

**2018 British Columbia Plumbing Code
Public Review of Proposed Changes**



PROPOSED CHANGE: Asbestos

CHANGE NUMBER: 2018-BCPC-01-Asbestos

CODE REFERENCE: 2012 British Columbia Plumbing Code - Division B - Various References

DESCRIPTION OF THE PROPOSED AMENDMENT:

It is proposed to remove all direct permissions in the British Columbia Plumbing Code (BCPC) to asbestos containing products.

PROBLEM/GENERAL BACKGROUND:

The BCPC is based substantially on the model National Plumbing Code of Canada (NPC). The NPC is updated about every five years and British Columbia adopts most of the NPC requirements into the next edition of the BCPC. The 2018 BCPC will be based on the 2015 NPC with some changes specific to British Columbia.

The BCPC currently contains several direct references to asbestos containing materials. Due to health concerns related to asbestos containing materials, all direct permissions for these are proposed to be removed from the BCPC. The proposed changes show variations from the model 2015 NPC. Though the 2012 BCPC contains some other references to asbestos containing products, some of these have been deleted from the 2015 NPA. For instance, the standards CAN/CGSB-34.1-94, “Asbestos-Cement Pressure Pipe”, CAN/CGSB-34.9-94, “Asbestos-Cement Sewer Pipe”, CAN/CGSB-34.22-94, “Asbestos-Cement Drain Pipe”, and CAN/CGSB-34.23-94, “Asbestos-Cement House Connection Sewer Pipe” are not referenced in the 2015 NPC. Hence, these deletions are not shown above.

The code language shown below is the proposed final code language that will appear in the 2018 BCPC. Comments submitted should focus on the changes noted. Changes from the 2012 BCPC to the 2015 NPC are not identified.

2018 PROPOSED BRITISH COLUMBIA CODE LANGUAGE (~~Deleted text~~ / Added text):

1.3.1.2. Applicable Editions

1) Where documents are referenced in this Code, they shall be the editions designated in Table 1.3.1.2.

<p align="center">Table 1.3.1.2. Documents Referenced in the British Columbia Plumbing Code Forming part of Sentence 1.3.1.2.(1)</p>			
Issuing Agency	Document Number⁽¹⁾	Title of Document⁽²⁾	Code Reference
CSA	CAN/CSA-B127.1-99	Asbestos-Cement Drain, Waste and Vent Pipe and Pipe Fittings	2.2.5.1.(1) 2.2.6.3.(1) A-2.2.5., 2.2.6. and 2.2.7.
CSA	B127.2-M1977	Components for Use in Asbestos-Cement Building Sewer Systems	2.2.6.3.(1)

2.2.5.1. ~~Reserved~~ **Asbestos-Cement Pipe and Fittings**

~~1) Asbestos-cement pipe and its fittings for use in a drain, waste or vent system shall conform to CAN/CSA B127.1, "Asbestos-Cement Drain, Waste and Vent Pipe and Pipe Fittings."~~

~~2) Asbestos-cement water pipe and fittings shall not be used above ground.~~

2.2.6.3. ~~Reserved~~ **Cast-Iron Fittings for Asbestos-Cement Drainage Pipe**

~~1) Cast-iron fittings designed for use with asbestos-cement pipe for drainage purposes shall conform to the applicable requirements of~~

~~a) CAN/CSA B127.1, "Asbestos-Cement Drain, Waste and Vent Pipe and Pipe Fittings," or~~

~~b) CSA B127.2-M, "Components for Use in Asbestos-Cement Building Sewer Systems."~~

2.3.4.5. **Support for Horizontal Piping**

1) *Nominally horizontal* piping that is inside a *building* shall be braced to prevent swaying and buckling and to control the effects of thrust.

2) *Nominally horizontal* piping shall be supported as stated in Table 2.3.4.5.

Piping Material	Maximum Horizontal Spacing of Supports, m	Additional Support Conditions
Asbestos-cement pipe	2^(†)	None
Asbestos-cement pipe that is ≤ 300 mm long between adjacent fittings	1	None

~~Notes to Table 2.3.4.5.:~~

~~(†) As an alternative, asbestos-cement pipe, which is typically manufactured in 4 m lengths, may have 2 supports per length of pipe.~~

2.3.5.2. **Protection of Non-Metallic Pipe**

1) Where ~~asbestos-cement drainage pipe or~~ vitrified clay is located less than 600 mm below a basement floor and the floor is constructed of other than 75 mm or more of concrete, the pipe shall be protected by a 75-mm layer of concrete installed above the pipe. (See Note A-2.3.5.2.(1).)

2.8.1.1. **Attribution to Acceptable Solutions**

1) For the purposes of compliance with this Code as required in Clause 1.2.1.1.(1)(b) of Division A, the objectives and functional statements attributed to the acceptable solutions in this Part shall be the objectives and functional statements listed in Table 2.8.1.1. (See Note A-1.1.2.1.(1).)

Table 2.8.1.1. Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 2 Forming part of Sentence 2.8.1.1.(1)	
Acceptable Solutions	Objectives and Functional Statements ⁽¹⁾
2.2.5.1. ReservedAsbestos-Cement Pipe and Fittings	
(1)	{F20-OH2.1,OH2.4}
(2)	{F20-OP5}
2.2.6.3. ReservedCast Iron Fittings for Asbestos-Cement Drainage Pipe	
(1)	{F20-OH2.1,OH2.3}

A-2.2.5., 2.2.6. and 2.2.7. Pipe and Fitting Applications.

Table A-2.2.5., 2.2.6. and 2.2.7. Summary of Pipe and Fitting Applications Forming part of Note A-2.2.5., 2.2.6. and 2.2.7.											
Types of Piping and Fittings	Standard References	NPC References	Use of Piping and Fittings ⁽¹⁾								
			Drainage System			Venting System		Potable Water System			
			Above-ground inside building	Under-ground under building	Building sewer	Above-ground	Under-ground	Above-ground		Underground	
								Cold	Hot	Under building	Outside building
Asbestos-cement DWV pipe	-	-	-	-	-	-	-	-	-	-	-
Type I Class 3-000, sizes 8 in. to 24 in.	CAN/CSA-B127.1	2.2.5.1.(1)	P	P	P	P	P	N	N	N	N
Type II Class 4-000, sizes 3 in. to 24 in.		2.2.5.1.(1)	P	P	P	P	P	N	N	N	N

A-2.3.3.9. Linear Expansion

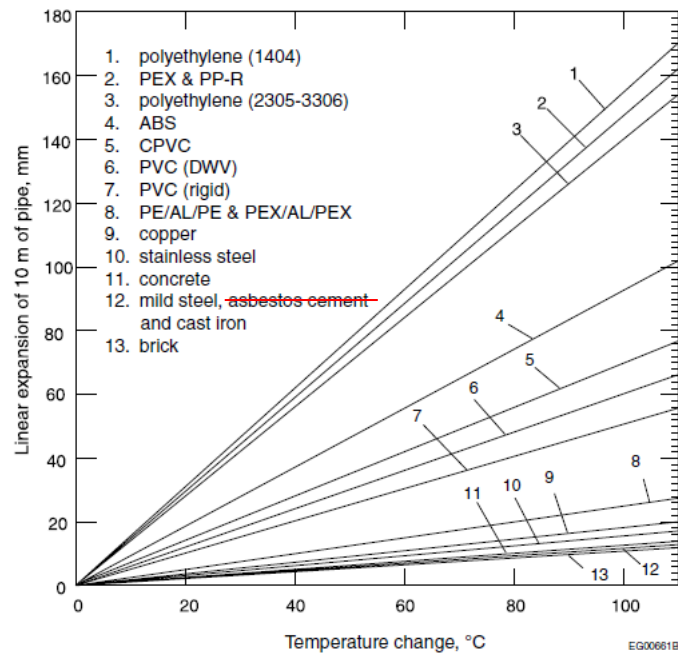


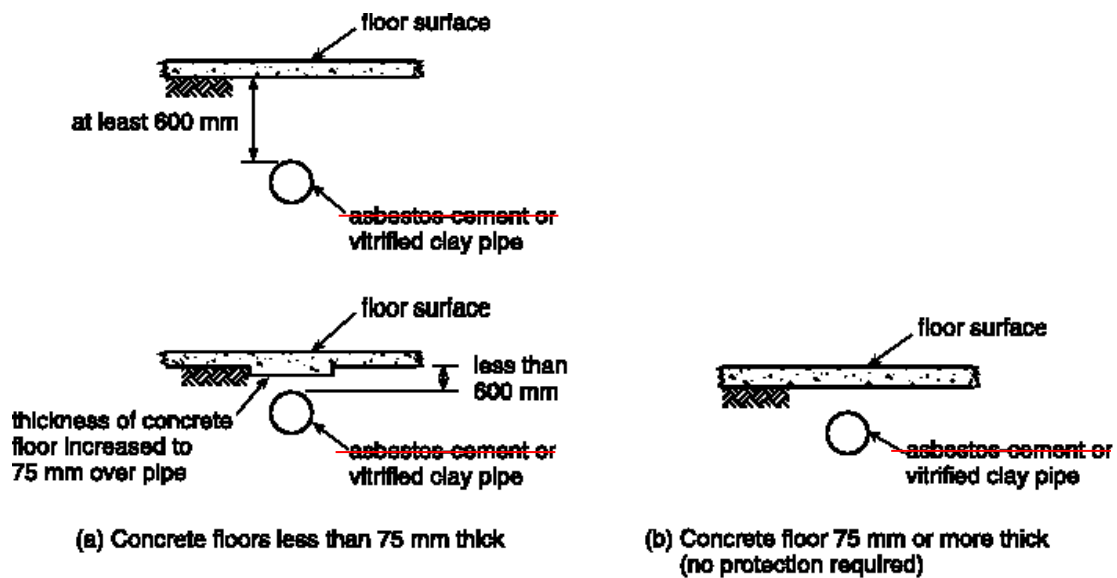
Figure A-2.3.3.9.
Linear Expansion

Example: To determine the expansion of 20 m of ABS pipe for a temperature change from 10°C to 60°C.

- Temperature change = 60 – 10 = 50°C,
- Enter the chart at 50°C, read up to ABS line, and then across to the mm scale = 47 mm/10 m of pipe,
- ∴ change in length of 20 m of pipe =

$$\frac{20}{10} \times 47 = 94 \text{ mm}$$

A-2.3.5.2.(1) Protection of Underground Non-Metallic Pipes.



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Figure A-2.3.5.2.(1) Protection of Underground Non-Metallic Pipes

RATIONALE FOR CHANGE:

Airborne particulate asbestos from handling or disturbing asbestos-containing materials can cause adverse health effects.

JUSTIFICATION/EXPLANATION:

The proposed change does not expressly prohibit asbestos containing materials to be used, as there are some instances where asbestos containing materials could be accepted as an alternative solution to the code's prescriptive requirements. There are also cases where a product standard referenced by the code may permit the use of asbestos containing products. However, the proposed changes remove all direct references to asbestos containing products from the BCPC as acceptable solutions because of the potential risk to the health and safety of building occupants.