STANDARDS UPDATE NOTICE (SUN)
ISSUED: November 20, 2024

STANDARD INFORMATION

Standard: CSA C22.2 No. 127
Standard ID: Equipment and Lead Wires [CSA C22.2#127:2024 Ed.10]
Previous Standard ID: Equipment and Lead Wires (R2022) [CSA C22.2#127:2018 Ed.9]

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **February 27, 2026**

IMPACT, OVERVIEW, AND ACTION REQUIRED

Impact Statement: Per our accreditation, Intertek is required to review reports against the standard revisions to confirm compliance. Once compliance is confirmed, the standard reference in the report is updated to show continued compliance to the technical requirements of the standard. Reports not updated to this version by the effective date above will be withdrawn.

Overview of Changes:

- Addition of mandatory FT2 Flame test for all decorative cord types
- New mandatory marking for Type REW to indicate insulation material
- Decorative Cords rated (-40 °C) will now have mandatory low temperature marking
- adding requirements for marking and tests for laser printing

Specific details of new/revised requirements are found in table below

Current Listings Not Active? – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records. We will do this at no charge as long as Intertek is notified in writing prior to the review of your reports.

STANDARD INFORMATION

CLAUSE	VERDICT	COMMENT
		Additions to existing requirements are <u>underlined</u> and deletions are shown ~~lined out~~ below.
5	Info	**Construction (all types except PXT, PXWT, TX, CXWT, DPTW, and DPT)**
5.9		***New section added;*** **Construction — Types PXT, PXWT, TX, CXWT, DPTW, and DPT** The conductors of all types of decorative cord shall use flexible stranding. All of the circuit conductors in a decorative cord shall be the same size. See standard for details.
6	Info	**Tests**
6.1	Info	**Equipment wires**
6.1.1	Info	**Physical properties of insulation**
6.1.1.1		The physical properties of insulation, when tested before and after accelerated aging, shall comply with the applicable requirements in Table 3. <u>The exterior surface of insulation with laser printing shall not be buffed or skived in preparation for the test.</u>
6.1.2	Info	**Flame**
6.1.2.3		**Flame test (FT2) — For Types TXF, TXF-S, TXFW, and TXFW-S** A specimen of finished cable shall be tested in accordance with the FT2/FH/Horizontal flame test in CSA C22.2 No. 2556. The total length of char shall not exceed 100 mm (4 in), and the dripping particles emitted by the specimen during or after the application of flame shall not ignite the cotton. Ignition shall be deemed to have taken place if a visible flame is produced, emanating from the cotton, which can be seen with normal vision or corrected-to-normal vision. Flameless charring of the cotton shall not be deemed to be ignition.
6.1.16	Info	**Insulating varnish — Types TEW, REW, and TEWN**
6.1.16.2		***New clause added;*** The apparatus and method for the dielectric shall be in accordance with the Dielectric voltage- withstand test (Method 1, in water) in CSA C22.2 No. 2556. The forced air-circulating oven in Clause 6.1.16.1shall be in accordance with the Physical properties (ultimate elongation and tensile strength) test in CSA C22.2 No. 2556.

CLAUSE	VERDICT	COMMENT
6.2	Info	**Lead wires**
6.2.1	Info	**Physical properties of insulations**
6.2.1.1		The physical properties of the various insulations, before and after accelerated aging, shall comply with the applicable requirements given in Table 3. The exterior surface of insulation with laser printing shall not be buffed or skived in preparation for the test.
6.3	Info	**Types GTO and ICS cables**
6.3.1	Info	**Physical properties of insulation**
6.3.1.1		The physical properties of insulation, when tested before and after accelerated aging, shall comply with the applicable requirements shown in Table 3. The exterior surface of insulation with laser printing shall not be buffed or skived in preparation for the test.
6.3.2	Info	**Physical properties of jackets**
6.3.2.1		The physical properties of jackets, when tested before and after accelerated aging, shall comply with the requirements shown in Table 31. The exterior surface of jackets with laser printing shall not be buffed or skived in preparation for the test.
6.4	Info	**Electronic wires — Single-conductor thermoplastic types and twin lead wires**
6.4.2	Info	**Physical properties of insulation**
6.4.2.1		The physical properties of insulation, when tested before and after accelerated aging, shall comply with the applicable requirements shown in Table 3. The exterior surface of insulation with laser printing shall not be buffed or skived in preparation for the test.
6.4.3	Info	**Physical properties of jackets**
6.4.3.1		The physical properties of jackets, when tested before and after accelerated aging, shall comply with the requirements shown in Table 31. The exterior surface of jackets with laser printing shall not be buffed or skived in preparation for the test.
6.5	Info	**Electronic wires — Multiple-conductor thermoplastic types**
6.5.2		**Physical properties of insulation** The conductor insulation shall meet the requirements of Clause 6.4.2. The exterior surface of insulation with laser printing shall not be buffed or skived in preparation for the test.
6.5.3		**Physical properties of overall insulating coverings** The insulating covering over the assembly and the shield (if used) of multiple-conductor Types TR-64, TR-32, and TTR wires shall comply with the physical requirements shown in Table 3. The exterior surface of overall insulating coverings with laser printing shall not be buffed or skived in preparation for the test.

CLAUSE	VERDICT	COMMENT
6.6	Info	**Electronic wires — Single-conductor thermoset types**
6.6.2	Info	**Physical properties of insulation**
6.6.2.1		The physical properties of insulation, when tested before and after accelerated aging, shall comply with the applicable requirements shown in Table 3. The exterior surface of insulation with laser printing shall not be buffed or skived in preparation for the test.
6.6.3	Info	**Physical properties of jackets**
6.6.3.1		The physical properties of jackets, when tested before and after accelerated aging, shall comply with the requirements shown in Table 31. The exterior surface of jackets with laser printing shall not be buffed or skived in preparation for the test.
6.6.4		**Physical properties of overall insulating covering** The physical properties of insulating covering, when tested before and after accelerated aging, shall comply with the requirements shown in Table 3, except for classes that include high-density polyethylene, for which the rate of separation of the jaws may be 0.85 mm/s. The exterior surface of overall insulating coverings with laser printing shall not be buffed or skived in preparation for the test.
6.7	Info	**Electronic wires — Multiple-conductor thermoset types**
6.7.2		**Physical properties of insulation** The conductor insulation shall meet the requirements of Clause 6.6.2. The exterior surface of insulation with laser printing shall not be buffed or skived in preparation for the test.
6.7.3		**Physical properties of overall insulating coverings** The insulating coverings over the assembly and the shield (if used) of a multiple-conductor cable shall comply with the physical requirements, as applicable, shown in Table 3. The exterior surface of overall insulating coverings with laser printing shall not be buffed or skived in preparation for the test.
6.8		***New section added;*** **Decorative cords** The physical properties of insulation, when tested before and after accelerated aging, shall comply with the applicable requirements in Table 3. The exterior surface of insulation with laser printing shall not be buffed or skived in preparation for the test. See standard for details.

CLAUSE	VERDICT	COMMENT
7	Info	**Marking**
7.1	Info	**Product**
7.1.1		**For types other than PXT, PXWT, TX, CXWT, DPTW, and DPT** Finished products having an overall diameter of 1.3 mm and larger shall be marked durably and legibly with the following information, at intervals of not more than 1 m: k) REW insulated with cross-linked PVC shall be surface marked with the type designation followed by (XLPVC), and REW insulated with cross-linked chlorinated polyethylene shall be surface marked with the type designation followed by (CPE). For types with an overall braid, the markings may appear on the braid, conductor insulation, or marker tape.
7.1.2		***New section added;*** **For types PXT, PXWT, TX, CXWT, DPTW, and DPT** Unless otherwise specified, the marking shall consist of surface printing, laser printing, indent marking, or embossing. No ampacity or other current designation or the word “outdoor” shall be marked. Laser printing shall be acceptable if: See standard for details.
7.2	Info	**Package**
7.2.1		**For types other than PXT, PXWT, TX, CXWT, DPTW, and DPT** Each coil or spool shall be legibly marked with the following: h) REW insulated with cross-linked PVC shall be marked with the type designation followed by (XLPVC) and REW insulated with cross-linked chlorinated polyethylene shall be marked with the type designation followed by (CPE). As an alternative to the marking in Clause 7.2b), the date of manufacture by month and year may be included among the product markings described in Clause 7.1. The marking shall be legible on or through the outer surface of the wire or cable.

CLAUSE	VERDICT	COMMENT
		New clause added;
		For types PXT, PXWT, TX, CXWT, DPTW, and DPT
		A tag on which the information specified in Items a) to g) is indicated plainly shall be attached to every shipping length of finished wire or cable. However, if the wire or cable is wound on a reel or coiled in a carton, the tag shall be glued, tied, stapled, or otherwise acceptably attached to the reel or carton instead of to the wire or cable, or the tag shall be eliminated, and the information printed or stenciled directly onto the reel or carton. The following information shall be included:
7.2.2		a) manufacturer's name, assigned file number, registered trade name, or trademark; b) date of manufacture by month and year (a code may be used); c) type designation; d) voltage rating; e) the number of conductors and size(s). The marking shall be in accordance with Clause 7.1.2.3d); f) the words "Not for sale to the general public" on the following products: i) TX; ii) PXT; and iii) single-conductor component of CXWT; and g) the words "Single-conductor component CXWT to be used only for the manufacture of two-conductor CXWT".