

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 And
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) 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) 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) 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) All certified heating and air conditioning contractors shall comply with the minimum standards required and described in the *International Mechanical Code*; including appendices, with the exception of section 601.1, mandating that the insulation value to conform to the requirements of the International Energy Conservation Code, the R value for duct insulation shall be set to a minimum of R 4.2.

(g) All certified heating and air conditioning contractors shall comply with the minimum standards required by and described in the *International Fuel Gas Code*;

(h) All certified heating and air conditioning contractors shall comply with the minimum standards required by and described in the *NFPA 70 National Electrical Code*; 2011

(i) 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) 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) 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) All certified contractors shall comply with the minimum standards required by and described in *Refrigeration and Air Conditioning* by ARI, the American Refrigeration Institute;

(m) All certified heating and air conditioning contractors shall comply with the minimum standards required for ACCA or equivalent ductulators;

(n) All certified contractors shall comply with the minimum standards of business law.

(o) All certified heating and air conditioning contractors must comply the minimum standards requires and described in the International Residential Code; including appendices, with the exception of section N1103.2.1, mandating that the duct insulation value, the R value for duct insulation shall be set to a minimum of R 4.2.

(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, with the exception of section 601.1, mandating that the insulation value to conform to the requirements of the International Energy Conservation Code, the R value for duct insulation shall be set to a minimum of R 4.2;

(c) All refrigeration contractors shall comply with the minimum standards required by and described in the *NFPA 70 National Electrical Code*; 1996

(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 ARI, the American Refrigeration Institute;

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

Authors: Mark Montiel, Kathy S. LeCroix, Jeffrey Becraft
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.

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 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.

440-X-5-.04 **Gas Connections.** 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 shutoff valve to the unit located ahead of all controls. Certified contractors shall conform and abide by all city, county, and state codes in regard to permits, licenses, and inspections for gas appliance, installation and change outs.

Author: Mark Montiel

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.

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

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.

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 Becraft, Kathy LeCroix
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.