CODE ADOPTION BY THE TOWN OF LOXLEY

International Energy Conservation Code, 2015
International Building Code, 2015
International Fuel Gas Code, 2015
International Mechanical Code, 2015
International Plumbing Code, 2015
International Residential Code, 2015
International Fire Code, 2015
International Energy Conservation Code, 2015
Town of Loxley Supplemental Code to the 2015 International Codes*
National Electric Code, 2014 For Commercial Buildings and Residential Building containing more than two (2) dwelling units
ICC A117.1 - 2017 Standard for Accessible and Usable Buildings and Facilities
Local Wind Load Code – 3 second gust winds: ***applicable to the 2015 IRC only***

130 mph – South of I-10
120 mph – North of I-10

Wind Load for Commercial Structures including Free Standing Signs shall be determined by the Engineer.

*In the event of a conflict between the Town of Loxley Supplemental Code and the 2015 International Codes, the Town of Loxley Supplemental Codes shall prevail and be enforced.

☑ APPROVED

11/13/17

TOWN OF LOXLEY SUPPLEMENTAL CODE IN ADDITION TO THE 2015 INTERNATIONAL CODES

The requirements specified in this Code Supplement apply to detached One and Two Family Dwelling Units not more than three stories above grade plan in height. The provisions of this supplement are intended to compliment the locally adopted codes. The elements of design not addressed by the provisions of this supplement shall be in accordance with the locally adopted code. In the event a conflict between this document and the adopted code, the more stringent shall apply.

STRUCTURAL:

1. Unless balloon-framed, gable ends over 4 feet high shall be braced with a minimum 2 x 6 horizontal strong back installed at midpoint of the vertical height of the gable end wall. Minimum 2 x 4 diagonal bracing not to exceed 45 degrees or 4 feet OC shall be installed on top of strong back and face nailed with 4-10d nails into side of gable wall framing studs. In addition, when ceiling joists run parallel to the gable end wall, a minimum 2 x 4 x 8 brace shall be installed at maximum 6 feet OC on top of ceiling joists and gable top plate nailed with 2-10d nails at each support. Metal 20-gauge straps shall be installed on top of 2 x 4 lateral brace and over gable top plate into stub below using 10-8d nails top and bottom. Install minimum 2 x 4 bracing under lateral braces adjacent to gable wall.
2. Wood structural panels with a minimum thickness of 7/16 inch (11 mm) and a maximum span of 8 feet (2438 mm) shall be permitted for opening protection in one and two-story buildings. Panels shall be precut and attached to the framing surrounding the opening containing the product with the glazed opening. Panels shall be pre-drilled as required for the anchorage method and shall be secured with the attachment hardware provided. Attachments shall be designed to resist the component and cladding loads determined in accordance with either Table R301.2(2) (See International Residential Code 2015) or ASCE 7, with the permanent corrosion-resistant attachment hardware provided and anchors permanently installed on the building. Attachment in accordance with Table R301.2.1.2 is permitted for building with a mean roof height of 33 feet (10 058 mm) or less where in Wind Zones 1 and 2 in accordance with figure R301.2(4)C. ***(Plyox clips are not allowed.)***

TABLE R301.2.1.2
WINDBORNE DEBRIS PROTECTION FASTENING
SCHEDULE FOR WOOD STRUCTURAL PANELS a, b, c, d

FASTENER TYPE	Panel span ≤ 4 feet	4 feet < panel span ≤ 6 feet	6 feet < panel span ≤ 8 feet
No. 8 wood screw based anchor with 2-inch embedment length	16	10	8
No. 10 wood screw based anchor with 2-inch embedment length	16	12	9
¼ inch lag screw based anchor with 2-inch embedment length	16	16	16

Sor SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound = 4.448N, 1 mile per hour = 0.447 m/s.

a. This table is based on 130-mph wind speeds and a 33-foot mean roof height.
b. Fasteners shall be installed at opposing ends of the wood structural panel. Fasteners shall be located a minimum of 1-inch from the edge of the panel.
c. Anchors shall penetrate through exterior wall covering with an embedment length of 2 inches minimum into the building frame. Fasteners shall be located a minimum of 2½ inches from the edge of concrete block or concrete.
d. Panels attached to masonry or masonry/stucco shall be attached using vibration-resistant anchors having a minimum ultimate withdrawal capacity of 1500 pounds.

3. Garage doors shall be rated to or above the applicable wind design load.
4. Wood frame chimney chases shall be structurally connected to rafters and/or ceiling joists. The attachment must be detailed in the plans or must meet the following minimum requirements:

   a. Each corner of the chimney structure must have a tension strap fastened to the corner stud and continue downward to the roof and/or ceiling support members below. The tension strap must have a minimum tension capacity of 700 lbs. at each end.
   b. Chimney framing shall be sheathed with minimum 7/16 inch structural panel on exterior four sides. The base perimeters of chimney framing must be continuously supported by minimum 2 x 4 blocking fastened to roof framing members with joist hangers.

5. Exterior and interior shear walls and/or braced wall panel locations shall be

indicated on the plans and shall be nailed in accordance with the engineered drawings but no less than 6 inches OC maximum intermediate and edge using 8d irregular shank (i.e., ring shank or spiral) nails with full round heads. All exterior walls and gable ends shall be fully sheathed with structural sheathing.

ROOF COVERINGS:

ASPHALT SHINGLES – REQUIREMENTS:

Wind Speed	**Shingle Testing Standard/Classification**
110 mph	ASTM D3161 (Class F) or ASTM D7158 Class F, G or H
120 mph	ASTM D7158 Class G or H
130 mph	ASTM D7158 Class H

1. Asphalt shingles shall be installed according to the manufacturer recommended listed installation instructions for high wind areas with minimum 6 nails.
2. All asphalt shingle roof covering underlayment shall be of a synthetic tear resistant polypropylene, polyester or fiberglass fabric certified by an approved testing agency or ICC-ES report. The Building Official may approve an equal or higher performing product. Asphalt felt roofing underlayment shall not be installed as a roof covering underlayment.

    a. Roof underlayment shall be installed and fastened in accordance with the manufacturer's installation instructions. NOTE – Most manufacturers do not allow staples as an approved fastener or staple button caps.

3. **All aluminum/vinyl soffet covering shall be attached to minimum 7/16 OSB or plywood or minimum 2 x 2 wood supports 8 inches OC maximum.**
4. **Roof deck sheathing seams shall be taped with minimum 4 inch peel and stick tape meeting ASTM D-1970, or sheathing seams and each side of roof support shall be sealed with closed cell foam meeting ASTM D-1622, other equal or greater methods may be approved by the Building Official.**
5. Metal roof covering shall be fastened to roof assembly with a maximum 2 foot OC spacing of fasteners in the length dimensions of the panels. Minimum number of fasteners in width dimension of the panel shall be no less than 4.
6. 1 x 4 or 2 x 4 wood purlins for attachment of metal roof coverings shall be a maximum 2 feet OC. Wood purlins shall be nailed with a maximum 2 deformed (spiral, ring shank) #16D nails at maximum of 24 inches OC.
7. Roof decks shall be nailed in accordance with the engineered drawings but no less than 6 inches OC maximum intermediate and edge, with minimum 8d irregular shank (i.e., ring shank or spiral) nails with full round heads. Staples are not permitted for fastening of the roof decking.

8. All roof coverings and underlayment shall be removed and any roof decking attached with staples or nailing pattern less than 6 inches OC edge and 6 inches OC intermediate shall be re-nailed with #8 ring shank nails to meet 6 inch OC edge and intermediate. Roof deck seams shall be taped with minimum 4 inch peel and stick tape meeting ASTM D-1970 to achieve a sealed roof deck or closed cell foam meeting ASTM-D1622 may be applied underneath to each side of framing member and sheathing seams.

ENERGY:

1. Attic: minimum insulation R-38
   Wall: minimum insulation R-13
   Floor: minimum insulation R-13
2. Batt insulation shall be cut neatly to fit around pipes and wires or shall be placed behind piping and wiring; staple insulation to face of stud.
3. Air permeable insulation shall not be used as a sealing material.
4. Space between windows and door jams shall be sealed.
5. Corners, headers and sill plates shall be sealed.
6. Rim joists shall be insulated.
7. A continuous air barrier shall be installed in the building envelope.
8. Break or joints in the air barrier shall be sealed (taped).
9. Access openings to un-air-conditioned spaces shall be sealed (weather stripping).
10. Building cavities shall not be used as ducts or plenums.
11. Programmable thermostats shall be used.
12. A minimum of 75% of lights used shall be of high efficiency.
13. Recessed light fixtures shall be sealed to airtight.
14. U factor of 40 shall be used and also SHGC of .25 for windows.
15. At the time of rough-in inspection peel and stick aluminum backed tape or other approved material shall be applied to all edges of all windows to prevent air exchange.
16. All holes interior and exterior wall top plates shall be sealed with caulking or expandable foam.
17. Space around plumbing pipes penetrating interior or exterior wall top plates shall be sealed with caulking or expandable foam.

HVAC:

1. Air handler's return air filters shall have a minimum one square inch of filter for every 2 CFM of air the HVAC moves. This equals 400 CFM per ton of AC capacity. ***Example: A 3-ton system will require a minimum of 600 square inches of return air filter area.***
2. Contractor shall provide number of AC units and tonnage of each unit to this Department before the rough-in inspection.

3. The maximum length of flexible duct allowable in any application shall be limited to 12 feet. Any duct run longer than 12 feet shall be same size snap lock pipe or equal. ***Exception: Flexible duct may exceed the 12-feet maximum length provided a Manual D and Manual J depicting supply air CFM, duct size length and layout of system, are provided to this Department before rough-in inspection is scheduled.***
4. All 90-degree turns, elbows, tees, or taps in rectangular duct construction with the exception of transfer duct shall have turn vanes or 2-piece 45-degree or 3-piece 90-degree elbow, 90-degree turns shall be of a long sweep design.
5. Each branch shall have a balancing damper with locking quadrant. Locations that are not accessible do not require a balancing damper.
6. All insulation shall have a continuous vapor barrier by means of same materials "glass fabric tape."
7. All duct seams, joints and connections shall be sealed with sealer/mastic to prevent air leakage.
8. All duct board seams and joints shall be stapled a *maximum 2 inches OC* in addition to tape and sealer.
9. On all new construction rough ins, refrigerant tubing shall be soldered closed to form an air tight seal.
10. Excess plenums above the air handler shall not be allowed unless Manual D documentation of compliance is provided to this Department.
11. Secondary plenums shall not be allowed unless Manual D documentation of compliance is provided to this Department.
12. Condensate lines shall terminate above finished grade.
13. R4 duct allowed in conditioned/semi-conditioned space.
14. Primary contractors are responsible to insure the design of the dwelling will accommodate compliance with the adopted codes.

ELECTRICAL:

1. The minimum size for conductors for feeders and branch circuits shall be 12 AWG copper wire.

MODULAR DWELLINGS:

1. Submit AMHC (Alabama Manufactured Home Commission)-stamped plans.
2. Modular Dwellings shall be certified by an Alabama Registered Engineer to meet adopted wind loads.
3. Submit foundation plans and anchorage to foundation plan. Shall equal or exceed local adopted codes.
4. All other on-site construction shall require a separate permit by the Building Inspection Department.

5. Modular Dwellings shall be required to have a final inspection after exterior of structure and any on-site construction are complete.
6. Modular Dwellings shall be installed as per the engineered installation instructions.
7. Modular Dwellings shall be inspected for compliance with engineered instructions and any applicable current local adopted codes.
8. In-factory construction and components are not the responsibility of the Town of Loxley Building Department.
9. Existing Modular Dwellings moved from one site to another shall comply with Items 3, 4, and 5 herein and require a final inspection. Any new construction shall be in compliance with current adopted codes.

BUILDING PERMITS AND INSPECTIONS:

1. Building permits shall be determined by the Town of Loxley Zoning Ordinance Article (4.2) (Building Permits) in lieu of Section 105 in the 2015 International Building Code.
2. The contractor/builder must supply a list of all subcontractors performing work.
3. All contractors and subcontractors shall be licensed by the Town of Loxley.
4. Inspections will not be made until all contractors/subcontractors are licensed by the Town of Loxley.
5. A Certificate of Occupancy shall not be issued until all contractors/subcontractors are licensed by the Town of Loxley.
6. A 24-hour notice shall be given to the Building Department for all inspections.

REQUIREMENTS FOR BUILDING PERMITS:

1. All construction plans for both commercial and residential construction must be stamped by an Alabama Registered engineer.
2. Two (2) sets of plans to be submitted with the Building Permit Application.
3. Erosion Plan to be submitted with building permit application. Silt fences, hay bales, etc. must be used to protect adjoining properties.
4. Rescheck
5. Plot Plan
6. List of subcontractors doing work on the site.

FLOOD ZONES:

1. Residential and commercial structures to be constructed in an AE or VE Flood Zone shall be in compliance with the Town of Loxley Flood Prevention Ordinance No. 2007-03.

PLUMBING:

1. Pex supply piping shall be inspected at a minimum pressure of 150 psi.
2. Copper and CPVC plastic piping shall be inspected at normal working pressure.
3. Top out plumbing inspection shall be performed with electrical, HVAC, and framing inspection.
4. The contractor responsible for construction shall call in for all 4-way inspections.
5. All bathtubs and showers shall be connected to the drain waste and vent system at the time of top out inspection. ***Exception: Whirlpool and garden tubs may be installed after top out inspection. The trap servicing the whirlpool and garden tub shall be installed at the time of inspection.***

SEWER LATERAL CONNECTIONS:

1. All connections to the Town of Loxley sewer laterals shall be inspected by the Building Department.
2. The use of 90-degree bends/fittings are prohibited for connections to sewer laterals.
3. A series of 45-degree bends/fittings shall be used to ensure a smooth transition into the sewer system.
4. Only glue-type fittings will be allowed on plastic pipe laterals.
5. Rubber couplings with stainless steel bands will be allowed to adapt plastic pipe to clay laterals.
6. Minimum Schedule 40 pipe shall be used for driveway crossings.

CERTIFICATE OF OCCUPANCY REQUIREMENTS:

1. Structure must pass final inspection by the Town of Loxley.
2. HVAC duct blast report.
3. Blower door test results.
4. Compaction report on subgrade.
5. Gas pressure test certificate.
6. If built in a flood zone, an elevation certificate from an Alabama Registered engineer that indicates compliance with the Town of Loxley Flood Ordinance No. 2007-037.
7. A Certificate of Occupancy shall not be issued until all contractors/subcontractors are licensed by the Town of Loxley.
8. Commercial sites/structures must submit an As-Built Certification stamped by the engineer of record.