

APA-2

Board of Heating, Air Conditioning & Refrigeration Contractors

NOTICE OF INTENDED ACTION

AGENCY NAME:

Board of Heating, Air Conditioning & Refrigeration Contractors

RULE NO. & TITLE:

440-X-5 MINIMUM STANDARDS FOR INSTALLATION, SERVICE, AND REPAIR OF
HEATING, AIR CONDITIONING OR REFRIGERATION SYSTEMS BY CERTIFIED
CONTRACTORS

INTENDED ACTION:

Repeal Current Rule Section and Replace with New Current Information

SUBSTANCE OF PROPOSED ACTION:

To omit material the Board no longer references.

TIME, PLACE, MANNER OF PRESENTING VIEWS:

11:00 A.M., May 5, 2022 4673 Wharf Pkwy W, Orange Beach, AL 36561

FINAL DATE FOR COMMENT AND COMPLETION OF NOTICE:

Written comment will be accepted until 5:00 P.M., Monday, May 2, 2022.
All comments will be read before the Board on Thursday, May 5, 2022.

CONTACT PERSON AT AGENCY:


Jeffrey M. Beckett
Executive Director

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 OR REFRIGERATION SYSTEMS BY CERTIFIED CONTRACTORS

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~~440-X-5-.01 Minimum Standards For Installation, Service Or Repair.~~

~~(1) The Board, pursuant to its authority under Section
34-31-21(g), Code of Ala. 1975, adopts the following minimum
installation service, and repair standards for all certified
heating and air conditioning contractors:~~

~~(a) All certified heating and air conditioning
contractors shall comply with the minimum standard required by
ASHRAE Standard 90.2P, as described in *Energy Efficient Design for
Residential Structures*;~~

~~(b) All certified heating and air conditioning
contractors shall comply with the minimum standards required by
ASHRAE 15-94 as described in *Safety Code for Mechanical
Refrigeration*;~~

~~(c) (a) All certified heating and air conditioning
contractors shall comply with the minimum
standards required by ACCA/Manual N as
described in *Load Calculation for Commercial
Summer and Winter Air Conditioning* for using
unitary equipment;~~

~~(d) (b) All certified heating and air conditioning
contractors shall comply with the minimum
standards required by ACCA/Manual J as
described in *Load Calculation for Residential
Winter and Summer Air Conditioning*;~~

~~(e) (c) All certified heating and air conditioning
contractors shall comply with the minimum
standards required by ACCA/Manual D as
described in *Duct Design for Residential Winter
and Summer Air Condition and Equipment
Selection*;~~

- ~~(f) (d) All certified heating and air conditioning contractors shall comply with the minimum standards required and described in the *International Mechanical Code*, including appendices;~~
- ~~(g) (e) All certified heating and air conditioning contractors shall comply with the minimum standards required by and described in the *International Fuel Gas Code*;~~
- ~~(h) (f) All certified heating and air conditioning contractors shall comply with the minimum standards required by and described in the *NFPA 70 National Electrical Code* adopted by the board;~~
- ~~(i) (g) All certified heating and air conditioning contractors shall comply with the 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;~~
- ~~(j) (h) All certified heating and air conditioning contractors shall comply with the minimum standards required by and described in *SMACNA HVAC Duct Construction Standards, Metal and Flexible*;~~
- ~~(k) (i) All certified heating and air conditioning contractors shall comply with the minimum standards required by and described in *SMACNA Fibrous Glass Duct Construction Standards*;~~
- ~~(l) (j) All certified contractors shall comply with the minimum standards required by and described in *Refrigeration and Air Conditioning* by AHRI, the American Heating and Refrigeration Institute;~~
- ~~(m) (k) All certified heating and air conditioning contractors shall comply with the minimum standards required for ACCA or equivalent ductulators;~~
- ~~(n) (l) All certified contractors shall comply with the minimum standards of business law.~~
- ~~(o) (m) All certified heating and air conditioning contractors must comply with the minimum standards required and described in the *International Residential Code*, including~~

~~appendices;~~

~~(2) The Board, pursuant to its authority under Section 34-31-21(g), Code of Ala. 1975, adopts the following minimum installation service, and repair standards for all certified refrigeration contractors:~~

~~(a) All refrigeration contractors shall comply with the minimum standards required by ASHRAE 15-94 as described in Safety Code for Mechanical Refrigeration;~~

~~(b) All refrigeration contractors shall comply with the minimum standards required and described in the International Mechanical Code, including appendices;~~

~~(c) All refrigeration contractors shall comply with the minimum standards required by and described in the NFPA 70 National Electrical Code;~~

~~(d) All refrigeration contractors shall comply with the 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;~~

~~(e) All refrigeration contractors shall comply with the minimum standards required by and described in Refrigeration and Air Conditioning by AHRI, the American Heating and Refrigeration Institute;~~

~~(e) All refrigeration contractors shall comply with the minimum standards of business law.~~

~~Authors: Mark Montiel, Kathy S. LeCroix Byrom, Jeffrey Beecraft~~

~~Statutory Authority: Code of Ala. 1975, §34-31-21(a); Act No. 2009-486.~~

~~History: Filed August 20, 1986. Amended: Filed July 12, 1988. Repealed and New Rule: _____ Filed April 9, 2003; effective May 14, 2003. Amended: Filed October 15, 2008; effective November 19, 2008. Amended: Filed August 14, 2009; effective September 18, 2009. _____ Amended: Filed March 6, 2013; effective April 10, 2013. Amended: Published December 31, 2019; effective February 14, 2020. Amended: Published; effective.~~

(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.

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

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

(6) 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.

(7) 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.

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

Authors: ~~Mark Montiel, Kathy LeCroix~~, Jeffrey M. Becraft

Statutory Authority: Code of Alabama. 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 Filed: May

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 Alabama, 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;
- (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;
- (k) Brand specific manufacturers installation instructions;
- (l) 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.

(2) Pursuant to Section 34-31-21(g), Code of Alabama, 1975, 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;
- (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;

(k) Brand specific manufacturers installation instructions;

(l) 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.

(3) Pursuant to Section 34-31-21(g), Code of Alabama, 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.

Authors: ~~Mark Montiel, Kathy LeCroy~~, Jeffrey M. Becraft

Statutory Authority: Code of Alabama. 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 Filed: May

~~440-X-5-.02 Compliance With Updated Or Amended Versions.~~

~~Certified contractors shall follow the updated or amended versions of all publications and regulations described in these Rules for compliance with the minimum standards for installation, service, and repair of heating, air conditioning or refrigeration systems.~~

~~Author: Mark Montiel~~

~~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.~~

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: ~~Mark Montiel~~ 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:

Filed May

~~440-X-5-.03 Certified Contractors To Furnish Information To The Board Regarding Installation, Service, And Repair.~~

~~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: Mark Montiel~~

~~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.~~

44-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: ~~Mark Montiel~~ 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: Filed May

~~440-X-5-.04~~ Gas Connections.

~~(1) Certified 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 contractors shall conform and abide by all city, county, and state codes regarding in regard to permits, licenses, and inspections for gas appliance, installation and change outs.~~

~~Author: Mark Montiel; Jeffrey M. Beecraft~~

~~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. Amended: Filed August 14, 2009; effective September 18, 2009.~~

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: ~~Mark Montiel;~~ 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. Amended: Filed August 14, 2009; effective September 18, 2009. Repealed and New Rule: May

440-X-5-.05 ~~Installation, Service, And Repair Of Heating And Air Conditioning Systems In Modular Or Manufactured Housing.~~

~~(1) Any on-site heating and air conditioning installation of a new system in a previously inspected manufactured structure; service or repair work of a heating and air conditioning system performed on manufactured or modular structure is considered to be under contractual agreement between the owner of the structure and the certified contractor and is within the regulatory authority of the Board.~~

~~(2) All persons performing such work on site are required to be certified by the Board. The Board will also refer complaints involving heating and air conditioning systems in manufactured housing to the Alabama Manufactured Housing Commission established by state law.~~

~~(3) Upon request by the Alabama Manufactured Housing Commission, the Board will assist in investigations and consumer complaints involving heating and air conditioning systems in manufactured or modular homes.~~

~~_____ The Board will investigate all illegal or uncertified contractors involved in the installation service, or repair work performed in manufactured or modular home construction.~~

~~Author: Mark Montiel, Kathy LeCroix Byrom, 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. Amended: Filed~~

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: Mark Montiel, Kathy LeCroix Byrom, 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: Filed May

~~440-X-5.06 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.~~

~~Authors: Jeffrey Beecraft, Kathy LeCroix Byrom~~

~~Statutory Authority: Code of Ala. 1975, §31-31-26; Act No.~~

~~2009-486. History: Filed June 19, 2009. New Rule: Filed August 14, 2009; effective September 18, 2009.~~

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.

Authors: Jeffrey Becraft, ~~Kathy LeCroix Byrom~~
Statutory Authority: Code of Ala. 1975, §31-31-26; Act No. 2009-486.
History: Filed June 19, 2009. New Rule: Filed August 14, 2009;
effective September 18, 2009. Repealed and New Rule: Filed may