

Bradley D. Sellers, Mayor



Melvin Lester, Building Commissioner

Ted Sims, Chief of Housing

# APPLICATION FOR RESIDENTIAL PLAN REVIEW

<b>Plan #</b>	<b>Fee:</b>	<b>Date:</b>
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One-Family  Two-Family  Three-Family

Nature of Job:  New  Alteration  Addition  Remodel  Change of Occupancy  Other \_\_\_\_\_

Project Address: \_\_\_\_\_ Parcel #: \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_

Sub Lot, Location, Landmarks, Sub Lot, Building etc.: \_\_\_\_\_

Estimated Cost of Construction: \$ \_\_\_\_\_ Square Footage of Construction Area: \_\_\_\_\_

Sales Price: \$ \_\_\_\_\_ Total Sq. Ft./ Gross Area of all Stories of Structure: \_\_\_\_\_

Comments and Explanations: \_\_\_\_\_

Property Owner Name: \_\_\_\_\_

Property Owner Address: \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone: \_\_\_\_\_

Applicant's Name: \_\_\_\_\_

Name of Firm: \_\_\_\_\_

Address: \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone: \_\_\_\_\_

Name of Person Drawing Plans: \_\_\_\_\_ Title \_\_\_\_\_

Name of Firm: \_\_\_\_\_

Address: \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone: \_\_\_\_\_

## 1333.15 FEES FOR PLAN REVIEW

Estimated Cost of construction	Plan review Base deposit	1% state surcharge	Administration Fee	Total Deposit
\$50,000 or less	\$105.00	\$1.75	\$100.00	\$206.75
\$50,000 - \$250,000	\$400.00	\$4.00	\$100.00	\$504.00
\$250,000-\$500,000	\$1500.00	\$15.00	\$100.00	\$1,615.00
\$500,000-\$1,000,000	\$2,900.00	\$29.00	\$100.00	\$3,029.00
\$1,000,000-\$4,000,000	\$5,900.00	\$59.00	\$100.00	\$6,059.00

# Ohio Residential Plan Submittal Form

<b>ELECTRICAL</b>	<b>MECHANICAL</b>																					
<p><b>NEC 110.3</b> All electrical equipment shall be installed and used in accordance with the listing requirements and manufacturer's instructions.</p>	<p><b>M1401.1</b> 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.</p>																					
<b>Service</b>	<b>Sizing</b>																					
<p><b>Size of Service in Amperes:</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;"></th> <th style="width: 15%;">Copper</th> <th style="width: 15%;">Aluminum</th> <th style="width: 15%;">Service Rating</th> <th rowspan="4" style="width: 50%; vertical-align: top;"> <b>NEC 310-15</b> Conductor Sizes 120/240 VOLT 3-Wire, Single-Phase, Dwelling Services/Feeders                 </th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;">4 AWG</td> <td style="text-align: center;">2 AWG</td> <td style="text-align: center;">100 Amps</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;">1 AWG</td> <td style="text-align: center;">2/0 AWG</td> <td style="text-align: center;">150 Amps</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;">2/0 AWG</td> <td style="text-align: center;">4/0 AWG</td> <td style="text-align: center;">200 Amps</td> </tr> </tbody> </table>		Copper	Aluminum	Service Rating	<b>NEC 310-15</b> 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					
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<p><b>NEC 250.50</b> 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.  <b>NEC 250.52</b> 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 &amp; plate electrodes</p>	<p><b>M1401.3</b> 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.</p> <p style="text-align: center;"><b>Gages of Metal Ducts &amp; Plenums Used for Htg/Cooling</b></p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width: 15%;">Types of Ducts</th> <th style="width: 15%;">Size (inches)</th> <th style="width: 15%;">Minimum Thickness (inch)</th> <th style="width: 15%;">Equiv. Galvanized Sheet Gage</th> <th style="width: 15%;">Approx. Aluminum B &amp; S Gage</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Round Ducts &amp; Enclosed Rectangular</td> <td rowspan="2">14 or less over 14</td> <td>0.013</td> <td>30</td> <td>26</td> </tr> <tr> <td>0.016</td> <td>28</td> <td>24</td> </tr> <tr> <td rowspan="2">Exposed Rectangular Ducts</td> <td rowspan="2">14 or less over 14</td> <td>0.016</td> <td>28</td> <td>24</td> </tr> <tr> <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 over 14	0.013	30	26	0.016	28	24	Exposed Rectangular Ducts	14 or less over 14	0.016	28	24	0.019	26	22
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<b>General Circuitry</b>	<b>Access &amp; Installation</b>																					
<p><b>NEC 210.11 and 422.12</b> 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</p>	<p><b>M1401.2</b> 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</p>																					
<p><b>NEC 210.52</b> Receptacles installed in the kitchen to serve countertop surfaces shall be supplied by not less than two separate small appliance branch circuits.</p>	<p><b>M1601.3.2</b> 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.</p>																					
<p><b>NEC 210.52</b> 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.</p>	<p><b>M1401.4</b> 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.</p>																					
<p><b>NEC 210.52</b> 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.</p>																						
<p><b>NEC 210.52 &amp; 406.8</b> 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</p>																						
<p><b>NEC 210.12</b> All branch circuits supplying 120-volt, 15 and 20 ampere outlets in dwelling unit family, dining, living, sun, recreation, bed, or similar rooms including closets hallways, dens, libraries, parlors shall be protected by a listed arc-fault circuit interrupter, combination- type installed to provide protection of the branch circuit.</p>																						
<p><b>NEC 210.8</b> 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.</p>																						
<p><b>NEC 334.80</b> Receptacles where more than two NM, NMC, are installed without maintaining spacing between cables or in contact with thermal insulation the allowable ampacity shall be adjusted by table 310.15</p>	<b>Plumbing</b>																					
<p><b>NEC 406.11</b> In all areas specified in 210.52 all 120-volt , 15 and 20 amp receptacles shall be listed tamper resistant.</p>	<p>Provide layout of plumbing fixtures on floor plan. Plumbing shall conform to the Residential Code.</p>																					

## Systems Description Form

Mechanical sheets should be included with construction documents; along with the following data:

HEATING, VENTILATION & AIR CONDITIONING SYSTEM				
1. Furnace location:	Basement	Garage	Attic	Other _____
2. Water heater location:	Basement	Garage	Attic	Other _____
3. Condensing unit location:	Rear yard	Side yard	(left)	(right)
4. Furnace / water-heater capacity:	BTU's _____			
5. Fuel type:	Natural gas	L.P.	Electric	
6. Furnace AFUE rating:	80%	90% +		
7. Ductwork type:	Sheet metal	Duct board		
8. Air conditioner capacity:	_____ Ton			
9. Air conditioning SEER rating:	11	12	13	14 15 16
10. Location of gas meter	Front yard	Rear yard	Side yard	(left) (right)
11. Location of vent terminations for:				
	(Dryer: front/rear/side yard/other _____)			
	(Furnace: front/rear/side yard/other _____)			
	(Water heater: front/rear/side yard/other _____)			
Equipment Type/Size	Location of Equipment	Type of Fuel	Heat Loss/Gain	
Sq. Ft. of Conditioned Space	Duct Size (Supply/Return)	Equipment Efficiency Ratings		

PLUMBING SYSTEM DESCRIPTION <span style="float: right; font-size: small;">(write in number of fixtures below)</span>					
Description	Count	Description	Count	Description	Count
Water closets		Dishwashers		Sewage grinders	
Lavatory sinks		Garbage disposals		Bidets	
Whirlpool tubs		Drinking fountains		Laboratory sinks	
Hot tubs		Urinals		Hot water dispensers	
Showers		Shampoo bowls		Water heaters	
Floor drains		Grease/oil intercept		Backflow devices	
Laundry tubs		Floor sinks		Washers automatic	
<b>Select size below for building main drain:</b>				Sump pumps	
3 inch      4 inch      6 inch					
<b>Building water service size:</b> ¾ inch    1 inch    1 ¼ inch    1 ½ inch    2 inch					
<b>Building water service type:</b> copper      pvc/plastic					

ELECTRICAL SYSTEM DESCRIPTION <span style="float: right; font-size: small;">(write in sizes required and select items listed below)</span>	
Underground service    [ ]	Single phase [ ]    Three phase [ ]
Overhead service    [ ]	Number of 120 volt circuits:
Service conductor size:	Number of 240 volt circuits:
Service conductor type: (aluminum) (copper)	Service size:
Grounding electrode conductor size:	Service location:
Grounding electrode conductor type: (aluminum) (copper)	<b>Load calculations must be per NEC 220</b>

## CHECK LIST

The following information should be included with this submission. Without these materials, the application will be viewed as incomplete and will not be acted upon.

### **Zoning Requirements**

Zoning District \_\_\_\_\_ Lot Area \_\_\_\_\_  
Front Yard Setback \_\_\_\_\_ Rear Yard Setback \_\_\_\_\_  
Side Yard Setback L \_\_\_\_\_ R \_\_\_\_\_ \_ Masonry Veneer Percentage \_\_\_\_\_

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- Index** – An index of drawing located on the first sheet. Six sets of plans to scale showing heights, location and arrangement of proposed building - Minimum Scale:  $\frac{1}{4}'' = 1'$ . The name and address of the author shall be plainly printed in the lower right hand corner on all plans of drawings
  - Site Plan** - (minimum of  $1'' = 10'$ ) showing all other construction features on the site (topography, parking, lighting, off-street loading, trash enclosure)
  - Foundations** - Include the block size or poured concrete size, the reinforcement placement, size and spacing, and finished height above the footing. If it is a wood foundation, submit the name of the manufacturer, construction details, and manufacturer specifications.
  - Footings** - Include the depth and the width of the footings, the size and placement of bearing pads, and the size and placement of reinforcements. For wood footings and foundations, submit a cross section of rock depth, size, and other construction details.
  - Exterior wall envelope and Elevations** – details of the exterior wall envelope as required, including flashing, intersections with dissimilar materials, corners and details, control joints, intersections at roof, eaves, or parapets, means of drainage, water resistive membrane and all elevations (front, rear and sides) necessary to completely describe the exterior
  - Sections and Ratings** – Cross Sections, wall sections, details including typical connections wall, ceiling, floor and roof; Fire resistance ratings of all structural elements, penetrations, materials and methods for structural integrity, fire resistance rating and fire stopping.
  - Floor Plans** - Include floor plans of the garage, the basement, and each level of construction. Floor plans should include all dimensions, room descriptions, location of all plumbing fixtures, location of the mechanical area and the placement of mechanical units, locations of all doors and the door swings, and any applicable notes.
  - Truss Drawings** - Trusses must be designed by a registered engineer of the State of Ohio or manufactured by a certified manufacturer of trusses approved by the State of Ohio. Manufacturer specification must be available at the site for the framing inspection.
  - Landscaping** - standards for the development and maintenance of land to provide attractive views from roads and adjacent properties, to screen visually unattractive and incompatible uses and to protect the health, safety and welfare of the community through the reduction of noise, air, water and visual pollution
  - System Descriptions**
    - Mechanical – Equipment Type/Size, Location of Equipment, Type of fuel, Heat gain/Loss Square Footage of Conditioned Space, Duct Size (Supply/Return), Equipment Efficiency Ratings
    - Electrical – Service Size (General Loads, HVAC Loads, Total Loads), Panel Location in Dwelling, Size of Service entry Cable, Location of Service (Overhead, Underground)
    - Plumbing – Fixture Locations, Isometrics
    - RES-Check - Insulation
- 

*By signing this application, we acknowledge we will comply with all applicable local and state codes.*

Applicant Signature \_\_\_\_\_ Date \_\_\_\_\_