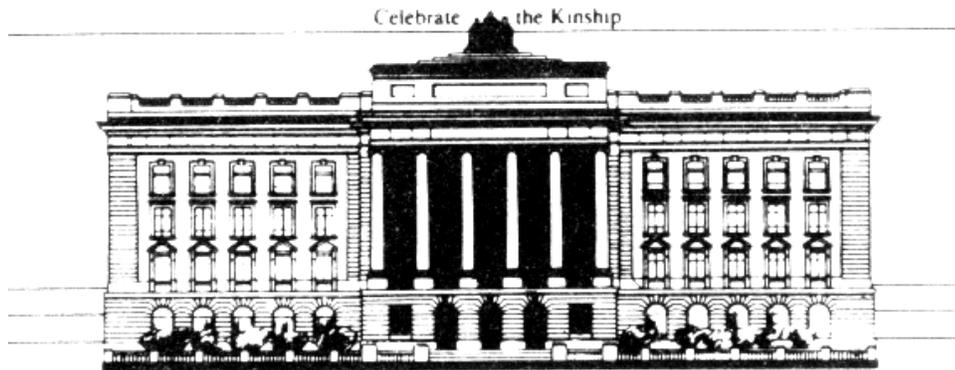


Mahoning County Building Regulations

ADOPTED BY THE BOARD OF MAHONING COUNTY COMMISSIONERS
RESOLUTION # 09-11-018
ADOPTED DATE: 11/19/2009 – EFFECTIVE DATE: 12/19/2009



Mahoning County Building Inspection
50 Westchester Dr., Room 201
Youngstown, OH 44515
Phone: 330-270-2894 / Fax: 330-270-2898

Mahoning County Building Regulations

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CHAPTER 1 – ADMINISTRATIVE

SECTION 1.1 GENERAL PROVISIONS

- 1.1.1 **TITLE.** These regulations promulgated by the County of Mahoning, State of Ohio, shall be known as the Mahoning County Building Regulations hereinafter referred to as “MCBR”.
- 1.1.2 **PURPOSE.** The purpose of these regulations is to provide basic uniform regulations and effective performance objectives to achieve reasonable safeguards for the safety, health and welfare of the occupants of structures and the general public.
- 1.1.3 **EFFECTIVE DATE.** These regulations shall take effect on December 19, 2009 and shall include all previously adopted regulations pertaining to construction regulated through the Mahoning County Building Inspection Department along with the provisions contained herein. In the event that there is a conflict between a previously adopted resolution and these regulations, these regulations shall prevail.
- 1.1.4 **MINIMUM REQUIREMENTS.** The provisions and requirements of these regulations shall be construed to be minimum requirements, and where not in conflict with any specific provision herein, shall not prohibit any person from exceeding these minimum requirements.
- 1.1.5 **RELATIONSHIP TO OTHER LAWS.** Nothing contained in these regulations shall be deemed to nullify or repeal any provision of local, state, or federal regulations pertaining to the location, use or type of construction of any structure or other condition to which these regulations may apply, except as such nullification or repeal may be specifically asserted by specific provisions of these regulations.
- 1.1.6 **PARTIAL INVALIDITY.** In the event any part or provision of these regulations is held to be illegal or void by a court of competent jurisdiction, such decision shall not have the effect of making illegal or void other parts or provisions of these regulations. It shall be presumed in such event that these regulations would have been enacted had such illegal or invalid parts or provisions not been included, and the remainder of these regulations shall continue in full force and effect regardless of the extent to which such illegal or invalid parts or provisions may be integrated in the remaining portions of these regulations.
- 1.1.7 **AUTHORITY.** Authority to adopt these regulations is per Ohio Revised Code (ORC) 3781.01 & 307.37 including the requirement to advertise and hold public hearings.

SECTION 1.2 STATE STATUTES, RULES, COUNTY REGULATIONS, ZONING AND FIRE AUTHORITIES

- 1.2.1 **RESIDENTIAL CONSTRUCTION, OHIO LAW (STATUTES AND RULES).** Effective on or about May 27, 2007, the Building Department of Mahoning County, Ohio obtained certification from the Ohio Board of Building Standards, pursuant to Section 3781.10 of the Ohio Revised Code to exercise enforcement authority in accordance with the provisions of the Residential Code of Ohio for One-, Two-, and Three-Family Dwellings subject to the rules for certification adopted by the Board and to the conditions and

limitations of the rule for certification cited therein. Mahoning County, Ohio shall continue to regulate residential construction (one-, two-, and three-family dwellings and their accessory structures) in accordance with Chapter 3781 of the Ohio Revised Code and the rules adopted by the State of Ohio pursuant thereto in accordance with the certification issued by the State of Ohio, as amended herein.

- 1.2.2 **NON-RESIDENTIAL CONSTRUCTION, OHIO LAW (STATUTES AND RULES).** Effective on or about March 1, 1985, the Building Department of Mahoning County, Ohio obtained certification from the Ohio Board of Building Standards, pursuant to Section 3781.10 of the Ohio Revised Code to exercise enforcement authority in accordance with the provisions of the Ohio Basic Building Code subject to the rules of certification adopted by the Board and to the conditions and limitations of the rule for certification cited therein. Mahoning County, Ohio shall continue to regulate non-residential construction as defined by Ohio Revised Code Section 3781.06(B)(10) in accordance with Chapter 3781 and 3791 of the Ohio Revised Code and the rules adopted by the State of Ohio pursuant thereto in accordance with the certification issued by the State of Ohio, as amended herein.
- 1.2.3 **MANUFACTURED HOME INSTALLATION, OHIO LAW (STATUTES AND RULES).** Mahoning County shall regulate manufactured home installation as defined by ORC 4781.01(B) & (C) outside manufactured home parks in accordance with ORC 4781 and the rules adopted by the State of Ohio pursuant thereto in accordance with the certification issued by the State of Ohio, as amended herein. Due to provisions in House Bill #1, effective January 1, 2010, the Ohio Manufactured Homes Commission has sole jurisdiction for the issuance of installation permits and inspections in Manufactured Home Parks. Mahoning County shall regulate manufactured home installation as defined by ORC 3733.02(A)(3) inside manufactured home parks, upon entering in an agreement as a licensor with the Ohio Manufactured Homes Commission per ORC 4781.04 and ORC4781.07.
- 1.2.4 **MAHONING COUNTY BUILDING PERMITS.** Ohio law referenced above requires any owner or authorized agent who intends to construct, install, enlarge, alter, repair, move, or change the occupancy of a building, residential building, manufactured home or structure, or portion thereof, or to erect, install, enlarge, alter, repair, remove, convert, or replace any electrical, gas, mechanical, plumbing system the installation of which is regulated by State of Ohio rules, or to cause any such work to be done, shall first make application to the Chief Building Official and obtain the required approval. In addition to the approvals required above, owners or authorized agents shall make application to the building department for an additional instrument which is a Building Permit.

Approvals and/or permits, license and/ or registration must be obtained from the following agencies when applicable to the project and prior to the issuance of a building permit:

- (A) Mahoning County Drainage and Erosion and Sedimentation Control Manual (Mahoning County Engineer's Office)
- (B) Mahoning County Flood Damage Reduction Regulations (Planning Commission) or corresponding municipal regulations

- (C) Mahoning County Sanitary Engineering Department regulations or corresponding municipal regulations
- (D) Mahoning County District Board of Health regulations
- (E) Requirements herein regarding specialty trade contractor registration and licensure (heating, ventilation, air conditioning, hydronics and electrical contractor license and/or registration)
- (F) Zoning regulations as enforced by the township, village, or city zoning authority
- (G) Curb cut (driveway permit) from appropriate road department (state, county, township, municipality, etc)
- (H) Any other federal, state, or local agency with regulations that apply to the project

Exception: In the event that prior approval is denied or delayed from any agency in this section, the Chief Building Official may release the Building Permit when written certification from the Department Head or Director of that agency is submitted stating there is no objection to its release. It shall be the applicant's responsibility to obtain said certification letter.

- 1.2.5 **RELATION TO TOWNSHIP, VILLAGE, AND CITY FIRE CODES.** In addition to complying with the Mahoning County Building Regulations it is the responsibility of the applicant to comply with all local fire codes in a township, village, city, or fire district that has enacted such codes.

CHAPTER 2 - BUILDING INSPECTION DEPARTMENT AND PERMITS

SECTION 2.1 MAHONING COUNTY BUILDING INSPECTION DEPARTMENT

2.1.1 **CREATION.** The Mahoning County Building Inspection Department hereinafter the “Building Department”, created by resolution on June 23, 1958, shall administer and enforce these regulations.

2.1.2 **MISSION.** It is the mission of the Building Department to safeguard the public through enforcement of Ohio construction codes and county regulations. The Building Department is committed to delivering qualified field inspections, timely and thorough plan review and professional, courteous service.

It is the object of the Building Department to place the public’s welfare above all other interests and to recognize that the chief function of government is to serve the best interest of all people. The protection of life, health and property is a solemn responsibility of the highest order.

We will demonstrate integrity, honesty and fairness in all transactions and constantly strive for excellence in all matters of ethical conduct. We will maintain professional competence in all areas of employment responsibility and encourage the same in associates at all levels.

We recognize the continuing need for developing improved safety standards for the protection of life, health and property, and acknowledge a professional obligation to contribute time and expertise in the development of such improvements. Public safety for all current and future occupants of Mahoning County is our priority.

SECTION 2.2 PERMITS

2.2.1 **PERMITS.** The following permits may be required, depending on the project:

(A) Building

(B) HVAC

(C) Hydronics

(D) Refrigeration

(E) Fire Suppression Systems

(F) Fire Alarm Systems

(G) Special Inspections

(H) Change of Occupancy

(I) Temporary Structures or Events

(J) Electrical (obtained from the Central Electric Inspection Bureau, as per resolution dated 5/1/1986)

(K) Plumbing (obtained from Mahoning County District Board of Health)

(L) Others as determined necessary by the Chief Building Official to maintain the health, safety, and/or welfare of occupants and citizens.

2.2.2 APPLICANTS SHALL PROVIDE ALL NECESSARY DOCUMENTS. All applications shall be completed in full and be accompanied by the documents required by the Chief Building Official.

2.2.3 CONDITIONS OF PERMIT

(A) Payment of Fees.

- (1) No permit shall be issued and no amendment to a drawing, application for permit, or other submission shall be approved or certified until all fees have been paid.
- (2) The Board of County Commissioners shall establish by resolution fees to be charged by the Building Department for performance of the duties established herein. This resolution shall be entitled the "Building Department Fee Schedule". When occurrences arise that do not conform to the existing fee schedule a fee for the particular permit, plan review or administrative service shall be calculated using the Building Department hourly rate, estimated time for services, and/or actual cost for any contracted services.
- (3) Any person, firm, or corporation who fails to obtain the required permit prior to the erection, construction, alteration, or repair of any structure within the jurisdictional area of the Mahoning County Building Department shall upon detection and notification, be required to obtain the necessary permit(s), and when applicable, register or license with the Building Department. To cover the administrative cost incurred, the violator shall be required to pay an administrative fee in addition to the permit fee. The amount of this fee shall be set by the Building Department Fee Schedule. The Chief Building Official shall have the discretion to adjust this administrative fee where deemed warranted. Nothing herein shall preclude the prosecution of the violator for conduct which otherwise constitutes a violation of the provisions of these regulations.

(B) Reinspections Required.

A fee shall be paid for each reinspection made necessary by incomplete, incompetent, negligent work or if ready or safe access to the job site is not provided. Fees for reinspection shall be paid prior to service and must be submitted to the Building Department; Inspectors are not permitted to accept payment.

(C) Certificate of Plan Approval.

A Certificate of Plan Approval shall be obtained in conformance with Section 1.2 and prior to the issuance of the Building Permit.

(D) Building Permit Expiration.

The approval of any permit in accordance with these regulations is invalid if construction, erection, alteration or other work upon the structure has not completed within twelve (12) months of its issuance. One extension shall be

granted for an additional six (6) month period if requested by the owner at least ten days in advance of the expiration of the permit and upon payment of a fee as prescribed in the Building Department Fee Schedule. Completion of the project shall be documented by the issuance of a Certificate of Occupancy or Use.

(E) Permit Validity.

The Building Permit shall remain valid under the condition that all supporting permit and approvals in Section 1.2.4 remain valid.

2.2.4 REQUEST FOR INSPECTION. It shall be the responsibility of the property owner and/or permit holder to notify the proper inspection agency when work is ready for the various inspections required by the State of Ohio rules. Such notice is mandatory and shall be given no later than 9:00 a.m. of the desired inspection day. Before giving such notice, and to avoid any additional fees, the holder of the permit shall first test the work and be satisfied that said work conforms to the approved plans and specifications and the requirements of the Code. Inspections are conducted between 9:00 a.m. and 4:30 p.m. on weekdays. Inspections requested after 4:30 p.m. on weekdays, or anytime on weekends and holidays, shall be subject to availability of resources and an after-hours special inspection fee as per the Building Department Fee Schedule.

CHAPTER 3 – BOARDS AND APPEALS

SECTION 3.1 NON-RESIDENTIAL APPEALS

3.1.1 **NON-RESIDENTIAL, OHIO STATUTE AND POWERS.** The Ohio Board of Building Appeals shall conduct the non-residential adjudication hearings for Mahoning County. Requests for such an appeal shall be made in the manner specified in ORC 119.

SECTION 3.2 RESIDENTIAL APPEALS

3.2.1 **RESIDENTIAL, OHIO RULE AND POWERS.** The Mahoning County Residential Building Board of Appeals is established as required by the Residential Code of Ohio (RCO) (Chapter 4101:8 Ohio Administrative Code), Section 112. It shall hear and decide appeals from the decisions of the Chief Building Official or other officer assigned to perform duties pertaining to the enforcement of the RCO and these regulations. This Board shall consist of five (5) members: an architect or engineer, an attorney, a representative of the Home Builders Association involved in the construction trade, a commercial contractor/ developer and a residential contractor/ developer. Each member shall be appointed to a two-year term. The Mahoning County Residential Building Board of Appeals shall have the same powers regarding the RCO as ORC 3781.20(f) & 3781.19 grants the state of Ohio regarding the Ohio Building/Mechanical Codes (Chapters 4101:1 and 2 Ohio Administrative Code).

SECTION 3.3 LICENSING AND REGISTRATION APPEALS

3.3.1 **ELECTRICAL LICENSING BOARD.** The Mahoning County Electrical Licensing Board is established for the review of applications for licensing and registration of electrical contractors as per Chapter 4 of the Mahoning County Building Regulations. It shall hear and decide on appropriate appeals requests regarding licensing or registration. Said Mahoning County Electrical Licensing Board shall consist of seven (7) members appointed by the Board of County Commissioners as follows: two licensed electric contractors, two persons with at least four (4) years experience in the electrical trade or business who are not licensed contractors, one person from the general public of Mahoning County qualified by training or experience in said trade or business but not actively engaged in trade or business, one person who shall be qualified as a professional electrical engineer, and one member at-large. Each member shall be appointed to a two-year term.

3.3.2 **WARM AIR HEATING AND AIR CONDITIONING LICENSING BOARD.** The Mahoning County Warm Air Heating and Air Conditioning Licensing Board is established to review applications for licensing and registration of HVAC contractors and refrigeration contractors as per Chapter 4 of the Mahoning County Building Regulations. It shall hear and decide on appropriate appeals requests regarding licensing or registration. Said Mahoning County Warm Air Heating and Air Conditioning Licensing Board shall consist of six (6) members as follows: members who are qualified by experience and learning (i.e. professional engineer, licensed HVAC contractor both union and non-union, attorney, representative of the HVAC contractors association, member at large, Fire Inspector or Chief). Each member shall be appointed to a two-year term.

- 3.3.3 **WET HEAT (HYDRONICS) LICENSING BOARD.** The Mahoning County Wet Heat (Hydronics) Licensing Board is established to review applications for licensing and registration of hydronics contractors for licensing and registration as per Section 4. It shall hear and decide on appropriate appeals requests regarding licensing and registration. Said Mahoning County Wet Heat (Hydronics) Licensing Board shall consist of six (6) members as follows: members who are qualified by experience and learning (i.e. professional engineer, licensed Wet Heat contractor both union and non-union, attorney, representative of the Wet Heat contractors association, member at large, Fire Inspector or Chief). Each member shall be appointed to a two-year term.

SECTION 3.4 BOARD PROCEDURES

- 3.4.1 **COMPENSATION.** The County Commissioners may from time to time set the compensation, if any, of the Board members for time served at Board meetings.
- 3.4.2 **CONFLICT OF INTEREST.** No member of a board shall pass upon any question in which he/she has financial or personal interest (ORC 102, 2921.42, & 2921.43).
- 3.4.3 **MEETINGS AND RECORDS.** Board meetings shall be held at the call of the Chairperson or Chief Building Official and at other times as the board determines. All hearings before the Board shall be open to the public. The board shall keep minutes of its proceedings, showing the vote of each member upon every question; or if absent or failing to vote, indicating such facts, and shall also keep records of its examinations and other official actions. The minutes and records are public records. A majority of appointed members shall constitute a quorum and a majority vote of the members present shall rule.
- 3.4.4 **PROCEDURES.** The boards shall establish rules and regulations for their own procedure not inconsistent with the provisions of the Mahoning County Building Regulations, or State of Ohio rules and statutes. The fee for each appeal to a board shall be set by the County Commissioners and prescribed in the Building Department Fee Schedule. The board members shall annually, by majority vote, select one of the members to serve as chairperson, who shall hold office for a term of one year or until a successor is elected and qualified.
- 3.4.5 **APPEAL PROCEDURE**
- (A) Who may appeal. Any person, County officer or official or any public body aggrieved by an order of the Chief Building Official, or Official acting in their place, may request an appeal to the appropriate board. The Chief Building Official or any County officer or official of any public body, or any member of the board, may request a hearing by a board on any subject over which the board has jurisdiction or power, as set forth in law, or may request the board to review or interpret any provision of the Mahoning County Building Regulations.
- (B) Time, fee and notice. An appeal from any decision of the Chief Building Official may be taken within thirty days from the date of the adjudication order from which the appeal is taken by paying the required fee and filing with the Chief Building Official a notice of appeal, specifying the grounds therefore. The Chief Building Official shall then transmit to the board the record upon which the action was taken.

- (C) Action on appeals. The Board shall hold a hearing on each appeal and shall give notice to the Chief Building Official and other interested parties, as the Board directs, and shall give notice to the public by posting, publication or otherwise as necessary for compliance with ORC 121.22. At the hearing, any party may appear in person or by designated agent or attorney.
- (D) Decision. The Board shall hear and act upon all cases within thirty (30) days unless additional time is mutually agreed upon by the Board and applicant. Every decision of the Board shall be in writing and shall indicate the vote upon a decision. Every decision shall be promptly filed in the office of the Building Department. A copy shall be sent by mail or, otherwise, to the applicant or other interested party.

CHAPTER 4 – SPECIALTY TRADE CONTRACTOR LICENSING AND REGISTRATION (HVAC, HYDRONICS, ELECTRICAL OR REFRIGERATION CONTRACTORS)

SECTION 4.1 REGISTRATION AND PERMIT

4.1.1 COMMERCIAL CONTRACTORS. No person shall engage in, contract for or represent himself/herself as being in the:

- Commercial HVAC Contracting
- Commercial Electrical Contracting
- Commercial Hydronics (Wet Heat) Contracting
- Commercial Refrigeration Contracting

business within Mahoning County without first becoming **registered**. These Commercial contractors must be licensed by the State of Ohio by testing and are therefore exempt from licensing in the County but required to be **registered only** in Mahoning County.

This shall be in writing as provided for in this resolution and which is subject to the Ohio Building Codes (OBC) and/or National Electric code (NEC). It is a per-se violation of this Resolution for any person to hold himself/herself out as any one of these contractors or builders without first obtaining the necessary registration. The public's health, safety and welfare can only be served by having qualified registered or licensed contractors.

(Note: Mahoning County Board of Health registers Plumbing Contractors separately)

4.1.2 RESIDENTIAL CONTRACTORS. No person shall engage in, contract for or represent himself/herself as being in the:

- Residential HVAC Contracting
- Residential Electrical Contracting
- Residential Hydronics Contracting
- Residential Refrigeration Contracting

business within Mahoning County without first becoming **licensed**. These residential contractors must be licensed by Mahoning County are therefore exempt from registration in the County.

This shall be in writing as provided for in these regulations and which is subject to the Residential Code of Ohio (RCO) and/ or National Electric Code (NEC). It is a per-se violation of these regulations for any person to hold himself/herself out as any one of these contractors or builders without first obtaining the required **license**. The public's health, safety and welfare can only be served by having qualified licensed contractors.

4.1.3 REQUIREMENT TO OBTAIN PERMIT. No person shall commence the construction and/or repair of any structure without first obtaining approval in accordance with Ohio's Building Codes and a building permit as required under these regulations. The failure of any person to obtain the pre-requisite registration, license, approval and permit prior to the commencement of any work shall be deemed, whether commenced, completed or substantially completed as in violation; as per Section 4.8.1.

- 4.1.4 **NON-COMPLYING CONTRACTOR.** This resolution hereby disclaims the breaching or non-complying contractor any right or entitlement to unjust enrichment. This resolution measures the public's health and safety to have only registered and/or licensed contractors perform work in Mahoning County and to the need to deter unregistered and/or unlicensed contractors holding themselves out as service agents to the public.
- 4.1.5 **ADMINISTRATIVE FEE.** Any person discovered to have not fulfilled all of the requirements pertaining to registration, licensure and/or work shall be subject to an administrative fee as listed in the Building Department Fee Schedule.
- 4.1.6 **TRANSFERENCE.** No registration and/or license shall be assignable or transferable.
- 4.1.7 **HOMEOWNER EXEMPTION.**
- (A) No provision of this section shall be interpreted to require that the bona fide owner and occupant of a single family dwelling be denied registration who personally performs work upon the premises occupied or to be occupied by the owner thereof as such owner's established residence.
 - (B) Such owner shall be registered for his/ her established single family residence immediately upon completing the required applications, passing required test and payment of all fees to the Mahoning County Building Department.
 - (C) The homeowner shall furnish two forms of identification, one with photo identification along with a signed affidavit that he/she is the owner and resident of such one-family dwelling and will perform the work himself/herself, and intends to reside at that location for at least one year or more, after the completion of the work.
 - (D) The homeowner shall submit plans drawn to scale for approval by the Mahoning County Building Department and shall not start any work unless all approvals in accordance with Ohio's Building Codes and a building permit as required under these regulations are first obtained. Furthermore, said homeowner shall be responsible to schedule all inspections required by Mahoning County Building Department and must obtain a Certificate of Occupancy for the structure upon completion but prior to occupancy.
 - (E) The homeowner shall insure that all work is in conformity with the Residential Code of Ohio and all laws established by the local, State and Federal agencies.
 - (F) The homeowner of a single family dwelling may exempt himself from the requirements of Section 4.5 for his home by filing a Waiver of Liability Form provided by the Mahoning County Building Department.
 - (G) The homeowner of a single family dwelling must pass a test offered by the Building Department to perform HVAC work or a test offered by the Central Electric Inspection Bureau to perform electrical work on the premises occupied or to be occupied by the owner thereof as such owner's established residence.

SECTION 4.2 DEFINITIONS

BUILDING CONTRACTOR OR BUILDER: Individual or business who engages in or offers to engage in, advertises or otherwise represents to be permitted and/or qualified to

superintend and/or construct a structure in Mahoning County governed by the Residential Code of Ohio (RCO). This would include all residential structures having 1, 2 or 3 families and their accessory structures. Building contractors shall include those constructing new structures, those performing alterations and/or additions to existing structures. No license or registration is required for either of these definitions.

EXPERIENCE: (1) Building contractor or general contractor with verifiable education and/or experience in the construction trades as listed in Section 4.3. (2) Journeyman in the carpenter, roofer or mason trades are with one (1) year verifiable experience in the construction trades. (3) Journeyman in the carpenter, roofer or mason trades with one (1) year verifiable experience in the construction trades and completion of an approved and recognized apprentice program.

GENERAL CONTRACTOR: Individual or business who engages in or offers to engage in, advertises or otherwise represents to be permitted and/or qualified to superintend and/or construct a structure in Mahoning County governed by the Ohio Building Code (OBC). This would include commercial structures (4 family and above) and their accessory structures. No registration or license is required to be a General Contractor.

HOMEOWNER: The bona fide owner and occupant of a single family dwelling who personally performs work upon the premises occupied or to be occupied by the owner thereof as such owner's established residence.

JOURNEYMAN: Three (3) years verifiable experience in the construction trades for work performed under the Residential Code of Ohio (RCO) and completion of an approved and recognized apprentice program.

LICENSED CONTRACTOR: Those contractors who must be licensed in Mahoning County or the State of Ohio by testing and are therefore exempt from registration: They include Residential HVAC Contractors, Electrical Contractors, Hydronics (Wet Heat) Contractors and Refrigeration Contractors. All Electrical, HVAC, Hydronics and Refrigeration Contractors working in Mahoning County must have a minimum of eighty (80%) of the employees on the job for which the building permit is secured under their direct supervision.

SECTION 4.3 QUALIFICATIONS

4.3.1 **COMMERCIAL REGISTRATION.** Unless provided elsewhere, no registration outlined in this section shall be issued except in accordance with the standards and methods set forth below:

- (A) The applicant shall be at least 18 years of age.
- (B) Applicant shall be a citizen of the United States.
- (C) A valid State of Ohio Commercial license, appropriate for the trade in which he wishes to be registered in Mahoning County.

4.3.2 **RESIDENTIAL LICENSING.** Unless provided elsewhere, no license outlined in this section shall be issued except in accordance with the standards and methods set forth below:

- (A) The applicant shall be at least 18 years of age.

- (B) Applicant shall be a citizen of the United States.
- (C) The Applicant will have at least one of the following requirements of experience or education:
 - a. Journeyman with three (3) years experience in the trade for which he is applying, for work performed under any of the following applicable codes (OBC, RCO, NEC).
 - b. Professional Engineer or Registered Architect registered with the State of Ohio.
 - c. A valid State of Ohio Commercial license for the trade in which he wishes to be licensed in Mahoning County.

SECTION 4.4 APPLICATIONS

- 4.4.1 APPLICATIONS. The application and all required attachments must be reviewed by the Chief Building Official and approved by the Mahoning County Electrical Licensing Board (MCELB) or the Mahoning County HVAC Licensing Board, prior to the applicant obtaining a license. Applications shall be reviewed a minimum of four (4) times per calendar year.
- 4.4.2 VERIFICATION. If, upon verification of an applicant's experience, it is found that violations exist as listed in Section 4.8, the application will be denied and the applicant shall not be eligible to apply for licensure until all administrative fees are paid and a period of **not less than one year** has passed from the original application date.
- 4.4.3 RENEWAL. Renewal of Residential licenses must be accompanied by proof of five (5) hours per year of continuing education (CE) in the National Electrical Code (NEC). The CE shall be from a State of Ohio approved training agency.
- 4.4.4 ELECTRICAL RESIDENTIAL LICENSE. No applicant shall be given a Residential Electrical license unless the following has been furnished:
 - (A) A minimum of 3 years experience must be shown; and documented on application form.
 - (B) A letter of recommendation from an actively employed Inspector currently licensed by the State of Ohio as an Electrical Safety Inspector (ESI).
 - (C) A letter of recommendation from a Professional Engineer licensed in the State of Ohio.
 - (D) The holder of a current State of Ohio license for the trade for which is being applied.
 - (E) Insurance and bond as listed in Section 4.5.
 - (F) A current Federal Tax Identification number or Social Security number.
 - (G) A current State of Ohio Workers Compensation Identification number.
 - (H) Fees as outlined in the Building Department Fee Schedule.
 - (I) All other pertinent information that the board may require.

- 4.4.5 HVAC RESIDENTIAL LICENSE. No applicant shall be given a Residential HVAC license unless the following has been furnished:
- (A) A minimum of 3 years experience must be shown; and documented on application form.
 - (B) A letter of recommendation from an actively employed Building or Mechanical Inspector currently licensed by the State of Ohio.
 - (C) A letter of recommendation from a Professional Engineer licensed in the State of Ohio.
 - (D) The holder of a current State of Ohio license for/in the trade for which is being applied.
 - (E) Insurance and bond as listed in Section 4.5.
 - (F) A current Federal Tax Identification number or Social Security number.
 - (G) A current State of Ohio Workers Compensation Identification number.
 - (H) Fees as outlined in the Building Department Fee Schedule.
 - (I) All other pertinent information that the board may require.
- 4.4.6 COMMERCIAL REGISTRATION. No applicant shall be given Commercial Registration unless the following has been furnished:
- (A) Insurance as listed in Section 4.5.
 - (B) A current Federal Tax Identification number.
 - (C) Proof of registration with the Mahoning County Tax department.
 - (D) Proof of compliance with Worker's Compensation.
 - (E) Proof of Bond as outlined in Section 4.5 Insurance.
 - (F) Fees as outlined in the Building Department Fee Schedule.
 - (G) All other pertinent information that the board may require.

SECTION 4.5 INSURANCE

- 4.5.1 INSURANCE. No licensing, registration, or renewal thereof shall be issued unless the application is accompanied by the following:
- (A) Proof of liability insurance policy in an amount not less than Three Hundred Thousand Dollars (\$300,000) for injuries including those resulting in death of any one person and in an amount of not less than Five Hundred Thousand Dollars (\$500,000) on account of any one accident or occurrence. This shall be kept in effect throughout the entire registration period.
 - (B) A Ten Thousand Dollar (\$10,000) Surety Bond made out to the Mahoning County Building Department which shall be in effect and kept in effect throughout the entire registration or licensing period conditioned upon the faithful performance by the contractor of all work entered into, or contracted for, by such contractor

and upon strict compliance of the contractor with all provisions and requirements of the regulations of the County (and/or City or Village if applicable) where the work under registration is being performed. This shall be used to indemnify the owner of each project that the contractor is performing work on against work not performed to code by the contractor and/or his subcontractors. It shall also indemnify the County against any and all losses and damages by reason of any negligence on the part of the contractor and/or his subcontractors. This shall be kept in effect throughout the entire registration period.

- 4.5.2 FAILURE TO MAINTAIN. Failure to maintain the insurance and/or bond listed above shall result in the immediate cancelation of the registration or license.
- 4.5.3 RENEWAL. All insurance shall be renewed annually. (See Section 4.10: Terms of Registration)
- 4.5.4 TRANSFERENCE. No insurance shall be assignable or transferable. Unless so stated in the policy and declarations page. The assignee must be specifically named on the policy.

SECTION 4.6 FEES

- 4.6.1 FEES. No registration or renewal thereof secured under this resolution shall be issued unless the application is accompanied by the appropriate fees paid to the Mahoning County Building Department. The fees are established by separate resolution known as the Building Department Fee Schedule.

SECTION 4.7 ENFORCEMENT. These regulations shall be enforced by the Mahoning County Chief Building Official and/or his approved designated agency by refusing building, HVAC and electrical permits to unregistered and/or unlicensed persons, companies, corporations, etc. and by enforcing administrative fees and prosecution.

SECTION 4.8 VIOLATIONS.

- 4.8.1 VIOLATIONS. The following actions constitute a violation:
- (A) Misrepresentation of a material fact in obtaining a registration, license or renewal.
 - (B) Registration and/or license holders securing building permits for work to be performed by any other individual, contractor or firm other than the registered holder.
 - (C) Failure to obtain permits, inspections or approvals required and referenced by these regulations
 - (D) Work which is performed without the contractor being registered and/or licensed.
 - (E) Work which is performed by the registrant or license holder who willfully or by reason of reckless disregard refuses to correct violations of the Building Code under which a structure is being built when so notified of said violation(s) by the Mahoning County Building Department.
 - (F) Work which is performed in violation of any applicable statute, resolution, rule or regulation of the County, Township, State, City or Village relating to the zoning,

erection, construction, repair, alteration, improvement, removal, replacement and/or remodeling of any structure.

- (G) Registration and/or licensing may be denied, suspended or revoked to any person or company who has been convicted in the State of Ohio of a criminal charge relating to breach of fiduciary duty, trustworthiness, or moral turpitude.
- (H) Dishonest or unfair practices in the conduct of a business or practice of trade.
- (I) Consumer fraud violations.

SECTION 4.9 ADMINISTRATIVE FEES

- 4.9.1 ADMINISTRATIVE FEES. Contractors or individuals performing work in Mahoning County, Ohio without being registered and/ or licensed shall be be charged an administrative fee as listed in the Building Department Fee Schedule.
- 4.9.2 DETERMINATION. All fees shall be determined by the Chief Building Official after investigation and/ or inspection.

SECTION 4.10 TERMS OF REGISTRATION AND LICENSES

- 4.10.1 EXPIRATION. All registrations and licenses expire at midnight EST on December 31 of the current calendar year and must be renewed with insurance and bond on, or prior to, January 1 of the following year.
- 4.10.2 RENEWAL. Before any expiring registration and/ or license is renewed, the holder of such shall provide any change in the information furnished on his application, pay the renewal fee listed in the Building Department Fee Schedule, provide proof of insurance listed in Section 4.5 and submit five (5) hours per year of continuing education (CE) in the National Electrical Code (NEC). The CE shall be from a State of Ohio approved training agency.
- 4.10.3 DENIAL. The Chief Building Official may deny renewal of registration and/ or licensing of any person or contractor if violations as listed in Section 4.8 exist and for failure to pay fees assessed.

SECTION 4.11 APPEALS. In accordance with Chapter 119 of the Ohio Revised Code, each person or company shall have 30 days after receiving a notice of violation to appeal. Refer to Chapter 3, Boards and Appeals.

CHAPTER 5 – STANDARDS AND WORK RULES

SECTION 5.1 GENERAL. All work shall be done in conformity with the provisions of these rules and Ohio law.

SECTION 5.2 JOB ACCESS. The permit holder and the owner of record are responsible for access to structure where inspections are required. Reinspection fees will be assessed when the requested inspection cannot be performed due to physical barriers that create limited or no access to the phase of construction, jobsite and/ or occupancy to be inspected. These fees are to defray additional expenses incurred by the County while executing the inspection attempt.

SECTION 5.3 CODE VIOLATIONS. Reinspection fees will be assessed for work that, upon inspection, was found to be in non-compliance with the Ohio Building Codes and will require an additional inspection. The permit holder will be responsible for all such fees as listed in the Building Department Fee Schedule.

~~SECTION 5.4 THREE PERMITS IN VIOLATION. The Chief Building Official may deny permits to an entity when three (3) active permits are in violation of the Ohio building codes and/or the Mahoning County Building Regulations. Deemed by the Ohio Board of Building Standards to be in conflict with the Residential Code of Ohio and is not enforceable.~~

SECTION 5.5 WORK LACKING PERMIT, LICENSING AND/OR REGISTRATION. Work done prior to licensing, registration, plan approval and/or obtaining a permit shall result in an additional fee to administrative costs resulting from noncompliance. All wiring and mechanical systems installed prior to obtaining a permit will be removed unless the installation of such systems are found, upon inspection, to be safe and in accordance with all applicable rules and payment of all applicable fees.

SECTION 5.6 ELECTRIC SERVICE ENERGIZATION. Before any electric service is authorized to be energized by the electric utility, all panel covers shall be installed with at least one breaker installed with a connected load.

SECTION 5.7 CONCEALING WIRING WITHOUT APPROVAL. Ceilings, walls, and underground wiring shall be inspected prior to backfilling or covering. Where covered by others prior to inspection, the responsibility for exposing said wiring shall be that of the person or persons who have violated this section and the owner of record.

SECTION 5.8 SERIOUS HAZARD WIRING. The minimum electrical requirements for an existing dwelling shall be as specified in the most recent edition of the National Electrical Code.

SECTION 5.9 FIRE REPAIRS. Remove all branch circuits from the panel during fire repairs. Circuits for heat and ground fault circuit interrupter protected outlets may be reestablished.

SECTION 5.10 ELECTRIC SERVICE SCOPE. All work done beyond the weather head on overhead services, and the point of service on underground services, with the exception of meters, are subject to registration and permit requirements.

Appendix I

Adopted separately by the Board of Mahoning County Commissioners. Included herein for reference purposes.

BUILDING DEPARTMENT FEE SCHEDULE (A, B, C, D, and E)

ALL FEES CALCULATED BY CONSTRUCTION COSTS INDEX METHOD (CCIM) UNLESS NOTED (item A)

RESIDENTIAL; 1, 2 & 3 family structures, and accessory buildings regulated by the Residential Code of Ohio
All residential plan approvals and permits are subject to a 1% State assessment fee (based on the total of all charges)

Type of project	Processing fee; \$	Review fee; \$	Rate x CCIM
Dwellings/ additions/ renovations	10	0	0.00250
Porches/ garages/ decks/ pool/ misc > 600 sf			
Misc./ not included in flat fees			
SPECIFIC AND FLAT FEES (see item E)			
Type of project/ use	# of inspections included w/ fee	Fee; \$	
Manufactured Home w/ State issued seal (excluding electric)	3	500.00	
Demolition; per each structure	1	25.00	
Minimum/ minor permits (roofing, siding, windows) Certificate of Occupancy/Use			
Porches/ garages/ decks/ pool/ misc ≤ 600 sf	2	50.00	
HVAC - New construction - 1st unit	n/a or 1	25.00	
HVAC - 2nd unit/ replacement			

COMMERCIAL; four or more family, projects/ use regulated by the Ohio Building Code

All commercial plan approvals and permits are subject to a 3% State assessment fee (based on the total of all charges)

Type of project	Processing fee; \$	Plan Review fee; \$/sf, flat	Rate x CCIM
New Structure	125.00	4/100	0.00250
New Structure - shell only		2/100	
Buildout/ renovations/ system modifications		n/a	
Plan Review Certificate	90.00	90.00	n/a
Resubmissions		90.00	
Mechanical/ system modifications CCIM < 10,000	50.00	90.00	0.00250
Mechanical/ system modifications CCIM ≥ 10,000	125.00	180.00	
SPECIFIC AND FLAT FEES (see item E)			
Type of service/ use/ project	# of inspections included w/ fee	Fee; \$	
Authentic approved plans	0	50.00	
Certificate of Occupancy/Use - change of ownership (when on file)	0	65.00	
Certificate of Occupancy/Use, Partial, Time-Limited	1	85.00	
Temporary structure			
Minimum Permit fee for CCIM ≤ 20,000			

Amended construction documents	n/a	
Demolition each structure	1	100.00
Phased approval/ permit		
HVAC-NEW with project submission	2	
Minor alterations permit with Certificate of Occupancy	2	222.50

A. Fees determined using the Construction Cost Index Method (CCIM), utilize the affected building gross area, and the base rate (.0025 as established by the Mahoning County Board of Commissioners). The CCIM uses a nationally recognized square foot construction cost schedule (commercial) or a minimum square foot construction cost schedule (residential, established by the Building Official) Both may be adjusted annually if needed and implemented on January 1st of each year). The following formula shall be used when fees are calculated using the CCIM, and does not include administrative or additional fees:

Affected Gross Building Area X Square foot Construction Cost X Base Rate = Fee

B. All plan approval and permit fees not described above shall be determined by the Chief Building Official and calculated using the Building Department hourly rate, estimated time for services and/or actual cost for any contracted services.

C. Electrical permit fees established through: Central Electric Inspection Bureau

D. All required inspections are included with the fees calculated using the construction cost index method; additional inspections due to partial inspections and re-inspections will be an additional charge as listed in miscellaneous fees.

E. Specific and flat fees include: processing, plan review and # of included inspections indicated. Additional inspections shall be an extra charge and must be paid in full before inspection. 1% and 3% State assessments not included.

MISCELLANEOUS SERVICE FEES	
SPECIALTY TRADE REGISTRATION AND LICENSURE: (Chapter 4 fees)	Fee; \$
Registration and/ or residential license application (non-refundable)	100.00
Electrical, HVAC, Hydronics, Refrigeration contractor renewals	
Homeowner exemption	50.00
Late filing for renewal: (required after Dec 31st thru Jan 31st)	25.00 + renewal fee
First violation	up to 500.00
Subsequent violations	5000.00 and/or suspension or revocation of registration/ license
ADMINISTRATIVE, PROCESSING AND INSPECTION	Fee; \$, minimum-per hour
Residential inspection/ reinspection/ safety hazard	25.00
Commercial inspection/ reinspection/ safety hazard	50.00
After hours special inspections (weeknights, weekends, and holidays)	112.50
Plan approval/ permit extension- 6 month (2 max)	50.00
Failure to comply w/ Field Notice resulting in legal order	
Appeals request for hearing - all Boards (non-refundable)	100.00
Occupancy without/ before Certificate of Occupancy issued. May be assessed no more than every seven-calendar days	
Work started without approval or permit	200% of permit fee plus permit fee
Copies per page (black and white)	0.10
REFUND POLICY	
The following guidelines shall control all refund requests and refunds:	
Processing fees: Plan approval and permit fees are assessed to cover the cost of processing permit request and therefore are non-refundable once the service has been initiated.	
Clerical error: A full refund of the amount overcharged will be granted due to any clerical error.	
Applicant error: A written request must be submitted within six months of the original payment stating the discrepancy.	
State assessment fees: 3% Commercial and 1% Residential: Pursuant to H.B. 175 and Sections 103.2.4.2 and 103.2.4.1 of Rule 4101:8-1-03 of the Ohio Administrative Code adopted by the Ohio Board of Building Standards, assessment fees for the acceptance and approval of plans and specifications, and the making of all inspections pursuant to division (E) of Section 3781.102 of the Ohio Revised Code shall be collected and remitted monthly to the State and therefore are not refundable once the fee has been processed with the State.	
Permit Cancellation: A written request must be submitted from the contractor or permit holder stating that no work has been performed. Refunds will be calculated as follows: <ul style="list-style-type: none"> 1. Processing fees non refundable 2. Plan Review fees 100% if requested before service is provided; otherwise non refundable 3. Square footage fees 100% minus inspection fee to field verify project status 	
Time limitation on permit refunds: In no case shall a refund be issued after 180 days from the original date of plan approval or permit issue date.	
Request for refund: All requests shall be forwarded to the Mahoning County Building Inspection Department on a fully completed "Refund Request Form" prescribed by the department. Once received, you will be notified that your request is being processed and what amount of refund you can expect to receive.	

APPENDIX II: RESIDENTIAL STANDARDS FOR SWIMMING POOLS, SPAS AND HOT TUBS

SECTION 1.1 **GENERAL.** This Appendix II, Residential Standards for Swimming Pools, Spas and Hot Tubs contains substantial copyrighted material from the *2003 International One- and Two-Family Dwelling Code*, which is a copyrighted work owned by the International Code Council, Inc. For information on permission to copy material exceeding fair use, please contact: Publications, 4051 West Flossmoor Road, Country Club Hills, IL 60478-5795. The provisions of this appendix shall control the design and construction of swimming pools, spas, and hot tubs installed in or on the lot of one-, two-, and three-family dwellings in Mahoning County.

SECTION 1.2 **DEFINITIONS.**

ABOVE-GROUND/ON-GROUND POOL: see “Swimming pool.”

BARRIER: A fence, wall, building wall or combination thereof which completely surrounds the swimming pool and obstructs access to the swimming pool.

HOT TUB: See “Swimming pool.”

IN-GROUND POOL: See “Swimming pool.”

RESIDENTIAL: That which is situated on the premises of a detached one-, two-, or three-family dwelling or on a one-family townhouse not more than three stories in height.

SPA, NONPORTABLE: See “Swimming pool.”

SPA, PORTABLE: A nonpermanent structure intended for recreational bathing, in which all controls, water-heating and water-circulating equipment are an integral part of the product.

SWIMMING POOL: Any structure intended for swimming or recreational bathing that contains water over 24 inches (610 mm) deep. This includes in-ground, above-ground and on-ground swimming pools, hot tubs and spas.

SWIMMING POOL, INDOOR: A swimming pool which is totally contained within a structure and surrounded on all four sides by walls of said structure.

SWIMMING POOL, OUTDOOR: Any swimming pool which is not an indoor pool.

SECTION 1.3 **SWIMMING POOLS.**

1.3.1 **IN-GROUND SWIMMING POOLS.** In-ground pools shall be designed and constructed in conformance with ANSI/NSPI-5 as listed in Section 1.8.1.

1.3.2 **ABOVE-GROUND AND ON-GROUND POOLS.** Above-ground and on-ground pools shall be designed and constructed in conformance with ANSI/NSPI-4 as listed in Section 1.8.1.

SECTION 1.4 SPAS AND HOT TUBS.

- 1.4.1 PERMANENTLY INSTALLED SPAS AND HOT TUBS. Permanently installed spas and hot tubs shall be designed and constructed in conformance with ANSI/NSPI-3 as listed in Section 1.8.1.
- 1.4.2 PORTABLE SPAS AND HOT TUBS. Portable spas and hot tubs shall be designed and constructed in conformance with ANSI/NSPI-6 as listed in Section 1.8.1.

SECTION 1.5 BARRIER REQUIREMENTS.

- 1.5.1 APPLICATION. The provisions of this chapter shall control the design of barriers for residential swimming pools, spas and hot tubs. These design controls are intended to provide protection against potential drownings and near-drownings by restricting access to swimming pools, spas and hot tubs.
- 1.5.2. OUTDOOR SWIMMING POOL. An outdoor swimming pool, including an in-ground, above-ground or on-ground pool, hot tub or spa shall be provided with a barrier which shall comply with the following:
- (A) The top of the barrier shall be at least 48 inches (1219 mm) above grade measured on the side of the barrier which faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (51 mm) measured on the side of the barrier which faces away from the swimming pool. Where the top of the pool structure is above grade, such as an above-ground pool, the barrier may be at ground level, such as the pool structure, or mounted on top of the pool structure. Where the barrier is mounted on top of the pool structure, the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be 4 inches (102 mm).
 - (B) Openings in the barrier shall not allow passage of a 4-inch-diameter (102 mm) sphere.
 - (C) Solid barriers which do not have openings, such as a masonry or stone wall, shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.
 - (D) Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is less than 45 inches (1143 mm), the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed 1.75 inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1.75 inches (44 mm) in width.
 - (E) Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is 45 inches (1143 mm) or more, spacing between vertical members shall not exceed 4 inches (102 mm). Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1.75 inches (44 mm) in width.

- (F) Maximum mesh size for chain link fences shall be a 2.25 inch (57 mm) square unless the fence is provided with slats fastened at the top or the bottom which reduce the openings to not more than 1.75 inches (44 mm).
- (G) Where the barrier is composed of diagonal members, such as a lattice fence, the maximum opening formed by the diagonal members shall not be more than 1.75 inches (44 mm).
- (H) Access gates shall comply with the requirements of Section 1.5.2, items A through G, and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outward away from the pool and shall be self-closing and have a self-latching device. Gates other than pedestrian access gates shall have a self-latching device. Where the release mechanism of the self-latching device is located less than 54 inches (1372 mm) from the bottom of the gate, the release mechanism and openings shall comply with the following:
 - a. The release mechanism shall be located on the pool side of the gate at least 3 inches (76 mm) below the top of the gate, and
 - b. The gate and barrier shall have no opening greater than 0.5 inch (12.7 mm) within 18 inches (457 mm) of the release mechanism.
- (I) Where a wall of a dwelling serves as part of the barrier, one of the following conditions shall be met:
 - a. The pool shall be equipped with a powered safety cover in compliance with ASTM F1346; or
 - b. All doors with direct access to the pool through that wall shall be equipped with an alarm which produces an audible warning when the door and its screen, if present, are opened. The alarm shall sound continuously for a minimum of 30 seconds immediately after the door is opened and be capable of being heard through the house during normal household activities. The alarm shall automatically reset under all conditions. The alarm system shall be equipped with a manual means, such as a touchpad or switch, to temporarily deactivate the alarm for a single opening. Such deactivation shall last for not more than 15 seconds. The deactivation switch(es) shall be located at least 54 inches (1372 mm) above the threshold of the door; or
 - c. Other means of protection, such as self-closing doors with self-latching devices, which are approved by the governing body, shall be acceptable as long as the degree of protection afforded is not less than the protection afforded by Items I(a) and I(b) described above.
- (J) Where an above-ground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure and the means of access is a ladder or steps, then:
 - a. The ladder or steps shall be capable of being secured, locked or removed to prevent access, or
 - b. The ladder or steps shall be surrounded by a barrier which meets the requirements of Section 1.5.2 items A through I. When the ladder or steps

are secured, locked or removed, any opening created shall not allow the passage of a 4-inch-diameter (102 mm) sphere.

- 1.5.3 **INDOOR SWIMMING POOL.** All walls surrounding an indoor swimming pool shall comply with Section 1.5.2, Item I.
- 1.5.4 **PROHIBITED LOCATIONS.** Barriers shall be located so as to prohibit permanent structures, equipment or similar objects from being used to climb the barriers.
- 1.5.5 **BARRIER EXCEPTIONS.** Spas or hot tubs with a safety cover which complies with ASTM F 1346, as listed in Section 1.8.2, shall be exempt from the provisions of this appendix.

SECTION 1.6 ENTRAPMENT PROTECTION FOR SWIMMING POOL AND SPA SUCTION OUTLETS.

- 1.6.1 **GENERAL.** Suction outlets shall be designed to produce circulation throughout the pool or spa. Single outlet systems, such as automatic vacuum cleaner systems, or other such multiple suction outlets whether isolated by valves or otherwise shall be protected against user entrapment.
- 1.6.2 **SUCTION FITTINGS.** All Pool and Spa suction outlets shall be provided with a cover that conforms with ANSI/ASME A112.19.8M, or a 12" x 12" drain grate or larger, or an approved channel drain system. Exception: Surface skimmers.
- 1.6.3 **ATMOSPHERIC VACUUM RELIEF SYSTEM REQUIRED.** All pool and spa single or multiple outlet circulation systems shall be equipped with atmospheric vacuum relief should grate covers located therein become missing or broken. Such vacuum relief systems shall include at least one approved or engineered method of the type specified herein, as follows:
 - (A) Safety vacuum release system conforming to ASME A112.19.17, or
 - (B) An approved gravity drainage system.
- 1.6.4 **DUAL DRAIN SEPARATION.** Single or multiple pump circulation systems shall be provided with a minimum of two (2) suction outlets of the approved type. A minimum horizontal or vertical distance of three (3) feet shall separate such outlets. These suction outlets shall be piped so that water is drawn through them simultaneously through a vacuum relief-protected line to the pump or pumps.
- 1.6.5 **POOL CLEANER FITTINGS.** Where provided, vacuum or pressure cleaner fitting(s) shall be located in an accessible position(s) at least (6) inches and not greater than twelve (12) inches below the minimum operational water level or as an attachment to the skimmer(s).

SECTION 1.7 ABBREVIATIONS.

ANSI: American National Standards Institute. 11 West 42nd Street, New York, NY 10036

ASTM: American Society for Testing and Materials. 1916 Race Street, Philadelphia, PA 19103

NSPI: National Spa and Pool Institute. 2111 Eisenhower Avenue, Alexandria, VA 22314

SECTION 1.8 STANDARDS.**1.8.1 ANSI**

- (A) ANSI/NSPI-3-99 Standard for Permanently Installed Residential Spas, Section 1.4.1
- (B) ANSI/NSPI-4-99 Standard for Above-ground/On-ground Residential Swimming Pools, Section 1.3.2
- (C) ANSI/NSPI-5-99 Standard for Residential In-ground Swimming Pools, Section 1.3.1
- (D) ANSI/NSPI-6-99 Standard for Residential Portable Spas, Section 1.4.2
- (E) ANSI/ASME A112.19.8M-1987 Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, Hot Tubs and Whirlpool Bathing Appliances, Section 1.6.2

1.8.2 ASTM

- (A) ASTM F 1346-91 (1996) Performance Specification for Safety Covers and Labeling Requirements for All Covers for Swimming Pools, Spas, and Hot Tubs, Section 1.5.2 and Section 1.5.5

1.8.3 ASME

- (A) ASME A112.19.17 Manufacturers Safety Vacuum Release Systems (SVRS) for Residential and Commercial Swimming Pool, Spa, Hot Tub and Wading Pool

**APPENDIX III:
RESIDENTIAL CODE OF OHIO
TABLE 301.2(1)
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA**

Ground snow load – 25 pounds per square foot
Wind Speed – 90 miles per hour
Seismic Design Category – A
Weathering – Severe
Frost Line Depth – 38 inches
Termite – Moderate to Heavy
Decay – Slight to Moderate
Winter Design Temperature – 10 degrees F
Ice Shield Underlayment Required – Yes
Flood Hazard – February 15th 1979
Air Freezing Index – 1,000
Mean Annual Temperature – 50 degrees F