

 DEE CRAMER HEATING / COOLING / SHEET METAL Dedicated People. Delivering Quality.	Doc No: ELECT	
	Initial Issue Date:	1/1/2017
	Revision Date:	6/22/2026
ELECTRICAL	Revision No.	1.0
	Next Review Date:	6/22/2029
Issuing Dept: Safety	Page:	Page 1 of 13

Purpose

The purpose of this program is to establish and implement written procedures for compliance to inform personnel of the potential exposure to electrical hazards in operations and to provide guidelines for use when dealing with those operations.

Scope

This program is applicable to all employees. When work is performed on a non-owned or operated site, the operator's program shall take precedence, however, this document covers Dee Cramer, Inc. employees and contractors and shall be used on owned premises, or when an operator's program doesn't exist or is less stringent.

Definitions

Affected Personnel - Personnel who normally use and work with electrical equipment, tools, and appliances, but who do not make repairs or perform lock out/tag out procedures.

Appliances - Electrical devices not normally associated with commercial or industrial equipment such as air conditioners, computers, printers, copiers, coffee pots, microwave ovens, toasters, etc.

Circuit Breaker - A device designed to open and close a circuit by non-automatic means and to open the circuit automatically on a predetermined over current without injury to itself when properly applied within its rating.

Disconnecting Means - A device, or group of devices, or other means by which the conductors of a circuit can be disconnected from their source of supply.

Disconnecting Switch - A mechanical switching device used for isolating a circuit or equipment from a source of power.

Double Insulated Tool - Tools designed of non-conductive materials that do not require a grounded, three wire plug.

Ground - Connected to earth or some conducting body that serves in place of the earth.

Grounded Conductor - A conductor used to connect equipment or the grounded circuit of a wiring system to a grounding electrode or electrodes.

Ground Fault Circuit Interrupter (GFCI) - A device whose function is to interrupt the electric circuit to the load when a fault current to ground exceeds some predetermined value that is less than that required to operate the over current protective device of the supply circuit. Dee Cramer, Inc. shall use GFCIs in lieu of an assured grounding program.

Insulated - A conductor encased within material of composition and thickness that is recognized as electrical insulation.

Premises Wiring - That interior and exterior wiring, including power, lighting, control, and signal circuit wiring together with all its associated hardware, fittings, and wiring devices, both

 DEE CRAMER HEATING / COOLING / SHEET METAL <i>Dedicated People. Delivering Quality.</i>	Doc No: ELECT	
	Initial Issue Date:	1/1/2017
	Revision Date:	6/22/2026
ELECTRICAL	Revision No.	1.0
	Next Review Date:	6/22/2029
Issuing Dept: Safety	Page:	Page 2 of 13

permanently and temporarily installed, which extends from the load end of the service drop, or load end of the service lateral conductors to the outlet (s). Such wiring does not include wiring internal to appliances, fixtures, motors, controllers, motor control centers, and similar equipment.

Qualified Person - One that has been trained in the repair, construction and operation of electrical equipment and the hazards involved.

Strain Relief - A mechanical device that prevents force from being transmitted to the connections or terminals of a cable or extension cord.

Class I Locations - Are those in which flammable gases or vapors are or may be present in the air in quantities sufficient to produce explosive or ignitable mixtures.

Class 1 Division 1 - Is a location (a) in which hazardous concentrations of flammable gases or vapors may exist under normal operating conditions; or (b) in which hazardous concentrations of such gases or vapors may exist frequently because of repairs or maintenance operations or because of leakage; or (c) in which a breakdown or faulty operation or equipment or processes might release hazardous concentrations of flammable gases or vapors, and might also cause simultaneous failure of electrical equipment.

Class 1 Division 2 - Is a location (a) in which volatile flammable liquids or flammable gases are handled, processed, or used, but in which the hazardous liquid, vapors, or gases will normally be confined within closed containers or closed systems from which they can escape only in case of accidental rupture or breakdown of such containers or systems, or in of abnormal operation of equipment or (b) in which hazardous concentrations of gases or vapors are normally prevented by positive mechanical ventilation, and which might become hazardous through failure or abnormal operations of the ventilating equipment; or (c) that is adjacent to a Class 1, Division 1 location, and to which hazardous concentrations of gases or vapors might occasionally be communicated unless such communication is prevented by adequate positive-pressure ventilation from a source of clean air, and effective safeguards against ventilation failure are provided.

Class II locations - Class II locations are those that are hazardous because of the presence of combustible dust. Class II locations include the following:

Class II, Division 1 - A Class II, Division 1 location is a location (a) in which combustible dust is or may be in suspension in the air under normal operating conditions, in quantities sufficient to produce explosive or ignitable mixtures; or (b) where mechanical failure or abnormal operation of machinery or equipment might cause such explosive or ignitable mixtures to be produced, and might also provide a source of ignition through simultaneous failure of electric equipment, operation of protection devices, or from other causes, or (c) in which combustible dusts of an electrically conductive nature may be present.

NOTE: This classification may include areas where metal dust and powders are produced or processed, and other similar locations that contain dust producing machinery and equipment (except where the equipment is dust-tight or vented to the outside).

 DEE CRAMER HEATING / COOLING / SHEET METAL <i>Dedicated People. Delivering Quality.</i>	Doc No:	ELECT
	Initial Issue Date:	1/1/2017
	Revision Date:	6/22/2026
ELECTRICAL	Revision No.	1.0
	Next Review Date:	6/22/2029
Issuing Dept: Safety	Page:	Page 3 of 13

- These areas would have combustible dust in the air, under normal operating conditions, in quantities sufficient to produce explosive or ignitable mixtures.
- Combustible dust that is electrically nonconductive includes dust produced in the handling and processing produce combustible dust when processed or handled.
- Dust containing magnesium or aluminum is particularly hazardous and the use of extreme caution is necessary to avoid ignition and explosion.

Class II, Division 2 - A Class II, Division 2 location is a location in which: (a) combustible dust will not normally be in suspension in the air in quantities sufficient to produce explosive or ignitable mixtures, and dust accumulations are normally insufficient to interfere with the normal operation of electrical equipment or other apparatus; or (b) dust may be in suspension in the air as a result of infrequent malfunctioning of handling or processing equipment, and dust accumulations resulting there from may be ignitable by abnormal operation or failure of electrical equipment or other apparatus.

NOTE: This classification includes locations where dangerous concentrations of suspended dust would not be likely but where dust accumulations might form on or in the vicinity of electric equipment. These areas may contain equipment from which appreciable quantities of dust would escape under abnormal operating conditions or be adjacent to a Class II Division 1 location, as described above, into which an explosive or ignitable concentration of dust may be put into suspension under abnormal operating conditions.

Responsibilities

Supervisors/Managers

- For ensuring to implement and enforcement of the electrical safety program and to ensure that workers must be informed of the potential electrical hazards before being permitted to do work in proximity to energized electrical conductors or equipment.
- To ensure all electrical installations, equipment, apparatus and appliances shall be in conformity with the requirements of the local, provincial and national regulatory codes.
- To ensure only approved electrical equipment is used by workers and that the electrical equipment is:
 - Approved for the intended use and location of the electrical equipment.
 - Maintained proper working conditions and capable of safe operation; and
 - Tested in accordance with the manufacturer's recommendations

Employees

- Following the requirements in the electrical safety program.

 DEE CRAMER HEATING / COOLING / SHEET METAL <i>Dedicated People. Delivering Quality.</i>	Doc No: ELECT	
	Initial Issue Date:	1/1/2017
	Revision Date:	6/22/2026
ELECTRICAL	Revision No.	1.0
	Next Review Date:	6/22/2029
Issuing Dept: Safety	Page:	Page 4 of 13

Procedure

During work there are times when overhead or buried lines may be present. Dee Cramer, Inc. staff will use hazard identification and assessment methods to document hazards and corrective actions needed to eliminate employee exposure to potential electrical hazards.

Qualifications of Electrical Workers

Electrical work may only be performed by competent/qualified workers. No worker shall connect, maintain, or modify electrical equipment or installations unless the worker is a certified electrician. Dee Cramer, Inc. shall ensure that the qualified electrician performing electrical work de-energizes, isolates, locks out, connects to ground electrical equipment on which work is to be done in a lawfully required manner, and removes any potential stored power and does not re-energize the equipment until the work has been completed and all persons in the immediate vicinity are in a safe location. See Lockout Tagout policy.

PPE and Tools

Personal protective equipment must be worn for protection from electrical shock and/or arc flashes. A worker shall use mats, shields or other protective devices or equipment, including personal protective equipment, adequate to protect the worker from electrical shock and burn.

Only non-conductive tools and equipment may be used while performing electrical work. Tools and other equipment that can conduct electricity and endanger the safety of any worker shall not be used in such proximity to any live electrical installation or equipment that they might make electrical contact with the live conductor.

Conductive apparel shall not be worn unless it is rendered non-conductive by covering, wrapping or other insulating means. Conductive items of jewelry or clothing shall not be worn unless they are rendered non-conductive by covering, wrapping or other insulating means.

Employees working in areas where there are potential electrical hazards shall be provided with, and shall use, electrical protective equipment that is appropriate for the specific parts of the body to be protected and for the work to be performed.

Equipment shall be maintained in a safe, reliable condition. Such protective equipment shall be periodically inspected and/or tested.

If the insulation capability of protective equipment may be subject to damage during use, the insulation material shall be protected. (An example might be an outer covering of leather used for the protection of rubber insulating material.)

Employees shall wear nonconductive head protection wherever there is a danger of head injury from electric shock or burns due to contact with exposed energized parts.

 DEE CRAMER HEATING / COOLING / SHEET METAL <i>Dedicated People. Delivering Quality.</i>	Doc No: ELECT	
	Initial Issue Date:	1/1/2017
	Revision Date:	6/22/2026
ELECTRICAL	Revision No.	1.0
	Next Review Date:	6/22/2029
Issuing Dept: Safety	Page:	Page 5 of 13

Employees shall wear protective equipment for the eyes or face wherever there is danger of injury to the eyes or face from electric arcs or flashes or from flying objects resulting from electrical explosion.

Ropes and handlines used near exposed energized parts shall be nonconductive.

Protective shields, protective barriers, or insulating materials shall be used to protect each employee from shock, burns, or other electrically related injuries while that employee is working near exposed energized parts. When normally enclosed live parts are exposed for maintenance or repair, they shall be guarded to protect unqualified persons from contact with the live parts.

Alerting techniques used to warn and protect employees from hazards which could cause injury due to electric shock, burns or failure of electric equipment parts can take the form of safety signs and tags, barricades & attendants)

Inspections

Electrical equipment, tools, and appliances must be inspected prior to each use.

The use of a hard fixed GFCI or a portable GFCI adapter shall be used with all portable hand tools, electric extension cords, drop lights and all 110-volt equipment.

Equipment with defective electrical components is immediately removed from service. Defective electrical equipment and tools that may pose a hazard shall be immediately disconnected, removed from service and tagged as being defective.

All extension cords and or electrical cords shall be inspected daily or before each use, for breaks, plug condition and ground lugs, possible internal breaks, and any other damage. If damage is found, the extension cord or electrical cord shall be remove from service and repaired or replaced.

Repairs

Only Qualified Personnel, who have been authorized by the department supervisor or manager, may make repairs to supply cords on electrical tools and to extension cords.

Use of Portable Electric Equipment

Portable equipment must not be handled in any way that would cause damage. Electrical cords cannot be used for raising or lowering equipment or being fastened by staples or otherwise hung in a manner which could cause damage to the outer insulation.

Portable electrical equipment used outdoors or in damp locations is equipped with ground fault circuit interrupters (GFCI). When used outdoors or in wet locations, portable electrical tools shall be protected by a ground fault circuit interrupter installed at the receptacle or on the circuit at the panel.

 DEE CRAMER HEATING / COOLING / SHEET METAL <i>Dedicated People. Delivering Quality.</i>	Doc No: ELECT	
	Initial Issue Date:	1/1/2017
	Revision Date:	6/22/2026
ELECTRICAL	Revision No.	1.0
	Next Review Date:	6/22/2029
Issuing Dept: Safety	Page:	Page 6 of 13

Cord-connected electrical equipment and tools must be adequately grounded. Cord-connected electrical equipment and tools shall have a casing that is adequately grounded. This does not apply to cord connected electrical equipment or tools that are adequately double-insulated and whose insulated casing shows no evidence of cracks or defects, and/or a portable electrical generator in which the equipment is not exposed to an external electric power source if the casings of portable electrical tools connected to the generator are bonded to a non-current-carrying part of the generator).

When a portable luminaire is used, the electrical extension cord and fittings shall be approved for the intended use and location of the extension cord and fittings and are properly maintained and the electrical extension cord is not used to supply power to any equipment other than the portable luminaire unless the cord meets the proper requirements.

Extension Cords

- Use only three-wire, grounded, extension cords and cables that conform to a hard service rating of 14 amperes or higher, and grounding of the tools or equipment being supplied.
- Only commercial or industrial rated-grounded extension cords may be used in shops and outdoors.
- Cords other than indoor appliances must have a rating of at least 14 amps.
- Cords must have suitable strain relief provisions at both the plug the receptacle ends.
- Work lamps (drop light) used to power electrical tools must have a 3 wire, grounded outlet, unless powering insulated tools.
- Adapters that allow three wire, grounded prongs, connected to two wire non-grounded outlets are strictly prohibited.
- Cords must have a service rating for hard or extra-hard service and have S, AJ, ST, SO, SJO, SJT, STO, or SJTO printed on the cord.
- Cords may not be run through doorways, under mats or carpets, across walkways or aisles, concealed behind walls, ceilings or floors, or run through holes in walls, or anywhere where they can become a tripping hazard.
- High current equipment or appliances should be plugged directly into a wall outlet whenever possible.
 - o All extension cords shall be plugged into one of the following:
 - A GFCI outlet.
 - A GFCI built into the cord.
 - A GFCI adapter is used between the wall outlet and cord plug.
- Extension cords shall not be used on compressor skids to operated heat tapes or any other type of equipment on a temporary basis. Heat tapes or other equipment shall be hard wired by applicable electrical codes.

Outlets

Outlets connected to circuits with different voltages must use a design such that the attachment plugs on the circuits are not interchangeable.

 DEE CRAMER HEATING / COOLING / SHEET METAL <i>Dedicated People. Delivering Quality.</i>	Doc No:	ELECT
	Initial Issue Date:	1/1/2017
	Revision Date:	6/22/2026
ELECTRICAL	Revision No.	1.0
	Next Review Date:	6/22/2029
Issuing Dept: Safety	Page:	Page 7 of 13

Multiple Outlet Boxes

- Multiple outlet boxes must be plugged into a wall receptacle.
- Multiple outlet boxes must not be used to provide power to microwave ovens, toasters, space heaters, hot plates, coffeepots, or other high-current loads.

Double Insulated Tools

Double insulated tools must have the factory label intact indicating the tool has been approved to be used without a three-wire grounded supply cord connection. Double insulated tools must not be altered in any way, which would negate the factory rating.

Switches, Circuit Breakers, and Disconnects

- All electrical equipment and tools must have an on and off switch and may not be turned on or off by plugging or unplugging the supply cord at the power outlet.
- Circuit breaker panel boxes and disconnects must be labeled with the voltage rating.
- Each breaker within a breaker panel must be labeled for the service it provides.
- Disconnect switches providing power for individual equipment must be labeled accordingly.
- Portable Ladders
 - Only approved, non-conductive ladders, may be used when working near or with electrical equipment, which includes changing light bulbs.
 - Ladders must be either constructed of wood or fiberglass
 - Portable ladders shall have non-conductive side rails.
 - Wood ladders should not be painted, which can hide defects, except with clear lacquer.
 - When using ladders they shall be free from any moisture, oils, and greases.

Additional Safe Work Practices to Prevent Electric Shock

Safe work practices shall be employed to prevent electric shock or other injuries resulting from either direct or indirect electrical contacts when work is performed near or on equipment or circuits which are or may be energized.

Additional practices include:

- Work shall not be done on an energized electrical conductor or equipment that has a voltage of more than 750 volts unless 2 or more authorized personnel are present while the work is being performed.
- Ensure that the path to ground from circuits, equipment, or conductor enclosures shall be permanent and continuous, shall have ample ampacity to conduct safely and currents liable to be imposed on it, and shall have impedance sufficiently low to limit the voltage above ground and to facilitate the operation of the over current devices in the circuit.
- All wire joints or connections are to be fitted with an approved cap or other approved cover, enclosed in an approved box or where the wire joints or connections are not permanently installed be protected from damage by another approved means and all dead, abandoned

 DEE CRAMER HEATING / COOLING / SHEET METAL <i>Dedicated People. Delivering Quality.</i>	Doc No: ELECT	
	Initial Issue Date:	1/1/2017
	Revision Date:	6/22/2026
	Revision No.	1.0
ELECTRICAL	Next Review Date:	6/22/2029
	Page:	Page 8 of 13
Issuing Dept: Safety		

or disused electrical conductors or equipment are removed from the work area or disconnected and secured to prevent inadvertent energization.

- Only CSA approved electrical equipment and devices used in electrical installations within the jurisdiction of the local regulatory requirements shall be approved and shall be of a kind or type and rating approved for the specific purpose for which it is to be employed.
- Only equipment and codes approved for use in wet locations may be used at job locations covered with water or conductive liquids or where employees are likely to contact conductive liquids.
- Employee's hands must be dry when plugging or unplugging energized equipment. Also, if energized plugs or receptacles are wet or could otherwise provide a conducting path, only protective insulation equipment may be used for handling the connection devices.
- Employees shall not enter spaces containing exposed energized parts unless qualified and proper illumination exists to enable employees to work safely. If employees are subject to handle long dimensional conductor objects (ducts or pipes), steps for safe work practices shall be employed to ensure the safety of workers.

Electrical Fire Safety

Dee Cramer, Inc. shall ensure that electrical installations shall be made so that the probability of spreading fire through fire stopped partitions, floors, hollow spaces, firewalls or fire partitions, vertical shafts, or ventilating or air-conditioning duct is reduced to a minimum. Where a fire separation is pierced by a raceway or cable, any openings around the raceway or cable shall be properly closed or sealed in compliance with the National Building Code of Canada.

Dee Cramer, Inc. shall ensure that a fire extinguisher approved for Class C fires is readily available to workers working on or near energized high voltage electrical equipment.

Dee Cramer, Inc. will ensure that in locations where explosive or flammable materials or gases are present, special precautions shall be observed including that repairs or alterations shall not be made on any live equipment and fits or seals in enclosures shall be maintained in their original safe condition.

Signage, Markings and Warnings

Warning techniques will be used to protect employees from injury by electrical equipment. These include:

- Safety signs or tags will be used when necessary to warn employees about electrical hazards.
- Electrical equipment such as switchboards, panel boards, industrial control panels, meter socket enclosures and motor control centers that are installed in other than dwelling units and are likely to require examination, adjustment, servicing or maintenance while energized shall be field marked to warn personnel of potential electric shock and arc flash hazards. The markings shall be located so that they are clearly visible to person before examination, adjustment, servicing, or maintenance of the equipment.

 DEE CRAMER HEATING / COOLING / SHEET METAL <i>Dedicated People. Delivering Quality.</i>	Doc No: ELECT	
	Initial Issue Date:	1/1/2017
	Revision Date:	6/22/2026
	Revision No.	1.0
ELECTRICAL	Next Review Date:	6/22/2029
	Page:	Page 9 of 13
Issuing Dept: Safety		

- Barricades, along with safety signs or tags, will be used where necessary to prevent or limit employee access to work areas exposing employees to exposed energized equipment. The barricades should not be conductive if the potential for electrical contact exists.
- Where signs and barricades do not provide sufficient warning and protection from electrical hazards, an attendant must be stationed to warn and protect employees.
- Electrical control panels have their covers permanently marked: DANGER "HIGH VOLTAGE" and must have an approved rubber mat in front of the panel.
- Notices reading "DANGER" "HIGH VOLTAGE" shall be placed in prominent positions in proximity to energized electrical equipment, operating at over 750 volts, which may be accessible to workers.
- Access to electrical control rooms and enclosures is restricted. Entrance to a room or similar enclosure containing exposed live electrical parts shall have a conspicuous sign, warning of the danger, and forbidding entry by unauthorized persons.
- All electrical panel switches must be legibly marked to indicate what they control. The markings must be durable to withstand the service environment.
- For electrically powered equipment in the shop: air compressors, fans, etc., controls must also be labelled unless the location of the switch makes it obvious what the control switch operates.

Lockout/Tagout

See Dee Cramer, Inc. Lockout/Tagout Program.

Guarding

Work shall not be done in or around an area or structure in proximity to energized electrical conductors or equipment which are normally isolated by position or elevation, unless the electrical connections, conductors or equipment are provided with cabinets or guards which will effectively prevent contact by a worker, or by equipment being used or handled.

Bare live parts shall be guarded against accidental contact by means of approved cabinets or other forms of approved enclosures except where local codes exempt and cabinets or guards shall meet the specifications of an authority acceptable to regulatory authorities.

All switches, receptacles, luminaries and junction boxes shall be fitted with a cover that is approved for the intended use and location of the cover.

Egress

Dee Cramer, Inc. shall ensure that passageways and working space around electrical equipment shall not be used for storage and shall be kept clear of obstruction and be arranged to give authorized persons ready access to all parts requiring attention.

A minimum working space of 1 meter with secure footing shall be provided and maintained about electrical equipment such as switchboards, panel boards, control panels, and motor control

 DEE CRAMER HEATING / COOLING / SHEET METAL <i>Dedicated People. Delivering Quality.</i>	Doc No: ELECT	
	Initial Issue Date:	1/1/2017
	Revision Date:	6/22/2026
ELECTRICAL	Revision No.	1.0
	Next Review Date:	6/22/2029
Issuing Dept: Safety	Page:	Page 10 of 13

centers that are enclosed in metal, except that working space is not required behind such equipment where there are no renewable parts such as fuses or switches on the back and where all connections are accessible from locations other than the back. Each room containing electrical equipment and each working space around equipment shall have suitable means of egress (walk areas, corridors, doors, etc.), which shall be kept clear of all obstructions.

Access to electrical equipment must be kept free of obstruction and allow easy access to all parts which may require maintenance. Special care will be taken to ensure hazardous or flammable material must not be stored or placed close to or in dangerous proximity to any electrical equipment.

For outdoor installations, arc producing electrical equipment shall not be installed within 1 meter from the discharge of a combustible gas relief device or vent.

Hazardous Locations

Hazardous locations will be classified as listed below:

- Class I: Locations in which flammable gases or vapors are or may be present in the air in quantities sufficient to produce explosive gas atmospheres.
- Class II: Locations in which there is a presence of combustible dust or electrically conductive dust.
- Class III: Locations in which there is a presence of easily ignitable fibers but in which such fibers are not likely to be in quantities sufficient to produce ignitable mixtures.

Wherever reasonably practicable, no electrical equipment or devices shall be used or installed within hazardous locations unless the equipment is essential to the process being carried out therein.

Dee Cramer will ensure the use or installation of electrical devices be essential within a hazardous location, only electrical equipment rated and approved for use by local regulatory code with the specific gas, vapor, mist or dust hazard which may be present within the hazardous location shall be used.

Service equipment, panel boards, switchboards, and similar electrical equipment shall, where practicable, be in rooms or sections of the building in which hazardous conditions do not exist.

Electrical equipment shall be adequately ventilated to prevent the development of electrical equipment of ambient air temperatures more than those normally permissible for such equipment.

Working Under Overhead Lines & Clearance Distances

The lines shall be deenergized and grounded or other protective measures shall be provided before work is started.

 DEE CRAMER HEATING / COOLING / SHEET METAL <i>Dedicated People. Delivering Quality.</i>	Doc No:	ELECT
	Initial Issue Date:	1/1/2017
	Revision Date:	6/22/2026
ELECTRICAL	Revision No.	1.0
	Next Review Date:	6/22/2029
Issuing Dept: Safety	Page:	Page 11 of 13

When Dee Cramer, Inc. personnel are working in an elevated position near overhead lines or have equipment elevated, the person and the longest conductive object he/she may contact cannot come closer to any unguarded, energized overhead line than specified below:

- For voltages to ground 50kV or below – minimum 10 ft. Clearance
- Minimum approach distance for qualified employees shall be followed per 29 CFR 1910.333 Qualified – Table S5 Selection and Use of Work Practices - Approach Distances for Qualified Employees – Alternating Current). Approach distances are 10' for 50kV plus 4" for every additional 10kV.

Voltage Range (phase to phase)	Minimum Approach Distance
Over 300V, not over 750V.....	1 ft. 0 in. (30.5 cm).
Over 750V, not over 2kV.....	1 ft. 6 in. (46 cm).
Over 2kV, not over 15kV.....	2 ft. 0 in. (61 cm).
Over 15kV, not over 37kV.....	3 ft. 0 in. (91 cm).
- Minimum approach distance to energized high power voltages lines for unqualified employees is 10 feet.

If adequately rated insulating barriers are installed to prevent contact with the lines and are not part of or an attachment to the vehicles or their raised structure, the clearance may be reduced to a distance within the designed working dimensions of the insulating barrier.

NOTE: For voltages encountered with overhead power lines, objects which do not have an insulating rating for the voltage involved are considered conductive.

Confined or Enclosed Workspaces

When an employee works in a confined or enclosed space that contains exposed energized parts, the employee shall isolate the energy source and turn off the source and lock and tag out the energy source (Only qualified electricians can work on an exposed energy source).

Working with Electrical Control Panels

If personnel must touch anything on an electrical control panel, first check it with a voltage tester (contact or non-contact).

Before operating switches or breakers ensure all protective panels are closed and properly fastened. To disconnect the electrical power from the equipment, always shut the control switch off first, before shutting the main switch off. To connect the electrical power, always ensure all control switches are off before engaging the master switch. When operating the control or master switch, never stand in front of the electrical panel. Always stand off to the side of the panel to operate the switch.

 DEE CRAMER HEATING / COOLING / SHEET METAL <i>Dedicated People. Delivering Quality.</i>	Doc No: ELECT	
	Initial Issue Date:	1/1/2017
	Revision Date:	6/22/2026
	Revision No.	1.0
ELECTRICAL	Next Review Date:	6/22/2029
	Page:	Page 12 of 13
Issuing Dept: Safety		

Emergency Procedures

The following emergency procedures shall be required as training to be completed and are to be followed if a person encounters exposed energized electrical equipment and that contact may affect his or her safety or health:

Contact with Normal Electrical Current

- Call for emergency medical assistance.
- Don't touch the victim unless the power is off.
- Unplug the equipment or turn the power off at the main control area.
- If you can't turn off the power, use a dry wooden board or broom handle to separate the victim from the power source.
- If the victim is not breathing, CPR, if trained.
- If the victim is conscious, keep them calm. Lay them on their backs. Elevate their feet. Cover them with a blanket.

Contact with High Voltage Line

- Don't try to separate the victim from the power source.
- Don't touch the victim unless you are certain the victim is not in contact with electrical wire.
- Call for emergency services and medical assistance.

Electrical Fire Safety

If an electrical fire occurs:

- Unplug the burning or smoking appliance.
- Get everyone out at once.
- If the fire is small, use a CO2 or dry powder fire extinguisher. Never put water on an electrical fire.
- Call for emergency assistance or the fire department. Tell the dispatcher your name, address, and that you have an electrical fire.

Training Requirements

All Dee Cramer, Inc. personnel shall be trained in the requirements of this program and general electrical safety safe work procedures. Specific elements include:

- Employees who face a risk of electric shock but who are not qualified personnel shall be trained and familiar with electrically related safety practices.
- Employees shall be trained in safety related work practices that pertain to their respective job assignments.
- Training shall include clearance distances based on voltage (See Overhead Power Lines).
- Training shall also include emergency response for electrical contact.
- All training must be documented and kept on file.

 DEE CRAMER HEATING / COOLING / SHEET METAL <i>Dedicated People. Delivering Quality.</i>	Dee Cramer, Inc. Safety Management System	Doc No:	ELECT
		Initial Issue Date:	1/1/2017
		Revision Date:	6/22/2026
ELECTRICAL		Revision No.	1.0
		Next Review Date:	6/22/2029
Issuing Dept: Safety			Page:

Management of Change		
Date	Description of Change	Name
6/22/2026	Combined Electrical Awareness Policy and Electrical Policy into one document.	Madelyn Nichols