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The Lief

22 Japandi residences

Adaptive Re-Use Project

301 W. Osborn Road, Phoenix, AZ 85013

2024 IBC CODE SYNOPSIS

PROJECT BASIS

Project:

Existing Office/Science Building Conversion to 22 Residential Condominium Units, including required Type A and Type B dwelling units in accordance with applicable accessibility requirements

Address:

301 W. Osborn Road, Phoenix, Arizona 85013

Existing Occupancy:

Group B — Office / Science Building

Proposed Primary Occupancy:

Group R-2 — 22 Residential Condominium Dwelling Units

Basement Occupancy:

Group S-2 — Enclosed Parking Garage



Construction Type:

Type I-B — Existing construction classification, subject to verification that existing structural frame, floor/roof construction, bearing walls and other applicable building elements provide the fire-resistance ratings required by 2024 IBC Table 601.

Existing Structural Construction:

Cast-in-place reinforced concrete column, beam and slab construction as documented by the existing structural condition assessment. Existing post-tensioned concrete construction shall be identified and verified from existing structural documents and field investigation where applicable.

Building Configuration:

4 stories above grade + 1 basement

Existing Building Height:

±50'-9"

Residential Unit Count:

22 condominium dwelling units

Unit Distribution:

Level 1 — 6 units

Level 2 — 6 units

Level 3 — 5 units

Level 4 / Penthouse — 5 units

Residential Livable Area:

±36,050 SF based upon current development program.

Code Building Area:

Final building area shall be established floor-by-floor from the architectural permit documents in accordance with the IBC definition of Building Area. Development/marketing area calculations shall not be used as the final Chapter 5 code-area calculation.

Basement Parking:

51 parking spaces; EV charging and individual vehicle-lift installations may be incorporated into the final design.



Automatic Sprinklers:

New NFPA 13 automatic sprinkler system throughout.

Standpipe:

Provide as required by the applicable IBC/Phoenix Fire Code provisions and final building configuration.

Vertical Egress:

(2) existing enclosed interior exit stairs extending through the building to the basement level.

Elevators:

(2) existing elevators + (1) proposed new exterior elevator.

Existing Vertical Construction:

Existing concrete stair enclosures and concrete elevator hoistways, subject to verification of required fire-resistance ratings.

New Interior Separations:

Strata/SABS tested/listed fire-resistance-rated and acoustical wall systems as applicable to dwelling-unit, corridor and other required separations.

Ceiling Height:

Approximately 12 feet or greater throughout the existing building; localized soffits, ceilings and building systems shall maintain applicable minimum clear heights. The development documents consistently identify 12'+ ceiling conditions.

Private Outdoor Areas:

Balconies, recessed patios and exterior terraces are integral to the residential program and shall be analyzed for guards, structural loads, accessibility, exterior-wall projections and fire-separation-distance requirements.

Occupied Roof:

An occupiable rooftop garden/amenity is included in the current project program and shall be analyzed for occupant load, means of egress, accessibility, guards, structural loading and associated life-safety requirements.



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Private Interior Stairs:

Certain dwelling units contain private internal stairs. These stairs shall be analyzed separately from the building's required interior exit stairways.

Fireplaces:

Where provided, fireplaces shall be self-contained listed appliances. Conventional chimneys or chimney penetrations through the building or roof are not proposed. Installation shall comply with the appliance listing, manufacturer's installation requirements and applicable mechanical/electrical provisions.

BASIS AND LIMITATIONS OF SYNOPSIS

This synopsis addresses the **2024 IBC/PBCC building-code analysis** applicable to the proposed conversion.

Requirements principally governed by the Phoenix Fire Code, IMC, IPC, IECC, NFPA 70, ISPSC, ICC A117.1, 2010 ADA Standards, or other referenced codes and standards are identified for coordination but are not intended to constitute a complete analysis of those codes.

Because this is an existing building undergoing a substantial alteration and change of occupancy from Group B to Group R-2/S-2, the **2024 International Existing Building Code, as adopted and amended by Phoenix, shall also be applied where applicable to the alteration and change-of-occupancy scope.** Phoenix specifically includes the 2024 IEBC within its adopted 2024 construction codes, and its adaptive-reuse guidance recognizes use of the IEBC for existing-building life-safety/change-of-occupancy evaluation.

Existing construction identified herein shall not be presumed compliant solely based upon material or appearance. Required fire-resistance ratings, structural capacities and existing life-safety features shall be documented by existing approved drawings, engineering evaluation, field investigation, tested/listed assemblies, calculated fire resistance, or other methods acceptable to the Building Official.

1. APPLICABLE CODES / LOCAL AMENDMENTS

Applicable Codes:



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The project shall be designed under the **2024 Phoenix Building Construction Code**, adopted by Phoenix City Council June 18, 2025 and effective August 1, 2025.

Applicable codes and standards include, as relevant:

- 2024 International Building Code with Phoenix amendments
- 2024 International Existing Building Code with Phoenix amendments
- 2024 International Mechanical Code
- 2024 International Fuel Gas Code, where applicable
- 2024 International Energy Conservation Code
- 2024 International Plumbing Code / applicable Phoenix plumbing provisions
- 2023 National Electrical Code
- 2024 International Swimming Pool and Spa Code, if pool/spa facilities are introduced
- ICC A117.1-2017 as referenced by the amended IBC
- 2010 ADA Standards for Accessible Design
- ASME A17 series applicable to elevators
- 2024 Phoenix Fire Code and amendments

Phoenix expressly requires accessible design in accordance with the IBC, ICC A117.1 and applicable Arizona/2010 ADA provisions, using the standard providing the greatest degree of accessibility where the Phoenix amendment applies.

Project Application:

2024 PBCC / IBC + 2024 IEBC SHALL FORM THE PRIMARY BUILDING-CODE BASIS FOR THE ADAPTIVE-REUSE / CHANGE-OF-OCCUPANCY PROJECT.

STATUS: APPLICABLE



2. OCCUPANCY CLASSIFICATION

2024 IBC: Chapter 3; §310.3; §311.3

Proposed Residential Occupancy:

The proposed condominium use contains permanent residential dwelling units within a building containing more than two dwelling units.

Therefore:

GROUP R-2

The existing building was previously utilized as an office/science building classified principally as:

GROUP B

The basement parking garage is classified:

GROUP S-2 — LOW-HAZARD STORAGE / ENCLOSED PARKING GARAGE

Project Classification:

LEVELS 1-4: GROUP R-2

BASEMENT: GROUP S-2

Common residential accessory spaces shall be classified according to their actual function and evaluated under the applicable accessory/mixed-occupancy provisions.

The conversion from Group B to Group R-2 constitutes a **change of occupancy** requiring coordination with the 2024 IEBC.

STATUS: R-2 / S-2

3. MIXED OCCUPANCIES / ACCESSORY USES

2024 IBC: §508

Design Strategy:



The building contains:

GROUP R-2 RESIDENTIAL

GROUP S-2 BASEMENT PARKING

The final design basis shall use:

SEPARATED OCCUPANCIES PER §508.4

Required separation between occupancies shall be determined from Table 508.4 based upon the final sprinkler condition.

The building will be equipped throughout with an NFPA 13 automatic sprinkler system.

Accessory spaces associated with the residential occupancy may be treated as accessory occupancies where the conditions of §508.2 are satisfied.

Potential accessory/common uses include:

- residential lobby;
- management area;
- fitness room;
- resident lounge;
- bicycle/storage rooms;
- rooftop amenity;
- building service rooms.

Project Application:

R-2 / S-2 SEPARATED-OCCUPANCY STRATEGY

The existing concrete horizontal construction between the basement garage and Level 1 shall be documented to provide not less than the required occupancy-separation rating.

STATUS: §508.4 SEPARATED OCCUPANCIES



4. CONSTRUCTION TYPE

2024 IBC: Chapter 6; §602; Table 601

Construction Classification:

TYPE I-B

This classification is supported as the existing project construction designation and is consistent with the documented cast-in-place concrete column, beam and slab structural system; however, construction material alone does not establish construction type.

Type I-B compliance requires the applicable building elements to provide the fire-resistance ratings required by **Table 601**.

Primary elements to be verified include:

- primary structural frame;
- bearing walls;
- floor construction and associated secondary members;
- roof construction and associated secondary members;
- exterior walls as additionally regulated by Table 705.5/fire separation distance.

Existing concrete stairs and elevator hoistways shall be evaluated separately under the applicable shaft/interior-exit-stair provisions.

Project Application:

TYPE I-B — EXISTING CONSTRUCTION CLASSIFICATION

VERIFY EXISTING FIRE-RESISTANCE RATINGS AGAINST TABLE 601

Existing concrete construction shall not be presumed to have a particular hourly rating without appropriate documentation or analysis.

STATUS: TYPE I-B — VERIFY EXISTING ASSEMBLY RATINGS



5. ALLOWABLE BUILDING HEIGHT

2024 IBC: §504.3; Table 504.3

Allowable building height is determined by:

- occupancy;
- construction type;
- sprinkler condition.

Project Condition:

Occupancy: R-2 / S-2

Construction: Type I-B

Sprinklers: NFPA 13 throughout

Existing Height: ±50'-9"

The final Chapter 5 code summary shall compare the actual building height measured in accordance with the IBC definition of **Building Height** against the allowable height established by Table 504.3.

Because the building is existing, the actual grade-plane calculation and highest roof elevation shall be documented on the architectural code/site plan.

Project Application:

ACTUAL BUILDING HEIGHT: ±50'-9" — VERIFY FINAL GRADE-PLANE CALCULATION

ALLOWABLE HEIGHT: ESTABLISH FROM TABLE 504.3 FOR R-2 / TYPE I-B / NFPA 13

No high-rise condition is anticipated based upon the known building configuration.

STATUS: VERIFY FINAL TABLE 504.3 CALCULATION

6. ALLOWABLE NUMBER OF STORIES

2024 IBC: §504.4; Table 504.4

Project Condition:



4 STORIES ABOVE GRADE PLANE + 1 BASEMENT

Allowable stories shall be established using:

GROUP R-2 / TYPE I-B / NFPA 13

The basement is not automatically counted as a story above grade plane; final classification shall be based upon the IBC definitions of **Basement**, **Story Above Grade Plane**, and **Grade Plane**.

Project Application:

ACTUAL: 4 STORIES ABOVE GRADE PLANE

BASEMENT: S-2 ENCLOSED PARKING

Final architectural code plans shall document grade plane sufficiently to confirm the basement/story determination.

STATUS: VERIFY AGAINST TABLE 504.4 — FOUR ABOVE-GRADE STORIES DESIGN BASIS

7. ALLOWABLE BUILDING AREA

2024 IBC: §§506.1–506.3; Table 506.2

Allowable building area shall be determined based upon:

- occupancy;
- Type I-B construction;
- sprinkler protection;
- number of stories;
- frontage increase, if utilized;
- separated-occupancy methodology.

Project Condition:



Current civil/design documentation contains slightly different overall area figures. The development program identifies approximately **42,282 SF**, while the code analysis must use the actual IBC-defined building area calculated floor-by-floor from the final architectural plans.

Therefore:

DO NOT USE THE DEVELOPMENT/MARKETING AREA AS THE FINAL IBC BUILDING-AREA CALCULATION.

The architectural code sheet shall tabulate:

- Level 1 actual building area;
- Level 2 actual building area;
- Level 3 actual building area;
- Level 4 actual building area;
- basement area separately;
- allowable area per story;
- total allowable aggregate area where applicable.

STATUS: FINAL FLOOR-BY-FLOOR CALCULATION REQUIRED

8. FRONTAGE / AREA INCREASES

2024 IBC: §506.3

An allowable-area increase may be available where the building has qualifying frontage on:

- public ways; or
- open space meeting the requirements of §506.3.

Project Application:

Because Type I-B construction provides substantial allowable-area capacity, a frontage increase should **not be assumed necessary** until the basic allowable-area calculation is completed.



If the building complies without a frontage increase:

DO NOT RELY ON §506.3 FOR COMPLIANCE.

If needed, frontage shall be calculated from actual qualifying perimeter/open-space conditions shown on the final site plan.

STATUS: AVAILABLE IF REQUIRED — DO NOT CLAIM UNTIL CALCULATED

9. AUTOMATIC SPRINKLER REQUIREMENTS

2024 IBC: §903.2.8; §903.3.1.1

Applicable Requirement:

An automatic sprinkler system is required throughout buildings containing Group R occupancies in accordance with §903.2.8.

Project Design:

NEW NFPA 13 AUTOMATIC SPRINKLER SYSTEM THROUGHOUT THE ENTIRE BUILDING

This shall include:

- residential levels;
- basement parking;
- common areas;
- service/support spaces;
- occupiable rooftop conditions where sprinkler protection is required;
- concealed or exterior areas where required by NFPA 13/IBC.

The existing sprinkler system is to be removed/replaced rather than relied upon as the final residential system.

Project Application:



FULL NFPA 13 — NOT NFPA 13R

The sprinkler classification shall be coordinated consistently across architectural, civil, fire-protection and code documents.

STATUS: REQUIRED — NFPA 13 THROUGHOUT

10. FIRE ALARM / DETECTION REQUIREMENTS

2024 IBC: §907.2.9

Group R-2 occupancies shall be provided with fire-alarm and detection systems as required by §907.

The final system shall be coordinated with:

- dwelling-unit smoke alarms;
- common-area detection;
- sprinkler supervisory devices;
- occupant notification;
- elevator recall;
- fire department notification;
- carbon-monoxide detection where required.

Project Application:

The existing commercial fire-alarm system shall not simply be assumed suitable for the new R-2 occupancy.

PROVIDE / MODIFY FIRE-ALARM SYSTEM FOR GROUP R-2 OCCUPANCY AND FINAL BUILDING CONFIGURATION.

STATUS: REQUIRED



11. EMERGENCY RESPONDER RADIO COVERAGE

2024 IBC: §916 where applicable

Phoenix Fire Code: Applicable provisions

Emergency responder communication coverage shall be evaluated under the adopted Phoenix requirements.

Project Application:

Existing reinforced-concrete construction, basement parking and multiple levels may affect radio-frequency propagation.

VERIFY EMERGENCY RESPONDER RADIO COVERAGE; PROVIDE ERRCS/DAS ONLY WHERE REQUIRED FOLLOWING APPLICABLE TESTING AND FIRE-DEPARTMENT REQUIREMENTS.

STATUS: VERIFY UNDER PHOENIX FIRE CODE

12. FIRE DEPARTMENT ACCESS

2024 IBC: Coordination requirement

Controlling Code: 2024 Phoenix Fire Code / IFC Chapter 5

Fire-apparatus access shall be maintained to the building and shall be coordinated with:

- existing site access;
- new exterior elevator;
- landscaping;
- accessible routes;
- roof/amenity modifications;
- fire department connections.

Phoenix currently identifies the **2024 International Fire Code with Phoenix amendments** as its adopted fire code, effective February 17, 2026.



STATUS: REQUIRED — PHOENIX FIRE CODE

13. FIRE HYDRANT / FIRE FLOW REQUIREMENTS

Controlling Code: Phoenix Fire Code

Required fire flow, hydrant quantity, hydrant spacing and FDC relationship shall be established under the adopted Phoenix Fire Code and water-system criteria.

Project Application:

Existing hydrants and available fire flow shall be documented and coordinated with the new NFPA 13 system.

VERIFY EXISTING FIRE-FLOW CAPACITY AND HYDRANT LOCATIONS.

STATUS: SEPARATE FIRE-CODE / CIVIL COORDINATION

14. STANDPIPE REQUIREMENTS

2024 IBC: §905

Standpipe requirements are based upon:

- building height;
- floor level relative to fire department access;
- stair configuration;
- occupancy/use;
- sprinkler protection.

The current civil/project documentation anticipates a standpipe system.

Project Application:

PROVIDE STANDPIPE SYSTEM AS REQUIRED BY §905 AND PHOENIX FIRE CODE.



Required hose-valve locations shall be coordinated with the two interior exit stairs and other required locations.

STATUS: REQUIRED / FINAL CLASS AND LOCATIONS TO BE CONFIRMED

15. FIRE COMMAND CENTER, IF REQUIRED

2024 IBC: §911

A fire command center is required only where specifically triggered by the IBC, including applicable high-rise and other special-building provisions.

Project Condition:

The building is approximately 50'-9" high and four stories above grade.

The highest occupied floor is not anticipated to exceed the high-rise threshold of 75 feet above the lowest level of fire-department vehicle access.

Therefore:

FIRE COMMAND CENTER NOT ANTICIPATED TO BE REQUIRED.

Final determination shall be confirmed after establishing actual floor elevations and fire-department access elevation.

STATUS: NOT ANTICIPATED REQUIRED

16. OCCUPANT LOAD

2024 IBC: §1004; Table 1004.5

Occupant load shall be calculated according to the actual function of each space.

Residential areas shall use the applicable residential occupant-load factor.

Common amenity areas shall be calculated independently based upon actual use, including as applicable:



- resident lounge;
- fitness;
- rooftop amenity;
- gathering areas;
- pool deck, if introduced;
- management/common areas.

Project Application:

DO NOT APPLY ONE GENERIC RESIDENTIAL OCCUPANT-LOAD FACTOR TO ALL COMMON AMENITY AREAS.

The occupiable rooftop shall receive a specific occupant-load calculation based upon its final programmed use and area.

Occupant loads shall be used to establish:

- number of exits;
- egress capacity;
- door swing;
- plumbing fixture requirements;
- other occupant-load-dependent provisions.

STATUS: FINAL FLOOR-BY-FLOOR / SPACE-BY-SPACE CALCULATION REQUIRED

17. NUMBER OF EXITS REQUIRED

2024 IBC: §1006

The required number of exits or access to exits is determined by:

- occupant load;



- common path of egress travel;
- story;
- occupancy;
- sprinkler protection.

Project Design:

(2) EXISTING INTERIOR EXIT STAIRS

The current design shall maintain two independent exit paths from the residential stories unless a specific code provision permits otherwise.

The occupiable rooftop shall be evaluated independently based upon its final occupant load and configuration.

Project Application:

DESIGN BASIS: TWO REQUIRED INTERIOR EXIT STAIRS

Private stairs located within individual dwelling units are **not** counted as required building exits unless specifically permitted by the means-of-egress provisions.

STATUS: TWO-EXIT DESIGN BASIS

18. EXIT ACCESS TRAVEL DISTANCE

2024 IBC: §1017; Table 1017.2

Maximum exit-access travel distance shall be determined based upon:

- occupancy;
- sprinkler protection;
- path configuration.

Project Application:



Group R-2 floors will be protected throughout by NFPA 13.

Travel distance shall be measured along the actual natural and unobstructed path of travel from the most remote occupiable point to the entrance of an exit.

Evaluate:

- each dwelling unit;
- residential corridors;
- common amenity areas;
- basement parking;
- rooftop amenity.

FINAL TRAVEL DISTANCES SHALL BE GRAPHICALLY DIMENSIONED ON THE LIFE-SAFETY PLANS.

STATUS: VERIFY FINAL PLANS

19. COMMON PATH OF EGRESS TRAVEL

2024 IBC: §1006.2.1; Tables 1006.2.1 and applicable residential provisions

Common path of egress travel shall be evaluated from the most remote point where occupants have only one available direction of travel before reaching a point where two independent paths become available.

Project Application:

Evaluate separately for:

- dwelling units;
- corridors;
- amenity spaces;
- basement garage;
- occupiable rooftop.



The existence of two building stairs does not by itself demonstrate common-path compliance.

SHOW COMMON-PATH DISTANCES ON LIFE-SAFETY PLANS WHERE CONTROLLING.

STATUS: VERIFY FINAL LAYOUT

20. DEAD-END CORRIDOR LENGTH

2024 IBC: §1020.5

Dead-end corridors shall not exceed the applicable maximum length established for the occupancy and sprinkler condition.

Project Application:

Residential corridor geometry shall be arranged to minimize dead-end conditions and maintain access to both exit stairs where required.

DIMENSION ALL DEAD-END CORRIDORS ON LIFE-SAFETY PLAN.

Private dwelling-unit circulation is not automatically treated as a common corridor and shall be evaluated under the applicable dwelling-unit egress provisions.

STATUS: VERIFY FINAL CORRIDOR PLAN

21. EXIT SEPARATION / REMOTENESS

2024 IBC: §1007.1.1

Applicable Requirement:

Where two exits or exit-access doorways are required, they shall be located remotely from one another.

Because the building will be equipped throughout with an **NFPA 13 automatic sprinkler system**, the minimum separation between two required exits is:

NOT LESS THAN ONE-THIRD OF THE MAXIMUM OVERALL DIAGONAL DIMENSION OF THE AREA SERVED



The separation is measured in a straight line between the nearest points of the exit doors or exit-access doorways, subject to the applicable configuration provisions of §1007.

Project Application:

The project provides:

(2) EXISTING INTERIOR EXIT STAIRS

The two stairs shall be evaluated on each residential level and at the occupiable rooftop to confirm required remoteness.

Where the stairs are interconnected by a qualifying rated corridor, the applicable measurement provisions of §1007 shall be applied.

VERIFY MINIMUM 1/3-DIAGONAL SEPARATION ON EACH LIFE-SAFETY PLAN.

STATUS: REQUIRED — VERIFY EXISTING STAIR LOCATIONS

22. EXIT STAIR QUANTITY AND LOCATIONS

2024 IBC: §§1006.3, 1023

Applicable Requirement:

The number of required exits from each story is based upon occupant load, occupancy, travel conditions and other Chapter 10 criteria.

Project Design:

(2) EXISTING INTERIOR EXIT STAIRS

serve the four residential stories and continue to the basement level.

The two stairs shall remain independent exits and shall be located/configured so that required occupants have access to the required number of exits.

The **occupied rooftop amenity** shall also be provided with the number of exits required by its final occupant load and Chapter 10 analysis.



Private internal stairs within individual condominium units:

ARE NOT BUILDING EXIT STAIRS

and shall not be counted toward the two required building exits except where specifically permitted by the applicable dwelling-unit egress provisions.

STATUS: TWO EXISTING INTERIOR EXIT STAIRS — RETAIN AND VERIFY

23. EXIT STAIR WIDTH

2024 IBC: §§1005.3.1, 1011.2

Applicable Requirement:

Required stair capacity is calculated from the occupant load served.

The base stairway capacity factor is:

0.30 INCH PER OCCUPANT

For occupancies other than Groups H and I-2, the factor may be reduced to:

0.20 INCH PER OCCUPANT

where the building is sprinklered throughout as prescribed by §1005.3.1 **and** provided with the required emergency voice/alarm communication system.

Regardless of calculated capacity, stairways generally require:

44 INCHES MINIMUM WIDTH

Stairways serving an occupant load of fewer than 50 are permitted to be:

36 INCHES MINIMUM

where the §1011.2 exception applies.

Project Application:

The two existing building exit stairs shall be field verified for:



- clear width;
- handrail projections;
- occupant-load capacity;
- accessible-means-of-egress requirements;
- existing-building allowances under the IEBC, where applicable.

For the principal building exit stairs, use:

44 INCHES MINIMUM AS THE NEW-WORK DESIGN BASIS, SUBJECT TO ACTUAL OCCUPANT-LOAD CAPACITY.

Because these are **existing stairs**, Phoenix's amended IEBC contains provisions allowing certain existing stair/corridor widths to remain where approved by the code official and sufficient for passage/capacity. This should be treated as an existing-building allowance only if necessary, rather than the primary design assumption.

STATUS: VERIFY EXISTING WIDTH + CALCULATED CAPACITY

24. STAIR RISER / TREAD GEOMETRY

2024 IBC: §§1011.4, 1011.5

Applicable Requirement — Building Exit Stairs:

Typical required stair geometry:

7 INCHES MAXIMUM RISER

11 INCHES MINIMUM TREAD

subject to the specific provisions and exceptions of §1011.

Private Dwelling-Unit Stairs:

The IBC provides an exception for stairs **within R-2 dwelling units not required to be Accessible or Type A units**, permitting:



7¾ INCHES MAXIMUM RISER

10 INCHES MINIMUM TREAD

with applicable winder/nosing provisions.

Project Application:

There are two different stair conditions:

Building exit stairs:

Evaluate against the general §1011 requirements and applicable IEBC existing-stair provisions.

Private internal condominium stairs:

May utilize the R-2 dwelling-unit exception where the particular unit and stair qualify.

DO NOT APPLY THE PRIVATE DWELLING-UNIT STAIR EXCEPTION TO THE TWO BUILDING EXIT STAIRS.

STATUS: REQUIRED — VERIFY EXISTING EXIT STAIRS / DESIGN PRIVATE STAIRS ACCORDINGLY

25. STAIR LANDINGS

2024 IBC: §1011.6

Applicable Requirement:

A floor or landing shall be provided at the top and bottom of each stairway.

Landing width shall not be less than the required stairway width.

Landing dimensions in the direction of travel shall comply with §1011.6, subject to applicable exceptions.

Doors opening onto landings shall not reduce the landing below the permitted dimensions during operation.

Project Application:

Verify all existing exit stair landings at:



- basement;
- Level 1;
- Level 2;
- Level 3;
- Level 4;
- occupied roof.

New or modified doors at the stair enclosures shall be coordinated so that door swings do not create prohibited reductions in required landing width.

STATUS: REQUIRED — VERIFY EXISTING LANDINGS

26. HANDRAILS

2024 IBC: §§1011.11, 1014

Applicable Requirement:

Building stair flights shall generally have:

HANDRAILS ON BOTH SIDES

Handrail height:

34 INCHES MINIMUM / 38 INCHES MAXIMUM

measured vertically above stair nosings or ramp surface as applicable.

Handrails shall comply with applicable requirements for:

- continuity;
- graspability;
- extensions;
- clearance from adjacent surfaces;



- projections;
- termination.

The IBC permits stairs **within individual dwelling units** to have a handrail on one side only.

Project Application:

Building exit stairs:

HANDRAILS BOTH SIDES

Private internal unit stairs:

ONE HANDRAIL PERMITTED WHERE THE DWELLING-UNIT EXCEPTION APPLIES

Existing stair handrails shall be field verified and modified where necessary.

STATUS: REQUIRED

27. GUARDS / GUARD HEIGHTS

2024 IBC: §1015

Applicable Requirement:

Guards are required along open-sided walking surfaces, including stairs, landings, balconies, terraces and occupied roofs, where the walking surface is located more than:

30 INCHES ABOVE THE FLOOR OR GRADE BELOW

General required guard height:

42 INCHES MINIMUM

Guard openings shall generally:

NOT ALLOW PASSAGE OF A 4-INCH-DIAMETER SPHERE

subject to specific exceptions for stairways and other conditions.

Project Application:



Guards are anticipated at:

- private balconies;
- large residential terraces;
- elevated patios;
- occupied rooftop amenity;
- open sides of applicable private internal stairs;
- other elevated walking surfaces.

All new guards shall additionally comply with structural loading requirements under Chapter 16.

42-INCH MINIMUM GUARD HEIGHT IS THE PROJECT DESIGN BASIS FOR EXTERIOR BALCONIES, TERRACES AND OCCUPIED ROOF.

STATUS: REQUIRED

28. STAIRWAY HEADROOM

2024 IBC: §1011.3

Applicable Requirement:

Stairways shall generally provide:

80 INCHES MINIMUM HEADROOM

measured vertically from the line connecting the tread nosings.

The required clearance extends over the stair and required landing as prescribed by §1011.3.

Project Application:

Existing building stairs shall be field verified.

Private internal dwelling-unit stairs shall be coordinated with:

- floor openings;



- structural beams;
- soffits;
- mechanical systems;
- architectural ceilings.

The building's generous 12'+ floor-to-floor/interior height conditions should provide substantial design flexibility, but compliance must be verified at the actual stair geometry.

STATUS: 80-INCH MINIMUM — VERIFY

29. STAIRWAY ENCLOSURE FIRE RATING

2024 IBC: §1023.2

Applicable Requirement:

Interior exit stairways connecting **four stories or more** shall be enclosed with:

2-HOUR FIRE BARRIERS

Interior exit stairways connecting fewer than four stories generally require 1-hour construction.

Project Application:

Each existing building exit stair connects:

BASEMENT + LEVELS 1-4 + OCCUPIED ROOF ACCESS AS APPLICABLE

Therefore:

2-HOUR INTERIOR EXIT STAIR ENCLOSURES REQUIRED

The existing stair enclosures are understood to be concrete construction.

Existing concrete wall construction shall be documented to demonstrate the required fire-resistance rating.



Openings, penetrations and joints in the stair enclosures shall comply with applicable Chapter 7 and §1023 requirements.

STATUS: 2-HOUR REQUIRED — VERIFY EXISTING CONCRETE ASSEMBLY

30. STAIRWAY DISCHARGE

2024 IBC: §§1023.3.1, 1028

Known Existing Condition:

This project has a critical existing condition:

THE TWO EXIT STAIRS CONTINUE DOWN TO THE BASEMENT AND DO NOT TERMINATE DIRECTLY AT THE EXTERIOR AT LEVEL 1.

Level 1 is the intended **level of exit discharge**.

The required egress path from each stair must therefore be demonstrated from:

STAIR ENCLOSURE → LEVEL 1 → COMPLIANT EXIT DISCHARGE CONDITION → EXTERIOR → PUBLIC WAY

Project Application:

The Level 1 discharge arrangement shall be evaluated specifically under §1028.

Where discharge through the interior of the building is utilized, all applicable conditions and limitations of §1028 shall be satisfied.

If the existing Level 1 configuration cannot satisfy the permitted interior-discharge provisions:

PROVIDE A COMPLIANT EXIT PASSAGEWAY OR OTHER APPROVED EXIT-DISCHARGE CONFIGURATION.

Because the stair enclosure is required to be 2-hour construction, an exit passageway connected to that stair shall have the fire-resistance rating required by the applicable Chapter 10 provisions.

THIS IS A PRIMARY LIFE-SAFETY PLAN COORDINATION ITEM.



STATUS: REQUIRED — FINAL LEVEL 1 DISCHARGE CONFIGURATION MUST BE DEMONSTRATED

31. EXIT PASSAGEWAYS

2024 IBC: §1024

Applicable Requirement:

Where an exit passageway is used to provide a protected horizontal extension of an exit, it shall comply with §1024.

Exit passageways shall:

- have the required fire-resistance rating;
- maintain required width/capacity;
- restrict openings and penetrations as prescribed;
- terminate at an exit discharge or another permitted exit component.

The rating shall generally be:

NOT LESS THAN THE RATING OF THE CONNECTED INTERIOR EXIT STAIRWAY

where the passageway provides the continuation of that stair exit.

Project Application:

If required to resolve the Level 1 discharge condition:

2-HOUR EXIT PASSAGEWAY

would be the working design basis because the connected interior exit stairs require 2-hour enclosures.

Do not designate ordinary residential lobby/corridor space as an exit passageway unless it is constructed and protected accordingly.

STATUS: PROVIDE IF REQUIRED BY FINAL STAIR-DISCHARGE DESIGN



32. HORIZONTAL EXITS, IF USED

2024 IBC: §1026

Project Application:

No horizontal exit is presently proposed or necessary as part of the primary egress strategy.

The project relies upon:

TWO INTERIOR EXIT STAIRS

rather than compartmentation using horizontal exits.

Therefore:

NO HORIZONTAL EXIT PROPOSED

STATUS: N/A

33. CORRIDOR WIDTH

2024 IBC: §1020.3; Table 1020.3

Applicable Requirement:

Required corridor width is determined by occupant load, occupancy and accessibility requirements.

For the principal common residential corridors:

44 INCHES MINIMUM DESIGN BASIS

unless a specific code provision permits a lesser width.

Because the building is being converted to luxury residential use, practical corridor widths will likely exceed the code minimum.

Project Application:

Common corridors serving dwelling units shall be evaluated for:

- minimum clear width;



- egress capacity;
- accessibility;
- door projections;
- furnishings or built-ins;
- required turning/maneuvering conditions.

Existing structural columns and new SABS partitions shall not reduce required clear corridor width.

STATUS: 44-INCH MINIMUM DESIGN BASIS — VERIFY PLANS

34. CORRIDOR FIRE RATING

2024 IBC: §1020.2; Table 1020.2; §420

Applicable Requirement:

Corridor fire-resistance requirements depend upon:

- occupancy;
- occupant load;
- sprinkler protection.

The project is:

GROUP R-2

and will be:

NFPA 13 SPRINKLERED THROUGHOUT

The applicable corridor construction shall be established from Table 1020.2 together with the residential separation requirements of §420.



Importantly, dwelling-unit walls facing the corridor may still be required to comply as **fire partitions under §420/§708**, even where the corridor provision itself permits a reduced or no corridor rating due to sprinkler protection.

Project Application:

DO NOT ASSUME THAT A SPRINKLERED CORRIDOR ELIMINATES THE REQUIRED DWELLING-UNIT SEPARATION WALL.

New unit-to-corridor walls shall utilize the selected tested/listed SABS assembly satisfying the applicable fire-partition requirement.

STATUS: UNIT/CORRIDOR SEPARATION REQUIRED — FINAL CORRIDOR RATING PER TABLE 1020.2

35. CORRIDOR DOOR RATINGS

2024 IBC: §§716, 708, 420, 1020

Applicable Requirement:

Door protection is determined by the wall assembly in which the door occurs.

Dwelling-unit entry doors located in required fire partitions shall provide the applicable opening protection and shall comply with the applicable:

- fire-protection rating;
- self-closing/automatic-closing requirements;
- positive-latching requirements;
- smoke and draft control requirements where applicable.

Project Application:

All 22 dwelling-unit entry doors shall be coordinated with the selected unit-to-corridor fire-partition assembly.

PROVIDE LISTED/LABELED UNIT ENTRY DOORS WITH THE REQUIRED FIRE-PROTECTION RATING FOR THE FINAL WALL CONDITION.



Do not establish the final door rating solely from the word “corridor”; it shall be coordinated with the actual rated assembly required by §420/§708/§1020.

STATUS: REQUIRED — FINAL RATING TO MATCH WALL CONDITION

36. DOOR CLEAR WIDTH

2024 IBC: §1010.1.1; Chapter 11

Applicable Requirement:

Required egress doors shall generally provide:

32 INCHES MINIMUM CLEAR OPENING WIDTH

measured with the door open 90 degrees between the face of the door and the stop.

Door width must also satisfy required egress capacity.

Project Application:

Provide required clear width at:

- dwelling-unit entry doors;
- common amenity doors;
- stair doors;
- exit doors;
- roof amenity doors;
- accessible rooms and spaces.

Accessibility requirements under Chapter 11 / ICC A117.1 shall additionally be applied where required.

32-INCH MINIMUM CLEAR OPENING — TYPICAL DESIGN BASIS

STATUS: REQUIRED



37. DOOR SWING / EGRESS DIRECTION

2024 IBC: §1010.1.2

Applicable Requirement:

Doors shall swing in the direction of egress travel where serving:

- rooms or areas with an occupant load of **50 or more**; or
- certain hazardous occupancies/conditions specified by the code.

Project Application:

Typical individual condominium entry doors are not anticipated to require outward swing solely due to unit occupant load.

Doors serving larger common amenity areas or the occupied rooftop shall be evaluated based upon final occupant load.

Stair enclosure doors shall be coordinated with the applicable means-of-egress requirements and landing clearances.

VERIFY DOOR SWING AT ALL COMMON AMENITY AND ROOFTOP SPACES AFTER OCCUPANT LOAD IS ESTABLISHED.

STATUS: REQUIRED AS APPLICABLE

38. DOOR MANEUVERING CLEARANCES

2024 IBC: Chapter 11

Referenced Standard: ICC A117.1-2017

Applicable Requirement:

Doors on required accessible routes shall provide applicable maneuvering clearances based upon:

- direction of approach;
- push/pull side;



- door swing;
- presence of closer/latch;
- adjacent wall configuration.

Phoenix identifies **ICC A117.1-2017** as the accessibility standard referenced through its amended 2024 IBC.

Project Application:

Maneuvering clearance shall be coordinated at:

- accessible building entrances;
- Type A units;
- applicable Type B unit conditions;
- elevator lobbies;
- common amenity rooms;
- accessible toilet rooms;
- rooftop amenity;
- other required accessible spaces.

DO NOT DESIGN ACCESSIBLE DOORS BASED ONLY UPON 32-INCH CLEAR WIDTH; REQUIRED MANEUVERING SPACE MUST ALSO BE PROVIDED.

STATUS: REQUIRED

39. DOOR HARDWARE / PANIC HARDWARE

2024 IBC: §§1010.2, 1010.2.9

Applicable Requirement:



Egress door hardware shall be readily operable from the egress side without a key, special knowledge or effort except where specifically permitted.

Accessible hardware shall additionally comply with Chapter 11 / ICC A117.1.

Panic or fire-exit hardware is required only at doors serving the occupancies and occupant loads specified by §1010.2.9.

Project Application:

Typical R-2 dwelling-unit entry doors do **not** require panic hardware merely because they are egress doors.

Evaluate panic hardware at:

- rooftop amenity exits;
- large assembly-type amenity spaces;
- other spaces whose final occupancy classification/occupant load triggers §1010.2.9.

Stair and exit doors shall receive code-compliant latching/locking hardware and shall maintain required reentry conditions where applicable.

STATUS: EGRESS HARDWARE REQUIRED / PANIC HARDWARE ONLY WHERE SPECIFICALLY TRIGGERED

40. MEANS OF EGRESS ILLUMINATION

2024 IBC: §1008

Applicable Requirement:

The means of egress shall be illuminated at all times the building space served is occupied.

Required illumination applies to applicable:

- exit access;
- corridors;



- stairs;
- landings;
- exits;
- exit passageways;
- exit discharge.

Emergency power for required illumination shall be provided where required by §1008.3.

Project Application:

Provide code-compliant illumination throughout:

RESIDENTIAL CORRIDORS → EXIT STAIRS → LEVEL 1 EXIT DISCHARGE → EXTERIOR PATH TO PUBLIC WAY

and:

OCCUPIED ROOFTOP → REQUIRED EXIT ACCESS → EXIT STAIRS

The basement parking egress system shall likewise receive required illumination.

STATUS: REQUIRED

41. EMERGENCY LIGHTING

2024 IBC: §1008.3

Applicable Requirement:

Emergency illumination shall be provided for the required means of egress in the locations prescribed by §1008.3.

Emergency lighting shall provide the required initial illumination and duration upon failure of normal power.

Project Application:



Provide emergency illumination at applicable:

- residential corridors and exit access;
- interior exit stairs and landings;
- exit passageways, if utilized;
- Level 1 exit-discharge paths;
- basement parking egress routes;
- elevator lobbies where part of the means of egress;
- occupied rooftop egress paths;
- exterior portions of the exit discharge where required.

Emergency lighting shall be supplied from the required emergency electrical source.

PROVIDE CONTINUOUS EMERGENCY EGRESS ILLUMINATION FROM OCCUPIED AREAS THROUGH EXIT DISCHARGE.

STATUS: REQUIRED

42. EXIT SIGNS

2024 IBC: §1013

Applicable Requirement:

Exits and exit-access doors shall be marked by approved exit signs where the exit or path of egress travel is not immediately visible.

Directional exit signs shall be provided where necessary to clearly indicate the direction of egress travel.

Project Application:

Provide illuminated exit signage throughout applicable common egress paths, including:

- residential corridors;



- stair entrances;
- basement parking;
- common amenity spaces;
- occupied rooftop;
- Level 1 discharge paths;
- exit passageways, if provided.

Exit signs are not generally required within individual dwelling units.

PROVIDE EXIT AND DIRECTIONAL SIGNAGE TO CLEARLY IDENTIFY THE REQUIRED EGRESS PATH.

STATUS: REQUIRED

43. ACCESSIBLE MEANS OF EGRESS

2024 IBC: §1009; Chapter 11

Applicable Requirement:

Accessible spaces shall be provided with accessible means of egress in accordance with §1009.

Accessible means of egress may include qualifying:

- accessible routes;
- interior exit stairways;
- elevators;
- horizontal exits;
- ramps;
- areas of refuge;
- exterior areas for assisted rescue.



Project Application:

The building contains occupied floors above and below the level of exit discharge and is served by elevators.

Accessible egress shall therefore be coordinated from:

- required accessible dwelling units;
- common residential areas;
- basement parking;
- occupied rooftop amenity;
- other required accessible spaces.

PROVIDE REQUIRED ACCESSIBLE MEANS OF EGRESS FROM EACH ACCESSIBLE OCCUPIED LEVEL.

Elevators used as components of an accessible means of egress shall comply with the applicable §1009 requirements.

STATUS: REQUIRED

44. AREAS OF REFUGE, WHERE REQUIRED

2024 IBC: §1009.6

Applicable Requirement:

Where required as part of an accessible means of egress, an area of refuge shall provide the prescribed:

- wheelchair spaces;
- clear dimensions;
- separation/protection;
- signage;
- two-way communication;



- access to the required exit component.

However, §1009 contains exceptions for certain buildings equipped throughout with an automatic sprinkler system.

Project Application:

The building will be protected throughout by:

NFPA 13 AUTOMATIC SPRINKLER SYSTEM

Therefore, areas of refuge shall **not automatically be assumed required at every stair landing**.

The final accessible-means-of-egress analysis shall determine whether an applicable §1009 exception eliminates the area-of-refuge requirement for the particular condition.

DO NOT CONSTRUCT AREAS OF REFUGE UNLESS REQUIRED BY THE FINAL §1009 ANALYSIS.

STATUS: VERIFY — SPRINKLER EXCEPTIONS ANTICIPATED TO APPLY WHERE PERMITTED

45. ELEVATOR REQUIRED / ACCESSIBILITY

2024 IBC: Chapter 11; §1104

Referenced Standard: ICC A117.1-2017

Applicable Requirement:

An accessible route is generally required to connect accessible stories, mezzanines and occupied levels unless a specific exception applies.

The multistory-building exceptions applicable to certain smaller buildings do not provide the project with a basis for eliminating vertical accessibility where the building configuration and R-2 accessibility requirements require an accessible route.

Project Condition:

4 RESIDENTIAL STORIES + BASEMENT + OCCUPIED ROOF

Existing/proposed elevator configuration:



(2) EXISTING ELEVATORS

(1) NEW EXTERIOR ELEVATOR

Project Application:

Provide an accessible elevator route connecting all levels required to be accessible, including the residential floors and applicable common-use areas.

The occupied rooftop amenity shall be included in the accessible-route analysis.

ELEVATOR ACCESS IS REQUIRED AS PART OF THE PROJECT ACCESSIBILITY STRATEGY.

STATUS: REQUIRED

46. ELEVATOR SIZE / STRETCHER REQUIREMENTS

2024 IBC: §3002.4

Applicable Requirement:

Where elevators are provided in buildings four or more stories above or below grade plane, at least one elevator shall be sized to accommodate an ambulance stretcher in the open horizontal position.

The qualifying elevator shall comply with the dimensional and identification requirements of §3002.4.

Project Condition:

4 STORIES ABOVE GRADE + BASEMENT

Therefore:

MINIMUM (1) STRETCHER-CAPABLE ELEVATOR REQUIRED

Project Application:

At least one of the existing or proposed elevators shall be documented/designed to satisfy the stretcher requirement.

The selected elevator shall be identified on the permit documents.



VERIFY EXISTING ELEVATOR CAB AND DOOR DIMENSIONS BEFORE RELYING ON AN EXISTING ELEVATOR FOR COMPLIANCE.

If neither existing elevator qualifies, the new exterior elevator shall be designed accordingly.

STATUS: REQUIRED — MINIMUM ONE ELEVATOR

47. ELEVATOR HOISTWAY RATING

2024 IBC: §§713, 3002

Applicable Requirement:

Elevator hoistways extending through multiple stories are shaft enclosures and shall be enclosed with fire barriers having the required fire-resistance rating.

A shaft enclosure connecting:

FOUR STORIES OR MORE

generally requires:

2-HOUR FIRE-RESISTANCE-RATED CONSTRUCTION

Project Application:

The two existing elevator hoistways are understood to be concrete construction.

The new exterior elevator shall also be provided with the required shaft construction where it constitutes an enclosed hoistway regulated by §713.

2-HOUR HOISTWAY ENCLOSURE DESIGN BASIS

Existing concrete shaft construction shall be documented to establish the actual fire-resistance rating.

STATUS: 2-HOUR REQUIRED — VERIFY EXISTING / PROVIDE NEW AS APPLICABLE

48. ELEVATOR LOBBY REQUIREMENTS



2024 IBC: §3006; §713.14 where applicable

Applicable Requirement:

Elevator hoistway opening protection shall be evaluated where elevator doors open into interior spaces.

Depending upon the building configuration and applicable exceptions, protection may include:

- enclosed elevator lobbies;
- additional hoistway-opening protection;
- approved doors or assemblies;
- other permitted protection methods.

A fully sprinklered building does **not by itself mean that every elevator opening can be left completely unprotected without evaluating §3006.**

Project Application:

Evaluate each elevator opening at:

- basement parking;
- Levels 1-4;
- occupied rooftop, if elevator access is provided directly to the roof.

The existing and new elevator systems shall be evaluated individually.

FINAL ELEVATOR-LOBBY / HOISTWAY-OPENING PROTECTION SHALL BE ESTABLISHED UNDER §3006 BASED UPON ACTUAL SHAFT CONFIGURATION.

Particular attention shall be given to elevator openings between the **S-2 basement garage and R-2 residential building.**

STATUS: VERIFY FINAL HOISTWAY OPENING PROTECTION

49. ELEVATOR MACHINE / CONTROL ROOM REQUIREMENTS



2024 IBC: Chapter 30; §3005

Referenced Standard: ASME A17.1/CSA B44

Applicable Requirement:

Elevator machine rooms, control rooms, machinery spaces and control spaces shall comply with the applicable Chapter 30 and elevator-code provisions.

Requirements depend upon the selected elevator system and may include:

- access;
- enclosure;
- environmental control;
- fire protection;
- electrical service;
- clearances;
- equipment protection.

Project Application:

Existing elevator equipment shall be evaluated for the proposed residential conversion.

The new exterior elevator shall be coordinated with the selected manufacturer's machine/control configuration.

DO NOT ASSUME A CONVENTIONAL MACHINE ROOM IS REQUIRED FOR THE NEW ELEVATOR UNTIL THE ELEVATOR SYSTEM IS SELECTED.

STATUS: REQUIRED — ELEVATOR CONSULTANT / MANUFACTURER COORDINATION

50. FIRE SERVICE ACCESS ELEVATOR, IF REQUIRED

2024 IBC: §403.6.1; §3007

Applicable Requirement:



Fire service access elevators are required in high-rise buildings having an occupied floor more than:

120 FEET ABOVE THE LOWEST LEVEL OF FIRE DEPARTMENT VEHICLE ACCESS

Project Condition:

Existing building height:

±50'-9"

Four stories above grade.

The project does not approach the applicable FSAE height threshold.

Therefore:

FIRE SERVICE ACCESS ELEVATOR NOT REQUIRED

This determination is separate from the requirement for a **stretcher-capable elevator** under §3002.4.

STATUS: NOT REQUIRED

51. SHAFT ENCLOSURES

2024 IBC: §713

Applicable Requirement:

Vertical openings extending through floors shall be protected with shaft enclosures where required.

Potential project shafts include:

- elevator hoistways;
 - mechanical shafts;
 - plumbing shafts;
 - exhaust shafts;
 - electrical/service shafts;
-



- refuse chute, if introduced.

Project Application:

Existing concrete elevator shafts shall remain and be verified for required rating.

New MEP shafts shall be constructed as rated shaft enclosures where required.

Because the building utilizes existing concrete floor construction:

MINIMIZE NEW VERTICAL PENETRATIONS AND COORDINATE ALL NEW SHAFT LOCATIONS WITH THE STRUCTURAL ENGINEER.

Where existing floors are post-tensioned, tendon scanning and structural approval shall occur before cutting or coring.

STATUS: REQUIRED

52. SHAFT FIRE RATINGS

2024 IBC: §713.4

Applicable Requirement:

Shaft enclosures shall generally have a fire-resistance rating of:

2 HOURS WHERE CONNECTING FOUR STORIES OR MORE

and:

1 HOUR WHERE CONNECTING FEWER THAN FOUR STORIES

subject to the specific provisions and exceptions of §713.

The number of connected stories includes applicable basement conditions when determining shaft extent.

Project Application:

Full-height elevator and major MEP shafts extending through the building shall use:



2-HOUR SHAFT ENCLOSURE DESIGN BASIS

Shorter shafts shall be evaluated individually.

STATUS: 2-HOUR FULL-HEIGHT SHAFT DESIGN BASIS

53. VERTICAL OPENING PROTECTION

2024 IBC: §§712, 713

Applicable Requirement:

Vertical openings through floor assemblies shall be protected unless specifically permitted to remain open by one of the exceptions or special provisions of §712.

Project Application:

Protect all new openings through existing concrete floors, including openings for:

- stairs;
- elevators;
- mechanical ducts;
- plumbing;
- electrical distribution;
- utility risers.

Private internal stairs within individual dwelling units shall be specifically evaluated under the applicable permitted-vertical-opening provisions.

DO NOT ASSUME THAT A PRIVATE STAIR OPENING MAY PENETRATE MULTIPLE FLOORS WITHOUT §712 ANALYSIS.

STATUS: REQUIRED



54. ATRIUM REQUIREMENTS, IF APPLICABLE

2024 IBC: §404

Project Condition:

No multistory atrium is currently identified in the project program.

Open stair conditions within individual condominium units do not automatically constitute an atrium.

Project Application:

NO ATRIUM PROPOSED

If a future design creates an open vertical volume connecting multiple stories outside the permitted §712 conditions, the condition shall be evaluated under §404 before proceeding.

STATUS: N/A

55. FLOOR / CEILING ASSEMBLY FIRE RATINGS

2024 IBC: Table 601; §711

Applicable Requirement:

For **Type I-B construction**, the floor construction and associated secondary structural members shall provide the fire-resistance rating required by Table 601.

For the current Type I-B design basis:

FLOOR CONSTRUCTION — 2-HOUR FIRE-RESISTANCE-RATED DESIGN BASIS

The existing building consists of cast-in-place concrete column, beam and slab construction as documented by the existing structural assessment.

Project Application:

The existing concrete floor system shall be documented to demonstrate the required rating through an accepted method such as:

- original approved construction documents;



- tested/listed assembly;
- calculated fire resistance under Chapter 7;
- engineering analysis acceptable to the Building Official.

Where existing slabs are confirmed as post-tensioned, PT tendon configuration and concrete cover shall be incorporated into the evaluation where relevant.

EXISTING CONCRETE FLOOR CONSTRUCTION TO DEMONSTRATE 2-HOUR TYPE I-B REQUIREMENT.

STATUS: 2-HOUR REQUIRED — VERIFY EXISTING CONCRETE ASSEMBLY

56. DWELLING UNIT SEPARATION WALLS

2024 IBC: §§420.2, 708

Applicable Requirement:

Walls separating dwelling units from:

- other dwelling units; and
- other occupancies contiguous to them

shall be constructed as **fire partitions** in accordance with §708.

Required fire-resistance rating:

1 HOUR

The applicable sprinkler exception may permit:

½-HOUR FIRE PARTITIONS

where the building is equipped throughout with an NFPA 13 system and the applicable §708 conditions are satisfied.

Project Application:



The project proposes **Strata/SABS tested/listed wall systems** having high fire-resistance and acoustical performance.

Rather than designing to the lowest potentially available reduction, the project design basis shall be:

1-HOUR MINIMUM UNIT-TO-UNIT FIRE PARTITIONS

unless a specific design condition justifies use of an allowed reduction.

Selected SABS assemblies shall additionally satisfy the required acoustical performance under Chapter 12.

STATUS: 1-HOUR PROJECT DESIGN BASIS

57. DWELLING UNIT SEPARATION FLOORS

2024 IBC: §§420.3, 711

Applicable Requirement:

Horizontal assemblies separating dwelling units from:

- other dwelling units; and
- other occupancies contiguous to them

shall comply with §711 and the applicable residential separation requirements.

Project Condition:

The existing building has cast-in-place concrete floor construction.

Under the Type I-B construction classification, the existing floors are independently subject to the Table 601 rating addressed above.

Therefore, the controlling Type I-B structural requirement may exceed the minimum dwelling-unit separation requirement.

Project Application:



EXISTING CONCRETE FLOOR ASSEMBLIES SHALL DEMONSTRATE THE REQUIRED 2-HOUR TYPE I-B FLOOR RATING.

The same assemblies shall also comply with applicable **IIC/STC acoustical requirements** between dwelling units.

STATUS: 2-HOUR TYPE I-B FLOOR ASSEMBLY CONTROLS — VERIFY

58. CORRIDOR SEPARATION

2024 IBC: §§420.2, 708, 1020

Applicable Requirement:

Walls separating dwelling units from common corridors shall comply with the applicable Group R-2 fire-partition requirements.

The fact that the building is fully sprinklered does not eliminate the required dwelling-unit boundary separation.

Project Application:

Provide tested/listed SABS wall assemblies between:

DWELLING UNITS ↔ COMMON RESIDENTIAL CORRIDORS

Project design basis:

1-HOUR FIRE PARTITION

unless an applicable code reduction is intentionally utilized and documented.

Penetrations, joints, electrical boxes and unit-entry doors shall maintain the integrity of the required assembly.

STATUS: 1-HOUR PROJECT DESIGN BASIS

59. FIRE WALLS / FIRE BARRIERS / FIRE PARTITIONS



2024 IBC: §§706, 707, 708

Applicable Requirement:

These assemblies perform different functions and shall not be used interchangeably on the construction documents.

Fire Walls — §706:

Used where required to create separate buildings or where otherwise intentionally utilized.

Fire Barriers — §707:

Applicable to conditions including required:

- interior exit stair enclosures;
- shaft enclosures;
- exit passageways;
- occupancy separations where prescribed.

Fire Partitions — §708:

Applicable to conditions including:

- dwelling-unit separations;
- corridor walls where required;
- other specifically identified conditions.

Project Application:

Current design does **not anticipate a fire wall dividing the existing building into separate buildings.**

Primary rated assembly strategy:

2-HOUR FIRE BARRIERS — EXIT STAIRS / FULL-HEIGHT SHAFTS / APPLICABLE EXIT PASSAGEWAYS

1-HOUR FIRE PARTITIONS — DWELLING-UNIT BOUNDARIES / UNIT-TO-CORRIDOR PROJECT DESIGN BASIS

R-2 / S-2 OCCUPANCY SEPARATION — PER §508.4 / TABLE 508.4



STATUS: REQUIRED AS IDENTIFIED

60. EXTERIOR WALL FIRE-RESISTANCE RATINGS

2024 IBC: §705.5; Table 705.5

Applicable Requirement:

Exterior-wall fire-resistance ratings are determined by:

- fire separation distance;
- occupancy;
- construction type;
- whether exposure is from the interior, exterior, or both sides as prescribed by §705.

Type I-B classification does **not mean every exterior wall automatically receives one universal rating regardless of location.**

Project Application:

Each exterior building face shall be evaluated using its actual:

FIRE SEPARATION DISTANCE (FSD)

measured in accordance with the IBC.

This analysis is particularly important for:

- existing glazing;
- new residential windows/doors;
- balconies and terraces;
- façade projections/screens;
- the new exterior elevator;
- any wall condition near an interior property line.



SHOW FIRE SEPARATION DISTANCE AT EACH EXTERIOR WALL ON THE CODE/SITE PLAN AND ESTABLISH THE REQUIRED WALL RATING FROM TABLE 705.5.

Existing exterior concrete wall construction shall be documented where a fire-resistance rating is required.

STATUS: REQUIRED — EVALUATE EACH EXTERIOR WALL BY FSD

61. FIRE SEPARATION DISTANCE

2024 IBC: §202; §705.3

Applicable Requirement:

Fire separation distance is measured perpendicular from the building face to the applicable:

- interior lot line;
- centerline of a street, alley or public way;
- imaginary line between buildings on the same lot where applicable.

Fire separation distance establishes the basis for:

- exterior-wall fire-resistance rating;
- permitted exterior openings;
- opening protection;
- allowable projections.

Project Application:

Establish and dimension the actual fire separation distance at **each building elevation**.

The existing building footprint, new exterior elevator, balconies, terraces, façade elements and other projections shall all be evaluated relative to the applicable FSD.

SHOW FIRE SEPARATION DISTANCE ON THE CODE / SITE PLAN AT EACH EXTERIOR BUILDING FACE.



STATUS: REQUIRED — VERIFY FROM FINAL SURVEY / SITE PLAN

62. EXTERIOR WALL OPENING LIMITATIONS

2024 IBC: §705.8; Table 705.8

Applicable Requirement:

Allowable exterior wall openings are regulated based upon:

- fire separation distance;
- whether openings are protected or unprotected;
- sprinkler protection;
- percentage of wall area.

Exterior openings include:

- windows;
- glazed doors;
- exterior doors;
- other openings through the exterior wall.

The existing building contains substantial exterior glazing; therefore, the opening analysis is a significant project-specific condition.

Project Application:

For each exterior wall:

1. establish FSD;
2. determine allowable protected/unprotected opening percentage;
3. calculate actual opening area;
4. compare actual versus allowable openings.



Where FSD permits unlimited unprotected openings, document that condition rather than unnecessarily providing opening protection.

EXISTING AND NEW GLAZING SHALL BE INCLUDED IN THE EXTERIOR OPENING ANALYSIS.

STATUS: REQUIRED — ELEVATION-BY-ELEVATION CALCULATION

63. OPENING PROTECTIVES

2024 IBC: §716; §705.8

Applicable Requirement:

Openings located in required fire-resistance-rated assemblies shall be protected where required by the applicable provisions of Chapter 7.

Protection may include:

- fire door assemblies;
- fire window assemblies;
- rated glazing;
- shutters or other approved opening protectives where specifically permitted.

Project Application:

Opening protection shall be coordinated at:

- rated stair enclosures;
 - elevator/shaft enclosures;
 - exit passageways, if used;
 - occupancy separations;
 - rated exterior walls where opening protection is required;
 - other required fire barriers/fire partitions.
-



OPENING PROTECTION SHALL MATCH THE RATING AND FUNCTION OF THE WALL ASSEMBLY IN WHICH THE OPENING OCCURS.

STATUS: REQUIRED WHERE RATED OPENINGS OCCUR

64. FIRE DOORS

2024 IBC: §716

Applicable Requirement:

Fire doors shall be approved, listed and labeled for the required opening-protection rating and installed as part of a complete rated opening assembly.

Required features may include:

- self-closing or automatic-closing operation;
- positive latching;
- listed frames;
- rated glazing;
- smoke/draft-control characteristics where required;
- listed hardware.

Project Application:

Fire doors are anticipated at applicable:

- interior exit stairs;
- rated shafts/service rooms;
- exit passageways, if provided;
- dwelling-unit entries;
- R-2/S-2 separation openings;



- other fire barriers or fire partitions.

The required rating shall be established from the actual wall assembly and Table 716.1.

DO NOT APPLY ONE GENERIC FIRE-DOOR RATING THROUGHOUT THE PROJECT.

STATUS: REQUIRED

65. FIRE / SMOKE DAMPERS

2024 IBC: §717

Applicable Requirement:

Ducts and air-transfer openings penetrating required rated assemblies shall be protected with fire dampers, smoke dampers, combination fire/smoke dampers, or other approved protection where required by §717.

Requirements depend upon:

- assembly type;
- assembly rating;
- duct configuration;
- presence of a shaft;
- air-transfer opening;
- applicable exceptions.

Project Application:

Evaluate HVAC penetrations through:

- dwelling-unit fire partitions;
- corridor separations;
- 2-hour stair enclosures;



- 2-hour shaft enclosures;
- R-2/S-2 occupancy separation;
- other rated assemblies.

DAMPER REQUIREMENTS SHALL BE COORDINATED WITH THE MECHANICAL DESIGN AND THE SPECIFIC RATED ASSEMBLY PENETRATED.

Do not provide dampers where an applicable code exception specifically permits an alternative.

STATUS: REQUIRED WHERE TRIGGERED

66. PENETRATION FIRESTOPPING

2024 IBC: §§714.4, 714.5

Applicable Requirement:

Penetrations through fire-resistance-rated walls and horizontal assemblies shall be protected by approved penetration firestop systems.

Systems shall be tested/listed for the specific:

- penetrating item;
- opening size;
- substrate;
- assembly rating;
- annular space;
- insulation condition.

Project Application:

Firestop all applicable penetrations for:

- plumbing;



- electrical;
- mechanical;
- fire sprinklers;
- communications;
- conduits;
- piping;
- ducts.

This is especially important where new residential MEP systems penetrate the existing concrete floor assemblies.

PROVIDE LISTED FIRESTOP SYSTEMS AT ALL PENETRATIONS OF REQUIRED RATED ASSEMBLIES.

STATUS: REQUIRED

67. JOINT FIRESTOPPING

2024 IBC: §715

Applicable Requirement:

Joints installed in or between fire-resistance-rated assemblies shall be protected by approved fire-resistant joint systems where required.

Applicable conditions include:

- wall-to-floor joints;
- wall-to-wall joints;
- floor-to-floor joints;
- head-of-wall joints;
- perimeter joints.



Project Application:

Particular attention shall be given to:

NEW SABS WALLS TERMINATING AT EXISTING CONCRETE FLOOR / STRUCTURE

The selected head-of-wall and perimeter joint systems shall be compatible with the tested/listed SABS wall assembly and accommodate required building movement.

DO NOT SUBSTITUTE GENERIC FIRE CAULKING FOR A REQUIRED TESTED JOINT SYSTEM.

STATUS: REQUIRED

68. DRAFTSTOPPING

2024 IBC: §718.3; §718.4 where applicable

Applicable Requirement:

Draftstopping is used to subdivide certain combustible concealed spaces, including applicable floor/ceiling and attic conditions, as prescribed by §718.

Project Condition:

The primary building structure consists of cast-in-place concrete floors and structural construction rather than conventional combustible wood floor/attic systems.

New interior construction is anticipated to utilize SABS and other noncombustible/rated assemblies.

Project Application:

Extensive draftstopping typical of combustible multifamily construction is **not anticipated to be a major project condition**.

However, any new qualifying combustible concealed spaces shall be evaluated under §718.

DRAFTSTOPPING REQUIRED ONLY WHERE THE FINAL CONCEALED-SPACE CONSTRUCTION TRIGGERS §718.

STATUS: LIMITED / VERIFY FINAL CONSTRUCTION



69. FIREBLOCKING

2024 IBC: §718.2

Applicable Requirement:

Fireblocking is required in combustibile concealed spaces to interrupt concealed draft openings and restrict the passage of fire and hot gases.

Typical locations can include:

- concealed wall spaces;
- intersections of horizontal and vertical concealed spaces;
- concealed spaces at stairs;
- openings around penetrations;
- other conditions identified by §718.2.

Project Application:

Because the primary building construction is concrete and the new dwelling-unit separation strategy utilizes SABS assemblies, conventional wood-frame fireblocking is not anticipated throughout the primary building.

Where combustibile furring, framing, soffits or other concealed spaces are introduced:

PROVIDE FIREBLOCKING AS REQUIRED BY §718.2.

STATUS: REQUIRED WHERE COMBUSTIBLE CONCEALED SPACES OCCUR

70. COMBUSTIBLE CONCEALED SPACES

2024 IBC: §§718, 903.3.1.1; applicable NFPA 13 provisions

Applicable Requirement:



Combustible concealed spaces shall comply with applicable requirements for:

- fireblocking;
- draftstopping;
- sprinkler protection;
- permitted combustible materials.

Project Application:

The design should avoid unnecessary combustible concealed cavities within the existing concrete building.

Where new ceiling, soffit or wall cavities are introduced, coordinate:

- material combustibility;
- fireblocking/draftstopping;
- sprinkler coverage or applicable omission criteria;
- rated-assembly continuity.

DO NOT CREATE UNDOCUMENTED COMBUSTIBLE CONCEALED SPACES ABOVE NEW RESIDENTIAL CEILINGS OR WITHIN FURRED CONDITIONS.

STATUS: VERIFY FINAL INTERIOR CONSTRUCTION

71. ROOF ASSEMBLY / ROOF CONSTRUCTION

2024 IBC: §8602, 1505; Table 601

Applicable Requirement:

Roof construction shall comply with the requirements applicable to **Type I-B construction**.

The fire-resistance requirement for the roof construction and associated secondary structural members shall be established from Table 601.



The roof covering shall additionally comply with the applicable roof-covering fire classification of Chapter 15.

Project Application:

Existing roof construction shall be documented as part of the Type I-B verification.

Because the roof is intended to support an **occupied rooftop amenity**, the roof assembly must additionally accommodate:

- occupied live loads;
- walking surfaces;
- landscaping/planters where provided;
- guards;
- drainage;
- waterproofing;
- accessible routes;
- rooftop equipment;
- applicable fire/life-safety conditions.

VERIFY EXISTING ROOF STRUCTURE AND FIRE-RESISTANCE RATING BEFORE INTRODUCING OCCUPIED-ROOF LOADS.

STATUS: REQUIRED — EXISTING ASSEMBLY TO BE VERIFIED

72. PARAPET REQUIREMENTS

2024 IBC: §705.11

Applicable Requirement:

Parapets are required at exterior walls where prescribed by §705.11 unless an applicable exception permits omission.



Whether a parapet is required depends upon conditions including:

- exterior-wall construction;
- roof construction;
- fire-resistance rating;
- fire separation distance;
- permitted exceptions.

Project Application:

Existing parapets shall be documented and evaluated at each roof perimeter condition.

Because the roof will be occupiable, the **parapet and the required guard are separate code concepts**.

An existing parapet may function as the required guard only where it satisfies all applicable:

- minimum guard height;
- opening limitations;
- structural loading;
- walking-surface relationships.

DO NOT ASSUME AN EXISTING PARAPET AUTOMATICALLY SATISFIES THE OCCUPIED-ROOF GUARD REQUIREMENT.

STATUS: VERIFY EXISTING PARAPET / GUARD CONDITION

73. ROOF ACCESS

2024 IBC: §1011.12; Chapter 10

Applicable Requirement:

The project includes an **occupied rooftop amenity**, so roof access is no longer being treated merely as maintenance access.



The occupied roof must be connected to the required means of egress based upon:

- rooftop occupant load;
- number of exits required;
- exit-access travel distance;
- accessible-route requirements;
- stair capacity.

Project Application:

At least one building stair is not sufficient merely because §1011 contains a roof-access provision; the occupied roof must independently satisfy the applicable Chapter 10 means-of-egress requirements.

The final roof plan shall establish access to the two existing interior exit stairs as required by the final occupant-load/egress analysis.

Elevator access shall be provided where required to maintain the accessible route to the common-use rooftop amenity.

TREAT ROOFTOP AS OCCUPIED COMMON AMENITY SPACE, NOT SERVICE-ONLY ROOF ACCESS.

STATUS: REQUIRED — FINAL ROOFTOP EGRESS ANALYSIS

74. EMERGENCY ESCAPE AND RESCUE OPENINGS, WHERE APPLICABLE

2024 IBC: §1031

Applicable Requirement:

Emergency escape and rescue openings are required for sleeping rooms in certain Group R occupancies and configurations identified by §1031.

For Group R-2, the requirement principally affects qualifying sleeping rooms located in:

- stories with a single exit or access to a single exit where §1031 applies; and
- qualifying basement conditions,



subject to the specific sprinkler and building conditions/exceptions of §1031.

Project Application:

This project provides:

TWO INTERIOR EXIT STAIRS

and:

NFPA 13 SPRINKLER PROTECTION THROUGHOUT

No residential dwelling units are proposed in the basement.

Therefore, conventional bedroom EEROs are **not anticipated to be required throughout the upper-floor condominium units solely because they contain sleeping rooms.**

The final unit/egress configuration shall nevertheless be checked against §1031.

DO NOT LABEL RESIDENTIAL WINDOWS AS EEROs UNLESS §1031 ACTUALLY REQUIRES THEM.

STATUS: NOT ANTICIPATED — VERIFY FINAL EGRESS CONFIGURATION

75. ACCESSIBLE DWELLING UNITS

2024 IBC: Chapter 11; §1108

Referenced Standard: ICC A117.1-2017

Additional Federal Requirement: Fair Housing Act accessibility requirements where applicable

Applicable Requirement:

The project contains:

22 GROUP R-2 CONDOMINIUM DWELLING UNITS

The required accessibility characteristics of the dwelling units shall be established under the applicable:

- 2024 Phoenix-amended IBC;
- ICC A117.1-2017;



- Fair Housing Act design requirements;
- applicable federal/state accessibility requirements.

The IBC distinguishes among:

ACCESSIBLE UNITS

TYPE A UNITS

TYPE B UNITS

These classifications are **not interchangeable**.

Project Application:

The final accessibility schedule shall clearly identify each dwelling unit by required accessibility classification.

The project shall not generically label Type A or Type B units as fully “ADA units.”

The elevator-served configuration and common-use facilities shall be incorporated into the complete accessibility analysis.

PROVIDE A UNIT-BY-UNIT ACCESSIBILITY MATRIX ON THE PERMIT DOCUMENTS.

STATUS: REQUIRED — FINAL UNIT CLASSIFICATION MATRIX TO BE ESTABLISHED

76. TYPE A DWELLING UNITS

2024 IBC: §1108.6.2.2

Phoenix Amendment: Applicable Chapter 11 amendments

Referenced Standard: ICC A117.1-2017

Applicable Requirement:

Type A units provide a higher level of accessibility than Type B units and shall comply with the applicable Type A dwelling-unit provisions of ICC A117.1.



The required number of Type A units shall be determined under the **Phoenix-amended Chapter 11 requirements applicable to this project**, including any applicable local transit-oriented-development condition.

Project Application:

The current project basis anticipates:

MINIMUM (2) TYPE A DWELLING UNITS — SUBJECT TO FINAL PHOENIX REQUIREMENT VERIFICATION

The Type A units shall be distributed among the dwelling-unit types and locations as required by the applicable accessibility provisions.

Type A requirements affect features including:

- accessible route through the unit;
- unit entrance;
- doors and doorways;
- kitchen;
- bathrooms;
- laundry;
- controls;
- electrical devices;
- environmental controls;
- balconies/patios serving the unit.

TYPE A UNITS SHALL BE IDENTIFIED INDIVIDUALLY ON THE FLOOR PLANS AND UNIT ACCESSIBILITY SCHEDULE.

STATUS: REQUIRED — FINAL QUANTITY / DISTRIBUTION TO BE CONFIRMED



77. TYPE B DWELLING UNITS

2024 IBC: §1108.6.2.3

Referenced Standard: ICC A117.1-2017

Applicable Requirement:

Type B dwelling units shall provide the adaptable features prescribed by ICC A117.1.

Type B requirements generally apply to qualifying dwelling units in structures containing four or more dwelling units where the units are located on an accessible route, subject to the applicable IBC exceptions.

Project Condition:

The building contains:

22 CONDOMINIUM DWELLING UNITS

and is served by elevators.

Accordingly, the elevator-served dwelling units are subject to the applicable Type B requirements unless they qualify as Type A units or another specific exception applies.

Project Application:

Design basis:

TYPE A UNITS AS REQUIRED

REMAINING COVERED DWELLING UNITS — TYPE B AS APPLICABLE

Type B features shall be incorporated during initial design. Do not treat Type B compliance as a future tenant modification.

STATUS: REQUIRED

78. FAIR HOUSING ACCESSIBILITY REQUIREMENTS

Federal Requirement: Fair Housing Act Design and Construction Requirements



Applicable Requirement:

The Fair Housing Act applies independently of the IBC to covered multifamily dwellings first occupied after the applicable statutory date.

For elevator buildings containing four or more dwelling units, covered dwelling units generally include:

ALL DWELLING UNITS SERVED BY THE ELEVATOR

The FHA establishes seven basic design and construction requirements addressing:

- accessible building entrance on an accessible route;
- accessible common and public-use areas;
- usable doors;
- accessible route into and through the dwelling;
- accessible environmental controls;
- reinforced bathroom walls;
- usable kitchens and bathrooms.

Project Application:

Because this project converts an existing commercial building into new condominium dwelling units, FHA applicability shall be incorporated into the residential design analysis.

DESIGN ALL APPLICABLE ELEVATOR-SERVED UNITS TO SATISFY FHA COVERED-DWELLING REQUIREMENTS IN ADDITION TO IBC TYPE A / TYPE B REQUIREMENTS.

Where requirements differ, the applicable provisions shall be coordinated rather than assuming compliance with one standard automatically establishes compliance with another.

STATUS: APPLICABLE — COORDINATE WITH IBC / A117.1

79. ACCESSIBLE ROUTES



2024 IBC: §1104

Referenced Standard: ICC A117.1-2017

Applicable Requirement:

Accessible routes shall connect accessible:

- site arrival points;
- entrances;
- parking;
- passenger loading zones where provided;
- elevators;
- dwelling units;
- common-use areas;
- amenities.

Project Application:

Provide a continuous accessible route connecting:

PUBLIC WAY → ACCESSIBLE ENTRANCE → COMMON AREAS → ELEVATORS → RESIDENTIAL FLOORS → REQUIRED DWELLING UNITS

and:

BASEMENT ACCESSIBLE PARKING → ELEVATOR → RESIDENTIAL / COMMON LEVELS

The occupied rooftop amenity shall be included in the accessible-route system.

STATUS: REQUIRED

80. ACCESSIBLE BUILDING ENTRANCES

2024 IBC: §1105



Applicable Requirement:

Required building entrances shall be accessible in accordance with §1105 and ICC A117.1.

Accessible entrances shall connect to required accessible routes from applicable site arrival points.

Project Application:

Identify the principal residential entrance and all other entrances required to be accessible.

The accessible entrance shall connect directly to:

- public sidewalk/site route;
- lobby;
- elevators;
- common residential circulation.

Doors, thresholds, hardware, opening force and maneuvering clearances shall comply with the applicable accessibility requirements.

PRINCIPAL RESIDENTIAL ENTRANCE SHALL BE ACCESSIBLE.

STATUS: REQUIRED

81. ACCESSIBLE PARKING

2024 IBC: §1106

Referenced Standard: ICC A117.1-2017

Applicable Requirement:

Accessible parking spaces shall be provided based upon the total number of parking spaces serving the facility and the applicable residential parking provisions.

Project Condition:

51 BASEMENT PARKING SPACES



The final required number of accessible spaces shall be calculated under the applicable Chapter 11 residential parking requirements rather than merely applying a generic commercial-parking calculation.

Accessible parking shall be located on the shortest accessible route to an accessible building entrance/elevator serving the residential building.

Project Application:

Provide the required:

- accessible spaces;
- van-accessible spaces;
- access aisles;
- vertical clearance;
- signage;
- accessible route to elevator.

Vehicle lifts shall **not obstruct required accessible parking or accessible routes.**

FINAL ACCESSIBLE PARKING COUNT SHALL BE SHOWN ON THE CODE / PARKING PLAN.

STATUS: REQUIRED — FINAL COUNT TO BE CALCULATED

82. ACCESSIBLE PASSENGER LOADING

2024 IBC: §1106

Referenced Standard: ICC A117.1-2017

Applicable Requirement:

Where passenger loading zones are provided, the required number shall be accessible and shall comply with applicable:

- vehicle-space dimensions;
- access aisle;



- vertical clearance;
- accessible route.

Project Application:

If the final site design includes a designated residential passenger loading/drop-off zone:

PROVIDE ACCESSIBLE PASSENGER LOADING SPACE AS REQUIRED.

A general driveway condition shall not automatically be labeled a passenger loading zone unless intended/designed as such.

STATUS: REQUIRED IF PASSENGER LOADING ZONE IS PROVIDED

83. ACCESSIBLE MAILBOXES / COMMON FACILITIES

2024 IBC: Chapter 11

Referenced Standard: ICC A117.1-2017

Applicable Requirement:

Common-use facilities required to be accessible shall comply with the applicable reach-range, clear-floor-space and operable-parts requirements.

Project Application:

Where centralized resident mailboxes/package facilities are provided:

- provide accessible approach;
- provide required clear floor space;
- locate required operable compartments within accessible reach ranges;
- coordinate package lockers and electronic controls.

Other common facilities shall likewise be accessible, including applicable:

- resident storage;



- bicycle facilities;
- package rooms;
- common work areas;
- amenity facilities.

ACCESSIBILITY APPLIES TO COMMON-USE FACILITIES, NOT ONLY THE DWELLING UNITS.

STATUS: REQUIRED

84. ACCESSIBLE AMENITY AREAS

2024 IBC: Chapter 11

Applicable Requirement:

Common-use amenities shall be accessible and connected by an accessible route.

Project Application:

This applies to all common amenities included in the final program, including the proposed:

OCCUPIED ROOFTOP GARDEN / AMENITY

and applicable:

- resident lounge;
- fitness areas;
- bicycle facilities;
- outdoor gathering spaces;
- common terraces;
- other resident amenities.

Where multiple elements of the same type are provided, the applicable accessibility scoping requirements shall be applied.



ROOFTOP AMENITY SHALL BE ACCESSIBLE BY ELEVATOR / ACCESSIBLE ROUTE.

STATUS: REQUIRED

85. ACCESSIBLE RESTROOMS

2024 IBC: Chapter 11

Referenced Standard: ICC A117.1-2017

Applicable Requirement:

Where toilet rooms are provided for common/public use, required toilet rooms shall be accessible.

Project Application:

Any common restroom serving:

- rooftop amenity;
- resident lounge;
- fitness facility;
- lobby/common facilities;
- other shared amenity

shall comply with applicable accessibility requirements.

Requirements include:

- accessible route;
- door maneuvering clearance;
- turning space;
- water closet clearance;
- lavatory clearance;
- accessories;



- mirrors;
- controls.

COMMON RESTROOMS SHALL BE FULLY ACCESSIBLE WHERE REQUIRED.

STATUS: REQUIRED WHERE COMMON RESTROOMS ARE PROVIDED

86. ACCESSIBLE KITCHENS

2024 IBC: Chapter 11

Referenced Standard: ICC A117.1-2017

Applicable Requirement:

Kitchens within Type A and Type B dwelling units shall comply with the requirements applicable to their respective unit classification.

Common-use kitchens shall comply with the applicable accessible-space requirements.

Project Application:

Kitchen layouts shall coordinate:

- clear floor spaces;
 - work aisles;
 - turning/clearance requirements;
 - sink access;
 - appliance access;
 - work surfaces where required;
 - operable parts;
 - removable/adaptable cabinetry where applicable.
-



TYPE A AND TYPE B KITCHENS SHALL BE DETAILED SEPARATELY WHERE THEIR REQUIREMENTS DIFFER.

The luxury character of the units does not eliminate required accessible clearances.

STATUS: REQUIRED

87. ACCESSIBLE BATHROOMS

2024 IBC: Chapter 11

Referenced Standard: ICC A117.1-2017

Applicable Requirement:

Bathrooms in Type A and Type B units shall comply with the applicable bathroom provisions for the respective unit type.

Project Application:

Coordinate:

- water closet clearances;
- lavatory clearances;
- bathtub/shower configuration;
- required maneuvering space;
- door swing;
- reinforcement for future grab bars where applicable;
- accessible controls;
- thresholds.

Type A bathrooms shall be designed to the Type A criteria rather than relying upon Type B adaptability provisions.

IDENTIFY ACCESSIBILITY CLEARANCES GRAPHICALLY ON TYPE A / TYPE B UNIT PLANS.



STATUS: REQUIRED

88. ACCESSIBLE BALCONIES / PATIOS

2024 IBC: Chapter 11

Referenced Standard: ICC A117.1-2017

Applicable Requirement:

Exterior spaces serving required accessible dwelling units and common-use areas shall comply with applicable accessibility provisions.

Project Condition:

Private balconies, patios and terraces are a significant component of the residential program, with private outdoor space associated with the units.

Project Application:

At applicable Type A/Type B dwelling units and common-use terraces, coordinate:

- accessible route;
- door clear width;
- threshold;
- level change;
- maneuvering clearance;
- exterior walking surface.

Waterproofing and drainage shall be designed without creating prohibited changes in level at accessible doors.

COORDINATE BALCONY WATERPROOFING / THRESHOLD DETAILS WITH ACCESSIBILITY FROM THE BEGINNING OF DESIGN.

STATUS: REQUIRED WHERE APPLICABLE



89. ACCESSIBLE CONTROLS / OPERATING HARDWARE

2024 IBC: Chapter 11

Referenced Standard: ICC A117.1-2017

Applicable Requirement:

Required operable parts shall comply with applicable provisions for:

- clear floor space;
- reach range;
- operability;
- allowable operating force.

Project Application:

Applicable controls include:

- light switches;
- thermostats;
- receptacles where regulated;
- intercoms;
- access-control devices;
- door hardware;
- appliance controls where applicable;
- common amenity controls.

COORDINATE DEVICE HEIGHTS BEFORE ELECTRICAL ROUGH-IN.

STATUS: REQUIRED



90. UNIT ENTRY DOOR CLEARANCES

2024 IBC: Chapter 11

Referenced Standard: ICC A117.1-2017

Applicable Requirement:

Required accessible dwelling-unit entrances shall provide compliant:

- clear opening width;
- maneuvering clearance;
- threshold;
- hardware;
- approach.

Project Application:

All Type A and applicable Type B/FHA-covered unit entries shall be coordinated with the applicable accessibility standard.

Particular attention shall be given to:

- corridor wall offsets;
- recessed entry alcoves;
- adjacent SABS wall thickness;
- door closers;
- latch-side clearance.

DO NOT ALLOW ARCHITECTURAL ENTRY RECESSES TO COMPROMISE REQUIRED MANEUVERING CLEARANCE.

STATUS: REQUIRED



91. UNIT INTERIOR DOOR CLEARANCES

2024 IBC: Chapter 11

Referenced Standard: ICC A117.1-2017

Applicable Requirement:

Doors and doorways within Type A and Type B dwelling units shall comply with the applicable unit-specific accessibility requirements.

Not every interior doorway is necessarily governed identically; requirements depend upon the unit classification and space served.

Project Application:

Evaluate:

- bedroom doors;
- bathroom doors;
- laundry doors;
- closets where applicable;
- doors to balconies/patios;
- other required usable doors.

USE TYPE A / TYPE B UNIT-SPECIFIC DOOR CRITERIA RATHER THAN APPLYING A GENERIC “ADA DOOR” STANDARD TO EVERY INTERIOR DOOR.

STATUS: REQUIRED

92. BATHROOM FIXTURE CLEARANCES

2024 IBC: Chapter 11

Referenced Standard: ICC A117.1-2017

Applicable Requirement:



Bathroom fixtures in Type A/Type B units and accessible common toilet rooms shall maintain the applicable clearances prescribed for the particular accessibility classification.

Project Application:

Coordinate required clearances at:

- water closets;
- lavatories;
- tubs;
- showers;
- bathroom doors.

Door swings shall not improperly overlap required fixture clearances where prohibited.

SHOW REQUIRED CLEAR FLOOR SPACES AND FIXTURE CLEARANCES ON ACCESSIBILITY PLANS.

STATUS: REQUIRED

93. KITCHEN CLEARANCES

2024 IBC: Chapter 11

Referenced Standard: ICC A117.1-2017

Applicable Requirement:

Accessible/adaptable kitchen layouts shall maintain the required clear widths and maneuvering spaces based upon kitchen configuration.

Requirements differ for:

- pass-through kitchens;
- U-shaped kitchens;
- other configurations;



- Type A versus Type B units.

Project Application:

Kitchen islands, oversized appliances and luxury cabinetry shall not reduce required accessible clearances.

VERIFY CLEARANCE BETWEEN CABINET / APPLIANCE FACES — NOT MERELY BETWEEN NOMINAL WALL LINES.

Coordinate appliance-door operation with required circulation space.

STATUS: REQUIRED

94. LAUNDRY CLEARANCES

2024 IBC: Chapter 11

Referenced Standard: ICC A117.1-2017

Applicable Requirement:

Laundry equipment serving required accessible/adaptable dwelling units shall provide the applicable:

- clear floor space;
- approach;
- reach to controls;
- door clearance;
- accessible route.

Project Application:

In-unit laundry facilities shall be coordinated with each unit's accessibility classification.

Where stacked washer/dryer equipment is proposed:

VERIFY THAT REQUIRED CONTROLS AND OPERABLE PARTS REMAIN WITHIN APPLICABLE ACCESSIBLE REACH RANGES WHERE REQUIRED.



Laundry closet doors shall not compromise required approach or clear floor space.

STATUS: REQUIRED

95. BALCONY / DECK GUARDS

2024 IBC: §§1015.2, 1015.3, 1015.4

Structural: Chapter 16

Applicable Requirement:

Guards are required at open-sided walking surfaces located more than:

30 INCHES ABOVE THE FLOOR OR GRADE BELOW

For the project's common and exterior elevated walking surfaces, the design basis shall be:

42-INCH MINIMUM GUARD HEIGHT

Typical guard openings shall:

NOT PERMIT PASSAGE OF A 4-INCH-DIAMETER SPHERE

subject to the specific exceptions of §1015.

Project Application:

Provide compliant guards at applicable:

- private balconies;
- large residential terraces;
- elevated patios;
- occupied rooftop;
- exterior elevated walking surfaces.

Guard design shall additionally comply with applicable Chapter 16 loading requirements.

Where glass guards are used, provide code-compliant safety glazing, structural design and attachment.



Where guards attach to existing concrete:

COORDINATE ANCHORAGE WITH EXISTING STRUCTURAL SYSTEM AND CONFIRMED PT TENDON LOCATIONS, WHERE APPLICABLE.

Planters, benches, built-ins or raised surfaces adjacent to guards shall be coordinated so the effective guard height and fall protection are not compromised.

STATUS: REQUIRED

96. EXTERIOR BALCONY / DECK FIRE PROTECTION

2024 IBC: §§705, 705.2, 1406; Chapter 15 as applicable

Construction Type: Type I-B

Applicable Requirement:

Exterior balconies, decks, terraces and similar projections shall comply with the requirements applicable to:

- Type I-B construction;
- combustible/noncombustible materials;
- fire separation distance;
- projections;
- exterior-wall construction;
- sprinkler protection where required;
- structural loading.

Project Condition:

Balconies, recessed patios and substantial exterior terraces are integral to the residential design.

Project Application:



New balcony/deck construction shall utilize materials and assemblies permitted for **Type I-B construction**.

Where existing concrete slabs form balconies or terraces, maintain the required fire-resistance and structural characteristics of the existing construction.

Combustible finish materials, decking, screening, shading devices or decorative façade elements shall be specifically evaluated for use in Type I construction.

BALCONIES / TERRACES SHALL NOT REDUCE REQUIRED FIRE SEPARATION DISTANCE OR CREATE NONCOMPLIANT PROJECTIONS.

Sprinkler protection at balconies and exterior projections shall be coordinated with NFPA 13 requirements.

STATUS: REQUIRED

97. TRASH / RECYCLING ROOMS

2024 IBC: §§302, 508, 509, 713 where applicable

Phoenix Fire Code: Coordinate applicable fire-protection requirements

Applicable Requirement:

Trash and recycling rooms shall be classified and protected according to their actual size, configuration and relationship to the building.

Where classified as an incidental use under §509, the applicable separation and/or sprinkler requirements of Table 509 shall be provided.

Project Application:

Any interior trash/recycling room shall be evaluated for:

- required fire separation;
- automatic sprinkler protection;
- rated doors where required;



- ventilation;
- floor/wall finish durability;
- accessible route where required;
- penetration protection.

LOCATE AND DETAIL TRASH / RECYCLING ROOMS AS REQUIRED INCIDENTAL OR ACCESSORY SPACES BASED UPON FINAL DESIGN.

STATUS: REQUIRED IF PROVIDED

98. TRASH CHUTES

2024 IBC: §§713, 713.13

Phoenix Fire Code: Applicable requirements

Applicable Requirement:

Where a refuse or laundry chute penetrates multiple floors, the chute and associated access/termination rooms shall comply with the applicable shaft and chute provisions.

Requirements include rated construction, opening protection and sprinkler protection as applicable.

Project Application:

No trash chute is presently established as a required project feature.

If a trash chute is introduced:

PROVIDE A CODE-COMPLIANT RATED CHUTE SHAFT, CHUTE ACCESS ROOMS, TERMINATION ROOM AND REQUIRED OPENING / SPRINKLER PROTECTION.

Because new vertical openings through existing concrete/PT floors create significant structural coordination, a chute should not be introduced without architectural, structural and fire-protection coordination.

STATUS: NOT CURRENTLY PROPOSED — FULL CODE ANALYSIS REQUIRED IF ADDED



99. LAUNDRY ROOMS

2024 IBC: §§302, 420, 508, 509 as applicable

IMC: Dryer exhaust requirements

Accessibility: Chapter 11 / ICC A117.1

Project Condition:

Laundry is anticipated principally **within individual dwelling units.**

Project Application:

In-unit laundry facilities shall be coordinated for:

- dryer exhaust;
- combustion provisions if fuel-fired appliances are introduced;
- plumbing;
- electrical service;
- accessibility requirements for applicable units;
- protection of penetrations through rated assemblies.

Where a common laundry facility is provided, evaluate its actual size/use under the applicable occupancy/incidental-use provisions and provide an accessible route and accessible equipment as required.

DRYER EXHAUST PENETRATIONS SHALL MAINTAIN REQUIRED FIRE-PARTITION / SHAFT / EXTERIOR-WALL PROTECTION.

STATUS: REQUIRED AS APPLICABLE

100. STORAGE ROOMS

2024 IBC: §§302, 311, 508, 509



Applicable Requirement:

Storage spaces shall be classified based upon the materials stored, size and relationship to the principal occupancy.

Small storage rooms accessory to the residential use may qualify as accessory occupancies.

Larger or distinct storage uses shall be evaluated for the appropriate Group S classification and applicable separation requirements.

Project Application:

Potential resident storage areas in the basement or elsewhere shall be evaluated for:

- occupancy classification;
- fire separation;
- sprinkler protection;
- egress;
- accessibility to common-use storage;
- combustible storage limitations.

DO NOT GENERICALLY CLASSIFY ALL BASEMENT STORAGE AS PART OF THE PARKING GARAGE WITHOUT EVALUATING THE ACTUAL USE.

STATUS: VERIFY FINAL PROGRAM

101. MECHANICAL ROOMS

2024 IBC: §§508, 509; Table 509

IMC: Applicable mechanical requirements

Applicable Requirement:

Mechanical rooms containing equipment identified by Table 509 shall receive the required separation and/or automatic sprinkler protection based upon the type and capacity of equipment installed.



Project Application:

Evaluate all:

- boiler rooms, if any;
- furnace rooms;
- central water-heating rooms;
- refrigeration equipment rooms;
- other mechanical equipment rooms.

Existing commercial mechanical systems shall be evaluated for the new residential use rather than presumed suitable.

FINAL ROOM RATINGS SHALL BE BASED UPON ACTUAL EQUIPMENT TYPE / CAPACITY AND TABLE 509.

STATUS: VERIFY WITH FINAL MEP DESIGN

102. ELECTRICAL ROOMS

2024 IBC: Chapter 7 where rated construction is required

NFPA 70: Primary electrical requirements

Applicable Requirement:

Electrical-room construction and working clearances are principally governed by NFPA 70, with the IBC regulating applicable enclosure, egress and fire-resistance conditions.

Project Application:

Electrical rooms shall be coordinated for:

- required working clearances;
- equipment access;
- door swing/egress where applicable;



- rated construction where required;
- penetration protection;
- accessibility of required service equipment;
- emergency/standby equipment separation.

DO NOT USE ELECTRICAL ROOMS FOR STORAGE OR ROUTE UNRELATED BUILDING SYSTEMS THROUGH REQUIRED EQUIPMENT CLEARANCES.

STATUS: REQUIRED — COORDINATE WITH ELECTRICAL ENGINEER

103. TRANSFORMER / UTILITY ROOMS

2024 IBC: Applicable occupancy/fire-resistance provisions

NFPA 70 / Utility Requirements: Primary technical criteria

Applicable Requirement:

Transformer and utility spaces shall comply with the requirements applicable to the equipment actually installed.

Indoor transformer installations may require fire-resistance-rated construction depending upon transformer type, fluid classification, voltage and electrical-code requirements.

Project Application:

Coordinate existing and new utility equipment with:

- APS requirements;
- NFPA 70;
- fire-resistance requirements;
- ventilation;
- access;
- equipment replacement path;



- separation from residential spaces.

VERIFY EXISTING TRANSFORMER / ELECTRICAL SERVICE CONFIGURATION FOR RESIDENTIAL CONVERSION.

STATUS: VERIFY WITH UTILITY / ELECTRICAL DESIGN

104. PARKING GARAGE OCCUPANCY / SEPARATION

2024 IBC: §§311.3, 406.6, 508.4; Table 508.4

Applicable Classification:

The basement parking garage is:

GROUP S-2 — ENCLOSED PARKING GARAGE

The residential floors are:

GROUP R-2

The project uses the separated-occupancy approach under §508.4.

Project Application:

Provide the required fire-resistance-rated separation between:

S-2 BASEMENT PARKING ↔ R-2 RESIDENTIAL OCCUPANCY ABOVE

based upon Table 508.4 and the NFPA 13 sprinkler condition.

The existing concrete floor assembly between basement parking and Level 1 shall be documented for the required rating.

Because Type I-B floor construction independently requires a substantial fire-resistance rating, the Type I-B floor requirement may control where it exceeds the occupancy-separation requirement.

VERIFY EXISTING CONCRETE LEVEL 1 FLOOR ASSEMBLY SATISFIES BOTH TYPE I-B AND R-2/S-2 SEPARATION REQUIREMENTS.

STATUS: REQUIRED



105. PARKING GARAGE VENTILATION

2024 IBC: §406.6

IMC: Mechanical ventilation requirements

Applicable Requirement:

An enclosed parking garage shall be mechanically ventilated in accordance with the IMC unless another specifically permitted ventilation approach applies.

Project Condition:

BASEMENT ENCLOSED PARKING GARAGE

Project Application:

Provide/verify mechanical ventilation serving the garage in accordance with the adopted mechanical code.

Coordinate:

- exhaust;
- makeup air;
- carbon monoxide controls/detection where required;
- duct routing;
- shaft construction;
- fire/smoke dampers where required;
- discharge locations.

EXISTING OFFICE-BUILDING GARAGE VENTILATION SHALL BE VERIFIED FOR CURRENT CODE COMPLIANCE AND NEW RESIDENTIAL USE.

STATUS: REQUIRED — IMC ANALYSIS



106. GARAGE-TO-RESIDENTIAL FIRE SEPARATION

2024 IBC: §§420, 508.4, 711

Applicable Requirement:

The basement S-2 garage shall be separated from the R-2 residential occupancy in accordance with the selected separated-occupancy strategy and applicable horizontal-assembly requirements.

Project Application:

The principal horizontal separation occurs at:

BASEMENT PARKING CEILING / LEVEL 1 CONCRETE FLOOR

Maintain continuity at:

- elevator shafts;
- stair enclosures;
- MEP penetrations;
- plumbing risers;
- electrical penetrations;
- ducts;
- expansion/construction joints;
- other openings.

NO UNPROTECTED OPENINGS SHALL COMPROMISE THE REQUIRED GARAGE / RESIDENTIAL SEPARATION.

STATUS: REQUIRED

107. GARAGE OPENINGS / VESTIBULES

2024 IBC: §§406, 3006 and applicable shaft provisions



Applicable Requirement:

Connections between the enclosed parking garage and other portions of the building shall comply with the applicable garage, shaft, elevator and occupancy-separation requirements.

Project Application:

Particular attention shall be given to:

- elevator openings at basement;
- stair doors;
- pedestrian doors between garage and building;
- service shafts;
- mechanical openings.

Elevator vestibule/lobby protection shall be established under the final §3006 analysis.

DO NOT ASSUME THAT AN ELEVATOR OPENING DIRECTLY BETWEEN THE BASEMENT GARAGE AND RESIDENTIAL BUILDING REQUIRES NO ADDITIONAL PROTECTION.

Where vestibules are required by the applicable elevator/garage provisions, provide compliant rated construction, doors and dimensions.

STATUS: VERIFY FINAL GARAGE CONNECTIONS

108. EV PARKING / EV INFRASTRUCTURE

2024 PBCC / IECC / Electrical Code: Applicable EV infrastructure requirements

NFPA 70: EV charging equipment

Project Condition:

The project program contemplates:

EV CHARGING WITHIN THE 51-SPACE BASEMENT GARAGE

Project Application:



Final EV infrastructure shall be evaluated under the applicable Phoenix-adopted energy/electrical provisions.

Coordinate:

- required EV-capable / EV-ready / installed charging infrastructure, as applicable;
- accessible EV charging where provided;
- electrical service capacity;
- equipment protection;
- vehicle impact protection;
- accessible route;
- charging-cord management;
- fire/life-safety coordination.

EV EQUIPMENT SHALL NOT ENCROACH INTO REQUIRED ACCESSIBLE PARKING, ACCESS AISLES OR EGRESS ROUTES.

STATUS: REQUIRED — SEPARATE IECC / NEC ANALYSIS

109. BICYCLE PARKING

IBC: Not principally governed by the IBC

Phoenix Zoning / Local Requirements: Verify

Project Condition:

The development program contemplates a resident bicycle storage/workshop facility.

Project Application:

Verify bicycle parking quantity and location under applicable Phoenix zoning/TOD requirements.

Interior bicycle storage shall additionally comply with applicable:



- occupancy classification;
- egress;
- sprinkler protection;
- accessibility;
- fire separation where required.

BICYCLE PARKING COUNT IS A ZONING / LOCAL REQUIREMENT; BUILDING CONDITIONS REMAIN SUBJECT TO IBC.

STATUS: VERIFY PHOENIX ZONING / TOD REQUIREMENTS

110. POOL / SPA REQUIREMENTS, IF APPLICABLE

2024 IBC: Chapter 11 accessibility coordination

ISPSC: Primary pool/spa technical requirements

Phoenix Requirements: Applicable local amendments

Project Condition:

A swimming pool or spa has not been established as a definitive component of the current code basis.

Project Application:

If a pool or spa is incorporated into the final project:

- provide required barriers;
- accessible means of entry;
- deck accessibility;
- drainage;
- safety equipment;
- applicable plumbing/mechanical systems;



- required separation from electrical equipment;
- applicable structural design.

POOL / SPA SHALL RECEIVE A SEPARATE ISPSC AND ACCESSIBILITY ANALYSIS IF INTRODUCED.

STATUS: NOT CURRENTLY ESTABLISHED — VERIFY FINAL AMENITY PROGRAM

111. POOL BARRIER / GATES

ISPSC: Applicable barrier provisions

Phoenix Requirements: Local amendments as applicable

Applicable Requirement:

Where a pool or spa requiring a barrier is provided, the barrier and gates shall comply with the applicable ISPSC/Phoenix requirements.

Project Application:

If a pool/spa is introduced, coordinate:

- barrier height;
- openings;
- climbability;
- gate direction;
- self-closing;
- self-latching;
- latch location;
- dwelling/building openings where applicable.

POOL BARRIER REQUIREMENTS ARE NOT INCLUDED AS A CURRENT DESIGN REQUIREMENT UNLESS A POOL / SPA IS ADDED.



STATUS: N/A UNLESS POOL / SPA PROVIDED

112. AMENITY / CLUBHOUSE OCCUPANT LOADS

2024 IBC: §1004; Table 1004.5

Applicable Requirement:

Common amenity spaces shall have occupant loads calculated according to their **actual function**, not automatically using the residential dwelling-unit factor.

Potential functions include:

- lounges;
- fitness;
- meeting/gathering areas;
- rooftop seating;
- outdoor gathering areas;
- common dining/kitchen areas.

Project Application:

Each amenity shall receive an individual occupant-load calculation.

Where a space functions as an assembly use, use the applicable assembly occupant-load factor even where the overall building remains principally R-2.

The calculated occupant load shall be used to determine:

- exit quantity;
- exit width;
- door swing;
- panic hardware where triggered;



- plumbing fixture counts;
- other life-safety requirements.

SHOW OCCUPANT LOAD AT EACH COMMON AMENITY SPACE ON THE LIFE-SAFETY PLANS.

STATUS: REQUIRED

113. ROOF DECK / ROOFTOP AMENITY EGRESS

2024 IBC: §§1004, 1006, 1007, 1017, 1023; §503.1.4 where applicable

Project Condition:

The project specifically includes an:

OCCUPIED ROOFTOP GARDEN / AMENITY

with walking, gathering and resident-use functions.

This is therefore an **occupied roof**, not merely a service/maintenance roof.

Project Application:

The rooftop shall receive a complete egress analysis including:

- occupant load;
 - number of exits;
 - exit separation/remoteness;
 - travel distance;
 - common path where applicable;
 - exit capacity;
 - stair access;
 - door swing;
-



- panic hardware if triggered;
- emergency lighting;
- exit signage;
- accessible means of egress.

The occupied roof shall be provided with access to the required building exit system.

DESIGN BASIS: PROVIDE ACCESS TO BOTH EXISTING INTERIOR EXIT STAIRS UNLESS THE FINAL OCCUPANT-LOAD / §1006 ANALYSIS EXPRESSLY PERMITS OTHERWISE.

Do not artificially restrict the occupant load solely to avoid a second exit unless a legitimate, enforceable occupant-load limitation is incorporated into the approved design and permitted by the Building Official.

STATUS: REQUIRED — MAJOR LIFE-SAFETY ITEM

114. ROOF DECK GUARD REQUIREMENTS

2024 IBC: §1015

Structural: Chapter 16

Applicable Requirement:

The occupied rooftop shall be protected by guards wherever the walking surface is more than:

30 INCHES ABOVE THE FLOOR OR GRADE BELOW

Project design basis:

42-INCH MINIMUM GUARD HEIGHT

Openings shall comply with §1015 limitations.

Project Application:

Guards shall be provided around all applicable occupied-roof edges, openings and changes in elevation.

Coordinate guards with:



- existing parapets;
- planters;
- seating;
- raised decks;
- landscape elements;
- rooftop equipment;
- architectural screens.

Where an existing parapet is used as the guard:

VERIFY HEIGHT FROM THE ACTUAL ADJACENT FINISHED WALKING SURFACE AFTER ALL PAVERS, PEDESTALS, DECKING AND LANDSCAPE BUILDUP ARE INSTALLED.

Guard anchorage shall be engineered for required loads and coordinated with existing concrete/PT construction.

STATUS: REQUIRED

115. PLUMBING FIXTURE COUNTS

2024 IBC: Chapter 29; §2902; Table 2902.1

IPC: Fixture design and installation

Applicable Requirement:

Required plumbing fixtures shall be determined from:

- occupancy classification;
- occupant load;
- use of each space;
- Table 2902.1;



- applicable exceptions.

Residential Dwelling Units:

Each dwelling unit shall contain the required residential plumbing facilities.

Common Amenity Areas:

The need for additional common/public toilet facilities shall be determined based upon:

- amenity occupancy;
- occupant load;
- location;
- availability of qualifying facilities;
- applicable §2902 provisions.

The occupied rooftop amenity shall be specifically evaluated.

Project Application:

Provide a plumbing fixture calculation addressing:

22 DWELLING UNITS

plus all applicable:

COMMON / AMENITY OCCUPANT LOADS

Do not assume that private condominium bathrooms automatically satisfy every plumbing-fixture requirement associated with a common rooftop or other amenity.

FINAL FIXTURE COUNT SHALL BE COORDINATED WITH THE FINAL OCCUPANT-LOAD PLAN.

STATUS: REQUIRED — FINAL CALCULATION

116. ACCESSIBLE PLUMBING FIXTURES



2024 IBC: Chapters 11 and 29

Referenced Standard: ICC A117.1-2017

2024 IPC: Chapter 4

Applicable Requirement:

Plumbing fixtures located within required accessible toilet and bathing facilities shall comply with the applicable accessibility requirements.

Project Application:

Accessible plumbing fixtures shall be provided within:

- required Type A dwelling-unit bathrooms;
- applicable Type B dwelling-unit bathrooms;
- accessible common-use toilet rooms;
- rooftop/common amenity toilet facilities, where provided.

Coordinate:

- water closet location and clearance;
- lavatory knee/toe clearance;
- faucets and controls;
- grab bars/reinforcement;
- mirrors and accessories;
- tubs and showers;
- clear floor spaces.

ACCESSIBLE FIXTURE REQUIREMENTS SHALL BE COORDINATED WITH EACH UNIT'S TYPE A / TYPE B CLASSIFICATION AND WITH COMMON-USE FACILITY REQUIREMENTS.

STATUS: REQUIRED



117. DRINKING FOUNTAIN REQUIREMENTS

2024 IBC: §2902; Table 2902.1

2024 IPC: Chapter 4

Applicable Requirement:

Drinking fountains shall be provided where required by the plumbing-fixture table based upon occupancy and occupant load.

The 22 private dwelling units do not create a requirement for common drinking fountains solely because they are residential dwelling units.

Common amenity areas shall be evaluated separately based upon their actual occupancy/use.

Project Application:

Evaluate drinking-fountain requirements for:

- rooftop amenity;
- fitness area;
- resident lounge;
- other common assembly-type amenities.

Where drinking fountains are required, provide accessible high/low or other permitted compliant drinking-water facilities in accordance with the applicable accessibility/plumbing provisions.

FINAL REQUIREMENT DEPENDS UPON COMMON-AMENITY OCCUPANT LOAD AND USE.

STATUS: VERIFY WITH FINAL AMENITY PROGRAM

118. SERVICE SINK REQUIREMENTS

2024 IBC: §2902; Table 2902.1

2024 IPC: Chapter 4

Applicable Requirement:



Service sinks are required where prescribed by the applicable plumbing-fixture requirements.

Project Application:

Provide required janitorial/service facilities serving common areas as determined by the final occupancy and plumbing analysis.

Service-sink location shall be coordinated with:

- housekeeping operations;
- accessible route where required;
- plumbing;
- waterproofing;
- storage of maintenance supplies.

The 2024 IPC specifically requires service sinks to be located on an accessible route where its §403.6 provisions apply.

VERIFY SERVICE-SINK REQUIREMENT FROM FINAL COMMON-AREA OCCUPANCY / FIXTURE CALCULATION.

STATUS: VERIFY

119. MECHANICAL VENTILATION

2024 IBC: Chapter 12

2024 IMC: Primary ventilation requirements

Applicable Requirement:

Occupied spaces shall be provided with ventilation in accordance with the adopted mechanical code.

Project Application:

Mechanical ventilation shall be provided/verified for applicable:

- dwelling units;



- bathrooms;
- kitchens;
- corridors/common spaces where required;
- basement parking;
- storage/service rooms;
- mechanical/electrical rooms where applicable;
- common amenity spaces.

Existing commercial HVAC systems shall not be presumed appropriate for the new residential occupancy.

PROVIDE A NEW RESIDENTIAL VENTILATION DESIGN BASED UPON THE FINAL R-2 CONFIGURATION AND 2024 IMC REQUIREMENTS.

STATUS: REQUIRED — IMC ANALYSIS

120. NATURAL VENTILATION, IF USED

2024 IBC: Chapter 12

2024 IMC: Natural ventilation provisions

Applicable Requirement:

Natural ventilation may be used where the applicable opening-area, location and operational requirements are satisfied.

Project Condition:

The existing building contains substantial exterior glazing; however, the presence of windows does not establish natural ventilation unless the openings are operable and satisfy the applicable requirements.

Project Application:

Unless the mechanical design intentionally relies upon natural ventilation:



MECHANICAL VENTILATION SHALL BE THE PRIMARY DESIGN BASIS.

Operable residential windows may be provided for occupant use without being relied upon as the code-required ventilation system.

STATUS: MECHANICAL VENTILATION DESIGN BASIS

121. BATHROOM EXHAUST

2024 IMC: Applicable exhaust provisions

Applicable Requirement:

Bathrooms and toilet rooms shall be provided with mechanical exhaust where required by the adopted mechanical code.

Project Application:

Each condominium bathroom/toilet room shall be provided with code-compliant exhaust unless an approved alternative is intentionally designed.

Coordinate exhaust routing with:

- dwelling-unit fire partitions;
- concrete floor construction;
- rated shafts;
- exterior-wall penetrations;
- roof penetrations;
- fire/smoke dampers where applicable.

DO NOT TERMINATE BATHROOM EXHAUST INTO CEILING, FLOOR OR OTHER CONCEALED BUILDING SPACES.

STATUS: REQUIRED



122. KITCHEN EXHAUST

2024 IMC: Applicable domestic kitchen exhaust provisions

Applicable Requirement:

Residential cooking appliances and associated exhaust systems shall comply with the adopted mechanical code and appliance listing.

Project Application:

Each dwelling-unit kitchen shall be coordinated for the selected:

- range/cooktop;
- hood;
- recirculating or ducted system where permitted;
- exhaust duct;
- termination;
- makeup-air requirements where triggered.

Where ducts penetrate required rated assemblies:

MAINTAIN REQUIRED FIRE / SMOKE / PENETRATION PROTECTION.

Common or commercial-style cooking facilities, if introduced within an amenity space, shall be evaluated separately and shall not automatically be treated as residential cooking.

STATUS: REQUIRED

123. SMOKE DETECTION / SMOKE ALARMS

2024 IBC: §§907.2.9, 907.2.11

Phoenix Fire Code: Applicable provisions

NFPA 72: Referenced standard

Applicable Requirement:



Group R-2 occupancies require fire-alarm/detection features and smoke alarms as prescribed by §907.

Smoke alarms shall be installed in required locations within dwelling units, including applicable:

- sleeping rooms;
- areas outside sleeping rooms;
- levels within dwelling units.

Project Application:

Provide a new coordinated residential detection/alarm system appropriate to the conversion.

The existing office/science-building system shall not be presumed adequate for the new residential layout.

PROVIDE SMOKE ALARMS THROUGHOUT EACH DWELLING UNIT AT ALL REQUIRED LOCATIONS AND COORDINATE WITH THE BUILDING FIRE-ALARM SYSTEM AS REQUIRED.

STATUS: REQUIRED

124. CARBON MONOXIDE DETECTION

2024 IBC: §915

Phoenix Fire Code: Applicable requirements

Applicable Requirement:

Carbon monoxide detection is required in applicable Group R occupancies where fuel-burning appliances, fireplaces, attached garages or other triggering conditions identified by §915 are present.

Project Condition:

The building contains:

S-2 BASEMENT PARKING BELOW THE RESIDENTIAL OCCUPANCY

and may contain self-contained listed fireplace appliances depending upon the final appliance selection.



Project Application:

Provide CO detection where required based upon:

- relationship of dwelling units to the enclosed garage;
- fuel-fired building equipment;
- final fireplace/appliance type;
- other §915 triggering conditions.

If fireplaces are entirely electric, they do not independently create combustion products; the garage and other fuel-burning systems must still be evaluated.

CO DETECTION SHALL BE INCLUDED WHERE REQUIRED BY §915 / PHOENIX FIRE CODE.

STATUS: REQUIRED AS APPLICABLE

125. EMERGENCY / STANDBY POWER

2024 IBC: §§2702, 3003; Chapter 10 as applicable

Applicable Requirement:

Emergency and standby power shall be provided for systems specifically required by the IBC and applicable referenced codes.

Required emergency electrical loads include applicable:

- means-of-egress illumination;
 - exit signs;
 - fire alarm/detection;
 - fire pumps where required;
 - other specifically required life-safety systems.
-



Emergency egress illumination is required to operate for not less than **90 minutes** following loss of normal power.

Elevators:

Where an elevator is used as part of an accessible means of egress, standby power is required in accordance with §1009.4.1, Chapter 27 and §3003.

Where standby power is furnished for multiple elevators, §3003 establishes requirements for transfer and operation of the elevator bank.

Project Application:

Develop a complete emergency/standby load schedule identifying all required life-safety loads.

DO NOT ASSUME THAT ALL THREE ELEVATORS MUST OPERATE SIMULTANEOUSLY ON STANDBY POWER; FINAL REQUIREMENT SHALL BE BASED UPON THE SELECTED ACCESSIBLE-EGRESS STRATEGY AND §3003.

STATUS: REQUIRED — ELECTRICAL / LIFE-SAFETY COORDINATION

126. ENERGY CODE / BUILDING ENVELOPE

2024 Phoenix Building Construction Code:

2024 IECC with Phoenix amendments

Phoenix adopted the 2024 IECC as part of the 2024 PBCC.

Applicable Requirement:

The conversion from commercial office/science use to residential condominiums requires a project-specific energy-code analysis.

The final compliance path shall establish requirements for:

- exterior walls;
- roof;
- fenestration;



- glazing;
- doors;
- air leakage;
- mechanical systems;
- lighting;
- controls;
- service water heating;
- other applicable energy systems.

Project Application:

Because this is an existing-building conversion:

COORDINATE 2024 IECC REQUIREMENTS WITH THE 2024 IEBC ALTERATION / CHANGE-OF-OCCUPANCY PROVISIONS.

Do not assume the existing commercial envelope automatically satisfies the residential conversion requirements.

STATUS: REQUIRED — SEPARATE IECC ANALYSIS

127. WALL INSULATION

2024 IECC: Applicable envelope provisions

2024 IEBC: Existing-building coordination

Applicable Requirement:

Exterior-wall thermal performance shall comply with the applicable energy-code provisions based upon:

- wall construction;
- climate zone;



- insulation configuration;
- compliance method;
- existing-building allowances.

Project Condition:

Existing exterior construction is part of a concrete commercial building being converted to residential use.

Project Application:

The final envelope design shall determine whether existing walls require:

- supplemental continuous insulation;
- interior insulation;
- cavity/furring insulation;
- thermal-bridge mitigation;
- other improvements.

New insulation shall be coordinated with:

- existing concrete;
- vapor/moisture behavior;
- exterior glazing;
- SABS interior construction;
- fire-resistance requirements.

FINAL R-VALUE / U-FACTOR SHALL BE ESTABLISHED BY THE PROJECT ENERGY ANALYSIS — DO NOT ASSUME A GENERIC PRESCRIPTIVE WALL R-VALUE.

STATUS: REQUIRED — ENERGY MODEL / COMPLIANCE ANALYSIS



128. ROOF INSULATION

2024 IECC: Applicable roof-envelope provisions

Applicable Requirement:

Roof thermal performance shall satisfy the applicable 2024 IECC requirements or permitted existing-building compliance provisions.

Project Application:

Because the roof will become an **occupied rooftop amenity**, coordinate roof insulation with:

- existing concrete roof structure;
- waterproofing;
- tapered insulation;
- drainage;
- pedestal pavers/deck systems;
- planters;
- structural loads;
- roof penetrations.

DO NOT COMPROMISE REQUIRED THERMAL PERFORMANCE OR DRAINAGE WHEN CONSTRUCTING THE OCCUPIED-ROOF ASSEMBLY.

Final insulation thickness shall be established by the energy-code compliance method.

STATUS: REQUIRED

129. FENESTRATION / U-FACTOR / SHGC

2024 IECC: Applicable fenestration provisions

Project Condition:



The existing building contains extensive exterior glazing.

Applicable Requirement:

Fenestration shall comply with applicable:

- U-factor;
- SHGC;
- air leakage;
- area limitations;
- performance requirements.

Project Application:

Existing glazing proposed to remain shall be incorporated into the energy analysis based upon its documented performance.

Where existing glazing performance cannot be substantiated:

DO NOT ASSIGN UNSUPPORTED U-FACTOR / SHGC VALUES.

Replacement glazing shall be selected to satisfy the final energy compliance path.

The substantial glazing percentage makes fenestration performance a **major energy-design consideration** for this adaptive-reuse project.

STATUS: REQUIRED — VERIFY EXISTING GLAZING PERFORMANCE

130. AIR BARRIER REQUIREMENTS

2024 IECC: Applicable air-leakage / envelope provisions

Applicable Requirement:

The building thermal envelope shall comply with applicable air-barrier and air-leakage requirements.

Project Application:



The renovation shall establish continuity between:

- existing exterior walls;
- replacement/new windows;
- exterior doors;
- roof;
- wall/roof interfaces;
- new exterior elevator interfaces;
- penetrations.

Particular attention shall be given to the perimeter of existing glazing retained within the converted building.

PROVIDE CONTINUOUS AIR-BARRIER STRATEGY AND SEAL NEW / MODIFIED ENVELOPE PENETRATIONS.

STATUS: REQUIRED

131. ROOF DRAINAGE

2024 IBC: Chapter 15

2024 IPC: Roof drainage provisions

Applicable Requirement:

Roof drainage shall be designed for the applicable rainfall conditions and roof configuration.

Project Application:

The occupied rooftop creates additional drainage coordination because of:

- pavers;
- pedestal systems;



- planters;
- landscape areas;
- raised walking surfaces;
- amenity structures.

Drainage design shall preserve positive drainage to the primary system and prevent landscaping or amenity construction from blocking drainage paths.

ROOF DECK FINISH ELEVATIONS SHALL BE COORDINATED WITH PRIMARY AND OVERFLOW DRAINAGE.

STATUS: REQUIRED

132. PRIMARY ROOF DRAINS

2024 IBC: Chapter 15

2024 IPC: Chapter 11 as applicable

Applicable Requirement:

Primary roof drainage shall be sized based upon:

- roof area;
- design rainfall rate;
- drainage configuration;
- tributary areas.

Project Application:

Existing roof drains shall be evaluated for:

- condition;
- location;



- capacity;
- new tributary areas;
- occupied-roof layout.

Planters, pavers and rooftop structures shall not obstruct primary drains.

VERIFY EXISTING PRIMARY DRAIN CAPACITY; MODIFY / SUPPLEMENT AS REQUIRED FOR FINAL ROOFTOP DESIGN.

STATUS: REQUIRED

133. SECONDARY / OVERFLOW ROOF DRAINAGE

2024 IBC: Chapter 15

2024 IPC: Applicable secondary drainage provisions

Applicable Requirement:

Where roof perimeter construction can retain water if the primary drainage system becomes blocked, secondary emergency drainage shall be provided as required.

Secondary drainage shall be independent from the primary drainage system to the extent required by the applicable plumbing provisions.

Project Application:

Existing overflow drains/scuppers shall be documented.

The occupied-roof design shall maintain:

- required overflow elevation;
 - unobstructed flow paths;
 - visible discharge where required;
 - adequate hydraulic capacity.
-



DO NOT ALLOW NEW PAVERS, PLANTERS OR GUARDS TO OBSTRUCT OVERFLOW SCUPPERS / DRAINS.

STATUS: REQUIRED — VERIFY EXISTING SYSTEM

134. STRUCTURAL DESIGN CRITERIA

2024 IBC: Chapter 16

Referenced Standards: ASCE 7 and applicable material standards

Applicable Requirement:

Structural design shall comply with Chapter 16 and the referenced structural standards applicable to the project.

Project Condition:

The existing building is documented as cast-in-place concrete column, beam and slab construction. The existing structural assessment reported the principal four-story building to be in generally good structural condition, while identifying repair conditions associated with portions of the parking structure.

Project Application:

The Structural Engineer of Record shall establish and document:

- dead loads;
- live loads;
- roof/occupied-roof loads;
- wind design criteria;
- seismic criteria;
- guard loads;
- equipment loads;
- new elevator loads;



- balcony/terrace loads;
- existing structural capacity;
- modifications to existing concrete construction.

THE CHANGE FROM OFFICE TO RESIDENTIAL DOES NOT BY ITSELF ESTABLISH EXISTING STRUCTURAL CAPACITY; NEW LOADS AND ALTERATIONS SHALL BE VERIFIED BY THE STRUCTURAL ENGINEER.

STATUS: REQUIRED

135. LIVE LOADS

2024 IBC: §1607; Table 1607.1

Applicable Requirement:

Minimum uniformly distributed and concentrated live loads shall be established according to the actual use of each space.

Project Application:

Evaluate separately:

- dwelling-unit floors;
- residential corridors;
- stairs and exits;
- balconies;
- terraces;
- common amenity areas;
- storage rooms;
- basement parking;



- mechanical/equipment rooms;
- occupied rooftop.

The occupied rooftop shall **not** automatically use a conventional nonoccupiable roof live load.

Its design live load shall correspond to the actual occupancy/use of the rooftop amenity.

Likewise, large private terraces and common gathering areas shall be evaluated according to their actual use rather than automatically assigning the residential dwelling-room live load.

STRUCTURAL LIVE-LOAD PLAN SHALL IDENTIFY EACH DISTINCT USE / LOAD CONDITION.

STATUS: REQUIRED

136. ROOF LOADS

2024 IBC: §§1607, 1608 as applicable

Referenced Standard: ASCE 7

Applicable Requirement:

Roof structural design shall account for all applicable dead, live and environmental loads.

Project Condition:

The roof is proposed as an:

OCCUPIED ROOFTOP GARDEN / AMENITY

Accordingly, portions of the roof used for occupancy shall be designed for the applicable occupancy live loads rather than relying solely upon minimum nonoccupiable roof live loads.

Project Application:

Structural evaluation shall include:

- occupied-roof live loads;
 - landscape/planter dead loads;
-



- saturated soil/landscape loads;
- pedestal pavers/decking;
- guards and screens;
- shade structures, if provided;
- rooftop mechanical equipment;
- drainage/ponding conditions;
- concentrated loads;
- applicable environmental loads.

VERIFY EXISTING CONCRETE ROOF CAPACITY FOR THE COMPLETE OCCUPIED-ROOF PROGRAM BEFORE FINALIZING THE ROOFTOP DESIGN.

STATUS: REQUIRED — STRUCTURAL VERIFICATION

137. WIND LOADS

2024 IBC: §1609

Referenced Standard: ASCE 7

Applicable Requirement:

The building and all new exterior components shall be designed for applicable wind pressures determined from the adopted structural criteria.

Project Application:

Wind design shall address applicable:

- exterior walls;
- glazing;
- doors;



- rooftop equipment;
- rooftop screens;
- shade structures;
- guards;
- new exterior elevator enclosure;
- balconies;
- façade screens / brise-soleil;
- architectural features.

The existing primary building structure shall be evaluated where new work changes wind loads or load paths.

FINAL WIND DESIGN CRITERIA SHALL BE ESTABLISHED BY THE STRUCTURAL ENGINEER IN ACCORDANCE WITH CHAPTER 16 / ASCE 7.

STATUS: REQUIRED

138. SEISMIC DESIGN

2024 IBC: §§1613, 1617 as applicable

Referenced Standard: ASCE 7

Applicable Requirement:

Structural seismic design shall comply with the applicable Chapter 16 and ASCE 7 provisions.

Because this is an existing-building alteration/change of occupancy, the extent of required seismic evaluation or upgrade shall additionally be determined under the applicable **2024 IEBC** provisions.

Project Application:

Evaluate:

- existing lateral-force-resisting system;



- change-of-occupancy implications;
- new exterior elevator;
- new openings through existing construction;
- rooftop amenity structures;
- architectural components;
- mechanical/electrical equipment;
- new partitions;
- guards and exterior features.

SEISMIC UPGRADE REQUIREMENTS SHALL BE ESTABLISHED UNDER THE IEBC BASED UPON THE FINAL ALTERATION / CHANGE-OF-OCCUPANCY SCOPE; DO NOT ASSUME A COMPLETE EXISTING-BUILDING SEISMIC RETROFIT IS REQUIRED WITHOUT THAT ANALYSIS.

STATUS: REQUIRED — IEBC / STRUCTURAL ANALYSIS

139. BALCONY / GUARD LOADS

2024 IBC: §§1607.8, 1607; Table 1607.1

Applicable Requirement:

Balconies, decks, terraces and guards shall be structurally designed for the applicable loads prescribed by Chapter 16.

Guards and handrails shall resist the required:

- concentrated loads;
- linear loads;
- infill-component loads,

as applicable.



Project Application:

Structural design shall address all new:

- balcony guards;
- terrace guards;
- rooftop guards;
- stair guards;
- glass guard systems;
- screen/guard combinations.

Balcony and terrace slabs shall be evaluated for their applicable occupancy live loads.

GUARD ANCHORAGE INTO EXISTING CONCRETE SHALL BE ENGINEERED AND COORDINATED WITH EXISTING REINFORCING / PT TENDONS WHERE APPLICABLE.

STATUS: REQUIRED

140. FOUNDATION DESIGN

2024 IBC: Chapter 18

2024 IEBC: Existing-building provisions

Applicable Requirement:

Existing foundations may remain where permitted by the IEBC and where they remain adequate for existing and new imposed loads.

New structural elements shall be supported by foundations designed for the applicable loads and site soil conditions.

Project Application:

Existing foundation evaluation shall consider modifications associated with:

- new exterior elevator;



- new exterior structures;
- rooftop structural modifications that increase column/foundation loads;
- new concentrated equipment loads;
- other structural alterations.

The new exterior elevator will likely require:

NEW FOUNDATION / PIT STRUCTURAL DESIGN

coordinated with existing foundations and underground utilities.

DO NOT ASSUME EXISTING FOUNDATIONS CAN ACCEPT NEW CONCENTRATED LOADS WITHOUT STRUCTURAL VERIFICATION.

STATUS: REQUIRED WHERE NEW / INCREASED LOADS OCCUR

141. SPECIAL INSPECTIONS

2024 IBC: Chapter 17; §1705

Applicable Requirement:

Special inspections and tests shall be provided for applicable construction and structural work identified by Chapter 17.

Project Application:

Potential special-inspection items include:

- concrete;
- reinforcing steel;
- post-installed anchors;
- structural steel;
- welding;



- bolting;
- masonry, if used structurally;
- sprayed fire-resistant materials, if used;
- fire-resistant penetrations/joints where required by Chapter 17;
- other designated structural systems.

Existing concrete work receiving new post-installed anchors shall be specifically coordinated with the structural engineer.

PROVIDE PROJECT-SPECIFIC STATEMENT OF SPECIAL INSPECTIONS WITH THE PERMIT DOCUMENTS.

STATUS: REQUIRED AS APPLICABLE

142. STRUCTURAL OBSERVATION, IF REQUIRED

2024 IBC: §1704.6

Applicable Requirement:

Structural observation is required where the project meets the conditions established by §1704.6 and applicable structural provisions.

Structural observation is distinct from:

SPECIAL INSPECTION

and does not replace required special inspections.

Project Application:

The Structural Engineer shall determine whether formal structural observation is required based upon:

- risk category;
- seismic design category;



- structural system;
- alterations to existing construction;
- other Chapter 17 triggers.

Regardless of whether formal §1704.6 structural observation is triggered, construction involving existing PT/concrete structural systems should receive appropriate engineer review consistent with the construction documents.

STATUS: VERIFY WITH STRUCTURAL ENGINEER

143. SOUND TRANSMISSION BETWEEN DWELLING UNITS

2024 IBC: §1206

Applicable Requirement:

Walls, partitions and floor/ceiling assemblies separating dwelling units from each other or from public/service areas shall provide the sound-transmission performance required by §1206.

Project Application:

Acoustical separation applies to:

- unit-to-unit walls;
- unit-to-corridor/common-space walls where applicable;
- floors between vertically stacked units;
- floors between residential and applicable service/common spaces.

The proposed **Strata/SABS systems have tested high STC/fire performance** and shall be selected from tested/listed configurations meeting or exceeding the required project criteria.

ACOUSTICAL PERFORMANCE SHALL BE BASED UPON THE COMPLETE TESTED ASSEMBLY, INCLUDING PENETRATIONS, OUTLETS, JOINTS AND PERIMETER CONDITIONS.

STATUS: REQUIRED



144. STC REQUIREMENTS

2024 IBC: §1206.2

Applicable Requirement:

Airborne sound transmission through required wall and floor/ceiling assemblies shall achieve:

STC 50 MINIMUM WHEN TESTED IN A LABORATORY

or:

ASTC 45 MINIMUM WHERE FIELD TESTED

for assemblies regulated by §1206.2.

Project Application:

Unit separation assemblies shall be selected to achieve at least the required STC performance.

Because the proposed SABS assemblies are anticipated to substantially exceed the minimum, use the actual tested assembly ratings in the wall-type schedule.

STC 50 MINIMUM LABORATORY-RATED DESIGN BASIS; HIGHER SABS PERFORMANCE MAY BE SPECIFIED AS THE PROJECT STANDARD.

STATUS: REQUIRED

145. IIC REQUIREMENTS

2024 IBC: §1206.3

Applicable Requirement:

Floor/ceiling assemblies separating dwelling units or dwelling units from applicable public/service spaces shall provide impact sound insulation of:

IIC 50 MINIMUM WHEN LABORATORY TESTED



or:

AIIC 45 MINIMUM WHERE FIELD TESTED

as applicable.

Project Condition:

The existing building utilizes concrete floor construction.

However, concrete structure alone does not automatically establish compliance with the required impact-isolation performance.

Project Application:

Final floor finishes and underlayments shall be selected to provide required IIC performance.

This is especially important where hard finishes are proposed, including:

- stone;
- porcelain tile;
- hardwood;
- engineered flooring.

PROVIDE TESTED FLOOR / UNDERLAYMENT / CONCRETE ASSEMBLIES ACHIEVING REQUIRED IIC PERFORMANCE.

STATUS: IIC 50 MINIMUM LABORATORY DESIGN BASIS

146. ADDRESS / BUILDING IDENTIFICATION

2024 IBC: §501.2

Phoenix Fire Code: Applicable premises-identification provisions

Applicable Requirement:

The building shall be provided with approved address identification that is:



- legible;
- plainly visible from the street or road fronting the property;
- provided with contrasting characters;
- sized in accordance with applicable requirements.

Project Application:

Primary project address:

301 W. OSBORN ROAD, PHOENIX, AZ 85013

Coordinate final address identification with:

- principal residential entrance;
- fire department approach;
- new façade improvements;
- site signage.

STATUS: REQUIRED

147. PREMISES IDENTIFICATION / UNIT NUMBERING

2024 IBC: §501.2 as applicable

Phoenix Fire Code: Applicable local requirements

Applicable Requirement:

Individual tenant/dwelling spaces shall be identified where required to facilitate emergency response and building navigation.

Project Application:

Provide a logical permanent numbering system for:

22 CONDOMINIUM UNITS



Coordinate numbering with:

- floor level;
- elevator directories;
- stair identification;
- fire alarm system;
- emergency response plans;
- postal addressing;
- condominium documents.

Mechanical/electrical/service rooms shall also receive appropriate room identification.

STATUS: REQUIRED

148. FIRE DEPARTMENT KEY BOX, IF REQUIRED

Phoenix Fire Code: Local fire-department requirements

Applicable Requirement:

Where required by the Fire Code Official, an approved fire department access/key box shall be provided.

Project Application:

Coordinate the location with the Phoenix Fire Department at the principal fire department building access point.

The key box shall provide access to applicable:

- building entrances;
- fire-control equipment;
- elevator controls/keys;
- mechanical/service spaces as required.



PROVIDE PHOENIX-APPROVED FIRE DEPARTMENT KEY BOX WHERE REQUIRED.

STATUS: VERIFY WITH PHOENIX FIRE DEPARTMENT

149. SITE ACCESSIBLE ROUTE

2024 IBC: §§1104, 1105

Referenced Standard: ICC A117.1-2017

Applicable Requirement:

An accessible route shall connect required site arrival points to the accessible building entrance.

Project Application:

Provide a continuous accessible route connecting applicable:

- public sidewalk;
- accessible parking;
- passenger loading, if provided;
- site amenities;
- principal residential entrance.

The route shall comply with applicable requirements for:

- width;
- running slope;
- cross slope;
- changes in level;
- surfaces;
- curb ramps;
- ramps;



- protruding objects.

SHOW THE COMPLETE SITE ACCESSIBLE ROUTE GRAPHICALLY ON THE SITE / ACCESSIBILITY PLAN.

STATUS: REQUIRED

150. ACCESSIBLE ROUTE FROM PUBLIC WAY

2024 IBC: §1104

Applicable Requirement:

At least one accessible route shall connect accessible building entrances with the public street/sidewalk system where required.

Project Application:

Provide a compliant route from the Osborn Road/public-way pedestrian system to the accessible principal residential entrance.

Coordinate:

- property-line elevation;
- sidewalk;
- site slope;
- curb conditions;
- gates;
- landscape elements;
- entrance landing.

PUBLIC WAY → ACCESSIBLE BUILDING ENTRANCE SHALL BE CONTINUOUS AND STEP-FREE.

STATUS: REQUIRED



151. ACCESSIBLE ROUTE FROM PARKING TO BUILDING

2024 IBC: §§1104, 1106

Referenced Standard: ICC A117.1-2017

Project Condition:

Accessible parking is located within the:

BASEMENT ENCLOSED PARKING GARAGE

Applicable Requirement:

Accessible parking shall connect to the accessible building route.

Project Application:

Provide:

**ACCESSIBLE PARKING → ACCESS AISLE → ACCESSIBLE ROUTE → ACCESSIBLE ELEVATOR →
RESIDENTIAL / COMMON LEVELS**

The route shall not require travel behind parked vehicles except where specifically permitted by the applicable accessibility provisions.

Vehicle lifts, EV charging equipment, bollards and building equipment shall not obstruct the accessible route.

STATUS: REQUIRED

152. SITE STAIRS / RAMPS

2024 IBC: §§1011, 1012; Chapter 11

Applicable Requirement:

Site stairs and ramps forming part of required means of egress or accessible routes shall comply with the applicable Chapter 10 and Chapter 11 requirements.

Project Application:



Where exterior grade changes occur:

- provide accessible route by compliant ramp where required;
- coordinate stairs independently with egress provisions;
- provide landings;
- handrails;
- guards;
- edge protection where required.

SITE STAIRS SHALL NOT SUBSTITUTE FOR THE REQUIRED ACCESSIBLE ROUTE.

STATUS: REQUIRED WHERE GRADE CHANGES OCCUR

153. RAMP SLOPES / LANDINGS / HANDRAILS

2024 IBC: §1012

Referenced Standard: ICC A117.1-2017

Applicable Requirement:

Accessible ramps shall generally have a maximum running slope of:

1:12

Cross slope shall comply with the applicable accessibility requirements.

Required landings shall be provided at:

- top;
- bottom;
- changes in direction;
- intermediate locations where required.

Handrails are required where triggered by the rise/geometry provisions.



Project Application:

Any new exterior or interior accessible ramp shall be designed as an integrated accessible-route element.

1:12 MAXIMUM ACCESSIBLE-RAMP RUNNING SLOPE DESIGN BASIS

Where site grading permits, use a walking surface at not steeper than 1:20 rather than introducing an unnecessary ramp condition.

STATUS: REQUIRED WHERE RAMPS ARE PROVIDED

154. SITE EGRESS TO PUBLIC WAY

2024 IBC: §1028

Applicable Requirement:

The exit discharge shall provide a direct and unobstructed path to:

A PUBLIC WAY

Exit discharge shall be of sufficient width to accommodate the required egress capacity and shall not be obstructed by site features.

Project Application:

This is particularly important because the two interior exit stairs require a compliant Level 1 discharge strategy.

The life-safety plan shall demonstrate:

STAIR / EXIT → LEVEL 1 DISCHARGE → EXTERIOR EGRESS PATH → PUBLIC WAY

Coordinate the exterior path with:

- gates;
- landscape walls;
- parking;



- vehicle circulation;
- site furnishings;
- ramps;
- accessible route.

THE EGRESS ANALYSIS DOES NOT END AT THE EXTERIOR DOOR; CONTINUE THE REQUIRED PATH TO THE PUBLIC WAY.

STATUS: REQUIRED

155. FIRE APPARATUS ACCESS ROAD

Phoenix Fire Code: Chapter 5

IBC: Site/life-safety coordination

Applicable Requirement:

Approved fire apparatus access shall be provided and maintained in accordance with the Phoenix Fire Code.

Project Application:

Existing site access shall be verified for continued compliance following:

- residential conversion;
- new exterior elevator construction;
- landscape modifications;
- entrance improvements;
- site amenity changes.

Coordinate access with:

- fire department connection;



- hydrants;
- building entrances;
- standpipe system;
- aerial access where applicable.

NEW SITE IMPROVEMENTS SHALL NOT REDUCE REQUIRED EXISTING FIRE APPARATUS ACCESS.

STATUS: REQUIRED — PHOENIX FIRE CODE

156. FIRE LANE WIDTH / TURNING RADIUS

Phoenix Fire Code: Chapter 5, §503 and applicable Phoenix amendments

2024 IBC: Coordination only

Applicable Requirement:

Fire apparatus access-road geometry, including required:

- clear width;
- vertical clearance;
- turning radius;
- grade;
- surface;
- dead-end turnaround;
- obstruction limitations

is principally governed by the **Phoenix Fire Code and Phoenix Fire Department requirements**, rather than the IBC.

Project Application:

Existing fire apparatus access shall be verified against the approved site/fire access conditions.



The new exterior elevator, landscaping, site walls, gates, parking modifications and other site improvements shall not reduce required apparatus access.

MAINTAIN PHOENIX FIRE DEPARTMENT-APPROVED FIRE APPARATUS ACCESS AND REQUIRED TURNING MOVEMENTS.

Final dimensional criteria shall be taken from the applicable Phoenix Fire Code/PFD requirements rather than establishing unsupported dimensions in this IBC synopsis.

STATUS: REQUIRED — PHOENIX FIRE CODE / PFD

157. AERIAL FIRE APPARATUS ACCESS, IF APPLICABLE

Phoenix Fire Code: §503; Appendix D where adopted/amended and applicable

Applicable Requirement:

Aerial fire apparatus access requirements are governed principally by the Phoenix Fire Code based upon building height and configuration.

Project Condition:

The existing building is approximately:

±50'-9" IN HEIGHT

with four stories above grade and an occupied rooftop amenity.

Project Application:

Because the building height exceeds the typical threshold at which aerial apparatus access becomes a fire-code consideration:

AERIAL FIRE APPARATUS ACCESS SHALL BE VERIFIED WITH PHOENIX FIRE DEPARTMENT.

Coordinate applicable access with:

- building perimeter;
- overhead obstructions;



- trees/landscaping;
- utility lines;
- site structures;
- new exterior elevator;
- rooftop projections.

STATUS: VERIFY — PHOENIX FIRE CODE / PFD

158. PROPERTY-LINE / BUILDING SEPARATION

2024 IBC: §§705.3, 705.5, 705.8

Applicable Requirement:

Building relationship to property lines and other buildings is regulated through **fire separation distance**.

Fire separation distance affects:

- exterior-wall ratings;
- allowable openings;
- opening protection;
- projections;
- permitted combustible construction.

Project Application:

Establish actual fire separation distance from each exterior wall to the applicable:

- interior lot line;
- centerline of public way;
- imaginary line between buildings on the same lot, if applicable.



DIMENSION PROPERTY LINES AND FIRE SEPARATION DISTANCES ON THE CODE / SITE PLAN.

Do not use the physical distance to a neighboring building where the IBC specifically requires measurement to the property line or other defined reference.

STATUS: REQUIRED

159. PROJECTIONS INTO FIRE SEPARATION DISTANCE

2024 IBC: §705.2; Table 705.2

Applicable Requirement:

Exterior projections are limited based upon their relationship to the fire separation distance.

Applicable projections can include:

- balconies;
- decks;
- roof overhangs;
- canopies;
- exterior shading devices;
- architectural projections.

Project Application:

This provision is particularly relevant because the residential conversion includes:

NEW / MODIFIED BALCONIES, TERRACES AND EXTERIOR ARCHITECTURAL ELEMENTS

and a:

NEW EXTERIOR ELEVATOR

Each projection shall be evaluated against the actual FSD.



Combustible projections shall additionally comply with the material restrictions applicable to **Type I-B construction**.

VERIFY ALL NEW PROJECTIONS AGAINST §705.2 BEFORE FINALIZING EXTERIOR ELEVATIONS.

STATUS: REQUIRED

160. OPENING PROTECTION AT PROPERTY LINES

2024 IBC: §705.8; Table 705.8

Applicable Requirement:

Exterior wall openings are regulated according to:

- fire separation distance;
- percentage of wall area;
- protected versus unprotected opening;
- sprinkler condition.

At sufficiently small fire separation distances, openings may be prohibited.

At greater distances, protected or unprotected openings may be permitted subject to Table 705.8.

Project Application:

The existing building contains substantial glazing.

For each elevation:

CALCULATE ACTUAL EXTERIOR OPENING AREA AND COMPARE WITH THE ALLOWABLE AREA BASED UPON FSD.

New residential windows, balcony doors and other openings shall be included.

Where openings are unlimited by Table 705.8, identify that condition directly on the analysis.

STATUS: REQUIRED — ELEVATION-BY-ELEVATION ANALYSIS



161. REQUIRED OPEN SPACE / COURTS

2024 IBC: §1205 where applicable

Phoenix Zoning Ordinance: Open-space requirements principally governed locally

Applicable Requirement:

Where courts are used to provide required natural light or ventilation, they shall comply with the applicable IBC dimensional requirements.

Separately, required development open space, landscape area, setbacks and similar planning requirements are governed by the **Phoenix Zoning Ordinance/PAPP approvals**, not principally by the IBC.

Project Application:

No new interior court is presently required as the basis for residential light/ventilation.

If the final design relies upon a court for required natural light or ventilation:

VERIFY COURT DIMENSIONS UNDER CHAPTER 12.

Project zoning/open-space compliance shall remain coordinated separately with the approved planning/PAPP requirements.

STATUS: IBC COURT REQUIREMENT NOT ANTICIPATED — ZONING REQUIREMENTS SEPARATE

162. LIGHT AND VENTILATION

2024 IBC: §§1204, 1205

2024 IMC: Mechanical ventilation

Applicable Requirement:

Occupied spaces shall be provided with required lighting and ventilation.

Lighting may be provided by:



- natural means;
- artificial means;
- permitted combination.

Ventilation may be provided by:

- natural ventilation meeting applicable requirements; or
- mechanical ventilation in accordance with the IMC.

Project Application:

The project design basis is:

ARTIFICIAL LIGHTING + CODE-COMPLIANT MECHANICAL VENTILATION

with exterior glazing providing substantial supplemental daylight.

Therefore, individual dwelling units do not need to rely upon operable windows as the sole code compliance method for ventilation where compliant mechanical ventilation is provided.

Bedrooms and habitable rooms shall nevertheless be coordinated with the final architectural and mechanical design.

STATUS: REQUIRED

163. MINIMUM ROOM AREAS / DIMENSIONS

2024 IBC: §1207

Applicable Requirement:

Habitable spaces shall comply with the minimum room-area and dimensional requirements of Chapter 12.

Where applicable:

HABITABLE ROOMS — 70 SF MINIMUM



and:

NOT LESS THAN 7 FEET IN ANY HORIZONTAL DIMENSION

subject to the specific exceptions and provisions of §1207.

Kitchens are subject to the applicable exceptions and are not treated identically to other habitable rooms.

Project Application:

The proposed luxury condominium units substantially exceed minimum dwelling-unit size requirements overall.

Nevertheless, verify individual:

- bedrooms;
- habitable rooms;
- dens where classified as habitable space;
- other enclosed habitable areas

against §1207.

MINIMUM AREA COMPLIANCE IS DETERMINED ROOM-BY-ROOM, NOT BY TOTAL UNIT AREA.

STATUS: REQUIRED — EXPECTED TO COMPLY

164. CEILING HEIGHTS

2024 IBC: §1208.2

Applicable Requirement:

Occupied spaces, habitable spaces and corridors shall provide the minimum ceiling heights prescribed by §1208.

The general minimum ceiling height for occupiable spaces, habitable spaces and corridors is:



7'-6"

Bathrooms, toilet rooms, kitchens, storage rooms and certain other spaces are permitted lower minimum heights as specifically allowed by §1208.

Project Condition:

The project basis identifies:

APPROXIMATELY 12-FOOT CEILING / FLOOR-HEIGHT ENVIRONMENT THROUGHOUT

providing substantial clearance above the code minimum.

Project Application:

Coordinate local reductions caused by:

- beams;
- ductwork;
- soffits;
- plumbing;
- lighting;
- sprinkler mains;
- private internal stairs.

VERIFY MINIMUM CLEAR HEIGHT AT ALL LOCAL SOFFITS AND BUILDING SYSTEMS; NOMINAL FLOOR-TO-FLOOR HEIGHT ALONE DOES NOT ESTABLISH COMPLIANCE.

STATUS: REQUIRED — SUBSTANTIAL AVAILABLE HEIGHT

165. HABITABLE SPACE REQUIREMENTS

2024 IBC: Chapter 12

Applicable Requirement:



Habitable spaces within dwelling units shall comply with applicable Chapter 12 requirements for:

- room dimensions;
- ceiling height;
- lighting;
- ventilation;
- temperature control;
- sound transmission;
- interior environment.

Project Application:

Each condominium unit shall provide compliant habitable spaces independent of the former office/science-building configuration.

The residential conversion shall address the building as:

NEW GROUP R-2 HABITABLE ENVIRONMENT WITHIN AN EXISTING STRUCTURE

rather than relying upon the prior commercial interior conditions.

New partitions, glazing, mechanical systems and acoustic assemblies shall collectively establish the required residential environment.

STATUS: REQUIRED

166. SMOKEPROOF ENCLOSURES, IF APPLICABLE

2024 IBC: §1023.12; §403 where applicable

Applicable Requirement:

Smokeproof enclosures are required only under specific building conditions identified by the IBC, including certain high-rise and deeply below-grade conditions.



Project Condition:

The building contains:

4 STORIES ABOVE GRADE

1 BASEMENT

±50'-9" BUILDING HEIGHT

The project does not meet the high-rise threshold.

The single basement level does not, based on the presently known configuration, independently trigger a smokeproof-enclosure requirement.

Project Application:

The two existing interior exit stairs require the applicable rated enclosure, but:

SMOKEPROOF ENCLOSURES ARE NOT ANTICIPATED TO BE REQUIRED.

This conclusion shall be reconfirmed against final grade-plane and below-grade conditions.

STATUS: NOT REQUIRED BASED UPON CURRENT PROJECT CONFIGURATION

167. HIGH-RISE PROVISIONS — VERIFY WHETHER BUILDING HEIGHT TRIGGERS

2024 IBC: §202; §403

High-Rise Definition:

A high-rise building is a building having an occupied floor located more than:

75 FEET ABOVE THE LOWEST LEVEL OF FIRE DEPARTMENT VEHICLE ACCESS

Project Condition:

Building height is approximately:

±50'-9"

with four stories above grade.



Even with the occupied rooftop amenity, the critical §202 measurement is the elevation of the applicable occupied floor relative to the lowest level of fire department vehicle access—not simply overall architectural/parapet height.

Project Application:

Based upon the known building configuration:

THE PROJECT IS NOT A HIGH-RISE BUILDING.

Accordingly, the comprehensive high-rise provisions of §403 are not triggered solely by the proposed residential conversion.

This avoids high-rise-specific requirements such as those applicable to:

- high-rise fire command centers;
- high-rise smokeproof exit enclosures;
- high-rise emergency systems;
- fire service access elevators where otherwise triggered solely by high-rise classification.

DOCUMENT THE HIGHEST OCCUPIED FLOOR ELEVATION AND LOWEST FIRE DEPARTMENT VEHICLE ACCESS ELEVATION ON THE CODE ANALYSIS TO CONFIRM THE <75-FOOT CONDITION.

STATUS: NOT HIGH-RISE — VERIFY FINAL ELEVATIONS

168. OVERALL EXISTING-BUILDING / CHANGE-OF-OCCUPANCY CODE BASIS

2024 Phoenix Building Construction Code

2024 IBC: Applicable new-work provisions

2024 IEBC: Existing-building alteration / change-of-occupancy provisions

Project Condition:

This project is not new ground-up construction.

It is the conversion of an existing:



GROUP B OFFICE / SCIENCE BUILDING

to:

22 GROUP R-2 RESIDENTIAL CONDOMINIUM UNITS

with:

GROUP S-2 BASEMENT PARKING

The existing building consists principally of concrete structural construction, including existing concrete floor construction, columns/beams and concrete stair/elevator shaft construction.

The working construction classification for the converted building is:

TYPE I-B — SUBJECT TO VERIFICATION OF EXISTING CONSTRUCTION AND REQUIRED FIRE-RESISTANCE RATINGS

Applicable Requirement:

The project shall comply with the **2024 IEBC** provisions applicable to the selected compliance method, alterations and change of occupancy.

New construction and new building systems introduced as part of the conversion shall comply with applicable current-code requirements except where an IEBC provision specifically permits otherwise.

The change from Group B to Group R-2 shall be evaluated for all applicable change-of-occupancy implications, including:

- occupancy classification;
- construction type;
- allowable height/area;
- fire-resistance requirements;
- fire protection systems;
- means of egress;
- accessibility;



- structural implications;
- interior environment;
- energy compliance;
- plumbing;
- mechanical/electrical systems.

Project Design Basis:

TYPE I-B / GROUP R-2 + GROUP S-2 / NFPA 13 SPRINKLERED THROUGHOUT

4 STORIES ABOVE GRADE + 1 BASEMENT

22 RESIDENTIAL CONDOMINIUM UNITS

(2) EXISTING INTERIOR EXIT STAIRS

(2) EXISTING ELEVATORS + (1) NEW EXTERIOR ELEVATOR

OCCUPIED ROOFTOP AMENITY

EXISTING CONCRETE STRUCTURAL BUILDING WITH NEW SABS RESIDENTIAL PARTITION SYSTEMS

SELF-CONTAINED LISTED FIREPLACE APPLIANCES ONLY; NO CHIMNEYS

The existing concrete construction shall be documented to substantiate the required Type I-B fire-resistance ratings rather than assuming compliance based solely upon material type.

Where existing conditions do not meet a new-construction provision, the applicable IEBC provision shall be evaluated before requiring wholesale replacement or modification.

Conversely:

THE FACT THAT AN ELEMENT IS EXISTING SHALL NOT, BY ITSELF, BE USED AS THE BASIS FOR ACCEPTANCE WHERE THE CHANGE OF OCCUPANCY TRIGGERS A SPECIFIC UPGRADE.

The final permit documents shall coordinate the IBC/IEBC analysis with the Phoenix Fire Code, IMC, IPC, IECC, NFPA 70, ICC A117.1, applicable structural standards and other adopted/referenced codes.

STATUS: PRIMARY CODE BASIS FOR THE COMPLETE ADAPTIVE-REUSE PROJECT



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