

HANDBOOK FOR ALABAMA BUILDING OFFICIALS



CONTACT INFORMATION & INTRODUCTION

Board for Registration of Architects

Paula Pilgreen – Executive Director 445 Dexter Avenue | Suite 4010 Montgomery, Alabama 36104 Phone: (334) 242-4179

www.boa.alabama.gov paula.pilgreen@boa.alabama.gov

State of Alabama Fire Marshal's Office

Scott F. Pilgreen – Fire Marshal Department of Insurance 201 Monroe Street | Suite 1790 Montgomery, Alabama 36104 Phone: (334) 241-4166 Fax: (334) 241-4158 www.firemarshal.alabama.gov firemarshal@insurance.alabama.gov

Professional Engineers and Land Surveyors Board

Rick Huett – Executive Director 100 North Union Street | Suite 382 Montgomery, Alabama 36104 Phone: (334) 242-5568

www.bels.alabama.gov rick.huett@bels.alabama.gov

he Handbook for Building Officials has been jointly published by the Alabama Board of Licensure for Professional Engineers and Land Surveyors (BELS), the Alabama Board for Registration of Architects (BOA) and has additional input from the State of Alabama Fire Marshal's Office and members of the Code Officials Association of Alabama (COAA).

Its purpose is to aid Building Officials and design reviewers, professionals in understanding the laws and administrative rules governing the practice of engineering, land surveying, and architecture within the State of Alabama. It is intended to be a source of basic information and does not address all the questions concerning the specific practices of engineering, land surveying, and architecture. Specific questions should be addressed to the individual agencies. Building codes and professional registration laws are meant to work together. Building Officials, COAA, BELS and BOA – each exist to protect the public against unsafe structures. These registration/licensure boards protect the public by ensuring that all design professionals have proper education and training and pass rigorous examinations on technical and practice issues within their area of expertise. Building Officials promulgate and enforce building code requirements that are intended to protect the public health and safety.

State of Alabama Law has some limited exemptions that permit unregistered or unlicensed persons to prepare construction documents for a single-family house, farm buildings, or other structures of limited scope. However, it is clear public policy in our state, and indeed, all jurisdictions, that structures of significant size or complexity must be designed by registered/licensed professionals.

Building Officials with their review and inspection processes, are an effective means of protecting the health, safety, and welfare of the public, safeguarding property, and promoting public good.

The Building Officials are not responsible for the design of buildings and structures. They must rely on competent design professionals operating within the State of Alabama Law to prepare proper documents and observe construction to assure safe buildings and structures.

Revised 2021

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PLEASE NOTE:

Under Alabama Law, an architect is "**registered**" whereas an engineer or land surveyor is "**licensed**." For the intent of this document, there is no difference in the use of these words. Wording hereafter will generally refer to registered individuals and this should be construed to mean registered or licensed.

FREQUENTLY ASKED QUESTIONS

Q: I have a set of construction documents stamped and signed by an architect registered in a state other than Alabama. Does the plan submittal meet Alabama requirements?

<u>A:</u> No. Only design professionals currently registered with the Alabama board have authority to practice in Alabama. Professionals registered in other states must obtain registration in Alabama in order to practice in this state.

Q: Can an Alabama registered architect or engineer place their stamp on construction documents prepared and stamped by an out-of-state architect or engineer for building permit submittal in Alabama?

<u>A</u>: No. An Alabama registered architect or licensed engineer may only prepare and seal drawings prepared by him or her or under his or her direct supervision. Under special circumstances, an ENGINEER can place their signature and seal on a document prepared by another ENGINEER if (1) the engineer has reviewed the document in sufficient depth to fully coordinate and assume responsibility for construction documents prepared by another licensed engineer and (2) the engineer originally producing the work has given consent of the review unless the obligation of such engineer to the work has been terminated.

Q: Can an owner/builder/contractor make changes to an architect's or engineer's construction documents?

<u>A:</u> No. When construction documents are prepared by an Alabama Registered Professional, no changes may be made except by that professional (or under certain conditions by another appropriately registered professional).

Q: May a professionally licensed Alabama engineer prepare and stamp the architectural portion of building construction documents?

<u>A</u>: Alabama law provides that architects or engineers can design structures. Engineers are permitted to perform architectural services incidental to their engineering practice. However, an engineer can only provide services in which he or she is competent to provide by education or experience. This generally limits the scope of building layout and design to less complicated structures and with lower human occupancy.

Q: May an Alabama registered architect <u>prepare</u> and stamp engineering documents associated with the structure which the architect designs?

<u>A:</u> An architect can prepare such engineering documents if he or she is competent to provide the services by education or experience. This generally limits the scope of engineering design to less complicated, incidental engineering services. **Incidental practice of engineering may include a minor engineering item, but not a complete engineering system.** It is usually of a secondary nature and typically a smaller portion of the main engineering project. It is an addition to the main engineering system and does not affect the primary engineering system. Incidental engineering items are usually included in the architectural drawings. An architect who performs the incidental practice of engineering must maintain supporting data to document, justify and certify information to the permitting or regulatory authority.

Q: May anyone other than a registered architect or engineer prepare and submit construction documents to Building Officials.

<u>A:</u> Yes – In limited instances where exceptions in state law noted above permit submission of construction documents not sealed by a registered professional. Building Officials / Code Enforcers should document for the record at the time a permit is granted the exception in the law that allows design of the structure based on unsealed construction documents by an unlicensed person. Interior design professionals may submit construction documents for some projects based on their law and regulations.

FREQUENTLY ASKED QUESTIONS

Q: What is the difference between an interior designer and a <u>REGISTERED</u> interior designer?

<u>A:</u> An interior designer can practice in a building or space within a building up to 5,001 square feet. An interior designer <u>CANNOT</u> practice in schools, churches, auditoriums or other buildings intended for assembly occupancy as defined in the applicable edition of the Building Code. A <u>REGISTERED</u> interior designer can practice in any building regardless of area or use. Neither Interior designers nor registered interior designers can design building systems related to architectural and engineering interior construction – including life safety systems, building structural support, elevators, plumbing, heating, ventilation, air conditioning, fire protection, mechanical systems and electrical systems, except the specifications of fixtures (lighting) and lamps within interior spaces. An interior designer cannot modify existing building stairwells and elevator shafts. An interior designer cannot modify existing building construction so as to alter the number of persons for which the means of egress of a building is designed.

NOTE: Even though a structure may, by definition, be exempt, certain components may require the services of a professional engineer or an architect.

Q: Should shop drawings be sealed by a registered engineer and submitted to the Building Official for approval?

<u>A:</u> No – Typically shop drawings are intended as contractor or fabricator- detailed documents. These are not part of the record construction documents.

Q: What are examples of component designs which are required to be sealed by an appropriate design professional when submitted to the Building Official for approval?

<u>A:</u> Component, or "manufactured," buildings are treated no differently than other buildings. The construction documents must be prepared and sealed by appropriate professionals registered in this state. Examples of such designs include but aren't limited to prefabricated metal buildings, roof truss systems, post tension or prestress designs, or precast concrete building components.

Q: Can a contractor sign the cover sheet of a set of construction documents prepared by an out-of-state architect or engineer and comply with the law? A: No

<u>A:</u> No.

Q: If an unregistered designer or property owner prepares construction documents for a non-exempt building and applies for a building permit, should the Building Officials suggest the designer or owner contact an architect or engineer, whichever is appropriate, and have the drawings and specifications reviewed and sealed?

<u>A:</u> No – Such action on the part of a registered architect or licensed engineer would be contrary to law and would put the professionals registration in jeopardy. A registered architect or licensed engineer may seal only construction documents prepared specifically by the architect or engineer or under either's responsible charge.

Q: Who may issue change orders and addenda to permitted construction documents which have been filed for non-exempt structures?

<u>A:</u> Descriptive drawings or documents used for change orders, additional or supplemental drawings, and/or addenda that alter documents required to be filed with the building department for non-exempt structures must bear the seal of the registered architect or licensed engineer responsible for the modifications. This should generally be the seal of the architect or the engineer that originally designed the project. Under special circumstances, another design professional may seal changes or additions to the drawings

FREQUENTLY ASKED QUESTIONS

Q: Who can be the applicant for the building permit?

<u>A</u>: The applicant can be the owner, contractor, authorized agent, or the architect or engineer as appropriate. However, the registered professionals name shall be listed on the <u>permit</u> application. All modifications or revisions to the sealed construction documents required by the Building Official / Code Enforcer shall be provided to the registered professional by the Building Official / Code Enforcer.

Q: What constitutes a valid engineer's document?

<u>A</u>: Each sheet of engineered design drawings shall be signed, sealed (a wet seal or digital seal is acceptable), and dated by the licensed engineer. Where more than one sheet is bound together in one volume, the Board's requires the licensee to sign, seal and date each design sheet.

For reports and specifications when more than one sheet is bound together in one volume, the licensee may sign, seal, and date only the title or index sheet, provided that this sheet clearly identifies all of the other sheets comprising the bound volume.

Q: What constitutes a valid architect's sealed document?

<u>A</u>: The personal architect's seal is required on all final drawings, plans, specifications, plats and reports issued by an architect. Alabama law does not require the architect's signature; however the authority having jurisdiction may require a signature on any or all sheets.

Q: On a project where a building permit has been issued, what responsibility does the sealing architect have with regard to construction administration services?

 \underline{A} : The minimum construction administration services expected of the sealing architect deemed necessary to protect the health, safety and welfare of the public shall be periodic site observations of the construction progress and quality, review of contractor submittal data and drawings, and reporting to the Building Official / Code Enforcer and owner any violations of codes or substantial deviations from the contract documents that the architect observed.

PLEASE TAKE NOTE

Construction Administration is a component of the practice of architecture. See § 34-2-30 (2) Code of Alabama (1975). When the sealing architect cannot perform construction administration, it is necessary to ensure that another qualified professional performs construction administration services until the project is completed.

Therefore, if the sealing architect becomes aware that construction has commenced and he or she has not been engaged to provide at least minimum construction administration services, the sealing architect must report to the Building Official / Code Enforcer and the Board that he or she has not been, or is no longer, so engaged. If the architect informs the Board and local Building Officials / Code Enforcer that he or she will not perform such services, the Board and Building Official can take any steps it deems necessary for the protection of the health, safety, and welfare of the public.

As with other architectural services, qualified employees of Registered Architects may perform construction administration services under the instruction or responsible control of the registered architect. See § 34-2-32 (a)(1) Code of Alabama (1975).



DEFINITIONS

Registered Architect:

A person who is currently registered in the State of Alabama as an Architect by the Board for Registration of Architects after having completed educational, experience and examination requirements. (*Note: throughout the rest of this handbook, the term "architect" means a registered architect as defined above.*)

Practice of Architecture:

"When an individual holds himself out as able to render or when the person does render any service by consultations, investigations, evaluations, preliminary studies, plans, specifications, contract documents and a coordination of all factors concerning the design and observation of construction of buildings or any other service in connection with the design, observation or construction of buildings located within the boundaries of the state regardless of whether such services are performed in connection with one or all of these duties or whether they are performed in person as the directing head of an office or organization performing them." See § 34-2-30 (2) Code of Alabama (1975).



Professional Engineer:

A person who is currently licensed in the State of Alabama as a professional engineer by the Board of Licensure for Professional Engineers and Land Surveyors (BELS) after having completed educational, experience, and examination requirements.

Practice of Engineering:

Any professional service or creative work; the adequate performance of which requires engineering education, training and experience in the application of special knowledge of the mathematical, physical and engineering sciences of such services or creative work as consultation, investigation, evaluation, planning, design and design coordination of engineering works and systems, planning the use of land and water, performing engineering surveys and studies and the review of construction or other design products for the purpose of monitoring compliance with drawings and specifications; any of which embraces such services or work, either public or private in connection with any utilities, structures, buildings, machines, equipment, processes, work systems, projects and industrial or consumer products; equipment of control, communications, computer, mechanical, electrical, hydraulic, pneumatic or thermal nature, insofar as they involve safeguarding life, health or property and including other professional services necessary to the planning, progress and completion of any engineering services. See § 34-11-1 (7) Code of Alabama (1975).



Schedules

Room finishes, doors, hardware, windows, plumbing, mechanical, electrical and structural.

Completeness of Documents

Construction documents for most projects consist of drawings, specifications and appropriate calculations. All elements shall complement each other. Completeness and coordination of all necessary information are the responsibility of the registered design professional.

Site Plan

Show proposed new structure and any existing buildings or structures, all property lines with dimensions, all streets, easements and setbacks. Show all water, sewer, communication services, natural gas, telephone, and cable TV.

Electrical points of connection, proposed utility service routes and existing utilities on the site.

Show all required parking, drainage, and grading information. Indicate drainage inflow and outflow locations and specify areas required to be maintained for drainage purposes. When appropriate include a topographical survey.

Show north arrow. Show dimensions for the location and size of components delineated on the site plan. Comply with ADECA – Alabama Department of Water Resource's requirements regarding site water management. Identify any/all special flood hazard zones and storm water runoff calculations. Comment on applicable permitting status.

Foundation Plan

Show all foundations and footings. Indicate size, locations, thicknesses, materials and strengths and reinforcing.

Show all embedded anchoring such as anchor bolts, holddowns, post bases, etc. Provide a geotechnical report for the proposed structure at that site. Show dimensions for the location and size of all components delineated on the foundation plan.

<u>Floor Plans</u>

Show all floors including basements. Show all rooms, with their use, overall dimensions and locations of all structural elements and openings. Show all doors and windows.

Provide door and window schedules. All fire resistance rated assemblies, area of refuge, occupancy separations, fire blocking and draft stopping shall be shown. Show dimensions for the size of all rooms and the locations of other components delineated on the floor plans.

Framing Plans and Roof Framing Plans

Show all structural members, their size and methods of attachment, connections, location and materials for floors and roofs.

Show roof plan. Show dimensions for the location and size of all components delineated on the roof plan. Show storm water drainage concept and specific layout.

Exterior Elevations

Show each view. Show all vertical dimensions and heights.

Show openings and identify materials and show lateral bracing system, where applicable. Show dimensions and schedules.

Building Sections and Wall Sections

Show materials of construction, non-rated and fire resistance rated assemblies and fire resistance rated penetrations. Show dimensions.

Mechanical System

Show the mechanical system. Include all units, their sizes, mounting details, all duct work and duct sizes. Indicate all fire dampers where required. Provide equipment schedules.

Submit energy conservation calculations as required by the State of Alabama. Show dimensions.

Plumbing System

Show all fixtures, piping, slopes, materials and sizes. Show point of connections to utilities, septic tanks, pre-treatment sewer systems and water wells. Show dimensions.

Electrical System

Show all electrical fixtures (interior, exterior and site), wiring sizes and circuiting, grounding, panel schedules, single line diagrams, load calculations and fixture schedules. Show point of connection to utility. Show dimensions.

Fire Sprinkler System

Show all sprinkler heads, piping valves, alarms, tamper switches, materials, and sizes. Show point of connection to the water system and fire alarm system. Show dimensions for the size and location of components delineated on the fire sprinkler system drawings.

Structural Systems

Show foundation, structural members and where required, provide structural calculations for the structural systems of the project. Include calculations indicating compliance with seismic, wind, snow, live and dead loads.

Specifications

Prepare specifications to further define the construction components, quality of materials, delineation of the materials and methods of construction, wall, floor and ceiling finishes and descriptions of all pertinent equipment. Schedules may be incorporated into the project manual in lieu of being delineated on the construction documents.

Addenda and Changes

It is the responsibility of the individual identified on the cover sheet as the principal design professional to notify the Building Official of any and all changes throughout the project and provide revised construction drawings, calculations or other appropriate documentation prior to commencement of that portion of construction.

Revisions

The party submitting changes shall be identified at the beginning of the approval process. For clarity, all revisions should be identified with a delta symbol and clouded on the construction documents or resubmitted as a new set of construction documents.

EXEMPT STRUCTURES

The Architects Registration Act provides limited instances where a person who is not registered as an architect may design and supervise the erection or alteration of a building.

The following structures are exempt from the registration law requirements and therefore do not require an architect:

- 1. A detached single-family dwelling and any sheds, storage buildings and garages incidental thereto.
- 2. Farm buildings, including barns, silos, sheds, or housing for farm equipment and machinery, livestock, poultry or storage.
- **3.** Utility works, structures, or building (provided that the person performing such architectural works is employed by an electric, gas, or telephone public utility regulated pursuant to the laws of Alabama or by a corporation affiliated with such utility).

Any other type building(s) with a total area less than 2,500 square feet provided it is not intended for assembly occupancy except schools, churches, auditoriums or other buildings intended for the assembly occupancy of people.

(Use the applicable Building Code adopted by the jurisdiction to determine assembly occupancy) Similarly, the engineering statutes provide limited instances where an unlicensed person may design and supervise the erection or alteration of various structures in specific circumstances specified by the exemptions. The following are exempt:

- 1. Practice of engineering or land surveying for the government by officers and employees of the U.S. Government whose compensation is not based on a fee.
- 2. Practice of engineering or land surveying with respect to transportation or utility facilities by any transportation company or public utility subject to regulation by the Alabama Public Service Commission, Federal Communications Commission, Federal Aviation Administration, the Federal Energy Regulatory Commission, the Nuclear Regulatory Commission, or by officers and employees of such a company; its parents, affiliates, or subsidiaries, whose compensation is not based in whole or in part on a fee.
- **3.** The execution as a contractor of work designed by a professional engineer or the supervision of the construction of such work as a foreman or superintendent.





Even though a structure may be exempt, certain components may require the services of a professional engineer or an architect.

AREAS OF RESPONSIBILITY

ARCHITECTS

Architects are involved in basic concepts of multiple design disciplines involved in the design of a building. Architects must develop a comprehensive package of design documents for submitting to the authority having jurisdiction, taking all aspects of the project into account, determining the appropriate authority having jurisdiction, the applicable governing code(s), and coordinating various submissions prepared by other project team disciplines. Listed below are examples of the matters architects typically address in gauging their services and building permit documents consistent with the standard-of-care:

- 1. Site layout: building layout, parking, zoning requirements, grading, landscaping, accessibility.
- **2.** Aesthetics/overall design.
- **3.** Building classification: occupancy (using the authority having jurisdiction's adopted code), construction type.
- 4. Building circulation and exiting: life safety issues, stairway location(s), exit width, travel distance(s), corridors.
- 5. Life safety considerations: requirements for sprinklers, fire ratings, fire walls, separations, fire alarms, smoke control.
- 6. Interior space planning.
- 7. Interior and exterior finish materials: durability, function, aesthetics, fire ratings.
- 8. Environmental impacts: sound attenuation, quality of living, impact on natural surroundings.
- 9. Physically handicapped criteria (ADA compliance).
- **10.** Project coordination and construction administration services (must notify Alabama Board of Architects and AHJ in writing if not providing construction administration).
- **11.** Coordinate shop drawings.
- 12. Engineering <u>incidental</u> to the practice of architecture.

ENGINEERS

Engineers are concerned with the planning, analysis, and design of particular building systems. Through education, examination, and training they have detailed knowledge of how specialized components of a building must work. Listed below are examples of areas engineers typically address as a standard of care measure in building permit application documents:

- 1. Structural systems: framing, structural connections, foundation.
- 2. Electrical systems: power distribution, grounding, security, fire alarm, and smoke detection.
- 3. Mechanical systems: drains and venting, water distribution systems, HVAC, fire protection system.
- 4. Soils analysis: soil reports, soil stabilization, geotechnical investigations.
- 5. Civil works: site layout, site drainage, grading, utilities, circulation.
- 6. Coordination of engineering works: power stations, dams, bridges, sewage treatment facilities.
- 7. Project coordination.
- 8. Review and approve shop drawings.
- 9. Review and approve special inspections and final letter of special inspections.
- **10.** Architecture <u>incidental</u> to the practice of engineering.

INTERIOR DESIGNERS & REGISTERED INTERIOR DESIGNERS

Alabama Board For Registered Interior Designers

6027 Kelly Creek Drive Moody, Alabama 35004 Phone: (205) 317-0356 <u>director@idboard.alabama.gov</u> www.idboard.alabama.gov

On May 21, 2001, the State of Alabama Legislature passed the Interior Design Consumer Protection Act (hereafter known as "Act") 34-15B-1 et. seq. It was signed by the Governor on May 21, 2001, and amended by the State Legislature in 2006. Under the Act, there are two types of interior design professionals established, each with different levels of practice ability.

INTERIOR DESIGNERS

An interior designer can practice in any building or space within a building consisting of a total area up to 5,001 square feet (465 sq m). An interior designer cannot practice in any building or space within a building which exceeds 5,001 square feet.

- An interior designer cannot practice in schools, churches, auditoriums or other buildings intended for assembly occupancy as defined in the applicable edition of the Building Code.
- An interior designer cannot design building systems relating to architectural and engineering interior construction including building structural support, elevators, plumbing, heating, ventilation, air conditioning, fire protection, and mechanical and electrical systems, except the specification of fixtures (light) and lamps within interior spaces.
- An interior designer cannot modify existing building stairwells and elevator shafts; nor cannot modify existing building construction to alter the number of persons for which the building's means of egress is designed.

REGISTERED INTERIOR DESIGNERS

An interior designer who passes a "sealed level" examination is a registered interior designer.

- A registered interior designer can practice in any building or space within a building regardless of area, size, or use.
- A registered interior designer cannot design building systems relating to architectural and engineering interior construction—including life safety, building structural support, elevators, plumbing, heating, ventilation, air conditioning, fire protection, and mechanical and electrical systems, except the specification of fixtures (light) and lamps within interior spaces.
- An interior designer cannot modify existing building stairwells and elevator shafts.
- An interior designer cannot modify existing building construction to alter the number of persons for which the means of egress of a building is designed (occupant content).

DIVISION OF CONSTRUCTION MANAGEMENT

REVIEW OF CERTAIN STRUCTURES

Under state law, the Division of Construction Management (DCM) reviews projects built on state property or with state funds, schoolhouses (public and private), hotels and motels, and motion picture theaters for code compliance prior to commencement of construction. Please refer to the DCM's Manual of Procedures (current revisions) found online at **www.dcm.alabama.gov.** The procedures for submitting a project for review can be found in Chapter 3 of the Manual of Procedures. The following paragraphs are also copied from the Manual of Procedures:

REQUIRED EMPLOYMENT OF DESIGN PROFESSIONALS:

"The Awarding Authority of a public construction or improvement project that is to be supervised and administered by the DCM shall employ the services of registered architects and engineers in accordance with Title 34, Chapter 2 - Architects and Chapter 11 -Engineers and Land Surveyors, Code of Alabama 1975. An architect or architectural firm shall be employed as the primary design professional to design and observe the construction or improvement of a building or facility. An engineer or engineering firm specializing in a certain discipline of engineering may be employed as the primary design professional when the primary purpose and design of the project is within the specialty of the engineer or engineering firm and architectural design is incidental to the overall project design."

FULL PROFESSIONAL TEAM:

"The primary design professional shall employ the services of consulting engineers, and consulting architects in the case of an engineering project, so as to provide a full professional team as dictated by the disciplines of architectural and engineering design involved in the project. Designs of structural, mechanical electrical and other specialized phases of engineering shall be performed by or under the supervision of professional engineers registered in Alabama (See Chapter 3 for exceptions involving "incidental work"). The consultants selected by the primary design professional are to be named in the O/A Agreement and are, therefore, subject to the approval of the Awarding Authority and DCM. The Consulting engineers named in the O/A Agreement are not to be changed without the written consent of the Awarding Authority."

ALABAMA DEPARTMENT OF PUBLIC HEALTH

Under state law, the Technical Services Unit of the Office of Facilities Management is responsible for the review and approval of drawings and specifications for the construction of new buildings, additions, alterations and renovations at health care facilities regulated by the Alabama Department of Public Health. Projects are reviewed for compliance with State Board of Health regulations and applicable codes.

Technical Service Unit's telephone number is 334-206-5177 and additional information is available from their web site www.alabamapublichealth.gov/facilitiesmanagement.

Written approval of each constructed project, by staff of Technical Services, is required prior to a facility's providing health care services to the public, and prior to the Department's issuing a license to operate (when required). Refer to Provider Services, www.alabamapublichealth.gov/providerstandards, for licensure information. No licensing actions will be taken until Technical Services issues a Certificate of Completion to Provider Services.

Radiation equipment and associated rooms must also be reviewed and approved in writing by Radiation Control of the Department, per State Board of Health regulation 420-3-26. Technical Services assists Radiation Control by forwarding submittals for review of installation and shielding. Shielding installations must also be tested prior to use. Contact Radiation Control at 334-206-5391 for more information. Projects in Jefferson County are reviewed by the Jefferson County Department of Health. However, facilities reviewed by the Alabama of Public Health or divisions of a county government must also meet local building, permit, and zoning requirements.

OTHER AGENCY REVIEW OF CERTAIN STRUCTURES

Other agencies may also have responsibility for reviewing certain structures being designed and constructed in the State of Alabama. For example, under state law, the Armory Commission of Alabama reviews the design and construction of all National Guard armories in the state for compliance with military construction requirements. However, such facilities must also meet local building, permit, and zoning requirements.

National Guard armory projects questions: Armory Commission of Alabama, P. O. Box 3711, Montgomery, Alabama 36109-0711 (334) 271-7275

SPECIAL REQUIREMENTS FOR STRUCTURES WHERE ALL SHEETS ARE SIGNED AND SEALED ONLY BY AN ARCHITECT OR ONLY BY AN ENGINEER

There can be <u>rare</u> occasions where a Building Official is faced with reviewing building design plans and supporting electrical, mechanical, and structural plans <u>where all sheets of the plans are signed and sealed by only one professional</u> (such as an architect only or an engineer only). The question then arises, "Is this one professional qualified to sign and seal both architectural design and all engineering design documents?"

In the case when <u>only one</u> design professional designs and seals all building documents, the Architect's Registration Board has adopted rules and regulations governing the <u>Incidental Practice of Engineering (100-X-4-.12)</u> copied below and the Engineer's Board of Licensure encourages the Building Official / Code Enforcer to contact BELS when the multi-discipline qualifications of the engineer are in question to discuss the scope of the project and the complexity of the submitted documents being signed and sealed by the engineer.

The appropriate boards have established processes to review violations or questionable practices associated with Incidental Practice and if warranted, can initiate further inquiry or investigation. If Alabama laws or administrative rules are violated, disciplinary action against the design professional could result. Information regarding BELS investigative process can be found online at <u>www.bels.alabama.gov</u>. If the Building Official has concerns over the qualification of a single architect or engineer to seal all documents, the appropriate registration/licensing board should be contacted for guidance.

100-X-4-.12. Incidental Practice of Engineering

(1) "Incidental Practice of Engineering" shall be clarified as follows:

- (a) The incidental practice of engineering may include a minor ngineering item, but not a complete engineering system;
- (b) It is usually of a secondary nature and is typically a smaller portion of the main engineering project;
- (c) It is an addition to the main engineering system and does not affect the primary engineering system; and
- (d) Incidental engineering items are usually included in the architectural drawings.

(2) Requirements/documentation: An architect shall prepare no engineering documents except those documents clearly defined as engineering incidental to the practice of architecture. An architect who performs the incidental practice of engineering must maintain supporting data to document, justify and certify information to the permitting or regulatory authority.

SPECIAL REQUIREMENTS FOR STRUCTURES WHERE MULTIPLE ENGINEERING DISCIPLINES ARE SIGNED <u>AND SEALED ONLY BY ONE ENGINEER</u>

There can be **rare** occasions where a Building Official is faced with reviewing building engineering plans <u>where multiple</u> <u>engineering disciplines are signed and sealed by only one engineer.</u> The question then arises, "Is this one professional qualified to sign and seal those disciplines?"

BELS does not issue licenses by discipline.

The Board's Code of Ethics identifies that the engineer or land surveyor shall not "affix his or her signature or seal to any engineering or land surveying plan or document dealing with subject matter on which he or she is not qualified by education or experience to form a dependable judgment". If the Building Official has concerns over the qualifications of a single engineer to sign various engineering disciplines of the design, the licensing board should be contacted for guidance.



STANDARDS FOR BUILDING CONSTRUCTION PLANS AND SPECIFICATIONS SUBMISSIONS

Construction documents for most projects consist of drawings, specifications, and appropriate calculations. All elements shall complement each other. Completeness and coordination of all necessary information are the responsibility of the design professional. Construction documents submitted to the Building Official must be of sufficient detail to clearly show the project in its entirety with emphasis on the following:

- 1. Life safety
- 2. Means of egress
- **3.** Barrier free accessibility
- **4.** Structural integrity
- 5. Building code compliance
- 6. Definition of scope of work
- 7. Authority Having Jurisdiction's adopted codes

The following is a suggested standard for drawings submitted to review by Building Officials. Depending upon the size, nature and complexity of the building, not all of the drawings listed below may be necessary, but reference to Alabama Building Commission requirements (www.bc.alabama.gov) can provide guidance on standard-of-care requirements.

Cover Sheet

- **1.** Project identification
- 2. Project address and a location map
- 3. All design professionals identified
- 4. The principal design professional (the professional responsible for project coordination) shall be identified. All communications should be directed through this individual.
- 5. Design Criteria list:
 - I Occupancy Group
 II Type of Construction Classification
 III Location of Property
 IV Seismic Risk
 V Design Loads
 - VI Structural Systems
 - VII Square footage / Allowable Area VIII Fire Sprinkler Systems
- IX Height & Number of Stories
 X Occupant Load
 XI Land Use Zone
 XII Soil Report
 XIII Base Flood Elevation

Code Official Checklist

GENERAL	Yes	No
Are all drawings sealed by a licensed design professional?		
Do all of the engineering firms noted on the drawings have Certificates of Authorization?		
Are the drawings - classified as S, C, M, E, or P - sealed by an engineer?		
Is each discipline's drawings sealed by a differ- ent engineer?		
Are architectural drawings, "A" sheets, sealed by an architect?		

ARCHITECTUAL DRAWINGS	Yes	No
Are Building Code requirements for rated as- semblies, occupant loads, egress and Builling Construction Type clearly shown on Life Safety Plans and within Building Code Analysis?		
Where foam plastic is used in exterior wall construction, do the components of the wall assembly and details of the openings comply with requirements of IBC Chapter 26 for the Construction Type used?		
Is the wall flashing shown and clearly detailed at floor line and exterior openings?		
Is roof flashing and the roof drainage system shown and clearly detailed?		

CIVIL (C) DRAWINGS	Yes	No
Do the drawings include a Site Plan?		
Do the drawings include a Utility Plan?		
Do the drawings include: A grading and drainage plan including erosion control?		
Are the applicable permits (Local, State & Federal) addressed?		
Is a GeoTechnical Report Required? If so, has it been performed?		
Are the construction materials testing indicated?		
STRUCTURAL (S) DRAWINGS	Yes	No
Does the drawing set list the design criteria; dead load, live load, wind speed, seismic criteria?		
Does the drawing set include framing plans for each level of the building including the roof?		
Does the drawing set include a separate plan		

for the foundation?

ELECTRICAL (E) DRAWINGS	Yes	No
Does the drawings contain a riser diagram?		
Does the drawings have a panel schedule called out?		
Are floor plans included that show electrical circuiting?		
Does the electrical drawings include panel schedules: Including loads, service size, voltage, and AIC information?		

MECHANICAL (M) DRAWINGS	Yes	No
Does the drawing set include plans of the me- chanical ductwork?		
Does the drawing set include an equipment schedule?		
Does the drawing set include a ventilation rate / outside air schedule?		

PLUMBING (P) DRAWINGS	Yes	No
Does the drawing set include waste, water and vent piping riser diagram?		
Does the drawing set include waste, water, drainage and vent piping plans?		
Does the drawing set include fixture/equipment schedules?		
Does the drawing set include gas piping plans and riser diagrams?		



The Alabama Board of Licensure for Professional Engineers and Land Surveyors was established by legislative action in 1935. Its charter is to protect the public by helping to safeguard life, health, and property, and to promote the public welfare by providing for the licensing and regulation of persons in the practices of engineering and land surveying. This purpose is achieved through the establishment of minimum qualifications for entry into the professions of engineering and land surveying.

The Board supports Building Officials in their role of public protection and wishes to assist them whenever a question arises regarding a set of design plans submitted to them for review by a licensed professional. If you have received this document, it simply means that a review of submitted design plans revealed your professional seal is present on multiple design sheets.

Please provide your resume and qualifications to seal each of the engineering disciplines that bear your professional seal. The information should include a description of your engineering education, the engineering exam(s) you have successfully passed, and the experience you have in each engineering discipline represented by your professional engineer seal. Please use additional sheets if necessary.

This information will be reviewed by the Building Official, and a decision made regarding the design plans for this project. Please understand this information is project specific, and any future projects in which your professional seal appears on multiple discipline design drawings would also require this process.

Education:	
Examination(s):	
Experience:	
	DISCIPLINE - CIVIL
Education:	
Examination(s):	
Experience:	
	DISCIPLINE - ELECTRICAL
Education:	
Examination(s):	
Experience:	
]	DISCIPLINE – MECHANICAL / PLUMBING
Education:	
Examination(s):	
Experience:	

DISCIPLINE - STRUCTURAL

Regulatory Board Contact List

Drofossional Sarryica	Phone Number	Wabaita
Alabama Board of Licensure for Professional Engineers and Land Surveyors	1-866-461-7640	www.bels.alabama.gov
Alabama Board of Architects	1-334-242-4179	www.boa.alabama.gov
Alabama Onsite Waste Water Board	1-334-269-6800	www.aowb.alabama.gov
Alabama Licensing Board for General Contractors	1-800-356-6361	www.genconbd.alabama.gov
Alabama Home Builders Licensure Board	1-800-304-0853	www.hblb.alabama.gov
Alabama Building Commission	1-334-242-4082	www.bc.state.al.us
Alabama Plumbing and Gas Fitters Board	1-888-726-9750	www.pgfb.alabama.gov
Alabama Heating, Air Conditioning and Refrigeration Contractors Board	1-866-855-1912	www.hvac.alabama.gov
Alabama Electrical Contractor's Board	1-866-873-4664	www.aecb.alabama.gov
Alabama Liquefied Petroleum Gas Board	1-800-545-9246	www.lpgb.alabama.gov
Manufactured Housing Commission	1-334-242-4036	www.amhc.alabama.gov



Board for Registration of Architects www.boa.alabama.gov

Paula Pilgreen – Executive Director

445 Dexter Avenue | Suite 4010 Montgomery, Alabama 36104 Phone: (334) 242-4179

paula.pilgreen@boa.alabama.gov

Board of Licensure for Professional Engineers and Land Surveyors www.bels.alabama.gov

Rick Huett – Executive Director

100 North Union Street | Suite 382 Montgomery, Alabama 36104 Phone: (334) 242-5568

rick.huett@bels.alabama.gov

State of Alabama Fire Marshal's Office www.firemarshal.alabama.gov

Scott F. Pilgreen – Fire Marshal

201 Monroe Street | Suite 1700 Montgomery, Alabama 36104 Phone: (334) 241-4166

firemarshal@insurance.alabama.gov www.insurance.alabama.gov/FireMarshal/