

Formal Interpretations/ Interprétation formelle

This section lists questions that individuals have submitted about a particular standard. Each question has been reviewed and answered by the appropriate committee. If you would like to submit a question about a particular standard, please see the end notes in the preface of that standard.

Posted December 7, 2017

The following interpretations regarding CSA Standard C22.1-15, *The Canadian Electrical Code, Part 1, 23rd edition*, have been formally approved by the Technical Committee for Canadian Electrical Code, Part I (Inside Wiring Rules):

IMPORTANT NOTES:

1. The interpretations are based on the 2015 edition of the CE Code, Part I.
2. In some instances, Rules have been revised or re-numbered for the 2018 edition of the CE Code (available January 2nd, 2018).
3. The CE Code, Part I is a voluntary standard developed as a model Code. Consult with the authority having jurisdiction to determine applicability of these interpretations within their local regulations.

Question 1: Is a receptacle that complies with Rule 26-704 and that is supplied as an integral part of a roof top unit considered to meet the requirements of Rule 2-314?

Answer: Yes

Question 2: With respect to Rule 6-112(1) is it required that a means of attachment shall be provided for telephone and/or cable TV providers in-coming overhead utility cables?

Answer: No

Question 3: With respect to Rule 6-212(1) is it permitted to make the water bond and/or gas bond connection in the main disconnect area of a combination breaker panel?

Answer: No

Question 4: Are the electric space-heating and air-conditioning loads in 8-106 (4) required to be installed so that only one can be operated at any one time if taking only the greater load when calculating the demand ampacity?

Answer: No

Question 5: As per 8-200 (1)(a)(vii), If an electric range has not been provided for, and there are multiple loads with a rating over 1500 watts each, and for the purpose of service calculation we add these multiple loads with ratings over 1500 watts at their 100% ratings - to the combined load up to 6000 watts. Do we add to this combined load (that consists of the sum of all multiple loads, each being rated at more than 1500 watt) 25% of the amount by which the combined load exceed 6000 watts?

Answer: Yes



Question 6: Is Subrule 8-400(2) intended to restrict the circuit ampacity of automotive heater receptacles to a maximum of 15 amps?

Answer: Yes

Question 7: Is an installation using a 20 amp receptacle and circuit used for block heaters for a large truck compliant with Rule 8-400(2)?

Answer: No

Question 8: With respect to Rules 18-104(2) and 18-154(2), is it intended that a LBY elbow conduit fitting be permitted to be installed between the conduit seal and an explosion proof enclosure in a zone 1 or 2 location?

Answer: Yes

Question 9: Per Rules 18-154(1)(b) *Sealing, Zone 2* and J18-154(1)(b) *Sealing, Class 1, Division 2*, is a RTRC XW coupling viewed in the same manner as a rigid steel coupling?

Answer: Yes

Question 10: Does Subrule 26-400(1) exempt the requirement for a panelboard to be installed in each dwelling unit, in new single dwellings that have been subdivided by construction to contain an accessory (secondary) suite which is not individually metered for electrical power consumption?

Answer: Yes

Question 11: Where a branch circuit originates from a panelboard within a dwelling unit and feeds receptacles (rated 125 volt, 20 amps or less) that are associated with but outside the dwelling unit (such as in a yard, accessory building or detached garage), does that branch circuit require AFCI protection as described in 26-724 (f) and (g)?

Answer: No

Question 12: Where a feeder originates from a panelboard within a dwelling unit to a subpanel in a location associated with but outside the dwelling unit (such as in an accessory building or detached garage), are receptacles located outside the dwelling unit (rated 125 volt, 20 amps or less) fed from that subpanel required to have AFCI protection as described in 26-724 (f) and (g)?

Answer: No

Question 13: Does Rule 26-724(f) apply to an existing branch circuit in which one or more existing receptacles are intended to be replaced?

Answer: No



Question 14: When increasing the overcurrent protection of a feeder supplying a group of motors to allow for simultaneous starting in accordance with 28-204(2), after performing the calculation outlined in 28-204(2)

“permitted to be increased as necessary, to a maximum that does not exceed the rating permitted for a single motor having a full load current rating not less than the sum of the full load current ratings of the greatest number of motors that start simultaneously, provided that this value does not exceed 300% of the ampacity of the feeder conductors”

should we then add the sum of the full load current ratings of all other motors that will be in operation at the same time?

Question 15: Are industrial skids covered by the Scope of Section 70?

Answer: Yes

Posted December 7, 2017

The following interpretation regarding CSA Standard C22.3 No.1-15, Clause 5.10.1.2, has been approved by the Technical Committee on Overhead Systems:

Question 1: Are these supply cables “protected by a covering that provides suitable mechanical protection”?

Answer: Referencing the picture provided, no.

Question 2.1: Is the factory applied insulation considered “suitable mechanical protection”?

Answer: No, factory applied insulation is not considered suitable mechanical protection.

Question 2.2: If the answer is “No” to Question 2.1, what would constitute as “suitable mechanical protection”?

Answer: Suitable mechanical protection may include but is not limited to fully armored cable, liquid tight flex conduit, rigid conduit, and U guard, etc.

Question 3: Would a u-guard, conduit, or additional type of electrical insulation be required?

Answer: Yes, examples of mechanical protection are in the answer to Question 2.2. Additional electrical insulation is not required.

Posted November 1, 2017

The following interpretation regarding CSA Standard N286-12, Clause 5.4.10 (and parallel Clauses 6.5.10, 7.6.10, 8.5.10), has been approved by the N286 Technical Committee on Management Systems:



Question: Was the intent of Clause 5.4.10, 6.5.10, 7.6.10, 8.5.10, and 9.5.10 for the control of items that require special handling or special tooling and equipment?

Answer: Yes

The following interpretation regarding CSA Standard N286-12, Clause 4.9, has been approved by the N286 Technical Committee on Management Systems:

Question 1: Was it the intention of the committee that problems are required to be identified and resolved (which can include accepting the problem and determining that no action is necessary)?

Answer 1: Yes

Question 2: Was it the intention of the committee that if any work is required to be done as a result of the identification and resolution of the problem that that work shall be managed?

Answer 2: Yes

Posted September 22, 2017

The following interpretation regarding CSA Standard N285.0-12 and Update 2, has been approved by the NPP Pressure-Retaining Systems & Components (Z953).

Question: Is it the intent of Clause 14.6.2.2 to exempt component pressure testing of replacement items with end connection size NPS ½ and smaller, without regard to component design or fabrication standard requirements?

Answer: No

Posted August 8, 2017

The following interpretation regarding CSA Standard CSA Z259.2.5-17, *Fall arresters and vertical lifelines* has been approved by the Technical Committee on Fall Protection:

Question: Does the wording “*in accordance with this Standard*” in Clauses 7.1 b), and 7.3 b), of CSA Z259.2.5-17 refer to Clause 4.3.1 of CSA Z259.2.5-17?

Answer: Yes

Posted August 7, 2017

The following interpretation regarding CSA Standard N285.4-14, Cl 4.2.10.2 a) i), has been approved by the N285B Technical Committee on Periodic Inspection of Nuclear Power Plant Components:



Question: N285.4-14, Clause 4.2.10.2 a) i) states that the scan angles for weld examination shall be conducted with two angle beams separated by at least 10 degrees. Does this statement refer to the nominal probe angle?

Answer: Yes

Posted July 24, 2017

The following interpretation regarding CSA Standard Z662-15, Cl 8.7.7.3, has been approved by the K110 Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials

Question #1a: Is a dead-weight tester required to be used on a Strength or Leak Test for the purposes of verifying the accuracy of the pressure & temperature chart recorders used (in-place) during testing?

Answer #1a: No. Any appropriate calibrated instrument may be used to verify pressure and temperature chart recorders.

Question #1b: As written in the CSA Z662 commentary, can any appropriate calibrated measuring device (e.g., a calibrated pressure gauge or temperature measuring device) be used to verify the accuracy of the chart recorders?

Answer #1b: CSA does not provide interpretations on non-consensus documents. The Commentary is not part of the Standard and has not been formally reviewed or approved by the Technical Committee. Please refer to the first page of the Commentary.

The following interpretation regarding CSA Standard Z662-15, Cl 5.2.6.4, has been approved by the K110 Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials:

Question: If the blind flange is drilled and a welded connection (flat socket-weld-olet) is used (in lieu of a threaded connection) specifically for a drain connection, is this acceptable?

Answer: Not applicable, this clause does not address welded connections.

The following interpretation regarding CSA Standard Z245.30-14, Cl 7.5.2.1, has been approved by the K110 Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials

Question #1: Can the coating of flat panels be used to meet the applied coating quality testing requirements of system FC1, 2, 3, in table 6?



Answer #1: Yes, provided the company approves it. See ‡ Note to Table 6:

‡ Alternate test methods are acceptable providing they are approved by the company

Question #2: Can the coating of flat panels be used to meet the applied coating quality testing requirements of system FC4, 5, 7, in table 7?

Answer #2: No.

Question #3: Can the coating of flat panels be used to meet the applied coating quality testing requirements of system FC6 in table 8?

Answer #3: No.

The following interpretation regarding CSA Standard Z245.22-14, Cl 6.1.1(a), has been approved by the K110 Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials

Question: We currently use cyclopentane as a blowing agent in the production of polyurethane foam insulation. This raw material may be purchased through multiple suppliers, but regardless of supplier, the cyclopentane must meet our internal specifications to be purchased. Does a change in cyclopentane supplier constitute a change in the manufacturer of the foam insulation materials?

Answer: Yes

The following interpretation regarding CSA Standard Z245.22-14, Table 2 and CSA Standard Z245.30-14, Table 4 has been approved by the K110 Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials

Question #1: CSA Z245.30 Table 4 (Manufacturer qualification coating test requirements for System FC6) has a column that details the number of test specimens required and also has a column that details the test method to be used. In cases where the “number of test specimens” in Table 4 differs from the number of test specimens required by the ASTM test method being referenced, is it permissible to supersede the ASTM number of test specimens with the CSA Z245.30 Table 4 number of test specimens when qualifying polyurethane foams in accordance with CSA Z245.30?

Answer #1: Yes

Question #2: Can the number of test specimens listed in CSA Z245.30 be used to qualify polyurethane foams to CSA Z245.22?

Answer #2: No.



Question #3: Do the number of test specimens required by the ASTM test method need to be followed?

Answer #3: Yes, unless otherwise stated in CSA

The following interpretation regarding CSA Standard Z245.22-14, Table 2 and CSA Standard Z245.30-14, Table 4 has been approved by the K110 Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials

Question #1: Is compressive strength testing (before aging) at maximum design temperature ± 3 deg C required in order to qualify a polyurethane foam to the CSA Z245.22 standard?

Answer #1: No.

Question #2: Is compressive strength testing on aged test specimens required in order to qualify a polyurethane foam to the CSA Z245.22 or CSA Z245.30 standard?

Answer #2: No.

The following interpretation regarding CSA Standard Z245.22-14, Table 2 and CSA Standard Z245.30-14, Table 4 has been approved by the K110 Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials

Question: Is there a way to express ASTM D2842 test results so that they can be compared to the CSA Z245.22 and CSA245.30 acceptance criteria of " ≤ 20 g /1000 mL"?

Answer: No. This will be corrected in the next edition of the standards. Default to ASTM D2842 for the units and record value for pass/fail criteria.

The following interpretation regarding CSA Standard Z245.30-14, Cl 1.2, has been approved by the K110 Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials

Question: Does System FC1, FC2 and FC3 of the CSA Z245.30-14 standard include liquid applied vinyl esters and polyurethane coatings?

Answer: No.



The following interpretation regarding CSA Standard Z245.30-14, Cl 4.2, has been approved by the K110 Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials

Clause 4.2 states: “The manufacturer... shall have a documented quality management system.”

Question #1: Is the seller required to have a documented QMS?

Answer #1: Yes

Question #2: Is the seller considered the manufacturer as defined by the standard?

Answer #2: Yes

Question #3: Is the toll manufacturer considered the manufacturer as defined by the standard?

Answer #3: No

The following interpretation regarding CSA Standard Z245.20-14, Cl 12.11.2, has been approved by the K110 Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials

Question: Clause 12.11.2 states that the flexibility test specimen dimensions “...from test rings shall measure approximately 25mm x 200mm x pipe wall thickness”. The actual specimen thickness is then measured before testing per clause 12.11.3 (d).
Question: Is it allowable to physically reduce the specimen thickness, by means that does not affect the coating, in order to accommodate bend test apparatus restrictions?

Answer: Yes

The following interpretation regarding CSA Standard Z662-15, Table 4.10, has been approved by the K110 Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials

Question: Is the minimum wall thickness given in Table 4.10 to be maintained over the life of the pipeline?

Answer: No



The following interpretation regarding CSA Standard Z662-15, Cl 16.3.3, has been approved by the K110 Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials

Question: Can a transition piece be considered as a piece of pipe?

Answer: Yes, if made from pipe.

The following interpretation regarding CSA Standard Z662-15, Cl 16.6.4, has been approved by the K110 Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials

Question: Weld hardness measurement by Brinell method (HBW): is it acceptable according to Clause 16.6.4 of Z662-15?

Answer: No.

The following interpretation regarding CSA Standard Z662-15, Cl 8.1, has been approved by the K110 Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials

Question: Does a valve (with flanged end connections) that has been manufactured and pressure tested in accordance with a recognized standard (e.g. CSA Z245.15, API 600, ASME B16.34, etc.), and the pressure testing requirements of that standard are less onerous than the requirements in Clause 8 of CSA Z662, also required to be pressure tested in accordance with Clause 8 of CSA Z662 before or after being assembled (bolted) in the piping system?

Answer: Yes.

Posted June 21, 2017

The following interpretation regarding CSA Standard N285.0-08 and Update No. 2, Clause 3, *General requirements for pressure-retaining systems and components in CANDU nuclear power plants*, has been approved by the Technical Committee on NPP Pressure-Retaining Systems & Components Z953:

Question: Is the intent of Clause 3 to consider metal removed as a result from scraping a pressure tube, as an “item”?

Answer: No



The following interpretation regarding CSA Standard N285.0-08 and Update No. 2, Clause 10.1, *General requirements for pressure-retaining systems and components in CANDU nuclear power plants*, has been approved by the Technical Committee on NPP Pressure-Retaining Systems & Components Z953:

Question: Is the intent of Clause 10.1 to apply to metal removed as a result from scraping a pressure tube?

Answer: No

The following interpretation regarding CSA Standard N285.0-08 and Update No. 2, Clause 14.7 and N285.0-12 Update No. 2, Clause 14.6, *General requirements for pressure-retaining systems and components in CANDU nuclear power plants*, has been approved by the Technical Committee on NPP Pressure-Retaining Systems & Components Z953:

Question: In reference to N285.0-08 Up. 2 Clause 14.7 and N285.0-12 Up. 2 Clause 14.6, Are bolted or threaded mechanical joints subject to pressure test?

Answer: No

Posted May 10, 2017

The following interpretation regarding CSA Standard CAN/CSA-Z5359:16, *Low-pressure hose assemblies for use with medical gases*, has been approved by the Technical Committee on Perioperative Safety:

Question: Does CSA Standard CAN/CSA-Z5359:16 apply to low-pressure hose assemblies internal to articulating arms typically installed in operating rooms?

Answer: Yes

Posted May 3, 2017

The following interpretation regarding CSA Standard C282-15, *Emergency electrical power supply for buildings*, Clause 7.3.5, has been approved by the Technical Committee on Emergency Electrical Power Supply for Buildings (C282):

Question: Is Clause 11.5.5 intended and/or allowed as a substitute for Clause 7.3.5?

Answer: No.

Posted April 21, 2017

The following interpretation regarding CSA Standard CAN/CSA-Z902-15, *Blood and blood components*, has been approved by the Technical Committee Blood and Blood Components:

Question: Does Clause 10.5.3, with the associated note referencing 8.2.4, indicate that a hospital transfusion service must repeat antigen typing (for antigens other than A, B and D) on a donor unit *if* the unit has been phenotyped by the blood supplier once (and is therefore not end labeled with an antigen typing result, but has a tag indicating the result)?

Answer: No. In discussion the TC agreed that re-testing by the hospital should not be necessary in the situation described. A formal vote was taken, and the TC confirmed that the answer to the interpretation question was “**No.**” In addition, the TC suggested the following changes to clarify the next edition of CSA Z902:

- In Clause, 8.2.4 specify that it applies to blood centre testing.
- In the note to Clause 10.5.3, remove the reference to Clause 8.2.4.

Posted March 8, 2017

The following interpretation regarding CSA Standard CSA N286-05, *Management System Requirements for Nuclear Power Plants*, Clause 5.13 item (e), has been approved by the N286 Technical Committee on Management Systems:

Question: Does this mean that the maintenance of permanent records need to be in hard copy format?

Answer: No

Posted March 1, 2017

The following interpretation regarding CSA Standard CAN/CSA-A440.4-07 (R2016), Clause 4.6.1, *Window, Door, and Skylight Installation*, has been approved by the Technical Committee on Industrial Products:

Question: Do acceptable flashing materials as described in the last sentence of Clause 4.6.1. also include other materials such as self-adhesive waterproofing membranes, as long as those materials meet the testing requirements described in Clause 4.6.2?

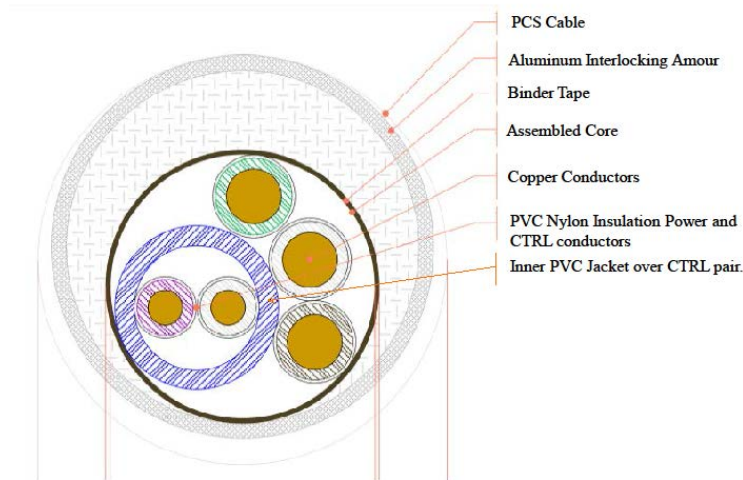
Rationale: The materials listed in Clause 4.6.1 are intended as examples of the most common flashing materials available at the time of writing and were not meant to be exhaustive.

Answer: Yes

Posted February 21, 2017

The following interpretation regarding CSA Standard C22.2 No. 239-09 (R2014), Update No. 2, *Control and instrumentation cables*, has been approved by the Technical Committee on Industrial Products:

Question 1: Does the construction/design in the figure bellow, meet CSA C22.2 No. 239-09, Update No. 2?



Answer: No. According to the Clause 5.5.1.4 of C22.2 No. 239-09 UPD2, *“For interlocked armoured cables, an inner jacket or protective tape shall be applied over the assembly. The overall inner jacket shall be as specified in Clause 5.6.3.1. Protective tapes may be used only over cable cores consisting of individually jacketed subassemblies. The thickness of such tapes shall be sufficient to prevent damage to the cable core from the armour.* The subject construction contains subassemblies that are not jacketed, therefore, an overall inner jacket is required in this case.

Question 2: Is an inner jacket under the amour mandatory as per CSA C22.2 No. 239-09 Update No. 2?

Answer: No. An overall inner jacket is not mandatory if the individual subassemblies are jacketed. If the subassemblies are not jacketed, then an overall inner jacket is mandatory.

Posted January 9, 2017

The following interpretation regarding CSA Standard N285.4-09, Clause 12.3, *Periodic inspection of CANDU nuclear power plant components*, has been approved by the Technical Committee Z954 on Periodic Inspection of Nuclear Power Plant Components (N285B):



Question: As per the requirements of Clause 12.3.2.1, can determination of the rolled joint Heq profile be established solely by calculation, using data from ex-service surveillance pressure tubes that satisfy the requirements of Clause 12.3.1.2, Items (a) and (b)?.

Answer: Yes

Question: In satisfying the requirements of Clause 12.3.2.1 for determining the Heq profile in the rolled joint region by calculation, is it permissible to use data from destructively examined pressure tubes that satisfy the requirements of Items (a) and (b) of Clause 12.3.1.2 but that were not formally designated as part of an Integrated Material Surveillance Program?

Answer: Yes

Posted February 14, 2017

The following interpretation regarding CSA Standard CSA B45.5-11/IAPMO Z124-2011, *Plastic plumbing fixtures*, has been approved by the Technical Committee on Plumbing Fixtures (B45):

Question: Are laboratory sinks made of plastic covered by the CSA B45.5-11/IAPMO Z124-2011 standard?

Answer: Yes