

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 6, 2011

The following interpretation regarding CSA Standard N285.6.4-05, *Thin-walled, large-diameter zirconium alloy tubing*, Clause 7.6 has been approved by the Z953 TC on CANDU Nuclear Power Plant Systems and Components (N285A).

Question: In the CSA N285.6.6-88 Standard Clause 6.5.2, is the intended depth dimension 0.075 mm instead of 0.75 mm?

Answer: Yes.

The following interpretation regarding CSA Standard N285.6.6-88, *Non-destructive examination criteria for zirconium alloys*, Clause 6.5.2 has been approved by the Z953 TC on CANDU Nuclear Power Plant Systems and Components (N285A).

Question: Does CSA N285.6.4-05, Clause 7.6 require UT inspection of outer tubing (4.6" diameter x 0.052" wall thickness) used for Liquid Zone Control assemblies?

Answer: No. The requirements of N285.6.4-06, Clause 7.6 are specific only to UT inspections of calandria tubes prior to flaring.

Posted October 21, 2011

The following interpretation regarding CSA Standard ASME A112.18.1/CSA B125.1-11, *Plumbing Supply Fittings*, Table 3, has been approved by the Plumbing Fittings Technical Committee (B125).

Question: If a lavatory faucet or a sink faucet is electronic and self-closing or metering is the number of cycles required by Table 3, 150,000?

Answer: Yes.

Question: If a bath or shower valve is electronic and self-closing or metering is the number of cycles required by Table 3, 150,000?

Answer: Yes.

Question: If a sink or lavatory faucet is electronic but not self closing or metering, is the number of cycles required by Table 3, 500,000?

Answer: Yes.

Question: If a bath or shower valve is electronic but not self closing or metering, is the number of cycles required by Table 3, 250,000?

Answer: Yes.

Question: If a lavatory faucet or a sink faucet is self-closing or metering is the number of cycles required by Table 3, 150,000?

Answer: Yes.

Question: If a bath or shower valve is self-closing or metering is the number of cycles required by Table 3, 150,000?

Answer: Yes.

Table 3
Life cycle test
(See Clauses 5.6.1.1.1 and 5.6.3.1.2.)

Fitting	Cycles
Bath or shower fitting*	250 000
Bidet fitting	50 000
Body spray, hand shower, or shower head adjusting mechanism (flow or function control)	10 000
Body spray or shower head ball joint	10 000
Divertor (tub-to-shower, shower-to-shower, tub spout, bidet, shampoo, shower-to-body spray, or in-line flow control device)	15 000
Laundry tub fitting	250 000
Lavatory or sink fitting*	500 000
Lawn or sediment faucet or hydrant	150 000
Metering faucet*	150 000
Self-closing faucet*	150 000
Side spray assembly, including the diverter (pullout spout handpiece function control or multi-function aerator)	10 000
Supply stop†	2 000
Swing spout	50 000

* Includes electronic fittings.

† Supply stops integral with automatic compensating valves are not subject to the life cycle test.

Posted August 16, 2011

The following interpretation regarding CSA Standard N285.0-06, *General requirements for pressure-retaining systems and components in CANDU nuclear power plants*, Clause 14.6.1, has been approved by the Z953 Technical Committee on CANDU Nuclear Power Plant Systems and Components (N285A). La demande d'interprétation suivante visant l'article 14.6.1 de la CSA N285.0-06, *Exigences générales relatives aux systèmes et aux composants sous pression des centrales nucléaires CANDU*, a été approuvée par le Comité technique Z953 sur les systèmes et les composants des centrales nucléaires CANDU (N285A).

Question: In CSA N285.0-06 clause 14.6.1 was it the intent of the CSA N285 TC to refer to Clauses RA-2250 to RA-2256 and Section RE of the ANSI/NBBI 23 – 2004 standard rather than clauses RA-2250-2294. Dans l'article 14.6.1 de la CSA N285.0, était-ce l'intention de Comité technique de se référer aux articles RA-2250 à RA-2256 et à la section RE de la norme ANSI/NBBI 23-2004 plutôt qu'aux articles RA-2250-2294?

Answer: Yes. Oui

Posted August 12, 2011

The following interpretation regarding CSA Standard **Z662-07, Oil and Gas Pipeline Systems**, Clause 5.2.3.2, has been approved by the Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials.

Question 1: Is notch toughness required in a NPS 4 or larger branch connection when:

- a) the run pipe requires notch toughness, but the branch pipe does not;

Answer: Yes

- b) both the run pipe and branch pipe require notch toughness;

Answer: Yes

- c) neither the run pipe or the branch pipe require notch toughness;

Answer: No

- d) the branch pipe requires notch toughness but the run pipe does not?

Answer: Yes

Question 2: When welding branch connections on an existing pipe, where notch toughness properties were not a requirement when installed (i.e. the pipeline was installed prior to the standard containing notch toughness requirements), if the answer to question 1(a) above is yes, then is notch toughness required in the branch connection?

Answer 2: Yes

Question 3: Is notch toughness required in a NPS 4 or larger pressure containing repair sleeve welded to the pipe with the run pipe requiring notch toughness if

- a) The pressure containing repair sleeve is not tapped to pressurize the annulus;

Answer: Yes

- b) The pressure containing repair sleeve is tapped to pressurize the annulus?

Answer: Yes

Posted August 12, 2011

The following interpretation regarding CSA Standards **Z245.20-10**, *Plant-Applied External Fusion Bond Epoxy Coating for Steel Pipe*; **Z245.21-10**, *Plant-Applied External Polyethylene Coating for Steel Pipe*; and **Z245.22-10**, *Plant-Applied External Polyurethane Foam Insulation Coating for Steel Pipe*; have been approved by the Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials.

CSA Z245.20-10

Question 1: Clause 12.8.1 (f) allows for the use of reverse osmosis water when preparing the 3% NaCl solution, however Clause 12.8.3.2 (h) specifies that the solution level be maintained by the addition of distilled water. Is it acceptable to use reverse osmosis water to maintain the solution level during the test?

Answer 1: Yes.

Question 2: Clause 12.7.3.3.1 (a) states that the Tg values shall be determined from the inflection point and references figures 4 & 5. Upon review it appears that figure 4 (epoxy powder) is indicating the onset point whereas Figure 5 (coating) indicates the inflection point. Is figure 4 indicating the wrong position for determining the Tg value?

Answer 2: Yes.

CSA Z245.21-10

Question 1: Clauses 5.6.1 & 5.6.2 make reference to Clause 5.2(b). Should the referenced clause be 5.2.1(b)?

Answer 1: Yes.

Question 2: Clauses 12.3.4, 12.4.5 and 12.5.5 require you to report the lot number for each coating component, but the term for primer has been changed to batch. Should we be reporting the primer batch number for these tests?

Answer #2: Yes.

CSA Z245.22-10

Question 1: Clause 6.1.1 states that, "The foam insulation coating system shall be qualified for production by the applicator by testing specimens removed from a pipe coated in the plant...." Does this mean that foam insulation system must be qualified for each individual application facility?

Answer 1: Yes.

Question 2: Clause 6.2.2.4 states that for liquid anti-corrosion coatings applied in line with the foam application the thickness measurements and holiday inspection shall be conducted without foam application at start up and every 4 hours of production. If a pipe fails to meet the thickness requirement or pass the holiday test is the disposition that all coated pipe from the last passing test to the noted failure must be stripped?

Answer 2: No.

Question 3: Clause 8.2.1 defines the maximum number of repairs per 12m pipe length, but doesn't provide a disposition if it is exceeded. Does the coated joint need to be stripped if 2 repairs per 12m pipe length is exceeded?

Answer 3: Yes.

Question 4: Clause 8.2.3 references Clause 8.2.1 for repair of remaining cracks and protrusions. Should this reference Clause 8.2.2 instead?

Answer 4: No.

Posted July 11, 2011

The following interpretation regarding CSA Standard **N289.5-M91, Seismic Instrumentation Requirements for CANDU Nuclear Power Plants**, Clause 3.2, has been approved by the N289 Technical Committee on Seismic Design. La demande d'interprétation soumis par OPG visant l'article 3.2 de la CSA N289.5-M91 a été revue par le Comité technique N289 sur *conception parasismique* le 28 février 2011. Le comité est d'accord sur la réponse suivante, qui a été approuvée par un vote nominal le 28 février 2011.

Question: Is it the intent of the clause to leave it to the Operator/Designer to decide the specific location for the annunciation feature requirement? est-ce c'est l'intention de cet article pour l'opérateur/concepteur à décider l'emplacement précis pour l'exigence d'alarme?

Answer: Yes. oui

Posted June 8, 2011

The following interpretation regarding CSA standard **Z195-09, Protective Footwear**, Clauses 4.6 and 6.5.1.2 have been approved by the Technical Committee on Protective Footwear.

Clause 4.6, Electric-shock-resistant Footwear – Design Requirements

Question: Are components that are simply attached to or applied to the surface of the sole considered to be “penetrating” the sole?

Answer: No. In this criterion, “penetrating” is referring to something that breaks through (pierces) the surface of the sole. Consequently, any component or accessory that attaches to or is applied to the sole, without actually breaking the surface, is not considered to be “penetrating” the sole.

Clause 6.5.1.2, Electric-shock-resistant Footwear – Test Equipment Set-up

Question: Should ESR footwear products be tested with all sole components normally sold with the product (OEM components and accessories)?

Answer: Yes. ESR footwear should be tested in all configurations and with all components (accessories) normally sold with the product (note: this does not include “after-market” components and accessories available from other non-OEM suppliers).

Posted May 24, 2011

The following interpretation regarding CSA standard **CSA N285.0-06, General requirements for pressure-retaining systems and components in CANDU nuclear power plants**, Clause 6.1.10.1, 6.1.10.2, 9.3.1, 9.3.2, 9.3.3 have been approved by the Technical Committee on CANDU Nuclear Power Plant Systems and Components.

Question: In CSA N285.0-06 are records required to be retained by the licensee for Clauses 6.1.10.1; 6.1.10.2; 9.3.1; 9.3.2 and 9.3.3 considered as non-permanent records in accordance with Clause 12.2.6

Answer: Yes

Posted May 24, 2011

The following interpretation regarding CSA standard **CSA N285.0-08, General requirements for pressure-retaining systems and components in CANDU nuclear power plants**, Clause 7.9.1.3 has been approved by the Technical Committee on CANDU Nuclear Power Plant Systems and Components.

Question: Does Clause 7.9.1.3 prohibit the use of instruments that have an inlet of NPS $\frac{3}{4}$ or smaller and registered as Class 1, 1C, 2, 2C, 3, 3C or 4 as replacements or part of a modification in a Class 1, 1C, 2, 2C, 3, 3C or 4 system or component:

Answer: No

Posted March 1, 2011

The following interpretation regarding Clause 4.14.2.11 and 4.14.3.8 of **CSA Standard Z662-07**, (Oil and Gas Pipeline Systems), has been approved by the Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials.

Question 1: As per Clause 4.14.2.11 and 4.14.3.8 of Z662-07, if ASME B31.3 has been used for a type of piping system in a compressor or pump building within a compressor or pump station, does it then mean that the piping in other associated buildings shall be according to ASME B31.3?"

Answer 1: Yes, if it is part of the same type of piping system.

Question 2: As per Clause 4.14.2.11 and 4.14.3.8 of Z662-07, if ASME B31.3 has been chosen for a type of piping system in various compressor or pump buildings within a compressor or pump station, does it then mean that the interconnecting piping between the buildings shall be according to ASME B31.3?"

Answer 2: Yes, if it is part of the same type of piping system.

Question 3: As per Clause 4.14.2.11 and 4.14.3.8 of Z662-07, if CSA-Z662 has been chosen for a type of piping system in various compressor or pump buildings within a compressor or pump station, does it then mean that the interconnecting piping between the buildings shall be according to CSA-Z662?"

Answer 3: Yes, if it is part of the same type of piping system.

Posted February 17, 2011

The following interpretation regarding CSA standard **CSA N285.0-08, General requirements for pressure-retaining systems and components in CANDU nuclear power plants**, Clause 11.2, 11.3, Supports, Clause 7.5.1(a), 14.3.2, 7.9.1.3 (update 1) and 7.9.2 (update 1) have been approved by the Technical Committee on CANDU Nuclear Power Plant Systems and Components.

Question 1: Do the requirements of 11.2 and 11.3 of CSA N285.0 apply to class 6 pressure-retaining piping or component and exempt from classification but registered piping and component? Est-ce que les articles 11.2 et 11.3 de la CSA N285.0

s'appliquent à la tuyauterie ou aux composants sous pression de classe 6 et sont-ils exempts de la qualification à l'exception de la tuyauterie et des composants enregistrés ?

Answer 1: No. The applicable requirements are contained in CSA B51. Non. Les exigences pertinentes se trouvent dans la CSA B51.

Question 2: Does an item manufactured from structural element that is used to connect together two or more pipe in a piping system to keep them apart, but is not transmitting any load to the building structure is considered a support as per CSA N285.0. Un article fabriqué d'éléments structuraux et qui relie deux ou plusieurs tuyaux dans un système de tuyauterie et en maintient l'espacement, sans transmettre aucune charge à la structure du bâtiment, est-il considéré comme un support en vertu de la CSA N285.0 ?

Answer 2: No as per defintion of support. Non étant donné la définition du terme support.

Question 3: Does an item manufactured from structural element providing damping thru friction only and that transmits loads to the building structure but does not carry the weight of the pipes need to be considered a support as per CSA N285.0. Un article fabriqué d'éléments structuraux et qui assure l'amortissement par friction uniquement et qui transmet des charges à la structure du bâtiment sans toutefois supporter les tuyaux doit-il être considéré comme un support en vertu de la CSA N285.0 ?

Answer 3: Yes. Oui.

Question 4: Is it the intent of Clause 7.5.1(a) to allow referencing existing system documents (certified or not) in a design specification to address content requirements as required by NCA-3252, provided that the design specification is certified as required by NCA-3255? : L'article 7.5.1 a) vise-t-il à permettre de citer en référence la documentation du système existante (certifiée ou non) dans une spécification technique en ce qui a trait aux exigences de contenu, comme l'exige la NCA-3252, si la spécification technique est certifiée conformément à la NCA-3255 ?

Answer 4: Yes. Oui.

Question 5: Is it the intent of Clause 14.3.2 to apply to replacement instruments registered in accordance with Clause 7.9.1.3? L'article 14.3.2 s'applique-t-il aux instruments de remplacement enregistrés selon l'article 7.9.1.3 ?

Answer 5: No. Non.

Question 6: Do clauses 7.9.1.3 and 7.9.2 require changing the classification of instrument lines to class 6 when instruments, registered to the requirements of CSA B51, are installed in nuclear class 1, 2 or 3 instrument lines? Les articles 7.9.1.3 et 7.9.2 exigent-ils de modifier la classification des conduites d'instrumentation à la classe 6

lorsque des instruments enregistrés selon CSA B51 sont installés dans des indique de classe 1, 2 ou 3, qualité nucléaire ?

Answer 6: No. Non.

Posted February 17, 2011

The following interpretation regarding **CSA standard CSA O86-09, Engineering Design in Wood**, clause 5.5.6.4.2 (b) has been approved by the Technical Committee on Engineering Design in Wood.

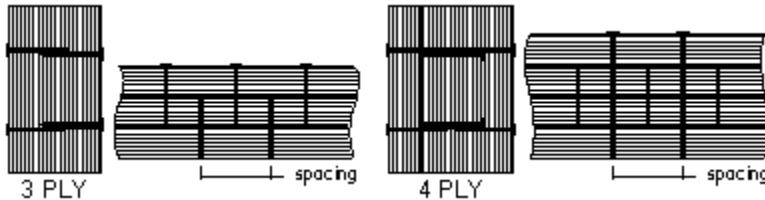
Solid sawn lumber members and with the increasing popularity of structural composite lumber (SCL) used in built up compression members, it is quite a challenge, and in some cases next to impossible using today's common construction practices, to provide nailing as described in CSA O86-09 [5.5.6.4.2 (b)]. The most popular method of fastening in today's construction industry is to use pneumatic nail guns and they typically do not support long spikes. The alternative is to purchase commercially available spikes and perform the installation with a conventional hammer. For many if not all SCL products pre-drilling would be required and that is not a common construction practice and some individuals would deem this a non viable alternative.

Question 1: Is it the intent of CSA O86-09 [5.5.6.4.2 (b)] to require fastening using long spikes?

Answer 1: Yes. The background information is contained in the paper, S. K. Malhorta and A. P. Sukurmar – A Simplified design procedure for built-up wood compression members. Canadian Journal for Civil Engineering Annual Conference 1989. This paper shows that the design provisions were developed based on the following assumptions:

- one nail must penetrate all members
- nail sizes were based on CSA B111 nails referenced in CSA O86 with respect to diameter and length.

Question 2: Can CSA O86-09 [5.5.6.4.2 (b)] be interpreted to permit nailing using standard 3" or 3.5" common wire or common spiral nails in such a way as to provide nailing, as I call it, per ply as shown below?



Recommendations: If the formulae are dependant on previous research and long spikes are to be used, I'd like to suggest that this clause be revisited to include a more practical method of fastening that compliments today's common construction practices.

Answer 2: No.

Posted January 4, 2011

The following interpretation regarding **CSA standard S16-09, Design of Steel Structures**, was reviewed by the Limit States Design of Steel Structures for Buildings Technical Committee.

Question: For double angle lintels in S16-09, Clause 13.6(e)(i) states: when $M_u > M_{yr}$ followed by the formula for M_r , and Clause 13.6(e)(ii) states when $M \leq M_{yr}$, followed by the formulas for M_r and M_u . Are the subscripts incorrect? Is the M_u for line (i) the same M_u formula following line (ii)?

Answer: Yes, it is incorrect. "when $M \leq M_{yr}$ " should read "when $M_u \leq M_{yr}$ ".