716.2.2.3 when the fire door is tested in accordance with NFPA 252, UL 10B or UL 10C. <u>716.2.2.3.1</u> |
| <input type="checkbox"/> | <input type="checkbox"/> | Fire-protection-rated glazing in fire doors in horizontal exits shall not exceed 100 square inches with no dimension exceeding 10 inches. <u>716.2.5.1.2.1</u> |
| <input type="checkbox"/> | <input type="checkbox"/> | Fire-protection-rated glazing in 1-1/2 hour. rated fire doors in other fire barriers shall not exceed 100 square inches. <u>716.2.5.1.2.2</u> |
| <input type="checkbox"/> | <input type="checkbox"/> | Fire doors shall be self- or automatic-closing and latching. <u>716.2.6.1</u> |
| <input type="checkbox"/> | <input type="checkbox"/> | Fire-resistance-rated glazing shall be tested to ASTM E119 or UL 263 and NFPA 252, UL 10B or UL 10C and shall be permitted in fire door assemblies and in fire barriers per Table 716.5 to the maximum size tested and in accordance with their listings. <u>716.2.5.1.1</u> |
| <input type="checkbox"/> | <input type="checkbox"/> | Fire protection-rated glazing is not allowed in interior fire partitions and fire barriers with fire-rating over 1 hour. <u>716.3.2.1</u> |
| <input type="checkbox"/> | <input type="checkbox"/> | The total area of the glazing in fire-protection-rated windows in fire partitions and fire barriers of 1 hour or less shall not exceed 25% of the common wall area. <u>716.3.2.1.2</u> |

Concealed Spaces, Ducts & Transfer Openings:

- | Y | N/A | <u>IBC Code Section</u> |
|----------|------------|--------------------------------|
|----------|------------|--------------------------------|

☐ ☐ Fire dampers, smoke dampers and combination fire/smoke dampers shall be provided at the locations prescribed in sec. 717.5.1-717.6, with applicable rating shown on the plans. **717.5**

☐ ☐ Provide means of access to the fire and smoke dampers for inspection and maintenance. **717.4**

☐ ☐ Ducts and air transfer openings in fire protected assemblies shall be protected. Hazardous Exhaust Ducts shall not penetrate a fire wall. **717**

☐ ☐ In combustible construction, fire blocking shall be installed to cut off concealed draft openings (both vertical and horizontal) and shall form an effective barrier between floors, between a top story and a roof or attic space. Fire blocking shall be installed in the locations specified in sec. 718.2.2- 718.2.7. Provide details on plans, or complete notes on the drawings. **718.2**

☐ ☐ Provide/detail draft stops to subdivide floor/ceiling assemblies where required by 718.3 (R-occupancies) so that horizontal floor areas do not exceed 1,000 square feet. **718.3, 708.4.2**

☐ ☐ Provide draft stops to subdivide attic spaces and concealed roof spaces such that any horizontal area does not exceed 3,000 square feet. **718.4, 708.4.2**

Fire Protection Systems:

Y N/A

IFC/IBC Code Section

☐ ☐ Specify the type of system on the cover sheet (i.e., NFPA 13 or 13R). Provide sprinkler system shop drawing to the City of Allentown Fire Department at least 30 days before starting work on the sprinkler system.

☐ ☐ Provide fire alarm and detection systems where required by 907.2. Provide shop drawings complying with 907.1.2 to the City of Allentown Fire Department at least 30 days before the start of any work on the systems. Provide hardwired listed smoke alarms, complying with UL 217, in all locations listed. **907.2.11, 907.1.2, 907.2, 907.2.11**

☐ ☐ Smokeproof enclosure shall be constructed according to Section 909.20 of the Austin local amendments. **909.20**

☐ ☐ The minimum dimension of the vestibule to the smokeproof enclosure shall be 44 inches wide x 72 inches long, but not less than the width of the corridor leading to the vestibule. **909.20.1**

☐ ☐ An area of refuge complying with 1009.6 shall be provided in the vestibule or the smoke-proof enclosure. The area of refuge shall not encroach into the required exit path of the surrounding vestibule or smokeproof enclosure.

1009.3

☐ ☐ The smoke-proof enclosure shall be separated from the remainder of the building by 2-hour fire barrier and/or horizontal assemblies without openings except egress doors. The vestibule to the smokeproof exit enclosure shall be separated by 2-hour fire-rated wall. **IFC 909.20.3**

☐ ☐ The door from the building to the vestibule and from the vestibule to the smoke-proof exit enclosure shall be 90-minute rated. The doors shall be self- or automatic closing by smoke detection. **IFC 909.20.2**

Means of Egress:

Y N/A

IBC Code Section

☐ ☐ Provide a complete code and exiting analysis. Identify the path of exit travel on the plans and indicate the common path of travel distance and maximum travel distance. No point in the building shall exceed the distances from an exterior exit, horizontal exit, enclosed stairway, exit passageway, exterior exit stair or ramp measured along the path of travel. The travel distance shall include travel within unenclosed stairways. Note: Travel distance and common path of egress travel share the same starting point. **Table 1017.2**

☐ ☐ Provide a door schedule and a door hardware schedule on the plans.

☐ ☐ Passage doorways shall provide a minimum clear width sufficient for the occupant load per but not less than 32 inches and a minimum clear height of 6 feet, 8 inches. **1010.1.1**

☐ ☐ Maintain a parking headroom clearance of at least 7 feet (8 feet, 2 inches for accessible van parking to any ceiling, beam pipe or similar construction). **406.2.2**

☐ ☐ A ceiling height of at least 7 feet, 6 inches is required in the means of egress system. Protruding objects shall not reduce the ceiling height to less than 80 inches, and such reduced height shall not exceed 50% of the ceiling area of a means of egress. **1003.2, 1003.3.1**

☐ ☐ When the headroom clearance is less than 80 inches, provide a barrier with the maximum height of 27 inches above the floor. **1003.3.1**

☐ ☐ Horizontally projecting objects between 27 and 80 inches high shall not exceed 4 inches from either side over a walking surface, except handrails, which may protrude up to 4.5 inches. **1003.3.3**

☐ ☐ Sloped surfaces shall be used in the means of egress with elevation changes of less than 12 inches. Sloped surfaces greater than 1:20 and greater than 6 inches tall shall have handrails **1003.5**

☐ ☐ In lieu of handrails, contrasting floor finish may be used for ramps with up to 6 inches of elevation change. **1003.5**

☐ ☐ Escalators and moving walks shall not be used as a component of egress travel. Elevators may be used as an accessible means of egress when designed per 1009.4 **1003.7**

☐ ☐ Every room that is an assembly occupancy shall have the occupant load sign posted in a conspicuous place near the main exit or exit access doorway. **1004.9**

☐ ☐ Occupant load shall be determined according to 1004.1. Fixed seating without dividing arms shall use a factor of one person for each 18 inches of seat length. Booth seating shall be based on one person for each 24 inches of seat length measured at the backrest. **1004.1, 1004.6**

☐ ☐ The minimum width for corridors shall be according to Table 1020.3. The minimum width for accessible aisles shall be 36 inches. The minimum width for other aisles shall be according to Section 1018. **1020, 1018**

Means of Egress:

Y N/A

IBC Code Section

☐ ☐ The means of egress width shall not be less than the total occupant load served by the means of egress multiplied by 0.3 inches per occupant for stairways and 0.2 inches per occupant for other egress components, but not less than specified elsewhere in this code. Means of egress width in fully sprinklered buildings, other than Groups H and I-2, shall be not less than the occupant load served multiplied by 0.2 inches/person for stairs, and 0.15 inches/person for other than stairs. **1005.3**

☐ ☐ Multiple means of egress shall be sized such that the loss of anyone means of egress shall not reduce the available capacity to less than 50% of the required capacity. **1005.5**

☐ ☐ Doors in the egress path shall not reduce required width by more than 50% in any position and 7 inches in fully opened position. **1005.7.1**

☐ ☐ Indicate the location of emergency means of egress illumination. **1008.1**

In buildings where required accessible floor or occupied roof is 4 or more stories above or below

☐ ☐ exit discharge, at least one elevator shall be provided as accessible means of egress. **1009.2.1**

☐ ☐ An accessible exit stairway in non-sprinklered and high-rise buildings shall have a clear width of at least 48 inches. **1009.3**

☐ ☐ Stairways within vertical exit enclosures shall incorporate an area of refuge within enlarged floor-level landings without reducing the required means of egress width. Stairs serving occupant load of 200 or more shall be provided with two wheelchair spaces. Smoke-proof enclosures shall have an area of rescue in either the vestibule or the enlarged floor-level landing without encroaching on the required exit path. **1009.3, 1009.7, 1009.6.1**

☐ ☐ Areas of refuge, except those located in vertical exit enclosure, shall be separated from the remainder of the story by a smoke barrier or a horizontal exit. **1009.6.4**

☐ ☐ Each area of refuge shall be provided with two-way communication system, instructions, and signage. **1009.6.5, 1009.8, 1009.9**

☐ ☐ Where an elevator lobby is used as an area of refuge, the shaft and lobby shall be a smoke-proof enclosure. **1009.4**

☐ ☐ The building exterior walls within 10 feet horizontally from the exterior area of assisted rescue shall be 1-hour rated min. with 3/4-hour opening protective and shall extend vertically from the ground to 10 feet above the floor of the assisted rescue area. **1009.7.2**

☐ ☐ Show that the exterior area for assisted rescue is 50% minimum open. **1009.7.3**

☐ ☐ The exterior exit stairways for exterior area for assisted rescue shall have at least 48 inches clear width. **1009.7.4**

☐ ☐ Egress doors shall be side-hinged swinging when serving an occupant load greater than 10 and shall swing in the direction of egress travel where serving more than 50 occupants. **1010.1.2, 1010.1.2.1**

Means of Egress:

☐ ☐ Thresholds at doorways shall not exceed 3/4 inch (19.1 mm) in height above the finished floor or landing for sliding doors serving dwelling units or 1/2 inch (12.7 mm) above the finished floor or landing for other doors. Raised thresholds and floor level changes greater than 1/4 inch (6.4 mm) at doorways shall be beveled with a slope not greater than one unit vertical in two units horizontal (50-percent slope). **1010.1.6**

☐ ☐ Provide a landing width not less than the width of the door or the stair served (whichever is greater) and a length of at least 44 inches. Doors fully open shall not reduce the width of the landing by more than 7 inches. When a landing serves an occupant load more than 50, doors in any position shall not reduce the landing to less than one-half its required width. **1010.1.5**

☐ ☐ Handles, pulls, latches, locks, and other operable parts on doors and gates shall comply with 309.4. Operable parts of such hardware shall be 34 inches (865 mm) minimum and 48 inches (1220 mm) maximum above the finish floor or ground. Where sliding doors are in the fully open position, operating hardware shall be exposed and usable from both sides. **1010.2**

☐ ☐ Doors serving a Group H occupancy, and doors serving rooms or spaces with an occupant load of 50 or more in a Group A or E occupancy, shall not be provided with a latch or lock other than panic hardware or fire exit hardware. **1010.2.9**

☐ ☐ Provide stairway riser and tread details. **1011.5**

☐ ☐ Stairways shall have a headroom clearance of at least 80 inches. **1011.3**

☐ ☐ Indicate stair landing dimensions complying with sec. 1009.8. **1011.6**

☐ ☐ Walls and soffits of enclosed usable space under stairs shall be protected on the enclosed side as required for 1-hour rating or the fire rating of the stair enclosure, whichever is greater. Access to the enclosed space shall not be directly from within the stair enclosure. The open space under exterior stairways shall not be used for any purpose. **1011.7.3, 1011.7.4**

☐ ☐ A flight of stairs shall not have a vertical rise greater than 12 feet (3658 mm) between floor levels or landings. **1011.8**

☐ ☐ Flights of stairways shall have handrails on each side and shall comply with Section 1014. Where glass is used to provide the handrail, the handrail shall comply with Section 2407. **1011.11**

☐ ☐ Buildings four or more stories high are required to have one stairway extended to the roof with a penthouse unless the roof has a slope steeper than 4:12. **1011.12**

☐ ☐ Exits and exit access doors shall be marked by approved exit signs. When exits are not readily visible, exit signs shall be located such that no point in a corridor or exit passageway is more than 100 feet from the nearest visible exit sign. **1013.1**

☐ ☐ Tactile exit signs shall be provided at locations listed in sec. 1013.4. **1013.4**

☐ ☐ Provide guards at floor and roof openings landings, balconies, and at open sides of stairs, which are more than 30 inches above grade or floor below. Guardrails shall be not less than 42 inches in height. **1015**

Means of Egress:

Y N/A

IBC Code Section

- ☐ ☐ Open guards shall have intermediate rails or an ornamental pattern such that a sphere 4 inches in diameter cannot pass through. **1015.4**
- ☐ ☐ Egress shall not pass through kitchens, storage rooms, closets or spaces used for similar purposes. **1016.2**
- ☐ ☐ Provide a complete architectural section of the corridor showing all fire-resistive materials and details of construction for all floor, wall, and roof assemblies.
- ☐ ☐ Each tenant space shall be provided with access to the required exits without passing through adjacent tenant spaces. **1016.2.1**
- ☐ ☐ The common path of egress travel shall comply with Section 1006.2.1 and Table 1006.2.1 **1006.2.1**
- ☐ ☐ Provide two exits or exit access doorways from any space when one of the conditions as noted in sec. 1006.2.1 or Table 1006.2.1 exists. **1006.2.1**
- ☐ ☐ Show the dimensions of all exit access aisles and aisle access ways complying with sec. 1018 **1018**
- ☐ ☐ The long side of an egress balcony shall be at least 50 percent open, and the open area above the guards shall be so distributed as to minimize the accumulation of smoke or toxic gases. **1021.3**
- ☐ ☐ Provide adequate exit separation between required exits. **1007.1.1**
- ☐ ☐ Exit access travel distance from the most remote point within a story to the entrance to an exit shall not exceed the values shown in Table 1017.2. **1017.2**
- ☐ ☐ Show that the corridor width is complying with sec. 1020.3. **1020.3**
- ☐ ☐ Dead ends more than 20 feet in length (or as allowed by the exceptions to 1020.5) are not permitted in a corridor when more than one exit or exit access doorway is required. **1020.5**
- ☐ ☐ Corridor shall have a min. width of 44 inches except as indicated in Table 1020.3 and be protected with 1-hour fire partition as required in Table 1020.2. **1020.3**
- ☐ ☐ Fire resistance rated corridors shall be continuous and shall not be interrupted by intervening rooms. **1020.7**
- ☐ ☐ Provide minimum number of exits from the building on each floor. **Table 1006.3.3**
- ☐ ☐ Provide 2-hour fire-rated enclosures where they connect 4 or more stories and not less than 1-hour rated enclosures for less than 4 stories. Elevators shall not open into an exit enclosure. **1023.2**
- ☐ ☐ The building exterior walls within 10 feet horizontally from the exterior non-rated wall of an exit stairway enclosure at an angle less than 180 degrees from the enclosure wall shall be 1-hour fire rated minimum with 3/4 -hour opening protective and shall extend vertically from the ground to 10 feet above the topmost landing or roofline, whichever is closer. **1023.7**
- ☐ ☐ Stairways from upper levels extending below the level of exit discharge shall have an approved barrier to preclude exiting into such lower levels. Directional exit signs shall be provided. **1023.8**

Means of Egress:

Y N/A

IBC Code Section

☐ ☐ Provide stairway identifications at each floor landing in interior exit enclosures connecting more than 3 stories. Tactile floor designation signs shall also be provided in buildings 2 or more stories high. Tactile exit signs shall be provided at locations listed in sec. 1013.4. 1023.9

☐ ☐ Exit passageway shall have a 1-hour fire-rated enclosure and shall have a width determined, but shall not be less than 44 inches, unless serving an occupant load of less than 50, in which case width may be reduced to 36 inches. 1024.2, 1024.3

☐ ☐ No more than one-half of the total number of exits shall be used as horizontal exits. 1026.1

☐ ☐ Clearly identify the location of horizontal exit on the plans and provide the required separation. Provide calculations to show that the refuge area can accommodate the required capacity as determined. 1026.2, 1026.4

☐ ☐ Exterior exit ramps and stairways shall not be permitted for buildings over 6 stories above grade plane or in high-rises or Group I-2 occupancies. 1027.2

☐ ☐ Show that the exterior exit ramps and stairways meet the openness requirements. 1027.3

☐ ☐ Exits (exterior exit, horizontal exit, enclosed stairway, exit passageway, exterior exit stair or ramp) shall not be used for any purpose that interferes with its function as a means of egress. Exits shall discharge directly to the exterior of the building or provide direct access to grade. Exit discharge shall not re-enter a building or exit through another building. 1022.1, 1028.2

☐ ☐ Egress balconies, exterior exit stairways and ramps shall be located at least 10 feet from adjacent lot lines and from other buildings on the same lot, unless the adjacent building exterior walls and openings are protected in accordance with sec. 705 based on the fire separation distance. 1021.4, 1027.5

☐ ☐ The long side of an egress balcony shall be at least 50 percent open. Exterior exit stairways and ramps serving as an element of a required means of egress shall be open on not less than two sides, except for required structural columns, beams, handrails, and guards. The open area shall not be less than 50% of the perimeter of the stairs, excluding the main landing. The open area shall be so distributed as to minimize the accumulation of smoke or toxic gases. 1021.3, 1027.3

☐ ☐ Provide dimensions of egress court to show compliance with sec. 1029.2 1029.2

☐ ☐ In a building, room or space used for assembly purposes that has an occupant load of greater than 300 and is provided with a main exit, that main exit shall be of sufficient capacity to accommodate not less than one-half of the occupant load, but such capacity shall be not less than the total required capacity of all means of egress leading to the exit. Where the building is classified as a Group A occupancy, the main exit shall front on not less than one street or an unoccupied space of not less than 10 feet (3048 mm) in width that adjoins a street or public way. In a building, room or space used for assembly purposes where there is not a well-defined main exit or where multiple main exits are provided, exits shall be permitted to be distributed around the perimeter of the building provided that the total capacity of egress is not less than 100 percent of the required capacity. 1030.2

Interior Finishes & Interior Environment:

Y N/A

IBC Code Section

- ☐ ☐ Foam plastics shall not be used as interior finish except as provided in sec. 803.4, 806.5, and 2604.2. 802.7

When walls and ceilings are required to be fire-resistive or non-combustible, the finish material shall be applied directly against such fire-resistive or non-combustible construction or furred out per Section 803.15.1.1, or set-out according to Section 803.15.1.2 803.15.1

- ☐ ☐ An interior wall or ceiling finishes less than 1/4 inches thick shall be applied directly against into the wall, ceiling or structural element without the use of furring strips and shall not be suspended away from the building element to which it is applied. (Exception: noncombustible interior finishes or Class A finish materials) 803.15.4

- ☐ ☐ Provide cross-ventilation calculation for attic and enclosed rafter spaces. Ventilating area shall not be less than 1/150 of the area space ventilated. The net free cross-ventilation area can be reduced to 1/300 if not less than 50%, and not more than 80%, of the required ventilating area provided by ventilators located in the upper portion of the space is to be ventilated at least 3 feet. above eave or cornice vents, with the balance of the required area provided by eave or cornice vents. At least 1 inch of airspace shall be provided between insulation and the roof sheathing. 1202.2.1

- ☐ ☐ Unvented attic and unvented enclosed rafter assemblies shall comply with the provisions of Section 1202.3. 1202.3

- ☐ ☐ Under-floor ventilation shall be provided at a rate of 1 square foot per 150 square feet of crawl space area. 1202.4.1

- ☐ ☐ For all occupied spaces, provide exterior openings for natural light (8% of floor area) or artificial lighting. Natural ventilation (4% of floor area) or a mechanical system for all occupied spaces is also required. Adjoining spaces shall be permitted where one-half of the area of the common wall is open and unobstructed and provides an opening not less than 1/10th of the room area or 25 square feet, whichever is greater. 1202.5, 1204.2, 1204.2.1

- ☐ ☐ Provide a mechanical ventilation system in bathrooms containing a bathtub and/or shower. 1202.5.2.1

- ☐ ☐ Exterior openings for natural light shall open directly into a public way, yard, or court unless they open into a roofed porch which abuts a public way, yard or court, has a ceiling height of at least 7 feet, and is at least 65% open on the longer side. 1204.2.2

- ☐ ☐ Provide a minimum of 7 feet dimension (in any direction) in all habitable rooms, other than kitchen, and at least one room of at least 120 square feet. net floor area. All other habitable rooms must be no smaller than 70 square feet. 1208.1, 1208.3

- ☐ ☐ Required ceiling height is at least 7 feet, 6 inches in general and at least 7 feet in kitchens, bathrooms, storage rooms and laundry rooms. See exceptions for sloped ceilings, mezzanines, etc. 1208.2

- ☐ ☐ Indicate the location of crawl space access with a minimum of 18x24 inches opening. 1209.1

- ☐ ☐ Indicate the location of attic accesses with a minimum of 20x30 inches opening and minimum 30 inches of clear headroom. 1209.2

Interior Finishes & Interior Environment:

Y N/A

IBC Code Section

☐ ☐ Toilet and bathroom finishes on floors, bases and walls shall be smooth, hard and non-absorbent where required by 1210.2. Showers and walls above bathtubs with shower heads shall be finished with a smooth, non-absorbent surface to a height at least 78 inches above drain inlet. 1210.2

☐ ☐ Privacy at Public Restrooms shall be provided where required by Section 1210.3. 1210.3

☐ ☐ Toilet rooms shall not open directly into a room used for the preparation of food for service to the public. 2902.3.2

Exterior Walls:

Y N/A

IBC Code Section

☐ ☐ Specify on elevations the proposed exterior wall finish. Specify material and thickness.

☐ ☐ Exterior walls, including basement walls, shall provide the building with a weather-resistant exterior wall envelope. The exterior wall envelope shall include flashing as described in sec. 1404.4. Protection against condensation shall be provided per 1404.3. 1403.2

☐ ☐ Balconies and similar projections of combustible construction other than fire-retardant-treated wood shall be fire-resistance rated floor construction in accordance with Table 601 or Heavy Timber construction in accordance with sec. 2304.11. The aggregate length shall not exceed 50% of the building's perimeter on each floor. See exceptions in sec.705.2.3.1. 705.2.3.1, 1405

☐ ☐ Combustible materials on the exterior side of exterior walls shall comply with Section 1405. (Exception: plastics complying with Chapter 26). Metal Composite Materials shall comply with Section 1406. Exterior Insulation and Finish Systems (EIFS) shall comply with Section 1407. 1405, 1406, 1407, Ch. 26

☐ ☐ Provide veneer design and installation details: thickness, anchors, backing, lintels, and support systems. 1404

Roof Assemblies and Rooftop Structures:

Y N/A

IBC Code Section

☐ ☐ Provide details of roof assemblies and specify roof covering materials. Class A or B roof covering, where required, shall comply with Section 1505. Table 1505.1

☐ ☐ Fasteners for roof covering shall be corrosion resistant such as copper, brass, stainless steel or galvanized. 1507.2.5

☐ ☐ Verify that the penthouse satisfies the provisions of sec.1511.2 1511.2

☐ ☐ Roofs shall be structurally designed to compensate for ponding effect. 1611

☐ ☐ Roof drain systems, including overflow drainage systems shall be designed in accordance with the IPC.

☐ ☐ Extend chimney at least 2 feet above any part of the building within 10 feet, but not be less than 3 feet above the highest point where the chimney passes through the roof. **2113.9**

☐ ☐ Provide make, model and ICC report number for manufactured skylight(s) and fireplace(s).

Glass and Glazing:

Y N/A **IBC Code Section**

☐ ☐ Screens shall be provided below sloped glazing of heat-strengthened glass, or fully tempered glass shall be provided. **2405.3**

☐ ☐ Skylights at angle less than 45 degrees from horizontal plane shall be mounted on a curb at least 4 inches above roof plane. **2405.4**

☐ ☐ Provide safety glazing in the locations as described in sec. 2406.4. **2406.4**

☐ ☐ Glass in handrails and guards shall be laminated glass constructed of fully tempered or heat-strengthened glass and comply with all other requirements in Section 2407. **2407**

Gypsum Board and Plaster:

Y N/A **IBC Code Section**

☐ ☐ Provide water-resistive barriers between lath and sheathing in cement plaster (stucco) construction **2510.6**

☐ ☐ Provide details for a corrosion-resistant weep screed on all exterior stud walls at or below the foundation plate line at least 4 inches above grade, or 2 inches above paved areas. **2512.1.2**

Plastic:

Y N/A **IBC Code Section**

☐ ☐ Foam plastics used as interior trim shall be minimum 20 pounds per cubic foot and maximum 8 inches wide x 0.5 inches thick. The interior trim shall not be more than 10% of the wall and ceiling area. Provide testing data of the foam plastic. **2604.2**

Elevators and Conveying Systems:

Y N/A **IBC Code Section**

☐ ☐ Provide elevator machine room ventilation. **3005.2**

☐ ☐ No more than 4 elevator cars serving the same portion of a building shall be located in the same hoist way. Where 4 or more elevator cars serve all or the same portion of a building, they shall be located in not less than 2 hoist ways. **3002.2**

☐ ☐ A hoist way opening protection (enclosed elevator lobby or equivalent) shall be provided to separate the elevator shaft enclosure doors from each floor in accordance with 3006.3 in high-rise buildings, fire-rated corridors, or where otherwise required by 3006.2. Where an elevator lobby is used as an area of refuge, the shaft and lobby shall be a smoke-proof enclosure. **3006.2, 3006.3, 716.2.2.1, 716.2.2.1.1, 1009.4**

☐ ☐ In buildings 4 or more stories above or below grade, at least one elevator shall be sized to accommodate an ambulance stretcher. Provide medical emergency designation at the elevator. **3002.4**

- ☐ ☐ Door, other than hoist way doors and the elevator car door, shall be prohibited at the point of access to an elevator car unless such doors are readily openable from the car side. **3002.6**
- ☐ ☐ Elevators shall not be in a common shaft enclosure with a stairway. **3002.7**

Grading & Site Improvement:

- Y** **N/A** **IBC Code Section**
- ☐ ☐ A Soil Report shall be provided when applying for grading, site improvement and building permit.
- ☐ ☐ Provide letter from Soil Engineer confirming that grading and paving plans and specifications have been reviewed and it was determined that the Soils Report recommendations are properly incorporated in the plans.
- ☐ ☐ Indicate width and maximum slope of sidewalks and walkway.
- ☐ ☐ Provide curb cut detail at intersection of walkways with sidewalks and other site curbs.
- ☐ ☐ Indicate size and elevation of landings at all exterior exit doors. **1010.1.5, 1010.1.6**
- ☐ ☐ Provide site accessibility signs at every primary public entrance to the site and every major junction. **1104.1, 1104.2**

Construction Safeguards:

- Y** **N/A** **IBC Code Section**
- ☐ ☐ **ALL** work **shall** comply with chapter 33 **Chapter 33**

Accessibility:

- Y** **N/A** **IBC & ICC A117-2009 Chapters**
- ☐ ☐ **Scoping:** **Chapter 2**
- Scoping: **IBC 1103**
- ☐ ☐ **Building Blocks:** Floor surfaces, changes in level, turning space, clear floor space, knee & toe clearance, Protruding objects, reach ranges, operable parts: **Chapter 3**
- ☐ ☐ **Accessible routes:** walking surfaces, doors & gates, ramps, curb ramps & transitions, elevators, lifts: **Chapter 4**
- Exterior routes: **IBC 1104.1, 1104.2**
- Entrances: **IBC 1105**
- Interior routes: **IBC 1104.3, IBC 1104.5**
- Routes in multilevel buildings: **IBC 1104.4**
- Accessible Means of Egress: **IBC 1009**
- ☐ ☐ **General Site & Building elements:** Parking spaces, loading zones, stairways,

Handrails, windows, accessible routes through parking:	<u>Chapter 5</u>
Parking:	<u>IBC1106.1</u>
Passenger loading zones:	<u>IBC1106.7</u>

Accessibility:

Y	N/A	<u>IBC & A117.1,2009 ICC Code Section</u>
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<input type="checkbox"/> <input type="checkbox"/> Plumbing Elements & Facilities: Drinking fountains, toilet & bathing rooms, water closets & toilet compartments, urinals, lavatories & sinks, bathtubs, shower compartments, grab bars, seats, wash machines & clothes dryers, saunas & steam rooms:	<u>Chapter 6</u>
Toilet Rooms, Bathing Facilities, Kitchens & Kitchenettes:	
Toilet and bathing rooms:	<u>IBC 1109.2</u>
Sinks, kitchens & kitchenettes:	<u>IBC 1109.3, 1109.4</u>
Drinking fountains:	<u>IBC 1109.5</u>
Saunas and steam rooms:	<u>IBC 1109.6</u>
<input type="checkbox"/> <input type="checkbox"/> Communication Elements & Features: Alarms, signs, telephones, detectable surfaces, listening systems, ATM's, two-way communication systems:	<u>Chapter 7</u>
Assistive Listening Systems:	<u>IBC 1108.2.7</u>
Signage:	<u>IBC 1111</u>
<input type="checkbox"/> <input type="checkbox"/> Special Rooms & Spaces: Assembly areas, dressing/fitting/locker rooms, kitchens, transportation Facilities, holding cells, courtrooms, acoustics for classrooms:	<u>Chapter 8</u>
Dressing, fitting and locker rooms:	<u>IBC 1109.12.1</u>
Seating, tables, counters:	<u>IBC 1109.11, 1109.12.3</u>
Assembly area seating:	<u>IBC 1108.2</u>
Wheelchair Spaces:	<u>IBC Table 1108.2.2.1</u>

Accessibility:

Y N/A

IBC & A117.1,2009 ICC Code Section

☐ ☐ **Furnishings & Equipment:** Dining/work surfaces, benches, sales/services counters/windows,

Storage facilities, charging stations, gaming machines and tables:

Chapter 9

Self-service storage:

IBC 1108.3

Checkout Isles:

IBC 1109.12.2

Storage:

IBC 1109.9

Dining & drinking areas:

IBC 1108.2.9

Stages / platforms:

IBC 1103.2.8, 1108.2.8, 1109.8

Dining & drinking areas:

IBC 1108.2.9

☐ ☐ **Recreational Facilities:** Amusement rides, boating, exercise machines, fishing piers,

Golf facilities, play areas, spas & pools, shooting ranges:

Chapter 10

Recreational facilities:

IBC 1110

Pools:

IBC 1110.4.14

☐ ☐ **Dwelling & Sleeping Units:** Accessible/type A/type B/type C units and units with

communication devices:

Chapter 11

Dwelling & sleeping units:

IBC 1107, Table 1107.6.1.1