

## Gwinnett County Building Plan Review Building Code Compliance Checklist

<b>Project Name</b>	
<b>Project Address</b>	
<b>Type of Work (Permit)</b>	
<b>Use of Construction</b>	

<b>Date of Review</b>		<b>Type of Occupancy</b>	
<b>PJX No.</b>		<b>Type of Construction</b>	
<b>BLD No.</b>		<b>SPR or UNSPR</b>	
<b>DEV No.</b>		<b>District/Land Lot/Parcel</b>	

**Gwinnett County**  
**Department of Planning and Development**  
 One Justice Square, 446 West Crogan Street, Lawrenceville, Georgia 30046  
 678-518-6040  
[www.gwinnettcounty.com](http://www.gwinnettcounty.com)

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**RELATED AGENCIES**

<b>Fire Plan Review</b> 678-518-6000	<b>Water &amp; Sewer Review</b> 678-518-6000
<b>Development Review</b> 678-518-6010	<b>Current Planning</b> 678-518-6000
<b>Environmental Health</b> 770-963-5132	<b>Permits Office</b> 678-518-6020



## BUILDING CRITERIA & ZONING REVIEW

AUTH NO. **BUILDING CODE COMPLIANCE ITEM**

**BC00 PROJECT CRITERIA AND DRAWING FORMAT**

Not Met	<b>BC01</b>	<p>Provide the following project criteria on the cover sheet for all new buildings:</p> <p>PJX No.                      Building Permit No.                      Project Name                      Project Address                      Site Development Permit (CDP or MDP)                      District/Landlot/Parcel No.                      Zoning District</p> <p>Occupancy Group                      Calculated Occupant Load</p> <p>Type of Construction                      Sprinklered (or) Unsprinklered</p> <p>New Building Area Per Floor                      New Total Floor Area                      New Basement Area                      New Mezzanine Area                      New Canopy-Porch-Balcony Area                      Total New Building Area                      Existing Building Area                      Total Building Area (new + existing)</p> <p>Number of Stories                      Building Height                      Building Code Height Limit                      County Zoning Height Limit</p>
Not Met	<b>BC02</b>	<p>Provide the following project criteria on the cover sheet for all interior finish permits:</p> <p>Project Name                      Project Address</p> <p>Occupancy Group                      Calculated Occupant Load</p> <p>Type of Construction                      Sprinklered (or) Unsprinklered</p> <p>Modified Interior Area Per Floor                      Modified Basement Area                      New or Modified Mezzanine Area                      Total Modified Interior Area</p> <p>Floor Level Location of Tenant suite                      Number of Stories in Building</p>

## BUILDING CRITERIA & ZONING REVIEW

Not Met	<b>BC03</b>	<p>Provide the following list of applicable codes that apply to the project on the cover sheet of the construction drawings:.</p> <p>The Gwinnett County Construction Code (GCCC) as adopted on October 1, 1991 including revisions, amendments, and appendices to the following codes:</p> <ul style="list-style-type: none"> <li>- International Building Code - 2006 Edition with 2007,2009 &amp; 2010 Georgia State Amendments</li> <li>- International Mechanical Code - 2006 Edition with 2007, 2008, 2010, 2011 &amp; 2012 Georgia State Amendments</li> <li>- International Plumbing Code - 2006 Edition with 2007, 2008, 2009, 2010, 2011 &amp; 2012 Georgia State Amendments</li> <li>- International Fuel Gas Code - 2006 Edition with 2007, 2008,2009, 2010, &amp; 2012 Georgia State Amendments</li> <li>- NFPA National Electrical Code - 2011 Edition</li> <li>- International Energy Conservation Code - 2009 Edition with 2011 &amp; 2012 Georgia State Supplements and Amendments</li> <li>- International Residential Code for One &amp; Two Family dwellings - 2006 Edition with 2007, 2008, 2009, 2010, 2011 &amp; 2012 Georgia State Amendments</li> <li>- The Gwinnett County 1985 Zoning Resolution, including revisions</li> </ul>
Not Met	<b>BC04</b>	<p>Provide a key plan of the entire building which clearly indicates the layout of each applicable floor level and identifies the specific floor area(s) affected by the proposed construction. (<b>GCCC section 103.2</b>)</p>
Not Met	<b>BC05</b>	<p>Indicate the correct <b>street address</b> for each building, tenant suite, and structure of the project in the title block of each drawing including the cover sheet.</p>
Not Met	<b>BC06</b>	<p>Provide on the cover sheet a complete index of all submitted drawings.</p>
Not Met	<b>BC07</b>	<p>Specify on the cover sheet a list of <b>Special Inspections</b> required. The registered design professional in responsible charge shall prepare a statement of special inspections in accordance with <b>IBC Section 1704.1.1 &amp; 1705</b>.</p> <p>Special Inspections may include and is not limited to the following:</p> <ul style="list-style-type: none"> <li>-Steel construction (IBC Table 1704.3).</li> <li>-Concrete construction (IBC Table 1704.4).</li> <li>-Masonry Construction (IBC Table 1704.5.1).</li> <li>-Soils (IBC Table 1704.7).</li> <li>-Pile foundations (IBC Table 1704.8).</li> <li>-Pier Foundations (IBC Table 1704.9).</li> <li>-Sprayed Fire-resistant material (IBC Section 1704.10).</li> <li>-Mastic and Intumescent Fire-resistant coating (IBC Section 1704.11).</li> <li>-EIFS (IBC Section 1704.12).</li> <li>-Seismic resistance (IBC Section 1707.1 &amp; 1708.1)</li> </ul> <p>Provide a note on the Cover sheet that <b><i>"Special inspection reports and a final report in accordance with Section 1704.1.2 of the Georgia State Minimum Standard Building Code shall be available at the time the building is approved for occupancy"</i></b>.</p>

## BUILDING CRITERIA & ZONING REVIEW

Not Met	<p><b>BC08</b></p> <p>Each drawing shall bear the seal of a professional engineer registered in the state of Georgia with corresponding handwritten signature thereon for any of the following construction projects:</p> <ul style="list-style-type: none"> <li>(A) Each building and structure with value of construction of \$100,000 or greater</li> <li>(B) Each residential building consisting of three (3) or more stories.</li> </ul> <p>(O.C.G.A. section 43-15-24)(GCCC section 103.2.3)</p>
Not Met	<p><b>BC09</b></p> <p>Each drawing shall bear the seal of an architect registered in the state of Georgia with corresponding handwritten signature thereon for any of the following construction projects:</p> <ul style="list-style-type: none"> <li>(A) Each building and structure with Assembly, Educational, Institutional, and Residential (R-1 and R-2) occupancy; or</li> <li>(B) Each multi-story building and structure; or</li> <li>(C) Each single-story building and structure with floor area greater than 5,000 square feet.</li> </ul> <p>Note: State Law prohibits the practice of architecture by professional engineers for the projects listed in (A), (B), and (C) above.</p> <p>(O.C.G.A section 43-4-14)(GCCC section 103.2.3)</p>
Not Met	<p><b>BC10</b></p> <p>Each drawing shall bear the seal of an interior designer registered in the state of Georgia with corresponding handwritten signature thereon for any of the following construction projects:</p> <ul style="list-style-type: none"> <li>(A) Nonstructural interior construction of a building which may include space planning, finishes, furnishings, fixtures, equipment, and non-loadbearing interior walls/partitions.</li> <li>(B) Responsibility for life safety design of proposed or modifications of existing nonstructural and nonengineered elements of construction such as partitions, doors, stairways, and paths of egress connecting to exits or exit ways</li> </ul> <p>Note: State Law excludes the design for the building shell or any building shell systems and/or construction which materially affects building life safety systems pertaining to fire safety protection such as fire-rated vertical shafts in multistory structures and fire-rated protection of structural elements with the exception of incidental restoration of fire protection to elements impacted by nonstructural elements of construction, smoke evacuation, emergency sprinkler systems, and emergency fire alarms</p> <p>(O.C.G.A section 43-4-30)(GCCC section 103.2.3)</p>
Not Met	<p><b>BC11</b></p> <p>For projects which require architect/interior designer/engineer-of-record as indicated in items # BC08 BC09, and BC10 each drawing (including cover sheet with index) shall bear a legible original or direct image copy of the seal of the corresponding design professional registered in the state of Georgia with handwritten signature thereon.</p> <p>NOTE: Adhesive-back or embossed seals and CAD or stamp generated signatures are NOT acceptable.</p> <p>Official Code of Georgia sections 43-4-16, 43-15-22; Georgia State Board of Architects and Interior Designers Rule 50-2A-.01, Georgia State Board of Registration for Professional Engineers and Land Surveyors Rule 180-12-.02</p>

## BUILDING CRITERIA & ZONING REVIEW

Not Met	<b>BC12</b>	Indicate on the cover sheet of submitted construction documents the name, address, and phone number of project designer-of-record ( <i>engineer, architect, draftsman, etc.</i> ). [Georgia State Board of Registration for Professional Engineers and Land Surveyors Rule 180-12-02]
Not Met	<b>BC13</b>	Provide either on or attached to the cover sheet of construction documents a complete index of all submitted drawings which address the proposed scope of work including architectural, structural, mechanical, electrical, and plumbing.
Not Met	<b>BC14</b>	Each sheet of submitted construction documents which indicates any status other than For Construction shall be considered incomplete and cannot be approved for issuance of a building permit. [Georgia State Board of Registration for Professional Engineers and Land Surveyors Rule 180-12-.02]
Not Met	<b>BC15</b>	Submit construction documents for all premanufactured buildings with the approved Georgia Department of Community Affairs (DCA) (or DCA-approved Third Party Agency) Approval Stamp to verify compliance with the Rules of the Commissioner of Community Affairs for Industrialized Buildings.  Approval Stamp by 3rd party evaluation agency shall include the minimum information required by the Industrialized Building Rule 110-2-6.07.
Not Met	<b>BC16</b>	Submitted drawings are incomplete to the extent that a review for building code compliance cannot be performed. Provide complete construction documents which accurately describe and detail the architectural, structural, mechanical, electrical, and plumbing components and systems associated with the proposed work. Review will continue upon receipt of complete revised drawings.
Not Met	<b>BC17</b>	XXXXXXXX
Not Met	<b>BC18</b>	XXXXXXXX
Not Met	<b>BC19</b>	XXXXXXXX

## BUILDING CRITERIA & ZONING REVIEW

### AZ00 ZONING COORDINATION

Not Met	<b>AZ01</b>	<p>Building Plan Review staff has conducted a research of available records maintained in the Department of Planning and Development in an attempt to identify all applicable special use permits (SUP), rezoning cases (RZ, REZ, RZC, RZM, RZR), zoning waivers (WVR), zoning variances (ZVR), buffer reductions (BRD), change in conditions (CIC), and administrative zoning variances (AVR) which impact this project.</p> <p>The following cases have been identified for this project: XXXXXX</p> <p>Provide a copy of all case conditions on the coversheet.</p> <p>Please be aware that unsuccessful efforts by Building Plan Review staff to locate all corresponding county records in determining the additional requirements of SUP, RZ, REZ, RZC, RZM, RZR, WVR, ZVR, BRD, CIC, and AVR do not relieve the project owner and building designer-of-record from full compliance.</p>
Not Met	<b>AZ02</b>	<p>Review of architectural elevations and sections indicates that the proposed height of the building exceeds the maximum allowable height for the zoning district applicable to this project as established by section 1401 of the 1985 Zoning Resolution of Gwinnett County. Either reduce the building height to within the maximum allowable height or obtain a zoning variance for the proposed height. [Contact Development Services at (678) 518-6000 for information regarding the variance process.]</p>
Not Met	<b>AZ03</b>	<p>A Tall Structure Permit is required for a steeple which extends fifty (50) feet or greater above grade. Contact Development Services at (678) 518-6009 for additional information.</p>
Not Met	<b>AZ04</b>	<p>Submit color renderings of building elevations for all sides of the building to clearly document compliance with the Architectural Design Guidelines established per section 1315.2.5 of the 1985 Zoning Resolution of Gwinnett County for each structure located within any of the Overlay Districts. For buildings constructed on Mill Creek property, submit letter of certification from Mill Creek, LLC which indicates compliance of the proposed development and building plans with the Design Guidelines of Mill Creek.</p> <p>Color renderings shall identify manufacturer color names and identification numbers of all exterior finish materials.</p>
Not Met	<b>AZ05</b>	<p>Submit a copy of the landscape plans which indicate the plant material and plant areas immediately in front of the building for compliance with the Gwinnett County 1985 Zoning Resolution, Section 1315, 5., 5.A., (4).</p>
Not Met	<b>AZ06</b>	<p>Submit digital copy of color renderings to "marcus.canada@gwinnettcountry.com".</p>
Not Met	<b>AZ07</b>	<p>Attach a copy of the approved color elevation renderings to the front of the County Approved Construction drawings which are stamped as "KEEP ON JOB SITE"</p>
Not Met	<b>AZ08</b>	<p>Provide on the cover sheet a copy of all zoning conditions that apply to the design of the building elevations.</p> <p>Also, provide a note on the cover sheet that "The Designer of Record shall submit an affidavit letter to the Gwinnett County Building Inspector that the constructed building elevation design, materials, and colors comply with the County approved elevations." (The affidavit must be submitted prior to the issuance of the Certificate of Completion or Certificate of Occupancy)</p>

## BUILDING CRITERIA & ZONING REVIEW

Not Met	<b>AZ09</b>	Submit a copy of the approved site plan including a site location map for each proposed structure which is located within any of the overlay districts (including Mall of Georgia, Civic Center, U.S. Highway 78 Corridor, Grayson/Highway 20, Centerville/Highway 124, Highway 124/324/Hamilton Mill) or which is subject to conditions of rezoning cases or special use permits stipulating review and approval of building plans by the Director of Planning and Development. Director review will not proceed in the absence of the required site plan.
Not Met	<b>AZ10</b>	Obtain approval from Development Review Section for each business with either a drive-up window or exterior sliding doors to verify minimum required clearance for adequate traffic flow along interior driveways of off-street automobile parking areas in accordance with Article X section 1001.2 of the 1985 Zoning Resolution of Gwinnett County.
Not Met	<b>AZ11</b>	<p>State the following (verbatim) on architectural drawings for compliance with Gwinnett County Clean Indoor Air Ordinance (Article VI section 42-129 of the Gwinnett County Code of Ordinances), Rules of the Department of Human Resources Public section 290-5-61-.05 (for Georgia Smokefree Air Act of 2005), and O.C.G.A. section 31-12A-8:</p> <p style="padding-left: 40px;">A sign clearly stating that smoking is prohibited shall be conspicuously posted by the building owner, agent, operator, person in charge or proprietor at each entrance or in a position clearly visible upon entry into the building in accordance with Georgia Smokefree Air Act of 2005. Acceptable signs shall display either "NO SMOKING" or the international "no smoking" symbol (consisting of a pictorial representation of a burning cigarette enclosed in a red circle with a red bar across it).</p> <p>[NOTE: For exemptions to the prohibition of smoking in public places and in places of employment, refer to Article VI section 42-127 of the Gwinnett County Code of Ordinances.]</p>
Not Met	<b>AZ12</b>	<p>State (verbatim) on the plans:</p> <p>"Signs are not approved within the scope of this building permit. A separate sign location permit is required for each sign".</p> <p>Contact Development Review at (678) 518-6010 for additional information.</p>
Not Met	<b>AZ13</b>	XXXXXXXX
Not Met	<b>AZ14</b>	XXXXXXXX
Not Met	<b>AZ15</b>	XXXXXXXX

## BUILDING SITE REVIEW

AUTH NO. BUILDING CODE COMPLIANCE ITEM

### AP00 SITE PLAN COORDINATION

Not Met	<b>AP01</b>	Prior to issuance of a building permit for this project, a Commercial Development Permit (CDP) or Multi-family Development Permit (MDP), as applicable, shall be obtained from the Development Review Section after review and approval of the corresponding site plans. <i>Contact Development Review Section at (678) 518-6010 for additional information regarding requirements for a development permit.</i>
Not Met	<b>AP02</b>	Project name on the building construction documents shall correspond with the project name indicated on the approved site plan on file with the Development Review Section.
Not Met	<b>AP03</b>	Building identification ( <i>office, warehouse, shopping center, church, etc.</i> ) on the building construction documents shall correspond with the building identification indicated on the approved site plan on file with the Development Review Section.
Not Met	<b>AP04</b>	Overall perimeter building dimensions on the building construction documents shall correspond with the building dimensions indicated on the approved site plan on file with the Development Review Section. Include dimensions for canopies and major roof projections.
Not Met	<b>AP05</b>	Square footage of building area under roof as proposed on the building construction documents shall correspond with the square footage indicated on the approved site plan on file with the Development Review Section.
Not Met	<b>AP06</b>	Submit a site plan indicating all existing and proposed parking spaces to verify that the proposed occupancy shall comply with 1985 Zoning Resolution of Gwinnett County, Section 1002 (Number of Off-Street Parking Spaces Required).
Not Met	<b>AP07</b>	XXXXXXX

### BS00 BUILDING SITE REVIEW

Not Met	<b>BS01</b>	Site plans as submitted on {month-day-year} have been reviewed for code compliance and appear to be in accordance with the 2006 International Building Code with Georgia State Amendments. Future revisions to these plans shall require further review.
Not Met	<b>BS02</b>	State the following (verbatim) on the site plan: "Each building and its relative location to property lines and other structures shall comply with the 2006 International Building Code with Georgia State Amendments (IBC) with regards to the height and area requirements of IBC Table 503 and the fire resistance and horizontal separation requirements of IBC Tables 601 and 602 based on occupancy group classification and type of construction."
Not Met	<b>BS03</b>	State the following (verbatim) on the utilities site plan: "This site plan indicates potable water service lines and sanitary sewer laterals. Georgia state law requires this work to be installed by a Georgia Licensed master Plumber. This work requires a separate site plumbing permit which can be obtained from Gwinnett County Building Permits. All work shall be inspected by the Gwinnett County Plumbing Inspections. Inspections shall be requested by phoning 678-518-6277."
Not Met	<b>BS04</b>	Indicate on the site utility plan the size and location for each potable water service line (with separate backflow preventer located at the primary meter) and for each sanitary sewer line. For each site with multiple buildings, provide an additional backflow preventer at the shut-off valve on the service line for each building. (2006 International Plumbing Code Section 608)

## BUILDING SITE REVIEW

Not Met	<b>BS05</b>	Dimension on the site plan the shortest distance from each side of each structure to adjacent property lines and to other structures.
Not Met	<b>BS06</b>	Indicate on the site plan the following for each structure: gross area in square feet per floor level (including area due to horizontal projection of roof/floor above); number of stories; height of building; proposed occupancy type or use; type of construction; <u>sprinklered or non-sprinklered building.</u>
Not Met	<b>BS07</b>	Provide building identification on the site plan. Label each structure with a unique alpha/numeric identifier.
Not Met	<b>BS08</b>	Specify on the site plan for each structure the overall building perimeter dimensions including those for courtyards, canopies, and other major building appendages.
Not Met	<b>BS09</b>	State on the site plan the following information for each existing and proposed new structure to verify compliance with the height and area requirements of IBC Table 503: type of construction; gross area of building (square feet); number of stories; height of building; sprinklered or non-sprinklered building; shortest distance from each side of each building to adjacent property lines and to other structures.
Not Met	<b>BS10</b>	Dimension on the site plan a clear open space of sixty (60) feet around the entire perimeter of building to other structures and to adjacent property lines for compliance with the requirements of IBC section 507 for unlimited area buildings.
Not Met	<b>BS11</b>	Fire-resistance rating requirements for exterior walls due to location of buildings from adjacent property lines and other buildings shall be as specified by the 2006 International Building Code (IBC) Table 602 "Fire-Resistance Rating Requirements For Exterior Walls Based On Separation Distance" and Table 704.8 "Maximum Area Of Exterior Wall Openings." Identify all walls in question on the site plan and indicate the corresponding fire-resistance rating.
Not Met	<b>BS12</b>	Indicate on the site grading plan the applicable location for each site retaining wall and for each detention pond wall (dam). Specify the elevation at the top and bottom of each wall either on the site grading plan or on a wall profile. For sites with multiple walls, label each wall with a unique alpha/numeric identifier. Remove from the site plans all structural details and specifications pertinent to the construction of retaining walls (which either exceed 4 feet in height or have a backfill slope greater than 1 foot rise in 3 feet horizontal) and detention pond walls (dams). NOTE: Structural construction details and specifications for each retaining wall and for each detention pond wall shall be submitted to Gwinnett county Building Plan Review for review and authorization of a separate building permit.
Not Met	<b>BS13</b>	State the following (verbatim) on the site grading plan to indicate retaining wall building permit requirements: "A separate building permit shall be obtained prior to construction for each site retaining wall (which either exceeds 4 feet in height or which has backfill slope greater than 1 foot rise in 3 feet horizontal) and for each detention pond wall (dam) in accordance with Gwinnett County Construction Code Section 103.1.1. A Certificate of Completion shall be issued by Gwinnett County Building Inspections Section for walls pertinent to the project prior to issuance of a Certificate of Occupancy for any usable structure on the site prior to authorization of the Final Subdivision Plat as applicable."
Not Met	<b>BS14</b>	State the following (verbatim) on the site plan: "Construction documents for each premanufactured building shall be reviewed and approved by the Georgia Department of Community Affairs (DCA) to indicate compliance with the Industrialized Buildings Act (Georgia Law 1982 pp. 1637-1643) prior to issuance of a building permit."
Not Met	<b>BS15</b>	Indicate on the landscape plans the types of plants and locations of plants immediately in front of or on the building for compliance with the requirements of the Activity Center/Corridor Overlay District, section 1315 of the 1985 Zoning Resolution of Gwinnett County. All plants must be permanent in-ground planting.

## BUILDING SITE REVIEW

Not Met	<b>BS16</b>	Submit a complete site lighting plan which includes the following: (A) Locations for all fixtures; (B) Proposed types of fixtures (submit vendor drawings) and light poles; (C) Point-by-point photometrics designed in accordance with IESNA (Illuminating Engineering Society of North America). Document compliance with the requirements of Section 1315.2.1.F of the 1985 Zoning resolution of Gwinnett County for each off-street parking area associated with non-residential and multi-family developments located within any of the Activity Center/Corridor Overlay Districts.
Not Met	<b>BS17</b>	State the following (verbatim) on the site lighting plan: "Prior to final inspection of the site lighting, the site lighting design professional of record for the project shall submit to the Chief Electrical Inspector a signed letter which states that...I have observed the site lighting for this project in operation at night in the absence of daylight to verify that the lighting is consistent with the approved site lighting plans."
Not Met	<b>BS18</b>	Submit a complete site lighting plan for each off-street parking area associated with non-residential and multifamily developments which clearly documents compliance with the parking lot lighting standards specified per Section 1008 of the 1985 Zoning Resolution of Gwinnett County, except parking areas located within the established Activity Center/Overlay Districts shall comply with Section 1315.2.1.F.
Not Met	<b>BS19</b>	If site lighting is not proposed for this project, state the following (verbatim) on the site plan: "Site lighting is not included in the scope of work for this project."
Not Met	<b>BS20</b>	State the following (verbatim) on the site plan for townhouse projects: "A minimum two (2) hour fire-resistance wall is required between each attached dwelling unit for compliance with the International Residential Code Section R317.2 and a four (4) rated fire wall is required between every fourth and fifth attached dwelling unit for compliance the 1985 Zoning resolution of Gwinnett County.
Not Met	<b>BS21</b>	XXXXXXXX
Not Met	<b>BS22</b>	XXXXXXXX
Not Met	<b>BS23</b>	XXXXXXXX

## ARCHITECTURAL REVIEW

AUTH NO. BUILDING CODE COMPLIANCE ITEM

### AG00 ARCHITECTURAL - GENERAL REVIEW

Not Met	<b>AG01</b>	Architectural drawings as submitted have been reviewed for code compliance and appear to be in accordance with the International Building Code. Future revisions to these plans shall require further review.
Not Met	<b>AG02</b>	Each building shall comply with the height and area requirements of IBC table 503 and the fire resistance and horizontal separation requirements of IBC tables 601 and 602. To document compliance, submit at least one (1) copy of the county-approved site plan.
Not Met	<b>AG03</b>	Proposed building does not appear to comply with the requirements of IBC Table 503 with regards to specified type of building construction, occupancy classification, and allowable building area, height, and number of stories.
Not Met	<b>AG04</b>	Submit a copy of the approved site plan on file with the Development Review Section which clearly documents compliance of each proposed building with the requirements of a basement as stated in IBC sections 202, 502.1, and 1612.2. Site plan shall identify building floor elevations, finished grade contours along all sides of the building, and spot elevations at each corner of the building and at each side of foundation wing walls. Building elevations on the architectural plans shall be coordinated with the finished grade elevations on the approved site plan.
Not Met	<b>AG05</b>	Dimension the height(s) of the building at roofs, parapets, towers, and penthouses on all building elevations. Building height shall be measured from grade plane to a datum elevation at the average height of the highest roof surface. Height shall also include penthouses and other rooftop structures (including but not limited to towers, spires, steeples, and cupolas) with aggregate area exceeding one-third (1/3) of the area of the supporting roof. (IBC sections 502 and 1509.2)
Not Met	<b>AG06</b>	The allowable building area for separated occupancies in a mixed occupancy shall be such that the sum of the ratios of the actual floor area of each occupancy divided by the allowable area for each occupancy shall not exceed one (1). Provide area calculations on plans to clearly document compliance. (IBC sections 506.4.1, 508.3.3.2, and table 503)
Not Met	<b>AG07</b>	The allowable building area of IBC table 503 appears to have been increased for this project based on the area modifications permitted for street frontage and for automatic sprinkler system protection. Provide calculations on plans to document allowable building area in accordance with <i>Equation 5-1</i> of IBC section 506.1 and <i>Equation 5-2</i> of IBC section 506.2.
Not Met	<b>AG08</b>	The maximum area of a building with more than one story above grade shall not exceed the allowable area of the first (1st) floor determined in accordance with IBC section 506.1 multiplied by the number of stories above grade plane up to a maximum of three (3) stories except the limit of three (3) stories is not applicable for determining the maximum area of buildings equipped with an automatic sprinkler system per NFPA 13R and unlimited area buildings shall comply with the requirements of IBC section 507. (IBC section 506.4)
Not Met	<b>AG09</b>	Provide an automatic sprinkler system throughout the area of each building which exceeds the limits specified per IBC section 903.2 based on the applicable occupancy classification and use.
Not Met	<b>AG10</b>	Indicate the proposed occupancy classification and design occupant load including employee/customer count for each building. Submit documentation from Fire Marshal's Office to verify occupancy classification and occupant load. (IBC section 1004.1)

## ARCHITECTURAL REVIEW

Not Met	<b>AG11</b>	XXXXXXXX
Not Met	<b>AG12</b>	XXXXXXXX
Not Met	<b>AG13</b>	XXXXXXXX
Not Met	<b>AG14</b>	XXXXXXXX

### AI00 ARCHITECTURAL - INTERIOR FINISH REVIEW

Not Met	<b>AI01</b>	Specify required type of safety glazing including but not limited to tempered and laminated in doors and windows for all hazardous locations. Wired safety glazing is allowed only in fire rated doors and door sidelights. Indicate all applicable locations by either a glazing schedule referenced to the drawings or by appropriate labels on floor plans and elevations in absence of a glazing schedule. (IBC section 2406.3)
Not Met	<b>AI02</b>	Interior glass panels up to 6'-0" in height with butt joints shall have a minimum thickness of 1/2" in addition to mall clips (per item AR15) installed along butt joints at a maximum spacing of 36 inches on center. (IBC sections 2403.2, 2403.3, and 2403.4)
Not Met	<b>AI03</b>	Interior glass panels with butt joints which either exceed 6'-0" in height or which extend below the level of 36 inches above the adjacent finished floor shall have mall clips (per item AG15) installed along butt joints at a maximum spacing of 36 inches on center and shall be limited to a maximum deflection of 1/175 of the glass edge length or 3/4", whichever is less, measured normal to the panel surface along each unsupported panel edge when subject to the applied horizontal design force. Each panel shall be capable of resisting a horizontal design force of 5 psf applied normal to the panel surface. Each panel installed adjacent to a walking surface shall also be capable of resisting a horizontal design force of 50 pounds per linear foot applied to each panel at any point up to 42 inches above the walking surface with deflection limited to the thickness of the panel. Submit engineering documentation to substantiate compliance with the required deflection limits. [Alternatively, provide details that clearly indicate the required method of continuous support along all four (4) edges (jamb, heads, and sills) of each interior glass panel.] (IBC sections 1607.13, 2403.2, 2403.3, and 2403.4)
Not Met	<b>AI04</b>	Submit the manufacturer's data sheet for each type of mall clip proposed for support along butt joints of interior glass panels. [NOTE: Mall clips of non-metallic material or with set-screw attachments are NOT acceptable.] (IBC sections 2403.2, 2403.3, and 2403.4)
Not Met	<b>AI05</b>	Indicate on architectural drawings the locations for all concealed air plenum systems. State on drawings that materials exposed within plenums are required to be noncombustible or shall have a flame spread index of not more than 25 and a smoke-developed index of not more than 50 as determined in accordance with ASTM E 84 <i>except for tested and labeled wiring, fire sprinkler piping, pneumatic tubing, and electrical equipment</i> . (IBC sections 716.5 and 1017.4.1; IMC section 602.2.1)
Not Met	<b>AI06</b>	Exit access corridors shall not serve as supply, return, exhaust, relief or ventilation air ducts unless in compliance with exceptions stated per IBC section 1017.4. In addition, the space between the corridor ceiling and the floor/roof structure above is permitted to serve as a return air plenum only for the conditions stated per IBC section 1017.4.1. (IBC section 1017.4)

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Not Met	<b>AI07</b>	<p>Provide details that indicate the required installation of suspended ceilings to adequately accommodate the applicable seismic design forces for compliance with IBC section 1613.1 &amp; ASCE/SEI 7-05 section 13.5.6:</p> <p>Proposed details for ceiling installation shall comply with the following requirements:</p> <ol style="list-style-type: none"> <li>1. CISCA 0-2 (Ceiling and Interior Systems Construction Association) and ASCE/SEI 7-05 section 13.5.6.2.1 for Seismic Design Category C structures;</li> <li>2. CISCA 3-4 (Ceiling and Interior Systems Construction Association) and ASCE/SEI 7-05 section 13.5.6.2.2 for Seismic Design Category D structures.</li> </ol>
Not Met	<b>AI08</b>	This project requires the installation of CISCA suspended ceiling details. Interior partitions can not connect to the ceiling grid.
Not Met	<b>AI09</b>	Provide details which clearly indicate lateral bracing to building structure for all partitions of wood and light gauge steel frame construction which exceed nine (9) feet in height to adequately resist the applicable lateral seismic design forces. (ASCE/SEI 7-05 sections 13.5.8.1 and 13.5.2)
Not Met	<b>AI10</b>	<p>Specify the required size, gauge, spacing, and height of light gauge steel studs for construction of interior walls and partitions to adequately resist the applicable design loads and a minimum horizontal design load of 5 psf applied normal to the wall surface.</p> <p>NOTE: Interior partition limiting height shall be based on wall height tables published by Steel Stud Manufacturers Association (SSMA) unless technical published data by the manufacturer of specific light gauge steel studs is submitted. (IBC sections 1603.1, 1607.13, and 2210)</p>
Not Met	<b>AI11</b>	Walls, partitions, and floor/ceiling assemblies that separate dwelling units from each other or from public or service areas ( <i>excluding dwelling unit entrance doors</i> ) shall have a sound transmission class (STC) of not less than 50 for air-borne noise when tested in accordance with ASTM E 90. Floor/ceiling assemblies that separate dwelling units from each other or from public or service areas shall have an impact insulation class (IIC) rating of not less than 50 when tested in accordance with ASTM E 492. Reproduce onto original drawings the applicable sound test design details for all STC and IIC rated systems as specified by the responsible sound testing agency. Clearly reference the corresponding sound tests to all applicable details on the drawings. (IBC sections 1207.2 and 1207.3)
Not Met	<b>AI12</b>	Specify the location and size (minimum of 20 inches by 30 inches) of opening for attic access for compliance with IBC section 1209.2.
Not Met	<b>AI13</b>	Indicate on architectural floor plan the required location of mechanical platform including access ( <i>pull-down stairs, floor opening, etc.</i> ) to equipment. Clearly dimension extent of flooring on working platform and location of mechanical equipment for compliance with section 306.3 of the International Mechanical Code.
Not Met	<b>AI14</b>	Buildings four or more stories shall provide at least one elevator car that can accommodate a 24-inch by 84-inch ambulance stretcher in the horizontal open position. (IBC section 3002.4)

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Not Met	<b>AI15</b>	Submit complete MSDS (Material Safety Data Sheets) which indicate materials being stored, processed or manufactured in this facility. State if such materials are corrosive, poisonous, liquid or gaseous state, under pressure, radioactive, noxious, etc.  Provide permanent emergency eye wash and/or shower station for protection in the event of human contact with hazardous materials. (IBC sections 414 and 415; IPC sections 403.1 and 411)
Not Met	<b>AI16</b>	XXXXXXXX
Not Met	<b>AI17</b>	XXXXXXXX
Not Met	<b>AI18</b>	XXXXXXXX
Not Met	<b>AI19</b>	XXXXXXXX
Not Met	<b>AI18</b>	XXXXXXXX

## AS00 ARCHITECTURAL - EXTERIOR SHELL REVIEW

Not Met	<b>AS01</b>	Specify on architectural details the appropriate materials for construction of the exterior walls including wall coverings to provide the building with a weather-resistant exterior wall envelope for protection against damage to the structure and the interior space. The type and thickness of proposed exterior wall coverings shall be in accordance with IBC table 1405.2. A minimum of one layer of no. 15 asphalt felt (complying with ASTM D 226 for type 1 felt) or other equivalent approved materials shall be attached to the studs or wall sheathing to provide a continuous water-resistive barrier behind the exterior wall veneer (including but not limited to wood, masonry, stone, and metal) for compliance with IBC section 1404.2. (IBC sections 1403, 1404, and 1405)
Not Met	<b>AS02</b>	Specify required type of safety glazing including but not limited to tempered and laminated in doors and windows for all hazardous locations. Wired safety glazing is allowed only in fire rated doors and door sidelights. Indicate all applicable locations by either a glazing schedule referenced to the drawings or by appropriate labels on floor plans and elevations in absence of a glazing schedule. (IBC section 2406.3)
Not Met	<b>AS03</b>	Specify on architectural drawings the proposed EIFS system and document compliance by submitting the applicable manufacturer's ICC Evaluation Report, standard specifications, details, and installation instructions. (2007 Georgia State Amendments for IBC sections 1404.11 and 1405.18)
Not Met	<b>AS04</b>	Specify six (6) inches minimum clearance between bottom edge of exterior wall covering ( <i>excluding masonry veneer</i> ) and top of adjacent exposed earth except clearance may be reduced to two (2) inches from top of paved surfaces. (2007 Georgia State Amendments for IBC section 1405.19)
Not Met	<b>AS05</b>	Specify and detail dampproofing / waterproofing requirements for walls that retain earth and enclose interior space and floors below grade for compliance with IBC section 1807.

## ARCHITECTURAL REVIEW

Not Met	<b>AS06</b>	Specify required types and sizes of masonry units pertinent to the proposed construction including the applicable method of bonding (running or stack) including but not limited to concrete, clay, glass, and stone. (IBC section 2101.3)
Not Met	<b>AS07</b>	Provide one (1) inch minimum air space between masonry veneer and the outside face of exterior sheathing for both wood and steel frame walls. (IBC section 1405.5; ACI 530-05/ASCE 5-05/TMS 402-05 sections 6.2.2.6.3 and 6.2.2.7.4)
Not Met	<b>AS08</b>	Provide one (1) inch minimum air space between masonry veneer and the outside face of concrete masonry walls. (IBC section 1405.5; ACI 530-05/ASCE 5-05/TMS 402-05 section 6.2.2.8.2)
Not Met	<b>AS09</b>	Detail continuous flashing with weepholes at least 3/16 inch in diameter in exterior masonry veneer at a maximum spacing of 33 inches on center in the first masonry course above finished ground level along the base of walls and along supports including but not limited to shelf angles and lintels. (IBC sections 1405.3.2, 1405.5, and 2104.1.8; ACI 530-05/ASCE 5-05/TMS 402-05 section 6.1.5.2)
Not Met	<b>AS10</b>	Provide details and locations (on building elevations) for all control and expansion joints in masonry walls. Specify control joints in concrete masonry to accommodate shrinkage due to moisture loss and expansion joints in clay masonry to allow for movement due to changes in both temperature and moisture. (IBC section 2101.3; ACI 530-05/ASCE 5-05/TMS 402-05 section 1.7.4)
Not Met	<b>AS11</b>	Provide a guard at the roof edge where mechanical equipment, fans, or components are located within 10 feet of the roof edge. The guard shall extend at least 30 inches beyond each end of the equipment and the top of the guard shall be at least 42 inches above the roof surface. A 21 inch diameter object shall not be able to pass through the guard. (IMC section 304.10).
Not Met	<b>AS12</b>	Provide permanent ladder access to mechanical equipment and appliances located on roofs that exceed 16 feet above finish floor elevation for compliance with IMC 306.5.
Not Met	<b>AS13</b>	Each awning and canopy attached to the exterior of a building shall have a structural frame of noncombustible material, fire-retardant-treated wood, wood of size per Type IV construction, or one (1) - hour construction with either a combustible or noncombustible cover. Provide details which clearly document compliance. (IBC section 3105.3)
Not Met	<b>AS14</b>	Ventilation of wood frame roofs shall be in conformance with IBC section 1203.2 for enclosed attics and for enclosed rafter spaces formed by direct application of ceiling to the underside of roof framing elements. Document compliance by details that clearly specify the type(s), size(s), locations, and net free area(s) of proposed vents. Provide calculations on roof plan which demonstrate direct comparison between both the required and specified net free ventilating areas. (IBC sections 2304.11.8 and 2308.10.11)
Not Met	<b>AS15</b>	Ventilation of crawl spaces under buildings without basements shall conform with IBC section 1203.3. Document compliance by details that clearly specify the type(s), size(s), locations, and net free area(s) of proposed vents. Provide calculations on floor plan which demonstrate direct comparison between both the required and specified net free ventilating areas. (IBC section 2304.11.9)
Not Met	<b>AS16</b>	XXXXXXX
Not Met	<b>AS17</b>	XXXXXXX

## ARCHITECTURAL REVIEW

Not Met	<b>AS18</b>	XXXXXXXX
Not Met	<b>AS19</b>	XXXXXXXX
Not Met	<b>AS20</b>	XXXXXXXX

### AF00 ARCHITECTURAL - FIRE PROTECTION REVIEW

Not Met	<b>AF01</b>	Document on plans compliance with the fire resistance requirements of IBC tables 601 and 602 by listing in tabular form each applicable structural element in the first column, the type of construction for the building in the second column, the corresponding fire-resistance-rated assembly design number in the third column, and the appropriate building detail(s) pertinent to each fire-resistance-rated assembly design number in the fourth column.
Not Met	<b>AF02</b>	Reference each tested fire-resistance-rated assembly design number on all architectural sections and details which indicate the applicable fire-resistance-rated walls, floors, ceilings, roofs, columns, and beams. (IBC sections 508.2, 508.3.3, 601, 602, 703, 704.5, 705, 706, 707, 708, 709, 710, 714, 715, and IBC tables 601 and 602)
Not Met	<b>AF03</b>	Indicate on floor plan(s) the location and corresponding fire-resistance rating of each proposed and existing fire barrier wall, fire partition, and fire wall. (IBC sections 508.2, 508.3.3, 601, 704.5, 705, 706, 707, 708, 709, 710, 715, 1020.1, and IBC tables 601 and 602)
Not Met	<b>AF04</b>	For fire resistance established by tests, reproduce onto original drawings the applicable fire design detail(s) from the appropriate Fire Resistance Directory or Design Manual published by an industry recognized fire testing agency for all fire resistant construction throughout the building including but not limited to floor/ceiling, roof/ceiling, columns and wall assemblies. Specify for each design the appropriate publisher and edition year for copyright protection. Clearly reference fire resistance tests to all applicable details on the drawings. (IBC sections 703.2 and 703.3)
Not Met	<b>AF05</b>	For fire resistance established by calculations, reproduce onto original drawings the applicable calculated fire resistance data from corresponding table(s) in IBC section 721 for all fire resistant construction throughout building including but not limited to floor/ceiling, roof/ceiling, columns and wall assemblies. Clearly reference pertinent tabular data to all applicable details on the drawings. (IBC sections 703.3, 721.1, 721.2, 721.3, 721.4, 721.5, and 721.6)
Not Met	<b>AF06</b>	For fire resistance established by prescriptive design, reproduce onto original drawings the applicable prescriptive fire resistance data from IBC tables 720.1(1), 720.1(2), and 720.1(3) for all fire resistant construction throughout building including but not limited to floor/ceiling, roof/ceiling, columns and wall assemblies. Clearly reference pertinent tabular data to all applicable details on the drawings. (IBC sections 703.3 and 720.1)
Not Met	<b>AF07</b>	A fire wall with a minimum fire-resistance rating per IBC table 705.4 appears to be required between new and existing construction to ensure compliance with the building height and area limitations set forth in IBC table 503 except as modified by IBC sections 504, 506, 507, and 509. Clearly detail extent of each required fire wall for compliance with the horizontal and vertical continuity requirements of IBC sections 705.5 and 705.6. (IBC sections 503.1 and 705)

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Not Met	<b>AF08</b>	Fire barriers as enumerated per IBC section 706.3 shall extend full height from the top of floor/ceiling assembly below to the underside of the floor or roof slab or roof deck above and shall be securely attached thereto. Such fire barriers shall be continuous through concealed spaces, such as those above a suspended ceiling. Exceptions are stated in IBC sections 706.4, 706.5, and 706.6. (IBC section 706)
Not Met	<b>AF09</b>	Each fire partition as defined per IBC section 708.1 shall extend from the top of foundation or floor/ceiling assembly below to the underside of the floor or roof sheathing, slab or deck above or to the fire-resistance-rated floor/ceiling or roof/ceiling assembly above and shall be securely attached thereto. If the partitions are not continuous to the sheathing, deck or slab, and where constructed of combustible construction, the space between the ceiling and the sheathing, deck or slab shall be fireblocked or draftstopped in accordance with Sections 717.2 and 717.3 at the partition line. Exceptions are stated in IBC section 708.4. (IBC section 708)
Not Met	<b>AF10</b>	Construction which supports fire-resistance-rated elements including fire barriers, shaft enclosures, and fire partitions shall be protected to provide a fire-resistance rating equal to or greater than that for the elements supported except in buildings of Types IIB, IIIB, and VB construction for one (1) hour fire-resistance-rated incidental use area fire barriers, for fire partitions which provide tenant and guestroom separation, and for exit access corridor fire partitions. (IBC sections 706.5, 707.5, and 708.4)
Not Met	<b>AF11</b>	Penetrations into and openings through each exit enclosure assembly (including but not limited to rated stairway enclosures) are prohibited except for protected openings for required exit doors and protected penetrations for portions of the building service systems (duct work, sprinkler piping, standpipes, electrical conduit terminating at a steel box not exceeding 16 square inches) which serve only the space within the enclosure. [Ventilation equipment and associated duct work for each enclosure shall comply with IBC section 1020.1.3.] (IBC sections 706.8.1, 707.8.1, and 1020.1.2)
Not Met	<b>AF12</b>	Exterior walls of proposed building which are located less than thirty (30) feet of fire separation distance do not appear to comply with the requirements of IBC tables 602 and 704.8 with regards to either minimum fire-resistance-rated construction or to wall opening limitations or both. Where both unprotected and protected openings are located in the exterior wall in any story, provide calculations which document compliance for total area of openings per Equation 7-2. (IBC sections 602.1, 704.3, 704.5, and 704.8)
Not Met	<b>AF13</b>	Provide cross-section detail illustrating fire separation construction for exterior wall above tenant's storefront, separating it from sloped canopy with horizontal soffit/ceiling creating an internal void and where such canopy is continuous between two or more adjacent tenants. Rated construction shall match fire rating of fire barriers where required. Alternatively, fire-rated separation is not required for the case in which adjacent tenants are not required to have fire separation. (IBC sections 508.3.2, 508.3.3, 704.2, 706; Gwinnett County Fire Protection and Life Safety Ordinance section 46-41)
Not Met	<b>AF14</b>	For protection of fire-resistance-rated walls at both membrane and through penetrations, reproduce onto mechanical, electrical, and plumbing original drawings complete details from the appropriate Fire Resistance Directory or Design Manual published by an industry recognized fire testing agency for the proposed through-penetration firestop system(s) which provide a minimum F Rating equal to the fire-resistance rating of the wall as determined by testing in accordance with ASTM E 814 or UL 1479. Alternatively, penetrations of noncombustible items may be protected by either of the methods indicated in IBC section 7.12.3.1 exceptions 1 and 2. (IBC sections 705.9, 706.8, 707.8, 708.7, 709.6, 710.6, 712.1, 712.2, and 712.3)

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Not Met	<b>AF15</b>	For protection of fire-resistance-rated horizontal assemblies at both membrane and through penetrations, reproduce onto mechanical, electrical, and plumbing original drawings complete details from the appropriate Fire Resistance Directory or Design Manual published by an industry recognized fire testing agency for the proposed through-penetration firestop system(s) which provide a minimum F Rating and T Rating equal to the fire-resistance rating of the horizontal assembly but not less than one (1) hour as determined by testing in accordance with ASTM E 814 or UL 1479. Alternatively, penetrations of noncombustible items may be protected by either of the methods indicated in IBC sections 7.12.4.1 and 7.12.4.2 exceptions 1, 2, 3, and 4. (IBC sections 707.8.1, 711.5, 712.1, and 712.4)
Not Met	<b>AF16</b>	For protection of joints installed in or between fire-resistance-rated walls, floor/ceiling assemblies, and roof/ceiling assemblies, reproduce onto architectural original drawings complete details from the appropriate Fire Resistance Directory or Design Manual published by an industry recognized fire testing agency for the proposed fire-resistant joint system(s) which provide a minimum fire-resistance rating equal to the fire-resistance rating of the wall, floor, or roof in or between which the joints are installed as determined by testing in accordance with ASTM E 1966 or UL 2079. [NOTE: Refer to IBC section 713.1 for exceptions.] (IBC sections 704.13, 705.10, 706.9, 707.9, 708.8, 709.7, 710.6, 711.6, and 713.1)
Not Met	<b>AF17</b>	Provide detail(s) to clearly indicate proposed method of maintaining the required fire-resistance rating of each fire barrier wall and fire partition for the joint at top of wall/partition interface with nonfire-resistance-rated floor and roof assemblies for the condition in which the joint accommodates vertical deflection of the floor/roof structure. (IBC section 706.5)
Not Met	<b>AF18</b>	<p>For fire protection at each floor opening, provide complete details for construction of required shaft enclosure (including vertical exit enclosure) with a fire-resistance rating per IBC section 707.4 except for conditions indicated in IBC section 707.2 exceptions 1 thru 13.</p> <p>Shaft enclosure shall consist of walls constructed as fire barriers in accordance with IBC section 706 or horizontal assemblies constructed in accordance with IBC section 711, or both, and shall have continuity in accordance with IBC section 706.5 for fire barriers or IBC section 711.4 for horizontal assemblies as applicable.</p> <p>Alternatively, a shaft enclosure that does not fully extend to the underside of the roof sheathing, deck or slab of the building shall be enclosed at the top with construction of the same fire-resistance rating as the topmost floor penetrated by the shaft, but not less than the fire-resistance rating required for the shaft enclosure. (IBC sections 706.3.1, 707.2, 707.4, and 1020)</p>
Not Met	<b>AF19</b>	Where fire-resistance-rated separation is required per IBC table 508.2, each incidental use area shall be separated from the remainder of the building by a fire barrier constructed in accordance with IBC section 706 or a horizontal assembly constructed in accordance with IBC section 711, or both. Where IBC table 508.2 permits an automatic fire-extinguishing system without a fire barrier, each incidental use area shall be separated from the remainder of the building by construction capable of resisting the passage of smoke. Provide complete details pertinent to the required separation. (IBC section 508.2)

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Not Met	<b>AF20</b>	Accessory occupancies which in aggregate exceed ten (10) percent of the area of the story in which they are located and do not individually exceed the tabular values of IBC table 503 (without height and area increases per IBC sections 504 and 506) are considered as individual occupancies of the building or portion of the building. Such accessory occupancies shall be separated by fire barriers per IBC section 706, horizontal assemblies per IBC section 711, or both, except for occupancies which comply with the exceptions noted in IBC section 508.3.1 or which are classified as nonseparated occupancies per IBC section 508.3.2. Provide complete details for all fire-resistant-rated construction pertinent to the required separation of individual occupancies. (IBC section 508.3)
Not Met	<b>AF21</b>	Tenant separations within multi-tenant commercial and industrial buildings shall have a minimum fire-resistance rating of one (1) hour for compliance with Gwinnett County Fire Protection and Life Safety Ordinance section 46-41. Provide complete details for all fire-resistant-rated construction pertinent to the required fire partitions and horizontal (floor/ceiling and roof/ceiling) assemblies. (IBC section 708.4)
Not Met	<b>AF22</b>	Fire door and fire shutter assemblies shall be installed for protection of openings in fire walls, fire barrier walls, and fire partitions to provide the minimum fire-protection rating required per IBC table 715.4. Clearly identify in door schedule each required fire door and fire shutter assembly and corresponding fire-protection rating. (IBC section 715.4)
Not Met	<b>AF23</b>	Glazing used in fire doors located at protected wall openings shall be ¼-inch wired glass limited to the door surface areas listed in IBC table 715.5.3. (IBC section 715.5)
Not Met	<b>AF24</b>	Glazing for interior fire window assemblies located in fire partitions and fire barriers shall be limited to a maximum fire-resistance rating of one (1) hour per IBC section 715.5 with size of glass panels limited per IBC table 715.5.3 such that the total area of windows does not exceed 25 percent of the area of the common wall for any room per IBC section 715.5.7.2.
Not Met	<b>AF25</b>	Building exterior walls within 10 feet horizontally of a nonrated exterior wall of a stair enclosure with unprotected openings which is exposed to adjacent building exterior walls at an angle of less than 180 degrees shall be constructed to provide a minimum one (1)-hour fire-resistance rating with ¾ hour opening protectives. Provide complete details to document compliance. (IBC section 1020.1.4)
Not Met	<b>AF26</b>	Clearly detail fire blocking in combustibles concealed locations to seal off both horizontal and vertical draft openings and to form an effective barrier between floors, and between the top floor and the roof or attic space. Provide fireblocking in concealed stud wall and partition spaces (including furred areas) at the ceiling and floor levels and at vertical and horizontal intervals of ten (10) feet, in concealed spaces at intersections between vertical and horizontal spaces such as floor/wall and ceiling/wall interface, at each end of stair stringers, at openings around vents, pipes, ducts, chimneys, and fireplaces at ceiling and floor levels, and at concealed spaces of exterior wall finish and other exterior architectural elements. (IBC Sections 717.2, 1406.2.4, 2111.12, and 2113.20)
Not Met	<b>AF27</b>	Wood framing for interior nonbearing partitions with a fire-resistance-rating no greater than two (2) hours shall be fire-retardant-treated for buildings of Type I and Type II construction except for blocking associated with handrails, millwork, cabinets, and window and door frames. (IBC sections 602.2 and 603.1)
Not Met	<b>AF28</b>	Wood framing for nonbearing exterior walls without a fire rating shall be fire-retardant-treated for buildings of Type I and Type II construction except for blocking associated with handrails, millwork, cabinets, and window and door frames. (IBC sections 602.2 and 603.1)

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Not Met	<b>AF29</b>	Roof construction (including girders, trusses, framing, and decking) for buildings of Type I and Type II construction shall be permitted to utilize fire-retardant-treated wood except for buildings of Type I construction exceeding two (2) stories in height in which the vertical distance from the upper floor to the roof is less than twenty (20) feet. (IBC section 603.1 and IBC table 601)
Not Met	<b>AF30</b>	Insulating materials installed in buildings of any type of construction shall have a flame spread index of not more than 25 and a smoke-developed index of not more than 450 for exposed conditions and pipe insulation when tested in accordance with ASTM E 84. Materials within "plenums" shall be non-combustible or shall have a flame spread index of not more than 25 and a smoke developed index of not more than 50 when tested in accordance with ASTM E 84. Specify on drawings the corresponding flame spread and smoke-developed indexes for the proposed insulation to document compliance with IBC sections 719.1, 719.2, and 719.3, IMC sections 602.2.1 and 1204.1. [EXCEPTION: Flame spread and smoke developed indexes do not apply to facings, coverings, and layers of reflective foil insulation installed in concealed spaces and in direct contact with the unexposed surface of the ceiling, wall, or floor finish for buildings of Types III, IV, or V construction per IBC 719.2.1] (IBC section 719)
Not Met	<b>AF31</b>	Foam plastic insulation shall comply with the surface-burning requirements of IBC section 2603.3 and shall be separated from the interior of a building (including attics and crawl spaces) by an approved thermal barrier of 0.5 inch gypsum wallboard or equivalent thermal barrier established by testing in accordance with IBC section 2603.4. Exceptions to the minimum required surface-burning requirements shall comply with IBC section 2603.3. Thermal barrier protection is not required for installation which satisfies the conditions of IBC Sections 2603.4.1.1 thru 2603.4.1.12. Clearly detail proposed installation of foam plastic insulation to document compliance.
Not Met	<b>AF32</b>	Clearly detail draft stopping in floors and attics of combustible construction to ensure compliance with the location and material requirements of IBC sections 717.3 and 717.4.
Not Met	<b>AF33</b>	The walls and soffits enclosing usable space under stairways ( <i>enclosed and unenclosed</i> ) shall be a minimum of one (1) hour fire-resistance-rated construction but not less than the fire-resistance rating of the stairway ( <i>vertical shaft</i> ) enclosure. There shall be no direct access to the enclosed usable space from within the stairway enclosure. Provide complete details for the required fire-resistant-rated construction. (IBC sections 706, 707.4, 711, and 1009.5.3)
Not Met	<b>AF34</b>	Load bearing exterior walls and structural columns located within the exterior walls of buildings of Type III-B construction shall be protected with a fire-resistance rating of two (2) hours. (IBC table 601 and IBC section 714.5)
Not Met	<b>AF35</b>	Provide detailed cross-section of fire partitions which includes all required materials, dimensions, and fire design test numbers. (IBC section 708.1)
Not Met	<b>AF36</b>	Provide detailed cross-section of floor/ceiling and roof/ceiling assemblies which includes all materials, dimensions, and fire design test numbers. (IBC sections 708.4 and 711.1)
Not Met	<b>AF37</b>	Detail fireblocking in concealed spaces (tenant separation walls, etc.) at each floor and ceiling level at ends and sides of joists or trusses. (IBC section 717.2)
Not Met	<b>AF38</b>	Detail draftstopping at floor trusses and/or floor joists along all tenant separation walls indicating types and locations of materials being used. (IBC section 717.3)
Not Met	<b>AF39</b>	Provide attic plan showing draftstopping at <b>all</b> tenant separation walls indicating types and locations of materials being used. Specify self-closing/self latching doors in draftstop wall indicating materials of construction. Specify tested fire rated access hatch in breezeway ceiling. Provide manufacturer's technical data sheet for each rated door and hatch. (IBC section 717.4)

## ARCHITECTURAL REVIEW

Not Met	<b>AF40</b>	Identify on architectural, mechanical, electrical, and plumbing drawings the applicable locations of recessed items including but not limited to washing machine connection boxes, icemaker boxes, dryer vents, medicine cabinets, fire extinguishers, and electrical panel boards. Recessed fixtures shall be installed such that the required fire-resistance rating is not reduced. Provide manufacturer's technical data sheet for each tested fire-rated fixture. <b>(IBC section 712.3.1 )</b>
Not Met	<b>AF41</b>	Provide a detailed cross-section of fireplace/chimney chase indicating tenant separation (5/8" Type "X" chase lining), fireblocking at each floor (3/4" plywood plus metal ring) and fireblocking at ceiling/attic level. (IBC sections 717.2.5, 2111.12, and 2113.20)
Not Met	<b>AF42</b>	Detail required type of fire protection beneath tubs, fireplaces, and interior HVAC units. (IBC sections 708.4 and 711.1)
Not Met	<b>AF43</b>	Detail required type of fire protection behind tubs and showers. (IBC section 708.4)
Not Met	<b>AF44</b>	Detail the intersection of tenant separation wall at floor/ceiling assembly. (IBC section 708.4)
Not Met	<b>AF45</b>	Detail the intersection of interior non-fire-rated partition at fire partition. (IBC section 708.4)
Not Met	<b>AF46</b>	Detail the intersection of interior non-fire-rated partition at floor/ceiling assembly. (IBC Sections 708.4 and 711.3)
Not Met	<b>AF47</b>	Detail the intersection of fire-rated walls and floors at exterior wall. (IBC section 708.4)
Not Met	<b>AF48</b>	Indicate the required type of fire protection at balcony/porch ceiling. (IBC sections 708.4 and 1406.3)
Not Met	<b>AF49</b>	Indicate the required type of fire protection at breezeway walls and ceiling. (IBC section 708.4)
Not Met	<b>AF50</b>	Indicate the model number for HVAC fire dampers at rated walls and for radiant ceiling dampers at rated ceilings. (IBC section 716.1)
Not Met	<b>AF51</b>	Detail fireblocking and draftstopping at the intersection of tenant separation walls where four (4) adjacent units adjoin one another. (IBC Sections 708.4 and 717.1)
Not Met	<b>AF52</b>	Detail the required fire-rated gypsum board behind interior stair stringers. (IBC sections 706.5 and 708.4)
Not Met	<b>AF53</b>	Fire rated floor/ceiling assemblies and fire rated roof/ceiling assemblies shall be supported by rated structural exterior and interior walls, columns, beams, etc. (IBC sections 711.4 and 714.1)
Not Met	<b>AF54</b>	Details the required fire protection at dryer vent and exhaust fan penetrations for fire-resistance-rated floor/ceiling assemblies. (International Mechanical Code sections 504 and 607; IBC Section 711)
Not Met	<b>AF55</b>	Doors in exterior fire-resistance-rated corridor walls shall provide a minimum fire-protection rating of 20 minutes. (IBC table 715.4 and IBC section 715.4.3)
Not Met	<b>AF56</b>	XXXXXXXX
Not Met	<b>AF57</b>	XXXXXXXX

## ARCHITECTURAL REVIEW

Not Met	<b>AF58</b>	XXXXXXXX
Not Met	<b>AF59</b>	XXXXXXXX
Not Met	<b>AF60</b>	XXXXXXXX

### AE00 ENERGY CODE REVIEW

Not Met	<b>AE01</b>	All commercial buildings or portions of commercial buildings shall comply with either the requirements of IECC Chapter 5 or the requirements of ASHRAE 90.1-2007.
Not Met	<b>AE02</b>	IECC Method: specify the minimum roof insulation R-Value, specify the minimum wall insulation R-Value, and specify the allowed U-Factor and SHGC values for all fenestrations for compliance with IECC Table 502.1.2 (Climate Zone 3), Table 502.2(2), and Table 502.3 (Climate Zone 3).
Not Met	<b>AE03</b>	ASHRAE 90.1-2007 Method: each building and/or each enclosed space within a building which is cooled by a cooling system whose sensible output capacity exceeds 5 Btu/h per square feet and is heated by heating system whose output capacity relative to the floor area is greater than or equal to 10 Btu/h per square feet shall comply with the requirements of a "conditioned space" as defined by ASHRAE 90.1-2007. Specify the minimum roof insulation R-value, specify the minimum wall insulation R-value for all cavity and mass walls, specify the minimum R-value for all elevated floors, and specify the maximum U-factor and SHGC for all fenestrations for compliance with ASHRAE 90.1-2007 table 5.5-3 (Climate Zone 3-A).
Not Met	<b>AE04</b>	ASHRAE 90.1-2007 Method: each building and/or each enclosed space within a building which is heated by a heating system whose output capacity is greater than or equal to 3.4 Btu/h per square feet shall comply with the requirements of a "semi-heated space" as defined by ASHRAE 90.1-2007.  Specify the minimum roof insulation R-value, specify the minimum wall insulation R-value for all cavity and mass walls, specify the minimum R-value for all elevated floors, and specify the maximum U-factor and SHGC for all fenestrations for compliance with ASHRAE 90.1-2007 table 5.5-3 (Climate Zone 3-A).
Not Met	<b>AE05</b>	The assembly U-Factors (R-Values) for metal building roofs with either "standing seam roofs with thermal blocks" or "screw down metal roofs" shall be in compliance with the values indicated in the ASHRAE 90.1 2007 Table 5.5.3 (Climate Zone 3A) and Table A2.3.
Not Met	<b>AE06</b>	Vertical fenestrations of buildings shall not exceed exceed 40% of the above grade for compliance with the requirements of ASHRAE 90.1-2007 Table 5.5-3 and IECC Table 502.3.  Buildings with vertical fenestrations that have areas exceeding 40% of the above grade wall shall comply with the requirements of ASHRAE 90.1-2007 Sections 5.5.4.2.1 and 5.5.4.4.1 (exception c.)

## ARCHITECTURAL REVIEW

Not Met	<b>AE07</b>	A door that separates conditioned space from the exterior shall be protected with an enclosed vestibule, with all doors opening into and out of the vestibule equipped with self closing devices. Vestibules shall be designed so that in passing through the vestibule it is not necessary for the interior and exterior doors to open at the same time. (IECC Section 502.4.6 and ASHRAE 90.1-2007 Section 5.4.3.4) Vestibule design compliance shall be based on the IECC Method or Ashrae 90.1 2007 Method.
Not Met	<b>AE08</b>	Insulation installed on a suspended ceiling with removable ceiling tiles shall not be considered part of the minimum thermal resistance of the roof insulation for compliance with IECC Section 502.2.1 and the air infiltration requirements of section 5.8.1.8 of ASHRAE 90.1-2007. Provide complete details which clearly indicate proposed method of compliance.
Not Met	<b>AE09</b>	<p>Reproduce onto original drawings the Energy Compliance Reports for the Envelope, Mechanical, and Interior Lighting Systems for each building which shall be produced by one of the following methods for compliance with IECC Sections 501, 502, 502, 503, 504, 505 or the ASHRAE 90.1-2007 compliance pathway:</p> <p style="padding-left: 40px;">COMcheck (current release)* - "90.1 (2007) Standard" code version (computer program applicable to most commercial buildings).</p> <p>* COMcheck computer programs are public domain and can be obtained at the following web address: <a href="http://www.energycodes.gov">http://www.energycodes.gov</a>.</p>
Not Met	<b>AE10</b>	<p>The Energy Compliance Report for Electrical (lighting) Systems is not required if all of the following conditions (1) thru (3) are satisfied:</p> <p>(1) Interior space is limited to either retail or office use with conditioned floor area no greater than 2,500 sq. ft.;</p> <p>(2) For retail space, the lighting fixture layout shall not exceed one (1) 2'x4' fluorescent fixture (with 3 - 30 watt bulbs) per ceiling area of sixty (60) sq. ft.;</p> <p>(3) For office space, the lighting fixture layout shall not exceed one (1) 2'x4' fluorescent fixture (with 3 - 30 watt bulbs) per ceiling area of ninety (90) sq. ft.</p> <p>(IECC Table 505.5.2)</p>
Not Met	<b>AE11</b>	<p>Reproduce onto original drawings the Energy Compliance Reports for the Exterior Lighting Systems for each building and parking lot area which shall be produced by one of the following methods for compliance with IECC Sections 505.6, 505.6.2 and Table 505.6.2 or the ASHRAE90.1-2007 Section 9.4.1.3, 9.4.4, 9.4.5, and Table 9.4.5 compliance pathway:</p> <p style="padding-left: 40px;">COMcheck (current release)* - "90.1 (2007) Standard" code version (computer program applicable to most commercial buildings).</p> <p>* COMcheck computer programs are public domain and can be obtained at the following web address: <a href="http://www.energycodes.gov">http://www.energycodes.gov</a>.</p>
Not Met	<b>AE12</b>	XXXXXXXX
Not Met	<b>AE13</b>	XXXXXXXX

**ARCHITECTURAL REVIEW**

Not  
Met

<b>AE14</b>	XXXXXXXX
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## ELECTRICAL REVIEW

AUTH NO. **BUILDING CODE COMPLIANCE ITEM**

<b>EG00 ELECTRICAL REVIEW</b>		
Not Met	<b>EG01</b>	Electrical drawings as submitted have been reviewed for code compliance and appear to be in accordance with the National Electrical Code. Future revisions to these plans require further review.
Not Met	<b>EG02</b>	In accordance with Gwinnett County Construction Code, submit complete electrical drawings which include riser diagrams, meter groupings with disconnects, panelboard sizes and locations, type of wiring and raceway systems, locations and types of receptacles and fixtures, panelboard schedules and load calculations. (GCCC sections 103.2.1 and 103.2.2).
Not Met	<b>EG03</b>	Maintain the minimum working clearances in the direction of access to live parts of the electrical equipment. [NEC Table 110.26(A)]
Not Met	<b>EG04</b>	The branch circuit feeding the unit equipment (emergency lighting) shall be the same branch circuit as that serving the normal lighting in the area and connected ahead of any local switches. [NEC article 700.12(F)]
Not Met	<b>EG05</b>	A single-phase, 125-volt, 15- and 20-amp receptacle must be installed within 25 feet of heating, air conditioning, and refrigeration equipment and have ground-fault circuit-interrupter protection. [NEC articles 210.8(B) and 210.63]
Not Met	<b>EG06</b>	All 120-volt, single-phase, 15- and 20- amp receptacles installed outdoors, in bathrooms, kitchens, and on rooftop areas shall have ground-fault circuit-interrupter protection. [NEC article 210.8(B)]
Not Met	<b>EG07</b>	If available on the premises, metal water piping, building steel, concrete-encased electrode (reinforcing rods in foundations), and ground ring shall be bonded together to form the grounding electrode system. (NEC article 250.50)
Not Met	<b>EG08</b>	Indicate on electrical drawings the locations for all concealed air plenum systems. State on drawings that materials exposed within plenums are required to be noncombustible or shall have a flame spread index of not more than 25 and a smoke-developed index of not more than 50 as determined in accordance with ASTM E 84 except for tested and labeled wiring, fire sprinkler piping, pneumatic tubing, and electrical equipment. (IBC sections 716.5 and 1017.4.1; IMC section 602.2.1)
Not Met	<b>EG09</b>	Indicate on drawings the available fault current at the service equipment. (NEC articles 110.9 and 110.10)
Not Met	<b>EG10</b>	Indicate on the drawings the short-circuit rating of the service equipment. (NEC articles 110.9 and 110.10)
Not Met	<b>EG11</b>	Detail on drawings method of physical protection of panelboards, transformers, etc. [NEC article 110.27(B)]
Not Met	<b>EG12</b>	State on drawings that a written record of the ground-fault performance test results shall be made available either to the Gwinnett County Chief Electrical Inspector or the Electrical Plans Examiner prior to the final electrical inspection. [NEC article 230.95(C)]
Not Met	<b>EG13</b>	Indicate on the electrical floor plan the proposed location of wall switch-controlled lighting outlet and receptacle for HVAC equipment installed in attic. [NEC articles 210.63 and 210.70(C)]

## ELECTRICAL REVIEW

Not Met	<b>EG14</b>	Electrical equipment and conductors shall be readily accessible and shall not be located in areas subject to deterioration due to exposure to moisture, excessive temperatures, gases, fumes, vapors, liquid, or other harmful agents. [NEC articles 110.11 and 240.24(C)]
Not Met	<b>EG15</b>	Each building which exceeds 5,000 square feet in area shall have an automatic control capable of turning off lighting in all spaces. Specify on electrical drawings either time-scheduling or occupant-sensing devices for compliance with section 9.4.1.1 of ANSI/ASHRAE/IESNA Standard 90.1-2004. (IECC sections 505.2.2.2, 701.1, and 805.2.3.2 of the 2003 & 2006 Georgia State Supplements & Amendments)
Not Met	<b>EG16</b>	Each room/space enclosed by ceiling-height partitions shall have at least one control device (either manual switch or occupant sensor) to operate the general lighting within the space such that each device shall serve a maximum of 2,500 square feet which may be increased up to 10,000 square feet of area for each room/space larger than 10,000 square feet. For classrooms (excluding preschool through 12th grade), conference/meeting rooms, and employee lunch/break rooms, a control device is required to automatically turn lighting off within 30 minutes of all occupants leaving a space. Document compliance on electrical drawings. (ANSI/ASHRAE/IESNA Standard 90.1-2004 section 9.4.1.2; IECC section 701.1 of the 2003 & 2006 Georgia State Supplements & Amendments)
Not Met	<b>EG17</b>	Clearly note on plans that "Exterior lighting shall be contained in cut-off type luminaries and shall be directed in toward the property so as not to reflect into adjacent properties" for compliance with The 1985 Gwinnett County Zoning Resolution, Section 1008. Submit vendor drawings for all proposed exterior light fixtures to document compliance.
Not Met	<b>EG18</b>	Submit a complete site lighting plan which includes the following items (A) thru (C) and clearly documents compliance with the requirements of section 1315.2.1.F of the 1985 Zoning Resolution of Gwinnett County for each off-street parking area associated with non-residential and multifamily developments located within any of the overlay districts including Mall of Georgia, Civic Center, U.S. Highway 78 Corridor, Grayson/Highway 20, Centerville/Highway 124, and Highway 124/324/Hamilton Mill:  (A) Locations for all fixtures (B) Proposed types of fixtures (submit vendor drawings) and light poles (C) Point-by-point photometrics designed in accordance with IESNA (Illuminating Engineering Society of North America)
Not Met	<b>EG19</b>	Submit a complete site lighting plan for each off-street parking area associated with non-residential and multifamily developments which clearly documents compliance with the parking lot lighting standards specified per section 1008 of the 1985 Zoning Resolution of Gwinnett County (as amended September 27, 2005) except parking areas located within established overlay districts shall comply with section 1315.2.1.F.
Not Met	<b>EG20</b>	State the following on site lighting plans:  "Prior to final inspection of site lighting, the site lighting design professional of record for the project shall submit to the Chief Electrical Inspector a signed letter which states that . . . I have observed the site lighting for this project in operation at night in the absence of daylight to verify that the installed lighting is consistent with the approved site lighting plans".

## ELECTRICAL REVIEW

Not Met	<b>EG21</b>	Individual single-pole breakers, with identified handle ties, shall be permitted as the protection for each ungrounded conductor of multiwire branch circuit that serve only single-phase line to neutral loads.( Article 240.15(B)(1) of the 2011 NEC)
Not Met	<b>EG22</b>	Where switches controlling lighting loads supplied by a grounded general purpose circuit, a grounded circuit conductor/neutral shall be provided at the switch location.(Article 404.2 C of the 2011 NEC).
Not Met	<b>EG23</b>	Note on plans submitted that "All non-dwelling unit switchboards and panelboards supplied by a feeder are required to be marked to indicate where the power supply source is located.(Article 408.4(B) of the 2011 NEC)
Not Met	<b>EG24</b>	Where the disconnecting means for the line side of a transformer is remote from the transformer or not within sight, the disconnecting means must be capable of being locked in the off position. ( Article 450.14 of the 2011 NEC).
Not Met	<b>EG25</b>	
Not Met	<b>EG26</b>	
Not Met	<b>EG27</b>	
Not Met	<b>EG28</b>	

## EG00 ELECTRICAL COMMUNICATION TOWER

Not Met	<b>ET01</b>	Provide details which clearly indicate proposed grounding of tower structure and electrical service. Tower structure shall have a primary ground consisting of no less than two 5/8 in. diameter galvanized steel ground rods driven a minimum of 8 feet into the ground (180 degrees apart adjacent to the base of the tower structure) and bonded with a minimum No. 6 tinned bare copper lead connected to the nearest leg or to the steel base of the tower structure. Each self-supporting tower (without guys) with a base width greater than five (5) feet shall have a minimum of one primary ground for each support leg. (TIA/EIA-222-F section 12)
Not Met	<b>ET02</b>	XXXXXXXX
Not Met	<b>ET03</b>	XXXXXXXX
Not Met	<b>ET04</b>	XXXXXXXX
Not Met	<b>ET05</b>	XXXXXXXX
Not Met	<b>ET06</b>	XXXXXXXX
Not Met	<b>ET07</b>	XXXXXXXX

## ELECTRICAL REVIEW

Not Met	<b>ET08</b>	XXXXXXXX
Not Met	<b>ET09</b>	XXXXXXXX

## MECHANICAL REVIEW

AUTH NO. BUILDING CODE COMPLIANCE ITEM

<b>MG00 MECHANICAL REVIEW</b>		
Not Met	<b>MG01</b>	Mechanical drawings as submitted have been reviewed for code compliance and appear to be in accordance with the International Mechanical Code. Future revisions to these plans shall require further review.
Not Met	<b>MG02</b>	Provide complete plan for each floor level and roof which indicates the required type, size, location of equipment (including air conditioning units, furnaces, air handler, exhaust fans), ductwork (including supply and return branches), ductwork material requirements, and piping for each air distribution system. (IMC sections 303, 501, 601, 603, 901, 1001, 1201, 1301; GCCC sections 103.2.1 and 103.2.2)
Not Met	<b>MG03</b>	Provide mechanical equipment schedule which includes ratings for air flow (cfm), BTU, and energy efficiency. (IMC sections 301 and 403; GCCC sections 103.2.1 and 103.2.2)
Not Met	<b>MG04</b>	Indicate on drawings energy efficiency ratio (EER) or seasonal energy efficiency ratio (SEER) for a/c units, annual fuel utilization efficiency (AFUE) or combustion efficiency (Ec) or thermal efficiency (Et) for furnaces and boilers, and coefficient of performance (COP) for water chillers for compliance with either 2009 IECC Chapter 5 with 2011 & 2012 Georgia State Amendments for Tables 503.2.3(1), 503.2.3(2), 503.2.3(5), and ASHRAE/IESNA Standard 90.1-2007 Section 6.8 with addendums.
Not Met	<b>MG05</b>	Duct penetrations and air transfer openings in fire-resistant-rated wall assemblies shall be protected with approved (UL 555) fire dampers except for applications which satisfy the requirements of either IMC section 607.5.2 or 607.5.3. Locate on drawings all required fire dampers. (IMC section 607 and IBC sections 705.11, 706.10, 707.10, 708.9, 712.3.3, 716.5)
Not Met	<b>MG06</b>	Duct penetrations through floors, floor/ceiling systems, or the ceiling of roof/ceiling systems shall be protected by a shaft enclosure except for applications which satisfy the requirements of either IMC section 607.6.1, 607.6.2, or 607.6.3. (IBC section 707.2, 711.7, 712.4.3, 716.6 and IMC section 607.6)
Not Met	<b>MG07</b>	Each duct penetration through a fire-resistance-rated floor/ceiling assembly that connects not more than two stories is permitted without a shaft enclosure (except for occupancy groups I-2 and I-3) provided a fire damper is installed at each floor line penetration. (IMC section 607.6.1 and IBC section 716.6.1)
Not Met	<b>MG08</b>	Each noncombustible duct penetration through only the ceiling membrane of a fire-resistance-rated floor/ceiling or roof/ceiling assembly is permitted without a shaft enclosure provided an approved (UL 555C) ceiling radiation damper is installed at each ceiling line penetration. (IMC section 607.6.2 and IBC section 716.6.2)
Not Met	<b>MG09</b>	Each noncombustible duct penetration through a non-fire-resistance-rated floor assembly is permitted without a shaft enclosure provided a fire damper is installed at each floor line penetration and the annular space between the assembly and the duct is filled with an approved noncombustible material to resist the free passage of flame and products of combustion. Alternatively, a fire damper at each floor line penetration is not required for ducts which connect not more than two stories. (IMC section 607.6.3 and IBC section 716.6.3)
Not Met	<b>MG10</b>	Specify on drawings the required fire protection rating of each fire damper in accordance with IMC Table 607.3.1. (IMC section 607.3.1)
Not Met	<b>MG11</b>	A smoke detector shall be installed in the supply air stream of each air distribution system with fan capacity greater than 2000 cfm for automatic shut down of fan. (IMC section 606.2.1 with Georgia State Amendments)

## MECHANICAL REVIEW

Not Met	<b>MG12</b>	A smoke detector shall be installed in the supply air stream of each air distribution system of multiple air-handling components sharing common supply air ducts or plenums with a combined fan capacity greater than 2000 cfm for automatic shut down of fan. [Note: Individual smoke detectors are not required for variable air volume (VAV) zone or terminal units for applications which comply with IMC section 606.2.2 - Exception.] (IMC section 606.2.2 with Georgia State Amendments).
Not Met	<b>MG13</b>	Each air distribution system with return ducts serving two (2) or more stories and a fan capacity greater than 15,000 cfm shall require installation of a smoke detector in each duct at each story in the return air stream upstream of the connection of the return duct with any other ducts or plenums to induce automatic shutdown of fan. (IMC section 606.2.3)
Not Met	<b>MG14</b>	Provide required ventilation by supplying outdoor air in accordance with IMC section 403. Substantiate compliance on drawings with calculations referencing IMC Table 403.3 which indicates the floor area (sq. ft.), maximum occupant load, minimum required ventilation rate (cfm) for each occupancy classification, and the total ventilation rate provided to the occupied space. [Note: Required outdoor air for each common ventilation system which serves spaces having different ventilation rate requirements shall comply with IMC section 403.3.2.]  Alternatively, the minimum required outdoor ventilation rate may be determined in accordance with the procedures and tables in ASHRAE Standard 62.1-2004 (Ventilation for Acceptable Indoor Air Quality). The entire building shall comply with ASHRAE 62.1 including any required additional equipment and/or systems required to be installed by ASHRAE 62.1. Substantiate compliance on drawings with corresponding calculations as previously described for IMC method. (IMC section 401.7 per Georgia State Amendments)
Not Met	<b>MG15</b>	Provide on drawings required exhaust ventilation for bathrooms, locker rooms, toilet rooms, etc. including corresponding fan air volume (CFM) and ductwork. (IMC section 502.18 and table 403.3)
Not Met	<b>MG16</b>	Provide adequate means of supplying air to each space for pressure equalization in which a greater volume of air is removed by a mechanical exhaust system than is supplied by a mechanical ventilating supply system. Indicate on drawings method of compliance including but not limited to wall louvers with back draft dampers, roof hoods, roll-up doors which automatically open when exhaust fans are operating, etc. (IMC section 501.3)
Not Met	<b>MG17</b>	Provide individual supplies and returns in each occupied room enclosed by walls which extend full height to the underside of ceiling, floor, or roof structure to ensure compliance with the required outdoor ventilation air. (IMC section 403 and table 403.3)
Not Met	<b>MG18</b>	Indicate on mechanical drawings the locations for all concealed air plenum systems. State on drawings that materials exposed within plenums are required to be noncombustible or shall have a flame spread index of not more than 25 and a smoke-developed index of not more than 50 as determined in accordance with ASTM E 84 except for tested and labeled wiring, fire sprinkler piping, pneumatic tubing, and electrical equipment. (IBC sections 603.1 exception 22, 717.5 exception 2, 1017.4.1; IMC section 602.2.1)
Not Met	<b>MG19</b>	Indicate the required sizes and locations of all louvers and ducts which provide air for combustion, ventilation, and dilution for spaces in which either solid, gas, or liquid fuel-burning appliances are installed in compliance with IMC Chapter 7 (except for gas-fired appliances which shall satisfy section 304 of International Fuel Gas Code). Specify permanent openings with louvers and/or ducts which either communicate directly with the outdoors from confined space or with other enclosed space of sufficient volume to satisfy unconfined space requirements. (IMC Chapter 7)

## MECHANICAL REVIEW

Not Met	<b>MG20</b>	Specify programmable thermostat for mechanical equipment for compliance with section 6.4.3 of ANSI/ASHRAE/IESNA Standard 90.1-2007 or IECC 503.2.4. (IECC section 501.1)
Not Met	<b>MG21</b>	Indicate on either mechanical or plumbing drawings the layout of gas piping on each floor plan with a corresponding riser diagram which specifies the type, pressure, size, location, and total equivalent length of each pipe, the type and location of shutoff valves and flow control devices, and a schedule of equipment (with BTUH demand) served by each pipe. Also, provide details which clearly address the requirements of items SE18 and SE19 regarding installation of piping to resist the applicable seismic design forces. (IFGC sections 301.12, 401, 402, 403, 404, 407, 409, 410, and 411)
Not Met	<b>MG22</b>	Specify required location, size, and length of exhaust duct for each clothes dryer for compliance with IMC section 504.
Not Met	<b>MG23</b>	Each room or space containing fumes, odors, vapors, heat, air-borne particulates, smoke, or gases in such quantities considered to be harmful to health shall have an exhaust system which discharges directly to an approved location at the exterior of the building. Indicate required locations and specifications for each pertinent exhaust system in accordance with the requirements of IMC Chapter 5. (IMC section 401.6)
Not Met	<b>MG24</b>	Provide complete details and specifications for each exhaust hood and associated duct system for compliance with IMC sections 506 and 507 to ensure that grease vapors, smoke, fumes, steam, odor, and heat produced by the equipment are adequately removed. Specify required type (Type I or II) of exhaust hood in accordance with IMC section 507.2 to provide the required minimum exhaust capacity per IMC section 507.13.
Not Met	<b>MG25</b>	Exhaust outlets for ducts which transport grease vapors, smoke, fumes, steam, odor, or heat (produced by commercial food heat-processing equipment) shall be terminated outside the building in accordance with IMC section 506.3.12 (for Type I commercial kitchen exhaust hoods) and IMC sections 401.4 and 506.4.1 (for Type II commercial kitchen exhaust hoods). Exhaust outlets for hoods shall be located not less than 10 feet horizontally from any part of the same building and from adjacent air intake openings into any building. Document compliance on plans.
Not Met	<b>MG26</b>	Specify the required method of supplying makeup air to each room or space which contains an exhaust hood at a rate approximately equal to that which is exhausted by the hood. (IMC section 508)
Not Met	<b>MG27</b>	Provide automatic shutoff devices to disconnect all sources of fuel and power which serve cooking equipment located under ventilation hoods upon activation of any equipment fire extinguishing system. Indicate the location of each shutoff device on the floor plan and on the electrical riser diagram. (2002 NFPA 17A section 4.4.3.1; IFGC sections 409.1 and 409.5)
Not Met	<b>MG28</b>	Bathroom exhaust fans shall be mechanically exhausted to the outdoors. (International Mechanical Code section 502.18)
Not Met	<b>MG29</b>	Provide permanent ladder access to mechanical equipment and appliances located on roofs that exceed 16 feet above finish floor elevation for compliance with IMC 306.5.
Not Met	<b>MG30</b>	Provide a guard at the roof edge where mechanical equipment, fans, or components are located within 10 feet of the roof edge. The guard shall extend at least 30 inches beyond each end of the equipment and the top of the guard shall be at least 42 inches above the roof surface. A 21 inch diameter object shall not be able to pass through the guard. IMC section 304.10.

### MECHANICAL REVIEW

Not Met	<b>MG31</b>	Exhaust fans for Type I hoods (kitchen hoods) shall be a minimum of 2 feet from roof parapet structures, provided that the parapet is not higher than the top of the discharge opening. IMC section 506.5.5.
Not Met	<b>MG32</b>	The maximum length of a clothes dryer exhaust duct shall not exceed 35 feet from the dryer location to the outlet terminal. The maximum length of the duct shall be reduced 2-1/2 feet for each 45 degree bend and 5 feet for each 90 degree bend. (IFGC section 614.6.1)
Not Met	<b>MG33</b>	XXXXXXXX
Not Met	<b>MG34</b>	XXXXXXXX
Not Met	<b>MG35</b>	XXXXXXXX
Not Met	<b>MG36</b>	XXXXXXXX

## PLUMBING REVIEW

AUTH NO. **BUILDING CODE COMPLIANCE ITEM**

### PG00 PLUMBING REVIEW

Not Met	<b>PG01</b>	Plumbing drawings as submitted have been reviewed for code compliance and appear to be in accordance with the International Plumbing Code. Future revisions to these plans shall require further review.
Not Met	<b>PG02</b>	Provide complete plan for each floor level and roof which indicates the required type, size, material, and location of each pipe for all systems including but not limited to water distribution, drain waste-vent, roof drainage, and gas distribution. (IPC chapters 6, 7, 8, 9, 10, and 11; IFGC chapters 3 and 4; GCCC sections 103.2.1 and 103.2.2)
Not Met	<b>PG03</b>	Provide complete schematic or isometric riser diagrams for each drain waste-vent system which indicates the type, size, and material of each pipe. (Continuous waste/vent risers shall be shown on a single sheet for clarification.) (IPC chapters 7, 8, 9, and 10; GCCC sections 103.2.1 and 103.2.2)
Not Met	<b>PG04</b>	Indicate main shutoff valve and pressure reducing valve on plans and on water riser diagram. (IPC sections 604.8 and 606)
Not Met	<b>PG05</b>	Provide complete fixture and equipment schedule and identify each item on floor plans and riser diagrams including but not limited to water closets, urinals, lavatories, drinking fountains, and water heaters. (IPC sections chapters 4 and 5)
Not Met	<b>PG06</b>	Drain waste-vent riser diagram does not appear to comply with the requirements of the International Plumbing Code. Revise accordingly to ensure compliance with code requirements. (IPC sections 7, 8, 9, and 10)
Not Met	<b>PG07</b>	Indicate on plumbing drawings the total number of occupants that has been considered in determining the required number of plumbing fixtures. (IPC section 403 and table 403.1)
Not Met	<b>PG08</b>	Tenant shall report on company letterhead stationery the proposed employee and visitor count for the purpose of determining plumbing fixture requirements. (IPC section 403) [NOTE: For each building addition and interior space renovation which does not entail the installation of additional plumbing fixtures, tenant shall also clearly describe in writing the type and quantity of existing plumbing fixtures including but not limited to water closets, lavatories, sinks, and drinking fountains.]
Not Met	<b>PG09</b>	Required restroom facilities shall be directly accessible to the public through direct openings or corridors from the area(s) they are intended to serve and shall not pass thru kitchens, storage rooms, closets, and other spaces which are restricted from public access. [EXCEPTION: Restroom facilities for businesses with carry-out food service without in-house dining and for dry cleaners in which customer transactions occur at a counter located directly adjacent to a designated customer waiting area.] (IPC section 403.1)

## PLUMBING REVIEW

Not Met	<b>PG10</b>	<p>Provide separate male and female toilet facilities for each tenant space for compliance with the requirements of IPC section 403.1 with the following exceptions:</p> <p>(A) Mercantile occupancy with a calculated occupant load (including employees and customers) of 50 or less;</p> <p>(B) Structures or tenant spaces with a calculated occupant load (including employees and customers) of 15 or less.</p> <p>The calculated occupant load shall be established either in accordance with 2006 International Building Code (IBC) section 1004.1.1 or by verification of the occupant load as determined by Gwinnett County Fire Marshal's Office per IBC 2007 Georgia State Amendments. Clearly document compliance with the fixture requirements on both architectural and plumbing drawings. (IPC sections 403.2 and 403.6)</p>
Not Met	<b>PG11</b>	Indicate size and location of water heater. (Water heaters larger than 10 gallons shall be floor mounted.) (IPC section 501.4)
Not Met	<b>PG12</b>	<p>Provide a drinking fountain in each suite to comply with IPC sections 403 and 410 with Georgia State Amendments. Water coolers or bottled water dispensers are allowed to be substituted for not more than fifty (50) percent of the required drinking fountains. Indicate on plans the location of each required drinking fountain, water cooler, and bottled water dispenser.</p> <p>[NOTE: For each previously occupied suite in which no new construction or renovation of the existing plumbing system is proposed and in which the proposed type of occupancy for the new tenant is the same as for the previous tenant, the new tenant may submit a copy of contract with a bottled water supplier in lieu of installing the required drinking fountain(s) per 2006 International Building Code section 3403.1 with Georgia State Amendments.]</p>
Not Met	<b>PG13</b>	Indicate on plumbing drawings the locations for all concealed air plenum systems. State on drawings that materials exposed within plenums are required to be noncombustible or shall have a flame spread index of not more than 25 and a smoke-developed index of not more than 50 as determined in accordance with ASTM E 84 except for tested and labeled wiring, fire sprinkler piping, pneumatic tubing, and electrical equipment. (IBC sections 603.1 exception 22, 717.5 exception 2, 1017.4.1; IMC section 602.2.1)
Not Met	<b>PG14</b>	Indicate on plans the locations of all backflow prevention devices for the potable water supply. Provide an accessible backflow prevention device at each water outlet not protected by the "minimum required air gap". (IPC section 608)
Not Met	<b>PG15</b>	Indicate on plans each required permanent emergency eye wash and/or shower station with floor drain based on the information contained in the MSDS (Material Safety Data Sheets) submitted in response to code compliance item AG18. (IPC sections 403.1 and 411)
Not Met	<b>PG16</b>	Indicate on plans a trap seal primer or other approved method at each location in which a liquid trap seal is subject to loss by evaporation. (IPC section 1002.4 with 2007 Georgia State Amendments)

## PLUMBING REVIEW

Not Met	<b>PG17</b>	Submit plans for both primary and secondary (emergency) roof drainage systems which include required sizes, locations, and materials for the applicable piping and scuppers. Piping for the secondary roof drain system shall be independent of the primary system with a separate point of discharge at a readily visible location above grade for compliance with IPC section 1107.2. Overflow scuppers shall be sized in accordance with IPC section 1107.3 and located such that the bottom of each scupper is not less than 2 inches nor more than 4 inches above the top of finished roof unless the specific rain design load for the corresponding scupper location is indicated on the structural construction documents. [NOTE: Refer to item SD19 for additional information.] (IPC sections 1105, 1106, and 1107; IBC sections 1603.1.7 and 1611)
Not Met	<b>PG18</b>	Each open vent for a drainage system shall not terminate directly below any door, operable window, or other air intake opening of any building and shall also not terminate within 10 feet horizontally of any air intake opening for any building unless it is located at least 2 feet above the top of such opening. Document compliance on plans. (IPC section 904.5)
Not Met	<b>PG19</b>	Indicate on either mechanical or plumbing drawings the layout of gas piping on each floor plan with a corresponding riser diagram which specifies the type, pressure, size, location, and total equivalent length of each pipe, the type and location of shutoff valves and flow control devices, and a schedule of equipment (with BTUH demand) served by each pipe. Also, provide details which clearly address the requirements of items SE18 and SE19 regarding installation of piping to resist the applicable seismic design forces. (IFGC sections 301.12, 401, 402, 403, 404, 407, 409, 410, and 411)
Not Met	<b>PG20</b>	Each establishment (including restaurants, cafes, snack bars, grocery stores, meat, poultry and fish markets, drugstores, bakeries, dairies, taverns and cocktail lounges) in which food is manufactured or processed shall collect all floor drains, hub drains, and open site drains into a safe waste system (master trap with fresh-air relief vent). Provide drain waste-vent riser diagram which incorporates the requirements of each safe waste system which shall be limited to one floor. (IPC Appendix H section 912.4 of 2007 Georgia State Amendments)
Not Met	<b>PG21</b>	For businesses with food service, the location and specifications for each required grease interceptor shall be approved by Gwinnett County Department of Water Resources (GCDWR) prior to issuance of the building permit. GCDWR shall signify acceptance of submitted plans by applying stamp of approval for grease interceptor directly on the pertinent plumbing drawings.
Not Met	<b>PG22</b>	Water heaters exceeding 200,000 Btu/hr, 210 degrees Fahrenheit, or 120 gallons capacity shall be established by O.C.G.A. Title 34, Chapter 11 and the Rules and Regulations of the Georgia Department of Labor. Georgia Amendments to IPC section 501.9.
Not Met	<b>PG23</b>	Provide freeze protection of sprinkler piping as required by the Fire Marshall to maintain air temperature at a minimum of 40 degrees fahrenheit in winter or install heat tape to maintain 40 degrees on piping in winter.
Not Met	<b>PG24</b>	The installation of high efficiency plumbing fixtures shall be required in all new construction. Georgia Amendments to IPC section 301.1.1, 419, 420, 424, and Table 604.4. (Effective July 1, 2012).
Not Met	<b>PG25</b>	XXXXXXX
Not Met	<b>PG26</b>	XXXXXXX

**PLUMBING REVIEW**

Not Met	<b>PG27</b>	XXXXXXXX
Not Met	<b>PG24</b>	XXXXXXXX
Not Met	<b>PG25</b>	XXXXXXXX

## STRUCTURAL REVIEW

AUTH NO. **BUILDING CODE COMPLIANCE ITEM**

### SG00 STRUCTURAL GENERAL DESIGN

Not Met	<b>SG01</b>	Structural drawings as submitted have been reviewed for code compliance and appear to be in accordance with the International Building Code. Future revisions to these plans shall require further review.
Not Met	<b>SG02</b>	Submitted structural drawings are incomplete. Furnish complete foundation, floor, and roof framing plans that clearly indicate required materials, sizes, and locations for all structural elements. Provide complete details which clearly indicate required connections between all structural framing components including anchorage to foundation to adequately resist all applicable design loads including gravity, wind, and seismic (GCCC section 103.2 and IBC section 1603.1).
Not Met	<b>SG03</b>	Indicate on structural drawings design compliance with 2006 International Building Code and Georgia State Amendments.
Not Met	<b>SG04</b>	Indicate on structural drawings the allowable soil bearing pressure in terms of pounds per square foot (PSF) utilized in the design of the foundation. The presumed design pressure shall not exceed the applicable value specified in IBC table 1804.2 unless substantiated by a foundation and soils investigation. (IBC sections 1802.6 and 1804.2)
Not Met	<b>SG05</b>	Submit foundation and soils investigation report to substantiate allowable soil bearing pressure greater than 2000 PSF based on the common soil classifications in this region, material class #4 of IBC table 1804.2. The investigation report, signed and sealed by a professional engineer registered in the state of Georgia, shall provide the information required by IBC section 1802.6. (IBC sections 1802.1 and 1802.2.1)
Not Met	<b>SG06</b>	Indicate on structural drawings the dead load (IBC section 1606) and live load (IBC section 1607.11) applicable to the design of the roof structure. (IBC sections 1602.1, 1603.1.2, and 1603.2)
Not Met	<b>SG07</b>	Primary roof structural framing components which are located above and exposed to work floor areas within repair garages, storage warehouses, and manufacturing facilities shall be designed to support either the minimum concentrated live load of 2000 lbs. uniformly distributed over an area of 2.5 feet square or the applicable live load specified in IBC table 1607.1, whichever load condition results in the greatest member stress. Indicate on structural drawings the concentrated live load of 2000 lbs. applicable to the design of the floor structure. (IBC sections 1603.1.7 and 1607.4)
Not Met	<b>SG08</b>	Indicate on structural drawings whether roof framing is or is not designed to accommodate concentrated loads due to mechanical equipment, cranes, etc. If roof structure is not designed to support concentrated loads, note accordingly on the structural drawings. Otherwise, indicate on the roof framing plan the location(s) and weight(s) of all equipment considered in the structural design. (IBC sections 1603.1.7, 1603.2, and 1606.2)
Not Met	<b>SG09</b>	Submit engineering documentation sealed and signed by a professional engineer registered in the state of Georgia which substantiates the structural adequacy of the existing roof structure to support the proposed mechanical rooftop equipment. Alternatively, submit a copy of the previously approved structural drawings for the existing building which clearly documents that the roof structure has been designed to accommodate each proposed mechanical equipment based on the specified location and operating weight. (IBC sections 1603.1.7, 1603.2, and 1606.2)

## STRUCTURAL REVIEW

Not Met	<b>SG10</b>	Indicate the operating weight for each proposed mechanical rooftop equipment. (IBC sections 1603.1.7 and 1606.2)
Not Met	<b>SG11</b>	Provide details that indicate required supplemental framing for support of proposed mechanical rooftop equipment. (IBC sections 1603.1 and 1604.2)
Not Met	<b>SG12</b>	Indicate on structural drawings the dead load(s) (IBC section 1606) and live load(s) (IBC section 1607.3) applicable to the design of the floor structure for all areas and intended uses including but not limited assembly areas, balconies, breezeways, classrooms, corridors, decks, dwelling units (apartment and hotel), lobbies, mezzanines, offices, retail space, storage areas, and stairs. [If utilized in the design, indicate the applicable reduced live load(s) including reduction method used per IBC section 1607.9.] (IBC sections 1602.1, 1603.2, and 1603.1.1)
Not Met	<b>SG13</b>	Indicate on drawings the dead load (IBC section 1606) and live load (IBC section 1607.3) applicable to the design of each mezzanine floor structure. [Note: Minimum required design live load shall be 125 PSF for light storage in accordance with IBC table 1607.1.] (IBC sections 1602.1, 1603.1.1, and 1603.2)
Not Met	<b>SG14</b>	Floor structure in areas used for business (offices, lobbies, corridors), libraries, manufacturing, retail, and schools (classrooms, corridors) shall be designed to support either the minimum concentrated live load uniformly distributed over an area of 2.5 feet square or the applicable live load specified in IBC table 1607.1, whichever load condition results in the greatest member stress. Indicate on structural drawings the concentrated live load applicable to the design of the floor structure. (IBC sections 1603.1.7 and 1607.4)
Not Met	<b>SG15</b>	Floor structure for areas in which partition locations are subject to change during the life of the structure (including but not limited to office buildings) shall be designed for a uniform live load of not less than 15 pounds per square foot (PSF) in addition to the minimum required floor design live load except for areas in which the specified live load exceeds 80 pounds per square foot (PSF). Indicate on structural drawings the applicable partition design live load. (IBC sections 1603.1.7 and 1607.5)
Not Met	<b>SG16</b>	Indicate on structural drawings the following wind data applicable to the design of the structure in accordance with IBC sections 1603.1.4 and 1609.1.1:  (A) Basic wind speed (3-second gust) in miles per hour (mph) per either ASCE/SEI 7-05 section 6.5.4 or IBC section 1609.3; (B) Importance factor (Iw) per ASCE/SEI 7-05 section 6.5.5 and table 6-1; (C) Upwind exposure category per either ASCE/SEI section 6.5.6 or IBC section 1609.4; (D) Internal pressure coefficient(s) per ASCE/SEI 7-05 section 6.5.11.
Not Met	<b>SG17</b>	Indicate on structural drawings the wind pressures in terms of pounds per square foot (PSF) applicable to the design of exterior components and cladding materials for the structure that are to be designed by other than the registered structural engineer-of-record for the project. The net design wind pressure acting in either direction normal to the surface of the components and cladding materials shall not be less than ten (10) PSF. (IBC sections 1603.1.4, 1609.1.1; ASCE/SEI 7-05 sections 6.1.4.2, 6.4.2.2, 6.5.12.4, and 6.5.13.3)

## STRUCTURAL REVIEW

Not Met	<b>SG18</b>	Identify on the plans and detail the lateral load-resisting system(s) for the proposed structure along two (2) orthogonal horizontal axes to ensure structural stability during seismic and wind design load conditions including but not limited to shear walls, braced frames, and moment resisting frames. (IBC sections 1604.4, 1604.10, 1609.1, and 1613.1; ASCE/SEI 7-05 sections 6.4.2, 6.5.4, 12.1, 12.5, and 12.14.1.1)
Not Met	<b>SG19</b>	The proposed structural system shall provide complete and continuous load path(s) for the adequate transfer of the applicable design wind and seismic forces from their point(s) of origin to the load-resisting elements and into the foundation. Provide complete details which clearly indicate all required connections between structural elements that comprise the load path of resistance including but not limited to roof/floor diaphragms, shear walls, braced frames, and moment-resisting frames. (IBC sections 1604.4 and 1604.9; ASCE/SEI 7-05 sections 12.1.3 and 12.14.7)
Not Met	<b>SG20</b>	The roof structure shall be designed to adequately support the weight of all rainwater that can possibly accumulate as a result of obstruction in the primary roof drainage system. Secondary (emergency) roof drains or scuppers shall be provided where the roof perimeter construction extends above the roof in such a manner that rainwater will be entrapped due to blockage in the primary roof drainage system for compliance with the 2006 International Plumbing Code (IPC). Overflow scuppers shall be located such that the bottom of each scupper is not less than 2 inches nor more than 4 inches above the top of finished roof unless the specific rain design load for the corresponding scupper location is indicated on the structural construction documents. (IBC sections 1603.1.7 and 1611; IPC sections 1101.7, 1107.1, and 1107.2)
Not Met	<b>SG21</b>	Indicate on structural drawings that each flat roof structure with a slope of less than one-fourth (1/4) inch vertical per foot horizontal is designed for ponding to ensure stability in the support of rainwater loads in accordance with ASCE/SEI section 7.11. (IBC section 1611.2)
Not Met	<b>SG22</b>	Provide complete details for construction of all guards and handrails to ensure compliance with IBC sections 505.5.3 (equipment platforms), 1010.10 (ramps), 1012 (handrails), 1013 (guards), 1025.14 (assembly guards), and 1607.7.1 (loads). Details shall indicate required materials, sizes, and locations for all posts and pickets including anchorage at base of posts.
Not Met	<b>SG23</b>	State the following (verbatim) on the structural drawings for compliance with IBC section 1603.3:  The floor design live load for each elevated floor structure or portion thereof that exceeds 50 pounds per square foot (PSF) shall be stated on durable signs and conspicuously posted by the owner in the applicable area(s) of the building.
Not Met	<b>SG24</b>	Provide complete framing plan for mezzanine that clearly indicates required materials, sizes, and locations for all structural elements. Provide complete details which clearly indicate required connections between all structural framing components to adequately resist all applicable design loads including gravity, wind, and seismic. (GCCC sections 103.2.1 and 103.2.2; IBC section 1603.1)
Not Met	<b>SG25</b>	All structural components of mezzanine including but not limited to walls, columns, beams, joists, floor decking, and guards shall consist of noncombustible materials for compliance with the requirements for buildings of Type I and II construction. (IBC sections 602.2, 603 and IBC table 601)

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Not Met	<b>SG26</b>	Provide details that indicate the required attachment to structure (type, size, and spacing of fasteners) on all sides of each exterior glazed system (including but not limited to window units, curtain walls, and storefronts) which exceeds ten (10) feet in height to adequately resist the applicable wind design pressures. (IBC sections 1609.1, 2403.2, 2403.3, 2404.1, 2404.2, and 2404.3; ASCE/SEI 7-05 sections 6.1.1, 6.4.2.2, 6.5.12.4, and 6.5.13.3)
Not Met	<b>SG27</b>	Structural backing for masonry veneer shall comply with the Span/240 deflection limit of IBC Table 1604.3. Submit engineering documentation which clearly substantiates compliance for all structural components to which veneer anchor ties are attached including but not limited to wall studs greater than ten (10) feet in height, structural siding, and girts subject to the applicable wind and seismic design loads. (IBC section 1604.3)
Not Met	<b>SG28</b>	State the following (verbatim) on the structural drawings for compliance with IBC section 1603.1 and GCCC section 103.8.6:  "Complete 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."
Not Met	<b>SG29</b>	Shop drawings for the following selected [X] building components not specified on the project construction documents approved for building permit shall be sealed and signed by a professional engineer registered in the state of Georgia and submitted to Gwinnett county Building Plan Review for review after approval by the project engineer-of-record for compliance with IBC section 1603.1 and GCCC section 103.8.6:  <input type="checkbox"/> Awnings / Canopies <input type="checkbox"/> Glazed system (including but not limited to window units, curtain walls, and storefronts) which exceeds ten (10) feet in height <input type="checkbox"/> Light gauge steel framing <input type="checkbox"/> Ornamental guardrails <input type="checkbox"/> Precast concrete <input type="checkbox"/> Skylights <input type="checkbox"/> Stairs <input type="checkbox"/> Trusses (floor and roof) <input type="checkbox"/> Other: _____  NOTE: The Dept. of Planning & Development will not provide any framing inspections for the project until the required shop drawings have been submitted to Building Plan Review for review and approval.

## STRUCTURAL REVIEW

Not Met	<b>SG30</b>	<p>Submit calculations sealed and signed by the project structural engineer-of-record which demonstrate the structural adequacy of each building or structure to resist the applicable load combinations of IBC section 1605 including wind and seismic design loads determined in accordance with IBC sections 1609, 1613, and ASCE/SEI 7-05 chapters 6, 11, 12. Calculations and engineering principles shall document each of the following in accordance with IBC sections 1604.4, 1604.10, 1609.1, 1613.1, and ASCE/SEI 7-05 sections 6.4, 6.5, 12.1 thru 12.14:</p> <p>(A) Identify the load paths for transferring both wind pressures (acting on exposed wall and roof surfaces) and lateral seismic forces through the building structure and down to the foundation;</p> <p>(B) Structural adequacy of the applicable lateral load-resisting system(s) including but not limited to structural elements (frames, braces, struts, girts, etc.) and diaphragms (floors, roofs, walls);</p> <p>(C) Structural adequacy of connections (including nailing, anchoring, strapping, bolting, welding, etc.) between building structural components which transmit wind or seismic forces including attachments to the lateral load-resisting system(s);</p> <p>(D) Structural stability against overturning for the applicable lateral load-resisting system(s) in conformance with IBC sections 1604.4, 1604.9, 1609.1.1, 1613.1 and ASCE/SEI 7-05 sections 6.4, 6.5, 12.8.5, 12.9.5, 12.14.8.4;</p> <p>(E) Compliance with the building drift limits of IBC section 1604.3.1 and ASCE/SEI 7-05 section 12.12.1;</p> <p>(F) For structures with braced frames, document design compliance with IBC section 2205.</p> <p style="text-align: center;">ALLOW TEN (10) BUSINESS DAYS FOR REVIEW OF ALL SUBMITTED CALCULATIONS</p>
Not Met	<b>SG31</b>	<p>Submit calculations sealed and signed by the project structural engineer-of-record which demonstrate the structural adequacy of each building or structure to resist the applicable load combinations of IBC section 1605 including but not limited to gravity, wind, and seismic design loads determined in accordance with IBC sections 1606 thru 1613 and ASCE/SEI 7-05 chapters 6, 11, 12. Calculations shall document compliance for all structural components including but not limited to foundation, framing members, connections between structural components, and anchorages to the foundation. (IBC section 1604)</p> <p style="text-align: center;"><i>ALLOW TEN (10) BUSINESS DAYS FOR REVIEW OF ALL SUBMITTED STRUCTURAL CALCULATIONS.</i></p>
Not Met	<b>SG32</b>	Indicate on structural drawings the applicable Occupancy Category per ASCE/SEI 7-05 table 1-1 (ASCE/SEI 7-05 section 11.5; IBC section 1603.1.5.)
Not Met	<b>SG33</b>	XXXXXXXX
Not Met	<b>SG34</b>	XXXXXXXX
Not Met	<b>SG35</b>	XXXXXXXX
Not Met	<b>SG36</b>	XXXXXXXX
Not Met	<b>SG37</b>	XXXXXXXX

## STRUCTURAL REVIEW

### SE00 SEISMIC DESIGN

Not Met	<b>SE01</b>	Indicate on structural drawings the applicable Seismic Importance Factor per ASCE/SEI 7-05 table 11.5-1. (ASCE/SEI 7-05 section 11.5; IBC section 1603.1.5)
Not Met	<b>SE02</b>	Indicate on structural drawings the Site Class applicable to this project per ASCE/SEI 7-05 section 11.4.2. Submit site-specific data prepared (sealed and signed) by a professional engineer or geologist registered in the state of Georgia in accordance with ASCE/SEI 7-05 sections 11.4.2 and 20.1 to substantiate assignment of project site as either Site Class A, B, or C per ASCE/SEI 7-05 table 20.3-1. (ASCE/SEI 7-05 section 20.4; IBC section 1603.1.5)
Not Met	<b>SE03</b>	Indicate on structural drawings the design spectral response acceleration coefficients SDS and SD1 applicable to this project per ASCE/SEI 7-05 section 11.4.3. [Note: SDS and SD1 shall be determined based upon the value of $SS = 0.25g$ (for mapped spectral acceleration for short periods) and the value of $S1 = 0.09g$ (for mapped spectral acceleration for a 1-second period) in accordance with IBC section 1613.5 for construction sites located in Gwinnett County.] (IBC section 1603.1.5)
Not Met	<b>SE04</b>	Design values indicated on the structural drawings for the spectral response acceleration coefficients SDS and SD1 shall not be less than 0.27g and 0.14g, respectively, for construction sites classified as Site Class D per ASCE/SEI 7-05 table 20.3-1. [Alternatively, address the requirements of item SE05.] (IBC section 1613.5; ASCE/SEI 7-05 section 11.4.3)
Not Met	<b>SE05</b>	Design values indicated on the structural drawings for the spectral response acceleration coefficients SDS and SD1 which are less than 0.27g and 0.14g, respectively, for construction sites classified as Site Class D shall be substantiated by a site-specific seismic hazard analysis report prepared (sealed and signed) by a professional engineer or geologist registered in the state of Georgia in compliance with ASCE/SEI 7-05 section 11.4.7. (Per ASCE/SEI 7-05 section 21.2, the values determined for SDS and SD1 shall not be less than 0.21g and 0.12g, respectively.)  ALLOW FIVE (5) BUSINESS DAYS FOR REVIEW OF SUBMITTED REPORT
Not Met	<b>SE06</b>	Design values indicated on the structural drawings for the spectral response acceleration coefficients SDS and SD1 for construction sites classified as other than Site Class D per ASCE/SEI 7-05 table 20.3-1 shall be determined in accordance with IBC section 1613.5 and documented by structural calculations sealed and signed by the project structural engineer-of-record. (IBC section 1613.5)

## STRUCTURAL REVIEW

Not Met	<b>SE07</b>	<p>Indicate on structural drawings the Seismic Design Category assigned to this project that represents the most severe category determined from ASCE/SEI 7-05 tables 11.6-1 and 11.6-2. (ASCE/SEI 7-05 sections 11.6; IBC section 1603.1.5)</p> <p>Alternatively, the Seismic Design Category may be determined solely from ASCE/SEI 7-05 table 11.6-1 subject to each of the following requirements per ASCE/SEI 7-05 section 11.6 with 2007 Georgia Amendments:</p> <ol style="list-style-type: none"> <li>1. The approximate fundamental period of the structure (<math>T_a</math>) in each of the two orthogonal directions determined in accordance with ASCE/SEI 7-05 section 12.8.2.1 is less than <math>0.8 T_s</math> (determined in accordance with ASCE/SEI 7-05 section 11.4.5);</li> <li>2. The seismic response factor (<math>C_s</math>) is determined using equation 12.8-2 of ASCE/SEI 7-05 section 12.8.1.1; and</li> <li>3. Each floor and roof diaphragm is defined as rigid per ASCE/SEI 7-05 section 12.3.1. Submit calculations sealed and signed by the project engineer-of-record which clearly document compliance.</li> </ol>
Not Met	<b>SE08</b>	<p>Indicate on structural drawings the Basic Seismic-Force-Resisting System and corresponding Response Modification Coefficient ( <math>R</math> ) per ASCE/SEI 7-05 table 12.2-1. [NOTE: For each structure with a combination of different basic-seismic-force-resisting systems located along the same orthogonal axis, the response modification co-efficient ( <math>R</math> ) used for design shall not be greater than the least value of <math>R</math> for any system utilized in that same direction in accordance with ASCE/SEI 7-05 section 12.2.3.1.] (ASCE/SEI 7-05 section 12.1.1; IBC section 1603.1.5)</p>
Not Met	<b>SE09</b>	<p>Indicate on structural drawings the seismic analysis procedure applicable to this project: equivalent lateral force procedure per ASCE/SEI 7-05 section 12.8, seismic response history procedure per ASCE/SEI 7-05 sections 16.1 and 16.2, modal response spectrum analysis procedure per ASCE/SEI 7-05 section 12.9, or simplified design procedure per ASCE/SEI 7-05 section 12.14.1.1. (ASCE/SEI 7-05 section 12.1.1; IBC section 1603.1.5)</p>
Not Met	<b>SE10</b>	<p>Simplified design procedure is restricted to the following structures assigned to Occupancy Category (I or II) per ASCE/SEI 7-05 Table 1-1: light-frame buildings of no more than three (3) stories, and buildings of any type of construction of no more than two (2) stories with flexible diaphragms at roof and floor levels. Submit calculations sealed and signed by the structural engineer-of-record to document compliance of each horizontal floor and roof diaphragm with the lateral deflection requirements for flexible diaphragms per ASCE/SEI 7-05 section 12.3 for buildings other than light frame construction in which the seismic simplified analysis procedure is utilized for structural design. (ASCE/SEI 7-05 section 12.14.1.1)</p>
Not Met	<b>SE11</b>	<p>Indicate on structural drawings the magnitude of seismic design base shear calculated for each of two (2) separate and independent orthogonal directions as determined in accordance with the applicable seismic analysis procedure (equivalent lateral force analysis, seismic response history procedure, modal response spectrum analysis, or simplified lateral force analysis). (ASCE/SEI 7-05 sections 12.1.1, 12.8.1, 12.9.4, 12.14.8.1 and chapter 16; IBC section 1603.1.5)</p>
Not Met	<b>SE12</b>	<p>Documentation to address items # SE03, SE04, SE06, SE08, SE09, and SE11 is optional for structures of light-frame conventional construction which comply with the requirements of ASCE/SEI 7-05 section 12.14. (ASCE/SEI 7-05 section 11.4.3; IBC section 1603.1.)</p>

## STRUCTURAL REVIEW

Not Met	<b>SE13</b>	Submit calculations sealed and signed by the structural engineer-of-record which clearly document compliance with the additional seismic analysis requirements of ASCE/SEI 7-05 Table 12.3-1 to adequately address the apparent plan structural irregularity type(s) _____ applicable to the proposed building structure. (ASCE/SEI 7-05 section 12.3.2.1)
Not Met	<b>SE14</b>	Submit calculations sealed and signed by the structural engineer-of-record which document compliance with the additional seismic analysis requirements of ASCE/SEI 7-05 Table 12.3-2 to adequately address the apparent vertical structural irregularity type(s) _____ applicable to the proposed building structure. (ASCE/SEI 7-05 section 12.3.2)
Not Met	<b>SE15</b>	For Seismic Design Category C structures, provide details which indicate required anchorage of concrete and masonry walls to wood and metal deck roof/floor diaphragms to ensure wall lateral stability in accordance with the requirements of ASCE/SEI 7-05 section 3.4.2 except interior masonry partitions which are not part of the lateral force-resisting system shall satisfy the requirements of item SM19.
Not Met	<b>SE16</b>	Provide details that clearly indicate either expansion joint or connections as required at interface between two (2) adjacent structures. Connections between adjacent structures shall be capable of transmitting the applicable lateral seismic design forces. Expansion joints shall be designed to accommodate independent lateral movement of both adjacent structures under seismic conditions without contact. (ASCE/SEI 7-05 11B.3, 11B.4 and 11B.5.)
Not Met	<b>SE17</b>	All architectural, mechanical, and electrical components shall be installed to resist the seismic design forces specified per ASCE/SEI 7-05 section 13.2 unless exempt as listed in ASCE/SEI 7-05 section 13.1.4. Compliance for this project shall be based upon the requirements of Category Seismic Design Category C (ASCE/SEI 7-05 section 11.6) except for projects classified as Occupancy Category IV (ASCE/SEI 7-05 table 1-1) in which case the requirements of Seismic Design Category D (ASCE/SEI 7-05 section 11.6) shall apply. Clearly detail proposed method of compliance for each affected component including but not limited to nonstructural partitions, suspended ceilings, mechanical equipment, HVAC ductwork, electrical conduits, plumbing supply and waste piping, and fire-protection sprinkler piping. Indicate member sizes, support connections, and spacing requirements. [For design assistance, refer to SMACNA Seismic Restraint Manual: Guidelines for Mechanical Systems (second edition)]. (ASCE/SEI 7-05 sections 13.5 and 13.6)
Not Met	<b>SE18</b>	Provide detail(s) for installation of all gas piping (component importance factor $I_p$ of 1.5) to resist the seismic design forces specified per ASCE/SEI 7-05 section 13.3.1 and 13.6.8 except for piping located in Seismic Design Categories A and B and unless exempt as stated in ASCE/SEI 7-05 section 13.1.4. Indicate member sizes, support connections, and spacing requirements. (ASCE/SEI 7-05 sections 13.6.8, 13.1.4, and 13.1.3)
Not Met	<b>SE19</b>	Component seismic attachments required per items SE17 and SE18 shall be positive connections without consideration of frictional resistance and shall be capable of resisting the prescribed seismic design force for each of two orthogonal directions (transverse and longitudinal). (ASCE/SEI 7-05 section 13.3.1)

## STRUCTURAL REVIEW

Not Met	<b>SE20</b>	Architectural, mechanical, and electrical components shall be designed, arranged, and installed to ensure that the failure of any component during seismic design conditions shall not affect the operation of any other essential component. Essential architectural, mechanical, and electrical components include components for structures classified as Occupancy Category IV (ASCE/SEI 7-05 table 1-1) or components with an assigned importance factor ( $I_p$ ) greater than 1.0 per ASCE/SEI 7-05 section 13.1.3. Document on plans the proposed methods for compliance. (ASCE/SEI 7-05 section 13.1.4)
Not Met	<b>SE21</b>	The fire-protection sprinkler system for each building shall be installed to resist the seismic design forces specified per ASCE/SEI 7-05 sections 13.3.1 and 13.3.2. State on architectural cover sheet that "plans for fire-protection sprinkler piping including complete seismic support details shall be reviewed and approved by the Gwinnett County Fire Marshal's Office prior to installation for compliance with ASCE/SEI 7-05 sections 13.3.1, 13.3.2, and NFPA 13".
Not Met	<b>SE22</b>	Identify on plans all locations at which essential mechanical and electrical components (including but not limited to HVAC ductwork, electrical conduits, plumbing supply and waste piping, gas piping, and fire-protection sprinkler piping) are routed across structural expansion joint(s) for components in structures classified as Occupancy Category IV (ASCE/SEI 7-05 table 1-1) and for components with an assigned importance factor ( $I_p$ ) greater than 1.0 per ASCE/SEI 7-05 section 13.1.3. Provide details that clearly indicate installation of each component to adequately accommodate the relative seismic displacements at the expansion joint(s) for compliance with ASCE/SEI 7-05 sections 13.3.2, 13.6.5, and 13.6.8. [For design assistance, refer to SMACNA Seismic Restraint Manual: Guidelines for Mechanical Systems (second edition)].
Not Met	<b>SE23</b>	XXXXXXXX
Not Met	<b>SE24</b>	XXXXXXXX
Not Met	<b>SE25</b>	XXXXXXXX
Not Met	<b>SE26</b>	XXXXXXXX

## SC00 CONCRETE DESIGN

Not Met	<b>SC01</b>	Specify required sizes for all concrete structural elements including but not limited to spread footings, continuous strip footings, thickened slab footings, walls, grade beams, pilasters, pedestals, piles and pile caps, beams, and columns. (IBC sections 1603.1, 1805, 1807, 1808, 1809, 1810, 1811, 1812, 1901.2, 1901.4, 1908, 1909, and ACI 318-05; TIA/EIA-222-F Section 7.4)
Not Met	<b>SC02</b>	Indicate required type, size, spacing, and location of all reinforcement in concrete structural elements per item SC01. (IBC sections 1805.4, 1805.5, 1808.2.23, 1809.2, 1810.1.2, 1810.3.5, 1810.5.4, 1810.6.4, 1811.5, 1812.4, 1901.2, 1901.4, 1907, 1908, 1913.4, 1915.4; TIA/EIA-222-F Section 7.4)
Not Met	<b>SC03</b>	Specify on structural drawings the 28-day design compressive strength ( $f_c$ ) of concrete for all structural elements including but not limited to foundations, slabs, walls, beams, and columns for compliance with IBC table 1904.2.2. (IBC sections 1805.4.2, 1901.4, 1904.2.2, and 1905.1; TIA/EIA-222-F Section 7.4)

## STRUCTURAL REVIEW

Not Met	<b>SC04</b>	Indicate on 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 318-05 section 3.5. (IBC section 1901.4; TIA/EIA-222-F Section 7.4)
Not Met	<b>SC05</b>	Specify on structural drawings that steel reinforcement to be welded shall conform to the requirements of ASTM A 706 and that welding shall be in accordance with AWS D1.4, Structural Welding Code – Reinforcing Steel by American Welding Society for compliance with ACI 318-05 section 3.5. (IBC section 1901.4)
Not Met	<b>SC06</b>	Specify that the bottom of all foundations shall extend a minimum of twelve (12) inches below the top of finished grade. (IBC section 1805.2)
Not Met	<b>SC07</b>	Specify minimum width of twelve (12) inches for all footings that resist loads. Alternatively, submit a subsurface investigation report sealed and signed by a professional geotechnical engineer licensed in the state of Georgia which documents the structural adequacy of footings less than twelve (12) inches in width. (IBC section 1805.4.1)
Not Met	<b>SC08</b>	Specify the required thickness of concrete and the corresponding reinforcement for all slabs on grade. (IBC sections 1901.4, 1907, and 1910)
Not Met	<b>SC09</b>	Specify placement of a 6 mil (minimum) polyethylene moisture barrier (with joints lapped not less than 6 inches) directly beneath all interior concrete slabs on grade. Alternatively, the designer-of-record shall state on drawings that omission of the moisture barrier beneath the concrete slab on grade will not be detrimental to the intended use of the building. (IBC section 1910)
Not Met	<b>SC10</b>	Specify the minimum required concrete cover for reinforcement for all concrete structural elements, including but not limited to foundations, slabs, walls, beams, and columns. (IBC sections 1901.4 and 1907.7)
Not Met	<b>SC11</b>	Specify the minimum required lap splice length for each type and size of steel reinforcement in compression and tension for all concrete structural elements including but not limited to foundations, slabs, walls, beams, and columns. (IBC section 1901.4; ACI 318-05 sections 12.14 thru 12.19)
Not Met	<b>SC12</b>	Indicate on structural drawings that the design of concrete structural elements including walls, formed slabs, beams, and columns is in accordance with ACI 318-05 (Building Code Requirements for Structural Concrete). (IBC section 1901.2)
Not Met	<b>SC13</b>	Detail continuous beam tension reinforcement required for positive moment at midspan and for negative moment at supports including stirrups for compliance with the structural integrity requirements of ACI 318-05 section 7.13. (IBC section 1907.13)
Not Met	<b>SC14</b>	Specified thickness of structural concrete element (including but not limited to footing, slab, wall, beam) does not provide the minimum required embedment depth for the proposed reinforcement beyond either construction joint or free edge of element to ensure full tensile development in accordance with ACI 318-05 sections 12.2, 12.4, and 12.5 for adequate transfer of design forces.

## STRUCTURAL REVIEW

Not Met	<b>SC15</b>	Specify on structural drawings the type, size, and spacing of anchors required for connection of steel framing components to concrete structural elements including but not limited to headed bolts, headed studs, hooked (J- and L-) bolts, and expansion-type bolts. (IBC sections 1901.4, 1911, and 1912)
Not Met	<b>SC16</b>	Specify on structural drawings the minimum required embedment depth into concrete for all anchors per item SC15. (IBC sections 1901.4, 1911, and 1912)
Not Met	<b>SC17</b>	Specify on structural drawings the minimum required clear distance between the edge of the concrete structural element and each anchor per item SC15 which is installed at a distance less than the specified anchor embedment depth from the edge. (IBC sections 1911.3 and 1912 or ACI 318-05 section D.8)
Not Met	<b>SC18</b>	Indicate on structural foundation drawings the relative elevations at the top of footings and at top of slab on grade. (IBC section 1901.4)
Not Met	<b>SC19</b>	For preengineered structural building systems, indicate on the foundation plan the design reactions (gravity, uplift, lateral thrust, etc.) that have been determined by the preengineered building structural engineer and utilized in the design of footings/column anchorage. (IBC section 1604.9; GCCC section 103.2.2)
Not Met	<b>SC20</b>	Specified footing size(s) shall provide for sufficient weight to adequately resist the applicable design uplift and overturning forces indicated on the foundation plan for each preengineered building structure. (IBC sections 1604.8.1 and 1801.2.1)
Not Met	<b>SC21</b>	Control joints in the floor slab on grade shall be offset from the centerline of columns which are supported by monolithic cast slab footings in order to prevent cracks from undermining the structural integrity of the footings and the structural frame anchorage. (IBC sections 1901, 1906.4, 1911, and 1912)
Not Met	<b>SC22</b>	State on drawings that results for all concrete compressive strength tests shall be available on the job site for review by the inspector. (IBC section 1905.6; GCCC section 104)
Not Met	<b>SC23</b>	<p>Prior to final authorization of the building permit, submit complete fabrication drawings sealed and signed by a professional engineer registered in the state of Georgia that address the structural requirements for construction of all types of concrete wall panels including precast and tilt-up. Drawings shall clearly indicate required steel reinforcement for the panels, steel embeds required for connections between wall panels and for anchorages between the roof/floor structure and wall panels, the minimum required 28-day concrete compressive strength, and all design loads including gravity, wind, and seismic. (GCCC section 103.2; IBC sections 1603.1 and 1901.4)</p> <p style="text-align: center;">ALLOW TEN (10) BUSINESS DAYS FOR REVIEW OF SUBMITTED STRUCTURAL DRAWINGS</p>
Not Met	<b>SC24</b>	XXXXXXXX
Not Met	<b>SC25</b>	XXXXXXXX
Not Met	<b>SC26</b>	XXXXXXXX

## STRUCTURAL REVIEW

Not Met	<b>SC27</b>	XXXXXXXX
Not Met	<b>SC28</b>	XXXXXXXX
Not Met	<b>SC29</b>	XXXXXXXX

### SM00 MASONRY DESIGN

Not Met	<b>SM01</b>	Specify on structural drawings the required type(s) of mortars per ASTM C 270. (IBC section 2103.8)
Not Met	<b>SM02</b>	Specify on structural drawings 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]. (IBC sections 2103.12 and 2105.2.2.1.2)
Not Met	<b>SM03</b>	Specify on structural drawings required net area compressive strength (f'm) of masonry. (IBC sections 2105.2 and 2107.1; ACI 530-05/ASCE 5-05/TMS 402-05 sections 2.1.1.2.1 and 3.1.8.1.1)
Not Met	<b>SM04</b>	Masonry net area compressive strength (f'm) greater than 1500 psi (for concrete masonry) and 2500 psi (for clay masonry) shall be verified either by prism tests conducted per ASTM C 1314 or by unit compressive strength tests performed per ASTM C 140 (for concrete masonry) and ASTM C 67 (for clay masonry). State on structural drawings that complete test reports that document either a minimum unit compressive strength of _____ psi or a prism minimum compressive strength (f'm) of _____ psi shall be submitted to the building inspector. For testing of prisms, at least one test shall be performed prior to construction and for each 5,000 square feet of wall surface area but not less than one set of three test prisms for each project. (IBC sections 1704.5, 2105.2.2.2, and 1704.5; IBC tables 1704.5.1 and 1704.5.3; ACI 530.1-05/ASCE 6-05/TMS 602-05 section 1.4)
Not Met	<b>SM05</b>	Indicate on structural drawings the required material specifications for all steel reinforcement to be placed in masonry construction including ASTM designation, and material grade or yield strength (KSI). (IBC sections 2101.3 and 2103.13)
Not Met	<b>SM06</b>	Specify the required type, size, and gauge of steel anchors for attachment of masonry veneer to structural backing including but not limited to corrugated sheet metal anchors, sheet metal anchors, wire anchors, joint reinforcement, and adjustable anchors. (Corrugated sheet metal anchors are allowed only for attachment of veneer to wood backing per ACI 530-05/ASCE 5-05/TMS 402-05 sections 6.2.2.6 thru 6.2.2.8.) (IBC sections 1405.5, 2101.3, and 2103.13.5; ACI 530-05/ASCE 5-05/TMS 402-05 sections 6.2.2.5 thru 6.2.2.8)
Not Met	<b>SM07</b>	Specify the required spacing (horizontal and vertical) of anchors for attachment of masonry veneer to structural backing. Anchor spacing shall not exceed 32 inches horizontally or 18 inches vertically with at least one anchor for each 3.5 square feet of wall area reduced to 2.67 square feet for adjustable two-piece anchors. (IBC sections 1405.5 and 2101.3; ACI 530-05/ASCE 5-05/TMS 402-05 section 6.2.2.5.6)

## STRUCTURAL REVIEW

Not Met	<b>SM08</b>	Indicate structural construction requirements for lintels that support masonry above openings and supplement with details as necessary to adequately reflect the applicable reinforcement and end bearing conditions. (IBC sections 2101.3, 2104.1.5, and 2205; ACI 530-05/ASCE 5-05/TMS 402-05 sections 1.10 and 2.3.3.4)
Not Met	<b>SM09</b>	Provide complete details which clearly indicate required anchorage of masonry walls to roof and floor structure to transfer the applicable horizontal design forces acting perpendicular and parallel to the wall but not less than 280 pounds per lineal foot of wall. For shear walls in Seismic Design Category C structures, anchorage connectors shall be spaced no more than 48 inches on center along a continuous bond beam reinforced with a minimum of one no. 4 rebar. (IBC sections 1604.8.2, 2101.3, 2106.2, and 2106.4; ACI 530-05/ASCE 5-05/TMS 402-05 sections 1.14.2.2.2.1, 1.14.2.2.2.2, and 1.14.5.3.3)
Not Met	<b>SM10</b>	Specify on structural drawings the type, size, and spacing of anchors required for connection of steel framing components to masonry structural elements including but not limited to headed bolts, headed studs, hooked (J- and L-) bolts, and expansion-type bolts. (IBC sections 2101.3 and 2103.13.5; ACI 530-05/ASCE 5-05/TMS 402-05 section 2.1.4.3.1.6)
Not Met	<b>SM11</b>	Specify on structural drawings the minimum required embedment depth of all anchors into grouted masonry. (IBC sections 2101.3 and 2107.1; ACI 530-05/ASCE 5-05/TMS 402-05 section 2.1.4.3.1.6)
Not Met	<b>SM12</b>	Specify on structural drawings the required type, size, and spacing of all horizontal and vertical reinforcement in masonry walls to adequately resist the applicable gravity, wind, and seismic design forces. (IBC section 2101.3; ACI 530-05/ASCE 5-05/TMS 402-05 sections 1.14.5, 1.14.2.2.2.1, 1.14.5.2.3, 1.14.6.3, 1.14.7.2, 1.14.7.3, 2.3, 3.3, 3.3.5, and 3.3.6)
Not Met	<b>SM13</b>	Specify minimum required lap splice length for reinforcement in masonry as determined either by Equation 21-2 of IBC section 2107.5 [Note: In regions of flexure for reinforced masonry where the design tensile stress in the reinforcement exceed 80% of the allowable tensile stress, the required length of lap determined by Equation 21-2 shall be increased by 50%.]
Not Met	<b>SM14</b>	Specify on structural drawings the type(s) of masonry shear walls proposed for the basic seismic-force-resisting system: ordinary reinforced, intermediate reinforced, or special reinforced. (IBC sections 1603.1.5 and 2106.1; ACI 530-05/ASCE 5-05/TMS 402-05 sections 1.14.3, 1.14.4.2, 1.14.5.3, and 1.14.6.4)

## STRUCTURAL REVIEW

Not Met	<b>SM15</b>	<p>Ordinary reinforced masonry shear walls shall be reinforced both vertically and horizontally in accordance with the minimum requirements of either ACI 530-05/ASCE 5-05/TMS 402-05 section 1.14.2.2.3. For vertical wall reinforcement, specify at least one no. 4 full height vertical rebar at all corners, within 16 inches of each side of openings, within 8 inches of each side of control and expansion joints, within 8 inches of the ends of walls, and at a maximum spacing of ten (10) feet. For horizontal wall reinforcement, specify either two (2) W1.7 wires at a maximum spacing of 16 inches or a continuous bond beam reinforced with at least one no. 4 rebar at a maximum spacing of ten (10) feet. Specify additional horizontal reinforcement at the top and bottom of wall openings which shall extend at least 24 inches and not less than 40 bar diameters beyond the opening; continuously along connections between wall and roof/floor structure; and within 16 inches of the top of walls. (IBC section 2101.3; ACI 530-05/ASCE 5-05/TMS 402-05 section 1.14.2.2.2.1)</p>
Not Met	<b>SM16</b>	<p>Intermediate reinforced masonry shear walls shall be reinforced both vertically and horizontally in accordance with the minimum requirements of either ACI 530-05/ASCE 5-05/TMS 402-05 section 1.14.2.2.4. For vertical wall reinforcement, specify at least one no. 4 full height vertical rebar at all corners, within 16 inches of each side of openings, within 8 inches of each side of control and expansion joints, within 8 inches of the ends of walls, and at a maximum spacing of 48 inches. For horizontal wall reinforcement, specify either two (2) W1.7 wires at a maximum spacing of 16 inches or a continuous bond beam reinforced with at least one no. 4 rebar at a maximum spacing of ten (10) feet. Specify additional horizontal reinforcement at the top and bottom of wall openings which shall extend at least 24 inches and not less than 40 bar diameters beyond the opening; continuously along connections between wall and roof/floor structure; and within 16 inches of the top of walls. (IBC section 2101.3; ACI 530-05/ASCE 5-05/TMS 402-05 section 1.14.2.2.2.1)</p>
Not Met	<b>SM17</b>	<p>Special reinforced masonry shear walls shall be reinforced both vertically and horizontally in accordance with the minimum requirements of either ACI 530-05/ASCE 5-05/TMS 402-05 section 1.14.2.2.5. The sum of the cross-sectional area of horizontal and vertical reinforcement shall be at least 0.002 times the gross cross-sectional area of the wall. For horizontal wall reinforcement, specify a minimum cross-sectional area of reinforcement of 0.0007 times the gross cross-sectional area of the wall. For vertical wall reinforcement, specify a minimum cross-sectional area of reinforcement of 0.0007 times the gross cross-sectional area of the wall but not less than one-third of the required shear reinforcement. Reinforcement shall be uniformly distributed with a maximum spacing at the smaller of one-third the length of the shear wall, one-third the height of the shear wall, or 48 inches except spacing shall be reduced to a maximum of 24 inches for stack bond masonry. [Note: Wythes of stack bond masonry shall be constructed of fully grouted hollow open-end units, fully grouted hollow units laid with full head joints, or solid units.] (IBC section 2101.3; ACI 530-05/ASCE 5-05/TMS 402-05 sections 1.14.2.2.2.1 and 1.14.6.3)</p>

## STRUCTURAL REVIEW

Not Met	<b>SM18</b>	<p>Exterior masonry walls that are not part of the lateral force-resisting system shall be laterally supported in either the vertical or horizontal direction at intervals not exceeding those indicated in ACI 530-05/ASCE 5-05/TMS 402-05 table 5.5.1 <u>only for Seismic Category B and C structures in which case structures with masonry shear walls shall not exceed 35 feet in height</u>. Lateral support shall be provided by structural elements including cross walls, pilasters, buttresses, or structural frame members when the limiting distance is measured horizontally, or by floors, roofs acting as diaphragms, or structural frame members when the limiting distance is measured vertically. Walls shall be directly anchored to the structural element that provides lateral support with connections capable of resisting a lateral seismic force (<math>F_p</math>) determined in accordance with ASCE/SEI 7-05 section 12.11.2 but not less than 280 pounds per lineal foot of wall per IBC section 1604.8.2. Clearly detail proposed method(s) of compliance to indicate required type, size, and spacing of anchors for attachment of walls to structural elements that provide lateral support. (IBC sections 1604.8, 1607.13, 1604.8.2, and 2101.3; ACI 530-99/ASCE 5-99/TMS 402-99 sections 5.5 and 5.8; ASCE/SEI 7-05 sections 12.11.1, 12.11.2, 12.11.2.1, and 13.5.3)</p>
Not Met	<b>SM19</b>	<p>Interior nonstructural masonry partitions that are not part of the lateral force-resisting system for Seismic Category C and D structures shall be laterally supported in either the vertical or horizontal direction to adequately resist a lateral seismic force (<math>F_p</math>) determined in accordance with ASCE/SEI 7-05 section 13.3.1 but not less than 280 pounds per lineal foot of wall per IBC 1604.8.2. Each partition shall be designed to ensure independent structural stability and shall be isolated from the main structure (including but not limited to floor/roof framing, columns, and shear walls) to prevent the transfer of vertical and lateral forces into the partition. Isolation joints and all connections between the partitions and structural elements that provide lateral support shall be designed to accommodate the design story drift. Clearly detail proposed method(s) of compliance. Each partition shall be reinforced in either the horizontal or vertical direction dependent upon the location of the lateral supporting elements. Horizontal reinforcement shall be provided for partitions with vertical lateral supports and vertical reinforcement shall be provided for partitions with horizontal lateral supports. For vertical wall reinforcement, specify at least one no. 4 full height vertical rebar at a maximum spacing of 48 inches and within 16 inches of each end of partition. For horizontal wall reinforcement, specify either two (2) W1.7 wires at a maximum spacing of 16 inches or a continuous bond beam reinforced with at least one no. 4 rebar at a maximum spacing of 48 inches with reinforcement within 16 inches of the top and bottom of the partition. (IBC sections 1604.8.2, 1607.13, and 2101.3; ASCE/SEI 7-05 sections 12.11.2 and 13.5; ACI 530-05/ASCE 5-05/TMS 402-05 sections 1.14, 1.14.2.2.2.2, 1.14.5.2, and 5.1.2)</p>
Not Met	<b>SM20</b>	<p>Provide complete details for construction of each fire wall which ensure that the wall is structurally independent of all other construction so that new and/or existing construction on either side of the fire wall can collapse under fire conditions without affecting the structural integrity of the wall. Each fire wall shall be nonloadbearing and shall be designed to adequately resist the applicable lateral design forces including 5 psf (IBC section 1607.13) for interior walls, seismic (ASCE/SEI 7-05 SECTION 13.5), and wind (IBC section 1609) for exterior walls. Specify sufficient clearance between face of fire wall and adjacent steel framing on each side to accommodate thermal expansion of the steel structure without causing damage to the wall. (IBC section 705 and IBC table 720.1(2); NFPA 221; NCMA-TEK Bulletin 5-8A)</p>
Not Met	<b>SM21</b>	XXXXXXXX
Not Met	<b>SM22</b>	XXXXXXXX

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Not Met	<b>SM23</b>	XXXXXXXX
Not Met	<b>SM24</b>	XXXXXXXX
Not Met	<b>SM25</b>	XXXXXXXX
Not Met	<b>SM26</b>	XXXXXXXX

### SS00 STEEL DESIGN

Not Met	<b>SS01</b>	Indicate the required types, sizes, and locations for structural framing components including but not limited to beams, columns, joists, joist girders, purlins, girts, and braces. (IBC sections 1603.1, 2205.1 and 2206.2; GCCC section 103.2; TIA/EIA-222-F Section 1.1.1)
Not Met	<b>SS02</b>	Indicate on structural drawings the required material specifications for all steel framing components and connectors including ASTM designation, yield strength (KSI), and material grade (as applicable). (IBC sections 2203.1, 2204.2, 2205.1, 2209.1, and 2210.1)
Not Met	<b>SS03</b>	Specify on structural drawings that bolted connections shall be assembled and inspected in accordance with RCSC-2004 (Specification for Structural Joints using ASTM A325 or ASTM A490 Bolts). (IBC sections 1704.3.3 and 2204.2; TIA/EIA-222-F Section 1.1.3)
Not Met	<b>SS04</b>	Specify on structural drawings that all structural welded joints shall conform to the provisions of AWS D1.1-04, Structural Welding Code by American Welding Society. Also, clearly note on structural plans that proof of Welder Certification shall be available at the job site during times of inspection. (IBC sections 1704.3.1 and 2204.2)
Not Met	<b>SS05</b>	Structural engineer-of-record shall clearly specify on structural drawings the special periodic and continuous inspections required for connections for the structural components including but not limited to structural steel, floor/roof deck, welded studs, light gauge steel framing, reinforcing steel, and seismic-force-resisting systems (braced frames, moment-resisting frames, etc.) for structures classified as Seismic Design Category C, D, E, or F per IBC section 1613.5.6. (IBC sections 1704.3, 1707.1, 1707.2, 1707.4, 2204, 2209, and 2210)  Copies of the special inspection reports shall be available at the jobsite for review by the Inspector.

## STRUCTURAL REVIEW

Not Met	<p><b>SS06</b></p> <p>The response modification coefficient (R) specified on the structural drawings as applicable to the structural steel lateral load-resisting system (including but not limited to braced frames and moment-resisting frames) for projects assigned to Seismic Design Category A, B, or C (SBC section 1613.5.6) shall be as established per ASCE/SEI 7-05 section 12.2.1 provided the structural system has been designed and detailed in accordance with the provisions of AISC 341-05 Part 1 - Seismic Provisions for Structural Steel Buildings (including 2006 Supplement No. 1).</p> <p>[Submit engineering calculations to document compliance with the provisions of AISC 341-05 Part 1.]</p> <p>Alternatively, the R factor specified on the structural drawings for structural systems not designed and detailed in accordance with AISC 341-05 Part 1 shall be equal to 3 (three) as designated for "steel systems not specifically detailed for seismic resistance" per ASCE/SEI 7-05 section 12.2.1. (IBC section 2205.2)</p> <p>[NOTE: Structural steel lateral load-resisting systems for projects assigned to Seismic Design Category D, E, or F shall be designed and detailed in accordance with AISC 341-05 Part 1.]</p>
Not Met	<p><b>SS07</b></p> <p>Specify on structural drawings that design of special connections between steel framing components by other than the project structural engineer-of-record shall be performed by a professional engineer registered in the state of Georgia including but not limited to brace end connections, moment-resisting connections, modified beam seat connections, and member splice connections. Indicate design forces and reactions for each applicable connection. (IBC sections 1603.1, 1604.2, 1604.4, 1604.10, 2204, and 2205; GCCC section 103.2)</p>
Not Met	<p><b>SS08</b></p> <p>Specify required type, size, and gauge of metal deck applicable to floor, roof, and wall construction. (IBC sections 1603.1 and 2209)</p>
Not Met	<p><b>SS09</b></p> <p>Specify required type, size, and spacing of fasteners for attachment of metal floor and roof deck to supports (including sidelaps) for compliance with the pertinent shear and stiffness requirements for structural diaphragms for adequate resistance of the applicable lateral wind and seismic design forces. (IBC sections 1603.1, 1604.4, and 2209; ASCE/SEI 7-05 sections 6.1.1, 12.1.1, 12.10.1, 12.10.1.1, and 12.14.7.4; Steel Deck Institute's Diaphragm Design Manual)</p>
Not Met	<p><b>SS10</b></p> <p>Specify required type, size, and spacing of fasteners for attachment of metal wall panels to supports (including sidelaps) to adequately resist the applicable design wind pressures acting normal to the face of wall. (IBC sections 1603.1, 1609.1 and 2209; ASCE/SEI 7-05 sections 6.1.1, 6.4.2.2, 6.5.12.4, and 6.5.13.3)</p>
Not Met	<p><b>SS11</b></p> <p>Indicate in details that the bottom surfaces of bearing plates and column base plates shall be grouted to insure full bearing contact on supports except for plates two (2) inches or less in thickness which bear on surfaces (such as concrete floors) constructed to specific levelness tolerances. (IBC sections 1603.1 and 2205.1; AISC Specifications)</p>
Not Met	<p><b>SS12</b></p> <p>Structural details shall clearly locate the edge of each joist and joist girder bearing plate at a distance of ½ inch or less from the inside face of masonry or concrete support except for the condition in which the top of plate is level with the support bearing surface. (IBC sections 1603.1, 2206.1, and 2206.2; Steel Joist Institute Standard Specifications)</p>

## STRUCTURAL REVIEW

Not Met	<b>SS13</b>	Provide a design load diagram for each open web steel joist which supports concentrated load (in addition to the applicable uniform gravity design loads) for design input by the joist manufacturer. Diagrams shall clearly specify the magnitude and location of all design loads including but not limited to uniform and concentrated. Alternatively, specify joists (such as KCS series) which have been designed by the manufacturer for constant moment and shear capacity along the entire span. (IBC sections 1603.1, 1604.2, 1606.2, 1607.4, 2206.1, and 2206.2)
Not Met	<b>SS14</b>	Provide details for stiffening the top and/or bottom chord of the open web steel joists at all locations in which the concentrated loads from the proposed mechanical equipment do not align with joist panel points. (IBC sections 1603.1, 1604.2, 1606.2, 1607.4, and 2206.2)
Not Met	<b>SS15</b>	Specify the required size, gauge, spacing, and height of light gauge steel studs for construction of exterior walls to ensure compliance with the applicable lateral deflection limits of IBC table 1604.3 under design wind conditions. (IBC sections 1603.1, 1604.3, and 2210)
Not Met	<b>SS16</b>	Specify the required size, gauge, spacing, and height of light gauge steel studs for construction of interior walls and partitions to adequately resist the applicable design loads including the gravity design loads (for loadbearing walls) and a minimum horizontal design load of 5 psf applied normal to the wall surface. [NOTE: Interior partition limiting height shall be based on wall height tables published by Steel Stud Manufacturers Association (SSMA) unless technical published data by the manufacturer of specific light gauge steel studs is submitted.] (IBC sections 1603.1, 1607.13, and 2210)
Not Met	<b>SS17</b>	Specify required type, size, quantity, and spacing of fasteners for connections between all light gauge steel framing components (studs, joists, rafters, runner track, framing clips, strap bracing, joist web stiffeners, horizontal bracing for loadbearing studs) including attachment to primary support structure and foundation. (IBC sections 1603.1, 1604.4, and 2210)
Not Met	<b>SS18</b>	Provide detail(s) to clearly indicate required connection of full height light gauge steel wall framing to floor structure to adequately accommodate the vertical deflection due to the applicable gravity design loads. Alternatively, submit engineering calculations which document the structural adequacy of the light gauge steel wall framing to support the applicable floor gravity design loads. (IBC sections 1604.4 and 2210)
Not Met	<b>SS19</b>	Provide detail(s) to clearly indicate required connection at top of full height light gauge steel wall framing to roof structure (excluding direct interface with roof deck only) to adequately accommodate the vertical deflection due to the applicable gravity design loads. Alternatively, submit engineering calculations which document the structural adequacy of the light gauge steel wall framing to support the applicable roof gravity design loads. (IBC sections 1603.1 and 2210)
Not Met	<b>SS20</b>	Structural backing to which masonry veneer anchor ties are attached shall be corrosion resistant and have a base metal thickness of at least 0.043 inch (18 gauge minimum). (IBC section 1405.5 ; ACI 530-05/ASCE 5-05/TMS 402-05 section 6.2.2.7.3)

## STRUCTURAL REVIEW

Not Met	<b>SS21</b>	Clearly identify on the plans all light gauge cold-formed steel frame shear walls that have been designed to resist the applicable lateral wind and seismic forces as specified by IBC sections 1606 thru 1613. Specify the shear wall construction requirements including the size, gauge, and spacing of wall studs, the proposed wall sheathing material (wood structural panel, gypsum board panel, sheet steel), and the required attachment pattern for compliance with the requirements of AISI Lateral-04 (American Iron and Steel Institute) sections C2.2 (Type I shear wall), C3.1 (Type II shear wall), and tables C2.1-1, C2.1-2, C2.1-3. (IBC sections 1603.1, 1604.4, 1604.9, 1604.10, 2210.1, 2210.5, and 2505.2)
Not Met	<b>SS22</b>	Steel material for studs and track for shear wall construction (in which steel or wood sheathing provides lateral resistance) shall comply with the requirements of ASTM A1003 and shall have a thickness of either 18 or 20 gauge for Grade 33 Type H steel and a thickness of at least 16 gauge for Grade 50 Type H steel as specified per AISI Lateral-04 (American Iron and Steel Institute) table C2.1-3. (IBC sections 1603.1, 2210.1, 2210.5, and 2505.2; AISI Lateral-04 section C5.4)
Not Met	<b>SS23</b>	Specify required type, size, and spacing of screws for attachment of shear wall sheathing (wood structural panel, gypsum board panel, sheet steel) to light gauge steel wall framing in accordance with AISI Lateral-04 (American Iron and Steel Institute) sections C2.2 (Type I shear wall), C3.1 (Type II shear wall), and tables C2.1-1, C2.1-2, C2.1-3. (IBC sections 1603.1, 2210.1, 2210.5, and 2505.2)
Not Met	<b>SS24</b>	Specify required blocking along all unsupported edges of shear wall sheathing panels (wood structural panel, gypsum board panel, sheet steel) attached to light gauge steel studs for compliance with AISI Lateral-04 (American Iron and Steel Institute) sections C2.2 (Type I shear wall), C3.1 (Type II shear wall), and tables C2.1-1, C2.1-2, C2.1-3 except for alternate fastening allowed for sheet steel and gypsum board panel sheathing per AISI Lateral-04 section C2.2.1 and table C2.1-2. (IBC sections 1603.1, 2210.1, 2210.5, and 2505.2)
Not Met	<b>SS25</b>	Specify hold-down anchorage hardware at the ends of each shear wall for conditions in which the overturning moment due to either design wind pressures or seismic design forces exceeds the dead load stabilizing moment. [IBC sections 1604.4, 1604.9, 2210.1, and 2210.5; ASCE/SEI 7-05 sections 12.8.5 and 12.14.8.4; AISI Lateral-04 (American Iron and Steel Institute) sections C2, C3.3.2, and C5.3]
Not Met	<b>SS26</b>	Provide details which indicate the required connection of each exterior awning or canopy to the supporting structure to adequately resist the applicable design live and wind loads. (IBC sections 1603.1, 1604.2, 1607.11.2.4, 3105.3 and table 1607.1)
Not Met	<b>SS27</b>	XXXXXXXX
Not Met	<b>SS28</b>	XXXXXXXX
Not Met	<b>SS29</b>	XXXXXXXX
Not Met	<b>SS30</b>	XXXXXXXX
Not Met	<b>SS31</b>	XXXXXXXX

## STRUCTURAL REVIEW

Not Met	<b>SS32</b>	XXXXXXXX
Not Met	<b>SS33</b>	XXXXXXXX
Not Met	<b>SS34</b>	XXXXXXXX
Not Met	<b>SS35</b>	XXXXXXXX

### SW00 WOOD DESIGN

Not Met	<b>SW01</b>	Specify that wood which is either embedded in earth or concrete, or placed on concrete in direct contact with earth, or directly exposed to the weather shall be preservative-treated including but not limited to posts, beams, columns, joists, sleepers, sills, and sole plates. (IBC sections 2304.11.2.4, 2304.11.2.7, 2304.11.4, and 2304.11.5)
Not Met	<b>SW02</b>	Specify six (6) inches minimum clearance between bottom edge of exterior wood siding and top of adjacent exposed earth except for preservative-treated siding, sheathing, and wall framing. (IBC section 2304.11.2.6)
Not Met	<b>SW03</b>	Specify eight (8) inches minimum clearance between exposed earth and wood framing components including sheathing except for preservative-treated wood. (IBC section 2304.11.2.2)
Not Met	<b>SW04</b>	Specify the required type, size, spacing, and embedment depth of wall sill plate anchor bolts. Except for more stringent requirements as determined by structural analysis for resistance of lateral wind and seismic design forces, provide minimum 1/2" diameter bolt (with nut and washer) spaced not more than 48 inches on center and embedded at least 7 inches into concrete or masonry. Specify a minimum of two (2) bolts per sill plate segment with one bolt located from the end of each segment at least 4 inches but not more than 12 inches. (IBC sections 1805.6, 2308.3.3, 2308.6, and 2308.11.3.1)
Not Met	<b>SW05</b>	Specify required size, embedment depth, and spacing of the proposed powder actuated fasteners for anchorage of wall sill plates to foundation including fastener manufacturer and catalog number. Fastener spacing shall not exceed 18 inches on center with one fastener at 6 inches and at 10 inches from each end of plate in accordance with ICC Evaluation Report 1290. (NOTE: Powder actuated fasteners are not approved for anchorage along shear walls which have been designed to resist more than 100 pounds per lineal foot lateral force.) (IBC sections 2301.2, 2308.3.3, and 2308.6; GCCC section 103.2.2)
Not Met	<b>SW06</b>	Specify the required species and grade of lumber for all structural framing components including but not limited to studs, joists, rafters, headers, beams and posts to ensure conformance with allowable stresses and deflections under design load conditions. (IBC sections 2301.2, 2303.1.1, 2306.1.1, 2306.1.2, 2308.8, 2308.9, 2308.10.2, and 2308.10.3)
Not Met	<b>SW07</b>	Specify the required design stress values for glued laminated timber in accordance with AITC 117-04 (Design Standard Specifications for Structural Glued Laminated Timber of Softwood Species) and for laminated veneer lumber (LVL) to ensure conformance with allowable stresses and deflections under design load conditions. (IBC sections 2301.2, 2303.1.3, and 2306.1)

## STRUCTURAL REVIEW

Not Met	<b>SW08</b>	Specify required size, spacing, and height of walls framed with wood studs including continuous double top plate. (IBC sections 2301.3 and 2308.9)
Not Met	<b>SW09</b>	For loadbearing and exterior walls framed with 2x4 studs exceeding ten (10) feet in height, submit calculations sealed and signed by the project structural engineer-of-record which demonstrate the structural adequacy of 2x4 studs of designated species and grade to resist the applicable design loads including gravity, seismic, and wind. (IBC sections 2301.2, 2308.9.1, and table 2308.9.1)  ALLOW TEN (10) BUSINESS DAYS FOR REVIEW OF ALL SUBMITTED STRUCTURAL CALCULATIONS.
Not Met	<b>SW10</b>	For walls framed with 2x4 studs which support more than one floor, ceiling, and roof, submit calculations sealed and signed by the project structural engineer-of-record which demonstrate the structural adequacy of 2x4 studs of designated species and grade to resist the applicable design loads including gravity, seismic, and wind. (IBC sections 2301.2, 2308.9.1, and table 2308.9.1)  ALLOW TEN (10) BUSINESS DAYS FOR REVIEW OF ALL SUBMITTED STRUCTURAL CALCULATIONS.
Not Met	<b>SW11</b>	Indicate on framing plans the required sizes and locations of all beams and headers. (IBC sections 2301.3, 2304.3.2, 2304.4, 2308.7, 2308.9.5, and 2308.9.6)
Not Met	<b>SW12</b>	Reproduce on structural drawings the applicable fastening requirements of IBC table 2304.9.1 (Fastening Schedule) for this project. (IBC section 2304.9)
Not Met	<b>SW13</b>	Specify required type, size, and spacing of bolts for attachment of continuous ledger to primary structure to adequately resist the applicable design loads. (IBC sections 1604.8.3 and 2304.9.1)
Not Met	<b>SW14</b>	Specify manufacturer and model number of wood framing connectors for required attachments between structural components including but not limited to joists, rafters, beams, and posts to adequately resist the applicable design loads. (IBC sections 2303.5, 2304.9.1, 2304.9.3 and 2308.5)
Not Met	<b>SW15</b>	Specify required hardware including manufacturer and model number for attachment of roof and floor trusses to supports. (IBC sections 2303.5, 2304.4, 2304.9.3, and 2308.10.1)
Not Met	<b>SW16</b>	Connectors and fasteners for preservative-treated and fire-retardant-treated wood shall be of hot-dipped zinc-coated galvanized steel, stainless steel, silicon bronze, or copper including but not limited to anchor bolts, powder actuated fasteners, nails, screws, bolts, and metal framing hardware. (Zinc coating weights shall comply with either ASTM A 153M or ASTM A 641, Supplementary Requirements.) Specify accordingly on structural drawings. (IBC section 2304.9.5)
Not Met	<b>SW17</b>	Specify required type, thickness, and span rating of structural floor and roof sheathing. (IBC sections 2303.1.4, 2304.7, 2305.2, 2306.3.2, 2308.8.6, 2308.10.8, and table 2306.3.1)

## STRUCTURAL REVIEW

Not Met	<b>SW18</b>	Specify required type, size, and spacing of fasteners for attachment of wood structural panels to floor and roof framing. (IBC sections 2305.2, 2306.3.2, 2304.9.1, and tables 2304.9.1, 2306.3.1)
Not Met	<b>SW19</b>	Clearly detail blocking along the perimeter edge of floor and roof sheathing with lumber at least two (2) inches in nominal width to accommodate the required diaphragm boundary fastening. (IBC section 2305.1.2 and table 2306.3.1)
Not Met	<b>SW20</b>	Clearly identify on the structural plans the location and extent of all wood frame shear walls that have been designed to resist the applicable lateral wind and seismic forces as specified by IBC sections 1609, 1613, and ASCE/SEI 7-05 chapters 6, 11, 12. Specify the shear wall construction requirements including the proposed sheathing material (including but not limited to wood structural panel, particleboard, and gypsum board/sheathing) for compliance with the requirements of IBC tables 2306.4.1 thru 2306.4.5. (IBC sections 2305.3, 2306.4, and 2505.1)
Not Met	<b>SW21</b>	Specify required type, size, and spacing of fasteners for attachment of shear wall sheathing (including but not limited to wood structural panel, particleboard, fiberboard, and gypsum board/sheathing) to wood wall framing in accordance with IBC tables 2306.4.1 thru 2306.4.5. (IBC sections 2305.3, 2306.4, and 2505.1)
Not Met	<b>SW22</b>	Specify that all unsupported edges of wood structural panels, particleboard, and fiberboard which are fastened to satisfy shear wall construction requirements shall be backed (blocked) with 2 - inch nominal or wider framing. Blocking for gypsum board/sheathing shall be in accordance with IBC table 2306.4.5. (IBC sections 2305.1.2.1, 2306.4, and 2306.4.5.1.2)
Not Met	<b>SW23</b>	Specify holdown anchorage hardware at the ends of each shear wall for conditions in which the overturning moment due to either design wind pressures or seismic design forces exceeds the dead load stabilizing moment. (IBC sections 1604.4, 1604.9, 2305.3.7, and 2305.3.8.2.4; ASCE/SEI 7-05 sections 12.8.5 and 12.14.8.4)
Not Met	<b>SW24</b>	Wood structural elements including but not limited to shear walls and diaphragms shall not be utilized to resist horizontal forces imparted by masonry or concrete construction (including those due to masonry veneer) for structures over one story in height unless proposed design is in compliance with Exceptions of IBC section 2305.1.5.
Not Met	<b>SW25</b>	Braced wall lines per IBC section 2308.9.3 may be specified in lieu of satisfying the shear wall requirements of items # SW20, SW21, SW22, and SW23 under the condition that the structure complies with the conventional light-frame construction requirements of IBC section 2308 with the limitations stated in IBC section 2308.2. [NOTE: Structures assigned to Seismic Design Category C (IBC section 1613.5.6) that comply with IBC section 2308 shall be limited to two (2) stories in height.] (IBC sections 2301.2, 2308.1, 2308.3, 2309.3, and 2308.11.1)

## STRUCTURAL REVIEW

Not Met	<b>SW26</b>	Clearly identify on the structural plans the location and extent of all braced wall lines as required by IBC sections 2308.3, 2308.9.3 and table 2308.9.3(1) only for structures which have been designed to comply with the conventional light-frame construction requirements of IBC section 2308. Specify the braced wall construction requirements including the proposed sheathing material in accordance with the acceptable construction methods per IBC section 2308.9.3. [Alternatively, specify the required shear walls and document compliance with the requirements of items # SW20, SW21, SW22, and SW23 of this checklist.] (IBC sections 2301.2, 2306.4.4, 2308.1, 2308.3, 2309.3, and 2308.11)
Not Met	<b>SW27</b>	Specify required type, size, and spacing of fasteners for attachment of sheathing for braced walls (including but not limited to wood structural panel, fiberboard, particleboard, and gypsum board/sheathing) to wood wall framing in accordance with IBC section 2308.9.3, tables 2308.9.3(2) thru 2308.9.3(5), and table 2306.4.4 only for structures which have been designed to comply with the conventional light-frame construction requirements of IBC section 2308. [Alternatively, specify the required shear walls and document compliance with the requirements of items # SW20, SW21, SW22, and SW23 of this checklist.] (IBC sections 2301.2, 2306.4.4, 2308.1, 2308.3, 2309.3, and 2308.11)
Not Met	<b>SW28</b>	Concrete or masonry walls shall not extend above the basement only for structures which have been designed to comply with the conventional light-frame construction requirements of IBC section 2308. (IBC sections 2308.11.2 and 2308.12.2)
Not Met	<b>SW29</b>	Masonry veneer shall be limited to the first story above grade or to the first two stories above grade provided the lowest story has concrete or masonry walls only for structures classified as Seismic Design Category B or C which have been designed to comply with the conventional light-frame construction requirements of IBC section 2308 and the Exceptions of IBC section 2308.11.2. (IBC section 2308.11.2)
Not Met	<b>SW30</b>	XXXXXXXX
Not Met	<b>SW31</b>	XXXXXXXX
Not Met	<b>SW32</b>	XXXXXXXX
Not Met	<b>SW33</b>	XXXXXXXX
Not Met	<b>SW34</b>	XXXXXXXX
Not Met	<b>SW35</b>	XXXXXXXX
Not Met	<b>SW36</b>	XXXXXXXX
Not Met	<b>SW37</b>	XXXXXXXX

## STRUCTURAL REVIEW

Not Met	<b>SW38</b>	XXXXXXXX
Not Met	<b>SW39</b>	XXXXXXXX
Not Met	<b>SW40</b>	XXXXXXXX

### SP00 PREENGINEERED STRUCTURAL COMPONENTS AND BUILDING SYSTEMS

Not Met	<b>SP01</b>	Specify on structural drawings that preengineered trusses shall be designed by a professional engineer registered in the state of Georgia. (IBC sections 2209.1, 2210.3, 2301.2, and 2303.4.1)
Not Met	<b>SP02</b>	Specify on structural drawings the applicable design load criteria for both top and bottom chords of preengineered floor and roof trusses including but not limited to dead, live, and wind loads. (IBC sections 1603.1.1, 1603.1.2, 1603.1.7, 1606, 1607, 1609, 2209, 2210.3, and 2303.4.1)
Not Met	<b>SP03</b>	Specify on structural drawings that all hardware (bolts, hangers, straps, etc.) required for connections between preengineered trusses shall be designed and specified by the truss design engineer. (IBC sections 1604.2, 2209, 2210.3, and 2303.4.1)
Not Met	<b>SP04</b>	Specify on structural drawings that preengineered metal plate connected wood trusses shall be braced in accordance with Truss Plate Institute's "Building Component Safety Information Booklet, BCSI 1-03" and related summary sheets. (IBC section 2303.4.1)
Not Met	<b>SP05</b>	State on structural drawings that "all preengineered truss shop drawings shall be available on the job site during the times of inspection and shall bear clear indication that they have been reviewed and approved by the project structural engineer-of-record" (or architect-of-record for projects without a structural engineer-of-record). (IBC section 1603.1; GCCC section 103.2)
Not Met	<b>SP06</b>	<p>Fabrication and erection drawings for construction of the preengineered building are either incomplete or were not included in the submitted plans.</p> <p>Provide complete fabrication and erection drawings for construction of the preengineered building which specify the required materials, sizes, and locations for all structural elements including but not limited to beams, columns, portal frames, joists, purlins, girts, braces, arches, wall and roof panels. Provide complete details which clearly indicate required connections between all structural framing components including anchorage to foundation to adequately resist all applicable design loads including gravity, wind, and seismic. Plans shall also specify the required size, quantity, and location of building anchor bolts. (IBC section 1603.1; GCCC section 103.2)</p> <p>ALLOW TEN (10) BUSINESS DAYS FOR REVIEW OF STRUCTURAL DRAWINGS SUBMITTED IN RESPONSE TO THIS CODE COMPLIANCE CHECKLIST ITEM.</p>

## STRUCTURAL REVIEW

Not Met	<b>SP07</b>	<p>Fabrication and erection drawings for construction of the preengineered building were included in the submitted plans and have been reviewed.</p> <p>At the time of final authorization of the building permit, furnish two (2) complete sets of fabrication and erection drawings for construction of the preengineered building.</p>
Not Met	<b>SP08</b>	<p>Consideration can be given to issuance of a Foundation Only Permit for a preengineered building upon submission of both a letter of Engineering Certification and a complete anchor bolt plan in addition to the foundation plan. The letter of Engineering Certification shall be sealed and signed by a professional engineer registered in the state of Georgia and shall state the applicable building code as well as all design loads. (IBC section 1603.1; GCCC section 103.2)</p>
Not Met	<b>SP09</b>	<p>Indicate on preengineered building structural drawings design compliance with 2006 International Building Code.</p>
Not Met	<b>SP10</b>	<p>Indicate on preengineered building structural drawings the gravity design loads for the roof structure including but not limited to dead, collateral, and live. (IBC sections 1602.1, 1603.1.2, 1603.2, 1606, and 1607.11)</p>
Not Met	<b>SP11</b>	<p>Indicate on preengineered building structural drawings the following wind data applicable to the design of the structure in accordance with IBC sections 1603.1.4 and 1609.1.1:</p> <p>(A) Basic wind speed (3-second gust) in miles per hour (mph) per either ASCE/SEI 7-05 section 6.5.4 or IBC section 1609.3;</p> <p>(B) Importance factor ( <math>I_w</math> ) per ASCE/SEI 7-05 section 6.5.5 and table 6-1;</p> <p>(C) Upwind exposure category per either ASCE/SEI section 6.5.6 or IBC section 1609.4;</p> <p>(D) Internal pressure coefficient(s) per ASCE/SEI 7-05 section 6.5.11.</p>
Not Met	<b>SP12</b>	<p>Indicate on preengineered building structural drawings the applicable Occupancy Category per ASCE/SEI 7-05 table 1-1. (ASCE/SEI 7-05 section 11.5; IBC section 1603.1.5)</p>
Not Met	<b>SP13</b>	<p>Indicate on preengineered building structural drawings the Site Class applicable to this project per ASCE/SEI 7-05 section 11.4.2. Submit site-specific data prepared (sealed and signed) by a professional engineer or geologist registered in the state of Georgia in accordance with ASCE/SEI 7-05 sections 11.4.2 and 20.1 to substantiate assignment of project site as either Site Class A, B, or C per ASCE/SEI 7-05 table 20.3-1. (ASCE/SEI 7-05 section 20.4; IBC section 1603.1.5)</p>
Not Met	<b>SP14</b>	<p>Indicate on preengineered structural drawings the design spectral response acceleration coefficients SDS and SD1 applicable to this project per ASCE/SEI 7-05 section 11.4.3. [Note: SDS and SD1 shall be determined based upon the value of <math>SS = 0.25g</math> (for mapped spectral acceleration for short periods) and the value of <math>S1 = 0.09g</math> (for mapped spectral acceleration for a 1-second period) in accordance with IBC section 1613.5 for construction sites located in Gwinnett County.] (IBC section 1603.1.5)</p>

## STRUCTURAL REVIEW

Not Met	<b>SP15</b>	Design values indicated on the preengineered building structural drawings for the spectral response acceleration coefficients SDS and SD1 shall not be less 0.27g and 0.14g, respectively, for construction sites classified as Site Class D per ASCE/SEI 7-05 table 20.3-1. [Alternatively, address the requirements of item SP16.] (IBC section 1613.5; ASCE/SEI 7-05 section 11.4.3)
Not Met	<b>SP16</b>	Design values indicated on the preengineered building structural drawings for the spectral response acceleration coefficients SDS and SD1 which are less than 0.27g and 0.14g, respectively, for construction sites classified as Site Class D shall be substantiated by a site-specific seismic hazard analysis report prepared (sealed and signed) by a professional engineer or geologist registered in the state of Georgia in compliance with ASCE/SEI 7-05 section 11.4.7. (Per ASCE/SEI 7-05 section 21.2, the values determined for SDS and SD1 shall not be less than 0.21g and 0.12g, respectively.)  ALLOW FIVE (5) BUSINESS DAYS FOR REVIEW OF SUBMITTED REPORT
Not Met	<b>SP17</b>	Design values indicated on the preengineered building structural drawings for the spectral response acceleration coefficients SDS and SD1 for construction sites classified as other than Site Class D per ASCE/SEI 7-05 table 20.3-1 shall be determined in accordance with IBC section 1613.5 and documented by structural calculations sealed and signed by the project structural engineer-of-record. (IBC section 1613.5)
Not Met	<b>SP18</b>	Indicate on preengineered building structural drawings the Seismic Design Category assigned to this project that represents the most severe category determined from ASCE/SEI 7-05 tables 11.6-1 and 11.6-2. (ASCE/SEI 7-05 sections 11.6; IBC section 1603.1.5)  Alternatively, the Seismic Design Category may be determined solely from ASCE/SEI 7-05 table 11.6-1 subject to each of the following requirements per ASCE/SEI 7-05 section 11.6 with 2007 Georgia Amendments: <ol style="list-style-type: none"> <li>1. The approximate fundamental period of the structure (<math>T_a</math>) in each of the two orthogonal directions determined in accordance with ASCE/SEI 7-05 section 12.8.2.1 is less than 0.8 <math>T_s</math> (determined in accordance with ASCE/SEI 7-05 section 11.4.5);</li> <li>2. The seismic response factor (<math>C_s</math>) is determined using equation 12.8-2 of ASCE/SEI 7-05 section 12.8.1.1; and</li> <li>3. Each floor and roof diaphragm is defined as rigid per ASCE/SEI 7-05 section 12.3.1. Submit calculations sealed and signed by the project engineer-of-record which clearly document compliance.</li> </ol>
Not Met	<b>SP19</b>	Indicate on preengineered building structural drawings the Basic Seismic-Force-Resisting System and corresponding Response Modification Coefficient ( $R$ ) per ASCE/SEI 7-05 table 12.2-1, and address the requirements of item SP06 of this checklist. [NOTE: For each structure with a combination of different basic-seismic-force-resisting systems located along the same orthogonal axis, the response modification co-efficient ( $R$ ) used for design shall not be greater than the least value of $R$ for any system utilized in that same direction in accordance with ASCE/SEI 7-05 section 12.2.3.1.] (ASCE/SEI 7-05 section 12.1.1; IBC section 1603.1.5)

## STRUCTURAL REVIEW

Not Met	<b>SP20</b>	Indicate on preengineered building structural drawings the seismic analysis procedure applicable to this project: equivalent lateral force procedure per ASCE/SEI 7-05 section 12.8, seismic response history procedure per ASCE/SEI 7-05 sections 16.1 and 16.2, modal response spectrum analysis procedure per ASCE/SEI 7-05 section 12.9, or simplified design procedure per ASCE/SEI 7-05 section 12.14.1.1. (ASCE/SEI 7-05 section 12.1.1; IBC section 1603.1.5)
Not Met	<b>SP21</b>	Indicate on structural drawings the magnitude of seismic design base shear calculated for each of two (2) separate and independent orthogonal directions as determined in accordance with the applicable seismic analysis procedure (equivalent lateral force analysis, seismic response history procedure, modal response spectrum analysis, or simplified lateral force analysis). (ASCE/SEI 7-05 sections 12.1.1, 12.8.1, 12.9.4, 12.14.8.1 and chapter 16; IBC section 1603.1.5)
Not Met	<b>SP22</b>	Indicate on preengineered building structural drawings the required material specifications for all steel framing components and connectors including ASTM designation, yield strength (KSI), and material grade (as applicable). (IBC sections 2203.1, 2204.2, 2205.1, 2209.1, and 2210.1)
Not Met	<b>SP23</b>	Indicate on preengineered wood building structural drawings the required material specifications for all framing components including but not limited to design stress values for glued laminated timber in accordance with AITC 117-04 (Design Standard Specifications for Structural Glued Laminated Timber of Softwood Species). (IBC sections 2301.2, 2303.1, 2307.1, and 2306.1)
Not Met	<b>SP24</b>	Proposed demolition entails removal of wall steel framing from the existing preengineered steel building. Lateral buckling stability of steel columns in this type of structure is typically ensured by installation of girts and siding (exterior column flange restraints) and interior column flange braces. Elimination of one or both of these framing components potentially results in a significant reduction of the load capacity of the existing columns. Secondly, the lateral load-resisting system of this type of building generally consists of either rod cross-bracing, portal frames, or masonry shear walls for resistance of lateral wind and seismic design forces. It appears that the specified existing components to be removed may be part of the lateral load-resisting system of the existing building whereupon removal would undermine the structural integrity. Submit letter sealed and signed by a professional structural engineer registered in the state of Georgia which indicates that he or she has inspected the existing structure and the proposed structural components to be removed and has determined that the structural integrity of the remaining existing structure is not affected by absence of the components proposed for removal. (IBC sections 1604.2 and 1604.6; GCCC section 103.2.2)
Not Met	<b>SP25</b>	Specify on preengineered steel building structural drawings the required type, size, and gauge of metal deck applicable to floor, roof, and wall construction. (IBC sections 1603.1 and 2209)

## STRUCTURAL REVIEW

Not Met	<b>SP26</b>	Specify on preengineered steel building structural drawings the required type, size, and spacing of fasteners for attachment of metal floor and roof deck to supports (including sidelaps) for adequate resistance of the applicable lateral wind and seismic design forces. [NOTE: Roof deck installation (either with or without thermal blocks along top of roof purlins per item SP28) shall be consistent with that specified on the architectural construction documents to ensure compliance with energy code.] (IBC sections 1603.1, 1604.4, and 2209; ASCE/SEI 7-05 sections 6.1.1, 12.1.1, 12.10.1, 12.10.1.1, and 12.14.7.4; Steel Deck Institute's Diaphragm Design Manual)
Not Met	<b>SP27</b>	Specify on preengineered steel building structural drawings the required type, size, and spacing of fasteners for attachment of metal wall panels to supports (including sidelaps) to adequately resist the applicable design wind pressures acting normal to the face of wall. (IBC sections 1603.1, 1609.1 and 2209; ASCE/SEI 7-05 sections 6.1.1, 6.4.2.2, 6.5.12.4, and 6.5.13.3)
Not Met	<b>SP28</b>	When specified on the architectural construction documents for compliance with energy code, indicate on preengineered building structural drawings 1" (thick) X 3" (wide) thermal blocks along the top of roof purlins for each building to accommodate the required insulation for compliance with ANSI/ASHRAE/IESNA Standard 90.1-2004 User's Manual section 5.5.3.1 and ANSI/ASHRAE/IESNA Standard 90.1-2004 table A2.3. (Refer to item EN05.)
Not Met	<b>SP29</b>	XXXXXXXX
Not Met	<b>SP30</b>	XXXXXXXX
Not Met	<b>SP31</b>	XXXXXXXX
Not Met	<b>SP32</b>	XXXXXXXX
Not Met	<b>SP33</b>	XXXXXXXX

## SR00 STRUCTURAL RETAINING WALL

Not Met	<b>SR01</b>	Submit copy of county-approved site grading plan which clearly indicates the applicable location for each retaining wall and for each detention pond wall (dam) and which specifies the elevation at top and bottom of each wall. (Alternatively, for retaining walls that are located on single-family residential lots, provide a plan which clearly indicates the location of each dwelling, property line, and proposed wall including elevation at top and bottom of wall.)
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## STRUCTURAL REVIEW

Not Met	<b>SR02</b>	<p>Provide structural construction details for each retaining wall and for each detention pond wall (dam) as shown on county authorized site grading plans which specify required materials, wall and footing dimensions, reinforcing (type, size &amp; spacing), concrete design strength, drainage method for relief of hydrostatic pressure, type of backfill material, and slope of backfill finished grade. (For modular type retaining walls, details shall indicate the required types, spacing, and embedment length of all geogrid reinforcement.)</p> <p>[Note: Modular type construction is not suitable for dam walls which are penetrated by stormwater outlet structures.]</p>
Not Met	<b>SR03</b>	<p>Structural construction details for each retaining wall exceeding six (6) feet in height and for each detention pond wall (dam) exceeding five (5) feet in height shall be sealed and signed by a professional structural engineer registered in the state of Georgia in accordance with Gwinnett County Construction Code and Development Regulations.</p>
Not Met	<b>SR04</b>	<p>Specify on structural drawings for each retaining wall which exceeds 6 feet in height and for each detention pond wall (dam) the applicable soil parameters utilized in the wall design including but not limited to allowable soil bearing pressure, equivalent lateral fluid pressure (active and passive), surcharge load, internal angle of friction, coefficient of friction, and soil density.</p>
Not Met	<b>SR05</b>	<p>Proposed wall reinforcement (horizontal and vertical) does not appear to comply with the minimum requirements of ACI 318-05 section 14.3.3. (IBC section 1901.2; ACI 318-05 section 14.1.2).</p>
Not Met	<b>SR06</b>	<p>Submit calculations sealed and signed by the structural engineer-of-record which demonstrate the structural adequacy of each proposed wall to resist the applicable design loads within the specified allowable soil bearing pressure and to maintain a minimum factor of safety of 1.5 against overturning and sliding. (Gwinnett County Construction Code section 103.2.2; IBC sections 1610.1 and 1806.1).</p>
Not Met	<b>SR07</b>	<p>State the following verbatim on structural construction details for each retaining wall which exceeds 10 feet in height (from top of footing) and for each detention pond wall (dam) submitted for building permit for compliance with Gwinnett County Development Regulations Articles 9.8.2.d(2), 9.8.2.d(4) and Gwinnett County Construction Code sections 103.2.2, 103.8.6.8:</p> <p>"Prior to construction, soil design parameters stated on the county-approved structural construction wall details including but not limited to allowable soil bearing pressure, equivalent lateral fluid pressure (active and passive), internal angle of friction, coefficient of friction, and soil density shall be field-verified by a Gwinnett County approved Third Party Geotechnical Testing Firm. A corresponding written report sealed and signed by a professional engineer registered in the state of Georgia and employed by the Third Party Geotechnical Testing Firm shall be submitted to Gwinnett County Chief Commercial Building Inspector prior to construction beyond footing installation. In the event of conflict between field-verified soil parameters and those stated on the county-approved details, construction shall not proceed until appropriate design modifications submitted by the wall design engineer-of-record have been reviewed and approved by Gwinnett County Building Plan Review.").</p>

## STRUCTURAL REVIEW

Not Met	<b>SR08</b>	<p>State the following verbatim on structural construction details for each retaining wall which exceeds 10 feet in height (from top of footing) and for each detention pond wall (dam) submitted for building permit for compliance with Gwinnett County Development Regulations Articles 9.8.2.d(2), 9.8.2.d(4) and Gwinnett County Construction Code sections 103.2.2, 103.8.6.8:</p> <p>"Prior to issuance of a Certificate of Completion for each wall by Gwinnett County, written notification sealed and signed by the wall design engineer-of-record shall be submitted to the Gwinnett County Chief Commercial Building Inspector which acknowledges receipt of a soils investigation report by a Gwinnett County approved Third Party Geotechnical Testing Firm and which confirms that all soil parameters applicable to the design of the wall are consistent with those reported as field-verified."</p>
Not Met	<b>SR09</b>	<p>Note directly on plans the name of the Gwinnett County approved Third Party Geotechnical Testing Firm responsible for performing the subsurface soils investigation and for verifying the soil design parameters specified on the structural construction details for each retaining wall which exceeds 10 feet in height (from top of footing) and for each detention pond wall (dam). (Gwinnett County Development Regulations Articles 9.8.2.d(2), 9.8.2.d(4) and Gwinnett County Construction Code section 103.8.6.8)</p> <p>The Gwinnett County approved Third Party Geotechnical Testing Firm and the wall design engineer-of-record per item SR03 shall be independent of one another such that there is no business or employment relationship between parties.</p>
Not Met	<b>SR10</b>	<p>Each retaining wall up to 10 feet in height (from top of footing) which has been designed for an allowable soil bearing pressure greater than 2000 PSF shall be subject to the requirements of items SR12, SR13, and SR14 of this document based on the common soil classifications in this region, material class #4 of IBC table 1804.2. (IBC sections 1802.2.1, 1802.4, 1802.5, and 1802.6).</p>
Not Met	<b>SR11</b>	XXXXXX
Not Met	<b>SR12</b>	XXXXXXXX
Not Met	<b>SR13</b>	XXXXXXXX
Not Met	<b>SR14</b>	XXXXXXXX

## ST00 STRUCTURAL COMMUNICATION TOWER

Not Met	<b>ST01</b>	<p>Submit engineering documentation sealed and signed by a professional engineer registered in the state of Georgia which substantiates via engineering analysis the structural adequacy of the existing tower to receive the additional antennas at the proposed indicated elevation(s) above grade based on a basic wind speed not less than 75 MPH. [Documentation shall include a copy of the original design drawings for the tower structure which have been sealed and signed by the engineer-of-record. The sizes and properties of the structural components considered in engineering analysis calculations shall be reflected on the original design drawings.] (IBC section 3108.4; TIA/EIA-222-F ANNEX F)</p>
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## STRUCTURAL REVIEW

Not Met	<b>ST02</b>	Submit complete details sealed and signed by a professional engineer registered in the state of Georgia which clearly indicate required structural framing for support of proposed antennas from the existing tower (including direct attachment of antennas to support framing) to adequately resist a minimum design wind speed of 75 MPH. (IBC section 3108.4; TIA/EIA-222-F sections 2.3 and 16)
Not Met	<b>ST03</b>	Submitted structural drawings are incomplete. Furnish complete foundation and framing plans for tower, which clearly indicate required materials, sizes, and locations for all structural elements. Provide complete details which clearly indicate required connections between all structural framing components including anchorage to foundation to adequately resist all applicable design loads including gravity, wind, and seismic (GCCC section 103.2 and IBC section 1603.1). ALLOW FIVE (5) BUSINESS DAYS FOR REVIEW OF SUBMITTED STRUCTURAL DRAWINGS.
Not Met	<b>ST04</b>	Provide complete details which clearly indicate required anchorage of equipment building to foundation to adequately resist all applicable design loads including wind and seismic. (IBC sections 1801.2.1; ASCE/SEI 7-05 sections 11.7.3 and 12.1.3)
Not Met	<b>ST05</b>	Provide details for an effective anti-climbing device on each tower in addition to enclosing the tower with fencing not less than six (6) feet in height. (Gwinnett County Telecommunications Tower and Antenna Ordinance section 406)
Not Met	<b>ST06</b>	Specify on construction documents the materials, finishes, and colors for towers, antennas, buildings and related structures to ensure compliance with Gwinnett County Telecommunications Tower and Antenna Ordinance. Towers and antennas shall either have a galvanized steel finish or be painted a neutral color to minimize visual obtrusiveness. Accessory buildings and structures shall utilize materials, textures, and colors which blend the tower facilities to the natural setting and building environment.
Not Met	<b>ST07</b>	Attach directly to cover sheet of construction documents submitted for permit a signed copy of approved TALL STRUCTURE PERMIT (TSP) including all conditions of approval. (The height of proposed tower and the elevation for each set of proposed antennas shall not exceed that specified by the TSP.)
Not Met	<b>ST08</b>	XXXXXXXX
Not Met	<b>ST09</b>	XXXXXXXX
Not Met	<b>ST10</b>	XXXXXXXX
Not Met	<b>ST11</b>	XXXXXXXX
Not Met	<b>ST12</b>	XXXXXXXX
Not Met	<b>ST13</b>	XXXXXXXX
Not Met	<b>ST14</b>	XXXXXXXX

## BUILDING REVIEW

AUTH NO. **BUILDING CODE COMPLIANCE ITEM**

### BP00 PERMIT AUTHORIZATION REQUIREMENTS

Not Met	<b>BP01</b>	For final permit AUTHORIZATION, submit two (2) complete sets of construction documents with Fire Plan Review authorization stamp to Building Plan Review with completed application form(s).
Not Met	<b>BP02</b>	Each multi-tenant building requires the issuance of a <b>SHELL</b> building permit in addition to a separate <b>INTERIOR FINISH</b> or <b>SPEC SPACE</b> permit for each individual suite . Applicant shall obtain the required authorization from each department.  Final authorization for <b>INTERIOR FINISH</b> permit(s) and <b>SHELL BUILDING</b> permit shall be obtained concurrently.
Not Met	<b>BP03</b>	<b>This project will require the following permits:</b>  (Indicate the type and number of permits to be issued)
Not Met	<b>BP04</b>	Applicant shall obtain the required authorization from <u>each</u> of the following departments:  CURRENT PLANNING REVIEW DEVELOPMENT REVIEW BUILDING PLAN REVIEW FIRE PLAN REVIEW WATER & SEWER PLAN REVIEW ENVIRONMENTAL HEALTH  Plan approval by Environmental Health is required for the following: Each building served by septic system; Each business with food service; Each business with a designated smoking area. Each clubhouse/poolhouse with a pool equipment room. Each clubhouse/poolhouse with toilet rooms adjacent to a swimming pool.
Not Met	<b>BP05</b>	<u>For alteration, repair, or renovation of either currently or previously occupied space</u> , the value of construction (including all architectural and engineering fees) for the project may be reported verbally without written documentation.
Not Met	<b>BP06</b>	FOR INFORMATION ONLY: A Certificate of Occupancy (C.O.) or Certificate of Completion (C.C.) (for unoccupied buildings only) will not be issued until all required site improvements have been completed.
Not Met	<b>BP07</b>	An Interior Finish permit can not be obtained until the Spec Space permit has been completed and assigned a Certificate of Completion (C.C.)
Not Met	<b>BP08</b>	For businesses with food service, the food service equipment plan(s) shall be approved by Environmental Health prior to issuance of a building permit. Environmental health shall signify authorization of the plans by applying a stamp of approval on 2 copies of the pertinent food service equipment and food service preparation drawings.
Not Met	<b>BP09</b>	If all comments are not addressed after the third review a meeting will be required with County Staff, Project Owner, Engineers, Architect, Designer, and Developer. A resubmittal/re-review fee of 25% of the total building permit plan review is due upon completion of the 3rd re-review of project documents if unresolved plan review checklist items remain. Payment of the fee is required prior to further review by the Department of Planning and Development,
Not Met	<b>BP10</b>	XXXXXXX
Not Met	<b>BP11</b>	XXXXXXX

## ADDITIONAL PERMIT INFORMATION

<b>BI01</b>	Submit the set of authorized construction drawings with "COUNTY COPY" stamp along with the payment for the permit fee(s) to the Permit Office for issuance of all Building Permits.
<b>BI02</b>	<p>Types of Permits include the following Types of Work:</p> <p>Shell Only Building Permit- building with no interior finish construction.</p> <p>Complete Building Permit - single tenant building which includes shell and interior finish construction.</p> <p>Multi-tenant Building Permit - includes one shell building permit and a separate interior finish permit for each suite.</p> <p>Interior Finish Permit - interior construction permit for a suite with an identified tenant name.</p> <p>Spec Space Complete Permit - interior construction permit for a suite with no identified tenant name.</p> <p>Spec Space Incomplete Permit - partial interior construction of a suite with no identified tenant name.</p>
<b>BI03</b>	Contact the Permit Office (678-518-6020) for information regarding permit fee payment requirements
<b>BI04</b>	The project designer-of-record shall be responsible for compliance with copyright law such that all data reproduced on the construction documents from copyright-protected material shall reference each corresponding publication, the publisher, the edition year, and a statement that material is reprinted with permission from the publisher.
<b>BI05</b>	Signs shall be permitted separately. Contact Building Plan Review at (678) 518-6040 for additional information. For ground signs, submit complete structural and electrical details which clearly indicate construction requirements.
<b>BI06</b>	Each construction office trailer requires a separate building permit which shall be purchased directly from Building Permits Section.
<b>BI07</b>	In accordance with the Gwinnett County Construction Code, construction documents for this project shall be permitted within six (6) months of the "Date of Review" indicated on page 1 of this checklist or the project shall be deemed to have been abandoned. Abandoned projects shall require resubmission of complete construction documents to Dept. of Planning and Development for complete review.
<b>BI08</b>	Mechanical, electrical, and plumbing subcontractors shall submit AFFIDAVITS for each building permit to the Building Permits Section at least two (2) business days before requesting inspections.