

# Systems Description Form

## City of Wadsworth Building Department

Address: \_\_\_\_\_ Contractor/Owner: \_\_\_\_\_

Work Type:     New     Replacement

**Electrical System – Fill in Required Information and  The Appropriate Boxes**

**Service Size**

	<u>Copper</u>	<u>Aluminum</u>	<u>Service Rating</u>	<u>Service Type</u>
<input type="checkbox"/>	4 AWG	2 AWG	*100 Amps	<input type="checkbox"/> Underground <input type="checkbox"/> Overhead
<input type="checkbox"/>	1 AWG	2/0 AWG	150 Amps	<u>Panel Location</u>
<input type="checkbox"/>	2/0 AWG	4/0 AWG	200 Amps	<input type="checkbox"/> Basement <input type="checkbox"/> Garage    Other _____

\* Requires Completed Load Calculation Form.

Grounding Electrode Conductor    Size \_\_\_\_\_     Copper     Aluminum

**The Appropriate Boxes Below:**

- 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. NEC 250.52 Permitted electrodes include:
  1. Metal underground water pipe in direct contact with earth 10' or more.
  2. Metal frame of the building.
  3. Concrete encased electrode.
  4. Rod, pipe and plate electrodes.
- NEC 210.00 and 422.12 In addition to the branch circuits installed to supply general illumination and receptacle outlets, the following minimum circuits will be supplied: Two 20-amp circuits for the kitchen receptacles, one twenty amp circuit for the laundry receptacle, one 20-amp circuit for the bathroom receptacle, and one branch circuit for heating equipment.
- NEC 210.52 In habitable rooms generally 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' or more in width.
- NEC 210.52 At kitchen countertops, receptacle outlets shall be installed so that no point along the wall line is more than 24" horizontally from a receptacle outlet in that space. Countertop spaces separated by range tops, sinks or refrigerators are separate spaces.
- NEC 210.70 Switched lighting outlets shall be installed in all habitable rooms, bathrooms, hallways, stairways, garages and outside exterior doors, Switch controlled outlets may be substituted in other than kitchens and baths.
- NEC 210.12 At least one receptacle, accessible at grade level and no more than 6.5' above grade shall be installed at the front and the back of a dwelling.
- NEC 210.12 All 120 volt, 15 and 20amp branch circuits in bedrooms shall be protected by an AFCI device.
- NEC 210.8 GFCI protection shall be provide for all 120 volt, 15 and 20amp receptacles installed outdoors, in 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 wet bars.

**Heating, Ventilating, Air Conditioning - Fill in Information and  The Appropriate Boxes**

Furnace Type \_\_\_\_\_    Square Feet of Conditioned Space \_\_\_\_\_

Furnace Size \_\_\_\_\_ BTU'S    Duct Size (Supply/Return) \_\_\_\_\_

Furnace Efficiency Rating \_\_\_\_\_    Furnace Location \_\_\_\_\_

**The Appropriate Boxes Below:**

- Heating and cooling equipment shall be installed in accordance with the manufacturer's installation instructions and the requirements of the Residential Code.
- Ductwork (including supply and RA opening locations) shall conform to ACCA manual D specifications.
- All ductwork connections and filter compartments shall be sealed with approved tapes/mastics.
- Heating and cooling equipment shall be sized in accordance with ACCA Manual J or other approved method.
- All direct vent terminations shall maintain a minimum 12" to building openings. Non-direct vent (no intake air) appliance vents shall maintain 48" to same. Roof vents shall conform to manufacturer's specifications.
- All connectors shall maintain ¼" per foot rise, be supported per manufacture's instructions, and maintain required clearances to combustibles.
- All vents and connectors shall be sized in accordance with the manufacturer's instructions and the Bldg Code.

**Submitted By** \_\_\_\_\_

**Date** \_\_\_\_\_