

Human Resources Support Services Health, Wellness and Safety**Electrical Safety (2.4.1)****PURPOSE TO PROVIDE A TEMPLATE FOR SAFE ELECTRICAL PROCEDURES AND PURCHASES IN THE PEEL DISTRICT SCHOOL BOARD****REFERENCE PEEL PROCEDURES, ELECTRICAL SAFETY CODE, CSA STANDARDS FOR ELECTRICAL EQUIPMENT****GENERAL ELECTRICAL SAFETY REQUIREMENTS**

Principals and supervisors are to advise their staff of the necessity for adherence to the following instructions with regard to electrical wiring, hazards, repairs, and the purchase of electrical equipment.

ONTARIO HYDRO ANNUAL INSPECTIONS

All Peel District School Board facilities will be subject to an "ANNUAL ELECTRICAL INSPECTION" under conditions outlined in the ONTARIO HYDRO ELECTRICAL SAFETY CODE.

An "ANNUAL INSPECTION BOOK" will be located in the custodian's office at each location. All Board employees, contractors or persons performing electrical work must record the extent and location of the job in the INSPECTION BOOK. Contractors will include the company name.

The INSPECTOR will make inspections at such time and in such manner as the inspection department determines. On arrival at the location, the INSPECTOR will report to the office, provide identification and request to see the PRINCIPAL OR DESIGNATE.

The PRINCIPAL OR DESIGNATE will accompany the inspector and provide access to all areas as requested by the INSPECTOR.

The INSPECTOR will complete the ANNUAL INSPECTION BOOK noting any action which may be required, and tagging any equipment which may present an immediate hazard. Any tagged equipment shall be removed from service until repaired. The INSPECTOR will leave a completed copy of the inspection form with completion dates to the attention of the PRINCIPAL OR DESIGNATE. Compliance with all deficiencies will be the responsibility of the site manager WITHIN THE TIME LINES DETERMINED BY THE INSPECTOR.

Copies of all inspections completed will be forwarded by the ONTARIO HYDRO INSPECTION DEPARTMENT to the Peel District School Board Electrical Supervisor, on a weekly basis.

GENERAL

All electrical equipment shall be used for the purpose and in the manner for which it has been designed. All users of electrical items are to read all instructions and be aware of all important safeguards before using electrical equipment, including appliances, power hand tools, etc.

All electrical equipment shall be procured through the Purchasing department to ensure adherence to applicable standards, bearing certification marks of the CSA, ULC or Ontario Hydro sticker. There are other approved certification designations which are not as common, the Ontario Hydro Inspection Department can provide information where required. The purchasing requisition originator shall ensure that the requisitioned item meets code requirements.

Electrical items and/or equipment purchased by outside groups and donated to schools for use by staff and students shall meet the same code requirements.

STANDARDS

The Peel District School Board requires that all electrical apparatus and equipment for use by staff and students has CSA/UL or equivalent approval or approval by the SPECIAL INSPECTION BRANCH of the ONTARIO HYDRO for commercial use.

Electrical equipment that is the personal property of staff, students or outside groups shall comply with Board standards.

Any equipment/apparatus containing Asbestos for heat shielding purposes must be so identified by non removable label and noted in user manuals and technical data.

GROUNDING

Electrical equipment and apparatus shall be grounded in accordance with the ONTARIO HYDRO CODE REQUIREMENTS.

No alterations or modifications shall be made to the 3 prong connectors of electrical equipment manufactured with a 3 wire "U" ground plug.

All three wire, cord connected equipment/apparatus shall be inspected for ground pin integrity prior to each use, and no equipment/apparatus shall be used where the ground pin has been removed.

*Note:

- **The electrical safety code will accept tools and appliances that are marked with the words DOUBLE INSULATED or the symbol of a square within a square.**
- The tools and appliances identified as DOUBLE INSULATED will not have a separate ground pin, they are manufactured with a 2 prong plug.

STAGE LIGHTING AND SOUND SYSTEMS

No wiring shall be modified for stage lighting and sound systems including P.A. systems. Lighting units and equipment shall be plugged into approved type receptacles.

Hard wiring is not permitted.

Installations and alterations of stage lighting systems and sound systems must be requested through the Superintendent of Schools.

All stage lighting and sound system equipment shall be made for institutional use and requires approval from the Facilities Services.

Changes to stage lighting and sound systems required for special events must be requested in writing by the Principal, submitted to the Maintenance department one month in advance. A Maintenance Supervisor will check the feasibility and provide an estimated cost to the Principal for approval of cost. If approved by the Principal, the Maintenance department will arrange for all temporary power connections and the disconnection.

AV/COMPUTER REPAIRS

The AV/Computer Repair department will only repair equipment which complies with Peel District School Board Standards.

Any equipment sent to this department for repair which does not meet these standards will be taken out of service in accordance with [*Operating Procedures LTSS 4*](#).

STATIONARY ELECTRICAL EQUIPMENT

All installation and removal of stationary electrical equipment such as score clocks, machines, lighting etc. must be requested through the Superintendent of Schools.

All stationary shop equipment shall be secured to bench or floor and shall be equipped with magnetic starters providing low voltage protection, as per the ELECTRICAL SAFETY CODE.

ELECTRICAL WIRING INDOOR AND OUTDOOR

All electrical wiring shall be in accordance with the ONTARIO HYDRO CODE, no alterations to the existing wiring, nor installation of new wiring, including power, lighting and signal systems shall be made except by qualified/licensed persons authorized by the Facilities Services.

All modifications to wiring and new installations require Ontario Hydro approval and inspection with clearance certificate upon completion.

All modifications and new installations must be recorded by the Maintenance Department, these records are made available to Hydro inspectors for their annual inspection.

The above does not apply to wiring done under Teacher/Instructor supervision on benches, racks or electrical shop wiring structures.

SCIENCE FAIRS

Student projects incorporating electrical devices must be equipped with GROUND FAULT INTERRUPTING DEVICES (GFI) for the complete project. Portable G.F.I. protection must be purchased through the Purchasing Department.

ELECTRICAL EMERGENCY SHUT-OFF - TECHNOLOGY FACILITIES

Most of the Design and Technology labs in addition to the secondary Technology labs are equipped with electrical panic stations so that power to all equipment can be cut by pushing a single mushroom shaped red button should an emergency arise. The breakers in these units are not designed for continuous usage. The panic buttons should be operated once per day to ensure that they are in operating condition, but under no circumstances should they be used for the routine starting up and shutting down of equipment.

In the event of power failure, the main breaker located at the panel in each shop should be disconnected. This will ensure that equipment not protected by magnetic switches will not inadvertently start up when power is restored.

EXTENSION CORDS

The ELECTRICAL SAFETY CODE and ONTARIO'S FIRE MARSHALL'S ACT do not permit the use of extension cords as a substitute for permanent wiring. The Ontario Hydro Safety Code cites the following: Flexible cord (extension) shall not be used as a substitute for the fixed wiring of structures and shall not be permanently secured to any structural member, or run through holes in walls, ceilings or floors; or run through doorways, windows or similar openings.

Extension cords may be used for temporary short term hook up only.

If additional receptacles are required to operate instructional or other equipment such installations must be requested through the Superintendent of Schools in accordance with Ontario Hydro Safety Code and Building Code requirements.

Extension cords must be of the C.S.A. approved 3 wire (separate ground) type, capable to safely carry the equipment's current, 2 wire cords are not permitted.

Extension cords are to be repaired only by persons authorized by the Facilities Services.

Sect 2.4.1

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