

PLAN REVIEW CHECKLIST 2018 IBC GENERAL

This checklist covers the general amended 2018 IBC building code requirements with City of Prescott Amendments. It is not all inclusive. The code requirements are very heavily abridged. Compliance with all codes and ordinances as written is required.

1. COVER SHEET AND CODE DATA SHEET

1.A. GENERAL

- A cover sheet or code data sheet is provided. **IBC 107.2.1**
- Designer's seal, signature, and date signed on all sheets, if not exempt per state law. **IBC 107.1**
- A list of the year and name of the adopted applicable codes from the adopting ordinance. **IBC 107.2.1**
- A list that includes all the drawing sheets in this permit's scope. **IBC 107.2.1**
- A detailed description of the work involved in this permit's scope. **IBC 105.3**
- A list of deferred submittals with a note to not install until approved. **IBC 107.3.4.1.**
- The registered design professional in responsible charge is named, with contact info. **IBC 107.3.4**
- Egress stairs, guards (guardrails), and storage racking are not deferred. **IBC 107.3.4.1.**
- An architectural special inspections certificate for: impervious moisture barriers, fire-resistant spray, intumescent, EIFS, or some penetrations and joints. **IBC 1705.1.1, 1705.14 – 1705.18. Special inspection form on website**
- An architectural statement of special inspections, if required per the above items. **IBC 1704.3**

1.B. FIRE PROTECTION FOR BASIC CODE REVIEW

- A type of sprinkler system (NFPA 13 or 13R) is specified By **COP Amendments and IBC 903.2.**
- Fire alarms specified, if required by occupancy, use, or occupant load. **IBC 907.2.1 to 907.2.23.**
- Emergency voice/alarm communication specified, if used for egress widths. **IBC 1005.3.1, 1005.3.2.**
- Fire review has a separate list**

1.C. USE AND OCCUPANCY CLASSIFICATION

- Each building's primary occupancy classification is shown. **IBC 302.1**
- Each building states all the occupancy classifications it contains. **IBC 302.1**
- Buildings with more than one occupancy classification identify the mixed occupancy methodology as either accessory, nonseparated, separated, or a stated combination of types. **IBC 508.1**
- Occupancies I-1, I-2, I-3, and R-4 show their occupancy condition classification. **IBC 302.1**
- Occupancies F-2 and S-2, other than parking garages, list what can be stored. **IBC 306.3, 311.3**

1.D. TYPE OF CONSTRUCTION

- Buildings are individually classified into one construction type on a code data sheet. **IBC 602.1**
- Portions of buildings separated by fire walls or as allowed by IBC Section 510 may be classified into different construction types. **IBC 503.1, 510.1**
- Combustible building elements are not shown, if not allowed. **IBC 602.2, 602.3, 602.4**

1.E. BUILDING HEIGHT, STORIES AND AREA (Separated, Non-Separated and Mixed Occupancies)

- Allowable building height is shown and is compared to the actual *building height*. **IBC 504.3**
- Allowable number of stories is shown and is compared to the actual number of *stories*. **IBC 504.4**
- The appropriate allowable area equation is shown with the values used. **IBC 506.2**
- If frontage for *building area* is used, equation 5-4 and 5-5 are shown with the values used. **IBC 506.3**
- Buildings considered as one are calculated as a single building. **IBC 503.1.2**
- The allowable area for the entire building is shown and is compared to the actual *building area*. **IBC 506.2**
- The number of *stories* used to determine entire building allowable area is not larger than 3. **IBC 506.2.3**
- The allowable area for any single *story* is shown and is compared to the actual area. **IBC 506.2**
- Accessory occupancies are ancillary to the primary occupancy. **IBC 508.2**
- Accessory occupancies combined do not exceed 10% of any floor's area. **IBC 508.2**
- Nonseparated occupancies allowable *building area*, *building height*, and number of *stories* is the most restrictive of any of the nonseparated occupancies. **IBC 508.3.2**
- The separated occupancy's equation of summed ratios for each *story* is shown with the values used and each *story* does not exceed 1. **IBC 508.4.2**
- The separated occupancy's individual *story's* summed ratios are shown added together and together do not exceed 3. **IBC 506.2.4**

1.F. BUILDING THERMAL ENVELOPE

- IECC method is identified as ASHRAE 90.1, prescriptive, or performance (COMcheck). **IECC C401.2.**
- Any supporting documentation is provided, and a list of the appropriate values is shown, *R-value* for batt and continuous insulation with location. *U-Factor*, *PF*, and *SHGC* for fenestration. **IECC C402.1, C407.4**

2. ARCHITECTURAL SITE PLAN

2.A. GENERAL

- A scaled architectural site plan is provided showing all buildings or structures on the lot. **IBC 107.2.6**
- A north arrow and adjacent street names. **IBC 107.2.1**
- The number of stories of each building is shown. **IBC 503.1**
- The building height of each building is shown. **IBC 503.1**
- The building area of each building is shown. **IBC 503.1**
- If frontage increases for building area are used, then all necessary dimensions are shown. **IBC 506.3**

2.B. FIRE SEPERATION DISTANCE (FSD)

- Dimensioned distances between structures and adjacent lot lines. **IBC 107.2.6**
- Dimensioned distances between structures and the centerline of directly adjacent public ways. **IBC 602.1**
- Dimensioned distances between structures and a shown imaginary line between adjacent buildings on the same lot. **IBC 602.1**
- Dimensioned distances between projections and the line used to determine FSD. **IBC 705.2**
- The fire-resistance rating of all exterior walls is shown and meets **IBC Table 602. IBC 602.1**
- For buildings with NFPA 13 sprinklers the percentage of wall openings are shown for each exterior wall with an FSD less than 20 feet and are compared to allowable area. **IBC 705.8**
- For buildings with NFPA 13R sprinklers the FSD above is changed to 30 feet.
- Exterior exit stairways and exterior egress balconies have a measured 10-foot separation distance to other buildings, the building itself, and lot lines. **IBC 1021.4, 1027.5**
- Identification of protected wall openings on taller buildings near shorter buildings. **IBC 705.8.6**

2.C. EXIT DISCHARGE

- The path(s) of exit discharge is shown to a public way or a safe dispersal area. **IBC 107.2.3, 1028.5**
- The path(s) of exit discharge has a slip-resistance surface. **IBC 1003.4,**
- The path(s) of exit discharge gates have only egress door equivalent hardware. **IBC 1010.2**
- The path(s) of exit discharge are sufficiently sized. Egress courts are rated. **IBC 1028.2, 1028.4**
- Changes in elevation < 12 inches use sloped surfaces along the path of exit discharge. **IBC 1003.5**
- A photometric plan or other method of showing 1 footcandle of normal power illumination at the walking surface along the path(s) of exit discharge, while the building is occupied. **IBC 1008.2.1, IBC 1008.2.3**

3. ARCHITECTURAL FLOOR PLAN

3.A. GENERAL

- Floor plans are provided to scale for each story and each floor of all buildings and structures. **IBC 107.2.1**
- All spaces are labeled with a name or further description as needed to adequately convey the intended purpose (use) or the multiple uses of the space. **IBC 302.1**
- All spaces are labeled with their occupancy classification or classifications. Blanket labels of multiple spaces are acceptable if the differing occupancies are specifically labeled. **IBC 302.1, 508.1**
- Exterior elevated walking surfaces supported by wood refer to details for protection. **IBC 2304.12.2.5**
- In 5 or more story buildings an elevator capable of holding a stretcher is provided. **IBC 3002.4**
- Non-fire-resistance rated floor openings connect only two stories. Filled annular space. **IBC 714.6.**
- Mezzanines are open and occupy no more than 1/3rd of the room they are in. **IBC 505.2.1, 505.2.3**
- No uses below exterior exit stairways. **IBC 1011.7.4**
- Toilet rooms do not open into kitchens. **IBC 2902.3.2**

3.B. FIRE-RESISTANCE

- The fire-resistance rating of all walls and elements is shown on each floor's plan view. **IBC 602.1**
- An indication of where to find the construction information for the fire-rated assemblies. **IBC 703.3**
- Enclosed usable space below stairways is protected by fire-rated construction. **IBC 1011.7.3**
- Combustible projections are fire-rated, if extending to within 5 feet of the line to FSD. **IBC 705.2.3**
- Balconies/decks are fire-rated or meet another option. If sprinklers extend to balconies, that requirement is stated on the cover or code data sheet where the sprinkler type is called out. **IBC 705.2.3.1**

3.B.1 BUILDING ELEMENTS

- The fire-resistance rating of all building elements meets the requirements of **IBC Table 601. IBC 602.1**
- Columns and their connections are provided with individual encasement protection. **IBC 704.2**
- Columns in rated exterior walls are provided with individual encasement protection. **IBC 704.10**

3.B.2 FIRE AND SMOKE SEPERATION

- Fire walls, fire barriers, fire partitions, smoke barriers, and smoke partitions are labeled with their name, as used in the IBC. **IBC 107.2.1, 911.1.6 item 13**
- Accessible concealed spaces next to separation walls have identified signage or stenciling with the designer's chosen wording shown. **IBC 703.7**
- Separated occupancies are separated with fire barriers and horizontal assemblies with the required fire-resistance rating **from Table 508.4. IBC 508.4.4** Note that separated occupancies may have no actual separation requirement.
- All floor openings are identified and comply with a vertical opening provision. **IBC 712.1**
- Interior exit stairways are enclosed by fire barriers. 2 hours for ≥ 4 stories. Not less than floor. **IBC 1023.2**
- Exterior exit stairways are separated from the building by fire barriers and the 180° rule. **IBC 1027.6**
- Elevators are enclosed by fire barriers. 2 hours for ≥ 4 stories. Not less than floor. **IBC 3002.1, 713.2**
- Elevator machine rooms are surrounded by fire barriers and horizontal assemblies. **IBC 3005.4**
- Elevators are not in a common shaft with stairways. **IBC 3002.7**
- Waste and linen chutes, their access rooms, and their discharge rooms are protected. **IBC 713.13**
- Exit component openings are limited to only those necessary for egress. **IBC 1023.4, 1024.5, 1027.6**
- Interior exit stairway and exit passageway penetrations are limited to specified items. **IBC 1023.5, 1024.6**
- Shaft enclosure openings and penetrations are only those necessary for the shaft. **IBC 713.7.1, 713.8.1**
- Joints in separation walls and floors have a reference where to find construction information. **IBC 715.1**
- Openings in separation walls and floors have a reference where to find information. **IBC 716.1, 717.1**
- Dampers for ducts penetrating separation walls and floors are provided. **IBC 717.5**
- Access points for fire and smoke dampers are provided. Label's wording is identified. **IBC 717.4**
- Penetrations in walls and floors are identified with a reference where to find information. **IBC 714.1**
- Fire-rated assemblies are supported by fire-rated construction. **IBC 707.5.1, 708.4.1, 709.4, 711.2.3**

3.C. MEANS OF EGRESS

3.C.1. OCCUPANT LOADS

- The total number of occupants for the story or floor is shown. **IBC 107.2.3**
- The number of occupants is shown for every room and space. **IBC 107.2.3**
- The occupant load factor and area are shown for every room and space. **IBC 1004.5**
- The occupant load factor used reflects the use/function of the space. **IBC 1004.5**
- The area of corridors and similar spaces is included in gross area. **IBC 1004.5**
- The area of aisles and aisle accessways are included in net area. **IBC 1004.5**
- Assembly occupancy spaces show occupant load signage. **IBC 1004.9**
- The number of occupants being served by each egress door and stairway is shown. **IBC 107.2.3**
- The size of each egress door and stairway is shown and is compared to allowable. **IBC 1005.3**
- Exception 1 reduced widths are only allowed if an emergency voice/alarm is provided.
- The loss of one means of egress does not reduce required capacity by more than 50%. **IBC 1005.5**

3.C.2 PATH OF EGRESS

- The paths of egress are shown. **IBC 107.2.3**
- The path of egress does not pass through kitchens, storage rooms, or similar spaces. **IBC 1016.2**
- Stairways are labeled as exit stairways or exit access stairways. **IBC 107.2.3**
- The exit access travel distance is dimensioned with a clear start and stop point. **IBC 1017.2**
- The common path of egress travel is dimensioned with a clear start and stop point. **IBC 1006.2.1**
- Two paths of egress are provided from spaces and stories that require it. **IBC 1006.2.1, 1006.3**
- Exits and exit access components are separated by 1/3rd the distance of the space. **IBC 1007.1**
- An indication for where to find the construction information for the stairways. **IBC 1011.1**
- Doors swinging into the path of egress and obstructions/protrusions are dimensioned. **IBC 1003.3, 1005.7**
- Corridors and aisles are a minimum of 44" wide, 72" in group E. **IBC 1020.2**
- The length of dead-end corridors is dimensioned. **IBC 1020.4**
- Changes in elevation less than 12 inches use sloped surfaces. **IBC 1003.5**
- Exit signs are shown at doors, as required to direct egress, and every 100 feet. **IBC 1013.1**
- Doors are labeled and a hardware schedule is provided. Free egress is provided. **IBC 1010.1.9**
- Doors are side swinging, min 32" opening wide, max 48" wide, min 6-8" high. **IBC 1010.1.1, 1010.1.2**
- Doors serving a space with ≥ 50 persons swing in the direction of egress travel. **IBC 1010.1.2.1**
- Doors serving a space with ≥ 50 persons in A or E occupancies have panic hardware. **IBC 1010.1.10**
- Doors have landings, min 44" long, min door width wide. **IBC 1010.1.5, 1010.1.6**
- Exit items are used only as means of egress and circulation paths. **IBC 1023.1, 1024.1**
- Interior exit stairways go to an exit passageway, exit discharge, or a sprinkled lobby. **IBC 1023.3, 1028.1**

4. ARCHITECTURAL ROOF PLAN

- Roof plans are provided to scale for each building and structure. **IBC 107.2.1**
- Fire-resistance rated parapets are provided if a rated exterior wall or otherwise required. **IBC 705.11**
- Parapet's top elevation and adjacent roof elevation are labeled. **IBC 705.11.1**
- Primary and secondary roof drawings are labeled with elevations. **IBC 1502.2, 1611.3**
- The roof covering assembly's listed classification is shown. **IBC 1505.1**
- Any foam plastic insulation is part of the roof covering's listed classification. **IBC 2603.6**
- The roof covering is identified, and the slope is identified. **IBC Section 1507.**
- For roofs over 16 feet high with equipment, a permanent ladder is provided. **IMC 306.5**
- Guards are height labeled at equipment and roof hatches near roof edges. **IBC 1015.6, 1015.7**
- A plan view shows how access to attics is provided. **IBC 1208.2**
- Combustible projections are fire-rated, if extending to within 5 feet of the line to FSD. **IBC 705.2.3**
- Roof framing is cross vented or entirely within the building thermal envelope. **IBC 1202.2, 1202.3.**
- Skylights show an evaluation report number and provide the report. **IBC 2405.5**
- Occupied roofs add to building height, stories, area, if enclosed with walls or roofs. **IBC 503.1.4.1**

5. STRUCTURAL DRAWING CROSSOVER (This is not the structural checklist)

- Structural floor and roof plans distinctly identify primary structural frame members that are required to have individual encasement protection. **IBC 704.3**
- Combustible building elements are not shown, if not allowed. **IBC 602.2, 602.3, 602.4**
- Signage is provided for live loads exceeding 50 psf. **IBC 106.1**
- Structural penetrations of shaft enclosures are reflected on the architectural drawings. **IBC 713.8**
- Only structural members necessary for the purpose of the shaft penetrate enclosures. **IBC 713.8.1**
- Exterior balconies have structure specified that matches architectural drawings. **IBC 2304.12.2.5**
- Fasteners and connectors have corrosion protection specified, where and how required. **IBC 2304.10.5**
- Fire-rated assemblies are supported by fire-rated construction. **IBC 707.5.1, 708.4.1, 709.4, 711.2.3**
- Details showing the vertical continuity of fire walls, fire barriers, fire partitions, smoke barriers, and smoke partitions are provided and match architectural. **IBC 706.6, 707.5, 708.4, 709.4, 710.4**

6. ARCHITECTURAL BUILDING EXTERIOR ELEVATIONS AND SECTIONS

6.A EXTERIOR ELEVATIONS

- Exterior elevations are shown to scale for each building and structure. **IBC 107.2.1**
- Grade plane, adjacent grade, floor, roof, and parapet heights are relatively dimensioned. **IBC 107.2.1**
- Exterior wall coverings are identified and a reference to an installation detail is provided. **IBC 1404.1**
- A specific exterior wall water resistive barrier is identified. **IBC 1403.2**
- Details are referenced that show the water resistive barrier and flashing. **IBC 107.2.4, 1402.2, 1404.4.**
- Foam plastic insulation in exterior walls meets its restrictions. **IBC 2603.5**
- EIFS systems show an evaluation report number and provide the report. **IBC 1407.2**
- In other than type V, combustible exterior wall coverings are limited in height and area. **IBC 1405.1**

6.B BUILDING SECTIONS

- Building sections are shown to scale for each building and structure. **IBC 107.2.1**
- Min. 7'-6" ceiling heights, protruding objects are dimensioned. **IBC 1003.2, 1207.2**
- Interior wall and ceiling finishes are specifically identified. **IBC 801.1**
- Interior wall and ceiling finishes are classified for fire and smoke. **IBC 803.1**
- Foam plastics are not used an interior finish or trim, except as indicated. **IBC 802.7**
- Foam plastics have 1 inch or more of masonry/concrete cover or has a thermal barrier. **IBC 2603.4**
- Interior floor finishes are specifically identified. **IBC 804.1**
- Carpets and fiber comprised interior floor finishes are classified. **IBC 804.2**
- Curtains and fabric hangings are identified and provide test reports. **IBC 806.2**
- Building thermal envelope information is shown and matches documentation. **IECC C402.1, C407.4**

7. ARCHITECTURAL DETAILS AND SCHEDULE SHEETS

7.A GENERAL

- Specific installation detailing is provided for heavy veneer. **IBC 1404.6 – 1404.10**
- Details are provided that show the flashing and intersection detailing of water resistive components at dissimilar materials, corners, ends, joints, roof to wall intersection, and as otherwise needed. **IBC 107.2.4**

7.B. FIRE RESISTANCE

- Details for the fire-resistance rated walls, floors, and roofs. The entire figure assembly is shown on the drawings. Identify the origin of the assembly and any number it is assigned. **IBC 703.3**
- Details showing the vertical continuity of fire walls, fire barriers, fire partitions, smoke barriers, and smoke partitions are provided. Fire wall horizontal continuity. **IBC 706.5, 706.6, 707.5, 708.4, 709.4, 710.4**

- Details for the individual encasement protection of members of the primary structural frame are provided. The entire assembly is shown on the drawings. Connections are protected. **IBC 704.2, 704.3**
- Combustible building elements are not shown, if not allowed. **IBC 602.2, 602.3, 602.4**
- Details are provided showing the reinforcement cover in fire-rated concrete slabs, beams, walls, and columns. **IBC 703.3, 704.7.**
- Details for penetration firestops are provided. The entire assembly is shown on the drawings. **IBC 714.1**
- Details for fire-resistant joints are provided. The entire assembly is shown on the drawings. **IBC 715.1**
- For combustible construction, fire blocking is provided in all required locations. **IBC 718.2**

7.C. STAIRWAYS, HANDRAILS AND GUARDS

- Details are provided for the construction information for all stairs and landings. **IBC 1011.1**
- 44" min stair width, 6'-8" headroom, 7" max risers, 11" min treads, landings, handrail each side. **IBC 1011**
- Nosing projection above the tread below is a maximum of 1 ¼ inches. **IBC 1011.5.5.1**
- Details are provided for the construction information for all handrails and guards. **IBC 1014.1, 1015.1**
- Handrails return to walls, are continuous between flights, and extend where not continuous. **IBC 1014.6**
- Handrails are graspable and continuous except for brackets extending down 1.5 inches. **IBC 1014.3, 1014.4**
- Guard are 42" high and don't allow 4" sphere passage. **IBC 1015.3, 1015.4**
- Glass anywhere in a guard is laminated and heat-strengthened. **IBC 2407.1**
- SITE BUILT CABLE RAILS – the cables shall be a minimum of 1/4 inch (6.4 mm) in diameter and, the cable shall be spaced no more than 2-½ inches (63.5 mm) apart and, the cables shall be fully tensioned and, stays shall be placed no more than 4' apart. **IBC1013.1 through 1013.3**

7.D DOORS AND WINDOWS

- Door hardware is provided. The capability for free egress is specifically shown. **IBC 1010.1.9**
- Electronic locks provide completely free egress or comply with specific provisions. **IBC 1010.1.9.3**
- Only the main door uses the key lock option with the correct sign. No thumb turns. **IBC 1010.1.9.4**
- Doors in separation walls are specified as self or automatically close, as required. **IBC 716.2.6**
- Glazing in hazardous locations is identified as safety glazing. **IBC 2406**
- Glazing in rated assemblies is specified and required markings are specifically shown. **IBC 716.1.2**
- Fire door assemblies are specified with required time. No mixed assembly components. **IBC 716.2**

7.E ELEVATED EXTERIOR WALKING DECK SUPPORTED BY WOOD

- Wood supported balconies have moisture protection and ventilation. **IBC 2304.12.2.5, 2304.12.2.6**
- Balconies have details for the impervious moisture barrier, where used. **IBC 107.2.5**
- Special inspection is provided for balcony impervious moisture barriers. **IBC 110.3.6 Exception**

8. ITEMS NOT SHOWN

This checklist is not all inclusive and intentionally does not have the following, which may be in

SEPARATE CHECKLISTS:

1. Many occupancy classifications have specific items, including all of IBC Chapter 4.
2. Many construction types have specific items.
3. Unlimited area buildings.
4. Podium buildings.
5. Existing building provisions.
6. Accessibility provisions.
7. Accessible means of egress provisions.