

Plan Submittal Requirements for Commercial & Multi-Family Building Permits

The Gwinnett County Building Plan Review Section of Planning and Development performs the code compliance review of commercial and multifamily buildings for new construction and existing renovation.

In addition to buildings, commercial structures such as communication towers, detention pond walls and retaining walls require a building permit – contact Building Plan Review for these submittal requirements.

General Requirements

1. Submittal of complete plans are required. Plans shall demonstrate compliance with the Gwinnett County Construction Code (This includes the Georgia State Minimum Codes), Gwinnett County Unified Development Ordinance and applicable zoning conditions.
2. Plans sealed by a Georgia registered professional engineer, architect and/or interior designer is typically required for most projects.

The following code review checklist is a general overview of plan submittal requirements. Additional details and information may be required as applicable to the proposed scope of work.

Provided the following information on the plans and documents submitted for code compliance review.

Project Criteria Information

1. Provide the project name, project address, occupancy group, occupant load, type of construction category, and construction/building area on the cover sheet.
2. List the applicable building codes and zoning cases on the cover sheet.

Zoning Information

1. The permit applicant shall verify the zoning category of the project land parcel and comply with the applicable zoning conditions.
2. Zoning conditions may require that color elevations are to be submitted for preliminary review before plan review and issuance of a building permit.

Architectural Review

1. Provide information on the plans to verify compliance with IBC Tables 506.2, 601, and 602 for allowed building size, type of construction, and location on the property.
2. Provide plans, elevations, and sections with complete dimensions and detail notations.
3. Provide details that specify all types of interior wall/partition construction.
4. Provide wall section details that specify the type of exterior wallcovering.
5. Provide details that specify types of interior walls and ceiling which indicate compliance with seismic design category C.
6. Provide complete details for all fire walls, fire barriers, fire partitions, and rated horizontal assemblies. Additional rated construction review will be performed by Fire Plan Review.
7. Provide complete details for rated exterior walls including protected openings.
8. Provide complete details for duct, pipe, and appliance penetrations through rated walls and floors.

Energy Code Review

1. Specify on the drawings the roof insulation R-value, wall insulation R-value for all cavity and mass walls, elevated floor insulation R-value, the U-value and SHGC-value for all fenestrations. (Climate Zone 3-A)
2. Submit the COMCheck Energy Compliance Report (Use the 90.1 2013 Standard Code Version) for the Envelope System for the building.
3. Submit the COMCheck Energy Compliance Report (Use the 90.1 2013 Standard Code Version) for the Mechanical System for the building.
4. Submit the COMCheck Energy Compliance Report (Use the 90.1 2013 Standard Code Version) for the Interior/Exterior Lighting System for the building.
5. Specify and detail on the drawings either time-scheduling or occupant-sensing devices capable of turning off lighting in all spaces for each building which exceeds 5,000 square feet in area.
6. Specify and detail at least one control device to control the general lighting in each interior space enclosed by ceiling height partitions. The control device shall automatically turn lighting off within 30 minutes of all occupants leaving. Each control device shall control a maximum of 2,500 square feet for an space 10,000 square feet or less and a maximum of 10,000 square feet for a space greater than 10,000 square feet.
7. Submit the Preliminary Functional Performance Testing Report – Statement of Performance Requirements.

Mechanical Review

1. Specify, detail, and indicate the location on the drawings (for each floor level and roof) the type of equipment and appliances, supply and return ducts (including duct materials), exhaust fans, mechanical louvers, and piping for each air distribution system.
2. Provide a mechanical equipment and appliance schedule on the drawings that indicates air flow ratings (cfm), heating and cooling size category (Btu/h), outside air ventilation (cfm), and energy efficiency rating (EER, SEER, HSPF, COP/IPLV, or AFUE).
3. Specify on the drawings the required outdoor air required by either IMC Section 403.3 or ASHRAE 62.1 - 2010 Section 6.1. Substantiate compliance by providing calculations on the drawings which indicates the floor area (sq. ft), maximum occupant load, minimum required ventilation rate (cfm) for each occupancy, and total ventilation rate provided to the occupied space.
4. Specify and detail on the drawings the gas piping layout on each floor plan with a corresponding riser diagram which specifies the type, pressure, size, location, total equivalent length of pipe, type and location of shut-off valves and flow control devices, and schedule of equipment indicating the BTUH demand.
5. Provide specific details for occupancy and use such as commercial kitchens.

Plumbing Review

1. Specify, detail, and indicate the location on the drawings (for each floor level and roof) the required type, size, and material of each pipe for all systems including but not limited to water supply and distribution, sanitary drainage, indirect/special waste, vents, traps and interceptors, and storm drainage.
2. Provide on the drawings a fixture and equipment schedule and identify each item on the floor plans and riser diagrams including but not limited to water closets, urinals, lavatories, sinks, drinking fountains, and water heaters.
3. Provide on the drawings riser diagrams for each drain waste-vent system which indicates the type, size, and material of each pipe.
4. Specify on the drawings the occupant load used to determine the required plumbing fixtures for each tenant space. Note: The calculated occupant load shall be determined by the Gwinnett County Fire Marshal or as defined by IBC Table 1004.5.
5. Provide specific details for occupancy and use such as commercial kitchens and car wash facilities.

Electrical Review

1. Provide electrical drawings which include riser diagrams, meter groupings with disconnects, panel board sizes and locations, type of wiring and raceway systems, locations and types of receptacles and fixtures, panel board schedules and load calculations.
2. Specify on the drawings the minimum working clearances in the direction of access to live parts of the electrical equipment.
3. Specify on the drawings the requirements for tamper-resistant receptacles to ensure that occupants will be protected in all environments.
4. Provide specific details for occupancy and use such as redundant grounding wiring methods for patient care areas.

Structural Review

1. Specify on the structural drawings the soil bearing pressure in terms of pounds per square foot (PSF) utilized in the design of the foundations.
2. Specify on the structural drawings the dead load and live load applicable to the design of the roof structure.
3. Indicate on the structural plans the locations and operating weights of all mechanical equipment and other significant load items considered in the structural design. If the roof structure is not designed to support concentrated loads, note accordingly on the structural drawings.
4. Indicate on structural drawings the dead loads and live loads applicable to the design of the mezzanine and/or floor structure for all areas and intended uses. As applicable, include partition design live load and concentrated design live loads per IBC Table 1607.1.
5. Submit shop drawings for construction of each building component not designed by the design team-of-record and not specified on the project construction documents shall be sealed and signed by a professional engineer registered in the state of Georgia and shall be available at the job site during the times of inspection.
6. Indicate on the structural drawings the following seismic data applicable to the design of the structure:
 - Mapped spectral response acceleration coefficients SS and S1;
 - Design spectral response acceleration coefficients SDS and SD1;
 - Risk Category;
 - Importance Factor, (I_e);
 - Applicable Site Class;
 - Seismic Design Category;
 - Basic Seismic Force Resisting System(s);
 - Response modification coefficients(s), R;
 - Seismic Response Coefficient(s), C_s;
 - Design Base Shear(s) for each of two separate and independent orthogonal directions;
 - Seismic Analysis Procedure.
7. Indicate on the structural drawings the following seismic data for buildings constructed in accordance with of conventional light frame construction provisions of IBC Section 2308:
 - (A) Risk Category;
 - (B) Applicable Site Class;
 - (C) Seismic Design Category.
8. Submit site-specific data prepared (sealed and signed) by a professional engineer or geologist registered in the state of Georgia to substantiate assignment of project site as either Site Class A, B, or C.
9. Indicate on the structural drawings the required material specifications for all steel reinforcement to be placed in concrete construction including ASTM designation, and material grade or yield strength (KSI) for compliance with ACI 318-14 section 20.2 and section 20.3 (for post-tensioning strands).
10. Specify on the structural drawings the type, size, spacing, and minimum required embedment depth into concrete of anchors required for connection of steel or wood framing components to concrete structural elements. For each anchor that is installed at a distance less than the specified anchor embedment depth from the edge of concrete or joint in concrete, also include the minimum required clear distance from the concrete edge or joint.
11. Specify on the structural drawings the information for structural masonry Required type(s) of mortars per ASTM C 270, conformance of masonry grout with ASTM C 476. (Alternatively, specify minimum required grout compressive strength equal to f'_m (compressive strength of masonry) but not less than 2000 psi as determined in accordance with ASTM C 1019.), required net area compressive strength (f'_m) of masonry, and required material specifications for all steel reinforcement to be placed in masonry construction including ASTM designation, and material grade or yield strength (KSI)
12. Provide steel details in accordance with the provisions of AISC 341-16 for steel lateral load resisting systems (except for "steel systems not specifically detailed for seismic resistance" with a response modification coefficient R of 3.0).
13. Specify on the drawings the hold-down anchorage hardware at the ends of each shear wall where the wind or seismic overturning moment exceeds the dead load stabilizing moment.
14. Specify on the drawings the required species and grade of lumber for all structural framing components.
15. Specify on the drawings the required size, spacing, and height of walls framed with wood studs including continuous double top plate.
16. Indicate on the framing plans the required sizes and locations of all beams, posts, and headers.
17. Provide complete fabrication and erection drawings for construction of the pre-engineered building which specify the required materials, sizes, and locations for all structural elements. Detail required connections between all structural framing components including anchorage to foundation to adequately resist all applicable design loads including gravity, wind, and seismic. Specify gravity and lateral design criteria and identify the lateral force resisting systems on the drawings.

Special Inspections

1. Specify on the plans the materials and systems of this project which require Special Inspections per IBC Chapter 17.
2. Submit the Gwinnett County Special Inspections Program documents which include the Statement of Special Inspections, signed and sealed by the Design Professional in Responsible Charge (DPIRC), Statement of Special Inspections Requirements for Seismic Resistance, and Schedule of Special Inspection Services with all line items indicated as "yes" or "no" and the Special Inspection Agent(s) identified.

Site Lighting

1. Submit a site lighting plan which includes the locations for all fixtures, proposed type of fixtures (submit vendor drawings) and light poles, and Point by Point photometrics designed in accordance with IESNA.
2. Specify on the plans that exterior lighting fixtures shall be cutoff luminaires with the lighting source completely concealed in an opaque housing, and fixtures shall be recessed in the opaque housing, and that the fixture lighting shall be directed in toward the property so as not to reflect into adjacent properties or thoroughfares.

Site Parking Areas

1. Specify on the plans the location and type of electric vehicle charging system for the parking lot area. Commercial and multi-family developments which have more than 49 parking spaces shall provide one electrical vehicle charging station for each fifty (50) parking spaces.

Current Building Codes and Ordinances

- The Gwinnett County Construction Code (2015 Version)
- The Gwinnett County Unified Development Ordinance (UDO)

The Georgia State Minimum Standard Codes:

- International Building Code, 2018 Edition with 2020 Georgia State Amendments
- International Mechanical Code, 2018 Edition with 2020 Georgia State Amendments
- International Plumbing code, 2018 Edition with 2020 Georgia State Amendments, and IPC Appendix F
- International Fuel Gas Code, 2018 Edition with 2020 Georgia State Amendments
- NFPA National Electrical Code, 2017 Edition
- International Energy Conservation Code, 2015 Edition with 2020 Georgia State Amendments
- International Swimming Pool and Spa Code, 2018 Edition with 2020 Georgia State Amendments
- International Existing Building Code, 2012 Edition with 2015 Georgia State Amendments
- International Residential Code for One & Two Family Dwellings, 2018 Edition with 2020 Georgia State Amendments, and IRC Appendix F

Plans and documents shall be submitted online at the following web address:

<https://eddspermits.gwinnettcountry.com/CitizenAccess/Default.aspx>