3801.3620 APPROVAL OF ELECTRICAL EQUIPMENT.

Subpart 1. **National standards.** Except as otherwise provided in subpart 2 or 3, as a condition for approval under Minnesota Statutes, section 326B.35, and Section 110.2 of the National Electrical Code, all electrical equipment, including material, fittings, devices, apparatus, fixtures, appliances, and utilization equipment, used as part of, or in connection with, an electrical installation shall be listed and labeled by a testing laboratory. Third party reviews are for the lifetime of the equipment unless the classification or environment that it is installed in changes.

Subp. 2. **Alternatives to listing and labeling.** With the exception of electrical equipment of types specifically required to be listed by the National Electrical Code, the board department shall accept one of the applicable methods described in item A or B as an alternative to listing and labeling.

A. Evaluation by a testing laboratory or by a registered or licensed electrical engineer who has no financial or other interest in the manufacture or sale of the equipment, provided that any deficiencies identified by the evaluation are corrected and the equipment complies with the listed requirements. A written report of the evaluation shall be submitted directly to the board, department and shall state the standards that were applied in the evaluation. Evaluation reports by an electrical engineer acting independently of a testing laboratory shall also include an item-by-item comparison of the equipment with the requirements to be listed. If the board department finds that the evaluation or evaluation report is incomplete or inaccurate, it retains the right to require further evidence of compliance or to reject the equipment.

Evaluations conducted according to the procedures in this item shall be considered evidence of compliance of all identical equipment produced by that manufacturer for a period of one year from the time the evaluation was completed, or until the equipment has been listed, whichever is less, provided that the manufacturer has applied for listing of the equipment, or produces fewer than 100 such units per year. Where additional identical equipment will be has been produced, the manufacturer third party evaluator shall provide the board department with a written statement giving the equipment model number and agreeing that all subsequent equipment will be identical to that which was evaluated and, where the equipment has not been submitted for listing, shall also provide a written report to the board 12 months from the date of the evaluation report which lists the serial numbers of the equipment installed in Minnesota over the preceding 12 months.

Where deficiencies are identified by the initial evaluation report, those deficiencies shall be corrected for all subsequent units, the changes shall be verified by the person who

performed the initial evaluation, and an amended report shall be submitted to the board department. If the manufacturer deviates from the construction established by the evaluation report, the equipment shall be reevaluated and any noncomplying equipment that was sold brought into compliance.

Where the evidence of compliance is an evaluation according to this item, the manufacturer shall affix a durable permanent label to the equipment in a readily visible location, which states: "This equipment is identical to equipment that was evaluated by (name), and found to be in compliance with the requirements to be listed. A copy of the evaluation report was filed with the Minnesota State Board of Electricity Department of Labor and Industry on (date)."

- B. Where procedures acceptable to the testing laboratory are followed, a manufacturer of unlisted equipment shall be permitted to submit the equipment to another manufacturer of similar listed equipment for evaluation, correction of noncomplying construction, and labeling.
- Subp. 3. **Equipment exempt from listing requirements.** Equipment described in items A to \underline{D} \in is exempt from the requirements in subparts 1 and 2.

A. Industrial machinery as defined by Section 670.2 100 of the National Electrical Code is not required to be listed where all electrical components of the equipment, including electrical control panels and solid-state motor controls, are in compliance with item B, C, or D, or subpart 1 or 2, and all of the machine electrical wiring is in compliance with the National Electrical Code.

B. Electrical equipment enclosed in a listed cabinet or box suitable for the environment in which it is installed, and electrically connected only to circuits supplied from listed Class 2, logic level, communications, or other circuits with maximum open circuit voltage of 30 volts rms AC, or DC, and overcurrent protection of eight amperes or less, or to any combination of such circuits, is not required to be listed, provided further that any printed wiring boards shall be of listed material and shall be permitted to be supplied from a labeled microcomputer power supply.

C. Electrical control equipment constructed according to the listed requirements and enclosed in a listed cabinet or box suitable for the environment in which it is located, where the enclosed equipment consists of eight or fewer listed components, other than wires, cables, cords, terminal assemblies, nonelectrical components, and those covered under item B, provided that the devices are not electrically connected to circuits on a printed wiring board other than those circuits covered under item B, is not required to be listed.

- D. Custom-made electrical equipment or related installations that are designed and manufactured to a purchaser's specifications and are not marketed to the general public are exempt from listing and labeling requirements. Equipment or installations exempt under this item are subject to the following:
- (1) they must be determined to be safe for their intended use by the manufacturer on the basis of test data which the purchaser keeps and makes available to the electrical inspection authority having jurisdiction, as required by Code of Federal Regulations, title 29, section 1910.399 (1991), for equipment or installations subject to national occupational safety and health laws; or
- (2) they must be inspected by the electrical inspection authority having jurisdiction for compliance with the construction requirements of the applicable electrical standards used by electrical testing laboratories to evaluate the equipment, or the National Electrical Code. Schematic wiring diagrams, component layout diagrams, and component electrical rating information shall be provided to enable evaluation under this subitem.
- E. Utilization equipment as defined by the National Electrical Code is not required to be listed if:
- (1) the equipment includes eight or fewer electrical components which are listed or are exempt from listing by item B or C; and
- (2) all wiring that is part of the equipment is in compliance with the National Electrical Code.