ALABAMA BOARD OF HEATING, AIR CONDITIONING AND REFRIGERATION CONTRACTORS ADMINISTRATIVE CODE

CHAPTER 440-X-5

MINIMUM STANDARDS FOR INSTALLATION, SERVICE, AND REPAIR OF HEATING, AIR CONDITIONING AND REFRIGERATION SYSTEMS BY CERTIFIED CONTRACTORS

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440-X-5-.01 Definitions.

(1) Minimum Standard: The basic or minimum requirements allowable by the Board as it pertains to the installation, service, and repair of residential and commercial heating and air conditioning, and commercial refrigeration equipment.

(2) Installation: The act of installing, placing, or permanently affixing residential and commercial heating and air conditioning, and commercial refrigeration equipment.

(3) Service: The act of performing routine maintenance to or on residential and commercial heating and air conditioning, and commercial refrigeration equipment.

(4) Repair: The act of fixing or mending residential and commercial heating and air conditioning, and commercial refrigeration equipment.

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(5) Certification Number: A unique number assigned to each heating and air conditioning contractor entity, or refrigeration contractor entity upon issuance of a certification.

(6) Business Name: The company name printed on the certification under which any entity is certified by this Board.

(7) Residential Heating and Air Conditioning System: A heating and/or cooling apparatus consisting of an air heating and/or cooling fixture from pipes, plenums, or blowers including any accessory and equipment installed in a one or two person dwelling for the use of human comfort as defined in the International Residential Code.

(8) Commercial Heating and Air Conditioning System: A heating and/ or cooling apparatus consisting of an air heating and/or cooling fixture from pipes, plenums, or blowers including any accessory and equipment installed in a commercial structure or building for the use of human comfort as defined in the International Building Code.

(9) Commercial Refrigeration System: The use of mechanical or absorption equipment to control temperature, humidity, or both, in order to satisfy the intended use of a specific space, other than for human comfort person as defined in Section 34-31-18(10), <u>Code</u> of Ala. 1975.

Author: Jeffrey M. Becraft

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440-X-5-.02 Minimum Standards For Installation, Service Or Repair Of Residential And Commercial Heating And Air Conditioning, And Commercial Refrigeration.

(1) Pursuant to Section 34-31-21(g), Code of Ala. 1975, the Board adopts the following minimum standards for the installation, service or repair of residential heating and air conditioning system, and all certified heating and air conditioning contractors shall comply with the minimum standards required by:

(a) ACCA/Manual J as described in Load Calculation for Residential Winter and Summer Air Conditioning;

(b) ACCA/Manual D as described in Duct Design for Residential Winter and Summer Air Condition and Equipment Selection;

Heating and Air

(c) International Residential Code; including appendices;

(d) International Fuel Gas Code;

(e) NFPA 70 National Electrical Code;

(f) NAIMA Fibrous Glass Duct Construction;

(g) SMACNA HVAC Duct Construction Standards, Metal and Flexible

(h) ACCA, Trane, or equivalent ductulators;

(i) NASLCA Contractors Guide to Business, Law and Project Management

(j) Brand specific manufacturers installation instructions;

(k) Any minimum standards required and described by applicable local, State, and Federal codes or ordinances, as well as any and all applicable Alabama agencies, Board's and Commissions' rules and regulations. Where there is conflict between the minimum standards adopted by the Board and the applicable local, State, or Federal codes or ordinances or any applicable Alabama agency, Board or Commission's, rules and regulations, the most restrictive will govern;

(1) ADC Flexible Air Duct Standards.

(2) Pursuant to Section 34-31-21(g), <u>Code of Ala. 1975</u>, the Board adopts the following minimum standards for the installation, service or repair of commercial heating and air conditioning system, and all certified heating and air conditioning contractors shall comply with the minimum standards required by:

(a) ACCA/Manual N as described in Load Calculation for Commercial Summer and Winter Air Conditioning;

(b) ACCA/Manual Q as described in Low Pressure, Low Velocity, Duct System Design;

- (c) International Mechanical Code; including appendices;
- (d) International Fuel Gas Code and appendices;
- (e) NFPA 70 National Electrical Code;

(f) ASHRAE Standard 15-2019 as described in Safety Standard for Mechanical Refrigeration;

- (g) NAIMA Fibrous Glass Duct Construction;
- (h) SMACNA HVAC Duct Construction Standards, Metal

(i) ACCA, Trane, or equivalent ductulators;

(j) NASLCA Contractors Guide to Business, Law and project management

(k) Brand specific manufacturers installation instructions;

(1) Any minimum standards required and described by applicable local, State, and Federal codes or ordinances, as well as any and all applicable Alabama agencies, Board's and Commissions' rules and regulations. Where there is conflict between the minimum standards adopted by the Board and the applicable local, State, or Federal codes or ordinances or any applicable Alabama agency, Board or Commission's, rules and regulations, the most restrictive will govern.

(m) ADC Flexible Air Duct Standards

(3) Pursuant to Section 34-31-21{g}, Code of Ala. 1975, the Board adopts the following minimum standards for the installation, service or repair of commercial refrigeration systems, and all certified refrigeration contractors shall comply with the minimum standards required by:

(a) International Mechanical Code; including appendices;

(b) NFPA 70 National Electrical Code;

(c) ASHRAE Standard 15-2019 as described in Safety Standard for Mechanical Refrigeration;

(d) NASLCA Contractors Guide to Business, Law and Project Management;

(e) Brand specific manufacturers installation instructions;

(f) Any minimum standards required and described by applicable local, State, and Federal codes or ordinances, as well as any and all applicable Alabama agencies, Board's and Commissions' rules and regulations. Where there is conflict between the minimum standards adopted by the Board and the applicable local, State, or Federal codes or ordinances or any applicable Alabama agency, Board or Commission's, rules and regulations, the most restrictive will govern.

Author: Jeffrey Becraft

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Ed. Note: Previous Rule .01 was renumbered .02 as per certification published November 30, 2022; effective January 14, 2023.

440-X-5-.03 Compliance With Updated Or Amended Versions.

All certified contractors shall be required to provide the Board, if requested, a copy of the heat gain, heat loss, duct sizing, gas piping calculations drawings or other information used by the certified contractor or concerning the installation, service, and repair of heating, air conditioning or refrigeration systems by the certified contractor.

Author: Jeffrey M. Becraft

Statutory Authority: Code of Ala. 1975, \$34-31-21(g). History: Filed August 20, 1986. Amended: Filed July 12, 1988. Repealed and New Rule: Filed April 9, 2003; effective May 14, 2003. Amended: Filed August 14, 2009; effective September 18, 2009. Repealed and New Rule: Published November 30, 2022; effective January 14, 2023.

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440-X-5-.04 Obligation To Furnish Information Regarding Installation, Service, Or Repair Of A Residential Or Commercial Heating And Air Conditioning System Or Commercial Refrigeration System.

All certified heating and air conditioning contractors and certified refrigeration contractors shall be required to provide the Board, upon request, a copy of all heat gain, heat loss, duct design plans, gas piping plans, other load calculations, or drawings, and any information used by the certified contractor pertaining to the installation, service, and/or repair of residential or commercial heating, air conditioning systems, and/ or commercial refrigeration systems.

Author: Jeffrey M. Becraft

Statutory Authority: Code of Ala. 1975, §34-31-21(g). History: Filed August 20, 1986. Amended: Filed July 12, 1988. Amended: Filed June 9, 1999; effective July 14, 1999. Repealed and New Rule: Filed April 9, 2003; effective May 14, 2003. Amended: Filed August 14, 2009; effective September 18, 2009. Repealed and New Rule: Published November 30, 2022; effective January 14, 2023. Ed. Note: Previous Rule .03 was renumbered .04 as per certification published November 30, 2022; effective January 14, 2023.

440-X-5-.05 Gas Connections.

(1) Certified heating and air conditioning contractors, who do not hold the appropriate gas fitters license when performing work on heating, air conditioning or refrigeration systems involving gas connections, shall work only the gas piping after the shut off valve to the unit located ahead of all controls.

(2) Certified heating and air conditioning contractors shall conform and abide by all city, county, and state codes regarding permits, licenses, and inspections for gas appliance, installation and change outs.

Author: Jeffrey M. Becraft

Statutory Authority: Code of Ala. 1975, §34-31-21(g). History: Filed August 20, 1986. Amended: Filed July 12, 1988; May 18, 1992. Repealed and New Rule: Filed April 9, 2003; effective May 14, 2003. Amended: Filed August 14, 2009; effective September 18, 2009. Repealed and New Rule: Published November 30, 2022; effective January 14, 2023.

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440-X-5-.06 Heating Air Conditioning Systems In Modular Or Manufactured Housing.

(1) Any heating and air conditioning system installation, service, or repair in a previously inspected modular or manufactured housing, by the Alabama Manufactured Housing Commission; is under contractual agreement between the owner of the structure and the certified contractor and is within the regulatory authority of the Board. Any individual performing such work is required to be certified by the Board.

(2) The Board will refer complaints involving heating and air conditioning systems in newly titled modular or manufactured housing to the Alabama Manufactured Housing Commission established by Alabama law.

(3) The Board will investigate all illegal or uncertified individuals involved in the installation service, or repair of a heating and air conditioning system performed in a previously inspected modular or manufactured home.

Author: Jeffrey M. Becraft

Statutory Authority: Code of Ala. 1975, §34-31-21(g). History: Filed August 20, 1986. Amended: Filed July 12, 1988; February 21, 1991. Amended: Filed November 5, 1996; effective December 10, 1996. Repealed and New Rule: Filed April 9, 2003; effective May 14, 2003. Amended: Filed August 14, 2009; effective September 18, 2009. Repealed and New Rule: Published November 30, 2022; effective January 14, 2023.

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440-X-5-.07 Display Of Certification Number And Business Name.

(1) Every certified contractor shall display in a prominent, legible manner, The State of Alabama Board of Heating, Air Conditioning and Refrigeration Contractor's certification number and company name on all service and/or installation vehicles used in conjunction with heat and air conditioning contracting. The company name and Alabama certification number shall:

- (a) Be at least two inches in height;
- (b) Be displayed on at least two sides of the vehicle;

(c) Display the phrase "AL Number"; "AL No."; or "AL#" immediately before the certification number in equal sized print.

(2) Every certified contractor shall display in a prominent, legible manner, The State of Alabama Board of Heating, Air Conditioning and Refrigeration Contractor's certification number and company name on all documentation and forms of advertising, including but not limited to letterhead, proposals, estimates, service tickets, contracts, work orders, receipts, business cards, yellow page advertisements, flyers, bulletins, mail solicitation, billboard advertisements, television commercials, radio commercials, websites; in conjunction with heat and air conditioning contracting. The company name and Alabama certification number shall:

(a) Display the phrase "AL Number," "AL No." or "AL#" immediately before the certification number in equal sized print.

(b) Failure to comply with this provision constitutes a cause for disciplinary action.

Author: Jeffrey Becraft : Code Act No. Statutory Authority of Ala. 1975, §31-31-26; 2009-486.

Statutory Authority:

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