

# RESIDENTIAL CODE OF OHIO CONSTRUCTION DOCUMENT REQUIREMENTS

RCO Section 106.1.1, construction documents are required to include the following information:

- Index
- Site Plan..... [Required for **Septic Permit** and **Floodplain Determination**]
- Floor Plans
- Exterior Elevations
- Wall Sections
- Structural Description
- Fire-Resistant Ratings
- Electrical Plans
- Mechanical Plans
- MEC Form- (Model Energy Check)...Available on the web @ [www.energycodes.gov](http://www.energycodes.gov)

**Geauga County Building Dept.**  
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 Fax: 440-285-2237  
[www.co.geauga.oh.us](http://www.co.geauga.oh.us)

***This document shall be included with the construction documents submitted and made a part.***

ELECTRICAL				MECHANICAL																											
NEC 110.3 All electrical equipment shall be installed and used in accordance with the listing requirements and manufacturer's instructions.				M1401.1 Heating and cooling equipment and appliances shall be installed in accordance with the manufacturer's installation instructions and the requirement's of the Residential Code.																											
<b>Service</b>				<b>Sizing</b>																											
Size of Service in Amperes: (Check one below)				Equipment Type: _____ Type of Fuel : _____ # Units: _____																											
<input type="checkbox"/>	Copper	Aluminum	Service Rating	NEC 310.15 Conductor Sizes 120/240 VOLT 3-Wire, Single-Phase, Dwelling Services/Feeders.																											
<input type="checkbox"/>	4 AWG	2 AWG	100 Amps																												
<input type="checkbox"/>	1 AWG	2/0 AWG	150 Amps																												
<input type="checkbox"/>	2/0 AWG	4/0 AWG	200 Amps																												
<input type="checkbox"/>			400 Amp / 600 Amp or Other Size																												
NEC 250.50 All grounding electrodes that are present at each building or structure served shall be bonded together to form the grounding electrode system. Conductor size per NEC 250.66. NEC 250.52 Permitted Electrodes include: 1. Metal underground water pipe in direct contact with earth for 10 feet or more 2. Metal frame of the building 3. Concrete-encased electrode 4. Rod, pipe & plate electrodes				M1401. 3 Heating and cooling equipment shall be sized based on building loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies.																											
				<b>Gages of Metal Ducts &amp; Plenums Used for Htg/Cooling</b>																											
				<table border="1"> <thead> <tr> <th>Types of Ducts</th> <th>Size (inches)</th> <th>Minimum Thickness (inch)</th> <th>Equiv. Galvanized Sheet Gage</th> <th>Approx. Aluminum B &amp; S Gage</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Round Ducts &amp; Enclosed Rectangular</td> <td>14 or less</td> <td>0.013</td> <td>30</td> <td>26</td> </tr> <tr> <td>over 14</td> <td>0.016</td> <td>28</td> <td>24</td> </tr> <tr> <td rowspan="2">Exposed Rectangular Ducts</td> <td>14 or less</td> <td>0.016</td> <td>28</td> <td>24</td> </tr> <tr> <td>over 14</td> <td>0.019</td> <td>26</td> <td>22</td> </tr> </tbody> </table>					Types of Ducts	Size (inches)	Minimum Thickness (inch)	Equiv. Galvanized Sheet Gage	Approx. Aluminum B & S Gage	Round Ducts & Enclosed Rectangular	14 or less	0.013	30	26	over 14	0.016	28	24	Exposed Rectangular Ducts	14 or less	0.016	28	24	over 14	0.019	26	22
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<b>General Circuitry</b>				<b>Access &amp; Installation</b>																											
NEC 210.11 and 422.12 In addition to the branch circuits installed to supply general illumination and receptacle outlets in dwelling units, the following minimum requirements apply: Two 20-amp circuits for the kitchen receptacles, One 20-amp circuit for the laundry receptacles, One 20-amp circuit for the bathroom receptacles and One separate, individual branch circuit for central heating equipment.				M1401.2 Heating and cooling equipment shall be located with respect to building construction and other equipment to permit maintenance, servicing and replacement. Clearances shall be maintained to permit cleaning of heating and cooling surfaces; replacement of filters, blowers, motors, controls and vent connections; lubrication of moving parts; and adjustments.																											
NEC 210.52 Receptacles installed in the kitchen to serve countertop surfaces shall be supplied by not less than two separate small appliance branch circuits.																															
NEC 210.52 Generally, receptacle outlets in habitable rooms shall be installed so that no point measured horizontally along the floor line in any wall space is more than 6' from a receptacle outlet. A receptacle shall be installed in each wall space 2 feet or more in width.				M1601.3.2 Metal ducts shall be supported by 0.5-inch (12.7 mm) wide 18-gage metal straps or 12-gage galvanized wire at intervals not exceeding 10 feet (3048 mm) or other approved means. Nonmetallic ducts shall be supported in accordance with manufacturer's installation instructions.																											
NEC 210.52 At kitchen countertops, receptacle outlets shall be installed so that no point along the wall line is more than 24 inch measured horizontally from a receptacle outlet in that space. Countertop spaces separated by range tops, sinks or refrigerators are separate spaces.																															
NEC 210.52 & 406.8 At least one receptacle, accessible at grade level and no more than 6.5' above grade, shall be installed at the front and back of a dwelling.				M1401.4 Equipment installed outdoors shall be listed and labeled for outdoor installation. Supports and foundations shall prevent excessive vibration, settlement or movement of equipment. Supports and foundations shall be level and conform to manufacturer's installation instructions.																											
NEC 210.12 All branch circuits supplying 125-volt, 15 and 20 ampere outlets in dwelling unit bedrooms shall be protected by a listed arc-fault circuit interrupter device.																															
NEC 210.8 Ground-fault circuit-interrupter (GFCI) protection shall be provided for all 125-volt, 15 and 20 amp receptacle outlets installed outdoors, in boathouses, garages, unfinished accessory buildings, crawl spaces at or below grade level, unfinished basements, bathrooms, at kitchen countertops and within 6' of the outside edge of the sink in laundry rooms, utility rooms, and at wet-bars.				<b>Plumbing</b>																											
				Provide layout of plumbing fixtures on floor plan. Plumbing permit required through the <b>Geauga County Health Department</b> .																											

I hereby do certify that all information given above is correct and accurate and has been included as part of the submitted plans.

PRINTED NAME (Owner/Applicant) \_\_\_\_\_ SIGNATURE \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_