

City Building Code Supplement

Building
Plumbing
HVAC



CITY OF FAIRHOPE REQUIREMENTS NOT SPECIFICALLY COVERED BY CODE

It is the intent of the City of Fairhope to require reasonable quality controls to ensure both the stability of buildings and the safety of all building occupants. Provisions in the Building Codes allow for the Building Official to make discretionary decisions in addition to the guidelines outlined in the Code to help ensure this. The following text outlines some of these requirements under the heading of each major building component and its corresponding inspection. It is important to note that the Building Code is designed to constitute a minimum guideline for construction, and each jurisdiction that enforces the Code is free to institute more stringent guidelines, if it deems necessary. While the City Inspectors try to follow the Codes as closely as possible, so as to give all contractors a known reference standard during construction, the experience of the Inspector and lessons learned by the City have led to some additional requirements that are to be followed by any contractor choosing to do business within the City of Fairhope Permitting Jurisdiction.

Erosion Control Measures

All land disturbing activities must comply with the City of Fairhope Erosion and Sediment Control Ordinance #1398. This supplement is just a reference guide. It is essential for all contractors to be familiar with the complete erosion & sediment control ordinance which is available on the City website (www.cofairhope.com) or upon request.

At the beginning of each project, a Sediment & Erosion Control inspection will be made to determine the potential for site run-off resulting from construction activities. While the topography of each site is different, Fairhope has minimum requirements that must be met for BMP (Best Management Practices) placement, mandatory for land disturbing activities and construction sites. The minimum standards are:

- **Silt Fencing** – Silt Fencing should be installed and entrenched on frontages, and any sides or back of lots that have a slope. Type A silt fencing is mandatory on commercial / multi-family sites, as well as all sites located in critical areas.
- **Construction Entrances** – A rocked entry must be installed on the entry point, to help minimize vehicle tracking. Aggregate size should be at least 1". Entry should be 20' X 50' for commercial; 10' X 20' for residential (minimum). Limited traffic should be allowed on the site.
- **Inlet Protection** – Any storm drain inlets located in front of or directly downhill of a construction site should be protected with acceptable inlet protection (such as sock pipes or mulch wattles). Monitor inlet protection devices during rain events to ensure street flooding is not evident.

Other effective measures to be applied may include:

- Seeding & Mulching – Exposed areas should be secured immediately, with seasonal mix of seed and mulch, or sod.
- Hay Bales – Hay bales can be used as needed to secure the perimeter of the lot, but should never be used in ditches or storm drains. Hay bales should be staked in.

Protective measures (BMPs) should be maintained and checked daily. Please be aware that the City has the authority to place a Stop Work Order on any project site that is not complying with the City Ordinance governing erosion control and has the discretion to decline inspections and/or apply fines to the Permittee for failure to comply with the Ordinance. In addition, the City will dispatch the City's street sweeper to any area where there is excessive sediment in the roadway. The Permittee will be billed accordingly, a minimum charge of \$300. A pamphlet outlining the *City's Storm Water Management* guidelines and the field guide for erosion & sediment control on construction sites in Alabama by the Alabama soil & Water Conservation Committee are available at no charge in the Building Department. These texts offer illustrations and installation guidelines for some of the measures listed above.

Construction Site Layout and Maintenance

Each site will have sanitary facilities available. Multiple sites may share facilities as long as they are not separated by another lot or a roadway or the combined number of workers does not exceed 10.

The building permit **MUST BE** posted clearly visible from the primary access road. All City Inspectors will refuse an inspection if the permit is not properly posted.

All Inspections requested prior to 4:00 p.m. on a business day will be scheduled for the following business day. The inspection may be performed **ANYTIME WITHIN REGULAR BUSINESS HOURS (7:00 a.m. – 4:00 p.m.)** depending on the number of inspection calls and administrative duties for that day, so it is in the best interest of each contractor to give as much notice as possible.

Fires are not allowed on any project site within the City limits.

Project sites will be kept as neat and clean as possible. The primary concern associated with this issue is trash and debris that can be blown from one site to another, especially in subdivisions that have occupied houses. While the City does not require dumpsters on residential jobsites at this time, loose trash **MUST BE CONTAINED**. All City of Fairhope Inspectors have the authority to assess fines and/or issue Stop Work Orders (SWO) for excessive or uncontained trash on any site. Also be advised that the City of Fairhope landfill will not accept any type of construction debris.

Supplemental City of Fairhope Codes

Right of Way (ROW)

City Code prohibits construction of any kind upon or within any public right-of-way or any utility or drainage easement without proper permits or City Council approval.

The responsibility for location of such easements is that of the builder or owner.

Any obstruction placed within such easement or right-of-way is a violation of the terms of the building permit and is subject to an order for immediate removal by the owner or contractor.

A building permit issued for new construction of a building allows for construction of driveways or walkways to service that building.

No shell, gravel, crushed limestone, slag, or similar loose material shall be permitted within four feet (4') of a road or two feet (2') of a sidewalk (acceptable materials include asphalt, concrete, pavers, or other non-eroding material). Note: Zoning Ordinance requires a three foot (3') green space between the edge of property (property line) and edge of driveway.

No drive or walk may be so constructed as to result in an obstruction or tripping hazard over or across an established city sidewalk.

Neither driveways nor sidewalks may be constructed over or around a utility service box.

City of Fairhope requires a permit to be pulled for all work done in or on the City Right-of Way.

Applications to the Public Works Department must include: application, diagram of area showing where work is to be done, and detail of materials to be installed.

Foundations

The Inspector may require compaction tests of the soil prior to the pouring of any concrete footers or slabs.

No fiber mesh concrete is allowed without welded wire mesh in the slab.

All footer grade stakes must be in place prior to an inspection being performed and must be of a decay resistant material (treated wood or metal).

Modular Homes / Manufactured Buildings Foundation Requirements:

Foundation must be permanent and of customary design and engineered.
Foundation may be of permanent pier construction or concrete slab construction.
Attachment of structure to foundation shall be engineered and certified to meet wind speed requirements.

Structural

All residential structures shall be engineered to a minimum of 130 MPH, 3 second gust (exception: residential additions less than 50% of primary structure and less than 1500 sq ft)

All furr-downs and/or concealed areas greater than 500 square feet must be draft-stopped.

Plywood or OSB must be used on the underside of any open porches prior to application of the siding or other covering.

Minimum of 1 hour resistive rated construction between tenant spaces.

All walls with plumbing vent and drainage lines must be 2"x6" to meet ICC 2012 cutting and notching requirements.

Weep holes in brickwork must be at least 1 course above finished floor elevation (FFE) and placed so as not to be covered or concealed by any landscaping that may be done.

All commercial structures shall be engineered per 2012 IBC and associated codes.

Specific questions can be directed to City Building Department.

Roof Requirements

Asphalt shingles shall be installed according to the manufacturer recommended listed installation instructions for High Wind areas (130 mph ASTM D7158 Class H shingle) with minimum 6 nails.

All asphalt shingle roof covering underlayment shall be of a synthetic tear resistant (20 lbs. per ASTM D1970 or ASTM D4533) polypropylene, polyester or fiberglass fabric and certified by an approved testing agency or ICC-ES report. The Building Official may approve an equal greater performing product. Roof underlayment shall be installed per Manufacturer's Installation Instructions **but**, shall not be fastened with staples.

Metal panel roofing systems and their attachment shall be installed in accordance with the manufactures installation instructions and shall provide uplift resistance equal to or greater then the design uplift pressure for the roof. The metal panels shall be installed over continuous decking and one of the acceptable secondary water barrier underlayment options.

2X4 or 1X4 wood purlin for attachment of metal roof coverings shall be spaced per manufacturer installation instructions but no greater than 2 foot OC. Wood purlin shall be nailed with a minimum 2 deformed (ring shank) nails penetrating into roof framing 1 ½ inch.

Roof decking shall be nailed in accordance with the engineered drawings but no greater than 4 inches OC both edge and field within the 4 foot roof edge zone and maximum 6 inches OC edge and field all other locations. Decking shall be fastened with minimum 8d full round head ring shank nails. Staples will not be permitted.

Roof decking shall be "sealed". All sheathing seams shall be taped with minimum 4 inch Peel and Stick tape meeting ASTM D1970, or spray polyurethane closed cell foam adhesive (meeting ASTM D1622) shall be applied over all joints between sheathing and along all intersections between roof sheathing and all roof framing members. Other equal or greater methods may be approved by the Building Official.

All aluminum and vinyl Soffit covering shall be attached to minimum 7/16 OSB or plywood or minimum 2 X 2 wood supports equally spaced but not greater than 12 inches OC.

Replacement of roof covering and underlayment of existing One and Two Family dwelling shall require a roofing permit from the City of Fairhope Building Department. All roof coverings and underlayment shall be removed and any roof decking attached with staples or nailing pattern exceeding minimum requirements shall be re-nailed with 8d ring shank to meet requirement. Roof deck shall be "sealed" as described above.

Energy Code

Building cavities shall not be used as ducts or plenums.

Programmable thermostat shall be used where the primary system is a forced-air furnace.

All supply and return ducts not completely inside the building thermal envelope shall be insulated to a minimum of R-6.

Mechanical system piping (Freon line) capable of carrying fluids above 105°F or below 55°F shall be insulated to a minimum of R-3. Piping insulation shall be protected from damage including environmental damage.

A minimum of 75% of lamps in permanently installed lights shall be of high efficacy.

All holes on interior and exterior wall top plates shall be sealed.

All holes and spaces around plumbing pipes, electrical, and mechanical penetrating interior or exterior wall top plates shall be sealed.

All wall windows must have a U factor of .40 and a SHGC of .25.

Attic insulation must be a minimum of R-38.

Wall insulation must be a minimum of R-13.

Floor insulation must be a minimum of R-13.

Dwelling units shall be tested and verified as having an air leakage rate of not exceeding 5 ACH when conducted with a blower door at a pressure of 0.2 inches w.g. or by visual inspection when the items listed above and in Table N1102.4.1.1 are met and field verified.

**TABLE N1102.4.1.1 (R402.4.1.1)
AIR BARRIER AND INSULATION INSTALLATION**

COMPONENT	CRITERIA^a
Air barrier and thermal barrier	A continuous air barrier shall be installed in the building envelope. Exterior thermal envelope contains a continuous air barrier. Breaks or joints in the air barrier shall be sealed. Air-permeable insulation shall not be used as a sealing material.
Ceiling/attic	The air barrier in any dropped ceiling/soffit shall be aligned with the insulation and any gaps in the air barrier sealed. Access openings, drop down stair or knee wall doors to unconditioned attic space.
Walls	Corners and headers shall be insulated and the junction of the foundation and sill plate shall be sealed. The junction of the top plate and top of exterior walls shall be sealed. Exterior thermal envelope insulation for framed walls shall be installed in substantial contact and continuous alignment with the air barrier. Knee walls shall be sealed. Common walls between dwelling units.
Windows, skylights and doors	The space between window/door jambs and framing and skylights and framing shall be sealed.
Rim joists	Rim joists shall be insulated and include the air barrier.
Floors (including above-garage and cantilevered floors)	Insulation shall be installed to maintain permanent contact with underside of subfloor decking. The air barrier shall be installed at any exposed edge of insulation.
Crawl space walls	Where provided in lieu of floor insulation, insulation shall be permanently attached to the crawlspace walls. Exposed earth in unvented crawl spaces shall be covered with a Class I vapor retarder with overlapping joints taped.
Shafts, penetrations	Duct shafts, utility penetrations, and flue shafts opening to exterior or unconditioned space shall be sealed.
Narrow cavities	Batts in narrow cavities shall be cut to fit, or narrow cavities shall be filled by insulation that on installation readily conforms to the available cavity space.
Garage separation	Air sealing shall be provided between the garage and conditioned spaces.
Recessed lighting	Recessed light fixtures installed in the building thermal envelope shall be air tight, IC rated, and sealed to the drywall.
Plumbing and wiring	Batt insulation shall be cut neatly to fit around wiring and plumbing in exterior walls, or insulation that on installation readily conforms to available space shall extend behind piping and wiring.
Shower/tub on exterior walls	Exterior walls adjacent to showers and tubs shall be insulated and the air barrier installed separating them from the showers and tubs.
Electrical/phone box on exterior walls	The air barrier shall be installed behind electrical or communication boxes or air-sealed boxes shall be installed.
HVAC register boots	HVAC register boots that penetrate building thermal envelope shall be sealed to the sub-floor or drywall.
Fireplace	An air barrier shall be installed on fireplace walls. Fireplaces shall have gasketed doors.

a. In addition, inspection of log walls shall be in accordance with the provisions of ICC-400.

Plumbing Requirements

Open trenches that show all fittings and slope of sewer and other in ground piping are required during rough-in inspections prior to pouring of slabs.

Topout inspections require that water be in all PVC piping to either the level of the washer/dryer box in single story houses, or at a height of 1' above a sink drain line at the top floor of multiple story buildings.

Use of in-line venting devices is not allowed in lieu of properly installed venting systems; any exception must be approved by the Building Department.

Schedule 40 pipe is required for all sewer lines from the building to the sewer.

Contractors cannot tie a sewer line directly into a manhole without first obtaining an inspection and permission from either the City Water and Sewer Department or the Building Department. In addition the tie in must be core drilled so as to limit the amount of debris introduced into the sewer line and both sides of the penetration must be grouted.

Donut Rings" (rubber gaskets) cannot be used to connect the building sewer line to the main in lieu of properly sized PVC fittings and reducers.

Septic tanks require a signed release from the Baldwin County Health Department.

Sewer lines and water supply lines running from the road to the house MUST HAVE either 5' of horizontal separation or 12" of vertical separation if they are in the same trench.

All slip joint fittings must have an access panel for servicing.

All Jacuzzi tubs must have an access panel large enough to reach and remove the motor.

All installations of Grinder Pumps require the master plumber of record to complete and sign the "Grinder Pump Installation" Form and submit to the Building Department.

Specific questions can be directed to the Building Department.

Mechanical Requirements

Water heaters (both electric and gas) located in garages that are in the direct path of the garage door must be protected by enclosure, elevation, bollards, or some other reasonable measure to protect the unit from vehicle damage.

Blocking placed underneath the HVAC condenser to elevate it in the auxiliary pan must be compatible to material in contact with and of decay resistant material (brick, plastic, etc).

HVAC equipment must be provided with an auxiliary float switch in the pan or on the unit that will stop the unit in the case of blockage of the primary drain line.

Any HVAC equipment with internal float switches installed must have manufacturer's information available for review by the Building Inspector and must have a label stating the installation clearly visible.

Attic mounted mechanical equipment (HVAC, water heaters, etc.) shall not be mounted more than 20' from the attic access point, shall have a clear walkway at least 24" wide from the access to the equipment panel, and shall have a level working platform extending at least 30" from the edge of the equipment.

Also see energy and electrical supplements.

Specific questions can be directed to the Building Department.

Electrical Requirements

Please reference the “City of Fairhope Electrical Code” for further requirements, copies of which are available from the Building Department.

Specific questions can be directed to the Building Department.