



# Guide to Commercial Building Permit Submittal

June 30, 2023

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### Guide for Minimum Required Information for Commercial Plan Reviews:

Note: the following information must be placed on plans on an early sheet. Other information may be required for the proposed submitted building permit application.

#### Adopted Codes

Applicable Codes (show entire list as indicated)

- 2021 International Building Code
- 2021 International Mechanical Code
- 2021 International Plumbing Code
- 2021 International Fuel Gas Code
- 2023 National Electrical Code
- 2018 International Energy Conservation Code
- 2017 ANSI-117.1 (Accessibility Standards)

#### Building Data

- Project Address and Suite Number
- Project Description (scope of work for current phase)
- Last/former Use or Occupancy of space (if applicable)
- Proposed Use or Occupancy of space based on 2021 IBC, Chapter 3

#### Construction Type and Sprinkler System

- Construction Type, based on Chapter 6, and tables 601 and 705.5, IBC-2021
- Sprinkler System? (yes or no); (indicate NFPA 13 or 13R)
- Declare (if applicable) which mixed occupancy/mixed use approach is being taken for either IBC section 508.3 (Non-separated Occupancies) or Section 508.4 (Separated Occupancies)

#### Allowable Stories, Height, and Floor Area

- Allowable Number of Stories per IBC-2021, table 504.4
- Proposed Number of Stories
- Allowable Building Height per IBC-2021, Table 504.3

## Proposed Building Height (show dimensions on Building Elevations)

- Allowable Area Factor in Square Feet for Building (based on IBC-2021, Table 506.2)
  - If needed (applicable to new construction or additions only), show calculation for Frontage increases in accordance with IBC 2021, section 506.3 and table 506.3.3 or 506.3.3.1, 507, and table 506.3.3.1
- Existing/New Building Square Footage per story (including basements) and total building square footage
- Current Affected Square Footage for current scope of work (if different from total building square footage, e.g., a tenant finish project or interior remodel within a building)

## Occupant Load Calculations\*

- Occupant Load Factor for applicable Occupancies and uses of space (including incidental and accessory occupancies) based on Table 1004.5, IBC-2021)
- Occupant Loads for each Occupancy Group and use (per IBC table 1004.5), including incidental and accessory occupancy groups
- \*Incidental and accessory occupancy groups/uses shall be classified under the main occupancy group but calculated per the use of the space for that area (see table 1004.5).
- Total Occupant Load. Group by occupancy group, sub-total, and total for entire space at bottom of table
- \* If Mixed Occupancy, refer to IBC section 508 for Accessory (508.2), Non-separated (508.3) or Separated (508.4). Note that Incidental uses should be considered as part of a main occupancy group (and calculated/labeled as such) and separated via fire rated walls from other spaces as required by IBC table 509. Show separations per table 508.4.
- \*All conference rooms, training rooms, reception waiting areas, lounges, break rooms, and other accessory assembly areas will be considered part of the main occupancy group but must be calculated on a per-room basis with the applicable occupant load factor (15 sf per person) for the room function shown on Table 1004.5 for the square footage of the room. Any rooms/areas over 49 occupants will require two exits.

### Required Exits

- Show the number of exits required, based on the Occupant Loads. See section 1006.3.3.
- Show a calculation for total exit width required based on IBC section 1005.
- Indicate total exit width provided (based on exit discharge and doors into rated exit stairways).

### Plumbing Fixture Calculation

- Show plumbing fixture calculations, indicating required number of fixtures per IBC 2021, chapter 29 (per occupancy group, broken down by gender), including toilets/urinals, lavatories, drinking fountains, and service sinks. Round all partial fixtures up within each occupancy group required (do not round up at point of grand total).
- Indicate number of fixtures of each type/gender provided).

### Egress Plan

Show the following (show all graphically, with distances indicated):

- Provide the egress plan at an architectural scale (1/16" = 1'-0" minimum). Information shown must be at a legible scale, and all exit access and exit discharge must be shown.
- Longest diagonal distance of area or building. Show graphically to distinguish from other distances required. Distance between exits ("as the crow flies"). Show graphically to distinguish from other distances required.
- Show exit passageways, if applicable.
- Occupancy groups in the building labeled in applicable areas
- Occupancy Separation walls and/or fire walls, fire barriers, and fire partitions, and/or horizontal exits, as applicable
- Exit Access Travel Distances (EATD) from most remote points in space to exit discharge (show/measure path parallel and perpendicular to walls, around planned furniture, not diagonally across room). Show path graphically to distinguish from other distances required. See 2021 IBC section 1017.
- Common Path of Travel Distances (CPET), from most remote points in suite to point in suite or building where two separate and distinct exits become available. Show distance to comply with section 1006.2.1 and table 1006.2.1. Show path graphically to distinguish from other distances required.

Calculate EATD and CPET as follows:

- Measure from most remote point in space, with path shown parallel and perpendicular to walls (not diagonally). Show furniture and/or equipment as necessary to show path of travel.
- Provide Common Path of Exit Travel distance (CPET) and Exit Access Travel Distance (EATD) along a graphic path shown on the exit/egress plan.
- Common Path of Exit Travel distance is calculated from the most remote point in the space to the point at which two separate and distinct paths to two separate exits become available. See definition for Common Path of Egress Travel in IBC Chapter 2, Definitions.
- Exit Access Travel Distance is calculated from the most remote point to the exit access (as differentiated between Exit Access Stairway, which is not a rated exit—see Chapter 2 definitions), and Exit Stair, as follows:
  - Exit Access Doorway (may be the door to the enclosed, 1 hour fire resistive rated stair) –or-
  - If it's an allowed open stair, the EATD will need to be calculated to the bottom of the stair and to the exit discharge (include the distance to the exit discharge on the exterior of the building, out from under any entry way overhangs or canopy).
  - Note, if an enclosed stair does not exit directly to the exterior, then there would need to be an exit passageway (a 1-hour fire-resistive- rated protected path of egress travel in a horizontal direction to the exit discharge—see definition of Exit Passageway in IBC Chapter 2 definitions).
  - If the stair does not open directly outside, and there is no required exit passageway, calculate the EATD to the point where the path of travel discharges to a public way, out from any building overhangs or canopies.

Permits for New Buildings or Additions:

- New buildings and any remodel/addition work involving the exterior of the building require approval from Engineering (303.660.7490) and Planning/Zoning (303.660.7460) prior to building permit review application. Contact the respective departments for information on their processes and to schedule a pre-submittal meeting through Planning. Minor exterior remodel work requires only Zoning approval.

- If the permit is for a new building, or an addition to an existing building, we will require an architectural site plan showing the building, the lot lines, Fire Separation Distances, fire department access, any fences/gates required by pools (where applicable), parking spaces with handicap spaces indicated, curb ramps, sidewalks, septic leech field and well (where applicable), etc.
- For new buildings and additions, a Geotechnical/Soils Report will be required, and referenced on the Structural Drawings.
- If the building is new, a copy of the water and sewer permits will be required from the applicable jurisdiction, or if applicable, well and septic tank permits from State of Colorado and Douglas County Health Department will be required.

### Energy Code (2018 IECC)

- State on drawings which 2018 IECC Energy Compliance Path is being taken (Prescriptive, Component Performance Alternative, Trade-off with ERA/HERS cost path). Complete and submit the Commercial Energy Code Checklist.
- An energy compliance certificate (usually COMCheck but depends on the compliance path chosen) will be required, stamped/signed, for the building envelope, mechanical system, service water heating system, and interior and exterior lighting. They will need to be based on the 2018 IECC, and the inspection checklist should be included, with the location of the information on the plans shown in the Comments/Assumptions section. All the information required by the IECC will need to be shown on the drawings, along with an assembly summary. This information should not be shown only in the Specification, but rather in the drawing notes. See 2018 IECC, section C103.
- Plans should include energy code compliance building sections that show the continuity of the building envelope from foundation to walls to roof at a legible scale, where all assemblies and systems are shown, noted, and a summary given for the chosen compliance path. Show the following:
  - Min Roof R-value (see C402.2.1)
  - Min R-value for walls adj to unconditioned space see C402.2.2)
  - Min R-value for exterior walls including opaque doors (see C402.2.2)
  - Window area U-factor, SHGC, overhang size, etc. (see C402.4)
  - Min R-value for floors over unconditioned space (see C402.2.3)
  - Min R-value for below grade walls (see C402.2.5)
  - Min R-value for slab-on-grade (see C402.2.4)

- State what the required Air Barrier is comprised of and specifically indicate it on the building sections and exterior wall sections.
- Door and Window elevations and schedules should show fenestration performance to comply with the energy code. Include U-factors, SHGC, and maximum air leakage per manufacturer label based on independent testing agency.

#### Permits for all Commercial Projects:

- A fire permit will be required for all commercial permit applications before we can release the building permit. Submit the actual fire permit card.
- Zoning approval is required before the building permit can be released for all projects. Building Division submittal will be automatically routed to Zoning upon application.
- A list of the GC and MEP subs will be needed for the project, once chosen, before the building permit can be released.
- Approval by the water/sewer district may be required, based on scope of work

#### Permits for all Food Related Spaces (including Restaurants):

- If the project is, or has as part of it, a restaurant or food-related processes, approvals from Douglas County Health Department will be required.

#### Elevator Permits:

- If applicable to the project, a separate elevator plan review on the elevator shop drawings and cut sheets, and a permit and inspections will be required by a third-party entity coordinated through Douglas County Building Division.

#### Pool Permits:

- All swimming pools require a separate building permit from the associated clubhouse or other structure.
- Pools shall comply with 2017 ICC-ANSI A117.1 and 2018 IECC.
- Contact Building Division plans examiner for requirements at all gates and fences surrounding pool decks and pool/spa areas.
- Public swimming pools will require Douglas County Health Department approval. Check with DC Health to confirm the requirements for submitted pool projects. (Email them at [EH@Douglas.co.us](mailto:EH@Douglas.co.us)).

General Information—applicable to all Building Permit applications:

(Additional information may be required, based on scope of work of the project):

- Provide an electronic pdf set, stamped/signed per above. An application will be required with project valuation, along with the Douglas County Zoning Disclosure form. More information is available on the Douglas County website.  
<http://www.douglas.co.us/land/building/>
- Applicant is responsible to submit to applicable Fire Department and Water/Sewer District for separate plan review and permit process.
- All sheets must be wet stamped and signed by a Colorado Registered Design Professional (architect) for architectural sheets, and a Colorado Licensed Professional Engineer (for engineering sheets). We can accept digital stamp/signatures, but do not lock them digitally. We must be able to add our approval stamps and flatten the drawings to protect our stamps.
- Architectural, Structural (if applicable), Mechanical, & Plumbing, and Electrical plans are required, applicable to scope of work
- If rated walls (fire barriers, fire walls, fire partitions, horizontal and vertical assemblies, smoke barriers, smoke partitions) are part of the project, applicable verbatim details from UL (or other testing agency) will be required with pertinent keynotes included. These can be provided on the drawing set or as separate 8 ½ x 11s. Project specific details showing rated wall and horizontal assembly details are also required.
- Provide a valuation of the project scope for purposes of calculating the plan review fee, due at the time of permit application/submittal. A fee schedule is provided on our website (see above) and provides an approximation of the applicable permit fees for the entire scope of work. Use tax is calculated by dividing the valuation in half and multiplying it by 0.01. The Building Division will calculate the fees.

Please contact a Douglas County Commercial Plans Examiner for more information about your specific project.