



ELECTRICAL PERMIT APPLICATION

4200 Mills Civic Parkway, Suite 1D, WDM, IA 50265
 Building Inspection/Development Services; Ph. (515) 222-3630

Email Application to: bi@wdm.iowa.gov
 (Fees & Form Effective 7-1-24 through 6-30-25)

PROJECT ADDRESS: _____ **SUITE #** _____

DESCRIPTION OF WORK: _____

ELECTRICAL WORK ONLY or **SUBCONTRACTOR** for _____

TYPE of PROJECT Commercial Single Family Townhome Multi-family Site-work Other _____

ELECTRICAL CONTRACTOR: _____ **State License #** _____

Address: _____ *City* _____ *ST* _____ *Zip* _____

Phone: _____ *Email:* _____

PRIMARY CONTACT: _____

Phone: _____ *Email:* _____

OWNER OR TENANT: _____ *Address* _____

Phone: _____ *Email:* _____

Residential FLAT FEES for New Single Family or Town House (includes the \$36 basic fee)		
100 amp service: (Up to 100amp)	\$170	Total Fee:
200 amp service: (Over 100amp to 399amp)	\$218	Total Fee:
400 amp or larger service:	\$340	Total Fee:








ELECTRICAL FEES (if FLAT FEES above do not apply)	No.	x	Fee	=	Sub-total
Meters: (for the first meter)			\$14.00		
For each additional meter			\$4.00		
Residential Service Upgrade & required smoke detector\CO upgrade Panel Change without upgrade & required smoke detector\CO upgrade (SMOKE DETECTOR & CARBON MONOXIDE FORM REQUIRED)			\$14.50		
Solar Energy System Setup			\$14.50		
Swimming Pool Setup (sub-panel, equipment, bonding, etc.)			\$13.80		
Circuits: For the first 10 circuits, <u>each</u> circuit is \$5.00 For each additional circuit, <u>each</u> circuit is \$3.00			\$5.00 \$3.00		
New Openings (receptacles, switches, smoke detectors, etc.)			\$2.00		
Fixed Appliances: (furnace, AC, pumps, RTUs, etc.)			\$8.00		
Fixtures: (lighting, etc.)			\$0.80		
Other (describe and an appropriate fee will be assigned)					
BASIC FEE (Applies to all permits except FLAT FEE permits)					\$36.00
TOTAL FEE (for other than flat fees)					\$







(Office use) **Reviewed by:** _____ **Fee Receipt #** _____ **Date** _____ **Permit #** _____



WEST DES MOINES RESIDENTIAL ELECTRICAL SERVICE UPGRADE & PANEL CHANGE-OUT REQUIREMENTS

When it is desired to install higher amperage electrical service to any residential property, the following items will also be required, with the intent of promoting additional fire and life/safety within the community. Installations will comply with the State of Iowa adopted Electrical Code and Amendments.

1.  **Outdoor Emergency Disconnects and Surge Protection** must be addressed per the MICCC policy. (See next page.)
2.  **Ground fault circuit interrupters (GFCI)** shall be installed in required locations in all kitchens & bathrooms. Existing unprotected receptacles in locations currently required to be GFCI protected shall be updated, these locations may include basements, exteriors, garages, out buildings, etc.
3.  **Smoke Detectors** shall be installed in all required locations per code. Hard wired and interconnected detectors are encouraged but battery powered smoke detectors will be deemed adequate. The State of Iowa requires all new smoke detectors installed or replaced must be of dual sensor type.
4.  **Carbon Monoxide Alarms** shall be provided per the NEC and IRC (International Residential Code). In existing dwellings that have attached garages or in dwellings within which fuel-fired appliances exist. An alarm shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms.
5.  **Grounding:** update the service grounding system including ground rods, water pipe bonding, jumpers, etc. per current code.
6.  **Gas Bonding:** properly bond CSST gas piping per code and manufacturer's requirements.
7.  **Any hazardous or substandard conditions** shall be rectified.

8.  Although **receptacle spacing** as per new construction will not be strictly enforced, habitable rooms should have an adequate number of receptacles. Typically, at least one per wall and/or kitchen counter.
9.  **Tamper-Resistant receptacles** shall be provided where replacements are made as required by code.
10.  **Ungrounded Circuits:** existing circuits which do not include an equipment grounding conductor must be wired into non-grounding-type (two prong) receptacles or protected as allowed in the code [NEC 406.4(D)(2)].
11.  **Disconnect:** the City's policy is to provide disconnection and over current protection within 10 (ten) feet of where the service entrance conductors enter the building.
12.  **Arc-Fault Protection:** existing circuits and additions to existing circuits do not require updating to AFCI protection. Any **new** circuits added in areas of the home where currently required shall be protected.
13.  **Panel Change Out only** (no increase in service amperage) *Items 1 thru 7 MUST be addressed.* (Additional updating is strongly encouraged.)

The City is NOT responsible for the service and metering ahead of the disconnecting means.
Mid-American Energy should be contacted concerning this portion of an upgrade.



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URBANDALE
WAUKEE
WEST DES MOINES
WINTERSET

The purpose of this handout is to help assist in guiding the contractor, electrician and homeowner for when an outdoor emergency disconnect (2020 NEC 230.85) and surge protection (2020 NEC 230.67) are required to be installed.

This policy is consistent with the interpretation received from the State of Iowa Electrical Examining Board/Fire Marshals Office.

Emergency Disconnects

- All new construction of one and two-family dwelling units are required to install an Emergency Disconnect per 2020 NEC 230.85.
- All service updates and repairs where the service panel AND meter are being replaced are required to install the Emergency Disconnect per 2020 NEC 230.85.
- Repairing or replacing service devices/equipment or service conductors does not trigger the requirement to install an emergency disconnect unless the service panel and meter are being replaced.
- In the event there is an existing meter stack with an empty meter socket, an emergency disconnect will not be required to be installed due to the installation of an additional meter within the empty socket.

Authority Having Jurisdiction (AHJ) considerations for emergency disconnects:

- When an exterior emergency disconnect is installed, the AHJ shall identify proper grounding and bonding procedures have been established for the new installations.
- In a situation where a 100 amp service is being upgraded to a 200 amp service and the existing meter enclosure is already listed to handle 200 amps, the AHJ shall determine if an emergency disconnect shall be installed for this situation where the meter enclosure is not needing replaced.

Surge Protection

- All new construction services for dwelling units shall be provided with a surge-protection device.
- When service equipment, per definition in the 2020 NEC, is replaced, a surge-protection device shall be installed on the service where the work is being conducted.

Authority Having Jurisdiction (AHJ) considerations for surge protection:

- When a replacement of service equipment occurs on a multiple service panel arrangement which are fed off one set of conductors from the utility, the AHJ shall determine if surge protection devices shall be installed within each service panel regardless of where the replacement occurs within the system.
- Per NEC 230.66 (B) meter sockets which are not classified as a meter main, are not considered service equipment. In addition, overcurrent protection devices for branch circuits and feeders located within service panels are also not service equipment. Replacement of these items will not require the installation of surge protection.



SMOKE & CARBON MONOXIDE ALARM REQUIREMENTS

For Residential Additions, Alterations and Repairs

The International Residential Code (IRC) requires that Smoke Alarms and Carbon Monoxide (CO) Alarms shall be installed within a dwelling unit *per current code requirements* when an Addition, Alteration or Repair requiring a Building Permit is issued for a property including Seasonal and Screened Porches. Exceptions to this requirement include roofing, siding, windows, decks and plumbing or mechanical work.

Smoke Alarms shall comply with NFPA 72, be listed in accordance with UL 217 and installed per the manufacturer's installation instructions. Alarms must be "dual sensor type" as required by the State of Iowa (ionization\photoelectric).

The required locations for are as follows:

- 1) In each sleeping room.
- 2) Outside each separate sleeping area in the immediate vicinity of bedrooms.
- 3) On each story of the dwelling, including basements and habitable attics.
- 4) At least 3' horizontally from the doorway of a bathroom with a shower\tub.

Carbon Monoxide Alarms shall be listed in accordance with UL 2034. Combination CO and smoke alarms shall be listed in accordance with UL 2034 and UL 217. Alarms shall be installed per the manufacturer's installation instructions. The required locations are as follows:

- 1) Outside each separate sleeping area in the immediate vicinity of bedrooms.
- 2) Where a fuel-burning appliance (i.e.: fireplace) is located in a bedroom or its attached bathroom, a CO alarm shall be installed within the bedroom.

Alarms should receive their primary power from the building wiring when possible. New alarms are permitted to be battery powered when installed in conjunction with Additions, Modifications or Repairs to an existing dwelling structure.

I hereby acknowledge that I have read the requirements outlined above and agree to comply with all City Ordinances regulating said requirements on this project.

Signature

Date

Print Name

The City of
West Des Moines

www.wdm.iowa.gov

Development Services
Department

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50265

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