

# Safety for All

Your Guide to Charging Systems Safety Certification

Charging systems that power our digital world both in and outside the classroom should keep devices, students and staff safe. But not all device charging systems are created equal.

Charging systems that are not fully evaluated and certified may exceed allowable load limits, which can cause safety hazards like electrical arcing. They may also have dangerous pinch points and be prone to tipping. Some manufacturers use individual components that are safety certified, but then combine them into a larger charging system that is not certified.

Districts should choose products with safety certifications for the complete, integrated system. You should also work with a supplier that offers professional-grade quality testing to ensure the safety of your devices and facilities, and most importantly, your students and staff.

#### THE RISKS OF USING NON-CERTIFIED PRODUCTS

#### Fire hazards can occur if:

- The critical materials are not fire resistant and a battery or electrical fault occurs
- The enclosure can let out flames or molten metal if an electrical fault occurs inside of the enclosure

#### Electrical hazards can occur if:

• Energized circuitry can be touched or if exposed metal is not safely grounded or properly isolated

#### Mechanical hazards can occur if:

- Pinch points, tip, crush or cut, sharp edges, and moving parts can injure students and staff
- It exceeds allowable load limits, causing electrical arcing, facility problems and/or interference with other equipment

#### WHY SAFETY CERTIFICATION?

Certification ensures that the supplying circuit will not be overloaded and cause problems with your facility, interfere with other equipment or become a fire hazard. It also helps protect against mechanical hazards that can impact your people and devices.

### **KEY SAFETY REQUIREMENTS**

Safety and electromagnetic compatibility (EMC) requirements for electronic products stem from the Code of Federal Regulations (CFR) in the U.S. and the New Approach Directives in the EU. Other countries have their own regulations, but most standards are compliant with these guidelines.

#### EMC requirements originate from:

- U.S.—FCC (Federal Communications Commission) (47 CFR part 15 Subpart B)
- EU-EMC Directive 2014/30/EU

#### Safety requirements originate from:

- U.S.—OSHA (Occupational Safety and Health Administration) (29 CFR Part 1910 Subpart S)
- EU—Low Voltage Directive 2006/95/EC

#### **COMPLIANCE TO U.S. FEDERAL REGULATIONS**

In the U.S., electrical equipment must be approved by the Nationally Recognized Test Laboratory (NRTL) if there is an applicable standard (e.g. UL60950, UL2442, etc.). Listings by NRTLs are public and are found in labeling, manuals and online listings.

The equipment should also be tested to show compliance with the FCC regulations. A label on the product should state that it complies with these regulations prior to marketing or selling the device.

#### WHAT TO LOOK FOR

Electrical products in the U.S. must be certified to meet OSHA requirements. Labeling must include an NRTL mark.



Electrical products must be tested and labeled with the FCC specified note for an unintentional radiator (Class A or B). For example:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### **COMPLIANCE TO EU DIRECTIVES**

In Europe, electrical equipment must be CE marked. A Declaration of Conformity should identify the applicable directives and the rationale that the equipment complies with those directives.

For example:

- Low Voltage Directive 2014/35/EU
- EMC Directive 2014/30/EU
- RoHS Directive 2011/65/EU

EMC and safety test reports allow product labeling stating compliance with the regulatory requirements including guidance in user documentation. CE marking for EU is authorized by generation of a Declaration of Conformity.

### WHAT TO LOOK FOR

In the EU, electrical products must be CE marked:

# CE

If a product is CE marked, a Declaration of Conformity must be available upon request. The manufacturer must declare the basis for compliance with the applicable directives.



### **ERGOTRON'S SAFE & CERTIFIED CHARGING SOLUTIONS**

The laws can be complex, so we do the hard work for you by applying the global standards and conducting rigorous product testing to ensure we comply (and many times exceed!) regulations worldwide. Our device management systems, including our charging carts and wall mounts, use redundant safety features to help keep all users safe.

Both the individual components and the entire integrated product is safety certified, including UL certification and CE markings. Electrical products are tested at an internationally approved and recognized laboratory to standards compatible with U.S. (FCC), EU (EN) and other country requirements. Our equipment ratings meet the National Electrical Code, which ensures product quality and consistency.

Third-party testing by the Nationally Recognized Testing Laboratory (NRTL) demonstrates compliance to standards accepted by the U.S. and international organizations. Ergotron's manufacturing factory is also regularly audited by NRTL to ensure consistency and quality. We evaluate products against rigorous standard for numerous hazards to help protect users so they can safely engage with technology now and in the future.

Learn more about our safe movement solutions for education at www.ergotron.com/education.

USING HUMAN-CENTERED DESIGN PRINCIPLES AND THE TECHNOLOGY OF MOVEMENT, WE BUILD ENVIRONMENTS THAT HELP PEOPLE THRIVE.

### MOVING YOU FORWARD









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