

Appendix B, Section 0120

**THE UNIVERSITY OF NORTH CAROLINA at GREENSBORO
SELF-INSPECTION ELECTRICAL
CHECKLIST for ELECTRICIANS**

Date: _____

Proper Protection Provided

Description	Yes*	No
Electrical insulation adequate		
Splices 1. Conductors properly spliced or joined with splicing devices		
Arcing parts 1. Arcing/sparking equipment isolated from combustibles		
Marking 1. Manufacturer, voltage, current, wattage, and other ratings listed		
Identification of disconnecting means and circuits 1. Disconnecting means for motors/appliances legibly marked 2. Service, feeder, and branch circuit, at its disconnecting means or overcurrent device legibly marked		
600 volts, nominal or less 1. Working space about electrical equipment a. Sufficient access and working space provided/maintained about all electrical equipment b. At least one entrance provided to working space c. Illumination adequate d. Minimum head room six feet, three inches e. Live parts of electrical equipment operating at 50+ volts guarded against accidental contact or elevated at eight feet or more above working surface f. Entrances to rooms and other guarded locations containing exposed live parts marked with conspicuous warning signs		
Over 600 volts, nominal 1. Electrical installations with exposed live parts accessible only to qualified persons 2. Kept locked and guarded 3. Access to electrical installations to unqualified persons prohibited		
Work space about equipment 1. Sufficient space provided/maintained to permit safe operation/maintenance		
Wiring design and equipment 1. Use/identification of grounded/grounding conductors a. Grounded conductors identifiable and distinguishable from other conductors b. Equipment grounding conductor identifiable and distinguishable from other conductors 2. Clearance from ground/other a. Open conductors: ten feet above finished grade b. twelve feet over areas subject to vehicles c. fifteen feet if subject to truck traffic d. eighteen feet over public streets and driveways e. Minimum of three feet clearance from windows, doors, fire escapes, or similar locations f. Conductors eight feet from highest point of roofs over which they pass		
Services 1. Means provided to disconnect all conductors from service entrance conductors 2. Disconnecting means indicates whether it is open or closed 3. Disconnecting means installed at a readily accessible location		

4. Each service disconnecting means indicates whether it is open or closed		
5. Service entrance conductors installed as open wires guarded to make them accessible only to qualified persons		
High voltage warning signs posted overcurrent protection		
1. Conductors and equipment protected from overcurrent		
2. Cartridge fuses on circuits over 150 volts to ground		
3. Overcurrent devices accessible to employees		
4. Overcurrent devices located away from physical damage or combustibles		
5. Breakers indicate whether open (off) or closed (on)		
6. Feeders and branch circuits over 600 volts have short-circuit protection		
Grounding		
1. Neutral conductor grounded on 3-wire DC systems		
2. Path to ground permanent and continuous		
3. Metal cable trays, metal raceways, and metal enclosures for conductors grounded		
4. Noncurrent carrying metal parts of fixed equipment grounded		
5. Noncurrent carrying metal parts of cord and plug-connected equipment grounded		
6. Fixed equipment, grounding conductors in same raceway, cable or cord, as circuit conductor		
7. Equipment grounding conductor separate from circuit conductors for DC currents		
Wiring Methods		
1. Metal raceways, cable armor, and other metal enclosure make continuous electric conductor		
2. So connected to all boxes, fittings, and cabinets as to provide electrical continuity		
3. 300 volts or less temporary wiring used only during/or remodeling, maintenance, or repair		
4. Temporary wiring use limited to ninety days		
5. Feeders originate in distribution center		
6. Conductors run as multi-conductor cord cable assemblies		
7. Open conductors on insulators not more than ten feet apart		
8. Branch circuit originate in power outlet or panelboard		
9. Open conductors fastened at ceiling height every ten feet		
10. Grounding type receptacles		
11. Branch circuits contain separate equipment grounding conductor		
12. Receptacles electrically connected to grounding connector		
13. Bare conductors and earth returns avoided		
14. Disconnecting switches or plug connectors on ungrounded conductors		
15. Lamps protected from accidental contact or breakage		
16. Flexible cords and cables protected from accidental damage		
17. Sharp corners and projected avoided		
18. Flexible cords and cables protected against damage		
Flexible nonmetallic tubing		
1. In dry locations not exposed to severe physical damage		
2. Tubing in continuous lengths not exceeding fifteen feet and secured to surface by straps at intervals not exceeding four feet, six inches		
Cabinets, boxes, and fittings		
1. Conductors entering boxes, cabinets, or fittings protected from abrasion		
2. Openings effectively closed		
3. Unused openings effectively closed		
4. Pull Boxes, junction boxes, and fittings provided with covers.		
5. Metal covers grounded		
6. Outlet boxes have cover face plates		
7. Outlet boxes with flexible cords provided with bushings or smooth, well-rounded surfaces		
Pull/junction boxes over 600 volts		
1. Cover permanently marked "HIGH VOLTAGE"		
2. Marked readily visible and legible		
Switches		
1. Knife switches have blades dead when switch is in open position		

2. Single throw knife switches not capable of being closed by gravity		
3. Single throw knife switches in inverted position have locking device to keep blades open		
Face plates for flush-mounted snap switches		
1. Flush snap switches in ungrounded metal boxes and with in reach of conducting floors or surfaces have face plates of nonconducting, noncombustible material		
2. Switchboards with exposed live parts in permanently dry locations		
3. Panelboards mounted in cabinets, cutout boxes, or enclosures approved with dead front		
4. Panelboards accessible only to qualified persons		
5. Exposed blades of knife switches dead when open		
6. Switches, circuit breakers, and switchboards enclosed in weatherproof enclosures		
7. Conductors for general wiring insulated		
8. Conductor insulation approved for voltage, operating temperature, and location of use		
9. Insulated conductors colored/identified as to type		
Flexible cords and cables		
1. Not used as substitute for fixed wiring		
2. Not run through holes in walls, ceilings or floors		
3. Not run through doorways, windows, or similar openings		
4. Not attached to building surfaces		
5. Not concealed behind walls, ceilings, or floors		
6. Flexible cords used without splice or tap		
7. Flexible cords provided with strain relief		
Motor disconnecting means		
1. Means in sight from controller location		
2. If out of sight, is controller marked, giving the location and identification of the disconnect		
3. If motor and machinery not in sight from controller, is controller locked in open position		
Equipment for general use		
1. Manually operable switch in sight from motor		
2. Disconnect indicate whether it is open (off) or closed (on)		
3. Disconnect readily accessible		
4. Individual disconnect provided for each motor		
Motor overload, short circuit, and ground-fault protection		
1. Motors, motor-control apparatus, and motor branch-circuit conductors protected against overheating short circuits and ground faults		
Electric welders-disconnecting means		
1. Disconnect provided in supply circuit for arc welder		
2. Ampere rating of disconnect not less than supply conductor		
Data processing systems-disconnecting means		
1. Disconnect provides power to all electronic equipment in data processing/computer rooms		
2. Disconnect controlled from locations accessible to operator at principal exit		
3. Disconnect to air conditioning serving area		
Hazardous locations		
1. Equipment and wiring used in classified locations are intrinsically safe, approved, or safe for the location		
2. Equipment marked to show class, group, and operating temperature for which it is approved		
3. Temperature marking exceeds ignition temperature of specific gas or vapor		
Conduits		
1. Conduits threaded and wrench tight		
2. Bonding jumpers utilized where not threaded joint tight		
Emergency power systems		
1. Emergency circuitwiring independent of other wiring and equipment		
2. Kept from same raceway, cable, box, or cabinet of other wiring		
3. Emergency lighting arranged due to the failure of individual lighting element cannot leave any space in total darkness		

Signature:	Date:
Forwarded to: Office of Safety	Date: