1

EXPLANATION

Zoning and Development Fee By-law amending By-law regarding 2017 fee increases

Enactment of the attached By-law will implement Council's resolution of November 15, 2016, to increase fees for 2017.

Director of Legal Services
November 29, 2016

BY-LAW NO. 7BF

A By-law to amend
Zoning and Development Fee By-law No. 5585
to increase fees

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

1. Council:

   (a) repeals Schedule 1 of the Zoning and Development Fee By-law, and substitutes for it Schedule 1 attached to this By-law, which new Schedule 1 is to form part of the Zoning and Development Fee By-law;

   (b) repeals Schedule 2 of the Zoning and Development Fee By-law, and substitutes for it Schedule 2 attached to this By-law, which new Schedule 2 is to form part of the Zoning and Development Fee By-law; and

   (c) approves the fees set out in the new Schedules 1 and 2.

2. A decision by a court that any part of this By-law is illegal, void, or unenforceable severs that part from this By-law, and is not to affect the balance of this By-law.

3. This By-law is to come into force and take effect on January 1, 2017.

ENACTED by Council this day of , 2016

_____
Mayor

_____
City Clerk

Schedule 1

Development Permits

Current Fees

One-Family Dwelling, One-Family Dwelling with Secondary Suite, Two-Family Dwelling and Two-Family Dwelling with Secondary Suite

1. For a new one-family dwelling, one-family dwelling with secondary suite, two-family dwelling, or two-family dwelling with secondary suite, and its accessory building or accessory use to an existing one or two-family dwelling or one or two-family dwelling with secondary suite, where such an addition, alteration, change of use, accessory building or accessory use is equal to or greater than 60 m^2 in gross floor area:

   (a) where the permit would be issued as an outright approval or as a conditional approval pursuant to Section 3.2.7 of the Zoning and Development By-law $1,800.00

   (b) where the permit would be issued as a conditional approval, except as provided for in Sections 1(a), 1(c) and 1C $2,390.00

   (c) where the permit would be issued as a conditional approval after proceeding to a review by a Council-appointed advisory design panel $3,940.00

1A. Except as provided for in Section 1B, for an addition, alteration, relaxation, change of use, accessory building or accessory use to an existing one or two-family dwelling or one or two-family dwelling with secondary suite where such addition, alteration, change of use, accessory building or accessory use is less than 60 m^2 in gross floor area:

   (a) where the permit would be issued as an outright approval, or where a relaxation of the required yards, building depth or maximum building height is required and where the relaxation of a required rear yard would be less than 60% of what is required by the applicable District Schedule, or where the permit would be issued as a conditional approval pursuant to Section 3.2.7 of the Zoning and Development By-law $469.00

   (b) in all other cases $924.00

1B. For conversion of a one-family dwelling to a one-family dwelling with secondary suite $642.00

1C. Notwithstanding Section 1, for a one-family dwelling in the RS-3, RS-3A, RS-5, RS-6 or RS-7 Districts which includes permission by the Director of Planning to increase the maximum Floor Space Ratio otherwise permitted by the District Schedule $3,070.00

1D. Despite Section 1, for a two-family dwelling in the RS-7 District which includes permission by the Director of Planning to increase the maximum permitted Floor Space Ratio otherwise permitted by the District Schedule $3,070.00

1E. For a permit for a laneway house:

(a) where the laneway house is one-storey and there is no relaxation of siting or maximum height required $1,150.00

(b) in all other cases $1,760.00

Multiple Dwelling and Freehold Rowhouses

2. For a multiple dwelling or freehold rowhouse, or for an addition to an existing multiple dwelling or freehold rowhouse:

(a) where the permit would be issued as an outright approval or as a conditional approval pursuant to Section 3.2.7 of the Zoning and Development By-law:

Each 100 m^2 of gross floor area or part up to 500 m^2 ..... $1,020.00

For each additional 100 m^2 of gross floor area or part $510.00

Maximum fee $41,400.00

(b) where the permit would be issued as a conditional approval, except as provided in Section 2 (a):

Each 100 m^2 of gross floor area or part up to 500 m^2 ..... $1,390.00

For each additional 100 m^2 of gross floor area or part $851.00

Maximum fee $68,900.00

Other Uses (Other Than One or Two-family or Multiple Dwellings)

3. For a new principal building or use, or for an addition to an existing building or use, being in all cases other than a one or two-family dwelling and a multiple dwelling:

(a) where the permit would be issued as an outright approval or as a conditional approval pursuant to Section 3.2.7 of the Zoning and Development By-law:

Each 100 m^2 of gross floor area or part up to 500 m^2 ..... $701.00

For each additional 100 m^2 of gross floor area or part $337.00

Maximum fee $34,400.00

(b) where the permit would be issued as a conditional approval except as provided in Section 3(a):

Each 100 m^2 of gross floor area or part up to 500 m^2 ..... $1,230.00

For each additional 100 m^2 of gross floor area or part $701.00

Maximum fee $66,000.00

Alterations, Changes of Use (Other Than One or Two-family Dwellings)

4. For an accessory building or accessory use to a principal building or principal use already existing, or for an alteration, relaxation, or change of use to an existing building, being in all cases other than a one or two-family dwelling:

   (a) where the permit would be issued as an outright approval or as a conditional approval pursuant to Section 3.2.7 of the Zoning and Development By-law:

   Each 100 m^2 of gross floor area or part thereof $604.00

   Maximum fee $4,830.00

   (b) where the permit would be issued as a conditional approval, except as provided in Section 4 (a):

   Each 100 m^2 of gross floor area or part thereof $851.00

   Maximum fee $6,090.00

   (c) where the change of use does not require a comprehensive development review or minor amendment $306.00

Outdoor Uses

5. For a parking area, storage yard, nursery, or other development which, in the opinion of the Director of Planning, is similar:

   (a) where the permit would be issued as an outright approval or as a conditional approval pursuant to Section 3.2.7 of the Zoning and Development By-law:

   Each 200 m^2 of site area or part up to 1 000 m^2 ..... $469.00

   Each additional 200 m^2 of site area or part $160.00

   (b) where the permit would be issued as a conditional approval, except as provided in Section 5 (a):

   Each 200 m^2 of site area or part up to 1 000 m^2 ..... $642.00

   Each additional 200 m^2 of site area or part $306.00

5A. For a Farmers' Market $567.00

Developments Requiring Development Permit Board Approval

6. For an application which proceeds to the Development Permit Board:

   (a) instead of the fees referred to in Sections 1 to 4:

   Each 100 m^2 of gross floor area or part up to 10 000 m^2 ..... $1,000.00

Each additional 100 m^2 of gross floor area or part over 10 000 m^2 ..... $191.00

(b) instead of the fees referred to in Section 5:

Each 200 m^2 of site area or part up to 1 000 m^2..... $707.00

Each additional 200 m^2 of site or part..... $342.00

Child Day Care Facility, Cultural Facility Or Social Service Centre

7. For a child daycare facility, cultural facility or social service centre, where the applicant is an incorporated non-profit society $595.00

Demolitions

8. For the demolition of residential rental accommodation, a building listed on the Heritage Register or a residential building located in the RS-1, RS-3, RS-3A, RS-5 and RS-6 or FSD District $327.00

Preliminary Applications

9. For an application in preliminary form only.....25% of the fee that would, except for this provision, apply (with a minimum fee of $681.00)

NOTE: This fee will be deducted from the fee for an application in complete form which follows approval of a preliminary application.

Revisions

10. For the second revision and every subsequent revision of drawings which are required because of non-compliance with the Zoning and Development By-law, or because there is insufficient information to satisfactorily process the permit, or because the applicant wishes to alter the use or form of development and where less than 15% of the gross floor area or building exterior is altered or less than 15% of the gross floor area is changed in use:

where the permit is to be issued under:

(a) sections 1 and 7 of this schedule..... $306.00

(b) all other sections of this schedule .....10% of the fee that would, except for this provision, apply (with a minimum fee of $306.00)

Minor Amendments

11. For each minor amendment to a permit where less than 15% of the gross floor area or building exterior is altered or less than 15% of the gross floor area is changed in use and:

(a) where the original permit was issued under Sections 1 and 7 of this schedule $306.00

(b) where the original permit was issued under any other section of this schedule or where the exterior alterations are to a commercial building which has no development permit authorizing its construction and where the alterations are to not more than one storey ..... 25% of the fee that would, except for this provision, apply (with a minimum fee of $306.00)

Extensions And Renewals

12. For an extension of the period of validity of a development permit application or a development permit, or for a renewal of a development permit which has become void $642.00

13. For the renewal of a development permit issued with specified time limitations where the conditions of approval have not changed:

(a) for a community care facility or all uses where the applicant is a duly incorporated non-profit society $285.00

(b) for all other uses $602.00

NOTE: Where an application is made for the retention of identical uses on more than one site controlled by the same applicant, providing the renewals are required annually and are filed simultaneously, the applications may be combined and considered as one for the purpose of calculating the fee.

Board of Variance Appeals

14. For a permit which has been approved as the result of a successful appeal to the Board of Variance after refusal by the Director of Planning or the Development Permit Board ..... No Charge

Application Following Refusal

15. Where an application has been refused and, within 30 days of such refusal, the applicant reapplies with an application which seeks to rectify the reasons for refusal and where the application is, in the opinion of the Director of Planning, not materially different from the original application in terms of layout and design. ..... 50% of original application fee

Changes to Form of Development in CD-1 District

16. For a development permit application in a CD-1 district where a change to the form of development requires Council approval and where such change is not accompanied by an amendment to, or adoption of, a CD-1 By-law ..... $4,750.00 plus the development application fees that would, except for this provision, apply

Maintenance of Heritage Buildings

17. For a permit for the maintenance or minor repair of a building, structure, use or site designated under the Heritage By-law or located in an HA District $59.00

Awnings

18. For an awning where the permit will be issued combined with a building permit or a sign permit. $204.00

Higher Building Application Fee

19. Despite any other provision in this schedule 1 to the contrary, for an application for a building that will exceed 137 m, unless fee was collected under Schedule 2 during Rezoning $47,700.00

Schedule 2

Current Fees

Zoning By-law Amendments

Change Zoning District (Except to CD-1)

1. For an amendment to the Zoning District Plan to redesignate from one zoning district to any other zoning district except a new Comprehensive Development District:

   Up to 4 000 m^2 site area $12,840.00

   For each additional 100 m^2 of site area or part thereof $288.00

   Maximum fee..... $128,600.00

Text Amendments (Except CD-1)

2. For an amendment to the text of the Zoning and Development By-law $25,800.00

New CD-1 or Amendment to Existing CD-1 (Not Contemplated in an ODP)

3. For an amendment to the Zoning District Plan to redesignate from a zoning district to a new Comprehensive Development District that is <u>not</u> contemplated in an Official Development Plan,
   -or-
   for an amendment, in terms of permitted uses and regulations, to an existing Comprehensive Development District By-law that is <u>not</u> contemplated in an Official Development Plan:

   (a) Within the downtown area shown on Map 1, where the site area is smaller than 40 000 m^2:

   Up to 4 000 m^2 site area..... $103,100.00

   For each additional 100 m^2 of site area or part thereof..... $474.00

   (b) Outside the downtown area shown on Map 1, where the site area is smaller than 8 000 m^2:

   For the first 4 000 m^2 of site area $43,000.00

   For each additional 100 m^2 of site area or part thereof..... $474.00

   (c) Outside the downtown area shown on Map 1, where the site area is 8 000 m^2 or greater but smaller than 40 000 m^2:

   For the first 8 000 m^2 of site area $103,100.00

   For each additional 100 m^2 of site area or part thereof..... $474.00

   (d) where the site area is 40 000 m^2 or greater:

   For the first 40 000 m^2..... $757,000.00

For each additional 100 m^2 of site area or part thereof $1,560.00

New CD-1 or Amendment to Existing CD-1 (Contemplated in an ODP)

4. For an amendment to the Zoning District Plan to redesignate from a zoning district to a new Comprehensive Development District that is contemplated in an Official Development Plan
-or-
for an amendment, in terms of permitted uses and regulations, to an existing Comprehensive Development District By-law that is contemplated in an Official Development Plan

   Up to 4 000 m^2 site area $193,900.00

   For each additional 100 m^2 of site area or part thereof $1,560.00

5. Despite sections 3 and 4 of this Schedule 2, for a site area of 40 000 m^2 or more, if the complexity or scope of an amendment with regard to the second or subsequent phase of a development is, in the opinion of the Director of Planning, significantly less than that of the first phase by reason of the existence of a land use policy statement or official development plan approved by Council within 10 years preceding the date of the application for the amendment, then the fee for such second or subsequent phase is to be:

   For the first 40 000 m^2 of site area..... $757,000.00

   For each additional 100 m^2 of site area $203.00

Reduced Fees for Large Sites with Limited Changes

6. Notwithstanding sections 3(d) and 4 of this schedule:

   For an amendment to the Zoning District Plan to redesignate from an industrial zoning district to a new Comprehensive Development District that relates to a site area of 40 000 m^2 or greater provided that:

   (a) the combined total floor area, of proposed new uses and expanded retail uses, is limited to 20% or less of the total floor area;

   (b) the use of at least 80% of the total floor area remains consistent with the existing zoning schedule and its restrictions on use and density; and

   (c) the maximum floor space ratio for all uses combined remains the same as that in the existing zoning schedule:

   For the first 40 000 m^2 of site area $179,700.00

   For each additional 100 m^2 of site area or part thereof..... $399.00

7. Notwithstanding sections 3(d), 4 and 6 of this schedule:

(a) For an amendment to the Zoning District Plan to redesignate from a zoning district to a new Comprehensive Development District that is contemplated in an Official Development Plan or that is not contemplated in an Official Development Plan but relates to a site area of 40 000 m^2 or more; or

(b) For an amendment, in terms of permitted uses and regulations, to an existing Comprehensive Development District that is contemplated in an Official Development Plan or that is not contemplated in an Official Development Plan but relates to a site area of 40 000 m^2 or greater; provided, that, in both cases,

(i) the approved or existing form of development is retained on at least 75% of the site area, or

(ii) the floor space ratio of buildings already existing on the site is not increased by more than 25% or 0.5, whichever is the greater, or

(iii) the Director of Planning determines that the application is similarly limited in scope having regard to use and form of development:

Up to 4 000 m^2 site area $39,200.00

For each additional 100 m^2 of site area or part thereof $399.00

Maximum fee $156,100.00

Amend CD-1 (One Section Only)

8. Despite sections 3, 4 and 6 of this schedule:

For an amendment to an existing CD-1 By-law where no more than one section required amendment $17,200.00

Higher Building Application Fee

9. Despite any other provision in this schedule 2 to the contrary, the additional fee for an application for a rezoning for a building that will exceed 137 m $47,700.00

Application for Rezoning Advice

10.

(a) Fee for reviewing drawings and providing comments pursuant to application for rezoning advice where application for rezoning has not yet been made $3,320.00

(b) Fee for reviewing drawings and providing comments to an incorporated non-profit society pursuant to application for rezoning advice where application for rezoning has not yet been made $332.00

EXPLANATION

Secondary Suite Inspection Fee By-law
amending By-law
Re: 2017 Fee increases

The attached By-law will implement Council's resolution of November 15, 2016 to amend the Secondary Suite Inspection Fee By-law to increase fees.

Director of Legal Services
November 29, 2016

BY-LAW NO. A3F

A By-law to amend
Secondary Suite Inspection Fee By-law No. 6553
to increase fees

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

1. From the Secondary Suite Inspection Fee By-law, Council repeals section 3, and substitutes:

"3. Where an application for a special inspection of a suite is made:

(a) within 60 days of the notification date, the applicant shall pay a fee, including all the inspections referred to in section 1, of $169.00; or

(b) more than 60 days after the notification date, the applicant shall pay a fee, including all of the inspections referred to in section 1, of $507.00."

2. A decision by a court that any part of this By-law is illegal, void, or unenforceable severs that part from this By-law, and is not to affect the balance of this By-law.

3. This By-law is to come into force and take effect on January 1, 2017.

ENACTED by Council this day of , 2016

Mayor

City Clerk

EXPLANATION

Building By-law amending By-law
Re: Fee increases

The attached By-law will implement Council's resolution of November 15, 2016 to amend the Building By-law to increase fees for 2017.

Director of Legal Services
November 29, 2016

BY-LAW NO. _____

ABF

A By-law to amend
Building By-law No. 10908 to increase fees

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

1. Council:

   (a) repeals the Schedule of Fees attached to the Building By-law, and substitutes for it the Schedule of Fees attached to this By-law, which new Schedule of Fees is to form part of the Building By-law; and

   (b) approves the fees set out in the new Fee Schedule.

2. A decision by a court that any part of this By-law is illegal, void, or unenforceable severs that part from this By-law, and is not to affect the balance of this By-law.

3. This By-law is to come into force and take effect on January 1, 2017.

ENACTED by Council this day of , 2016

_____
Mayor

_____
City Clerk

SCHEDULE OF FEES

PART A - BUILDING

1 **The fees hereinafter specified shall be paid to the City with respect to and upon the application for the issue of a PERMIT as follows:**

(a)	Except as provided for in Clauses (b)(i) and (b)(ii) for the CONSTRUCTION of any BUILDING, or part thereof:	
	When the estimated cost of the work, being the valuation referred to in Article 1.6.2.3. of Book I, Division C and Book II, Division C of this By-law, does not exceed $5,000 or for the first $5,000 of the estimated cost of the work	$126.00
	For each $1,000, or part thereof, by which the estimated cost of the work exceeds $5,000 but does not exceed $50,000	$8.10
	For each $1,000, or part thereof, by which the estimated cost of the work exceeds $50,000	$4.05
(b)(i)	For the installation, CONSTRUCTION, re- construction, ALTERATION or repair of, or ADDITION to, any CHIMNEY, FIREPLACE, INCINERATOR, VENTILATING SYSTEM, AIR-CONDITIONING SYSTEM, or HEATING SYSTEM, the fee shall be in accordance with Clause (a), except that a fee shall not be charged when the cost of such work is less than $500.	
(b)(ii)	For the installation, CONSTRUCTION, re- construction, ALTERATION or repair of, or ADDITION to, any PHOTOVOLTAIC PANELS, and related roof ALTERATION or repair	$100.00
(c)	For a permit for temporary OCCUPANCY of a part of a STREET, or of the AIR SPACE immediately ABOVE a part of a STREET, in accordance with Section 1.9. of Book I, Division C and Book II, Division C of this By-law, the daily fee for occupancy other than for a portable toilet shall be for each 10 m2 or part thereof, of STREET or of AIR SPACE part thereof, of STREET or of AIR SPACE immediately above such STREET to be occupied	$2.64
	Subject to a minimum fee of	$90.00
	Flat rate for each portable toilet	$90.00
(d)	For an OCCUPANCY PERMIT not required by this By-law but requested	$102.00

SCHEDULE OF FEES

(e)	For the demolition of a BUILDING, not including a ONE-FAMILY DWELLING, which has at any time since November 1, 1986 provided RESIDENTIAL OCCUPANCY, subject to Section 3:	
	For each DWELLING UNIT	$1,000.00
	For each sleeping room in a multiple conversion dwelling, hotel or other BUILDING, which is or has been a principal dwelling or residence of a person, family or household	$1,000.00
(f)	For the demolition of a ONE-FAMILY DWELLING, which has at any time since November 1, 1986 provided RESIDENTIAL OCCUPANCY, subject to Section 3	$1,000.00
(g)	For the repair of building envelope pursuant to requirements of Book I, Division B, Part 5 for any residential building	Nil
2	The fees hereinafter specified shall be paid to the City as follows:	
(a)	For a required permit inspection for compliance with this By-Law which cannot be carried out during normal working hours and where there is a request to carry out the inspection after hours, the fee to be based on the time actually spent in making such inspection, at a minimum inspection time of four (4) hours, including traveling time:	
	For each hour or part thereof	$255.00
(b)	For a plan review where an applicant requests in writing that the review be carried out during overtime:	
	For each hour or part thereof	$255.00
(c)	For each special inspection of a BUILDING or structure to determine compliance with this By-law, and in respect of which no specific fee is otherwise prescribed, the fee to be based on the time actually spent in making the inspection:	
	For each hour or part thereof	$169.00
(d)	For each REINSPECTION made necessary due to faulty work or materials or incomplete work requested to be inspected	$169.00

SCHEDULE OF FEES

(e)	For each inspection of a drainage tile system:	
	For a one- or two-family residence	$169.00
	For all other drain tile inspections:	
	When the estimated cost of the CONSTRUCTION of the BUILDING, being the valuation referred to in Article 1.6.2.3. of Book I, Division C and Book II, Division C does not exceed $500,000	$339.00
	When the estimated cost of the work exceeds $500,000 but does not exceed $1,000,000	$677.00
	When the estimated cost of the work exceeds $1,000,000	$847.00
(f)	For a review of records pertaining to a BUILDING to provide the status of outstanding orders and other matters concerning the BUILDING:	
	For a one- or two-family residence	$217.00
	For all other BUILDINGS	$436.00
(g)	To access plans (electronic or on microfilm) or documents for viewing or copying	$37.00
(h)	For each microfilm image or electronic file copied	$10.20
(i)	For a request to renumber a BUILDING	$806.00
(j)	For the extension of a BUILDING PERMIT where requested in writing by an applicant pursuant to Article 1.6.7.1. of Book I, Division C and Book II, Division C	50 percent of the original BUILDING PERMIT fee to a maximum of $312.00
(k)	For the extension of a building permit by Council where requested in writing by an applicant pursuant to Article 1.6.7.4. of Book I, Division C and Book II, Division C	$2,040.00
(l)	For review of plans, specifications, building materials, procedures or design methods for the purpose of revisions to an application or a permit in accordance with Article 1.5.2.13. and Section 1.6.6. of Book I, Division C and Book II, Division C	

	where the PERMIT relates to a ONE-FAMILY DWELLING or a SECONDARY SUITE	$169.00
	plus for each hour, or part thereof, exceeding one hour	$169.00
	where the PERMIT relates to any other BUILDING	$510.00
	plus for each hour, or part thereof, exceeding one hour	$255.00
(m)	For each RE-OCCUPANCY PERMIT after rectification of an UNSAFE CONDITION and related By-law violations	$169.00
(n)	For review of plans, specifications, building materials, procedures or design methods for the purpose of acceptance of an alternative solution for new construction under Article 2.3.2.1. Book I, Division C	
	for each application	$714.00
(o)	For an evaluation of plans, specifications, building materials, procedures or design methods for the purpose of acceptance of existing conditions with mitigating features	
	for each application	$408.00
(p)	For review by the Alternative Solution Review panel	$2,280.00
(q)	For the evaluation of a resubmission or revised submission made under Clauses (n) or (o) of this Section 2	$255.00

3 Upon written application of the payor and on the advice of the General Manager of Community Services, the Director of Finance shall refund to the payor, or a designate of the payor, the fees paid pursuant to Clauses (e) and (f) of Section 1:

(a) for all demolished dwelling units in a building that will be replaced by a social housing or co-operative development that has received a Project Commitment Letter from the British Columbia Housing Management Commission or the Canada Mortgage and Housing Corporation; and

(b) for each demolished dwelling unit that has been replaced by a dwelling unit occupied by rental tenants and not created pursuant to the Strata Property Act.

SCHEDULE OF FEES

PART B - PLUMBING

Every applicant for a Plumbing PERMIT shall, at the time of application, pay to the City the fees set out hereunder:

1. **INSTALLATIONS**

For the Installation of:

One, two or three FIXTURES $169.00

Each additional FIXTURE..... $53.00

Note: For the purpose of this schedule the following shall also be considered as FIXTURES:
- Every "Y" intended for future connection;
- Every ROOF DRAIN, swimming pool, dishwasher, and interceptor;
- Every vacuum breaker in a lawn sprinkler system; and
- Every back-flow preventer

Alteration of Plumbing (no FIXTURES involved):

For each 30 metres of piping or part thereof $248.00

For each 30 metres of piping or part thereof, exceeding the first 30 metres..... $69.00

Connection of the City water supply to any hydraulic equipment $94.00

2. **INSPECTIONS OF FIRELINE SYSTEMS:**

Hydrant & Sprinkler System:

First two inspections for each 30 m of water supply pipe or part thereof..... $248.00

Each additional inspection for each 30 m of water supply pipe or part thereof .. $102.00

Sprinklers:

First head, one- or two-family dwelling..... $282.00

First head, all other buildings $599.00

First head, renovations to existing sprinkler systems $174.00

Each additional head, all buildings (no limit on number) $3.10

SCHEDULE OF FEES

Firelines:

Hose Cabinets $32.60

Hose Outlets $32.60

Wet & Dry Standpipes $32.60

Standpipes $32.60

Dual Check Valve In-flow Through Devices $32.60

Backflow Preventer $169.00

Wet & Dry Line Outlets:

Each connection $32.60

NOTE: A Siamese connection shall be considered as two dry line outlets.

Each Fire Pump $263.00

Each Fire Hydrant $81.00

3. **RE-INSPECTIONS**

For each REINSPECTION made necessary due to faulty work or materials or incomplete work requested to be inspected $169.00

4. **SPECIAL INSPECTIONS**

Each inspection to establish fitness of any existing fixture for each hour or part thereof $169.00

An inspection outside normal working hours and at a minimum inspection time of four (4) hours, including traveling time, for each hour or part thereof $255.00

5. **BUILDING SEWER INSPECTIONS**

First two inspections for each 30 m of BUILDING SEWER or part thereof $248.00

Each additional inspection for each 30 m of BUILDING SEWER or part thereof ... $102.00

EXPLANATION

Protection of Trees By-law amending By-law
Re: 2017 Fee increases

The attached By-law will implement Council's resolution of November 15, 2016 to amend the Protection of Trees By-law to increase fees for 2017.

Director of Legal Services
November 29, 2016

BY-LAW NO. _____ ABF

A By-law to amend
Protection of Trees By-law No. 9958
regarding fee increases

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

1. From the Protection of Trees By-law, Council repeals section 4.4 (c), and substitutes:

"4.4 (c) a non-refundable application fee of:

(i) $67.00 for a tree permit to remove the first tree in a 12 month period, and

(ii) $194.00 to remove each subsequent tree during that same 12 month period; and"

2. A decision by a court that any part of this By-law is illegal, void, or unenforceable severs that part from this By-law, and is not to affect the balance of this By-law.

3. This By-law is to come into force and take effect on January 1, 2017.

ENACTED by Council this day of , 2016

_____
Mayor

_____
City Clerk

EXPLANATION

Miscellaneous Fees By-law amending By-law
Re: 2017 Fee increases

The attached By-law will implement Council's resolution of November 15, 2016 to amend the Miscellaneous Fees By-law to increase fees for 2017.

Director of Legal Services
November 29, 2016

BY-LAW NO. _____

ABF

A By-law to amend
Miscellaneous Fees By-law No. 5664
regarding fee increases

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

1. Council:

   (a) repeals Schedule 1 of the Miscellaneous Fees By-law, and substitutes for it Schedule 1 attached to this By-law, which new Schedule 1 is to form part of the Miscellaneous Fees By-law; and

   (b) approves the fees set out in the new Schedule 1.

2. A decision by a court that any part of this By-law is illegal, void, or unenforceable severs that part from this By-law, and is not to affect the balance of this By-law.

3. This By-law is to come into force and take effect on January 1, 2017.

ENACTED by Council this day of , 2016

_____
Mayor

_____
City Clerk

Schedule 1

Adopt or Amend an Area Development Plan (ADP)

1. For adoption or amendment of an Area Development Plan:

   Up to 0.4 ha (43,128 sq. ft.) site area $27,600.00

   For each additional 100 m^2 (1,080 sq. ft.) of site area, or part thereof $268.00

   Maximum fee $110,100.00

Amend an Official Development Plan (ODP) and Area Development Plan (ADP)

2. For an amendment to the text of an Official Development Plan and any associated Area Development Plan $41,500.00

Amend a Regional or Provincial Land Use Designation

3. For an amendment of a regional or provincial land use designation $2,790.00

Research Requests

4. For research requests:

   (a) Research requests requiring up to a maximum of 2 hours of staff time $224.00

   (b) Extensive research requests (as time and staffing levels permit):

   For each additional hour or part thereof beyond the 2 hours referred to in clause (a) above $112.00

Site Profile Review

5. For each review of a site profile $100.00

Appeal to Board of Variance/Parking Variance Board

6. For the filing of an appeal $435.00

Approved Use Research Requests

7. Provide written information on the approved use of a building in accordance with the Zoning & Development and Vancouver Building By-laws

   (a) Residential $51.00

   (b) Commercial (one unit only) $51.00

(c) Commercial and/or mixed use (all units) requiring up to a maximum of 2 hours of staff time $224.00

For each additional hour or part thereof beyond the 2 hours referred in Clause (c) above $112.00

Producing Permit/Document Copies

8. Provide paper copies of permits or specific documents from either microfiche or our images database

(a) 1 to 3 paper copies $49.50

(b) Each additional copy $9.70

File Research Environmental

9. Provide written information as to whether *the City* records indicate that a a property has any contamination or environmental issues $224.00

Building Grades

10. The following fees shall be paid to the City for the review of design elevations of streets or lanes where they adjoin a building site, as required with a Development and/or Building Permit application:

(a) Where City of Vancouver Staff are required to complete a survey for the purpose of calculating the design elevations of the required streets and lanes:

Length of property abutting street or lane, or both, is

Up to 31 m $1,148.00
Over 31 m and up to 90 ..... $1,377.00
Over 90 m and up to 150 m $1,938.00
Over 150 m and up to 300 m $2,856.00
Over 300 m $4,233.00

(b) Where the applicant provides approved building grade survey information to the City for the purpose of calculating the design elevations of the required streets and lanes:

Length of property abutting street or lane, or both, is

Up to 31 m $342.00
Over 31 m and up to 90 m $459.00
Over 90 m and up to 150 m $571.00
Over 150 m and up to 300 m $801.00
Over 300 m $1,260.00

11. **Traffic Management Plan Review**

    (a) Where the review is less than 1 hour of staff time $51.00

    (b) Where the review is 1 to 15 hours of staff time..... $510.00

    (c) Where the review is over 15 hours of staff time $1,428.00

12. **Discharge of a Registered Encumbrance**

    (a) Where the review is less than 2 hours of staff time $204.00

    (b) Where the review is more than 2 hours of staff time $510.00

13. **Road Closure Fee** $8,568.00

EXPLANATION

Gas Fitting By-law amending By-law
Re: 2017 Fee increases

The attached By-law will implement Council's resolution of November 15, 2016 to amend the Gas Fitting By-law to increase fees.

Director of Legal Services
November 29, 2016

BY-LAW NO. _____ ABF

A By-law to amend
Gas Fitting By-law No. 3507 to increase fees

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

1. Council:

   (a) repeals the Fee Schedule of the Gas Fitting By-law, as referred to in sections 4 and 5 thereof, and substitutes for it the Fee Schedule attached to this By-law as Appendix A, which new Fee Schedule is to form part of the Gas Fitting By-law; and

   (b) approves the fees set out in the new Fee Schedule attached as Appendix A.

2. A decision by a court that any part of this By-law is illegal, void, or unenforceable severs that part from this By-law, and is not to affect the balance of this By-law.

3. This By-law is to come into force and take effect on January 1, 2017.

ENACTED by Council this day of , 2016

_____
Mayor

_____
City Clerk

APPENDIX A

FEE SCHEDULE

Domestic Installations:

This fee is for one family dwellings only. Any other occupancy shall be charged under "Commercial and Industrial Installation" rates.

One, two or three appliances $169.00

Each additional appliance..... $53.00

Each replacement water heater or gas range..... $94.00

Where piping only is being installed, see "Piping Permits" below.

Commercial and Industrial Installations

Fee for each appliance, based on BTU/hour input rating:

65,000 or less $215.00

65,001 to 200,000 ..... $230.00

200,001 to 409,000 ..... $262.00

Over 409,000 ..... $319.00

in addition to all costs incurred by the inspector.

Vent or Gas Value or Furnace Plenum (no appliances)

One, two or three units $169.00

Each additional unit..... $53.00

Piping Permits (no appliances)

For first 60 m of house piping or part thereof $169.00

Every 30 m or part thereof exceeding the first 60 m $65.00

Re-inspections

For each reinspection made necessary due to faulty work or materials or incomplete work requested to be inspected $169.00

Special Inspections

To establish the fitness of any existing installations, for each hour or part thereof $169.00

If conducted with a Plumbing Inspection, for each hour of part thereof $169.00

If outside normal working hours, and at a minimum inspection time of four (4) hours, including traveling time, for each hour or part thereof $255.00

7

EXPLANATION

A By-law to amend the Subdivision By-law
Re: 2017 fee increases

On November 15, 2016 Council resolved to amend the Subdivision By-law to increase 2017 fees, to be effective January 1st, 2017. Enactment of the attached by-law will effect these changes.

Director of Legal Services
November 29, 2016

BY-LAW NO. _____

ABF

A By-law to amend
Subdivision By-law No. 5208 to increase fees

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

1. Council:

   (a) repeals Schedule F of the Subdivision By-law, and substitutes for it Schedule F attached to this By-law, which new Schedule F is to form part of the Subdivision By-law; and

   (b) approves the fees set out in the new Schedule F.

2. A decision by a court that any part of this By-law is illegal, void, or unenforceable severs that part from this By-law, and is not to affect the balance of this By-law.

3. This By-law is to come into force and take effect on January 1, 2017.

ENACTED by Council this day of , 2016

_____
Mayor

_____
City Clerk

Schedule F
Fees

Every applicant for subdivision shall at the time of application pay the applicable fee set out below.

1. **CLASS I (Major)** - For an application to subdivide pursuant to Part 7 of the Land Title Act or Section 243 of the Strata Property Act, where the site is: (i) more than 40 000 m^2 in area; or (ii) where the site is between 10 000 m^2 and 40 000 m^2 in area and the subdivision is reasonably likely to require that legal agreements be registered on title as a condition of subdivision approval; but in either case where the subdivision is not described in Section 4.5(a), (b) or (c) of this By-law $104,000.00

2. **CLASS II (Intermediate)** - For an application to subdivide pursuant to Part 7 of the Land Title Act or Section 243 of the Strata Property Act, where the site is between 4 000 m^2 and 10 000 m^2 in area and the subdivision is reasonably likely to require that legal agreements be registered on title as a condition of subdivision approval, but where the subdivision is not described in Section 4.5(a), (b) or (c) of this By-law or in Class I $52,000.00

3. **CLASS III (Minor)** - For an application to subdivide pursuant to Part 7 of the Land Title Act or Section 243 of the Strata Property Act, where the site is: (i) less than 4 000 m^2 in area; or (ii) where the subdivision is unlikely to require that legal agreements be registered on title as a condition of subdivision approval; but in either case where the subdivision in not described in section 4.5(a) or (b) of this By-law or in Class I or II $8,950.00

4. **CLASS IV (Dedication)** - For an application to subdivide as described in Section 4.5(a) or (b) of this By-law

   (a) where such subdivision is required as a condition of enactment of a zoning by-law, or is otherwise required by the City Engineer $439.00

   (b) where such subdivision is required by the Director of Planning or Development Permit Board as a condition of issuance of a development permit, or is otherwise initiated by the owner except as arising from rezoning approval No Fee

5. **CLASS V (Air Space)** - For an application to subdivide made pursuant to Part 9 (Air Space Titles) of the Land Title Act

   (a) for developments having a Floor Space Ratio (FSR) greater than 3.0 $74,700.00

	(b) for developments having a Floor Space Ratio (FSR) of 3.0 or smaller, or where the application is solely for the purpose of creating air space parcels to secure separate tenure for public benefits such as libraries, theatres and other cultural amenities, for-profit affordable rental housing, social housing or day care	$39,100.00
6.	**CLASS VI (Freehold Rowhouses)** - For an application to subdivide pursuant to Section 223.2 of the Land Title Act	$8,950.00
	Plus $1,170.00 per freehold lot	$1,170.00
7.	**RECLASSIFICATION** - For an application to change from one sub-area to another sub-area in the RS-1, RS-3, RS-3A, RS-5, or RS-6 Zoning District	$4,550.00
8.	**STRATA APPLICATIONS** - For an application to convert an existing building to strata title ownership pursuant to Section 242 of the Strata Property Act; or amend Strata Plans pursuant to Part 15 of the Strata Property Act; or for Phased Strata applications made pursuant to Section 13 of the Strata Property Act	$4,550.00

Note: *Strata Conversions and applications to subdivide strata lots also require a separate fee for a Special Inspection Application, to ensure compliance with relevant provisions of the Zoning and Development By-law and Building By-law.*

EXPLANATION

Electrical By-law amending By-law
Re: 2017 Fee increases

The attached By-law will implement Council's resolution of November 15, 2016 to amend the Electrical By-law to increase fees for 2017.

Director of Legal Services
November 29, 2016

BY-LAW NO. _____

A By-law to amend ABF
Electrical By-law No. 5563 to increase fees

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

1. Council:

   (a) repeals Schedule A of the Electrical By-law, and substitutes for it Schedule A attached to this By-law, which new Schedule A is to form part of the Electrical By-law; and

   (b) approves the fees set out in the new Schedule A.

2. A decision by a court that any part of this By-law is illegal, void, or unenforceable severs that part from this By-law, and is not to affect the balance of this By-law.

3. This By-law is to come into force and take effect on January 1, 2017.

ENACTED by Council this day of , 2016

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Mayor

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City Clerk

SCHEDULE A

1. **The following fees, based on the cost of work, including materials and labour, as estimated by the contractor or owner and established to the satisfaction of the City Electrician, shall be payable to the City and shall accompany every application for a permit for electrical work:**

When the estimated cost does not exceed $250 ..... $63.20

When the estimated cost exceeds $250 but does not exceed $500 ..... $85.70

When the estimated cost exceeds $500 but does not exceed $700 ..... $111.20

When the estimated cost exceeds $700 but does not exceed $1,000 ..... $145.00

When the estimated cost exceeds $1,000 but does not exceed $10,000 ..... $145.00

plus for every $1,000 of the estimated cost, or part thereof, over $1,000 ..... $47.90

When the estimated cost exceeds $10,000 but does not exceed $50,000 ..... $662.00

plus for every $1,000 of the estimated costs, or part thereof, over $10,000 ..... $26.00

When the estimated cost exceeds $50,000 but does not exceed $100,000 ..... $1,870.00

plus for every $1,000 of the estimated costs, or part thereof, over $50,000 ..... $15.80

When the estimated cost exceeds $100,000 but does not exceed $500,000 ..... $2,770.00

plus for every $1,000 of the estimated costs, or part thereof, over $100,000 ..... $11.00

When the estimated cost exceeds $500,000 but does not exceed $1,000,000 ... $7,780.00

plus for every $1,000 of the estimated cost, or part thereof, over $500,000 ..... $8.50

When the estimated cost exceeds $1,000,000 ..... $12,810.00

plus for every $1,000 of the estimated cost, or part thereof, over $1,000,000 ..... $3.50

2. **The temporary power permit shall be valid for one year and the fee shall be:**

(a) for single and two-family dwellings $343.00

(b) for all other uses where the temporary power is supplied from a power source not exceeding 750v $363.00

(c) for all other uses where the temporary power is supplied from a voltage power exceeding 750v $997.00

3. **The City Electrician may issue an annual permit where one person, firm or corporation has more than one site, the fee for an annual permit for any one building or site shall be as follows:**

Total service rating up to and including the first 500 kVA $349.00

For 10 kVA or part thereof exceeding the first 500 kVA $6.90

Subject to a maximum fee of $4,410.00

4. **Fees for an Electrical Permit for the Entertainment and Film industry**

(a) For an annual permit for filming in a single location $520.00

(b) For an annual fee for filming in multiple locations $997.00

(c) For a Temporary permit for filming in single or multiple locations

for up to 14 days $169.00
for 15 to 30 days $339.00
for 31 to 60 days $508.00
for 61 to 90 days $847.00

5. **The fee for staff time spent inspecting of electrical work or reviewing resubmitted or amended plans to determine compliance with this By-law, if a permit holder deviates from approved plans, for each hour or part thereof** $169.00

6. **The fee for an inspection of electrical work where errors or omissions were found at a previous inspection shall be** $169.00

7. **The fee for inspection and plan review outside normal working hours and at a minimum inspection and review time of four (4) hours, including traveling time, shall be for each hour or part thereof** $243.00

8. Fees for an Electrical Permit for installations related to tents or similar structures

(a) Where each installation that is supplied from a portable single-phase generator rated at not more than 5 kW $85.70

(b) Where each installation that is supplied from a portable generator rated at more than 5 kW or from any other temporary or permanent power source not exceeding 750 V

for up to 14 days $169.00
for 15 to 30 days $338.00
for 31 to 60 days $507.00
for 61 to 90 days $845.00

(c) Where each installation is supplied from a High Voltage power source $1,017.00

EXPLANATION

Sign By-law amending By-law
Re: 2017 Fee increases

The attached By-law will implement Council's resolution of November 15, 2016 to amend the Sign By-law to increase fees for 2017.

Director of Legal Services
November 29, 2015

BY-LAW NO. _____

ABF

A By-law to amend
Sign By-law No. 6510 to increase fees

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

1. From the Sign By-law, Council repeals section 13, and substitutes the table comprising section 13 attached to this By-law as Schedule A.

2. A decision by a court that any part of this By-law is illegal, void, or unenforceable severs that part from this By-law, and is not to affect the balance of this By-law.

3. This By-law is to come into force and take effect on January 1, 2017.

ENACTED by Council this day of , 2016

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Mayor

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City Clerk

SCHEDULE A

Section 13

Fees and Charges

Current Fees

13.1 Permit Application Fee

Every person applying to the Director for a sign permit shall pay to the City at the time such application is filed the appropriate fee as set out in this section, and no application is valid without such payment:

(a) For each sign requiring a permit..... $94.90
plus

(b) For each sign requiring an electrical connection..... $94.90
plus

(c) For each sign incorporating a supporting structure..... $94.90
plus

(d) For a billboard, free-standing sign or parking lot advertising sign $94.90

13.2 Additional Inspection Fee

13.2.1 Each permit fee described in section 13.1, provides for one field inspection. Where any additional field inspection is required to complete the final inspection on an installation, the fee for each additional inspection shall be..... $94.90

13.2.2 Except where exempted by section 5.2 or 5.3, where any sign has been erected before a permit has been issued for such sign, the fee in Section 13.1 (a), in addition to all other fees, shall be $459.00

13.3 Permit Fee Refund

No sign permit application fee shall be refunded after the application has been approved or refused, but if the application has been withdrawn prior to processing, the Director of Finance may refund to the applicant a part of the fee as recommended by the Director of Licenses and Inspections.

13.4 Registration Fee

Where a facia sign will be or has been installed in accordance with Section 5.3.1(a), a registration fee shall be paid to the City as follows:

For each sign face $57.80

13.5 Amendment Application Fee

13.5.1 Every person applying to the City Council for an amendment to the Sign By-law shall pay to the City at the time such application is filed with the Director of Planning the appropriate fee as set forth in this Section, and no application is valid without such payment.

(a) For an amendment, other than Schedule E, where no more than one section requires amendment..... $6,800.00

(b) For an amendment, other than Schedule E, where more than one section requires amendment or where the amendment would allow a type of sign that is not permitted $10,220.00

(c) For an amendment to Schedule E:

(i) To assign a Comprehensive Development District, at time of creation of the District, to the same sign schedule that applied to the site prior to its Comprehensive Development District zoning..... $169.00

(ii) To assign a Comprehensive Development District to an existing sign schedule with different sign regulations than currently apply to the site $1,690.00

(iii) To assign a Comprehensive Development District to a new schedule to be created $10,220.00

13.5.2 No fee paid to the City pursuant to Section 13.6.1 shall be refunded after the application for the amendment has been considered by the Director of Planning, but where the application has been withdrawn before being considered by the Director of Planning, the Director of Finance may refund to the applicant such part of the fee as is recommended by the Director of Planning.

13.5.3 Where an application to amend the Sign By-law is made by the Director of Planning at the direction of City Council, no fee pursuant to this By-law shall be payable.

EXPLANATION

A By-law to amend the Noise Control By-law
Re: 2017 Fee Increases

The attached By-law will implement Council's resolution of November 15, 2016 to amend the Noise Control By-law to increase fees for 2017.

Director of Legal Services
November 29, 2016

BY-LAW NO. _____

ABF

A By-law to amend
Noise Control By-law No. 6555
2017 Fee Increases

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

1. This By-law amends Schedule E of the Noise Control By-law No. 6555.

2. A decision by a court that any part of this By-law is illegal, void, or unenforceable severs that part from this By-law, and is not to affect the balance of this By-law.

3. This By-law is to come into force and take effect on the date of its enactment.

ENACTED by Council this day of , 2016

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Mayor

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City Clerk

SCHEDULE E

Proposed Fees

For an application for an exception to the noise by-law:

(i) for an application submitted at least five working days prior to the date of the proposed activity.....$151.00

(ii) for an application submitted less than five working days prior to the date of the proposed activity $302.00

EXPLANATION

Animal Control By-law amending By-law
Re: 2017 fee increases

The attached by-law will implement Council's resolution of November 15, 2016 to amend the Animal Control By-law regarding fee increases for 2017.

Director of Legal Services
November 29, 2016

BY-LAW NO. _____ ABF

A By-law to amend Animal Control By-law No. 9150
regarding 2017 fee increases

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

1. Council:

   (a) repeals Schedule A, and substitutes for it Schedule A attached to this By-law, which new Schedule A is to form part of the Animal Control By-law; and

   (b) approves the fees set out in the new Schedule A.

2. A decision by a court that any part of this By-law is illegal, void, or unenforceable severs that part from this By-law, and is not to affect the balance of this By-law.

3. This By-law is to come into force and take effect on January 1, 2017.

ENACTED by Council this day of , 2016

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Mayor

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City Clerk

Year 2017 Animal Control Fees and Charges

SCHEDULE A

Part 1 - License Fees

Altered male or female dog (per annum)	$42.00
Replacement tag	$5.00

Part 2 - Impound Fees

Licensed dog	$90.00
Unlicensed dog	$175.00
Licensed aggressive dog	$325.00
Unlicensed aggressive dog	$415.00
Fowl, other bird, rabbit, or rodent	$16.00
Reptile or other animal	$89.00

Part 3 - Maintenance Charges (per day)

Dog	$22.50 per day
Aggressive dog	$30.50 per day
Fowl, other bird, rabbit or rodent	$5.00 per day
Reptile or other animal	$31.00 per day
Exotic Bird (Amazon Parrots, African Grey, Cockatoos, Conures, Lorikeets and Macaws)	$16.00 per day

Part 4 - Adoption Fees

Dog Up to 7 years of age	$285.00
Dog >7 years old / Medical Conditions	$87.00
Mouse, rat, hamster, gerbil, degu, chicken, rooster, duck, pigeon, dove	$5.00
Budgie and Finch	$10.00
Guinea pig, parakeet, lovebird	$16.00
Rabbit, chinchilla, hedgehog	$31.00
Ferret	$58.00

Part 5 - Miscellaneous

Microchipping	$15.00

EXPLANATION

A By-law to amend Fire By-law No. 11312
regarding housekeeping and underground storage tanks

This housekeeping by-law will reinstate provisions that were inadvertently removed from the most recent iteration of the Fire By-law. Prior to the enactment of the current Fire By-law 11312 on July 22, 2015, underground storage tanks (UST) for flammable liquids were required to be removed when they have been out of service for more than 2 years. This requirement was inadvertently replaced in the new by-law by language that harmonized with the provincial Fire Code and suggested that a UST should be removed or abandoned in place after 12 months of non-use, in accordance with good engineering practice. The new language is vague and difficult to enforce.

Staff recommends that for effective and efficient administration of the Fire By-law, the previous requirement, that a UST that has been out of service for more than 2 years be removed or abandoned in place and that any associated contamination shall be remediated to the applicable standards prescribed in the Contaminated Sites Regulation, be reinstated into the Fire By-law.

Director of Legal Services
November 29, 2016

BY-LAW NO. _____

ABF

A By-law to amend Fire By-law No. 11312
regarding housekeeping and underground storage tanks

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

1. This By-law amends the indicated provisions of Fire By-law 11312.

2. In Division B, Article 4.3.16.1. Council adds after Sentence (1):

"

2) An underground *storage tank* that has been out of service for over 2 years shall
   a) have all *flammable liquids* and *combustible liquids* removed from it,
   b) be purged of vapours, and
   c) except as permitted in Sentence (3), be removed from the ground.

3) Where the *Fire Chief* determines that it is impractical to remove an underground *storage tank*
   a) the tank shall be filled with inert material, and
   b) the piping shall have the ends permanently sealed by capping or plugging.

4) Any associated contamination shall be remediated to the applicable standards as prescribed in the *Contaminated Sites Regulation*."

3. A decision by a court that any part of this By-law is illegal, void, or unenforceable severs that part from this By-law, and is not to affect the balance of this By-law.

4. This By-law is to come into force and take effect on the date of its enactment.

ENACTED by Council this day of , 2016

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Mayor

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City Clerk

EXPLANATION

Building By-law amending By-law
Re: miscellaneous Housekeeping amendments, sustainability & energy efficiency and amendments to incorporate certain revisions to the British Columbia Building Code

The attached By-law will implement Council's resolution of June 28, 2016 to amend the Building By-law in relation to miscellaneous Housekeeping amendments, sustainability & energy efficiency and amendments to incorporate certain revisions to the British Columbia Building Code, including some lengthy recent revisions that were inadvertently not adopted correctly.

Director of Legal Services
November 29, 2016

BY-LAW NO. _____

ABF

A By-law to amend Building By-law No. 10908 in relation to miscellaneous Housekeeping amendments, sustainability & energy efficiency and amendments to incorporate certain revisions to the British Columbia Building Code.

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

1. This by-law amends the indicated provisions of Building By-law 10908.

2. In Book I, Division A, Part 1, Article 1.1.1.1., Council:

   a) in Sentence (1) strikes out the words "(See Appendix A.)"; and

   b) in Sentence (2) strikes out the words "(See Appendix A.)".

3. In Book I, Division A, Part 1, Sentence 1.4.1.2.(1), Council:

   a) amends the defined term "dangerous goods" by striking out "NFC" and substituting "Vancouver Fire By-law";

   b) amends the defined term "storage garage" by inserting the word "primarily" after the word "intended"; and

   c) deletes the defined term "Storage-type service water heater".

4. In Book I, Division A, Part 1, Sentence 1.4.1.2.(1), Council adds the following abbreviations:

" HDD	heating degree day(s)
HVAC	heating, ventilation and air conditioning
k	degree(s) kelvin
R	thermal resistance value (imperial units)
RSI	thermal resistance value (metric value)
u-value	overall thermal transmittance"

5. In Book I, Division A, Part 1, Council strikes out Article 1.5.1.1., and substitutes the following:

   "**1)** Except as provided in Sentence (2), the provisions of documents referenced in this By-law, and of any documents referenced within those documents, apply only to the extent that they relate to

   a) buildings, and

   b) the objectives and functional statements attributed to the applicable acceptable solutions in Division B where the documents are referenced.

   (See Appendix A.)

2) Where a provision of the By-law references the Fire By-law, the NECB or Book II (Plumbing Systems) of this By-law, the applicable objectives and functional statements shall be those found in the referenced document."

6. In Book I, Division A, Part 1, Council adds to Article 3.2.1.1. the following functional statements in ascending order:

" **F90** To limit the amount of uncontrolled air leakage through the building envelope.
F91 To limit the amount of uncontrolled air leakage through system components.
F92 To limit the amount of uncontrolled thermal transfer through the building envelope.
F93 To limit the amount of uncontrolled thermal transfer through system components.
F95 To limit the unnecessary demand or consumption of energy for heating and cooling.
F96 To limit the unnecessary demand or consumption of energy for service water heating.
F98 To limit the inefficiency of equipment.
F99 To limit the inefficiency of systems.
F100 To limit the unnecessary rejection of reusable waste energy."

7. In Book I, Division B, Part 1, Council strikes out Sentence 1.1.2.1.(1) and substitutes the following:

"**1)** For the purpose of compliance with this By-law as required in Clause 1.2.1.1.(1)(b) of Division A, the objectives and functional statements attributed to the acceptable solutions in Division B shall be the objectives and functional statements identified in Sections 3.9., 4.5., 5.11., 6.4., 7.2., 8.3., 9.38. and 10.4. (See Appendix A.)"

8. In Book I, Division B, Part 1, Article 1.1.3.1., Council:

a) strikes out Sentence (1) and substitutes the following:

"1) Except as required by Sentence (3), the climatic and seismic values required for the design of buildings under this By-law shall be in conformance with Table 1.1.3.1.A and Table 1.1.3.1.B;" and

b) strikes out Sentence (3) and substitutes the following:

"**3)** The driving rain wind pressure (DRWP) values in Table A.1 of CSA A440S1, "Canadian Supplement to AAMA/WDMA/CSA 101/I.S.2/A440, NAFS - North American Fenestration Standard/Specification for Windows, Doors and Skylights," shall be used for selecting the performance grades of windows, doors and skylights, as required by Article 5.10.2.2. and Subsection 9.7.4."

9. In Book I, Division B, Part 1, Article 1.1.4.1., Council strikes out Sentence (1) and substitutes the following:

"1) Fire safety plans shall conform to the Vancouver Fire By-law."

10. In Book I, Division B, Part 1, Article 1.3.1.2, Council strikes out Table 1.3.1.2 and substitute the following:

"

Table 1.3.1.2.
Documents Referenced in the Book I (General) of the Building By-law
Forming part of Sentence 1.3.1.2.(1)

Issuing Agency	Document Number(1)	Title of Document(2)	By-law Reference
AISI	S201-07	North American Standard for Cold-Formed Steel Framing - Product Data	9.24.1.2.(1)
ANSI	A208.1-2009	Particleboard	Table 5.10.1.1. 9.23.15.2.(3) 9.29.9.1.(1) 9.30.2.2.(1)
ANSI/ ASHRAE	62.1-2001 (except Addendum n)	Ventilation for Acceptable Indoor Air Quality	6.2.2.1.(2)
ANSI/ ASHRAE/ IESNA	90.1-2010	Energy Standard for Buildings Except Low-Rise Residential Buildings	10.2.1.1.(1)(a)
ASME	B18.6.1-1981	Wood Screws (Inch Series)	Table 5.10.1.1. 9.23.3.1.(3)
ASME/CSA	ASME A17.1-2007/CSA B44-10	Safety Code for Elevators and Escalators	3.2.6.7.(2) 3.5.2.1.(3) 3.5.4.2.(1) 3.8.3.10.(1) Table 4.1.5.11.
ASTM	A 123/A 123M-09	Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products	Table 5.10.1.1. Table 9.20.16.1.
ASTM	A 153/A 153M-09	Zinc Coating (Hot-Dip) on Iron and Steel Hardware	Table 5.10.1.1. Table 9.20.16.1.
ASTM	A 252-10	Welded and Seamless Steel Pipe Piles	4.2.3.8.(1)
ASTM	A 283/A 283M-03	Low and Intermediate Tensile Strength Carbon Steel Plates	4.2.3.8.(1)
ASTM	A 653/A 653M-11	Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process	Table 5.10.1.1. 9.3.3.2.(1)
ASTM	A 792/A 792M-10	Steel Sheet, 55% Aluminum-Zinc Alloy-Coated by the Hot-Dip Process	9.3.3.2.(1)
ASTM	A 1008/A 1008M-11	Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Solution Hardened, and Bake Hardenable	4.2.3.8.(1)
ASTM	A 1011/A 1011M-10	Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength	4.2.3.8.(1)
ASTM	C 4-04	Clay Drain Tile and Perforated Clay Drain Tile	Table 5.10.1.1. 9.14.3.1.(1)
ASTM	C 27-98	Classification of Fireclay and High-Alumina Refractory Brick	9.21.3.4.(1)
ASTM	C 73-10	Calcium Silicate Brick (Sand-Lime Brick)	Table 5.10.1.1. 9.20.2.1.(1)
ASTM	C 126-11	Ceramic Glazed Structural Clay Facing Tile, Facing Brick, and Solid Masonry Units	Table 5.10.1.1. 9.20.2.1.(1)
ASTM	C 212-10	Structural Clay Facing Tile	Table 5.10.1.1. 9.20.2.1.(1)
ASTM	C 260/C 260M-10a	Air-Entraining Admixtures for Concrete	9.3.1.8.(1)

Table 1.3.1.2.
Documents Referenced in the Book I (General) of the Building By-law
Forming part of Sentence 1.3.1.2.(1)

Issuing Agency	Document Number(1)	Title of Document(2)	By-law Reference
ASTM	C 411-11	Hot-Surface Performance of High-Temperature Thermal Insulation	3.6.5.4.(4) 3.6.5.5.(1) 9.33.6.4.(4) 9.33.8.2.(2)
ASTM	C 412M-11	Concrete Drain Tile (Metric)	Table 5.10.1.1. 9.14.3.1.(1)
ASTM	C 444M-03	Perforated Concrete Pipe (Metric)	Table 5.10.1.1. 9.14.3.1.(1)
ASTM	C 494/C 494M-11	Chemical Admixtures for Concrete	9.3.1.8.(1)
ASTM	C 553-11	Mineral Fiber Blanket Thermal Insulation for Commercial and Industrial Applications	Table 5.10.1.1.
ASTM	C 612-10	Mineral Fiber Block and Board Thermal Insulation	Table 5.10.1.1.
ASTM	C 700-11	Vitrified Clay Pipe, Extra Strength, Standard Strength and Perforated	Table 5.10.1.1. 9.14.3.1.(1)
ASTM	C 834-10	Latex Sealants	Table 5.10.1.1. 9.27.4.2.(2)
ASTM	C 920-11	Elastomeric Joint Sealants	Table 5.10.1.1. 9.27.4.2.(2)
ASTM	C 954-11	Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.033 in. (0.84 mm) to 0.112 in. (2.84 mm) in Thickness	9.24.1.4.(1)
ASTM	C 991-08e1	Flexible Fibrous Glass Insulation for Metal Buildings	Table 5.10.1.1.
ASTM	C 1002-07	Steel Self-Piercing Tapping Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs	Table 5.10.1.1. 9.24.1.4.(1) 9.29.5.7.(1)
ASTM	C 1177/C 1177M-08	Glass Mat Gypsum Substrate for Use as Sheathing	Table 5.10.1.1. Table 9.23.17.2.A
ASTM	C 1178/C 1178M-11	Coated Glass Mat Water-Resistant Gypsum Backing Panel	Table 5.10.1.1. 9.29.5.2.(1)
ASTM	C 1184-05	Structural Silicone Sealants	Table 5.10.1.1. 9.27.4.2.(2)
ASTM	C 1311-10	Solvent Release Sealants	Table 5.10.1.1. 9.27.4.2.(2)
ASTM	C 1330-02	Cylindrical Sealant Backing for Use with Cold Liquid Applied Sealants	Table 5.10.1.1. 9.27.4.2.(3)
ASTM	C 1396/C 1396M-11	Gypsum Board	3.1.5.12.(4) Table 5.10.1.1. Table 9.23.17.2.A 9.29.5.2.(1) Table 9.29.5.3.
ASTM	D 323-08	Vapour Pressure of Petroleum Products (Reid Method)	1.4.1.2.(1)(3)
ASTM	D 2178-04	Asphalt Glass Felt Used in Roofing and Waterproofing	Table 5.10.1.1.
ASTM	D 2898-10	Accelerated Weathering of Fire-Retardant-Treated Wood for Fire Testing	3.1.5.5.(5) 3.1.5.21.(1) 3.2.2.50.(3) 3.2.3.7.(4) 9.10.14.5.(3) 9.10.15.5.(3)

Table 1.3.1.2.
Documents Referenced in the Book I (General) of the Building By-law
Forming part of Sentence 1.3.1.2.(1)

Issuing Agency	Document Number[1]	Title of Document[2]	By-law Reference
ASTM	E 90-04	Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements	5.9.1.1.(1) 9.11.1.1.(1)
ASTM	E 96/E 96M-10	Water Vapour Transmission of Materials	5.5.1.2.(3) 9.25.4.2.(1) 9.25.5.1.(1) 9.30.1.2.(1)
ASTM	E 336-05	Measurement of Airborne Sound Attenuation between Rooms in Buildings	5.9.1.1.(1) 9.11.1.1.(1)
ASTM	E 413-04	Classification for Rating Sound Insulation	5.9.1.1.(1) 9.11.1.1.(1)
ASTM	E 2190-10	Insulating Glass Unit Performance and Evaluation	Table 5.10.1.1. 9.6.1.2.(1)
ASTM	F 476-84	Security of Swinging Door Assemblies	9.7.5.2.(2)
ASTM	F 1667-05	Driven Fasteners: Nails, Spikes, and Staples	9.23.3.1.(1) 9.26.2.2.(1) 9.29.5.6.(1)
AWPA	M4-11	Care of Preservative-Treated Wood Products	4.2.3.2.(2) Table 5.10.1.1.
City		Fire By-law	1.1.1.1.(1)[3] 1.1.4.1.(1) 1.4.1.2.(1)[3] 2.1.1.2.(4)[3] 3.1.13.1.(1) 3.2.3.21.(1) 3.2.4.6.(1) 3.2.5.16.(1) 3.3.1.2.(1) 3.3.1.10.(1) 3.3.2.3.(1) 3.3.2.15.(1) 3.3.4.3.(4) 3.3.5.2.(1) 3.3.6.1.(1) 3.3.6.3.(1) 3.3.6.3.(2) 3.3.6.4.(1) 3.3.6.4.(2) 3.3.6.6.(1) 6.2.2.6.(1) 6.2.12.2.(3) 6.2.12.3.(1) 6.2.12.4.(1) 8.1.1.1.(3) 8.1.1.3.(1) 9.10.1.2.(1) 9.10.20.4.(1) 9.10.21.8.(1)

Table 1.3.1.2.
Documents Referenced in the Book I (General) of the Building By-law
Forming part of Sentence 1.3.1.2.(1)

Issuing Agency	Document Number(1)	Title of Document(2)	By-law Reference
City		Book II (Plumbing Systems) of the By-law	2.1.1.2.(4)(3) 5.6.2.2.(2) 7.1.2.1.(1) 9.31.6.2.(1)
BC	R.S.B.C. 1996, c. 17	Architects Act	1.4.1.2.(1)(3)
BC	B.C. Reg. 100/2004	Electrical Safety Regulation	3.3.6.2.(4) 3.6.1.2.(1) 3.6.2.1.(6) 3.6.2.7.(1) 6.2.1.4.(1) 9.31.6.2.(2) 9.33.5.2.(1) 9.34.1.1.(1)
BC	B.C. Reg. 101/2004	Elevating Devices Safety Regulation	3.5.2.1.(1) 3.5.2.1.(2)
BC	R.S.B.C. 1996, c. 116	Engineers and Geoscientists Act	1.4.1.2.(1)(3)
BC	B.C. Reg. 103/2004	Gas Safety Regulation	6.2.1.4.(1) 9.10.22.1.(1) 9.31.6.2.(2) 9.33.5.2.(1)
BC	R.S.B.C. 1996, c. 323	Local Government Act	2.2.1.1.(1)(4)
BC	R.S.B.C. 1996, c. 293	Mines Act	1.4.1.2.(1)(3)
BC	S.B.C. 2003, c. 39	Safety Standards Act	6.2.1.4.(1) 6.2.1.4.(2) 9.31.6.2.(2) 9.33.5.2.(1) 9.33.5.2.(2)
BC	B.C. Reg. 104/2004	Power Engineers, Boiler, Pressure Vessel and Refrigeration Safety Regulation	6.2.1.4.(1) 9.31.6.2.(2) 9.33.5.2.(1)
BNQ	NQ 3624-115/2007	Polyethylene (PE) Pipe and Fittings – Flexible Pipes for Drainage – Characteristics and Test Methods	Table 5.10.1.1. 9.14.3.1.(1)
CCBFC	NRCC 38732	National Farm Building Code of Canada 1995	1.1.1.1.(4)
CCBFC	NRCC 54435-2011	National Energy Code of Canada for Buildings	10.2.1.1.
CGSB	CAN/CGSB-1.501-M89	Method for Permeance of Coated Wallboard	5.5.1.2.(2) 9.25.4.2.(5)
CGSB	CAN/CGSB-7.2-94	Adjustable Steel Columns	9.17.3.4.(1)
CGSB	CAN/CGSB-10.3-92	Air Setting Refractory Mortar	9.21.3.4.(2) 9.21.3.9.(1) 9.22.2.2.(2)
CGSB	CAN/CGSB-11.3-M87	Hardboard	Table 5.10.1.1. 9.27.9.1.(2) 9.29.7.1.(1) 9.30.2.2.(1)
CGSB	CAN/CGSB-11.5-M87	Hardboard, Precoated, Factory Finished, for Exterior Cladding	Table 5.10.1.1. 9.27.9.1.(1)

Table 1.3.1.2.
Documents Referenced in the Book I (General) of the Building By-law
Forming part of Sentence 1.3.1.2.(1)

Issuing Agency	Document Number(1)	Title of Document(2)	By-law Reference
CGSB	CAN/CGSB-12.1-M90	Tempered or Laminated Safety Glass	3.3.1.19.(2) 3.4.6.15.(1) 3.4.6.15.(3) Table 5.10.1.1. 9.6.1.2.(1) 9.6.1.4.(1) 9.8.8.7.(1)
CGSB	CAN/CGSB-12.2-M91	Flat, Clear Sheet Glass	Table 5.10.1.1. 9.6.1.2.(1)
CGSB	CAN/CGSB-12.3-M91	Flat, Clear Float Glass	Table 5.10.1.1. 9.6.1.2.(1)
CGSB	CAN/CGSB-12.4-M91	Heat Absorbing Glass	Table 5.10.1.1. 9.6.1.2.(1)
CGSB	CAN/CGSB-12.8-97	Insulating Glass Units	Table 5.10.1.1. 9.6.1.2.(1)
CGSB	CAN/CGSB-12.10-M76	Glass, Light and Heat Reflecting	Table 5.10.1.1. 9.6.1.2.(1)
CGSB	CAN/CGSB-12.11-M90	Wired Safety Glass	3.3.1.19.(2) 3.4.6.15.(1) 3.4.6.15.(3) Table 5.10.1.1. 9.6.1.2.(1) 9.6.1.4.(1) 9.8.8.7.(1)
CGSB	CAN/CGSB-12.20-M89	Structural Design of Glass for Buildings	4.3.6.1.(1) 9.6.1.3.(1)
CGSB	CAN/CGSB-19.21-M87	Sealing and Bedding Compound, Acoustical	9.11.3.1.(1)
CGSB	CAN/CGSB-19.22-M89	Mildew-Resistant Sealing Compound for Tubs and Tiles	9.29.10.5.(1)
CGSB	CAN/CGSB-34.22-94	Asbestos-Cement Drain Pipe	Table 5.10.1.1. 9.14.3.1.(1)
CGSB	CAN/CGSB-37.1-M89	Chemical Emulsifier Type, Emulsified Asphalt for Dampproofing	Table 5.10.1.1. 9.13.2.2.(1)
CGSB	CAN/CGSB-37.2-M88	Emulsified Asphalt, Mineral-Colloid Type, Unfilled, for Dampproofing and Waterproofing and for Roof Coatings	Table 5.10.1.1. 9.13.2.2.(1) 9.13.3.2.(1)
CGSB	CAN/CGSB-37.3-M89	Application of Emulsified Asphalts for Dampproofing or Waterproofing	5.8.2.3.(1) Table 5.10.1.1. 9.13.2.3.(1) 9.13.3.3.(1)
CGSB	CAN/CGSB-37.4-M89	Fibrated, Cutback Asphalt, Lap Cement for Asphalt Roofing	Table 5.10.1.1. 9.26.2.1.(1)
CGSB	CAN/CGSB-37.5-M89	Cutback Asphalt Plastic, Cement	Table 5.10.1.1. 9.26.2.1.(1)
CGSB	37-GP-6Ma-1983	Asphalt, Cutback, Unfilled, for Dampproofing	5.8.2.2.(6) 5.8.2.2.(7) Table 5.10.1.1. 9.13.2.2.(1)

Table 1.3.1.2.
Documents Referenced in the Book I (General) of the Building By-law
Forming part of Sentence 1.3.1.2.(1)

Issuing Agency	Document Number(1)	Title of Document(2)	By-law Reference
CGSB	CAN/CGSB-37.8-M88	Asphalt, Cutback, Filled, for Roof Coating	Table 5.10.1.1. 9.26.2.1.(1)
CGSB	37-GP-9Ma-1983	Primer, Asphalt, Unfilled, for Asphalt Roofing, Dampproofing and Waterproofing	Table 5.10.1.1. 9.26.2.1.(1)
CGSB	37-GP-12Ma-1984	Application of Unfilled Cutback Asphalt for Dampproofing	5.8.2.3.(2) Table 5.10.1.1. 9.13.2.3.(1)
CGSB	CAN/CGSB-37.16-M89	Filled, Cutback Asphalt for Dampproofing and Waterproofing	Table 5.10.1.1. 9.13.2.2.(1) 9.13.3.2.(1)
CGSB	37-GP-18Ma-1985	Tar, Cutback, Unfilled, for Dampproofing	5.8.2.2.(6) 5.8.2.2.(7) Table 5.10.1.1. 9.13.2.2.(1)
CGSB	37-GP-21M-1985	Tar, Cutback, Fibrated, for Roof Coating	Table 5.10.1.1. 9.26.2.1.(1)
CGSB	CAN/CGSB-37.22-M89	Application of Unfilled, Cutback Tar Foundation Coating for Dampproofing	5.8.2.3.(2) Table 5.10.1.1. 9.13.2.3.(1)
CGSB	37-GP-36M-1976	Application of Filled Cutback Asphalts for Dampproofing and Waterproofing	5.8.2.3.(1) Table 5.10.1.1.
CGSB	37-GP-37M-1977	Application of Hot Asphalt for Dampproofing or Waterproofing	5.8.2.3.(1) Table 5.10.1.1.
CGSB	CAN/CGSB-37.50-M89	Hot-Applied, Rubberized Asphalt for Roofing and Waterproofing	Table 5.10.1.1. 9.26.2.1.(1)
CGSB	CAN/CGSB-37.51-M90	Application for Hot-Applied Rubberized Asphalt for Roofing and Waterproofing	5.6.1.2.(1) 5.8.2.3.(1) Table 5.10.1.1. 9.26.15.1.(1)
CGSB	37-GP-52M-1984	Roofing and Waterproofing Membrane, Sheet Applied, Elastomeric	Table 5.10.1.1. 9.26.2.1.(1)
CGSB	CAN/CGSB-37.54-95	Polyvinyl Chloride Roofing and Waterproofing Membrane	Table 5.10.1.1. 9.26.2.1.(1)
CGSB	37-GP-55M-1979	Application of Sheet Applied Flexible Polyvinyl Chloride Roofing Membrane	5.6.1.2.(1) Table 5.10.1.1. 9.26.16.1.(1)
CGSB	37-GP-56M-1985	Membrane, Modified, Bituminous, Prefabricated, and Reinforced for Roofing	Table 5.10.1.1. 9.26.2.1.(1)
CGSB	37-GP-64M-1977	Mat Reinforcing, Fibrous Glass, for Membrane Waterproofing Systems and Built-Up Roofing	Table 5.10.1.1.
CGSB	41-GP-6M-1983	Sheets, Thermosetting Polyester Plastics, Glass Fiber Reinforced	Table 5.10.1.1. 9.26.2.1.(1)
CGSB	CAN/CGSB-41.24-95	Rigid Vinyl Siding, Soffits and Fascia	Table 5.10.1.1. 9.27.12.1.(1)
CGSB	CAN/CGSB-51.25-M87	Thermal Insulation, Phenolic, Faced	Table 9.23.17.2.A 9.25.2.2.(1)

Table 1.3.1.2.
Documents Referenced in the Book I (General) of the Building By-law
Forming part of Sentence 1.3.1.2.(1)

Issuing Agency	Document Number(1)	Title of Document(2)	By-law Reference
CGSB	51-GP-27M-1979	Thermal Insulation, Polystyrene, Loose Fill	9.25.2.2.(1)
CGSB	CAN/CGSB-51.32-M77	Sheathing, Membrane, Breather Type	Table 5.10.1.1. 9.20.13.9.(1) 9.26.2.1.(1) 9.27.3.2.(1)
CGSB	CAN/CGSB-51.33-M89	Vapour Barrier Sheet, Excluding Polyethylene, for Use in Building Construction	Table 5.10.1.1. 9.25.4.2.(4)
CGSB	CAN/CGSB-51.34-M86	Vapour Barrier, Polyethylene Sheet for Use in Building Construction	Table 5.10.1.1. 9.13.2.2.(1) 9.18.6.2.(1) 9.25.3.2.(2) 9.25.3.6.(1) 9.25.4.2.(3)
CGSB	CAN/CGSB-82.6-M86	Doors, Mirrored Glass, Sliding or Folding, Wardrobe	9.6.1.2.(2)
CGSB	CAN/CGSB-93.1-M85	Sheet, Aluminum Alloy, Prefinished, Residential	Table 5.10.1.1. 9.27.11.1.(4)
CGSB	CAN/CGSB-93.2-M91	Prefinished Aluminum Siding, Soffits, and Fascia, for Residential Use	3.2.3.6.(4) Table 5.10.1.1. 9.10.14.5.(8) 9.10.14.5.(11) 9.10.15.5.(7) 9.10.15.5.(10) 9.27.11.1.(3)
CGSB	CAN/CGSB-93.3-M91	Prefinished Galvanized and Aluminum-Zinc Alloy Steel Sheet for Residential Use	Table 5.10.1.1. 9.27.11.1.(2)
CGSB	CAN/CGSB-93.4-92	Galvanized Steel and Aluminum-Zinc Alloy Coated Steel Siding, Soffits and Fascia, Prefinished, Residential	Table 5.10.1.1. 9.27.11.1.(1)
CSA	CAN/CSA-6.19-01	Residential Carbon Monoxide Alarming Devices	6.2.4.1.(2) 9.32.4.2.(2) 9.32.4.2.(3)
CSA	A23.1-09	Concrete Materials and Methods of Concrete Construction	4.2.3.6.(1) 4.2.3.9.(1) Table 5.10.1.1. 9.3.1.1.(1) 9.3.1.1.(4) 9.3.1.3.(1) 9.3.1.4.(1)
CSA	CAN/CSA-A23.3-04	Design of Concrete Structures	Table 4.1.8.9. 4.3.3.1.(1)
CSA	CAN/CSA-A82.1-M87	Burned Clay Brick (Solid Masonry Units Made from Clay or Shale)	Table 5.10.1.1. 9.20.2.1.(1)
CSA	A82.4-M1978	Structural Clay Load-Bearing Wall Tile	Table 5.10.1.1. 9.20.2.1.(1)
CSA	A82.5-M1978	Structural Clay Non-Load-Bearing Tile	Table 5.10.1.1. 9.20.2.1.(1)
CSA	CAN3-A82.8-M78	Hollow Clay Brick	Table 5.10.1.1. 9.20.2.1.(1)

Table 1.3.1.2.
Documents Referenced in the Book I (General) of the Building By-law
Forming part of Sentence 1.3.1.2.(1)

Issuing Agency	Document Number(1)	Title of Document(2)	By-law Reference
CSA	CAN/CSA-A82.27-M91	Gypsum Board	3.1.5.12.(4) Table 5.10.1.1. Table 9.23.17.2.A 9.29.5.2.(1)
CSA	A82.30-M1980	Interior Furring, Lathing and Gypsum Plastering	Table 5.10.1.1. 9.29.4.1.(1)
CSA	A82.31-M1980	Gypsum Board Application	3.2.3.6.(4) Table 5.10.1.1. 9.10.12.4.(3) 9.10.14.5.(8) 9.10.14.5.(11) 9.10.15.5.(7) 9.10.15.5.(10) 9.29.5.1.(2)
CSA	CAN3-A93-M82	Natural Airflow Ventilators for Buildings	Table 5.10.1.1. 9.19.1.2.(5)
CSA	A123.1-05/A123.5-05	Asphalt Shingles Made From Organic Felt and Surfaced with Mineral Granules/Asphalt Shingles Made From Glass Felt and Surfaced with Mineral Granules	Table 5.10.1.1. 9.26.2.1.(1)
CSA	CAN/CSA-A123.2-03	Asphalt-Coated Roofing Sheets	Table 5.10.1.1. 9.26.2.1.(1)
CSA	A123.3-05	Asphalt Saturated Organic Roofing Felt	Table 5.10.1.1. 9.26.2.1.(1)
CSA	CAN/CSA-A123.4-04	Asphalt for Constructing Built-Up Roof Coverings and Waterproofing Systems	Table 5.10.1.1. 9.13.2.2.(1) 9.13.3.2.(1) 9.26.2.1.(1)
CSA	A123.17-05	Asphalt Glass Felt Used in Roofing and Waterproofing	Table 5.10.1.1. 9.26.2.1.(1)
CSA	CAN3-A123.51-M85	Asphalt Shingle Application on Roof Slopes 1:3 and Steeper	5.6.1.2.(1) Table 5.10.1.1. 9.26.1.2.(1)
CSA	CAN3-A123.52-M85	Asphalt Shingle Application on Roof Slopes 1:6 to Less Than 1:3	5.6.1.2.(1) Table 5.10.1.1. 9.26.1.2.(1)
CSA	CAN/CSA-A165.1-04	Concrete Block Masonry Units	Table 5.10.1.1. 9.15.2.2.(1) 9.17.5.1.(1) 9.20.2.1.(1) 9.20.2.6.(1)
CSA	CAN/CSA-A165.2-04	Concrete Brick Masonry Units	Table 5.10.1.1. 9.20.2.1.(1)
CSA	CAN/CSA-A165.3-04	Prefaced Concrete Masonry Units	Table 5.10.1.1. 9.20.2.1.(1)
CSA	CAN3-A165.4-M85	Autoclaved Cellular Units	Table 5.10.1.1. 9.20.2.1.(1)

Table 1.3.1.2.
Documents Referenced in the Book I (General) of the Building By-law
Forming part of Sentence 1.3.1.2.(1)

Issuing Agency	Document Number(1)	Title of Document(2)	By-law Reference
CSA	CAN/CSA-A179-04	Mortar and Grout for Unit Masonry	Table 5.10.1.1. 9.15.2.2.(3) 9.20.3.1.(1)
CSA	CAN/CSA-A220 Series-06	Concrete Roof Tiles	Table 5.10.1.1. 9.26.2.1.(1) 9.26.17.1.(1)
CSA	CAN/CSA-A324-M88	Clay Flue Liners	9.21.3.3.(1)
CSA	CAN/CSA-A371-04	Masonry Construction for Buildings	5.6.1.2.(2) Table 5.10.1.1. 9.15.2.2.(3) 9.20.3.2.(7) 9.20.15.2.(1)
CSA	CAN/CSA-A405-M87	Design and Construction of Masonry Chimneys and Fireplaces	9.21.3.5.(1) 9.22.1.4.(1) 9.22.5.2.(2)
CSA	AAMA/WDMA/CSA 101/I.S.2/A440-08	NAFS – North American Fenestration Standard/Specification for Windows, Doors, and Skylights	5.10.2.2.(1) 5.10.2.2.(3) 9.7.4.1.(1) 9.7.4.2.(1) 9.7.4.3.(2) 9.7.5.1.(1) 9.7.5.3.(1)
CSA	A440S1-09	Canadian Supplement to AAMA/WDMA/CSA 101/I.S.2/A440, NAFS – North American Fenestration Standard/Specification for Windows, Doors, and Skylights, as updated by update no. 1 (July 2013)	1.1.3.1.(2) 5.10.2.2.(1) 9.7.4.2.(1)
CSA	CAN/CSA-A660-10	Certification of Manufacturers of Steel Building Systems	4.3.4.3.(1)
CSA	CAN/CSA-A3001-08	Cementitious Materials for Use in Concrete	Table 5.10.1.1. 9.3.1.2.(1) 9.28.2.1.(1)
CSA	CAN/CSA-B72-M87	Installation Code for Lightning Protection Systems	6.3.1.4.(1)
CSA	B111-1974	Wire Nails, Spikes and Staples	9.23.3.1.(1) 9.26.2.2.(1) 9.29.5.6.(1)
CSA	B139-04	Installation Code for Oil-Burning Equipment	6.2.1.4.(1) 9.31.6.2.(2) 9.33.5.2.(1)
CSA	CAN/CSA-B182.1-11	Plastic Drain and Sewer Pipe and Pipe Fittings	Table 5.10.1.1. 9.14.3.1.(1)
CSA	CAN/CSA-B214-12	Installation Code for Hydronic Heating Systems	6.2.1.1.(1) 9.33.4.2.(1)
CSA	CAN/CSA-B355-09	Lifts for Persons with Physical Disabilities	3.8.3.10.(1)
CSA	CAN/CSA-B365-01	Installation Code for Solid-Fuel Burning Appliances and Equipment	6.2.1.4.(1) 9.22.10.2.(1) 9.31.6.2.(2) 9.33.5.3.(1)

Table 1.3.1.2.
Documents Referenced in the Book I (General) of the Building By-law
Forming part of Sentence 1.3.1.2.(1)

Issuing Agency	Document Number(1)	Title of Document(2)	By-law Reference
CSA	C22.1-15	Canadian Electrical Code, Part I	3.3.6.2.(4) 3.6.1.2.(1) 3.6.2.1.(6) 3.6.2.7.(1) 6.2.1.4.(1) 9.31.6.2.(2) 9.33.5.2.(1) 9.34.1.1.(1)
CSA	C22.2 No. 0.3-09	Test Methods for Electrical Wires and Cables	3.1.4.3.(1) 3.1.4.3.(2) 3.1.5.18.(1) 3.1.5.18.(3) 9.34.1.5.(1)
CSA	C22.2 No. 141-10	Emergency Lighting Equipment	3.2.7.4.(2) 3.4.5.1.(3) 9.9.11.3.(3) 9.9.12.3.(7)
CSA	C22.2 No. 211.0-03	General Requirements and Methods of Testing for Nonmetallic Conduit	3.1.5.20.(1)
CSA	CAN/CSA-C22.2 No. 262-04	Optical Fiber Cable and Communication Cable Raceway Systems	3.1.5.20.(1)
CSA	CAN/CSA-C260-M90	Rating the Performance of Residential Mechanical Ventilating Equipment	9.32.3.5.(1) 9.32.3.6.(2) 9.32.3.7.(1)
CSA	CAN/CSA-C282-09	Emergency Electrical Power Supply for Buildings	3.2.7.5.(1)
CSA	CAN/CSA-C448 Series-02	Design and Installation of Earth Energy Systems	9.33.5.2.(1)
CSA	F280-12	Determining the Required Capacity of Residential Space Heating and Cooling Appliances	9.33.5.1.(1)
CSA	CAN/CSA-F326-M91	Residential Mechanical Ventilation Systems	9.32.3.1.(1)
CSA	CAN/CSA-G30.18-09	Billet-Steel Bars for Concrete Reinforcement	9.3.1.1.(4)
CSA	CAN/CSA-G40.21-04	General Requirements for Rolled or Welded Structural Quality Steel	4.2.3.8.(1) Table 5.10.1.1. 9.23.4.3.(2)
CSA	CAN/CSA-G401-07	Corrugated Steel Pipe Products	Table 5.10.1.1. 9.14.3.1.(1)
CSA	CAN/CSA-O80 Series-08	Wood Preservation	3.1.4.5.(1) 4.2.3.2.(1) 4.2.3.2.(2) Table 5.10.1.1.
CSA	CAN/CSA-O80.1-08	Specification of Treated Wood	9.3.2.9.(5)
CSA	CAN/CSA-O80.2-08	Processing and Treatment	4.2.3.2.(1)
CSA	CAN/CSA-O80.3-08	Preservative Formulations	4.2.3.2.(1)
CSA	O80.15-97	Preservative Treatment of Wood for Building Foundation Systems, Basements, and Crawl Spaces by Pressure Processes	4.2.3.2.(1)
CSA	O86-09	Engineering Design in Wood	Table 4.1.8.9. 4.3.1.1.(1)

Table 1.3.1.2.
Documents Referenced in the Book I (General) of the Building By-law
Forming part of Sentence 1.3.1.2.(1)

Issuing Agency	Document Number(1)	Title of Document(2)	By-law Reference
CSA	O115-M1982	Hardwood and Decorative Plywood	Table 5.10.1.1. 9.27.8.1.(1) 9.30.2.2.(1)
CSA	O118.1-08	Western Red Cedar Shakes and Shingles	Table 5.10.1.1. 9.26.2.1.(1) 9.27.7.1.(1)
CSA	O118.2-08	Eastern White Cedar Shingles	Table 5.10.1.1. 9.26.2.1.(1) 9.27.7.1.(1)
CSA	O121-08	Douglas Fir Plywood	Table 5.10.1.1. 9.23.15.2.(1) 9.23.16.2.(1) Table 9.23.17.2.A 9.27.8.1.(1) 9.30.2.2.(1) Table A-13 Table A-14 Table A-15
CSA	CAN/CSA-O122-06	Structural Glued-Laminated Timber	Table A-11 Table A-16
CSA	CAN/CSA-O132.2 Series-90	Wood Flush Doors	9.7.4.3.(4)
CSA	O141-05	Softwood Lumber	Table 5.10.1.1. 9.3.2.6.(1)
CSA	O151-09	Canadian Softwood Plywood	Table 5.10.1.1. 9.23.15.2.(1) 9.23.16.2.(1) Table 9.23.17.2.A 9.27.8.1.(1) 9.30.2.2.(1) Table A-13 Table A-14 Table A-15
CSA	O153-	Poplar Plywood	Table 5.10.1.1. 9.23.15.2.(1) 9.23.16.2.(1) Table 9.23.17.2.A 9.27.8.1.(1) 9.30.2.2.(1)
CSA	O177-06	Qualification Code for Manufacturers of Structural Glued-Laminated Timber	4.3.1.2.(1) Table A-11 Table A-16

Table 1.3.1.2.
Documents Referenced in the Book I (General) of the Building By-law
Forming part of Sentence 1.3.1.2.(1)

Issuing Agency	Document Number(1)	Title of Document(2)	By-law Reference
CSA	CAN/CSA-O325-07	Construction Sheathing	Table 5.10.1.1. Table 9.23.13.6. 9.23.15.2.(1) 9.23.15.4.(2) Table 9.23.15.5.B 9.23.16.2.(1) 9.23.16.3.(2) Table 9.23.16.7.B Table 9.23.17.2.B 9.29.9.1.(2) 9.29.9.2.(5) Table A-13 Table A-14 Table A-15
CSA	O437.0-93	OSB and Waferboard	Table 5.10.1.1. 9.23.15.2.(1) 9.23.15.4.(2) 9.23.16.2.(1) 9.23.16.3.(2) Table 9.23.17.2.A 9.27.10.1.(1) 9.29.9.1.(2) 9.30.2.2.(1) Table A-13 Table A-14 Table A-15
CSA	S16-09	Design of Steel Structures	Table 4.1.8.9. 4.3.4.1.(1)
CSA	CAN/CSA-S136-07	North American Specification for the Design of Cold-Formed Steel Structural Members (using the Appendix B provisions applicable to Canada)	Table 4.1.8.9. 4.3.4.2.(1)
CSA	CAN/CSA-S157 -05/S157.1-05	Strength Design in Aluminum/Commentary on CSA S157-05, Strength Design in Aluminum	4.3.5.1.(1)
CSA	S269.1-1975	Falsework for Construction Purposes	4.1.1.3.(4)
CSA	CAN/CSA-S269.2-M87	Access Scaffolding for Construction Purposes	4.1.1.3.(4)
CSA	CAN/CSA-S269.3-M92	Concrete Formwork	4.1.1.3.(4)
CSA	S304.1-04	Design of Masonry Structures	Table 4.1.8.9. 4.3.2.1.(1)
CSA	S307-	Load Test Procedure for Wood Roof Trusses for Houses and Small Buildings	9.23.14.11.(5)
CSA	CAN/CSA-S350-M	Code of Practice for Safety in Demolition of Structures	8.1.1.3.
CSA	S367-09	Air-, Cable-, and Frame-Supported Membrane Structures	4.4.1.1.(1)
CSA	CAN/CSA-S406-92	Construction of Preserved Wood Foundations	9.15.2.4.(1) 9.16.5.1.(1)
CSA	S413-07	Parking Structures	4.4.2.1.(1)
CSA	CSA-S478-95 (Reaffirmed 2001)	Guideline of Durability in Buildings	5.1.4.2.(3)
CSA	Z32-09	Electrical Safety and Essential Electrical Systems in Health Care Facilities	3.2.7.3.(4) 3.2.7.6.(1)
CSA	CAN/CSA-Z240 MH Series	Mobile Homes	1.1.1.1.(2)

Table 1.3.1.2.
Documents Referenced in the Book I (General) of the Building By-law
Forming part of Sentence 1.3.1.2.(1)

Issuing Agency	Document Number(1)	Title of Document(2)	By-law Reference
CSA	Z240.2.1-09	Structural Requirements for Manufactured Homes	9.12.2.2.(6) 9.15.1.3.(1)
CSA	Z240.10.1-08	Site Preparation, Foundation, and Anchorage of Manufactured Homes	9.15.1.3.(1) 9.23.6.3.(1)
CSA	CAN/CSA-Z317.2-01	Special Requirements for Heating, Ventilation, and Air Conditioning (HVAC) Systems in Health Care Facilities	6.2.1.1.(1)
CSA	Z662-11/Z662.1-11	Oil and Gas Pipeline Systems/Commentary on CSA Z662-11	3.2.3.22.(1)

Table 1.3.1.2.
Documents Referenced in the Book I (General) of the Building By-law
Forming part of Sentence 1.3.1.2.(1)

Issuing Agency	Document Number(1)	Title of Document(2)	By-law Reference
CSA	Z7396.1-09	Medical Gas Pipeline Systems – Part 1: Pipelines for Medical Gases and Vacuum	3.7.3.1.(1)

Table 1.3.1.2.
Documents Referenced in the Book I (General) of the Building By-law
Forming part of Sentence 1.3.1.2.(1)

Issuing Agency	Document Number[1]	Title of Document[2]	By-law Reference
CWC	2009	Engineering Guide for Wood Frame Construction	9.4.1.1.(1) 9.23.13.1.(2) 9.23.13.2.(2) 9.23.13.3.(2)
EPA	625/R-92/016 (1994)	Radon Prevention in the Design and Construction of Schools and Other Large Buildings	6.2.1.1.(1)
HVI	HVI Publication 915-2009	Loudness Testing and Rating Procedure	9.32.3.6.(2)(a)
HVI	HVI Publication 916-2009	Airflow Test Procedure	9.32.3.5.(2) 9.32.3.6.(2) 9.32.3.7.(1)
ISO	3864-1:2002	Graphical symbols – Safety colours and safety signs – Part 1: Design principles for safety signs in workplaces and public areas	3.4.5.1.(2) 9.9.11.3.(2)
ISO	7010:2003	Graphical symbols – Safety colours and safety signs – Safety signs used in workplaces and public areas	3.4.5.1.(2) 9.9.11.3.(2)
ISO	8201:1987(E)	Acoustics – Audible emergency evacuation signal	3.2.4.19.(2)
NFPA	13-2013	Installation of Sprinkler Systems	3.1.9.1.(4) 3.2.4.9.(2) 3.2.4.16.(1) 3.2.5.12.(1) 3.3.2.13.(3) 9.10.9.6.(11)
NFPA	13D-2010	Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes	3.2.4.1.(2) 3.2.5.12.(3) 9.10.18.2.(3)
NFPA	13R-2010	Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height	3.2.5.12.(2)
NFPA	14-2010	Installation of Standpipe and Hose Systems	2.2.7.1.(1)[4] 3.2.5.9.(1) 3.2.5.10.(1)
NFPA	20-2010	Installation of Stationary Pumps for Fire Protection	3.2.4.10.(4) 3.2.5.18.(1)
NFPA	68-2007	Explosion Protection by Deflagration Venting	3.3.6.4.(2)
NFPA	80-2010	Fire Doors and Other Opening Protectives	3.1.8.5.(2) 3.1.8.10.(2) 3.1.8.14.(1) 3.1.9.1.(5) 9.10.9.6.(13) 9.10.13.1.(1)
NFPA	82-2009	Incinerators and Waste and Linen Handling Systems and Equipment	6.2.6.1.(1) 9.10.10.5.(2)
NFPA	91-2010	Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Noncombustible Particulate Solids	6.2.12.3.(1)
NFPA	96-2011	Ventilation Control and Fire Protection of Commercial Cooking Operations	3.2.4.9.(2) 6.2.2.7.(1)
NFPA	101-2012	Life Safety Code	3.3.2.1.(2) 3.3.2.1.(3)

Table 1.3.1.2.
Documents Referenced in the Book I (General) of the Building By-law
Forming part of Sentence 1.3.1.2.(1)

Issuing Agency	Document Number(1)	Title of Document(2)	By-law Reference
NFPA	211-2010	Chimneys, Fireplaces, Vents, and Solid Fuel-Burning Appliances	6.3.1.2.(2) 6.3.1.3.(1)
NFPA	214-2011	Water-Cooling Towers	6.2.3.14.(3)
NLGA	2010	Standard Grading Rules for Canadian Lumber	9.3.2.1.(1)
SMACNA	ANSI/SMACNA 006-2006	HVAC Duct Construction Standards – Metal and Flexible	9.33.6.5.(2)
TC		Canadian Aviation Regulations – Part III	4.1.5.13.(1)
TPIC	2011	Truss Design Procedures and Specifications for Light Metal Plate Connected Wood Trusses	9.23.14.11.(6)
UL	ANSI/UL 300-2005	Fire Testing of Fire Extinguishing Systems for Protection of Commercial Cooking Equipment	6.2.2.7.(2)
ULC	CAN/ULC-S101-07	Fire Endurance Tests of Building Construction and Materials	3.1.5.12.(3) 3.1.5.12.(4) 3.1.5.12.(6) 3.1.7.1.(1) 3.1.11.7.(1) 3.2.3.8.(1) 3.2.6.5.(6) 9.10.16.3.(1)
ULC	CAN/ULC-S102-10	Test for Surface Burning Characteristics of Building Materials and Assemblies	3.1.5.21.(1) 3.1.12.1.(1) 3.2.2.50.(3)
ULC	CAN/ULC-S102.2-07	Test for Surface Burning Characteristics of Flooring, Floor Coverings, and Miscellaneous Materials and Assemblies	3.1.12.1.(2) 3.1.13.4.(1)
ULC	CAN/ULC-S102.3-07	Fire Test of Light Diffusers and Lenses	3.1.13.4.(1)
ULC	CAN/ULC-S102.4-10	Fire and Smoke Characteristics of Electrical Wiring and Cables	3.1.5.18.(2) 3.1.5.20.(2)
ULC	CAN4-S104-M80	Fire Tests of Door Assemblies	3.1.8.4.(1) 3.2.6.5.(3)
ULC	CAN4-S105-M85	Fire Door Frames Meeting the Performance Required by CAN4-S104	9.10.13.6.(1)
ULC	CAN4-S106-M80	Fire Tests of Window and Glass Block Assemblies	3.1.8.4.(1)
ULC	CAN/ULC-S107-10	Fire Tests of Roof Coverings	3.1.15.1.(1)
ULC	CAN/ULC-S109-03	Flame Tests of Flame-Resistant Fabrics and Films	3.1.6.5.(1) 3.1.16.1.(1) 3.6.5.2.(2) 3.6.5.3.(1) 9.33.6.3.(1)
ULC	CAN/ULC-S110-07	Test for Air Ducts	3.6.5.1.(2) 3.6.5.1.(5) 9.33.6.2.(2) 9.33.6.2.(4)
ULC	ULC-S111-07	Fire Tests for Air Filter Units	6.2.3.13.(1) 9.33.6.14.(1)
ULC	CAN/ULC-S112-10	Fire Test of Fire-Damper Assemblies	3.1.8.4.(1)
ULC	CAN/ULC-S112.1-10	Leakage Rated Dampers for Use in Smoke Control Systems	6.2.3.9.(3)
ULC	CAN/ULC-S113-07	Wood Core Doors Meeting the Performance Required by CAN/ULC-S104 for Twenty Minute Fire Rated Closure Assemblies	9.10.13.2.(1)

Table 1.3.1.2.
Documents Referenced in the Book I (General) of the Building By-law
Forming part of Sentence 1.3.1.2.(1)

Issuing Agency	Document Number[1]	Title of Document[2]	By-law Reference
ULC	CAN/ULC-S114-05	Test for Determination of Non-Combustibility in Building Materials	1.4.1.2.(1)[3]
ULC	CAN/ULC-S115-11	Fire Tests of Firestop Systems	3.1.5.16.(3) 3.1.9.1.(1) 3.1.9.1.(2) 3.1.9.1.(3) 3.1.9.4.(4) 9.10.9.6.(2) 9.10.9.7.(3)
ULC	CAN/ULC-S124-06	Test for the Evaluation of Protective Coverings for Foamed Plastic	3.1.5.12.(2)
ULC	CAN/ULC-S126-06	Test for Fire Spread Under Roof-Deck Assemblies	3.1.14.1.(1)
ULC	CAN/ULC-S134-92	Fire Test of Exterior Wall Assemblies	3.1.5.5.(1) 3.2.2.50.(3) 3.2.3.7.(3) 9.10.14.5.(2) 9.10.15.5.(2) 9.10.15.5.(3)
ULC	ULC-S135-04	Test Method for the Determination of Combustibility Parameters of Building Materials Using an Oxygen Consumption Calorimeter (Cone Calorimeter)	3.1.5.1.(2)
ULC	CAN/ULC-S138-06	Test for Fire Growth of Insulated Building Panels in a Full-Scale Room Configuration	3.1.5.12.(7)
ULC	ULC-S139-00	Fire Test for Evaluation of Integrity of Electrical Cables	3.2.7.10.(2) 3.2.7.10.(3)
ULC	CAN/ULC-S143-09	Fire Tests for Non-Metallic Electrical and Optical Fibre Cable Raceway Systems	3.1.5.20.(1)
ULC	ULC-S505-1974	Fusible Links for Fire Protection Service	3.1.8.9.(1)
ULC	CAN/ULC-S524-06	Installation of Fire Alarm Systems	3.1.8.12.(2) 3.1.8.12.(3) 3.2.4.5.(1) 3.2.4.20.(4) 3.2.4.21.(7) 3.2.4.21.(12) 9.10.19.4.(3) 9.10.19.6.(2)
ULC	CAN/ULC-S531-02	Smoke-Alarms	3.2.4.21.(1) 9.10.19.1.(1)
ULC	CAN/ULC-S537-04	Verification of Fire Alarm Systems	3.2.4.5.(2)
ULC	CAN/ULC-S553-02	Installation of Smoke-Alarms	3.2.4.21.(10) 9.10.19.3.(2)
ULC	CAN/ULC-S561-03	Installation and Services for Fire Signal Receiving Centres and Systems	3.2.4.8.(4)
ULC	CAN/ULC-S572-10	Photoluminescent and Self-Luminous Signs and Path Marking Systems	3.4.5.1.(3) 3.4.5.1.(4) 9.9.11.3.(3) 9.9.11.3.(4)
ULC	CAN/ULC-S610-M87	Factory-Built Fireplaces	9.22.8.1.(1)
ULC	ULC-S628-93	Fireplace Inserts	9.22.10.1.(1)
ULC	CAN/ULC-S629-M87	650°C Factory-Built Chimneys	9.33.10.2.(1)
ULC	CAN/ULC-S639-M87	Steel Liner Assemblies for Solid-Fuel Burning Masonry Fireplaces	9.22.2.3.(1)

Table 1.3.1.2.
Documents Referenced in the Book I (General) of the Building By-law
Forming part of Sentence 1.3.1.2.(1)

Issuing Agency	Document Number(1)	Title of Document(2)	By-law Reference
ULC	CAN/ULC-S647-05	Standard for Exhaust Cleaning and Recirculation Assemblies for Commercial and Institutional Kitchen Exhaust Systems	1.4.1.2
ULC	CAN/ULC-S701-11	Thermal Insulation, Polystyrene, Boards and Pipe Covering	Table 5.10.1.1. 9.15.4.1.(1) Table 9.23.17.2.A 9.25.2.2.(1)
ULC	CAN/ULC-S702-09	Mineral Fibre Thermal Insulation for Buildings	Table 5.10.1.1. Table 9.23.17.2.A 9.25.2.2.(1)
ULC	CAN/ULC-S703-09	Cellulose Fibre Insulation (CFI) for Buildings	Table 5.10.1.1. 9.25.2.2.(1)
ULC	CAN/ULC-S704-11	Thermal Insulation, Polyurethane and Polyisocyanurate, Boards, Faced	Table 5.10.1.1. Table 9.23.17.2.A 9.25.2.2.(1)
ULC	CAN/ULC-S705.1-01	Thermal Insulation – Spray Applied Rigid Polyurethane Foam, Medium Density – Material - Specification	Table 5.10.1.1. 9.25.2.2.(1)
ULC	CAN/ULC-S705.2-05	Thermal Insulation – Spray-Applied Rigid Polyurethane Foam, Medium Density — Application	5.3.1.3.(3) Table 5.10.1.1. 9.25.2.5.(1)
ULC	CAN/ULC-S706-09	Wood Fibre Thermal Insulation for Buildings	Table 5.10.1.1. 9.23.16.7.(3) Table 9.23.17.2.A 9.25.2.2.(1) 9.29.8.1.(1)
ULC	CAN/ULC-S741-08	Air Barrier Materials - Specification	5.4.1.2.(1)
ULC	ULC/ORD-C199P-2002	Combustible Piping for Sprinkler Systems	3.2.5.13.(2) 3.2.5.13.(5)
ULC	ULC/ORD-C1254.6-1995	Fire Testing of Restaurant Cooking Area Fire Extinguishing System Units	6.2.2.7.(2)

Notes to Table 1.3.1.2.:

(1) Some documents may have been reaffirmed or reapproved. Check with the applicable issuing agency for up-to-date information.

(2) Some titles have been abridged to omit superfluous wording.

(3) By-law reference is in Division A.

(4) By-law reference is in Division C.

"

11. In Book I, Division B, Part 1, Sentence 1.3.2.1.(1), Council:

a) adds the following abbreviations:

" NECB National Energy Code of Canada for Buildings 2011 (see CCBFC)
NFRC National Fenestration Rating Council (6305 Ivy Lane, Suite 140, Greenbelt, Maryland 20770 U.S.A.; www.nfrc.org)";

and

b) repeals the following definition:

"TPIC Truss Plate Institute of Canada (c/o MiTek Canada Inc., 100 Industrial Road, Bradford, Ontario L3Z 3G7; www.tpic.ca)"

12. In Book I, Division B, Part 3, Sentence 3.1.5.18.(2), Council strikes out the words "Fire and Smoke Characteristics of Electrical Wiring and Cables," and substitutes "Standard Method of Test for Fire and Smoke Characteristics of Electrical Wiring, Cables and Non-Metallic Raceways,".

13. In Book I, Division B, Part 3, Sentence 3.1.5.21.(1), Council strikes out the words "Test for Surface Burning Characteristics of Building Materials and Assemblies." and substitutes "Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies.".

14. In Book I, Division B, Part 3, Clause 3.1.8.4.(1)(c), Council strikes out the words "CAN/ULC-S112-M," and substitutes "CAN/ULC-S112,".

15. In Book I, Division B, Part 3, Sentence 3.1.12.1.(1), Council strikes out the words "Test for Surface Burning Characteristics of Building Materials and Assemblies." and substitutes "Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies.".

16. In Book I, Division B, Part 3, Article 3.2.1.1., Council strikes out Sentence (1) and substitutes the following:

"**1**) A roof-top enclosure shall not be considered as a *storey* in calculating the *building height* if the roof-top enclosure is
a) provided for elevator machinery, a stairway or a *service room*, and
b) used for no purpose other than for service to the *building*."

17. In Book I, Division B, Part 3, Clause 3.2.2.50.(3)(b), Council strikes out the words "Test for Surface Burning Characteristics of Building Materials and Assemblies." and substitutes "Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies.".

18. In Book I, Division B, Part 3, Clause 3.2.4.1.(4)(f), Council strikes out the words "daycare facility," and substitutes "*child care facilities*,".

19. In Book I, Division B, Part 3, Sentence 3.2.4.21.(1), Council strikes out the words "Smoke-Alarms," and substitutes "Standard for Smoke Alarms,".

20. In Book I, Division B, Part 3, Article 3.2.7.3., Council strikes out Clause (1)(j) and substitutes the following:

" j) *floor areas* or parts thereof where persons are cared for that are within daycare facilities, including *child care facilities*, and"

21. In Book I, Division B, Part 3, Sentence 3.2.4.22., Council strikes out Sentence (10) and substitutes the following:

"**10)** The voice communication system required by Sentence (7) shall meet the silencing and transmission requirements of Sentences (3) to (5)."

22. In Book I, Division B, Part 3, Article 3.2.5.7., Council strikes out Sentence (2) and substitutes the following:

" **2)** Buildings that are sprinklered throughout with a sprinkler system conforming to Article 3.2.5.12. or have a standpipe system conforming to Article 3.2.5.9. to to 3.2.5.11. need not comply with Sentence 3.2.5.7.(1)."

23. In Book I, Division B, Part 3, Sentence 3.3.1.13., Council amends Clause 3.3.1.13.(10)(b) as follows by:

a) striking out subclauses (i) and (ii) and substituting the following:

"i) for manual doors swinging into this area, not less than 1 500 mm long by a width equal to the door assembly width plus not less than 600 mm clear space beside the latching jamb of the door,
ii)for manual doors swinging away from this area, not less than 1 200 mm long by a width equal to the door assembly width plus not less than 300 mm clear space beside the latching jamb of the door,"

24. In Book I, Division B, Part 3, Sentence 3.3.2.7.(1), Council Strikes out the words "Sentence 3.8.3.3.(7)" and substitutes "Sentence 3.3.1.13.(10)(d)".

25. In Book I, Division B, Part 3, Article 3.3.4.9., Council strikes out Sentence (1) and substitutes the following:

"1) *Dwelling units* shall conform to Article 9.7.2.1. and Subsection 9.7.5."

26. In Book I, Division B, Part 3, Sentence 3.4.5.1., Council strikes out Sentence (2) to (4) and substitutes the following:

"**2)** Every exit sign shall
a) be visible on approach to the exit,
b) consist of a green pictogram and a white or lightly tinted graphical symbol meeting the colour specifications referred to in ISO 3864-1, "Graphical symbols - Safety colours and safety signs - Part 1: Design principles for safety signs in workplaces and public areas," and

c) conform to the requirement of ISO 7010, "Graphical symbols - Safety colours and safety signs - Safety signs used in workplaces and public areas," for one or more of the following symbols (see Appendix A):

i) E001 emergency exit (left hand),
ii) E002 Emergency exit (right hand),
iii) E005 Direction, arrow (90° increments), safe condition, and
iv) E006 Direction, 45° arrow (90° increments), safe condition.

3) Internally illuminated exit signs shall be continuously illuminated and

a) where illumination of the sign is powered by an electrical circuit, conform to CSA C22.2 No. 141, "Emergency Lighting Equipment," (See Appendix A) or

b) where illumination of the sign is not powered by an electrical circuit, conform to CAN/ULC-S572, "Photoluminescent and Self-Luminous Signs and Path Marking Systems."

4) Externally illuminated exit signs shall be continuously illuminated and conform to CAN/ULC-S572,
"Photoluminescent and Self-Luminous Signs and Path Marking Systems.
(See Appendix A.)"

27. In Book I, Division B, Part 3, Article 3.4.6.8., after Sentence (10) Council adds the following:

"11) Stairs shall be provided with tactile warning strips conforming to Article 3.8.3.11. unless the stairs are

a) stairs within or serving *dwelling units*,
b) *exit* stairs not normally used for access purposes, or
c) fire escape stairs.".

28. In Book I, Division B, Part 3, Article 3.4.6.16., Council strikes out Sentence (3) and substitutes the following:

"**3)** Except as required by Clause 3.3.1.13.(10)(d), every *exit* door shall be designed and installed so that, when the latch is released, the door will open under a force of not more than 90 N, applied at the knob or other latch-releasing device.".

29. In Book I, Division B, Part 3, Article 3.4.7.7., Council strikes out Sentence (1) and substitutes the following:

"**1)** Platforms for a fire escape shall be provided in conformance with the requirements for stair landings in Articles 3.4.6.3. and 3.4.6.4"

30. In Book I, Division B, Part 3, Sentence 3.7.2.2.(7), Council strikes out the words "daycare centres," and substitutes "*child care facilities*,".

31. In Book I, Division B, Part 3, Article 3.8.3.5., Council strikes out Sentence (4) and substitutes the following:

"**4)** Power operation that functions for passage in both directions shall be provided for all doors in an *accessible* path of travel at the exterior *accessible* entrances to

a) a hotel,
b) a Group B, Division 2 *major occupancy*,
c) a Group B, Division 3 *major occupancy*, and
d) any of the following that is more than 500 m2 in area:
i) an *assembly occupancy*,
ii) a *business and personal services occupancy*, and
iii) a *mercantile occupancy*."

32. In Book I, Division B, Part 3, Sentence 3.8.3.10.(1)(b), Council Strikes out the words "CAN/CSA-B44, "Safety Code for Elevators," and substitutes "ASME A17.1/CSA B44, "Safety Code for Elevators and Escalators,".

33. In Book I, Division B, Part 3, Article 3.9.1.1., in Table 3.9.1.1., Council adds the following item:

"

3.3.2.16. Daycare Facilities with Children under 30 Months	
(1)	(a) [F02,F03,F05-OS1.2,OS1.3]
	(b) [F10-OS1.5]
(2)	[F11-OS1.5]
(3)	[F11-OS1.5]
(4)	[F11-OS1.5]
	[F81-OS1.4]
(5)	[F11-OS1.5]
	[F81-OS1.4]

"

34. In Book I, Division B, Part 3, Article 3.9.1.1., in Table 3.9.1.1., Council deletes the following item:

"

6.2.1.7. Outdoor Design Conditions	
(2)	[F40,F44,F50-OH1.1]
	[F44-OS3.4]

"

35. In Book I, Division B, Part 4, Sentence 4.1.7.1.(5), Council strikes out Clauses (b) and (c), and substitutes

" b) $0.7(h/12)^{0.3}$ but not less than 0.7 for rough terrain, where rough terrain is suburban, urban or wooded terrain extending upwind from the *building* uninterrupted for at least 1 km or 20 times the height of the *building*, whichever is greater, h being the reference height above grade in metres for the surface or part of the surface (see Appendix A),

c) an intermediate value between the two exposures defined in Clauses (a) and (b) in cases where the site is less than 1 km or 20 times the height of the *building* from a change in terrain conditions, whichever is greater, provided an appropriate interpolation method is used (see Appendix A), or".

36. In Book I, Division B, Part 4, Article 4.3.6.1. Council strikes out Sentence (1) and substitutes the following:

"**1)** Glass used in *buildings* shall be designed in conformance with

a) CAN/CGSB-12.20-M, "Structural Design of Glass for Buildings," or

b) ASTM E1300, "Standard Practice for Determining Load Resistance of Glass in Buildings." ".

37. In Book I, Division B, Part 4, Sentence 4.4.1.1.(1), Council strikes out the words "CSA S367, "Air-, Cable-, and Frame-Membrane Supported Structures," and substituting "CSA S367, "Air-, Cable-, and Frame-Supported Membrane Structures,".

38. In Book I, Division B, Part 5, Article 5.2.2.1., Council strikes out Sentence (2) and substitutes the following:

" **2)** Except as provided in Article 4.1.8.18., the structural loads referred to in Sentence (1) and their related effects shall include

a) dead loads transferred from structural elements,

b) wind, snow, rain, hydrostatic and earth pressures,

c) earthquake effects for post-disaster buildings, depending on their intended function (see Appendix A),

d) live loads due to use and occupancy, and

e) loads due to thermal or moisture-related expansion and contraction, deflection, deformation, creep, shrinkage, settlement, and differential movement.".

39. In Book I, Division B, Part 5, Article 5.10.1.1., Council strikes out Sentence (1) and substitutes the following:

"**1)** Except as provided in Sentence (2) and elsewhere in this Part, materials and components, and their installation, shall conform to the requirements of the applicable standards in Table 5.10.1.1. where those materials or components are

a) incorporated into environmental separators or assemblies exposed to the exterior, and

b) installed to fulfill the requirements of this Part.

(See Appendix A.)"

40. In Book I, Division B, Part 5, Article 5.10.1.1., Council strikes out Table T-5.10.1.1 and substitutes the following:

"

Table 5.10.1.1. Standards Applicable to Environmental Separators and Assemblies Exposed to the Exterior Forming part of Sentence 5.10.1.1.(1)		
Issuing Agency	**Document Number**	**Title of Document**
ANSI	A208.1	Particleboard
ASME	B18.6.1	Wood Screws (Inch Series)
ASTM	A 123/A 123M	Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
ASTM	A 153/A 153M	Zinc Coating (Hot-Dip) on Iron and Steel Hardware
ASTM	A 653/A 653M	Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy Coated (Galvannealed) by the Hot-Dip Process
ASTM	C 4	Clay Drain Tile and Perforated Clay Drain Tile
ASTM	C 73	Calcium Silicate Brick (Sand-Lime Brick)
ASTM	C 126	Ceramic Glazed Structural Clay Facing Tile, Facing Brick, and Solid Masonry Units
ASTM	C 212	Structural Clay Facing Tile
ASTM	C 412M	Concrete Drain Tile (Metric)
ASTM	C 444M	Perforated Concrete Pipe (Metric)
ASTM	C 553	Mineral Fiber Blanket Thermal Insulation for Commercial and Industrial Applications
ASTM	C 612	Mineral Fiber Block and Board Thermal Insulation
ASTM	C 700	Standard Specification for Vitrified Clay Pipe, Extra Strength, Standard Strength and Perforated
ASTM	C 834(1)	Latex Sealants
ASTM	C 920(1)	Elastomeric Joint Sealants
ASTM	C 991	Flexible Fibrous Glass Insulation for Metal Buildings
ASTM	C 1002	Steel Self-Piercing Tapping Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs
ASTM	C 1177/C 1177M	Glass Mat Gypsum Substrate for Use as Sheathing
ASTM	C 1178/C 1178M	Coated Glass Mat Water-Resistant Gypsum Backing Panel
ASTM	C 1184(1)	Structural Silicone Sealants
ASTM	C 1311(1)	Solvent Release Sealants
ASTM	C 1330(1)	Cylindrical Sealant Backing for Use with Cold Liquid Applied Sealants
ASTM	C 1396/C 1396M	Gypsum Board
ASTM	D 2178	Asphalt Glass Felt Used in Roofing and Waterproofing
ASTM	E 2190	Insulating Glass Unit Performance and Evaluation
AWPA	M4	Care of Preservative-Treated Wood Products

BNQ	BNQ 3624-115	Polyethylene (PE) Pipe and Fittings - Flexible Pipes for Drainage - Characteristics and Test Methods
CGSB	CAN/CGSB-11.3-M	Hardboard
CGSB	CAN/CGSB-11.5-M	Hardboard, Precoated, Factory Finished, for Exterior Cladding
CGSB	CAN/CGSB-12.1-M	Tempered or Laminated Safety Glass
CGSB	CAN/CGSB-12.2-M	Flat, Clear Sheet Glass
CGSB	CAN/CGSB-12.3-M	Flat, Clear Float Glass
CGSB	CAN/CGSB-12.4-M	Heat Absorbing Glass
CGSB	CAN/CGSB-12.8	Insulating Glass Units
CGSB	CAN/CGSB-12.10-M	Glass, Light and Heat Reflecting
CGSB	CAN/CGSB-12.11-M	Wired Safety Glass
CGSB	CAN/CGSB-34.22	Asbestos-Cement Drain Pipe
CGSB	CAN/CGSB-37.1-M	Chemical Emulsifier Type, Emulsified Asphalt for Dampproofing
CGSB	CAN/CGSB-37.2-M	Emulsified Asphalt, Mineral-Colloid Type, Unfilled, for Dampproofing and Waterproofing and for Roof Coatings
CGSB	CAN/CGSB-37.3-M	Application of Emulsified Asphalts for Dampproofing or Waterproofing
CGSB	CAN/CGSB-37.4-M	Fibrated, Cutback Asphalt, Lap Cement for Asphalt Roofing
CGSB	CAN/CGSB-37.5-M	Cutback Asphalt Plastic, Cement
CGSB	37-GP-6Ma	Asphalt, Cutback, Unfilled, for Dampproofing
CGSB	CAN/CGSB-37.8-M	Asphalt, Cutback, Filled, for Roof Coating
CGSB	37-GP-9Ma	Primer, Asphalt, Unfilled, for Asphalt Roofing, Dampproofing and Waterproofing
CGSB	37-GP-12Ma	Application of Unfilled Cutback Asphalt for Dampproofing
CGSB	CAN/CGSB-37.16-M	Filled, Cutback Asphalt for Dampproofing and Waterproofing
CGSB	37-GP-18Ma	Tar, Cutback, Unfilled, for Dampproofing
CGSB	37-GP-21M	Tar, Cutback, Fibrated, for Roof Coating
CGSB	CAN/CGSB-37.22-M	Application of Unfilled, Cutback Tar Foundation Coating for Dampproofing
CGSB	37-GP-36M	Application of Filled Cutback Asphalts for Dampproofing and Waterproofing
CGSB	37-GP-37M	Application of Hot Asphalt for Dampproofing or Waterproofing
CGSB	CAN/CGSB-37.50-M	Hot-Applied, Rubberized Asphalt for Roofing and Waterproofing
CGSB	CAN/CGSB-37.51-M	Application for Hot-Applied Rubberized Asphalt for Roofing and Waterproofing
CGSB	37-GP-52M	Roofing and Waterproofing Membrane, Sheet Applied, Elastomeric
CGSB	CAN/CGSB-37.54	Polyvinyl Chloride Roofing and Waterproofing Membrane
CGSB	37-GP-55M	Application of Sheet Applied Flexible Polyvinyl Chloride Roofing Membrane
CGSB	37-GP-56M	Membrane, Modified, Bituminous, Prefabricated, and Reinforced for Roofing
CGSB	37-GP-64M	Mat Reinforcing, Fibrous Glass, for Membrane Waterproofing Systems and Built-Up Roofing

CGSB	41-GP-6M	Sheets, Thermosetting Polyester Plastics, Glass Fiber Reinforced
CGSB	CAN/CGSB-41.24	Rigid Vinyl Siding, Soffits and Fascia
CGSB	CAN/CGSB-51.32-M	Sheathing, Membrane, Breather Type
CGSB	CAN/CGSB-51.33-M	Vapour Barrier Sheet, Excluding Polyethylene, for Use in Building Construction
CGSB	CAN/CGSB-51.34-M	Vapour Barrier, Polyethylene Sheet for Use in Building Construction
CGSB	CAN/CGSB-93.1-M	Sheet, Aluminum Alloy, Prefinished, Residential
CGSB	CAN/CGSB-93.2-M	Prefinished Aluminum Siding, Soffits and Fascia, for Residential Use
CGSB	CAN/CGSB-93.3-M	Prefinished Galvanized and Aluminum-Zinc Alloy Steel Sheet for Residential Use
CGSB	CAN/CGSB-93.4	Galvanized Steel and Aluminum-Zinc Alloy Coated Steel Siding, Soffits and Fascia, Prefinished, Residential
CSA	A23.1	Concrete Materials and Methods of Concrete Construction
CSA	CAN/CSA-A82.1-M	Burned Clay Brick (Solid Masonry Units Made from Clay or Shale)
CSA	A82.4-M	Structural Clay Load-Bearing Wall Tile
CSA	A82.5-M	Structural Clay Non-Load-Bearing Tile
CSA	CAN3-A82.8-M	Hollow Clay Brick
CSA	CAN/CSA-A82.27-M	Gypsum Board
CSA	A82.30-M	Interior Furring, Lathing and Gypsum Plastering
CSA	A82.31-M	Gypsum Board Application
CSA	CAN3-A93-M	Natural Airflow Ventilators for Buildings
CSA	A123.1/A123.5	Asphalt Shingles Made From Organic Felt and Surfaced with Mineral Granules/Asphalt Shingles Made From Glass Felt and Surfaced with Mineral Granules
CSA	CAN/CSA-A123.2	Asphalt-Coated Roofing Sheets
CSA	A123.3	Asphalt Saturated Organic Roofing Felt
CSA	CAN/CSA-A123.4	Asphalt for Constructing Built-Up Roof Coverings and Waterproofing Systems
CSA	A123.17	Asphalt Glass Felt Used in Roofing and Waterproofing
CSA	CAN3-A123.51-M	Asphalt Shingle Application on Roof Slopes 1:3 and Steeper
CSA	CAN3-A123.52-M	Asphalt Shingle Application on Roof Slopes 1:6 to Less Than 1:3
CSA	CAN/CSA-A165.1	Concrete Block Masonry Units
CSA	CAN/CSA-A165.2	Concrete Brick Masonry Units
CSA	CAN/CSA-A165.3	Prefaced Concrete Masonry Units
CSA	CAN3-A165.4-M	Autoclaved Cellular Units
CSA	CAN/CSA A179	Mortar and Grout for Unit Masonry
CSA	CAN/CSA-A220 Series	Concrete Roof Tiles
CSA	CAN/CSA A371	Masonry Construction for Buildings
CSA	CAN/CSA-A3001	Cementitious Materials for Use in Concrete

CSA	CAN/CSA-B182.1	Plastic Drain and Sewer Pipe and Pipe Fittings
CSA	CAN/CSA-G40.21	General Requirements for Rolled or Welded Structural Quality Steel
CSA	CAN/CSA-G401	Corrugated Steel Pipe Products
CSA	CAN/CSA-O80 Series	Wood Preservation
CSA	O115-M	Hardwood and Decorative Plywood
CSA	O118.1	Western Red Cedar Shakes and Shingles
CSA	O118.2	Eastern White Cedar Shingles
CSA	O121	Douglas Fir Plywood
CSA	CAN/CSA-O141	Softwood Lumber
CSA	O151	Canadian Softwood Plywood
CSA	O153-M	Poplar Plywood
CSA	CAN/CSA-O325	Construction Sheathing
CSA	O437.0	OSB and Waferboard
ULC	CAN/ULC-S701	Thermal Insulation, Polystyrene, Boards and Pipe Covering
ULC	CAN/ULC-S702	Mineral Fibre Thermal Insulation for Buildings
ULC	CAN/ULC-S703	Cellulose Fibre Insulation (CFI) for Buildings
ULC	CAN/ULC-S704	Thermal Insulation, Polyurethane and Polyisocyanurate, Boards, Faced
ULC	CAN/ULC-S705.1	Thermal Insulation - Spray Applied Rigid Polyurethane Foam, Medium Density - Material - Specification
ULC	CAN/ULC-S705.2	Thermal Insulation - Spray-Applied Rigid Polyurethane Foam, Medium Density — Application
ULC	CAN/ULC-S706	Standard for Wood Fibre Thermal Insulation for Buildings

Notes to Table 5.10.1.1.:

(1) See Appendix A.

41. In Book I, Division B, Part 5, Subsection 5.10.2., Council:

a) strikes out the Subsection heading "5.10.2. Windows, Doors and Skylights" and substitutes the heading "5.10.2. Windows, Doors, Skylights and Other Glazed Products", and

b) strikes out Articles 5.10.2.1. through 5.10.2.3. and substitutes the following:

"5.10.2.1. General

1) This Subsection applies to windows, doors, skylights, other glazed products and their components that separate

a) interior space from exterior space, or

b) environmentally dissimilar interior spaces.

2) For the purposes of this Subsection, the term "skylight" refers to unit skylights, roof windows and tubular daylighting devices.

3) Windows, doors, skylights, other glazed products and their components that are required to have a *fire-protection rating* need not conform to this Subsection. (See Appendix A.)

5.10.2.2. Design and Construction
(See Appendix A.)

1) Windows, doors, skylights and their components shall be designed and constructed in accordance with

a) Subsection 5.1.4., Section 5.3., Section 5.4. and Section 5.6., or

b) the following standards:

i) AAMA/WDMA/CSA 101/I.S.2/A440, "NAFS - North American Fenestration Standard/Specification for Windows, Doors, and Skylights," and

ii) except as permitted by Sentence (3), CSA A440SI, "Canadian Supplement to AAMA/WDMA/CSA 101/I.S.2/A440, NAFS - North American Fenestration Standard/Specification for Windows, Doors, and Skylights." (See Appendix A.)

2) Other glazed products and their components shall be designed and constructed in accordance with Subsection 5.1.4., Section 5.3., Section 5.4. and Section 5.6. (See Appendix A.)

3) For the purposes of conformance with Subclause (1)(b)(ii), loads and procedures from Section 5.2. may be used instead of the loads and procedures set out in the standard. (See Appendix A.)

5.10.2.3. [Reserved.]".

42. In Book I, Division B, Part 6, Council strikes out Article 6.2.1.4., and substitutes the following:

"6.2.1.4. Installation Standards

1) Except as provided in Articles 6.2.1.5. and 6.2.1.6., the installation of heating and air-conditioning equipment,
including mechanical refrigeration equipment, and including provisions for mounting, clearances and air supply, shall
conform to the requirements of

a) CAN/CSA-B139, "Installation Code for Oil Burning Equipment," for the installation of oil burning equipment,

b) the BC Safety Standards Act and the following of its regulations:

i) the Gas Safety Regulation for the installation of natural gas and propane burning equipment,

ii) the Electrical Safety Regulation, and

iii) the Power Engineers, Boiler, Pressure Vessel and Refrigeration Safety Regulation for the installation of boilers, pressure vessels, pressure piping and mechanical refrigeration, and

c) CAN/CSA B365, "Installation Code for Solid-Fuel Burning Appliances and Equipment," for the installation of solid fuel burning equipment".

2) For the purposes of Clause (1)(c), section 3.1 of CAN/CSA-B365, "Installation Code for Solid-Fuel-Burning Appliances and Equipment." shall be read as though that section included the following paragraph:

a) an alternative safety approach under which a solid-fuel burning boiler is accepted for use under section 10 of the Safety Standards Act."

43. In Book I, Division B, Part 6, Article 6.2.2.1., Council strikes out Sentence (3) and substitutes the following:

"**3)** Self-contained mechanical ventilation systems serving only one dwelling unit shall comply with

a) this Part, or

b) Subsection 9.32.3."

44. In Book I, Division B, Part 6, Sentence 6.2.2.6.(1), Council strikes out the words "Systems" and substitutes "Except as provided in Subsection 6.2.12., systems".

45. In Book I, Division B, Part 6, Clause 6.2.3.9.(3)(c), Council strikes out the words "CAN/ULC-S112.1-M," and substitutes "CAN/ULC-S112.1,".

46. In Book I, Division B, Part 6, Article 6.4.1.1., Council amends Table 6.4.1.1. by repealing the following:

"

6.2.1.7 Outdoor Design Conditions	
(2)	[F40,F43,F44,F50-OH1.1]
	[F44-OS3.4]

"

and substituting the following:

"

6.2.1.7 Outdoor Design Conditions	
(2)	[F40,F44,F50-OH1.1]
	[F44-OS3.4]

"

47. In Book I, Division B, Part 9, Subclause 9.3.1.1.(4)(b)(i), Council strikes out the words "Billet-Steel Bars for Concrete Reinforcement," " and substituting "Carbon Steel Bars for Concrete Reinforcement,".

48. In Book I, Division B, Part 9, Sentence 9.3.1.8.(1), Council strikes out the words "ASTM C 260" " and substituting "ASTM C 260/C 260M".

49. In Book I, Division B, Part 9, Sentence 9.3.2.1.(1), Council strikes out the words "NLGA 2007" " and substituting "NLGA 2010".

50. In Book I, Division B, Part 9, Sentence 9.4.2.1.(1), Council strikes out the words "(See Appendix A.)".

51. In Book I, Division B, Part 9, Council strikes out Article 9.4.2.2. and substitutes the following:

"9.4.2.2. Specified Snow Loads
(See Appendix A.)"

52. In Book I, Division B, Part 9, Subsection 9.6.1., Council:

a) strikes out Article 9.6.1.1. and substitutes the following:

"9.6.1.1. Application

1) This Section applies to glass, and the protection of glass, in
a) doors, including closet doors and sidelights for doors,
b) windows,
c) skylights as defined in Sentence 9.7.1.1.(2),
d) shower or bathtub enclosures,
e) glazed panels and partitions{, or
{f) glass guards.}
(See Appendix A.)", and

b) strikes out Article 9.6.1.3. and substitutes the following:

"9.6.1.3. Structural Sufficiency of Glass

1) Except as permitted by Sentence (2), glass used in *buildings* shall be designed in conformance with
a) CAN/CGSB-12.20-M, "Structural Design of Glass for Buildings," or
b) ASTM E1300, "Standard Practice for Determining Load Resistance of Glass in Buildings."

2) Individual panes of glass conforming to Table 9.6.1.3. that are used in doors need not comply with Sentence (1).".

53. In Book I, Division B, Part 9, Council amends Section 9.7. by adding the words "(See Appendix A and A-9.7.4. in Appendix A.)" under the header.

54. In Book I, Division B, Part 9, Article 9.7.1.1., Council strikes out Sentence (3) and substitutes the following:

> "**3**) For the purpose of this Section, the term "doors" includes glazing in doors and sidelights for doors but does not include vehicular access doors.".

55. In Book I, Division B, Part 9, Council strikes out Article 9.7.2.2. and substitutes the following:

> "9.7.2.2. [Reserved].".

56. In Book I, Division B, Part 9, Council strikes out Article 9.7.3.1. and substitutes the following:

> "9.7.3.1. General
>
> 1) [Reserved.]
> 2) Skylights and their components shall be designed, constructed and installed so that they resist snow loads.".

57. In Book I, Division B, Part 9, Article 9.7.3.3., Council strikes out Sentences (1) and (2), and substitutes the following:

> "**1**) Except as permitted in Sentence (2), metal frames, and metal sashes, of windows, doors and skylights shall
> incorporate a thermal break.
>
> **2**) Windows and doors described in Sentence (1) do not require a thermal break where they
> a) are installed as storm windows and doors, or
> b) are required to have a *fire-protection rating*.".

58. In Book I, Division B, Part 9, Council strikes out Subsection 9.7.4. and substitutes the following:

> "**9.7.4. Design and Construction**
> (See Appendix A.)
>
> **9.7.4.1. General**
>
> **1**) Except as provided by Sentence (2), windows, doors, skylights and their components shall be designed and constructed in accordance with
> a) Article 9.7.4.2., or
> b) Part 5.

2) Windows, doors, skylights and their components that are required to have a *fire-protection rating* need not conform to this Subsection. (See Appendix A.)

9.7.4.2. Standards

1) Except as permitted by Sentence (2) and Article 9.7.4.3., windows, doors, skylights and their components shall conform to

a) AAMA/WDMA/CSA 101/I.S.2/A440, "NAFS - North American Fenestration Standard/Specification for Windows, Doors, and Skylights" (Harmonized Standard), and

b) A440S1, "Canadian Supplement to AAMA/WDMA/CSA 101/I.S.2/A440, NAFS - North American Fenestration Standard/Specification for Windows, Doors, and Skylights."

(See Appendix A.)

2) A door designated as a "Limited Water" door in accordance with the standard referenced in Clause (1)(a) shall not be used unless the door

a) separates a *dwelling unit* from an unconditioned *storage garage* or a carport,

b) conforms to Clauses 3.3.1.13.(1)(a), (b) and (c) and Sentences 3.3.1.13.(5) and (10), or

c) is not required by Sentence 9.27.3.8.(3) to have flashing installed.

9.7.4.3. Performance Requirements

1) For the purposes of compliance with the standard referenced in Clause 9.7.4.2.(1)(b), windows, doors and their components in a *building* of no more than 10 m in height, measured from *grade*, may conform to the design pressure, performance grade and water resistance values in Table C-4 of Appendix C instead of the values calculated in the Canadian Supplement.

2) For *buildings* described in Sentence 1.3.3.3.(1) of Division A, where design pressure, performance grade and water resistance values are calculated in accordance with the standard referenced in Clause 9.7.4.2.(1)(b), the driving rain wind pressure (DRWP) values in Table A.1 of CSA A440S1, "Canadian Supplement to AAMA/WDMA/CSA 101/I.S.2/A440, NAFS - North American Fenestration Standard/Specification for Windows, Doors, and Skylights," shall be used. (See Appendix A.)".

59. In Book I, Division B, Part 9, Subsection 9.7.5., Council:

a) strikes out the header to Subsection 9.7.5. and substitutes the following:

"9.7.5. Resistance to Forced Entry",

b) strikes out Article 9.7.5.1. and substitutes the following:

"**9.7.5.1. Resistance to Forced Entry for Sliding Doors**

1) This Article applies to sliding doors serving *dwelling units*, other than exterior doors to garages and to other ancillary spaces.

2) Sliding doors shall not permit the removal of the sliding panel when in the locked position.

3) Exterior doors shall

a) have a pin type locking mechanism, with a minimum 9 mm throw into the frame, or an equivalent locking mechanism, operable from the interior without the use of keys, special devices or specialized knowledge of the locking mechanism, or

b) conform to at least Grade 10 in ASTM F842, "Standard Test Methods for Measuring the Forced Entry Resistance of Sliding Door Assemblies, Excluding Glazing Impact." ",

c) strikes out the header to Article 9.7.5.2. and substitutes the following:

"**9.7.5.2. Resistance to Forced Entry for Swinging Doors**", and

d) strikes out Sentence 9.7.5.2.(2) to (6) and substitutes the following:

"2) Doors, frames and hardware that conform to AAMA 1304, "Voluntary Specification for Forced Entry Resistance of Side-Hinged Door Systems," are not required to conform to Sentences (3) to (7).

3) Wood doors described in Sentence (1) shall

a) be solid core or stile-and-rail type,

b) be not less than 45 mm thick, and

c) if of the stile-and-rail type, have a panel thickness of not less than 19 mm, with a total panel area not more than half of the door area.

4) Doors described in Sentence (1) shall be provided with

a) a deadbolt lock with a cylinder having no fewer than 5 pins, and

b) a bolt throw not less than 25 mm long, protected with a solid or hardened free-turning ring or bevelled cylinder housing. (See Article 9.9.6.7.)

5) An inactive leaf in double doors used in locations specified in Sentence (1) shall be provided with heavy-duty bolts top and bottom having an engagement of not less than 15 mm.

6) Hinges for doors described in Sentence (1) shall be fastened

a) to wood doors with wood screws not less than 25 mm long and to wood frames with wood screws so that at least 2 screws per hinge penetrate not less than 30 mm into solid wood, or

b) to metal doors and metal frames with machine screws not smaller than No. 10 and not less than 10 mm long.
(See Appendix A.)".

60. In Book I, Division B, Part 9, Sentence 9.10.2.2.(2), Council strikes out Clause (c) and substitutes the following:

"c) emergency lighting is provided in conformance with Article 9.9.12.3., and"

61. In Book I, Division B, Part 9, Council strikes out Sentence 9.10.4.4 and substitutes the following:

"9.10.4.4. <Roof-Top Enclosures

1) A roof-top enclosure shall not be considered as a *storey* in calculating the *building height* if the roof-top enclosure is
a) provided for elevator machinery, a stairway or a *service room*, and
b) used for no purpose other than for service to the *building*.".

62. In Book I, Division B, Part 9, Article 9.10.9.7., Council strikes out Sentence (2) and substitutes the following:

"**2)** Combustible drain, waste and vent piping not located in a vertical shaft is permitted to penetrate a fire separation required to have a fire-resistance rating or a membrane that forms part of an assembly required to have a fire-resistance rating provided the piping is sealed at the penetration by a fire stop that has an F rating not less than the fire-resistance rating required for the fire separation."

63. In Book I, Division B, Part 9, Article 9.10.14.5., Council amends Sentence (3) as follows:

a) strikes out Clause (b) and substitutes the following:

"b) the limiting distance is greater than 2.5 m where the area and width-to-height ratio of the exposing building face conform to Table 9.10.14.5.B,"

b) strikes out Subclause (e)(i) and substitutes the following:

"i) conforms to Subsection 9.27.12.,"

64. In Book I, Division B, Part 9, Clause 9.10.15.5.(2)(b), Council strikes out Subclause (i) and substitutes the following:

"i) conform to Subsection 9.27.12.,"

65. In Book I, Division B, Part 9, Clause 9.10.15.5.(3)(a), Council strikes out "Section 9.20, Subsection 9.27.11. or Section 9.28." and substitutes "Section 9.20., 9.27. or 9.28."

66. In Book I, Division B, Part 9, Sentence 9.10.19.1.(1), Council strikes out "CAN/ULC-S531, "Smoke Alarms," " and substitutes "CAN/ULC-S531, "Standard for Smoke Alarms," ".

67. In Book I, Division B, Part 9, Article 9.12.2.2., Council strikes out Sentence (1) and substitutes the following:

"**1)** Except as provided in Sentences (4) to (7), the minimum depth of foundations below finished ground level shall conform to Table 9.12.2.2."

68. In Book I, Division B, Part 9, Council repeals Subsection 9.13.4. and substitutes the following:

"9.13.4. Soil Gas Control

(See Appendix A.)

9.13.4.1. Application and Scope

1) This Subsection applies to

a) wall, roof and floor assemblies separating *conditioned space* from the ground, and

b) the rough-in of a radon vent pipe to allow the future protection of *conditioned space* that is separated from the ground by a wall, roof or floor assembly.

2) This Subsection addresses the leakage of *soil* gas from the ground into the *building*.

9.13.4.2. Protection from Soil Gas Ingress

1) All wall, roof and floor assemblies separating *conditioned space* from the ground shall be protected by an *air barrier system* conforming to Subsection 9.25.3.

2) Except as permitted by Sentence (4), unless the space between the *air barrier system* and the ground is designed to be accessible for the future installation of a subfloor depressurization system, *dwelling units* and *buildings* containing *residential occupancies* shall be provided with the rough-in for a subfloor depressurization system conforming to Article 9.13.4.3.

3) Except as permitted by Sentence (4) or (5), where *buildings* are used for *occupancies* other than those described in Sentence (2), and are intended to be occupied on average for greater than 4 hours within a 24 hour period, protection from
radon ingress and the means to address high radon concentrations in the future shall conform to

a) Article 9.13.4.3., or

b) Part 5 and 6 (see Article 5.4.1.1. and 6.2.1.1.).

(See Appendix A.)

4) *Buildings* in locations classified as Radon Area 2 by Table C-3 in Appendix C need not conform to Sentences (2) and (3).

5) *Buildings* described in Clause 9.16.2.1.(2)(b) need not conform to Sentence (3).

9.13.4.3. Rough-in for a Subfloor Depressurization System
(See Appendix A.)

1) Floors-on-ground shall be provided with a rough-in for subfloor depressurization consisting of

a) a gas-permeable layer and a radon vent pipe, **as** described in Sentence (2), or

b) a gas-permeable layer consisting of coarse clean granular material and a radon vent pipe, as described in Sentence (3).

2) Where a rough-in referred to in Clause (1)(a) is provided, the rough-in shall include

a) a gas-permeable layer installed in the space between the *air barrier system* and the ground to allow the depressurization of that space, and

b) a radon vent pipe that

i) has one or more inlets that allow for the effective depressurization of the gas-permeable layer (see A-9.13.4.3.(2)(b)(i) and (3)(b)(i) in Appendix A),

ii) terminates outside the *building* in a manner that does not constitute a hazard, and

iii) is clearly labelled "RADON VENT PIPE."

3) Where a rough-in referred to in Clause (1)(b) is provided, the rough-in shall include

a) a gas-permeable layer, consisting of not less than 100 mm of clean granular material containing not more than 10% of material that will pass a **4** mm sieve, installed below the floor-on-ground, and

b) a radon vent pipe not less than 100 mm in diameter that is constructed so as to be air-tight and installed through the floor-on-ground such that

i) it opens into each contiguous area of the granular layer required by Clause (a) and not less than 100 mm of granular material projects beyond the terminus of the pipe measured along its axis (see A-9.13.4.3.(2)(b)(i) and (3)(b)(i) in Appendix A),

ii) it terminates not less than 1 m above and not less than 3.5 m in any other direction from any air inlet, door or openable window,

iii) it terminates not less than 2 m above and not less than 3.5 m in any other direction from a roof that supports an *occupancy*,

iv) it terminates not less than 1.8 m from a property line,
v) it is shielded from the weather in accordance with Sentence 6.2.3.12.(3),
vi) it is protected from frost closure by insulating the pipe or by some other manner, if subject to frost closure,
vii) the accumulation of moisture in the pipe is prevented, and
viii) it is clearly labelled "RADON VENT PIPE" every 1.2 m and at every change in direction.

(See Appendix A.)"

69. In Book I, Division B, Part 9, Sentence 9.14.3.1.(1), Council:

a) strikes out Clause (d) and substitutes the following:

"d) ASTM C 700, "Standard Specification for Vitrified Clay Pipe, Extra Strength, Standard Strength, and Perforated,"; and

b) strikes out Clause (h) and substitutes the following:

"h) BNQ 3624-115, "Polyethylene (PE) Pipe and Fittings - Flexible Pipes for Drainage - Characteristics and Test Methods."

70. In Book I, Division B, Part 9, Article 9.15.3.4., Council repeals Table 9.15.3.4. and substitutes the following:

"

Table 9.15.3.4.
Minimum Footing Sizes
Forming part of Sentence 9.15.3.4.(1)

No. of Floors Supported	Minimum Width of Strip Footings, mm		Minimum Footing Area for Columns Spaced 3 m (9 ft. 10 in.) o.c.,[1] m^2
	Supporting Exterior Walls[2]	Supporting Interior Walls[3]	
1	250	200	0.4
2	350	350	0.75
3	450	500	1.0

Notes to Table 9.15.3.4.:

[1] See Sentence 9.15.3.7.(1).

[2] See Sentence 9.15.3.5.(1).

[3] See Sentence 9.15.3.6.(1).

"

71. In Book I, Division B, Part 9, Council repeals Article 9.16.2.1. and substitutes the following:

"9.16.2.1. Required Installation of Material Beneath Floors-on-Ground

1) Except as provided in Sentence (2), a drainage layer shall be installed below floors-on-ground. (See Appendix A.)

2) The drainage layer required in Sentence (1) need not be installed below
a) slabs in garages, carports or accessory *buildings*, or
b) *buildings* of *industrial occupancy* where the nature of the process contained therein permits or requires the use of large openings in the *building* envelope even during the winter."

72. In Book I, Division B, Part 9, Sentence 9.16.2.2.(4), Council strikes out the words "clean coarse aggregate" and substitutes "coarse clean granular material".

73. In Book I, Division B, Part 9, Article 9.19.2.1., Council strikes out Sentence (1) and substitutes the following:

"**1)** Every attic or roof space shall be provided with an access hatch where the open space in the attic or roof space measures
a) 3 m2 or more in area,
b) 1 m or more in length or width, and
c) 600 mm or more in height over at least the area described in Clauses (a) and (b).
(See Appendix A.)"

74. In Book I, Division B, Part 9, Council strikes out Article 9.23.3.1. and substitutes the following:

"9.23.3.1. Standards for Nails and Screws

1) Except as provided in Sentence (2) and unless otherwise indicated, nails specified in this Section shall be common steel wire nails or common spiral nails conforming to
a) ASTM F 1667, "Driven Fasteners: Nails, Spikes, and Staples," or
b) CSA B111, "Wire Nails, Spikes and Staples."

2) Nails used to comply with Table 9.23.3.4. shall have a diameter not less than that stated in Table 9.23.3.1.
(See Appendix A.)

Table 9.23.3.1.
Diameter of Nails
Forming part of Sentence 9.23.3.1.(2)

Minimum Length of Nails, mm	Diameter of Nails, mm
57	2.87
63	3.25

76	3.66
82	3.66
101 or greater	4.88

3) Wood screws specified in this Section shall conform to ASME B18.6.1, "Wood Screws (Inch Series)."
(See Appendix A.)"

75. In Book I, Division B, Part 9, Sentence 9.23.13.1.(2), Council strikes out Subclause (a)(ii) and substitutes the following:

"ii) sheathed with plywood, OSB, waferboard, fibreboard, gypsum board or diagonal lumber sheathing complying with Subsection 9.23.17. and fastened in accordance with Table 9.23.3.5.A, or"

76. In Book I, Division B, Part 9, Article 9.23.13.7., Council strikes out Sentence (7) and substitutes the following:

"**7)** Where the length of required braced wall panels of an exterior wall is reduced as described in Sentence (6), the ratio of the length of braced wall panels in the respective upper braced wall bands to the length of braced wall panels in the reduced exterior braced wall band shall not exceed 2."

77. In Book I, Division B, Part 9, Clause 9.23.16.5.(2)(a), Council strikes out "and" and substitutes "or".

78. In Book I, Division B, Part 9, Article 9.23.16.7.(3), Council strikes out the words "Wood Fibre Thermal Insulation for Buildings," and substitutes "Wood Fibre Insulating Boards for Buildings,".

79. In Book I, Division B, Part 9, Article 9.25.1.1., Council strikes out Sentences (2) and (3) and substitutes the following:

"**2)** All walls, ceilings and floors separating *conditioned space* from unconditioned space, the exterior air or the
ground shall be
a) provided with
i) thermal insulation conforming to Subsection 9.25.2. and Part 10,
ii) an air barrier conforming to Subsection 9.25.3. and Part 10,
iii) a vapour barrier conforming to Subsection 9.25.4., and
b) constructed in such a way that the properties and relative position of all materials conform to Subsection 9.25.5.

3) Insulation and sealing of heating and ventilating ducts shall conform to Sections 9.32., 9.33. and Part 10."

80. In Book I, Division B, Part 9, Sentence 9.25.2.1.(1), Council strikes out the words "and Part 10".

81. In Book I, Division B, Part 9, Article 9.25.2.2., Council strikes out Clause (1)(h) and substitutes the following:

"h) CAN/ULC-S706, "Wood Fibre Insulating Boards for Buildings.""

82. In Book I, Division B, Part 9, Article 9.26.2.1., Council strikes out Clause (1)(q) and substitutes the following:

"q) CAN/CSA-A220 Series, "Concrete Roof Tiles,""

83. In Book I, Division B, Part 9, Article 9.26.2.2., Council strikes out Sentence (1) and substitutes the following:

"**1)** Nails used for roofing shall be corrosion-resistant roofing or shingle nails conforming to

a) ASTM F1667, "Driven Fasteners: Nails, Spikes, and Staples," or
b) CSA B111, "Wire Nails, Spikes and Staples.""

84. In Book I, Division B, Part 9, Sentence 9.26.17.1.(1), Council strikes out "CAN/CSA-A220.1, "Installation of Concrete Roof Tiles." " And substituting "CAN/CSA-A220 Series, "Concrete Roof Tiles." "

85. In Book I, Division B, Part 9, Article 9.29.5.6., Council strikes out Sentence (1) and substitutes the following:

"**1)** Nails for fastening gypsum board to wood supports shall conform to

a) ASTM F1667, "Driven Fasteners: Nails, Spikes, and Staples," or
b) CSA B111, "Wire Nails, Spikes and Staples." "

86. In Book I, Division B, Part 9, Sentence 9.29.8.1.(1), Council strikes out "Wood Fibre Thermal Insulation for Buildings." and substituting "Wood Fibre Insulating Boards for Buildings.".

87. In Book I, Division B, Part 9, Council:

a) amends the Article 9.31.1.1. by adding:

"**4)** Systems used for service water heating shall conform to the energy efficiency requirements of Part 10."

b) amends the Article 9.32.1.1. by adding:

"**4)** Systems used for ventilation shall conform to the energy efficiency requirements of Part 10."; and

c) amends the Article 9.33.1.1. by adding:

"3) Systems used for heating and air-conditioning shall conform to the energy efficiency requirements of Part 10.".

88. In Book I, Division B, Part 9, Article 9.31.6.2., Council:

a) strikes out Clause (2)(a) and substitutes the following:

"a) CSA B139, "Installation Code for Oil-Burning Equipment," "; and

b) strikes out Clause (2)(c) and substitutes the following:

"c) CAN/CSA-B365, "Installation Code for Solid-Fuel-Burning Appliances and Equipment."

89. In Book I, Division B, Part 9, Article 9.32.4.1., Council strikes out Sentence (1) and substitutes the following:

"1) Additional make-up air for the actual appliance exhaust rate shall be provided for any appliance that discharges air to the exterior at an installed rate exceeding 0.5 air change per hour when it is located within a dwelling unit that

a) contains a vented appliance that is subject to back drafting (Naturally Aspirating Fuel Fired Vented Appliance) (See Appendix Note A-9.32.3.8.(1)(a) in Appendix A), or

b) is located in an area where soil gas is deemed to be a problem and incorporates no soil gas mitigation system.".

90. In Book I, Division B, Part 9, Sentence 9.33.5.1.(1), Council strikes out the words "CAN/CSA-F280-M" and substitutes "CSA F280".

91. In Book I, Division B, Part 9, Council strikes out Article 9.33.5.2. and substitutes the following:

"9.33.5.2. Appliance Installation Standards

1) Except as provided in Articles 9.33.5.3. and 9.33.5.4., the installation of heating and air-conditioning equipment, including mechanical refrigeration equipment, and including provisions for mounting, clearances and air supply, shall conform to the requirements of

a) CAN/CSA-B139, "Installation Code for Oil-Burning Equipment," for the installation of oil-burning equipment

b) the Safety Standards Act and the following of its regulations:

i) the Gas Safety Regulation, for the installation of natural gas- and propane-burning equipment,

ii) the Electrical Safety Regulation, and

iii) the Power Engineers, Boiler, Pressure Vessel and Refrigeration Safety Regulation, for the installation of boilers, pressure vessels, pressure piping and mechanical refrigeration,

c) CAN/CSA-B365, "Installation Code for Solid-Fuel- Burning Appliances and Equipment," and
d) CAN/CSA-C448, "Design and Installation of Earth Energy Systems."

(See also Sentence 9.33.5.3.(1).)

2) For the purposes of Sentence (1), solid-fuel-burning boiler appliances that are approved for use under section 10 of the Safety Standards Act satisfy section 3.1 of CAN/CSA-B365, "Installation Code for Solid-Fuel-Burning Appliances and Equipment."

92. In Book I, Division B, Part 9, Council strikes out Section 9.36. and substitutes the following:

"Section 9.36. Energy Efficiency

9.36.1. GENERAL

9.36.1.1. Application

1) All Part 9 buildings shall conform to the energy requirements of Part 10."

93. In Book I, Division B, Part 9, Council renumbers Table 9.37.1.1. as Table 9.38.1.1. and amended by repealing the following:

"

9.36.3.1 Specific Requirements	
(1)	[F03-OS1.2] [F11-OS1.2, OS3.7]
9.36.4.1. Specific Requirements	
(1)	[F03-OS1.2]
(2)	[F03-OS1.2]
(3)	[F03-OS1.2]

"

and substituting the following:

"

9.37.3.1 Specific Requirements	
(1)	[F03-OS1.2] [F11-OS1.2, OS3.7]
9.37.4.1. Specific Requirements	
(1)	[F03-OS1.2]
(2)	[F03-OS1.2]
(3)	[F03-OS1.2]

"

94. In Book I, Division B, Part 9, Council strikes out Section 9.37. and substitutes the following before Table 9.38.1.1.:

"Section 9.37. Secondary Suites and Lock-off Units

9.37.1. GENERAL

9.37.1.1. Application

1) This Section applies to the construction of a secondary suite or a lock-off unit within a one-family dwelling; the construction of a secondary suite or a lock-off unit within one or both of the dwelling units in a two-family dwelling; or the construction of a lock-off unit within a residential suite in an apartment building. (See Part 11 for the application of secondary suites or lock-off units to existing buildings)

9.37.1.2. Deleted

9.37.2. DELETED

9.37.3. ONE-FAMILY DWELLING WITH A SECONDARY SUITE OR LOCK-OFF UNIT

9.37.3.1. Specific Requirements

1) In addition to the requirements of this Part, a one-family dwelling with secondary suite or a lock-off unit shall be constructed in conformance with

a) the fire compartmentation requirements in Table 11.4.3.1.,
b) the installation of smoke alarms in Subsection 9.10.19., and
c) the installation of electrical facilities in Subsection 9.34.1.

2) The location of gas shut off valves controlling the flow of gas to appliances in a one-family dwelling with secondary suite or a lock-off unit shall be readily accessible to all occupants having access to the appliances served by such valves.

3) A one-family dwelling with secondary suite or a lock-off unit may be classified, for the purposes of this By-law, as a one-family dwelling if the building is constructed in conformance with the requirements of Sentences (1) and (2) or converted in conformance with the requirements of Subsection 11.4.3.

9.37.4. TWO-FAMILY DWELLING WITH A SECONDARY SUITE OR LOCK-OFF UNIT

9.37.4.1. Specific Requirements

1) In addition to the requirements of this Part, a two-family dwelling with a secondary suite or a lock-off unit in each dwelling unit or a secondary suite or a lock-off unit in one of the dwelling units shall be

a) sprinklered to NFPA 13D if no part of a dwelling unit or its secondary suite or lock-off unit is constructed over another dwelling unit or its secondary suite or lock-off unit, or
b) sprinklered to NFPA 13R if any part of a dwelling unit or its secondary suite or lock-off unit is constructed over another dwelling unit or its secondary suite or lock-off unit,

2) Each dwelling unit and its secondary suite or lock-off unit shall be separated from an adjoining dwelling unit and its secondary suite or lock-off unit by
a) a fire separation with a 1 h fire resistance rating, and
b) a sound transmission classification (STC) of 50.

3) Each dwelling unit and its secondary suite or lock-off unit shall be separated from each other by
a) a fire separation with a minimum 13 mm thick gypsum wallboard on wood studs at maximum 450 mm on centre, and
b) tightly fitted building service penetrations.

9.37.5. RESIDENTIAL SUITES IN AN APARTMENT BUILDING WITH A LOCK-OFF UNIT

9.37.5.1. Specific Requirements

1) In addition to the requirements of this By-law, a lock-off unit in a residential suite in an apartment building shall be separated from the remainder of the building by
a) a fire separation with a 1 h fire-resistance rating, and
b) a sound transmission classification (STC) of 50 or 55 where the lock-off unit adjoins an elevator.

2) Lock-off units are not permitted to be constructed within an existing residential apartment building."

95. In Book I, Division B, Part 9, Council strikes out Section 9.38. except Table 9.38.1.1., and adds the following before Table 9.38.1.1.:

"9.38.1. OBJECTIVES AND FUNCTIONAL STATEMENTS

9.38.1.1. Attributions to Acceptable Solutions

1) For the purpose of compliance with this By-law 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 9.38.1.1. (See A-1.1.2.1.(1) in Appendix A.)"

96. In Book I, Division C, Sentence 2.3.1.2.(2), Council strikes out Clause (b) and substitutes the following:

"b) information concerning any special maintenance or operational requirements, including any building component commissioning requirements, that are necessary for the alternative solution to achieve compliance with the By-law after the building is constructed."

97. In Book I, Appendix A of Division B, Council adds Appendix Note A-1.1.1.1.(3) as follows:

"**A-1.1.1.1.(3) Factory-Built Houses.** Portions of the CSA-Z240 series of standards on mobile homes resemble a building code. These portions contain requirements in many of the areas where the Vancouver Building By-law also has requirements and frequently the requirements are different. Other portions of the Z240 standards deal with special requirements for mobile homes related to the fact that these houses are intended to be periodically moved over roads. The Vancouver Building By-law considers mobile homes certified to the Z240 standard as acceptable housing and they are permitted under Clause 1.1.1.1.(2)(g)."

98. In Book I, Appendix A of Division B, Council strikes out Appendix Note A-1.1.1.2.(1) and substitutes the following:

"**A-1.1.1.2.(1) Application to Existing Buildings** (See Division B Part 11)"

99. In Book I, Appendix A of Division B, Council adds Appendix Note A-1.2.1.2.(1) as follows:

"**A-1.2.1.2.(1) Responsibility of Owner** Sentence 1.1.1.1.(1) is not intended to imply that a person who becomes the owner of a building must bring the entire building into compliance with the Code. The Code applies only in the cases and to the extent specified by Article 1.1.1.1. and Part 11, and the owner of a building is therefore made responsible for ensuring the building complies with the Code by Sentence 1.2.1.2.(1) only in the cases and to the extent specified by Article 1.1.1.1. and Part 11. If none of the provisions in Sentence 1.1.1.1.(1) and Part 11 apply to the building, the owner is not required to make any changes to the building."

100. In Book I, Appendix A of Division B, Council adds Appendix Note A-1.3.1.2.(1) as follows:

"

Table A-1.3.1.2.(1) Documents Referenced in Appendices A, B and C of Book I (General) of the Building By-law Forming part of Appendix Note A-1.3.1.2.(1)			
Issuing Agency	**Document Number(1)**	**Title of Document(2)**	**By-law Reference**
AAMA	1304-02	Voluntary Specification for Forced Entry Resistance of Side-Hinged Door Systems	9.7.5.2.(2)
ASCE	SEI/ASCE 8-02	Design of Cold-Formed Stainless Steel Structural Members	A-4.3.4.2.(1)
ANSI/ ASHRAE	62-2001	Ventilation for Acceptable Indoor Air Quality (except Addendum n)	A-9.25.5.2.
ANSI/UL	199	Standard for Safety of Automatic Sprinklers for Fire-Protection Service	A-3.2.5.12.(8)
ANSI/UL	1626	Standard for Safety of Residential Sprinklers for Fire-Protection Service	A-3.2.5.12.(8)
ASME	B18.6.1-1981	Wood Screws (Inch Series)	A-9.23.3.1.(3)
ASME/CSA	ASME A17.1-2010/CSA B44-10	Safety Code for Elevators and Escalators	A-3.5.2.1.(1)
ASTM	A 390-06	Zinc-Coated (Galvanized) Steel Poultry Fence Fabric (Hexagonal and Straight Line)	Table A-9.10.3.1.B
ASTM	C 516-08	Vermiculite Loose Fill Thermal Insulation	A-9.25.2.4.(5)
ASTM	C 1193-11a	Use of Joint Sealants	A-Table 5.10.1.1. A-9.27.4.2.(1)
ASTM	C 1299-03	Selection of Liquid-Applied Sealants	A-Table 5.10.1.1. A-9.27.4.2.(1)
ASTM	C 1472-10	Calculating Movement and Other Effects When Establishing Sealant Joint Width	A-Table 5.10.1.1. A-9.27.4.2.(1)
ASTM	D 1037-06a	Evaluating Properties of Wood-Base Fiber and Particle Panel Materials	A-9.23.15.2.(4)
ASTM	D 1143/D 1143M-07e1	Deep Foundations Under Static Axial Compressive Load	A-4.2.7.2.(2)
ASTM	E 336-05	Measurement of Airborne Sound Attenuation between Rooms in Buildings	A-9.11.1.1.(1)
ASTM	E 492-09	Laboratory Measurement of Impact Sound Transmission Through Floor-Ceiling Assemblies Using The Tapping Machine	A-9.11.1.1.(1)
ASTM	E 597-95	Determining a Single Number Rating of Airborne Sound Insulation for Use in Multi-Unit Building Specifications	A-9.11.1.1.(1)
ASTM	E 736-00	Cohesion/Adhesion of Sprayed Fire-Resistive Materials Applied to Structural Members	Table A-9.10.3.1.B
ASTM	E 1007-11e1	Field Measurement of Tapping Machine Impact Sound Transmission Through Floor-Ceiling Assemblies and Associated Support Structures	A-9.11.1.1.(1)
ASTM	E 1300-04e1	Standard Practice for Determining Load Resistance of Glass in Buildings	4.3.6.1.(1) 9.6.1.3.(1)

ASTM	F 842-04	Standard Test Methods for Measuring the Forced Entry Resistance of Sliding Door Assemblies, Excluding Glazing Impact	9.7.5.1.(3)
Vancouver		Book II (Plumbing Systems)	A-2.2.1.1.(1)(3) A-3.2.1.1.(1)(3) A-4.1.6.4.(3) Appendix C
BC	B.C. Reg. 100/2004	Electrical Safety Regulation	A-3.2.4.21.(6)(a) A-9.34.2. A-9.35.2.2.(1)
BC	B.C. Reg. 101/2004	Elevating Devices Safety Regulation	A-3.5.2.1.(1)
BC	S.B.C. 1998, c. 43	Strata Property Act	A-9.37.1.1.
CCBFC	NRCC 35951	Guidelines for Application of Part 3 of the National Building Code of Canada to Existing Buildings	A-1.1.1.2.(1)(3)
CCBFC	NRCC 38732	National Farm Building Code of Canada 1995	A-1.4.1.2.(1)(3) A-Table 4.1.2.1. A-5.1.2.1.(1)
CCBFC	NRCC 40383	User's Guide – NBC 1995, Fire Protection, Occupant Safety and Accessibility (Part 3)	A-1.1.1.2.(1)(3)
CCBFC	NRCC 43963	User's Guide – NBC 1995, Application of Part 9 to Existing Buildings	A-1.1.1.2.(1)(3)
CCBFC	NRCC 48192	User's Guide – NBC 2005, Structural Commentaries (Part 4 of Division B)	A-1.1.1.2.(1) A-4.1.1.3.(1) A-4.1.1.3.(2) A-3.2.5.12.(8) A-4.1.3.4.(1) A-4.1.3.5.(1) A-4.1.3.5.(3) A-Table 4.1.8.5. A-Table 4.1.8.6. A-5.1.4.2. Appendix C
CCBFC	NRCC 53303	National Fire Code of Canada 2010	A-1.1.1.2.(1)(3) A-2.2.1.1.(1)(3) A-3.1.2.3.(1) A-3.2.1.1.(1)(3) A-3.2.4.7.(2) A-3.2.7.8.(3) A-3.3. A-3.3.1.2.(1) A-3.3.1.7.(1) A-3.3.3.1.(1) A-3.3.6.1.(1) B-3.2.6.
CCBFC	NRCC 53543	User's Guide – NBC 2010, Structural Commentaries (Part 4 of Division B)	A-1.1.1.2.(1)(3) A-4.1.1.3.(1) A-4.1.1.3.(2) A-4.1.2.1.

			A-4.1.2.1.(1) A-4.1.3. A-4.1.3.2.(2) A-4.1.3.2.(4) A-4.1.3.2.(5) A-4.1.3.3.(2) A-4.1.3.4.(1) A-4.1.3.5.(1) A-4.1.3.5.(3) A-4.1.3.6.(1) A-4.1.3.6.(2) A-4.1.3.6.(3) A-4.1.5.8. A-4.1.5.17. A-4.1.6.2. A-4.1.6.2.(4)(b) A-4.1.6.3.(2) A-4.1.6.4.(1) A-4.1.7.1.(1) to (3) A-4.1.7.1.(5)(a) to (c) A-4.1.7.1.(5)(d) A-4.1.7.1.(6)(a) A-4.1.7.1.(6)(c) A-4.1.7.1.(6)(d) and 4.1.7.2.(1)(b) A-4.1.7.2.(1) and (2) A-4.1.7.3.(1) A-4.1.8.2.(1) A-4.1.8.3.(4) A-4.1.8.3.(6) A-4.1.8.3.(7)(b) and (c) A-4.1.8.3.(8) A-4.1.8.4.(3) and Table 4.1.8.4.A. A-Table 4.1.8.5. A-Table 4.1.8.6. A-4.1.8.7.(1) A-4.1.8.9.(4) A-4.1.8.9.(5) A-4.1.8.11.(3) A-4.1.8.12.(1)(a) A-4.1.8.12.(1)(b) A-4.1.8.12.(3) A-4.1.8.12.(4)(a) A-4.1.8.13.(4) A-4.1.8.15.(1) A-4.1.8.15.(3) A-4.1.8.15.(4) A-4.1.8.15.(5)

			A-4.1.8.15.(6) A-4.1.8.15.(7) A-4.1.8.16.(1) A-4.1.8.16.(3)(a) A-4.1.8.16.(4) A-4.1.8.16.(5)(a) A-4.1.8.16.(7) A-4.1.8.17.(1) A-4.1.8.18. A-4.2.4.1.(3) A-4.2.4.1.(5) A-4.2.5.1.(1) A-4.2.6.1.(1) A-4.2.7.2.(1) A-5.1.4.2. Appendix C
CGSB	CAN/CGSB-7.2-94	Adjustable Steel Columns	A-9.17.3.4.
CGSB	CAN/CGSB-12.20-M89	Structural Design of Glass for Buildings	A-9.6.1.3.(1)
CGSB	CAN/CGSB-71.26-M88	Adhesive for Field-Gluing Plywood to Lumber Framing for Floor Systems	Table A-9.23.4.2.(2)C
CGSB	CAN/CGSB-82.6-M86	Doors, Mirrored Glass, Sliding or Folding, Wardrobe	A-9.6.1.2.(2)
CGSB	CAN/CGSB-93.1-M85	Sheet, Aluminum Alloy, Prefinished, Residential	A-9.27.11.1.(3) and (4)
CGSB	CAN/CGSB-93.2-M91	Prefinished Aluminum Siding, Soffits, and Fascia, for Residential Use	A-9.27.11.1.(3) and (4)
CISC	2009	Crane-Supporting Steel Structures: Design Guide	A-4.1.3.2.(2)
CMHC	1993	Testing of Fresh Air Mixing Devices	A-9.32.3.4.
CMHC	1988	Air Permeance of Building Materials	A-5.4.1.2.(1) and (2) Table A-9.25.5.1.(1)
CMHC/HC	2007	Radon: A Guide for Canadian Homeowners	A-5.4.1.1. A-6.2.1.1. A-9.13.4.3.
CSA	CAN/CSA-A23.3-04	Design of Concrete Structures	A-4.1.3.2.(4) A-4.3.3.1.(1)
CSA	A23.4-09	Precast Concrete – Materials and Construction	A-4.3.3.1.(1)
CSA	A82.31-M1980	Gypsum Board Application	Table A-9.10.3.1.A Table A-9.10.3.1.B
CSA	CAN/CSA-A370-04	Connectors for Masonry	A-9.21.4.5.(2)
CSA	AAMA/WDMA/CSA 101/I.S.2/A440-08	NAFS – North American Fenestration Standard/Specification for Windows, Doors, and Skylights, as updated by Update No. 1 (July 2013)	A-5.3.1.2. A-9.7.4.2.(1)
CSA	A440S1-09	Canadian Supplement to AAMA/WDMA/CSA 101/I.S.2/A440, NAFS – North American Fenestration Standard/Specification for Windows, Doors, and Skylights	A-5.10.2.2. A-9.7.4.2.(1)
CSA	B111-1974	Wire Nails, Spikes and Staples	A-Table 9.23.3.5.B.
CSA	CAN/CSA-B365-01	Installation Code for Solid-Fuel-Burning Appliances and Equipment	A-9.33.1.1.(2) A-9.33.5.3.
CSA	CAN/CSA-F326-M91	Residential Mechanical Ventilation Systems	A-9.32.3. A-9.32.3.1.(1)

			A-9.32.3.5. A-9.32.3.7. A-9.32.3.8. A-9.33.6.13.
CSA	O86-09	Engineering Design in Wood	A-9.15.2.4.(1) A-9.23.4.2.
CSA	O112.9-10	Evaluation of Adhesives for Structural Wood Products (Exterior Exposure)	Table A-9.10.3.1.B
CSA	O112.10-08	Evaluation of Adhesives for Structural Wood Products (Limited Moisture Exposure)	Table A-9.10.3.1.B
CSA	O141-05	Softwood Lumber	A-9.3.2.1.(1)
CSA	O437.0-93	OSB and Waferboard	A-9.23.15.4.(2)
CSA	CAN/CSA-S6-06	Canadian Highway Bridge Design Code	A-Table 4.1.5.3. A-Table 4.1.5.9.
CSA	S16-09	Design of Steel Structures	A-4.1.5.11. A-4.3.4.1.(1)
CSA	S304.1-04	Design of Masonry Structures	A-5.1.4.1.(5)(b) and (c)
CSA	CAN/CSA-S406-92	Construction of Preserved Wood Foundations	A-9.15.2.4.(1)
CSA	Z32-04	Electrical Safety and Essential Electrical Systems in Health Care Facilities	A-3.2.7.6.(1)
CSA	CAN/CSA-Z240 MH Series-09	Manufactured Homes	A-1.1.1.1.(3)[3]
CSA	Z240.2.1-09	Structural Requirements for Manufactured Homes	A-1.1.1.1.(3)[3]
CSA	Z240.10.1-08	Site Preparation, Foundation, and Anchorage of Manufactured Homes	A-1.1.1.1.(3)[3]
CWC	1997	Introduction to Wood Building Technology	A-9.27.3.8.(4)
CWC	2000	Wood Reference Handbook	Table A-9.27.3.8.(4)
CWC	2009	The Span Book	A-9.23.4.2.
CWC	2009	Engineering Guide for Wood Frame Construction	A-9.4.1.1. A-9.23.13.1.
EC	CEPA 1988	Canadian Environmental Protection Act, Section 8, Part 1	A-6.2.1.7.(2)
EPA	625/R-92/016 (1994)	Radon Prevention in the Design and Construction of Schools and Other Large Buildings	A-5.4.1.1.
FM Approvals	2008	Approval Standard for Suppression Mode [Early Suppression – Fast Response (ESFR)] Automatic Sprinklers	A-3.2.5.12.(7)
FPI	Project 43-10C-024 (1988)	Deflection Serviceability Criteria for Residential Floors	A-9.23.4.2.(2)
HC	2004	Fungal Contamination in Public Buildings: Health Effects and Investigation Methods	A-5.5.1.1.
HC	2008	Guide for Radon Measurements in Public Buildings (Schools, Hospitals, Care Facilities, Detention Centres)	A-5.4.1.1. A-6.2.1.1.
HC	2008	Guide for Radon Measurements in Residential Dwellings (Homes)	A-9.13.4.3.
ISO	7010:2003	Graphical symbols – Safety colours and safety signs – Safety signs used in workplaces and public areas	A-3.4.5.1.(2)(c)
ISO	7731:2003(E)	Ergonomics – Danger signals for public and work areas – Auditory danger signals	A-3.2.4.22.(1)(b)

ISO	8201:1987(E)	Acoustics – Audible emergency evacuation signal	A-3.2.4.19.(2)
NFPA	2001 Edition	Fire Protection Guide to Hazardous Materials	A-6.2.2.6.(1)
NFPA	FPH 2008-2008	Fire Protection Handbook	A-3.2.2.2.(1) A-3.6.2.7.(5)
NFPA	13-2013	Installation of Sprinkler Systems	A-3.2.4.10.(3)(f) A-3.2.5.12.(1) A-3.2.5.12.(6) A-3.2.5.13.(1) A-3.2.8.2.(3)
NFPA	13D-2010	Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes	A-3.2.5.12.(6) A-3.2.5.12.(7) A-3.2.5.13.(1)
NFPA	13R-2010	Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height	A-3.2.5.12.(6) A-3.2.5.12.(7) A-3.2.5.13.(1)
NFPA	20-2010	Installation of Stationary Pumps for Fire Protection	A-3.2.4.10.(3)(f)
NFPA	30-2008	Flammable and Combustible Liquids Code	A-6.2.2.6.(1)
NFPA	30A-2008	Motor Fuel Dispensing Facilities and Repair Garages	A-6.2.2.6.(1)
NFPA	32-2007	Drycleaning Plants	A-6.2.2.6.(1)
NFPA	33-2007	Spray Application Using Flammable or Combustible Materials	A-6.2.2.6.(1)
NFPA	34-2007	Dipping and Coating Processes Using Flammable or Combustible Liquids	A-6.2.2.6.(1)
NFPA	35-2005	Manufacture of Organic Coatings	A-6.2.2.6.(1)
NFPA	36-2009	Solvent Extraction Plants	A-6.2.2.6.(1)
NFPA	40-2007	Storage and Handling of Cellulose Nitrate Film	A-6.2.2.6.(1)
NFPA	51-2007	Design and Installation of Oxygen-Fuel Gas Systems for Welding, Cutting, and Allied Processes	A-6.2.2.6.(1)
NFPA	51A-2006	Acetylene Cylinder Charging Plants	A-6.2.2.6.(1)
NFPA	55-2005	Storage, Use, and Handling of Compressed Gases and Cryogenic Fluids in Portable and Stationary Containers, Cylinders, and Tanks	A-6.2.2.6.(1)
NFPA	61-2008	Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities	A-6.2.2.6.(1)
NFPA	68-2007	Explosion Protection by Deflagration Venting	A-3.6.2.7.(5) A-6.2.2.6.(1)
NFPA	69-2008	Explosion Prevention Systems	A-3.6.2.7.(5) A-6.2.2.6.(1)
NFPA	72-2007	National Fire Alarm and Signaling Code	A-3.2.4.22.(2)
NFPA	80-2007	Fire Doors and Other Opening Protectives	A-3.1.8.1.(2) A-3.2.8.2.(3)
NFPA	80A-2007	Protection of Buildings from Exterior Fire Exposures	A-3
NFPA	85-2007	Boiler and Combustion Systems Hazards Code	A-6.2.2.6.(1)
NFPA	86-2007	Ovens and Furnaces	A-6.2.2.6.(1)
NFPA	88A-2007	Parking Structures	A-6.2.2.6.(1)
NFPA	91-2004	Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Noncombustible Particulate Solids	A-6.2.2.6.(1)

NFPA	96-2008	Ventilation Control and Fire Protection of Commercial Cooking Operations	A-3.3.1.2.(2) A-6.2.2.6.(1) A-9.10.1.4.(1)
NFPA	101-2009	Life Safety Code	A-3.3.2.1.(2)
NFPA	204-2007	Smoke and Heat Venting	A-6.2.2.6.(1)
NFPA	303-2006	Marinas and Boatyards	A-6.2.2.6.(1)
NFPA	307-2006	Construction and Fire Protection of Marine Terminals, Piers, and Wharves	A-6.2.2.6.(1)
NFPA	409-2004	Aircraft Hangars	A-6.2.2.6.(1)
NFPA	415-2008	Airport Terminal Buildings, Fueling, Ramp Drainage, Loading Walkways	A-6.2.2.6.(1)
NFPA	484-2009	Combustible Metals	A-6.2.2.6.(1)
NFPA	654-2006	Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids	A-6.2.2.6.(1)
NFPA	655-2007	Prevention of Sulfur Fires and Explosions	A-6.2.2.6.(1)
NFPA	664-2007	Prevention of Fires and Explosions in Wood Processing and Woodworking Facilities	A-6.2.2.6.(1)
NFPA	1142-2007	Standard for Water Supply for Suburban and Rural Fire Fighting	A-3.2.5.7.(1)
NFPA	1710-2004	Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments	A-3.2.3.1.(8)
NLGA	2007	Standard Grading Rules for Canadian Lumber	A-9.3.2.1.(1) A-9.3.2.8.(1) A-9.23.10.4.(1)
NLGA	SPS-1-2007	Fingerjoined Structural Lumber	Table A-9.10.3.1.A A-9.23.10.4.(1)
NLGA	SPS-3-2007	Fingerjoined 'Vertical Stud Use Only' Lumber	Table A-9.10.3.1.A A-9.23.10.4.(1)
NRCA	2005	The NRCA Waterproofing Manual	A-5.6.2.1.
NRCA	2007	The NRCA Roofing Manual: Membrane Roof Systems	A-5.6.2.1.
NRC-IRC	CBD 222	Airtight Houses and Carbon Monoxide Poisoning	A-9.33.1.1.(2)
NRC-IRC	CBD 230	Applying Building Codes to Existing Buildings	A-1.1.1.2.(1)(3)
NRC-IRC	CBD 231	Moisture Problems in Houses	A-9.25.3.1.(1)
NRC-IRC	1988	Performance and Acceptability of Wood Floors – Forintek Studies	A-9.23.4.2.(2)
NYCDOHMH	2008	Guidelines on Assessment and Remediation of Fungi in Indoor Environments	A-5.5.1.1.
OMMAH	2006	2006 Building Code Compendium, Volume 2, Supplementary Standard SB-7, Guards for Housing and Small Buildings	A-9.8.8.2.
SMACNA	6th Edition	Architectural Sheet Metal Manual	A-5.6.2.1.
TC	SOR/2008-34	Transportation of Dangerous Goods Regulations (TDGR)	A-3.3.1.2.(1)
TWC	1993	Details of Air Barrier Systems for Houses	Table A-9.25.5.1.(1)
TWC	1995	High-Rise Residential Construction Guide	A-5.6.2.1.
ULC	CAN/ULC-S101-07	Fire Endurance Tests of Building Construction and	A-3.1.5.12.(2)(e)

		Materials	A-9.10.3.1.B B-3.2.6.5.(6)(b)
ULC	CAN/ULC-S112-M90	Fire Test of Fire-Damper Assemblies	Table B-3.2.6.6.(1)C
ULC	CAN/ULC-S113-07	Wood Core Doors Meeting the Performance Required by CAN/ULC-S104 for Twenty Minute Fire Rated Closure Assemblies	A-9.10.9.3.(2) A-9.10.13.2.(1)
ULC	CAN/ULC-S124-06	Test for the Evaluation of Protective Coverings for Foamed Plastic	A-3.1.5.12.(2)(e)
ULC	ULC-S332-93	Burglary Resisting Glazing Material	A-9.7.5.2.(1)
ULC	CAN/ULC-S524-06	Installation of Fire Alarm Systems	A-3.2.4.19.(8) A-3.2.4.21.(7)
ULC	CAN/ULC-S526-07	Visible Signal Devices for Fire Alarm Systems, Including Accessories	A-3.2.4.20.(2)
ULC	CAN/ULC-S572-10	Photoluminescent and Self-Luminous Signs and Path Marking Systems	A-3.4.5.1.(4)
ULC	CAN/ULC-S702-09	Mineral Fibre Thermal Insulation for Buildings	A-5.10.1.1.(1)
WCLIB	No. 17 (2004)	Standard Grading Rules	A-Table 9.3.2.1.
WWPA	2011	Western Lumber Grading Rules	A-Table 9.3.2.1.

Notes to Table A-1.3.1.2.(1):

(1) Some documents may have been reaffirmed or reapproved. Check with the applicable issuing agency for up-to-date information.

(2) Some titles have been abridged to omit superfluous wording.

(3) By-law reference is in Division A.

"

101. In Book I, Appendix A of Division B, Council amends Appendix Note A-3.1.2.1.(1) under the heading "Group A, Division 2" by adding "Child Care Facilities"

102. In Book I, Appendix A of Division B, following Appendix note A-3.1.2.3.(1) Council adds the following Appendix Note:

> "**A-3.1.2.5.(3) Daycare Facilities for Children** A daycare facility for children is typically occupied for a period of less than 24 hours each day (i.e., is not a residential facility). The term "daycare" is not meant to exclude facilities that provide short term care during the night for a period of less than 24 hours each day. (See also A-3.3.2.16.)".

103. In Book I, Appendix A of Division B, Council strikes out ppendix Note A-3.2.5.7.(1) and substitutes the following:

> "A-3.2.5.7.(1) Water Supply The intent of Sentence 3.2.5.7.(1) is that an adequate water supply for firefighting be readily available and of sufficient volume and pressure to enable emergency response personnel to control fire growth so as to enable the safe evacuation of occupants and the conduct of search and rescue operations, prevent the fire from spreading to adjacent buildings, and provide a limited measure of property protection.
>
> The water supply requirements for buildings containing internal fire suppression systems, including sprinkler systems and standpipe systems, are contained in specific standards referenced in the By-law. Compliance with the referenced standard, including any variations made by this By-law, is deemed to satisfy the intent of Sentence 3.2.5.7.(1). However, it will be necessary to verify that an adequate source of water is available at the building site to meet the required quantities and pressures.
>
> For a building with no internal fire suppression system, the determination of the minimum requirements applicable to the water supply for firefighting is relevant mainly to building sites not serviced by municipal water supply systems. For building sites serviced by municipal water supply systems, where the water supply duration is not a concern, water supply flow rates at minimum pressures is the main focus of this provision. However, where municipal water supply capacities are limited, it may be necessary for buildings to have supplemental water supplies on site or readily available.
>
> The sources of water supply for firefighting purposes may be natural or developed. Natural sources may include ponds, lakes, rivers, streams, bays, creeks, and springs. Developed sources may include aboveground tanks, elevated gravity tanks, cisterns, swimming pools, wells, reservoirs, aqueducts, artesian wells, tankers, hydrants served by a public or private water system, and canals. Consideration should be given to ensuring that water sources will be accessible to fire department equipment under all climatic conditions.

The volume of on-site water supply is dependent on the building size, construction, occupancy, exposure and environmental impact potential, and should be sufficient to allow at least 30 minutes of fire department hose stream use.

For the purposes of calculating adequate water supply requirements for fire-fighting the following documents may be useful:

- Insurance Services Office (ISO), "Needed Fire Flow Guide"
- NFPA 1142, "Standard for Water Supply for Suburban and Rural Fire Fighting," and
- American Water Works Association "Distribution Requirements for Fire Protection."

104. In Book I, Appendix A of Division B, following Appendix note A-3.3.2.1.(2) Council adds the following Appendix note:

"**A-3.3.2.16. Daycare Facilities with Children under 30 Months** These daycare facilities are subject to additional requirements to address the unique profile of the occupants. (See also A-3.1.2.5.(3))"

105. In Book I, Appendix A of Division B, Appendix Note A-3.4.5.1.(2)(c), Council:

a) strikes out the caption to Figure A-3.4.5.(2)(c)-A and substitutes the following:

"Figure A-3.4.5.1.(2)(c)-A
"E001 Emergency exit (left hand)" symbol from ISO 7010"

b) strikes out the caption to Figure A-3.4.5.(2)(c)-B and substitutes the following:

"Figure A-3.4.5.1.(2)(c)-B
"E005 Direction, arrow (90° increments), safe condition" symbol from ISO 7010"

106. In Book I, Appendix A of Division B, Council strikes out Appendix Note A-3.4.5.1.(3) and substitutes the following:

"**A-3.4.5.1.(3) Internally Illuminated Signs** Photoluminescent signs are not internally illuminated and therefore must conform to Sentence 3.4.5.1.(4)."

107. In Book I, Appendix A of Division B, Council strikes out Appendix Note A-3.4.5.1.(4) and substitutes the following:

"**A-3.4.5.1.(4) Externally Illuminated Signs** An external lighting source is required to properly charge photoluminescent signs. In addition to being continuously illuminated as required by Sentence 3.4.5.1.(4), these types of signs must also be lit in conformance with the charging requirements stated in CAN/ULC-S572."

108. In Book I, Appendix A of Division B, Appendix Note A-4.1.5.8., Council strikes out the words "entitled Tributary Area" and substitutes "entitled Live Loads".

109. In Book I, Appendix A of Division B, Council strikes out Appendix Note A-5.10.2.2. and substitutes the following:

"A-5.10.2.2. Windows, Doors, Skylights and Other Glazed Products

Design Values
CSA A440S1 requires that the individual performance levels achieved by the product for structural resistance, water penetration resistance and air leakage resistance be reported on the product's performance label.

Storm Doors and Windows
Where storm doors and storm windows are not incorporated in a rated window or door assembly, they should be designed and constructed to comply with the applicable requirements of Part 5 regarding such properties as appropriate air leakage and structural loads.

Forced Entry Test
Even though the performance label on rated windows, doors and skylights does not explicitly indicate that the product has passed the forced entry resistance test, products are required to pass this test in order to be rated.

Installation and Field Testing of Windows, Doors, Skylights and Other Glazed Products
Windows, doors, skylights, other glazed products and their components require installation details that are appropriately designed and constructed to provide acceptable overall performance of a building envelope assembly. Proper design of installation details provides the information necessary to integrate the window, door or skylight's structure, air barrier, vapour barrier and water barrier functions into the overall design of the building envelope assembly for these functions. Proper construction of these details is necessary to achieve an appropriate level of long term performance. Further guidance on installation detailing for windows, doors, skylights and other glazed products and their components can be found in CSA A440.4, "Window, Door and Skylight Installation."

Field testing of installed windows, doors and skylights during construction can be an invaluable tool for verifying acceptable levels of performance for the installed system. Although not required by this Code, field testing early in the envelope construction phase is considered favourable such that discontinuities in the system can be readily identified and corrections made before construction of the entire assembly is completed. Additional field testing during the construction phases can also be used to monitor installation consistency. Further guidance on methods and guidelines for the field testing of windows, doors and skylights can be found in CSA A440.4, "Window, Door and Skylight Installation, Annex D - Field Testing of Window and Door Installations." While this document does list previously identified industry performance

data values, it is important to note that the user should utilize current specific performance requirements for a project as governed by the values developed in the referenced standard AAMA/WDMA/CSA101/I.S.2/A440, "NAFS - North American Fenestration Standard/Specification for Windows, Doors, and Skylights."

Field test procedures should be in accordance with referenced test standards, such as ASTM E783, "Standard Test Method for Field Measurement of Air Leakage Through Installed Exterior Windows and Doors" and ASTM E1105, "Standard Test Method for Field Determination of Water Penetration of Installed Exterior Windows, Skylights, Doors, and Curtain Walls, by Uniform or Cyclic Static Air Pressure Difference." ".

110. In Book I, Appendix A of Division B, before Appendix Note A-5.10.2.4.(3), Council adds the following notes:

"**A-5.10.2.2.(1) Two Compliance Paths** It is intended that any fenestration product that conforms to this Part may choose to comply with either Clause (a) or Clause (b) of Sentence 5.10.2.2.(1). Even if a product is in scope of the standards referenced via Clause (b) (NAFS and the Canadian Supplement to NAFS), the compliance path in Clause (a) may be used. However, it is not intended that the compliance path in Clause (b) be used where fenestration products are not within the scope of the referenced standards.

A-5.10.2.2.(2) Other Glazed Products Glazed products such as curtain walls or sloped glazing that are not typically considered
windows but are installed as part of a separation described in Sentence 5.10.2.1.(1) are not within the scope of the referenced standards
and therefore must conform to Subsection 5.1.4. and Sections 5.3., 5.4. and 5.6.

A-5.10.2.2.(4) Loads and Procedures For windows within the scope of the "Canadian Supplement" referred to in Sentence 5.10.2.2.(1), structural and wind loads are included and may be calculated in accordance with that standard. As an alternative, structural and wind loads from Section 5.2. may be used to select fenestration products that are appropriate for the point of installation. Values derived from the referenced standard, which uses a simplified calculation method, are typically higher than those derived from
calculations done in conformance with Section 5.2.".

111. In Book I, Appendix A of Division B, Appendix Note A-6.2.2.6.(1), Council strikes out the words "NFPA 55, "Storage, Use, and Handling of Compressed Gases and Cryogenic Fluids in Portable and Stationary Containers, Cylinders, and Tanks" " and substitutes "NFPA 55, "Compressed Gases and Cryogenic Fluids Code" ".

112. In Book I, Appendix A of Division B, Appendix Note A-9.3.2.1.(1), Council amends Table A-9.3.2.1.(1)A. in the third paragraph by striking out the words "NLGA 2007" and substituting "NLGA 2010".

113. In Book I, Appendix A of Division B, Appendix Note A-9.3.2.8., Council strikes out the words "NLGA 2007" and substitutes "NLGA 2010".

114. In Book I, Appendix A of Division B, Council renumbers Appendix Note A-9.4.2.1.(1) as Appendix Note A-9.4.2.2. .

115. In Book I, Appendix A of Division B, before Appendix Note A-9.6.1.2.(2), Council adds the following Appendix Note:

> "**A-9.6.1.1.(1) Application.** The scope of this Section includes glass installed on the interior or on the exterior of a building.".

116. In Book I, Appendix A of Division B, Council repeals Appendix Note A-9.6.1.3.(1).

117. In Book I, Appendix A of Division B, Council

a) adds the following Appendix Note:

> "**A-9.7. Windows, Doors and Skylights.** This section applies only to windows, doors and skylights as defined in the scope of the standards referenced in Article 9.7.4.2. Other glazed products, such as site-built windows, curtain walls or sloped glazing, are required to conform to Part 5.
>
> It is also permitted for fenestration products within the scope of the NAFS standard to conform to Part 5. This option is typically used for windows and doors that are impractical to subject to the testing requirements of NAFS due to their size or for custom configurations."
>
> , and

b) adds the following Appendix Note:

> "**A-9.7.4. Design and Construction.** Garage doors, sloped glazing, curtain walls, storefronts, commercial entrance systems, site-built or site-glazed products, revolving doors, interior windows and doors, storm windows, storm doors, sunrooms and commercial steel doors are not in the scope of NAFS.
>
> All windows, doors and skylights installed to separate conditioned space from unconditioned space or the exterior must also conform to Section 9.36.".

118. In Book I, Appendix A of Division B, Appendix Note A-9.7.4.2.(1), Council:

a) Adds the following before the passage headed "Canadian Requirements in the Harmonization Standard":

> "**General**
> Doors between an unconditioned garage and a dwelling unit are considered to be in scope of the standard referenced in this Sentence. Although the standard refers to windows in "exterior building envelopes", a note to the definition of

"building envelope" clarifies that for the purpose of application of the standard, in some cases a building envelope may consist of 2 separate walls (such as a wall between garage and dwelling unit as well as the exterior wall of the garage itself).

A door leading to the exterior from an unconditioned garage is also within scope of the referenced standard, as it is also part of the exterior building envelope. However, because the scope of the Building By-law takes precedence, these doors are not required to conform to "NAFS". This Subsection of the Code does not apply to a door separating two unconditioned spaces.",

b) strikes out the text associated with the heading "Water Penetration Resistance" and substitutes the following:

"For the various performance grades listed in the Harmonized Standard, the corresponding water penetration resistance test pressures are a percentage of the design pressure. For R class products, water penetration resistance test pressures are 15% of design pressure. In Canada, driving rain wind pressures (DRWP) have been determined for the locations listed in Division B - Part 1 of the By-law. These are listed in the Canadian Supplement. The DRWP given in the Canadian Supplement must be used for all products covered in the scope of the Harmonized Standard when used in buildings within the scope of Part 9.

To achieve equivalent levels of water penetration resistance for all locations, the Canadian Supplement includes a provision for calculating specified DRWP at the building site considering building exposure. Specified DRWP values are, in some cases, greater than 15% of design pressure and, in other cases, less than 15% of design pressure. For a fenestration product to comply with the By-law, it must be able to resist the structural and water penetration loads at the building site. Reliance on a percentage of design pressure for water penetration resistance in the selection of an acceptable fenestration product will not always be adequate. Design pressure values are reported on a secondary designator, which is required by the Canadian Supplement to be affixed to the window.

As an alternative to the above noted provision in the Canadian Supplement for calculating specified DRWP, the Water Resistance values listed in Table C-4 of Appendix C may be used. ",

c) Adds the following before the passage headed "Condensation Resistance":

"**Uniform Load Structural Test**

The Harmonized Standard specifies that fenestration products be tested at 150% of design pressure for wind (specified wind load) and that skylights and roof windows be tested at 200% of design pressure for snow (specified snow load). With the change in the NBC 2005 to a 1-in-50 return period for wind load, a factor of 1.4 rather than 1.5 is now applied for wind. The NBC has traditionally applied a factor of 1.5 rather than 2.0 for snow. Incorporating

these lower load factors into the By-law requirements for fenestration would better reflect acceptable minimum performance levels; however, this has not been done in order to avoid adding complexity to the By-law, to recognize the benefits of Canada-US harmonization, and to recognize that differentiation of products that meet the Canadian versus the US requirements would add complexity for manufacturers, designers, specifiers and regulatory officials.

The required design pressure and Performance Grade (PG) rating of doors and windows has been listed for each of the geographic locations found in the Code in Table C-4. These may be used as an alternative to the specified wind load calculations in the Canadian Supplement.",

d) strikes out the words ", which is referenced in Table 9.7.3.3.," in the passage headed "Condensation Resistance", and

e) strikes out the passage headed "Greenhouse Windows".

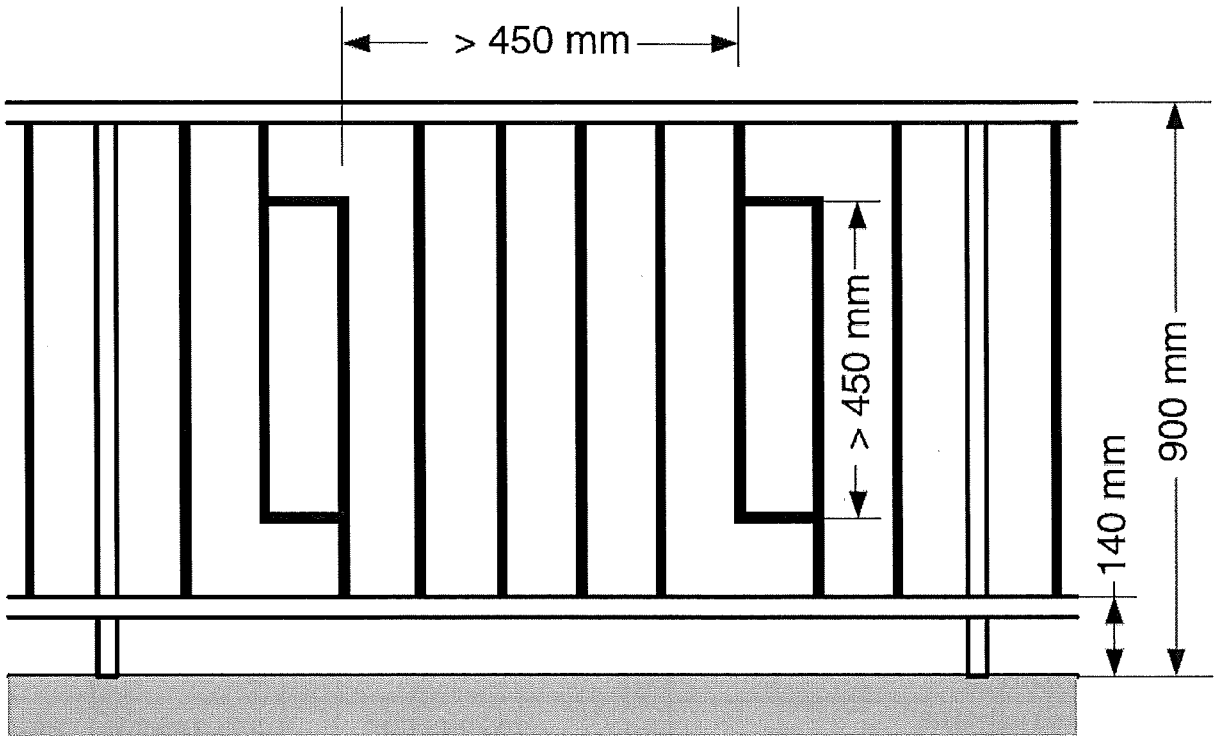
119. In Book I, Appendix A of Division B, before Appendix Note A-9.7.5.2.(1), Council adds the following Appendix Note:

"A-9.7.4.3.(2) Performance Requirements. If the option of calculating design pressure performance grade and water resistance values using the Canadian Supplement is chosen, the DRWP values in Table A.1 of that standard must be used for all buildings within the scope of Part 9 of the Building By-law. This requirement applies whether the windows, doors and skylights are designed to conform to Article 9.7.4.2. or to Part 5.".

120. In Book I, Appendix A of Division B, Council strikes out Appendix Note A-9.7.5.2.(2).

121. In Book I, Appendix A of Division B, Appendix Note A-9.8.8.6.(2), Council repeals Figure A-9.8.8.6.(2)-Bnd substitutes the following:

"



GG00176A

Figure A-9.8.8.6.(2)-A
Example of minimum horizontal and vertical clearances between protrusions in guards as described in Clause 9.8.8.6.(2)(a)"

122. In Book I, Appendix A of Division B, Appendix Note A-9.10.3.1., Council strikes out Note (12) of Table A-9.10.3.1.B and substituting the following:

"(12) Except where assemblies with wood I-joists are tested according to CAN/ULC-S101, "Fire Endurance Tests of Building Construction and Materials," the fire-resistance rating values apply only to I-joists that have been fabricated with a phenolic-based structural wood adhesive complying with CSA O112.10, "Evaluation of Adhesives for Structural Wood Products (Limited Moisture Exposure)." For I-joists with flanges made of laminated veneer lumber (LVL), the fire-resistance rating values apply only where the adhesive used in the LVL fabrication is a phenolic-based structural wood adhesive complying with CSA O112.9, "Evaluation of Adhesives for Structural Wood Products (Exterior Exposure)." ".

123. In Book I, Appendix A of Division B, Appendix Note A-9.10.15.4.(2), Council repeals Figure A-9.10.15.4.(2)-C and substitutes the following:

"

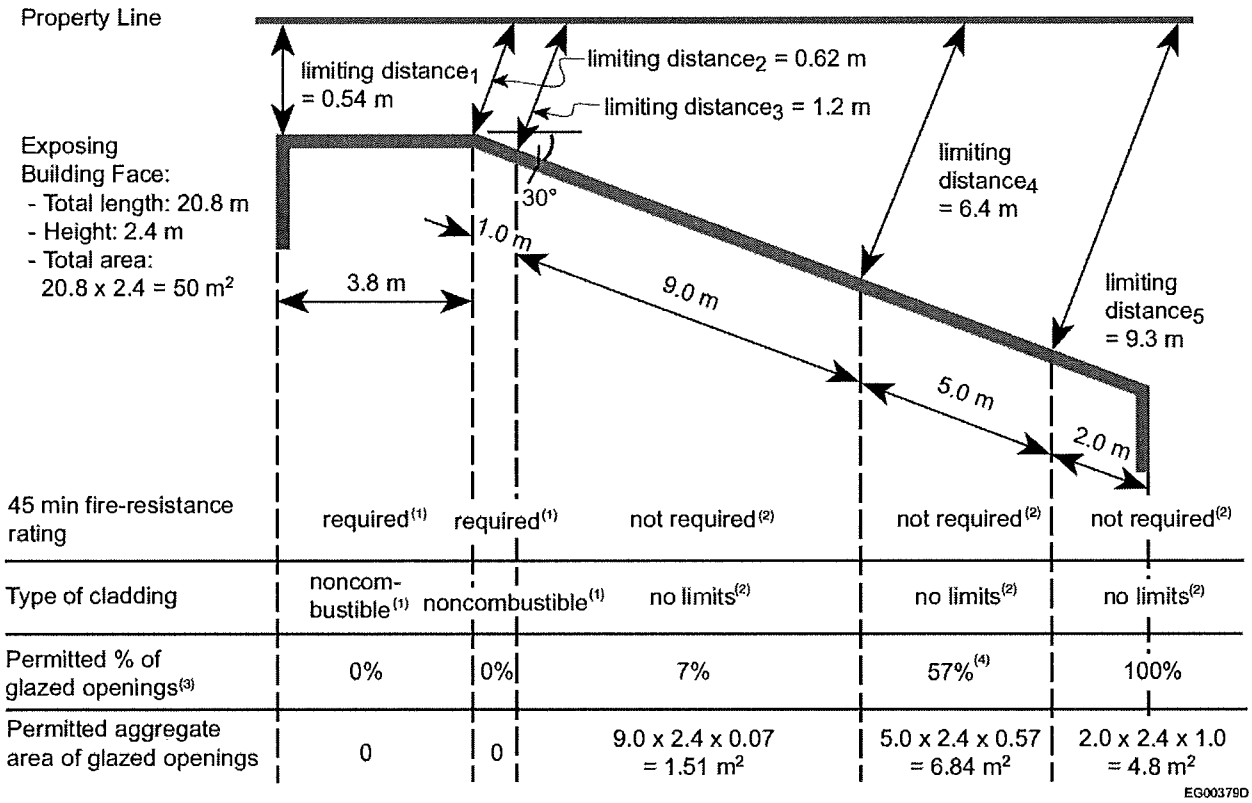


Figure A-9.10.15.4.(2)-C
Example of determination of criteria for the exposing building face of a skewed wall of a house with a different arbitrary division of the wall

Notes to Figure A-9.10.15.4.(2)-C:

(1) See Sentence 9.10.15.5.(2).

(2) See Sentence 9.10.15.5.(3).

(3) See Table 9.10.15.4.

(4) To simplify the calculations, choose the column for the lesser limiting distance nearest to the actual limiting distance. Interpolation for limiting distance is also acceptable and may result in a slightly larger permitted area of {Deleted} unprotected openings. Interpolation can only be used for limiting distances greater than 1.2 m."

124. In Book I, Appendix A of Division B, Council strikes out ote A-9.10.22. and substitutes the following:

"**A-9.10.22. Clearances from Gas, Propane and Electric Cooktops** The British Columbia Electrical Safety Regulation, and the British Columbia Gas Safety Regulation, referenced in Article 9.10.22.1., address clearances directly above, in front of, behind and beside the appliance. Where side clearances are zero, the standards do not address clearances to building elements located both above the level of the cooktop elements or burners and to the side of the appliance. Through reference to the

Electrical Safety Regulation and the Gas Safety Regulation and the requirements in Articles 9.10.22.2. and 9.10.22.3., the British Columbia Building Code (BCBC) addresses all clearances. Where clearances are addressed by the BCBC and the Electrical Safety Regulation or the Gas Safety Regulation, conformance with all relevant criteria is achieved by compliance with the most stringent criteria."

125. In Book I, Appendix A of Division B, Appendix Note A-9.13.4., Council adds the words "system" after "between the air barrier".

126. In Book I, Appendix A of Division B, Council strikes out Appendix Note A-9.13.4.3. and substitutes the following:

"**A-9.13.4.3.**

Providing Performance Criteria for the Depressurization of the Space Between the Air Barrier System and the Ground
Article 9.13.4.3. contains two sets of requirements: Sentence (2) describes the criteria for subfloor depressurization systems using performance-oriented language, while Sentence (3) describes one particular acceptable solution using more prescriptive language. In some cases, subfloor depressurization requires a solution other than the one described in Sentence (3), for example, where compactable fill is installed under slab-on-grade construction.

Completion of a Subfloor Depressurization System
The completion of a subfloor depressurization system may be necessary to reduce the radon concentration to a level below the guideline specified by Health Canada. In this case, to complete the system, the radon vent pipe is mechanically assisted to enable effective depressurization of the space between the air barrier system and the ground. An electrically powered fan is typically installed somewhere along the radon vent pipe. Further information on protection from radon ingress can be found in the following Health Canada publications:

- "Radon: A Guide for Canadian Homeowners" (CMHC/HC), and
- "Guide for Radon Measurements in Residential Dwellings (Homes)." ".

127. In Book I, Appendix A of Division B, Council strikes out Appendix Note A-9.13.4.3.(2)(b)(i) and (3)(b)(i) and substitutes the following:

"**A-9.13.4.3.(2)(b)(i) and (3)(b)(i) Effective Depressurization** To allow effective depressurization of the space between the air barrier system and the ground, the extraction opening (the pipe) should not be blocked and should be arranged such that air can be extracted from the entire space between the air barrier system and the ground. This will ensure that the extraction system can maintain negative pressure underneath the entire floor (or in heated crawl spaces underneath the air barrier). The arrangement and location of the extraction system inlet(s) may have design implications where the footing layout separates part of the space underneath the floor.".

128. In Book I, Appendix A of Division B, after Appendix Note A-9.13.4.3.(2)(b)(i) and (3)(b)(i), Council adds the following Appendix Note:

> "**A-9.13.4.3.(3)(b) Vent Terminals** To prevent soil gases from entering a building through air intakes, windows, and other openings in the building envelope, radon vent pipe terminations should be installed in a similar manner to plumbing vent terminals. (See A-2.5.6.5.(4) in Appendix A of Division B to Book II of the Code.)".

129. In Book I, Appendix A of Division B, after Appendix Note A-9.15.3.4.(2), Council adds the following Appendix Note:

> "**A-9.16.2.1.(1) Drainage Layer Beneath Floors-on-Ground** A drainage layer required by Sentence 9.16.2.1.(1) shall also be gas-permeable and conform to Article 9.13.4.3. in *buildings* to which that Article applies.".

130. In Book I, Appendix A of Division B, Council strikes out Appendix Note A-9.23.3.1.(2) and substitutes the following:

> "**A-9.19.2.1.(1) Access to Attic or Roof Space** The term "open space" refers to the space between the insulation and the roof sheathing. Sentence 9.19.2.1.(1) requires the installation of an access hatch where the open space in the attic or roof is large enough to allow visual inspection. Although the dimensions of an uninsulated attic or roof space may meet the size that triggers the requirement for an access hatch to be installed, most of that space will actually be filled with insulation and may therefore not be easily inspected, particularly in smaller buildings or under low-sloped roofs."

131. In Book I, Appendix A of Division B, Council strikes out Appendix Note A-9.23.3.1.(2) and substitutes the following:

> "**A-9.23.3.1.(2) Alternative Nail Sizes** Where power nails or nails with smaller diameters than required by Table 9.23.3.4. are used to connect framing, the following equations can be used to determine the required spacing or required number of nails.
>
> The maximum spacing can be reduced using the following equation:
>
> $$S_{adj} = S_{table} \bullet (D_{red} / D_{table})^2$$
>
> Where
>
> S_{adj} = adjusted nail spacing ≥ 20 x nail diameter,
> S_{table} = nail spacing required by Table 9.23.3.4.,
> D_{red} = smaller nail diameter than required by Table 9.23.3.1., and
> D_{table} = nail diameter required by Table 9.23.3.1.
>
> The number of nails can be increased using the following equation:
>
> $$N_{adj} \_ N_{table} \bullet (D_{table} / D_{red})^2$$
>
> Where
>
> N_{adj} = adjusted number of nails,

N_{table} = number of nails required by Table 9.23.3.4.,
D_{table} = nail diameter required by Table 9.23.3.1., and
D_{red} = smaller nail diameter than required by Table 9.23.3.1.

Note that nails should be spaced sufficiently far apart—preferably no less than 55 mm apart—to avoid splitting of framing lumber.

A-9.23.3.1.(3) Standard for Screws The requirement that wood screws conform to ASME B18.6.1, "Wood Screws (Inch Series)," is not intended to preclude the use of Robertson head screws. The requirement is intended to specify the mechanical properties of the fastener, not to restrict the means of driving the fastener."

132. In Book I, Appendix A of Division B, Council strikes out Appendix Note A-Table 9.23.4.3. and substitutes the following:

"**A-Table 9.23.4.3. Spans for Steel Beams** <The spans provided in Table 9.23.4.3. reflect a balance of engineering and acceptable
proven performance.> The spans have been calculated based on the following assumptions:

- simply supported beam spans
- laterally supported top flange
- yield strength 350 MPa
- deflection limit L/360
- live load: first floor = 1.9 kPa; second floor = 1.4 kPa
- dead load = 1.5 kPa (0.5 kPa floor + 1.0 kPa partition)

The calculation used to establish the specified maximum beam spans also applies a revised live load reduction factor to account for the
lower probability of a full live load being applied over the supported area in Part 9 buildings.".

133. In Book I, Appendix A of Division B, Appendix Note A-9.23.10.4.(1), Council strikes out the words "NLGA 2007" and substitutes "NLGA 2010".

134. In Book I, Appendix A of Division B, Appendix Note A-9.27.3.1., Council strikes out the words "10 mm" and substitutes "9.5 mm".

135. In Book I, Appendix C of Division B, Council adds the following Table:

"

Table C-4
Required Performance of Windows and Doors in Part 9 Buildings
Forming Part of Appendix C

Location	Climatic Data		Specified Loads			NAFS		
	1/5 DRWP	1/50 HWP	DRWP	Wind Load		Required Fenestration Performance		
	Pa	kPA	Pa	Pa	(psf)	DP	PG	Water Resist.

Vancouver - Burnaby (Simon Fraser Univ.)	160	0.47	160	952	19.88	960	20	180
Vancouver - North Vancouver	160	0.45	160	911	19.03	960	20	180
Vancouver - Richmond	160	0.45	160	911	19.03	960	20	180
West Vancouver	160	0.48	160	972	20.30	1200	25	180

".

136. In Book I, Appendix D of Division B, Council strikes out Table D-1.1.2. and substitutes the following:

"

Table D-1.1.2.
Documents Referenced in Appendix D Fire-Performance Ratings
Forming part of Sentence (1)

Issuing Agency	Document Number(1)	Title of Document(2)	Reference
ANSI	A208.1-2009	Particleboard	Table D-3.1.1.A.
ASTM	C 330-09	Lightweight Aggregates for Structural Concrete	D-1.4.3.(2)
ASTM	C 1396/C 1396M-11	Gypsum Board	D-1.5.1. Table D-3.1.1.A.
CCBFC	NRCC 30629	Supplement to the National Building Code of Canada 1990	D-6.2. D-6.3. D-6.4.
CGSB	4-GP-36M-1978	Carpet Underlay, Fiber Type	Table D-3.1.1.B.
CGSB	CAN/CGSB-4.129-97	Carpets for Commercial Use	Table D-3.1.1.B.
CGSB	CAN/CGSB-11.3-M87	Hardboard	Table D-3.1.1.A.
CGSB	CAN/CGSB-92.2-M90	Trowel or Spray Applied Acoustical Material	D-2.3.4.(5)
CSA	A23.1-09/A23.2-09	Concrete Materials and Methods of Concrete Construction/Test Methods and Standard Practices for Concrete	D-1.4.3.(1)
CSA	CAN/CSA-A23.3-04	Design of Concrete Structures	D-2.1.5.(2) D-2.6.6.(1) Table D-2.6.6.B. D-2.8.2.(1) Table D-2.8.2.
CSA	A82.5-M1978	Structural Clay Non-Load-Bearing Tile	Table D-2.6.1.A.
CSA	A82.22-M1977	Gypsum Plasters	Table D-3.1.1.A.
CSA	CAN/CSA-A82.27-M91	Gypsum Board	D-1.5.1. Table D-3.1.1.A.
CSA	A82.30-M1980	Interior Furring, Lathing and Gypsum Plastering	D-1.7.2.(1) D-2.3.9.(1) Table D-2.5.1.
CSA	A82.31-M1980	Gypsum Board Application	D-2.3.9.(1) D-2.3.9.(6)

CSA	CAN/CSA-A165.1-04	Concrete Block Masonry Units	Table D-2.1.1.
CSA	O86-09	Engineering Design in Wood	D-2.11.2.(1) D-2.11.2.(2)
CSA	O121-08	Douglas Fir Plywood	Table D-3.1.1.A.
CSA	O141-05	Softwood Lumber	D-2.3.6.(2) Table D-2.4.1.
CSA	O151-09	Canadian Softwood Plywood	Table D-3.1.1.A.
CSA	O153-M1980	Poplar Plywood	Table D-3.1.1.A.
CSA	CAN/CSA-O325-07	Construction Sheathing	D-3.1.1.A.
CSA	O437.0-93	OSB and Waferboard	Table D-3.1.1.A.
CSA	S16-09	Design of Steel Structures	D-2.6.6.(1) D-2.6.6.(3) Table D-2.6.6.B.
NFPA	80-2010	Fire Doors and Other Opening Protectives	D-5.2.1.(1) D-5.2.1.(2)
ULC	CAN/ULC-S101-07	Fire Endurance Tests of Building Construction and Materials	D-1.1.1.(4) D-1.12.1. D-2.3.2.
ULC	CAN/ULC-S102-10	Test for Surface Burning Characteristics of Building Materials and Assemblies	D-1.1.1.(5)
ULC	CAN/ULC-S102.2-10	Test for Surface Burning Characteristics of Flooring, Floor Coverings, and Miscellaneous Materials and Assemblies	D-1.1.1.(5) Table D-3.1.1.B.
ULC	CAN/ULC-S114-05	Test for Determination of Non-Combustibility in Building Materials	D-1.1.1.(6) D-4.1.1.(1) D-4.2.1.
ULC	ULC-S505-1974	Fusible Links for Fire Protection Service	D-5.3.2.
ULC	CAN/ULC-S702-09	Mineral Fibre Thermal Insulation for Buildings	Table D-2.3.4.A. Table D-2.3.4.D. D-2.3.5.(2) D-2.3.5.(4) Table D-2.6.1.E. D-6.4.
ULC	CAN/ULC-S703-09	Cellulose Fibre Insulation (CFI) for Buildings	D-2.3.4.(5)
ULC	CAN/ULC-S706-09	Wood Fibre Thermal Insulation for Buildings	Table D-3.1.1.A.

Notes to Table D-1.1.2.:

(1) Some documents may have been reaffirmed or reapproved. Check with the applicable issuing agency for up-to-date information.

(2) Some titles have been abridged

to omit superfluous wording.

".

137. In Book I, Appendix D of Division B, Appendix Note D-1.4.3.(2), Council strikes out the words "ASTM C 330," and substitutes "ASTM C 330/C 330M,".

138. In Book I, Appendix A of Division C, Council amends Appendix Note A-2.2.7.3. under the heading "3.2.4. Fire Suppression" as follows:

a) striking out the second bullet and their associated text under the heading "Scenario 1" and substituting the following:

"

- The engineer of record submits Schedule B with the BP application."

b) striking out the second and third bullets and their associated text under the heading "Scenario 2" and substituting the following:

"

- The engineer of record submits Schedule B with the BP application for overall coordination of the sprinkler design. Schedules B-1 and B-2 can be annotated "For Performance Specification Only."
- The performance specifications may include a requirement that a separate sprinkler design engineer be responsible for detailed sprinkler design, preparation of sprinkler shop drawings and hydraulic calculations, letters of assurance Schedule B (for field review during construction), and Schedule C-B (for Detailed Design) prior to Occupancy Permit."

139. In Book II, Division B, Part 1, Article 1.3.1.2, Council strikes out Table T-1.3.1.2. and substitutes the following:

"

Table 1.3.1.2.
Documents Referenced in Book II (Plumbing Systems) of the By-law
Forming part of Sentence 1.3.1.2.(1)

Issuing Agency	Document Number(1)	Title of Document(2)	By-law Reference
ANSI/AWWA	C288-08	Stainless-Steel Pipe Flanges for Water Service — Sizes 2 In. Through 72 In. (50 mm Through 1,800 mm)	2.2.6.12.(1)
ANSI/CSA	ANSI Z21.22-1999/ CSA 4.4-M99 (including Addenda 1 and 2)	Relief Valves for Hot Water Supply Systems	2.2.10.11.(1)
ASME/CSA	ASME A112.18.1-2012/	Plumbing Supply Fittings	2.2.10.6.(1) 2.2.10.7.(1)

	CAN/CSA-B125.1-12		
ASME/CSA	ASME A112.18.2-2011/ CAN/CSA-B125.2-11	Plumbing Waste Fittings	2.2.3.3.(1) 2.2.10.6.(2)
ASME/CSA	ASME A112.19.1-08/ CSA B45.2-08	Enamelled Cast Iron and Enamelled Steel Plumbing Fixtures	2.2.2.2.(3) 2.2.2.2.(4)
ASME/CSA	ASME A112.19.2-08/ CSA B45.1-08	Ceramic Plumbing Fixtures	2.2.2.2.(2)
ASME/CSA	ASME A112.19.3-08/ CSA B45.4-08	Stainless Steel Plumbing Fixtures	2.2.2.2.(5)
ASME/CSA	ASME A112.19.7-2012/ CSA B45.10-12	Hydromassage Bathtub Systems	2.2.2.2.(7)
ASME	B16.3-2011	Malleable Iron Threaded Fittings, Classes 150 and 300	2.2.6.6.(1)
ASME	B16.4-2011	Gray Iron Threaded Fittings, Classes 125 and 250	2.2.6.5.(1)
ASME	B16.5-2009	Pipe Flanges and Flanged Fittings: NPS ½ Through NPS 24 Metric/Inch Standard	2.2.6.12.(1)
ASME	B16.9-2007	Factory-Made Wrought Buttwelding Fittings	2.2.6.11.(1) 2.2.6.14.(1)
ASME	B16.12-2009	Cast Iron Threaded Drainage Fittings	2.2.6.3.(1)
ASME	B16.15-2011	Cast Copper Alloy Threaded Fittings, Classes 125 and 250	2.2.7.3.(1)
ASME	B16.18-2012	Cast Copper Alloy Solder-Joint Pressure Fittings	2.2.7.6.(1) 2.2.7.6.(2)
ASME	B16.22-2001	Wrought Copper and Copper Alloy Solder Joint Pressure Fittings	2.2.7.6.(1)
ASME	B16.23-2011	Cast Copper Alloy Solder Joint Drainage Fittings: DWV	2.2.7.5.(1)
ASME	B16.24-2011	Cast Copper Alloy Pipe Flanges and Flanged Fittings: Classes 150, 300, 600, 900, 1500, and 2500	2.2.7.2.(1)
ASME	B16.26-2011	Cast Copper Alloy Fittings for Flared Copper Tubes	2.2.7.7.(1) 2.2.7.7.(2)
ASME	B16.29-2007	Wrought Copper and Wrought Copper Alloy Solder-Joint Drainage Fittings - DWV	2.2.7.5.(1)
ASME	B31.9-2008	Building Services Piping	2.3.2.8.(1)
ASME	B36.19M-2004	Stainless Steel Pipe	2.2.6.10.(1)
ASSE	ANSI/ASSE 1010-2004	Water Hammer Arresters	2.2.10.15.(1)
ASSE	1051-2009G	Individual and Branch Type Air Admittance Valves for Sanitary Drainage Systems	2.2.10.16.(1)
ASTM	A 53/A 53M-10	Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless	2.2.6.7.(4)
ASTM	A 182/A 182M-06	Forged or Rolled Alloy and Stainless Steel Pipe Flanges, Forged Fittings, and Valves	2.2.6.12.(1) 2.2.6.13.(1)

		and Parts for High-Temperature Service	
ASTM	A 269-10	Seamless and Welded Austenitic Stainless Steel Tubing for General Service	2.2.6.14.(1)
ASTM	A 312/A 312M-11	Seamless, Welded, and Heavily Cold Worked Austenitic Stainless Steel Pipes	2.2.6.10.(1)
ASTM	A 351/A 351M-10	Castings, Austenitic, for Pressure-Containing Parts	2.2.6.13.(1)
ASTM	A 403/A 403M-11	Wrought Austenitic Stainless Steel Piping Fittings	2.2.6.11.(1)
ASTM	A 518/A 518M-99	Corrosion-Resistant High-Silicon Iron Castings	2.2.8.1.(1)
ASTM	B 32-08	Solder Metal	2.2.9.2.(1)
ASTM	B 42-10	Seamless Copper Pipe, Standard Sizes	2.2.7.1.(1)
ASTM	B 43-09	Seamless Red Brass Pipe, Standard Sizes	2.2.7.1.(2)
ASTM	B 88-09	Seamless Copper Water Tube	2.2.7.4.(1)
ASTM	B 306-09	Copper Drainage Tube (DWV)	2.2.7.4.(1)
ASTM	B 813-10	Liquid and Paste Fluxes for Soldering of Copper and Copper Alloy Tube	2.2.9.2.(3)
ASTM	B 828-02	Making Capillary Joints by Soldering of Copper and Copper Alloy Tube and Fittings	2.3.2.4.(1)
ASTM	C 1053-00	Borosilicate Glass Pipe and Fittings for Drain, Waste, and Vent (DWV) Applications	2.2.8.1.(1)
ASTM	D 2466-06	Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40	2.2.5.8.(2)
ASTM	D 2467-06	Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80	2.2.5.8.(2)
ASTM	D 3261-10a	Butt Heat Fusion Polyethylene (PE) Plastic Fittings for Polyethylene (PE) Plastic Pipe and Tubing	2.2.5.5.(3)
ASTM	F 628-08	Acrylonitrile-Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste, and Vent Pipe With a Cellular Core	2.2.5.10.(1) 2.2.5.12.(1)
ASTM	F 714-10	Polyethylene (PE) Plastic Pipe (SDR-PR) Based on Outside Diameter	2.2.5.6.(1)
AWS	ANSI/AWS A5.8/A5.8M:2011	Specification for Filler Metals for Brazing and Braze Welding	2.2.9.2.(4)
AWWA	ANSI/AWWA C104/A21.4-08	Cement-Mortar Lining for Ductile-Iron Pipe and Fittings	2.2.6.4.(2)
AWWA	ANSI/AWWA C110/A21.10-12	Ductile-Iron and Gray-Iron Fittings	2.2.6.4.(3)
AWWA	C111/A21.11-2007	Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings	2.2.6.4.(4)
AWWA	ANSI/AWWA C151/A21.51-09	Ductile-Iron Pipe, Centrifugally Cast, for Water	2.2.6.4.(1)
City		Book I (General) of the Building By-law	1.1.1.1.(1)[3]

			1.1.1.1.(3)[3] 1.4.1.2.(1)[3] 2.1.3.1.(1) 2.2.3.1.(1)[4] 2.2.5.12.(2) 2.2.5.12.(3) 2.2.6.7.(3) 2.4.3.1.(1) 2.4.10.4.(1)
City		Fire By-law	2.5.5.2.
BC	R.S.B.C. 1996, c. 323	Local Government Act	2.2.1.1.(1)[4]
BC	R.S.B.C. 1996, c. 293	Mines Act	1.4.1.2.(1)[3]
CGSB	CAN/CGSB-34.1-94	Asbestos-Cement Pressure Pipe	2.2.5.2.(1)
CGSB	CAN/CGSB-34.9-94	Asbestos-Cement Sewer Pipe	2.2.5.1.(2)
CGSB	CAN/CGSB-34.22-94	Asbestos-Cement Drain Pipe	2.2.5.1.(1)
CGSB	CAN/CGSB-34.23-94	Asbestos-Cement House Connection Sewer Pipe	2.2.5.1.(2)
CSA	A60.1-M1976	Vitrified Clay Pipe	2.2.5.4.(1)
CSA	A60.3-M1976	Vitrified Clay Pipe Joints	2.2.5.4.(2)
CSA	CAN/CSA-A257.1-09	Non-Reinforced Circular Concrete Culvert, Storm Drain, Sewer Pipe, and Fittings	2.2.5.3.(1)
CSA	CAN/CSA-A257.2-09	Reinforced Circular Concrete Culvert, Storm Drain, Sewer Pipe, and Fittings	2.2.5.3.(1)
CSA	CAN/CSA-A257.3-09	Joints for Circular Concrete Sewer and Culvert Pipe, Manhole Sections, and Fittings Using Rubber Gaskets	2.2.5.3.(2)
CSA	CAN/CSA-A257.4-09	Precast Reinforced Circular Concrete Manhole Sections, Catch Basins, and Fittings	2.2.5.3.(5)
CSA	CAN/CSA-B45 Series-02	Plumbing Fixtures	2.2.2.2.(1)
CSA	CSA-B45.5-11/IAPMO Z124-2011	Plastic Plumbing Fixtures	2.2.2.2.(6)
CSA	CAN/CSA-B45.9-02	Macerating Systems and Related Components	2.2.2.2.(8)
CSA	B64.0-11	Definitions, General Requirements, and Test Methods for Vacuum Breakers and Backflow Preventers	2.2.10.10.(1)
CSA	CAN/CSA-B64.1.1-11	Atmospheric Vacuum Breakers (AVB)	2.2.10.10.(1)
CSA	CAN/CSA-B64.1.2-11	Pressure Vacuum Breakers (PVB)	2.2.10.10.(1)
CSA	B64.2-11	Hose Connection Vacuum Breakers (HCVB)	2.2.10.10.(1)
CSA	B64.2.1-11	Hose Connection Vacuum Breakers (HCVB) with Manual Draining Feature	2.2.10.10.(1)
CSA	B64.2.2-11	Hose Connection Vacuum Breakers (HCVB) with Automatic Draining Feature	2.2.10.10.(1)

CSA	B64.3-11	Dual Check Valve Backflow Preventers with Atmospheric Port (DCAP)	2.2.10.10.(1)
CSA	B64.4-11	Reduced Pressure Principle Backflow Preventers (RP)	2.2.10.10.(1)
CSA	B64.4.1-11	Reduced Pressure Principle Backflow Preventers for Fire Protection Systems (RPF)	2.6.2.4.(2) 2.6.2.4.(4)
CSA	B64.5-11	Double Check Valve Backflow Preventers (DCVA)	2.2.10.10.(1)
CSA	B64.5.1-11	Double Check Valve Backflow Preventers for Fire Protection Systems (DCVAF)	2.6.2.4.(2)
CSA	B64.6-11	Dual Check Valve Backflow Preventers (DuC)	2.2.10.10.(1)
CSA	B64.6.1-11	Dual Check Valve Backflow Preventers for Fire Protection Systems (DuCF)	2.6.2.4.(2)
CSA	B64.7-11	Laboratory Faucet Vacuum Breakers (LFVB)	2.2.10.10.(1)
CSA	B64.8-11	Dual Check Valve Backflow Preventers with Intermediate Vent (DuCV)	2.2.10.10.(1)
CSA	B64.9-11	Single Check Valve Backflow Preventers for Fire Protection Systems (SCVAF)	2.6.2.4.(2)
CSA	B64.10-11	Selection and Installation of Backflow Preventers	2.6.2.1.(3)
CSA	B70-12	Cast Iron Soil Pipe, Fittings, and Means of Joining	2.2.6.1.(1) 2.4.6.4.(2)
CSA	B125.3-12	Plumbing Fittings	2.2.10.6.(1) 2.2.10.6.(3) 2.2.10.7.(2) 2.2.10.10.(2)
CSA	CAN/CSA-B127.1-99	Asbestos Cement Drain, Waste and Vent Pipe and Pipe Fittings	2.2.5.1.(1) 2.2.6.2.(1)
CSA	B127.2-M1977	Components for Use in Asbestos Cement Building Sewer Systems	2.2.5.1.(2) 2.2.6.2.(1)
CSA	CAN/CSA-B128.1-06	Design and Installation of Non-Potable Water Systems	2.7.4.1.(1)
CSA	CAN/CSA-B137.1-09	Polyethylene (PE) Pipe, Tubing, and Fittings for Cold-Water Pressure Services	2.2.5.5.(1)
CSA	CAN/CSA-B137.2-09	Polyvinylchloride (PVC) Injection-Moulded Gasketed Fittings for Pressure Applications	2.2.5.8.(3)
CSA	CAN/CSA-B137.3-09	Rigid Polyvinylchloride (PVC) Pipe and Fittings for Pressure Applications	2.2.5.8.(1)
CSA	CAN/CSA-B137.5-09	Crosslinked Polyethylene (PEX) Tubing Systems for Pressure Applications	2.2.5.7.(1)
CSA	CAN/CSA-B137.6-09	Chlorinated Polyvinylchloride (CPVC) Pipe, Tubing, and Fittings for Hot- and Cold-Water Distribution Systems	2.2.5.9.(1)
CSA	CAN/CSA-B137.9-09	Polyethylene/Aluminum/Polyethylene (PE-AL-PE) Composite Pressure-Pipe Systems	2.2.5.13.(1)
CSA	CAN/CSA-B137.10-09	Crosslinked	2.2.5.13.(4)

		Polyethylene/Aluminum/Crosslinked Polyethylene (PEX-AL-PEX) Composite Pressure-Pipe Systems	2.2.5.14.(1)
CSA	CAN/CSA-B137.11-09	Polypropylene (PP-R) Pipe and Fittings for Pressure Applications	2.2.5.15.(1)
CSA	B158.1-1976	Cast Brass Solder Joint Drainage, Waste and Vent Fittings	2.2.10.1.(1)
CSA	CAN/CSA-B181.1-11	Acrylonitrile-Butadiene-Styrene (ABS) Drain, Waste, and Vent Pipe and Pipe Fittings	2.2.5.10.(1) 2.2.5.11.(1) 2.2.5.12.(1) 2.4.6.4.(2)
CSA	CAN/CSA-B181.2-11	Polyvinylchloride (PVC) and Chlorinated Polyvinylchloride (CPVC) Drain, Waste, and Vent Pipe and Pipe Fittings	2.2.5.10.(1) 2.2.5.11.(1) 2.2.5.12.(1) 2.4.6.4.(2)
CSA	CAN/CSA-B181.3-11	Polyolefin and Polyvinylidene Fluoride (PVDF) Laboratory Drainage Systems	2.2.8.1.(1)
CSA	CAN/CSA-B182.1-11	Plastic Drain and Sewer Pipe and Pipe Fittings	2.2.5.10.(1) 2.4.6.4.(2)
CSA	CAN/CSA-B182.2-11	PSM Type Polyvinylchloride (PVC) Sewer Pipe and Fittings	2.2.5.10.(1)
CSA	CAN/CSA-B182.4-11	Profile Polyvinylchloride (PVC) Sewer Pipe and Fittings	2.2.5.10.(1)
CSA	CAN/CSA-B182.6-11	Profile Polyethylene (PE) Sewer Pipe and Fittings For Leak-Proof Sewer Applications	2.2.5.10.(1)
CSA	B242-05	Groove- and Shoulder-Type Mechanical Pipe Couplings	2.2.10.4.(1)
CSA	B272-93	Prefabricated Self-Sealing Roof Vent Flashings	2.2.10.14.(2)
CSA	CAN/CSA-B356-10	Water Pressure Reducing Valves for Domestic Water Supply Systems	2.2.10.12.(1)
CSA	CAN/CSA-B602-10	Mechanical Couplings for Drain, Waste, and Vent Pipe and Sewer Pipe	2.2.10.4.(2)
CSA	CAN/CSA-F379.1 Series-09 (excluding CAN/CSA-F379S1-11)	Packaged Solar Domestic Hot Water Systems (Liquid to Liquid Heat Transfer)	2.2.10.13.(1)
CSA	CAN/CSA-F383-08	Installation Code for Solar Domestic Hot Water Systems	2.6.1.8.(1)
CSA	CAN/CSA-G401-071	Corrugated Steel Pipe Products	2.2.6.8.(1)
NFPA	13D-2010	Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes	2.6.3.1.(3)
ULC	CAN/ULC-S114-05	Test for Determination of Non-Combustibility in Building Materials	1.4.1.2.(1) [3]

Notes to Table 1.3.1.2.:

(1)	Some documents may have been reaffirmed or reapproved. Check with the applicable issuing agency for up-to-date information.
(2)	Some titles have been abridged to omit superfluous wording.
(3)	By-law reference is in Division A.
(4)	By-law reference is in Division C.

".

140. In Book II, Division B, Part 2, Sentence 2.2.2.2.(6), Council strikes out the words "CAN/CSA-B45.5," and substitutes the following "CSA B45.5/IAPMO Z124,".

141. In Book II, Division B, Part 2, Sentence 2.2.2.2.(7), Council strikes out the words "CSA/CSA-45.10, "Hydromassage Bathtubs." " and substitutes "ASME A112.19.7/CSA B45.10, "Hydromassage Bathtub Systems." ".

142. In Book II, Division B, Part 2, Sentence 2.2.3.3.(1), Council strikes out the words "ASME A112.18.2/CAN/CSA-B125.2," and substitutes "ASME A112.18.2/CSA B125.2,".

143. In Book II, Division B, Part 2, Sentence 2.2.4.3.(2), Council adds the words "described in Sentence (1)" after the words "90° elbows".

144. In Book II, Division B, Part 2, at the end of Subsection 2.2.6., Council adds the following:

"2.2.6.10. Stainless Steel Pipe

1) Stainless steel pipe shall conform to
a) ASTM A 312/A 312M, "Seamless, Welded, and Heavily Cold Worked Austenitic Stainless Steel Pipes," and
b) ASME B36.19M, "Stainless Steel Pipe."

2) Only grade 304/304L or 316/316L stainless steel pipe shall be used.

2.2.6.11. Stainless Steel Butt Weld Pipe Fittings

1) Stainless steel butt weld pipe fittings shall conform to
a) ASTM A 403/A 403M, "Wrought Austenitic Stainless Steel Piping Fittings," and
b) ASME B16.9 "Factory-Made Wrought Buttwelding Fittings."

2) Stainless steel butt weld pipe fittings shall be made of a material that matches the grade of the pipe material used.

2.2.6.12. Stainless Steel Pipe Flanges

1) Stainless steel pipe flanges shall conform to ASME B16.5, "Pipe Flanges and Flanged Fittings: NPS ½ Through NPS 24 Metric/Inch Standard," and

a) ASTM A 182/A 182M, "Forged or Rolled Alloy and Stainless Steel Pipe Flanges, Forged Fittings, and Valves and Parts for High-Temperature Service," or

b) ANSI/AWWA C228, "Stainless-Steel Pipe Flanges for Water Service — Sizes 2 In. Through 72 In. (50 mm Through 1,800 mm)."

2) Stainless steel pipe flanges shall be made of a material that matches the grade of the pipe material used.

2.2.6.13. Stainless Steel Threaded Fittings

1) Stainless steel threaded fittings shall be schedule 40s or greater conforming to

a) ASTM A 182/A 182M, "Forged or Rolled Alloy and Stainless Steel Pipe Flanges, Forged Fittings, and Valves and Parts for High-Temperature Service," or

b) ASTM A 351/A 351M, "Castings, Austenitic, for Pressure-Containing Parts."

2) Stainless steel threaded fittings shall be made of a material that matches the grade of the pipe material used.

2.2.6.14. Stainless Steel Tube

1) Stainless steel tube shall conform to

a) ASTM A 269, "Seamless and Welded Austenitic Stainless Steel Tubing for General Service," and

b) ASME B16.9, "Factory-Made Wrought Buttwelding Fittings."

2) Only grade 304/304L or 316/316L stainless steel tube shall be used.

2.2.6.15. Stainless Steel Pipe and Tube

1) The use of stainless steel pipe and tube shall conform to Table 2.2.6.15.

Table 2.2.6.15.
Permitted Uses of Stainless Steel Tube and Pipe
Forming part of Sentence 2.2.6.15.(1)

Stainless Steel Tube or Pipe	Plumbing Purposes						
	Water Distribution System		Building Sewer	Drainage System		Venting System	
	Under-ground	Above-ground		Under-ground	Above-ground	Under-ground	Above-ground
Stainless steel pipe	P	P	P	P	P	P	P

Stainless steel tube	P	P	N	N	N	N	N
P = Permitted N = Not Permitted							

".

145. In Book II, Division B, Part 2, Sentence 2.2.9.2.(4), Council strikes out the words "ANSI/AWS A5.8/A5.8M," and substitutes "ANSI/AWS A5.8,".

146. In Book II, Division B, Part 2, Clause 2.2.10.6.(1)(a), Council strikes out the words "ASME A112.18.1/CAN/CSA-B125.1," and substitutes "ASME A112.18.1/CSA B125.1,".

147. In Book II, Division B, Part 2, Clause 2.2.10.6.(1)(b), Council strikes out the words "CAN/CSA-B125.3," and substitutes "CSA B125.3,".

148. In Book II, Division B, Part 2, Sentence 2.2.10.6.(2), Council strikes out the words "ASME A112.18.2/CAN/CSA-B125.2," and substitutes "ASME A112.18.2/CSA B125.2,".

149. In Book II, Division B, Part 2, Sentence 2.2.10.7.(1), Council strikes out the words "ASME A112.18.1/CAN/CSA-B125.1," and substitutes "ASME A112.18.1/CSA B125.1,".

150. In Book II, Division B, Part 2, Sentence 2.2.10.7.(2), Council strikes out the words "CAN/CSA-B125.3," and substitutes "CSA B125.3,".

151. In Book II, Division B, Part 2, Article 2.2.10.10., Council:

a) strikes out Sentence (1) and substitutes the following:

"**1)** Except as provided in Sentence (2), *back-siphonage preventers* and *backflow preventers* shall conform to

a) CSA B64.0, "Definitions, General Requirements, and Test Methods for Vacuum Breakers and Backflow Preventers,"
b) CSA B64.1.1, "Atmospheric Vacuum Breakers (AVB),"
c) CSA B64.1.2, "Pressure Vacuum Breakers (PVB),"
d) CSA B64.2, "Hose Connection Vacuum Breakers (HCVB),"
e) CSA B64.2.1, "Hose Connection Vacuum Breakers (HCVB) with Manual Draining Feature,"
f) CSA B64.2.2, "Hose Connection Vacuum Breakers (HCVB) with Automatic Draining Feature,"
g) CSA B64.3, "Dual Check Valve Backflow Preventers with Atmospheric Port (DCAP),"
h) CSA B64.4, "Reduced Pressure Principle Backflow Preventers (RP),"
i) CSA B64.5, "Double Check Valve (DCVA) Backflow Preventers,"
j) CSA B64.6, "Dual Check Valve (DuC) Backflow Preventers,"
k) CSA B64.7, "Laboratory Faucet Vacuum Breakers (LFVB)," or
l) CSA B64.8, "Dual Check Valve Backflow Preventers with Intermediate Vent (DuCV)."

, and

b) amends Sentence by striking out the words "CAN/CSA-B125.3," and substituting "CSA B125.3,".

152. In Book II, Division B, Part 2, Article 2.2.10.13., Council strikes out sentence (1) and substitutes the following:

"**1)** Equipment for solar heating of *potable* water shall conform to CAN/CSA-F379 Series, "Packaged Solar Domestic Hot Water Systems (Liquid-to-Liquid Heat Transfer)," excluding CAN/CSA-F379S1.".

153. In Book II, Division B, Part 2, Article 2.2.10.16., Council strikes out sentence (1) and substitutes the following:

"**1)** *Air admittance valves* shall conform to ASSE 1051, "Individual and Branch Type Air Admittance Valves (AAVs) for Sanitary Drainage Systems." (See Appendix A.)".

154. In Book II, Division B, Part 2, at the end of Subsection 2.3.2, Council adds the following:

"**2.3.2.8. Stainless Steel Welded Joints**

1) Welding shall conform to ASME B31.9, "Building Services Piping," and accord with good engineering practice.

2) Butt weld pipe fittings shall have an equal or thicker section than the pipe wall specified.".

155. In Book II, Division B, Part 2, at the end of Subsection 2.3.2, Council adds the following:

"**2)** Where a hanger or support for stainless steel pipe or tube is of a material other than stainless steel, it shall be suitably separated and electrically insulated from the pipe or tube.".

156. In Book II, Division B, Part 2, Article 2.3.4.5., Council strikes out Table 2.3.4.5. and substitutes the following:

"

Table 2.3.4.5.
Support for Nominally Horizontal Piping
Forming part of Sentence 2.3.4.5.(2)

Piping Material	Maximum Horizontal Spacing of Supports, m	Additional Support Conditions
Galvanized iron or steel pipe		
• diameter ≥ 6 inches	3.75	
• diameter < 6 inches	2.5	
Stainless steel pipe		
• diameter ≥ 1 inches	3	
• diameter < 1 inches	2.5	

Stainless steel tube		
• diameter ≥ 1 inches	3	
• diameter < 1 inches	2.5	
Lead pipe	Throughout length of pipe	
Cast-iron pipe	3	At or adjacent to each hub or joint
Cast-iron pipe with mechanical joints that is ≤ 300 mm long between adjacent fittings	1	
Asbestos-cement pipe	2[1]	
Asbestos-cement pipe that is ≤ 300 mm long between adjacent fittings	1	
ABS or PVC plastic pipe	1.2	At the end of *branches* or *fixture drains* and at changes in direction and elevation
ABS or PVC plastic *trap arm* or *fixture drain* pipe > 1 m long	n/a	As close as possible to the *trap*
CPVC pipe	1	
Copper tube or copper and brass pipe, hard temper, diameter > 1 inch	3	
Copper tube or copper and brass pipe, hard temper, diameter ≤ 1 inch	2.5	
Copper tube, soft temper	2.5	
PE/AL/PE composite pipe	1	
PEX/AL/PEX composite pipe	1	
PEX plastic pipe	0.8	
PP-R plastic pipe	1	At the end of *branches* and at changes in direction and elevation

Notes to Table 2.3.4.5.:

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

".

157. In Book II, Division B, Part 2, Sentence 2.4.6.3.(6), Council strikes out the words "*check valve*" and substitutes "*backwater valve*".

158. In Book II, Division B, Part 2, Sentence 2.5.5.2.(5), Council strikes out the words "or grease".

159. In Book II, Division B, Part 2, Sentence 2.5.8.4.(5), Council adds the words "*sanitary*" before the words "*building drain*".

160. In Book II, Division B, Part 2, Article 2.5.9.3., Council strikes out sentence (5) and substitutes the following:

> "5) Every *drainage system* shall have at least one vent that terminates to the outdoors in conformance with Sentence 2.5.6.5.(1).".

161. In Book II, Division B, Part 2, Sentence 2.6.1.8.(1), Council strikes out the words "CAN/CSA-F383 "Installation Code for Solar Domestic Hot Water Systems." " and substitutes "CAN/CSA-F383 "Installation of Packaged Solar Domestic Hot Water Systems." ".

162. In Book II, Division B, Part 2, Sentence 2.8.1.1.(1), in Table 2.8.1.1. Council:

a) adds the following:

"

2.2.6.10. Stainless Steel Welded Joints	
(1)	[F71,F80-OH2.1,OH2.3] Applies to drainage systems and venting systems.
	[F46-OH2.2] Applies to water systems.
	[F80-OP5]
(2)	[F71,F80-OH2.1,OH2.3] Applies to drainage systems and venting systems.
	[F46-OH2.2] Applies to water systems.
	[F80-OP5]
2.2.6.11. Stainless Steel Butt Weld Pipe Fittings	
(1)	[F71,F80-OH2.1,OH2.3] Applies to drainage systems and venting systems.
	[F46-OH2.2] Applies to water systems.
	[F80-OP5]
(2)	[F71,F80-OH2.1,OH2.3] Applies to drainage systems and venting systems.
	[F46-OH2.2] Applies to water systems.
	[F80-OP5]
2.2.6.12. Stainless Steel Pipe Flanges	
(1)	[F71,F80-OH2.1,OH2.3] Applies to drainage systems and venting systems.
	[F46-OH2.2] Applies to water systems.
	[F80-OP5]
(2)	[F71,F80-OH2.1,OH2.3] Applies to drainage systems and venting systems.
	[F46-OH2.2] Applies to water systems.
	[F80-OP5]
2.2.6.13. Stainless Steel Threaded Fittings	
(1)	[F20-OP5]
(2)	[F20-OP5]
2.2.6.14. Stainless Steel Pipe and Tube	
(1)	[F46-OH2.2]
(2)	[F46-OH2.2]
2.2.6.15. Stainless Steel Welded Joints	
(1)	[F80-OH2.1,OH2.2, OH2.3]

"

b) adds the following:

"

2.3.2.8. Stainless Steel Welded Joints	
(1)	[F20,81–OH2.1,OH2.2,OH2.3]
(2)	[F20,81–OH2.1,OH2.2,OH2.3]

",

c) strikes out the following:

"

2.3.4.3. Insulation of Support	
(1)	[F80–OH2.1,OH2.3]
	[F80–OP5]
	[F80–OS3.1]

"

and substitutes the following:

"

2.3.4.3. Insulation of Support	
(1)	[F80–OH2.1,OH2.3]
	[F80–OP5]
	[F80–OS3.1]
(2)	[F80–OH2.1,OH2.3]
	[F80–OP5]
	[F80–OS3.1]

"

; and

d) strikes out the following:

"

2.6.3.1. Design, Fabrication and Installation	
(1)	[F71,F72–OH2.1,OH2.3]
(2)	[F72–OH2.1][F70–OH2.2][F71–OH2.3]
(3)	[F70,F71–OH2.2,OH2.3]
	[F81–OP5]
	[F81–OS1.4]

"

and substitutes the following:

"

2.6.3.1. Design, Fabrication and Installation	
(1)	[F71,F72–OH2.1,OH2.3]
(2)	[F72–OH2.1][F70–OH2.2][F71–OH2.3]
(3)	[F70,F71–OH2.1,OH2.3]
	[F81–OP5]

	[F81–OS1.4]

".

163. In Book II, Appendix A of Division B, Appendix Note A-1.3.1.2.(1), Council amends Table A-1.3.1.2.(1)

"

Table A-1.3.1.2.(1) Documents Referenced in the Appendices of Book II (Plumbing Systems) of the By-law			
Issuing Agency	**Document Number(1)**	**Title of Document(2)**	**By-law Reference**
ASHRAE	2009	ASHRAE Handbook of Fundamentals	Appendix Note A-2.6.3.1.(2)
ASHRAE	2011	ASHRAE Handbook - HVAC Applications	Appendix Note A-2.6.3.1.(2)
ASME	B16.3-2011	Malleable-Iron Threaded Fittings, Classes 150 and 300	Table A-2.2.5., 2.2.6. and 2.2.7.
ASME	B16.4-2011	Gray Iron Threaded Fittings, Classes 125 and 250	Table A-2.2.5., 2.2.6. and 2.2.7.
ASME	B16.15-2011	Cast Copper Alloy Threaded Fittings, Classes 125 and 250	Table A-2.2.5., 2.2.6. and 2.2.7.
ASME	B16.18-2012	Cast Copper Alloy Solder-Joint Pressure Fittings	Table A-2.2.5., 2.2.6. and 2.2.7.
ASME	B16.22-2001	Wrought Copper and Copper Alloy Solder Joint Pressure Fittings	Table A-2.2.5., 2.2.6. and 2.2.7.
ASME	B16.23-2011	Cast Copper Alloy Solder Joint Drainage Fittings: DWV	Table A-2.2.5., 2.2.6. and 2.2.7.
ASME	B16.29-2007	Wrought Copper and Wrought Copper Alloy Solder Joint Drainage Fittings - DWV	Table A-2.2.5., 2.2.6. and 2.2.7.
ASPE	2010	ASPE Plumbing Engineering Design Handbook	Appendix Note A-2.6.3.1.(2)
ASPE	2008	Data Book - Volume 4, Chapter 8, Grease Interceptors	A-2.4.4.3.(1)
ASTM	A 269-10	Seamless and Welded Austenitic Stainless Steel Tubing for General Service	Table A-2.2.5., 2.2.6. and 2.2.7.
ASTM	A 312-11	Seamless, Welded, and Heavily Cold Worked Austenitic Stainless Steel Pipes	Table A-2.2.5., 2.2.6. and 2.2.7.
ASTM	A 53/A 53M-10	Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless	Table A-2.2.5., 2.2.6. and 2.2.7.
ASTM	B 42-10	Seamless Copper Pipe, Standard Sizes	Table A-2.2.5., 2.2.6. and 2.2.7.
ASTM	B 43-09	Seamless Red Brass Pipe, Standard Sizes	Table A-2.2.5., 2.2.6. and 2.2.7.
ASTM	B 88-09	Seamless Copper Water Tube	Table A-2.2.5., 2.2.6. and 2.2.7.
ASTM	B 306-09	Copper Drainage Tube (DWV)	Table A-2.2.5., 2.2.6.

			and 2.2.7.
ASTM	D 2466-06	Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40	Table A-2.2.5., 2.2.6. and 2.2.7.
ASTM	D 2467-06	Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80	Table A-2.2.5., 2.2.6. and 2.2.7.
ASTM	D 3138-04	Solvent Cements for Transition Joints Between Acrylonitrile-Butadiene-Styrene (ABS) and Poly(Vinyl Chloride) (PVC) Non-Pressure Piping Components	A-2.2.5.10. to 2.2.5.12.
ASTM	F 628-08	Acrylonitrile-Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste, and Vent Pipe With a Cellular Core	Table A-2.2.5., 2.2.6. and 2.2.7.
ASTM	F 714-10	Polyethylene (PE) Plastic Pipe (SDR-PR) Based on Outside Diameter	Table A-2.2.5., 2.2.6. and 2.2.7.
AWWA	M14-2004	Recommended Practice for Backflow Prevention and Cross-Connection Control	Table A-2.6.2.4.(2)
AWWA	ANSI/AWWA C151/A21.51-2009	Ductile-Iron Pipe, Centrifugally Cast, for Water	Table A-2.2.5., 2.2.6. and 2.2.7.
BC	S.B.C. 2003, c. 53	Environmental Management Act	A-2.7.4.1.
CCBFC	NRCC 35951	Guidelines for Application of Part 3 of the National Building Code of Canada to Existing Buildings	A-1.1.1.1.(1)
CCBFC	NRCC 40383	User's Guide - NBC 1995, Fire Protection, Occupant Safety and Accessibility (Part 3)	A-1.1.1.1.(1)
CCBFC	NRCC 43963	User's Guide - NBC 1995, Application of Part 9 to Existing Buildings	A-1.1.1.1.(1)
CCBFC	NRCC 53301	National Building Code of Canada 2010	Table A-2.2.5., 2.2.6. and 2.2.7. A-2.4.10. A-2.4.10.4.(1)
CCBFC	NRCC 53543	User's Guide - NBC 2010, Structural Commentaries (Part 4 of Division B)	A-1.1.1.1.(1)
CGSB	CAN/CGSB-34.1-94	Asbestos-Cement Pressure Pipe	Table A-2.2.5., 2.2.6. and 2.2.7.
CGSB	CAN/CGSB-34.9-94	Asbestos-Cement Sewer Pipe	Table A-2.2.5., 2.2.6. and 2.2.7.
CGSB	CAN/CGSB-34.22-94	Asbestos-Cement Drain Pipe	Table A-2.2.5., 2.2.6. and 2.2.7.
CGSB	CAN/CGSB-34.23-94	Asbestos-Cement House Connection Sewer Pipe	Table A-2.2.5., 2.2.6. and 2.2.7.
CSA	A60.1-M1976	Vitrified Clay Pipe	Table A-2.2.5., 2.2.6. and 2.2.7.
CSA	CAN/CSA-A257.1-09	Non-Reinforced Circular Concrete Culvert, Storm Drain, Sewer Pipe, and Fittings	Table A-2.2.5., 2.2.6. and 2.2.7.

CSA	CAN/CSA-A257.2-09	Reinforced Circular Concrete Culvert, Storm Drain, Sewer Pipe, and Fittings	Table A-2.2.5., 2.2.6. and 2.2.7.
CSA	B64.4.1-11	Reduced Pressure Principle Backflow Preventers for Fire Protection Systems (RPF)	Table A-2.6.2.4.(2)
CSA	B64.5.1-11	Double Check Valve Backflow Preventers for Fire Protection Systems (DCVAF)	Table A-2.6.2.4.(2)
CSA	B64.6.1-11	Dual Check Valve Backflow Preventers for Fire Protection Systems (DuCF)	Table A-2.6.2.4.(2)
CSA	B64.9-11	Single Check Valve Backflow Preventers for Fire Protection Systems (SCVAF)	Table A-2.6.2.4.(2)
CSA	B64.10.1-11	Maintenance and Field Testing of Backflow Preventers	A-2.6.2.1.(3)
CSA	B70-12	Cast Iron Soil Pipe, Fittings, and Means of Joining	Table A-2.2.5., 2.2.6. and 2.2.7.
CSA	B125.3-12	Plumbing Fittings	A-2.6.1.11.(1)
CSA	CAN/CSA-B127.1-99	Asbestos Cement Drain, Waste and Vent Pipe and Pipe Fittings	Table A-2.2.5., 2.2.6. and 2.2.7.
CSA	B127.2-M1977	Components for Use in Asbestos Cement Building Sewer Systems	Table A-2.2.5., 2.2.6. and 2.2.7.
CSA	CAN/CSA-B137.1-09	Polyethylene (PE) Pipe, Tubing, and Fittings for Cold-Water Pressure Services	Table A-2.2.5., 2.2.6. and 2.2.7.
CSA	CAN/CSA-B137.2-09	Polyvinylchloride (PVC) Injection-Moulded Gasketed Fittings for Pressure Applications	Table A-2.2.5., 2.2.6. and 2.2.7.
CSA	CAN/CSA-B137.3-09	Rigid Polyvinylchloride (PVC) Pipe and Fittings for Pressure Applications	Table A-2.2.5., 2.2.6. and 2.2.7.
CSA	CAN/CSA-B137.5-09	Crosslinked Polyethylene (PEX) Tubing Systems for Pressure Applications	Table A-2.2.5., 2.2.6. and 2.2.7. A-2.2.5.7.(1)
CSA	CAN/CSA-B137.6-09	Chlorinated Polyvinylchloride (CPVC) Pipe, Tubing, and Fittings for Hot- and Cold-Water Distribution Systems	Table A-2.2.5., 2.2.6. and 2.2.7. A-2.2.5.10. to 2.2.5.12.
CSA	CAN/CSA-B137.9-09	Polyethylene/Aluminum/Polyethylene (PE-AL-PE) Composite Pressure Pipe Systems	Table A-2.2.5., 2.2.6. and 2.2.7. A-2.2.5.13.(1)
CSA	CAN/CSA-B137.10-09	Crosslinked Polyethylene/Aluminum/Crosslinked Polyethylene (PEX-AL-PEX) Composite Pressure-Pipe Systems	Table A-2.2.5., 2.2.6. and 2.2.7. A-2.2.5.14.(1)
CSA	CAN/CSA-B137.11-09	Polypropylene (PP-R) Pipe and Fittings for Pressure Applications	Table A-2.2.5., 2.2.6. and 2.2.7. A-2.2.5.15.(1)
CSA	CAN/CSA-B181.1-11	Acrylonitrile-Butadiene-Styrene (ABS) Drain, Waste, and Vent Pipe and Pipe Fittings	Table A-2.2.5., 2.2.6. and 2.2.7. A-2.2.5.10. to 2.2.5.12.

CSA	CAN/CSA-B181.2-11	Polyvinylchloride (PVC) and Chlorinated Polyvinylchloride (CPVC) Drain, Waste, and Vent Pipe and Pipe Fittings	Table A-2.2.5., 2.2.6. and 2.2.7. A-2.2.5.10. to 2.2.5.12.
CSA	CAN/CSA-B181.3-11	Polyolefin and Polyvinylidene Fluoride (PVDF) Laboratory Drainage Systems	Table A-2.2.5., 2.2.6. and 2.2.7.
CSA	CAN/CSA-B182.1-11	Plastic Drain and Sewer Pipe and Pipe Fittings	Table A-2.2.5., 2.2.6. and 2.2.7.
CSA	CAN/CSA-B182.2-11	PSM Type Polyvinylchloride (PVC) Sewer Pipe and Fittings	Table A-2.2.5., 2.2.6. and 2.2.7.
CSA	CAN/CSA-B182.4-11	Profile Polyvinylchloride (PVC) Sewer Pipe and Fittings	Table A-2.2.5., 2.2.6. and 2.2.7.
CSA	CAN/CSA-B182.6-11	Profile Polyethylene (PE) Sewer Pipe and Fittings For Leak-Proof Sewer Applications	Table A-2.2.5., 2.2.6. and 2.2.7.
CSA	CAN/CSA-G401-07	Corrugated Steel Pipe Products	Table A-2.2.5., 2.2.6. and 2.2.7.
McGraw-Hill	2006	International Plumbing Codes Handbook	A-2.6.3.
NIST	Building Materials and Structures Report BMS-79, 1941	Water-Distributing Systems for Buildings	A-2.6.3.

Notes to Table A-1.3.1.2.(1):

(1) Some documents may have been reaffirmed or reapproved. Check with the applicable issuing agency for up-to-date information.

(2) Some titles have been abridged to omit superfluous wording.

".

164. In Book II, Appendix A of Division B, Appendix Note A-2.2.5., Council amends Table A-2.2.5., 2.2.6. and 2.2.7. by adding:

"

Stainless steel pipe	ASTM A 312	2.2.6.10.	P	P	P	P	P	P	P	P	P
Stainless steel tube	ASTM A 269	2.2.6.14.	N	N	N	N	N	P	P	P	P

"

before the following row:

"

Welded and seamless steel galvanized pipe	ASTM A 53/A53M	2.2.6.7.	P	N	N	P	N	P(9)	P(9)	P(9)	P(9)

".

165. In Book II, Appendix A of Division B, Appendix Note A-2.6.1.11., Council strikes out "CAN/CSA-B125.3," and substitutes "CSA B125.3,".

166. In Book II, Appendix A of Division B, Appendix Note A-2.6.2.4.(2), Council amends Table A-1.3.1.2.:

a) By striking out "CAN/CSA-B64.6.1" and substituting "CSA B64.6.1",
b) By striking out "CAN/CSA-B64.9" and substituting "CSA B64.9",
c) By striking out "CAN/CSA-B64.5.1" and substituting "CSA B64.5.1",
d) By striking out "CAN/CSA-B64.4.1" and substituting "CSA B64.4.1",

167. In Book II, Appendix A of Division B, Appendix Note A-2.6.3.1.(2), Council strikes out "ASHRAE 2003, "ASHRAE Handbook of HVAC Applications," " and substitutes "ASHRAE 2011, "ASHRAE Handbook - HVAC Applications,".

168. In Book I, Division A, Part 1, Sentence 1.4.1.2.(1), Council:

(a) in the definition of "*Designated flood plain*", in clause (a) between "area shown" and "crosshatched", adds "shaded or"; and

(b) in the definition of "*Floor construction level requirements*", in subclauses (i) and (ii), between "shown" and "crosshatched" adds "shaded or".

169. In Division B, Part 3, Sentence 3.1.2.5.(3), in Table 3.1.2.5., Council:

(a) strikes out the last two rows of the table; and

(b) substitutes:

"

≥30	≤ 8 and more than 2	C(4)	Yes(5)	Yes	Yes(3)	1 h	Yes
<30	≤ 8 and more than 2	C(4)	Yes(5)	Yes	Yes(3)	2 h	Yes
≥30	> 8	A2	Yes	Yes	Yes(3)	1h	Yes
<30	> 8	A2	Yes	Yes	Yes(3)	2 h	Yes

"

170. In Division B, Part 3, in Sentence 3.1.2.5.(3), following Sentence 3.1.2.5.(3)(c) Council adds the following:

"(d) Unsprinklered temporary child care facilities shall be provided with two means of egress directly to grade."

171. In Division B, Part 3, Sentence 3.1.3.4.(1), Council:

(a) in Clause 3.1.3.4.(1)(c)", strikes out "3.2.4.11.", substitutes "3.2.4.12."; and

(b) in Clause 3.1.3.4.(1)(d)", strikes out "3.2.4.20.", substitutes "3.2.4.21.".

172. In Division B, Part 3, Clause 3.2.1.1.(3)(b), Council strikes out "visually".

173. In Division B, Part 3, in 3.2.2.50.(3)(c) Council strikes out "3.1.5.3.(3)" and substitutes "3.1.5.5.(3)".

174. In Book I, Division B, Part 3, in Article 3.2.3.13., Council:

(a) in Sentence 3.2.3.13.(2) at the beginning of the Sentence strikes out the words "If an" and substitutes "If any"; and

(b) in Sentence 3.2.3.13.(2) following the words "exterior single means of egress" Council strikes out "which".

175. In Book I, Division B, Part 3, in Sentence 3.2.3.13.(5), Council:

(a) Council strikes out Clause 3.2.3.13.(5)(d) and substitutes the following:

"have sprinklers located between150 mm and 300 mm horizontally from the interior face of the opening at ceiling level and not more than 3.6 m vertically above the floor immediately below";

(b) in Clause 3.2.3.13.(5)(f), strikes out "an orifice size of 12.7 mm and"; and

(c) in Clause 3.2.3.13.(5)(i), strikes out "permitted to be openable" and substitutes "provided".

176. In Book I, Division B, Part 3, Subclause 3.2.4.9.(2) before the words "in each", Council adds "*smoke detectors*, *heat detectors*, manual stations and waterflow detecting devices".

177. In Book I, Division B, Part 3, Sentence 3.2.4.1.(1), Council strikes out the words "Sentences (2) and (3)" and substitutes the following "Sentences (2), (3), (5), (6) and (7)".

178. In Book I, Division B, Part 3, Sentence 3.2.5.5.(3), Council:

(a) in Clause 3.2.5.5.(3)(b), after the words "secondary suite" adds "or lock-off suite, ";

(b) amends Subclause 3.2.5.5.(3)(b)(i), by striking out "13R" and substituting "13R or 13,"; and

(c) strikes out Clause 3.2.5.5.(3)(c) and substitutes:

"c) 65 m from the access route to the entrance door of each dwelling unit, where the dwelling unit may contain a secondary suite or the dwelling unit has not more than one dwelling unit on top, if

i) the requirements of Subclauses (b)(i) to (b)(vii) are met,
ii) a 64 mm diameter fire department hose connection is located adjacent to the path of travel for fire fighters located not more than 45 m measured from the hose connection to the principal entrance of each of the dwelling units, and
iii) the location of the fire department hose connections required by Subclause (c)(ii) above is indicated on the fire alarm system graphic annunciator,
iv) the building is sprinklered to NFPA 13, and".

179. In Book I, Division B, Part 3, Article 3.2.5.9., at the end of Article 3.2.5.9. Council adds the following:

(a) in Sentence 3.2.5.9.(1), strikes out "(7)" and substitutes "(8)"; and

(b) strikes out Clause 3.2.5.9.(7)(b), and substitutes the following:

"b) the hose connection shall be available to reach all portions of the *floor area* with 30 m of hose plus 9 m of hose stream distance.".

(c) strikes out clause 3.2.5.9.(7)(a) and substitutes:

"a) a 64 mm diameter fire department hose connection is located adjacent to the path of travel for firefighters and is connected to a fire department connection in conformance with 3.2.5.15., and"

(d) At the end of Article 3.2.5.9. adds:

"**8**) A standpipe system may be omitted from *dwelling units* where

a) the *building* is of *residential occupancy* throughout,
b) the path of travel may not exceed 15 m from the principal entrance of *suite* to the *fire department access route*,
c) egress from each *suite* complies with Sentence 3.3.4.4.(3)., and
d) the travel distance from any point on the *floor area* to the primary entrance of each *suite* does not exceed 30 m.".

180. In Book I, Division B, Part 3, Sentence 3.2.5.12.(3), Council strikes out Clause 3.2.5.12.(3)(a) and substitutes the following:

"a) in a *building* of *residential occupancy* throughout containing a *one family dwelling* or *two family dwelling* with or without *secondary suites*, where

i) each *dwelling unit* and its respective *secondary suite* has its own sprinkler water supply, and

ii) a one tank-type water closet is supplied with water from the sprinkler head which is located farthest from the main water supply; or".

181. In Book I, Division B, Part 3, Clause 3.2.5.12.(3)(c), after Subclause 3.2.5.12.(3)(iii), Council adds "iv) each rowhouse has access to two open sides," and re-numbers the following sub clauses in numerical sequence.

182. In Book I, Division B, Part 3, Article 3.2.5.12., Council:

(a) in Sentence 3.2.5.12.(9), strikes out "residential"; and

(b) at the end of Article 3.2.5.12., adds the following:

"11) Notwithstanding the requirements of the standards referenced by Sentence (3) regarding the installation of automatic *sprinkler systems*, sprinklers shall be provided in any storage garage attached to a building of residential occupancy where a fire separation is not provided between the storage garage and adjacent floor areas.".

183. In Book I, Division B, Part 3, Article 3.2.5.15., Council:

(a) at the end of Sentence 3.2.5.15.(1) strikes out "and shall be unobstructed" and substitutes ", have unobstructed access and be visible from the *street*"; and

(b) at the end of Sentence 3.2.5.15.(2) strikes out "and shall be unobstructed" and substitutes ", have unobstructed access and be visible from the *street*".

184. In Book I, Division B, Part 3, Article 3.2.7.10., following the words "Electrical conductors", Council adds "in buildings required to conform to Subsection 3.2.6. or Sentence 3.2.7.9.(1),".

185. In Book I, Division B, Part 3, Sentence 3.3.1.1.(5) Council strikes out Sentence (5) and substitutes:

"**5)** Each *suite* other than a residential *suite*, located at ground level and having direct access to the *street*, shall be separated from adjoining *suites* by a *fire separation* having a *fire resistance rating* not less than 2 h.".

186. In Book I, Division B, Part 3, Clause 3.3.1.19.(8)(a), Council strikes out "and" and substitutes "or".

187. In Book I, Division B, Part 3, Sentence 3.3.4.2.(1), following the words "*suites of residential occupancy*" Council adds the words "including *secondary suites* and *lock-off suites*".

188. In Book I, Division B, Part 3, Article 3.3.7.3., Council strikes out Sentence (1) and substitutes:

"1) All entrance and exterior doors to dwelling units, doors between dwelling units and attached garages, and doors which provide direct or indirect access from storage garages to dwelling units shall conform to Subsections 9.6.1 and 9.7.3.".

189. In Book I, Division B, Part 3, Sentence 3.3.7.4.(1), Council strikes out "Article 9.6.6.2." and substitutes "Sentence 9.6.1.4.(1)".

190. In Book I, Division B, Part 3, Article 3.3.7.7., at the end of Sentence 3.3.7.7.(2), Council adds "see Appendix A".

191. In Book I, Division B, Part 3, Sentence 3.6.5.1.(1) Council strikes out ", asbestos-cement".

192. In Book I, Division B, Part 3, Article 3.8.3.4., following Sentence 3.8.3.4.(2) Council adds the following:

"**3)** This Subsection does not apply to existing buildings except for spaces created by
a) an addition,
b) the reconstruction of an existing space, and
c) the conversion of an existing space into a secondary suite or lock-off unit.".

193. In Division B, Table 3.9.1.1., in numerical order, Council adds:
"

3.2.5.19.	Radio Antennae Systems
(1)	[F12, F13 - OS1.2,OS1.5] [F12,F13 - OS3.7]
	[F12, F13- OP1.2]

"

194. In Book I, Division B, Part 5, Sentence 5.1.2.2.(1), after the words "Part 5", Council adds " with respect to Section 5.4, 5.5, and 5.6".

195. In Book I, Division B, Part 6, Article 6.2.2.7., Council:

(a) in Sentence 6.2.2.7.(3) after the words "ecology unit" adds "or *acceptable* equipment complying with Sentence (5),"; and

(b) at the end of Article 6.2.2.7., adds the following:

"**5)** Equipment provided in compliance with Sentence 6.2.2.7.(3) shall
a) remove 99.97% of the grease entering the equipment,
b) be of continuously welded 1.5 mm thick carbon steel or 1.1 mm stainless steel,
c) prevent the leakage of flame, smoke, or grease from the equipment at normal or abnormal temperatures,
d) limit the temperature rise of adjacent combustible materials to no more than 97°C above room temperature, and

e) limit the temperature of exhaust air at the exhaust outlet to no more than 138°C.".

196. In Book I, Division B, Part 8, Article 8.1.1.1., Council:

(a) in Sentence 8.1.1.1.(2), strikes out "the construction of buildings" and substitutes "construction *projects*"; and

(b) in Sentence 8.1.1.1.(3) , strikes out "*buildings*" and substitutes "*projects*".

197. In Book I, Division B, Part 8, Article 8.1.3.3., Council:

(a) in Sentence 8.1.3.3.(1), strikes out "*buildings*" and substitutes with "*projects*"; and

(b) in Sentence 8.1.3.3.(3), strikes out "*buildings*" and substitutes with "*projects*".

198. In Book I, Division B, Part 8, Sentence 8.1.4.1.(1), Council strikes out "*buildings*" and substitutes with "*projects*".

199. In Book I, Division B, Part 8, in Article 8.1.4.2., Council:

(a) in Sentence 8.1.4.2.(1), strikes out "Program" and substitutes with "Plan"; and

(b) in Sentence 8.1.4.2.(2), strikes out "Program" and substitutes with "Plan".

200. In Book I, Division B, Part 8, Clause 8.2.1.1.(2)(b), Council strikes out "building located more than 2 m from a sidewalk" and substitutes with "*project*".

201. In Book I, Division B, Part 8, Sentence 8.2.1.5.(1), Council:

(a) strikes out "construction" and substitutes "*project*"; and

(b) strikes out "when workers are not present on the site".

202. In Book I, Division B, Part 8, Sentence 8.2.3.1.(1), Council strikes out "construction" and substitutes "*project*".

203. In Book I, Division B, Part 8, in Article 8.2.3.6., following the heading "**Maintenance of Public Ways**", Council adds "**and City Property**".

204. In Book I, Division B, Part 8, in Article 8.2.4.1., Council:

(a) in Sentence 8.2.4.1.(1), strikes out "construction" and substitutes "*project*"; and

(b) in Clause 8.2.4.1.(1)(b), Council strikes out "traffic" and substitutes "vehicle & pedestrian traffic".

205. In Book I, Division B, Part 8, in Subsection 8.2.6., Council:

(a) in Sentence 8.2.6.1.(1) strikes out "*buildings*" and substitutes "*projects*";

(b) in Sentence 8.2.6.3.(1) strikes out "construction site" and substitutes "*project*";

(c) in Sentence 8.2.6.4.(5) strikes out "construction site" and substitutes "*project*";

(d) in Clause 8.2.6.14.(2)(a) strikes out "site" and substitutes "*project*"; and

(e) in Sentence 8.2.6.17.(1) strikes out "construction site" and substitutes "*project*".

206. In Book I, Division B, Part 9, Article 9.8.8.1., Council:

(a) in Sentence 9.8.8.1.(5), strikes out "Openable" and substitutes "Except as provided in Sentence (6), openable"; and

(b) Strikes out Sentence (6) and substitutes:

"**6)** Windows need not be protected in accordance with Sentence (5), where

a) the windows serve a dwelling unit that is not located above another suite, or

b) Reserved.

c) openings greater than 100 by 380 mm are

i) located more than 900 mm above the finished floor on one side of the window, and

ii) construction below the opening does not facilitate climbing, or

d) windows are designed such that

i) the only opening greater than 100 mm by 380 mm is a horizontal opening at the top of the window,

ii) the opening is at least 450 mm above the window sill, and

iii) the window sill is located more than 450 mm above the finished floor on one side of the window, or

e) the window is located in a room or space with the finished floor described in Clause 9.8.8.1.(6)(d) located less than 1 800 mm above the floor or ground on the other side of the window.

(See A-9.8.8.1.(5) in Appendix A.)"

207. In Book I, Division B, Part 9, Article 9.9.4.4. Council strikes out Sentence 9.9.4.4.(1) and substitutes:

"**1)** Unprotected openings in exterior walls of the *building* shall be protected with wired glass in fixed steel frames, glass block conforming to Articles 9.10.13.5. and 9.10.13.7., or protection complying with the requirements of Sentence 3.2.3.13.(5), where

a) an unenclosed exterior *exit* stair or ramp provides the only *means of egress* from a *suite* or *secondary suite* and is exposed to fire from unprotected openings in the exterior walls of

i) another fire compartment, or

ii) another dwelling unit, and

b) unprotected openings in the exterior walls of the building are within 3 m horizontally and less than 10 m below or 5 m above the exit stair or ramp."

208. In Book I, Division B, Part 9, Sentence 9.9.4.6.(1), Council:

(a) in Clause 9.9.4.6.(1)(a) strikes out "or";

(b) at the end of Clause 9.9.4.6.(1)(b) adds "or"; and

(c) at the end of Sentence 9.9.4.6.(1) adds "c) protection complying with the requirements of Sentence 3.2.3.13.(5)".

209. In Book I, Division B, Part 9, Article 9.10.14.5., Council:

(a) in Subclause 9.10.14.5.(7)(b)(i), Council strikes out "one dwelling unit" and substitutes "one-family dwelling or two-family dwelling,";

(b) in Book I, Division B, Part 9, Subclause 9.10.14.5.(7)(b)(ii), Council strikes out "one dwelling unit" and substitutes "one-family dwelling or two-family dwelling,"; and

(c) strikes out Sentence 9.10.14.5.(14) and substitutes:

"**14)** Where a *residential building* is *sprinklered*, and Table 9.10.14.5.A requires *noncombustible construction*, the *exposing building faces* may use a wood stud wall assembly having a 1 hour *fire-resistance rating* provided the *limiting distance* is at least 1.0 m and the wall assembly is of *noncombustible* construction throughout excepting structural elements and sheathing."

210. In Book I, Division B, Part 9, Sentence 9.10.15.5.(13), Council strikes out Clause 9.10.15.5.(13)(b) and substitutes the following:

"b) the wall assembly is of *non-combustible* construction throughout excepting structural elements and sheathing, and"

211. In Book I, Division B, Part 9, Clause 9.32.3.7.(1)(a), Council strikes out "Standard" and substitutes "Procedure".

212. In Book I, Division B, Part 9, Subclause 9.10.15., Council repeals Article 9.10.15.1. and substitutes the following:

"9.10.15.1. Application

1) This Subsection applies to

a) *buildings* containing only *dwelling units* with no *dwelling unit* above another dwelling unit except as described in (b) or (c),
b) *one-family dwellings with secondary suite*,
c) *two-family dwellings* having no *dwelling unit* above another *dwelling unit* except *secondary suite* within the principal *dwelling unit*,
d) *laneway houses*, and
e) accessory *buildings* that serve a *building* described in Clause (a)."

213. In Book I, Division B, Part 3, Sentence 9.10.22.2.(2)(b) Council strikes out ", asbestos millboard" and substitutes "*Noncombustible* cementitious board".

214. In Book I, Division B, Part 3, Sentence 9.14.3.1., Council strikes out Clause (1)(e) and substitutes "e) Deleted".

215. In Book I, Division B, Part 3, Sentence 9.25.22.2.(2)(b) Council strikes out ", asbestos millboard"

216. In Book I, Division B, Part 3, Sentence 9.26.22.2.(2)(b) Council strikes out ", asbestos millboard"

217. In Book I, Division B, Part 9, Sentence 9.27.8.5.(1), Council strikes out "caulked" and substitutes "sealed".

218. In Book I, Division B, Part 9, Sentence 9.30.5.1.(1) Council strikes out ", vinyl-asbestos".

219. In Book I, Division B, Part 9, Sentence 9.34.1.1.(2), Council strikes out Clause 9.34.1.1.(2)(c) and substitutes:

> "(c) Except as permitted by Sentence 11.4.3.1.(5), a single panel board may supply electrical loads of the principal dwelling and the secondary suite, provided that it is located within the building in a common area accessible to all occupants of the building."

220. In Book I, Division B, Part 9, Clause 9.37.3.1.(1)(a), Council strikes out "Table 11.4.3.1." and substitutes "Sentence 9.10.9.14(1)".

221. In Book I, Division B, Part 9, Sentence 9.37.4.1.(3), Council repeals Clause (a) and substitutes "a) a fire separation complying with Sentence 9.10.9.14.(1), and".

222. In Book I, Division B, Part 10, Sentence 10.2.1.1.(1), Council:

(a) in Subclause 10.2.1.1.(1)(a)(iv), strikes out the words "1 per cent" and substitutes the words "2 per cent";

(b) in Subclause 10.2.1.1.(1)(a)(ii), strikes out ", and"; and

(c) at the end of Clause 10.2.1.1.(1)(a), adds the following:

" v) need not comply with the Fenestration Orientation provisions of ASHRAE 90.1, Article 5.5.4.5.,
vi) need not be provided with Automatic Receptacle Control, per ASHRAE 90.1, Article 8.4.2., and
vii) if designed in accordance with lighting control per ASHRAE 90.1 Article 9.4.1.3.(b), the maximum period of no activity is reduced to 20 min."

223. In Book I, Division B, Part 10, Clause 10.2.1.1.(1)(b), Council:

(a) strikes out Subclause 10.2.1.1.(1)(b)(vi) and substitutes:

"vi) with a Skylight Solar Heat Gain Coefficient without curb, or with curb and glass, which does not exceed an assembly maximum of 0.49, where the ratio of the aggregate skylight area to roof area is less than or equal to 2.0 per cent,"

(b) strikes out Subclause 10.2.1.1.(1)(b)(vii) and substitutes:

"vii) with a Skylight Solar Heat Gain Coefficient without curb, or with curb and glass, which does not exceed an assembly maximum of 0.39, where the ratio of the aggregate skylight area to roof area is greater than 2.0 per cent and less than or equal to 5.0 per cent,"; and

(c) strikes out Subclause 10.2.1.1.(1)(b)(viii) and substitutes:

"viii) with a Skylight Solar Heat Gain Coefficient with curb and plastic which does not exceed an assembly maximum of 0.77, where the ratio of the aggregate skylight area to roof area is less than or equal to 2.0 per cent, and".

224. In Book I, Division B, Part 10, Sentence 10.2.1.1.(2), Council:

(a) strikes out the row "Concrete or Masonry Walls (other than foundation walls)" and substitutes the following:

"

Concrete or Masonry Walls (other than foundation walls) - Effective rating	3.85

"

; and

(b) at the end of Table 10.2.1.1. adds the following:

"

Fenestration and Doors other than one and two family dwellings	1.80
Skylights other than one and two family dwellings	2.90

"

225. In Book I, Division B, Part 10, at the end of Article 10.2.2.2. Council adds:

"**3)** Exterior doors assemblies that include doors swinging on a vertical axis, installed singly or in pairs, sidelites or transoms, shall be provided with labeling demonstrating a overall thermal transmittance (U-value) of not more than 1.80 $W/(m^2 \cdot K)$ by an *acceptable* certification body."

226. In Book I, Division B, Part 10, Article 10.2.2.12., Council strikes out Sentence 10.2.2.12.(2). and substitutes the following:

"**2)** A *dwelling unit* that is 112 square metres or smaller and has a Normalized Leakage Area (NLA) of 2.10 or lower, shall have a maximum of 3.5 air changes per hour or be sealed according to good engineering practice as described in Appendix A."

227. In Book I, Division B, Part 10, Subsection 10.2.3., Council:

(a) Repeals Article 10.2.3.1. and substitutes the following:

"**10.2.3.1. Electric Vehicle Charging for Buildings** (See Appendix A)

1) The electrical installations, including the service capacity of the installation, the number and distribution of circuits and receptacles, shall meet the requirements of the "Electrical Safety Regulation."

2) Except as provided by Sentence (3), each storage garage or carport in one-family dwellings, two-family dwellings, one-family dwellings or two family dwellings with secondary suites or lock-off units, or laneway houses shall be provided with an electrical outlet, a receptacle or electric vehicle supply equipment where applicable, supplied by a branch circuit rated not less than 40 A at the nominal voltage of 208 V or 240 V as applicable and labelled to identify its intended use with the electric vehicle supply equipment.

3) Where the requirements of Sentence (2) would cause the dwelling unit calculated load to exceed 200 A, the installation of a 40 A branch circuit may be omitted provided that a minimum nominal trade size of 21 raceway supplied with pull string leading from the dwelling unit panelboard to an electrical outlet box is installed in the storage garage or carport and is labelled to identify its intended use with the electric vehicle supply equipment.

4) One residential parking stall in each group of five residential parking stalls, and, one residential parking stall in any group of less than five residential parking stalls, in a multi-family building or in the multi-family component of a mixed use building that includes three or more dwelling units shall be provided with an electrical

outlet, a receptacle or electric vehicle supply equipment where applicable, for the use of electric vehicle charging.

5) One commercial parking stall in each group of 10 commercial parking stalls, and one commercial parking stall in any group of less than 10 commercial parking stalls, in a commercial building, including the commercial component of a mixed use building shall be provided with an electrical outlet, a receptacle or electric vehicle supply equipment where applicable, for the use of electric vehicle charging.

6) The electrical outlet, receptacle or supply equipment described in Sentences (4) and (5) shall be supplied by a branch circuit rated not less than 40 A at the nominal voltage of 208 V or 240 V as applicable."; and

(b) in Article 10.2.3.2, Council repeals Sentence 10.2.3.2.(1) and substitutes the following:

"**1)** In a multi-family building or the multi-family component of a mixed use building, with three or more dwelling units, an electrical room shall be designed with sufficient space for the future installation of electrical equipment necessary to support electric vehicle charging in all residential parking stalls."

228. In Book I, Division B, Part 11, 11.2.1.2.(2) Council strikes out Clause11.2.1.2.(2)(a) and substitutes "a) upgraded to an *acceptable* level as defined in the *existing building* upgrade mechanism model in Division B Appendix A (See Appendix Note A-11.2.1.2.), except that existing lighting exceeding the Lighting Power Density of ASHRAE 90.1 -2007 shall be removed within existing spaces of a *suite* within the scope of a *project*, or".

229. In Book I, Division B, Part 11, Sentence 11.2.1.2.(3), Council:

(a) strikes out "except for a change of *major occupancy* to a *small suite,*"; and

(b) at the beginning of Sentence 11.2.1.2.(3), Council adds "Except as required by Sentence (9) and changes of *major occupancy* in a *small suite,*".

230. In Book I, Division B, Part 11, Sentence 11.2.1.2.(3), Council:

(a) strikes out "except for a change of *major occupancy* to a *small suite*"; and

(b) at the beginning of Sentence 11.2.1.2.(3), adds:

"Except as required by Sentence (9) and changes of *major occupancy* in a *small suite,*"

231. In Book I, Division B, Part 11, Clause 11.2.1.2.(3)(a), Council strikes out "July 1, 1994" and substitutes "November 1, 1999".

232. In Book I, Division B, Part 11, Sentence 11.2.1.2.(8), Council strikes out "E4" and substitutes "E3".

233. In Book I, Division B, Part 11, Clause 11.2.1.2.(9)(a), following the words "ASHRAE 90.1-2007" Council adds the words "or as deemed *acceptable* to the *Chief Building Official*".
234.

235. In Book I, Division B, Part 11, Subsection 11.3.2., Council:

(a) in Sentence 11.3.2.1.(1), replaces "first and second storey", with "*first storey* and second *storey*";

(b) in Sentence 11.3.2.2.(1), replaces "first and second storey", with "*first storey* and second *storey*"; and

(c) in Clause 11.3.2.3.(1)(b), replaces "first and second storey", with "*first storey* and second *storey*".

236. In Book I, Division B, Part 11, Sentence 11.4.2.2.(9), Council strikes out "pull station" and substitutes "manual station".

237. In Book I, Division B, Part 11, Article 11.4.3.1., in Table 11.4.3.1. under the Row "Sprinklers" and Subrow "Two family dwelling with a secondary suite or lock-off unit in one or both of the primary suites" Council strikes out "family dwelling" and substitutes "dwelling unit and its secondary suite".

238. In Book I, Division B, Part 11, Article 11.4.3.1., Council strikes out Sentence 11.4.3.1.(5), and substitutes the following:

> "Where a single existing panel board is located in a common area within the *building* accessible to all occupants of the building, the panel board may supply electrical loads for both the principal dwelling and the *secondary suite* or *lock-off unit*."

239. In Book I, Division B, Part 11, Article 11.5.1.1., in Table 11.5.1.1., row 13, 3rd column, Council strikes out "single family homes" and substitutes "*one-family dwelling*".

240. In Division B, Part 11, Subsection 11.6.1., Council strikes out Subsections 11.6.1. to 11.6.4., and substitutes:

"11.6.1. Application

11.6.1.1. Application

1) The alternative acceptable solutions in this Section apply to
a) *arts and culture indoor events* in *existing buildings*,
b) temporary *buildings*,
c) special event facilities in *existing* or temporary *buildings*, and
d) temporary emergency shelters in *existing buildings*.

2) Subject to the provisions of Article 1.6.7.3. of Division C, "temporary" in this Section means

a) in relation to special event facilities, no more than two months,
b) in relation to temporary *buildings*, no more than one year, and
c) in relation to emergency shelters, no more than one year.

11.6.1.2. Alternative Acceptable Solutions

1) Section 11.3. may be applied to existing conditions, except as defined in Subsections 11.6.2. and 11.6.3.

2) The alternative *acceptable* solutions in Section 11.5 may be applied to existing conditions in a *heritage* building, except as defined in Subsections 11.6.2. and 11.6.3.

3) The alternative *acceptable* solutions provided in Table 11.6.3.1. apply to *existing buildings* used for *arts and culture indoor events* and do not apply to new work, which must conform to the requirements for new *construction* in other Parts of this By-law.

4) The alternative acceptable solutions provided in Table 11.6.4.1. apply to existing buildings used as temporary special event facilities and temporary emergency shelters and to temporary buildings and do not apply to new work, which must conform to the requirements for new construction in other Parts of this By-law.

11.6.2. Arts and Culture Indoor Event

11.6.2.1. Alternative Acceptable Solutions

1) Where the *occupancy* of an *existing building* or portion of an *existing building* is classified as Group D offices, Group E retail, Group F Division 2 production or rehearsal studio, wholesale, warehouse, or factory, or Group F Division 2 artist studio without living accommodations, the *major occupancy* may be changed to a temporary Group A Division 2 major occupancy for an *arts and culture indoor event* if

a) the maximum *occupant load* is no more than 250 persons,
b) the arts and culture indoor event is located in the *first storey* or the *storey* below the *first storey* and has at least one *exit* that conforms to Clauses 3.8.3.19.(1)(d) or (e),
c) emergency lighting is provided
    i) inside washrooms or, in the case of a single toilet room, immediately outside the entrance door and visible under the closed toilet room door, and
    ii) in locations leading from the *arts and culture indoor event* to the *street* as described in Sentence 3.2.7.3.(1)
d) portable fire extinguishers are installed in accordance with the Fire By-law, with at least one extinguisher at the main entrance

and at each egress door leading from the *arts and culture indoor event floor area*,

e) an *approved* fire emergency procedures and security plan with approved maximum occupant load is posted beside each portable extinguisher at the main entrance and at each egress door leading from the *arts and culture indoor event*,

f) the *building* is equipped with a fire alarm system, or *supervisory staff* are designated to monitor egress and *exit* doors and to carry out an emergency evacuation in accordance with *approved* fire emergency procedure, and

g) the *storey* below the *first storey* used for an *arts and culture indoor event* is

h) the *arts and culture indoor event* has at least one *accessible* entrance; and

i) the *arts and culture indoor event* has a *means of egress* in accordance with Article 3.8.3.19.

2) The floor of a *building* used for an *arts and culture indoor event* shall be

a) constructed of concrete supported by solid ground without suspended slab, or

b) certified by a *registered professional*, after a structural review, to be safe for *assembly occupancy* and designed to a minimum specified uniformly distributed *live load* of 4.8 kPa.

3) Cooking which generates grease-laden vapour is not permitted at an *arts and culture indoor event*, unless commercial cooking and ventilation equipment, installed under permit and conforming with Article 6.2.2.7., is used.

4) An *approved* maximum *occupant load* from the Vancouver Fire and Rescue Services, and a Vancouver Police Department security assessment shall be obtained *for arts and culture indoor events* in accordance with Table 11.6.2.1.

5) The number of *exits*, designated *supervisory staff*, and *exit* signs for *arts and culture indoor events* shall be provided in accordance with Table 11.6.2.1.

Table 11.6.2.1.
Requirements for Arts and Culture Indoor Events
Forming part of Article 11.6.2.1.

Occupant Load for Event	*Occupant Load* Approval Required(1)(1)	Minimum number of *Exits* Required	*Exit* Signage Required	*Supervisory Staff* at Egress/*Exit* Door Required(2)	VPD Security Assessment Required(5)
≤ 60 people for private SOL(3) or dry event(4)	Yes	1	No	1	No

≤ 60 people for public SOL	Yes	1	No	1	Yes
61-250 people for private SOL(3) dry event(4) or public SOL(3)	Yes	2	Yes	2	Yes

Notes to Table 11.6.2.1.:

(1) Vancouver Fire and Rescue Services will assess and approve the maximum temporary occupant load for arts and culture indoor
events.

(2) Supervisory staff is required to monitor all egress/exit doors. One supervisory staff must be provided at each required exit door at all times.

(3) SOL means Special Occasion License issued by the British Columbia Liquor Control and Licensing Branch.

(4) Dry event means an event at which there is no liquor service.

(5) VPD means Vancouver Police Department.

11.6.3. Special Event Facilities, Emergency Shelters and Temporary Buildings

11.6.3.1. Alternative Acceptable Solutions

1) Table 11.6.3.1. provides alternative acceptable solutions for
   a) temporary use of buildings as special events facilities and emergency shelters, and
   b) temporary buildings.

Table 11.6.3.1.
Alternate Acceptable Solutions for Temporary Special Events Facilities, Emergency Shelters and Temporary Buildings

No.	By-law Requirement Division B	Alternate Acceptable Solution
1	**Flame Resistance** 3.1.6.5.	Fabric tent material may conform to a) NFPA 701, "Standard Methods of Fire Tests for Flame Propagation of Textiles and Films", 2004 edition, or b) Certification of Registered Flame Resistant Product certified by the California Department of Forestry and Fire Protection, Office of the State Fire Marshall.
2	**Fire Separation under Tiers of Seats** 3.3.2.2.	A *fire separation* between the space and the seats is not required provided a) the only occupied space beneath the bleacher seating is used as a pedestrian walkway for access to the bleacher seating, b) the occupied space is not used for storage, signage must be posted in the space beneath the bleacher seating that reads "No Storage Permitted in This Area", and c) cleanup crews must clean up debris from the space beneath the bleacher seating at the end of each day.
3	**Handrails** 3.4.6.5.	Handrail extensions for temporary *buildings* may extend vertically downward not less than 300 mm beyond the top and bottom of the stairway.

4	**Guards** 3.4.6.6.	Openings greater than 100 mm may be permitted in *guards* where a) the *guard* serves stairs that are used only by staff or work force volunteers, and b) a triangular space created by the stair tread, stair rise, and the underside of the *guard*, provided the opening will not permit the passage of a sphere greater than 200 mm, in egress stairs that serve bleacher seating. Member, attachment or openings located between 140 mm and 900 mm above the level being protected by the *guard* may be permitted where a) the *guard* serves stairs that are used only by staff or work force volunteers, and b) rosettes in the vertical posts of scaffolding type bleachers have been installed
5	**Treads and Risers** 3.4.6.8.	In locations where it is not practical for persons with disabilities to work, stairs with no public access, may have a) runs of not less than 250 mm between successive steps, b) risers between successive treads not less than 125 mm and not more than 190 mm, and c) open risers.
6	**Direction of Door Swing** 3.4.6.12. **Door Release Hardware** 3.4.6.16.	Tent *exit* doors may be equipped with fabric flaps, tie straps, zippers, or VELCRO brand or equivalent hook and loop fasteners in lieu of doors that swing on a vertical axis provided a) a minimum of two *exit* doors are be provided for each tent, b) the *occupant load* of the tent does not exceed 60, and c) security personnel are trained for emergency evacuation procedures, and remain in the vicinity of the *exit* at all times. Temporary sliding gates may be used as *exit* doors provided a) gates are left open during normal operating hours and always manned by security personnel, b) gates are closed during non-operating hours, and locked with chains and a padlock, c) operational procedures are in place to ensure that the chains and padlock are removed during operating hours, and d) security personnel are trained for emergency evacuation procedures.
7	**Environment Separation** Part 5	Part 5 does not apply.

11.6.3.2. Additional Requirements for Emergency Shelters

1) Notwithstanding the provisions of this By-law, a temporary emergency shelter is permitted in an *existing building*, except that there shall be

a) no cooking in the *building*, other than food re-heated by microwave,
b) no less than one staff for each 20 shelter spaces on duty at all times,
c) no more than one shelter bed for every 3.7 m^2 of *floor area* or, if bunk beds are provided, no more than two shelter beds for every 3.7 m^2 of floor area,
d) aisles no less than 900 mm wide on both sides of every shelter bed,
e) at least 2 *means of egress*,
f) *exit* signs on all *exit* doors,
g) additional directional *exit* signs, in any circumstance where *exit* signs over *exit* doors are not visible from any location in the shelter,

h) *exit* signs which comply with Subsection 3.4.5.,
i) *smoke alarms* conforming to Article 3.2.4.20. installed throughout the entire *building*,
j) at least one water closet for every 20 shelter spaces,
k) at least one lavatory for every 5 water closets, and
l) all staff shall have training in first aid and emergency evacuations."

241. In Book I, Appendix A, before Appendix note A-3.4.1.1.(1), Council adds the following:

"A-3.3.7.7.(2) Security for Storage Garage
The requirements of Sentence 3.3.7.7.(2) are intended to provide improved visibility into or out of a stair tower or vestibule which might otherwise occlude the line of sight of building occupants as a result of intervening construction. Glazing must provide the maximum practical improvement to visibility to improve occupant safety. The term 'stair tower' used in this Sentence is intended to apply to vertical stair enclosures connecting more than one floor or containing superimposed flights of stairs.".

242. In Book I, Division B, Appendix A, following Appendix note Appendix A-10.2.2.12.(2)., Council adds the following:

"A-10.2.3.1 Electric Vehicle Charging for Buildings

The Canadian Electrical Code, Part I contains the requirements of electric vehicle charging systems, the requirements of Rule 86-300(2) and (3) recognize the use of load management technologies via the manual transfer or automated control in a branch circuit that supplies the electric vehicle supply equipment load and other loads. This Rule requires that, where the electric vehicle supply equipment load and other loads are installed, only one load can be operated at any one time and the branch circuit must be based on the calculated demand in accordance with Section 8.

All references to the electrical installation including receptacle, supply equipment and rating of voltage and ampere in Article 10.2.3.1 are intended to align with the requirements of SAE AC Level 2 charging requirements, whether in applying load managed solutions or separate branch circuits for each charging point. In addition to the requirements of Article 10.2.3.1, the installation of electric vehicle charging systems and electric vehicle supply equipment must meet the requirements of the Canadian Electrical Code, Part I and the manufacturer's instructions."

243. In Book I, Division B, Appendix A, Appendix note A-11.2.1.2., Figure A-11.2.1.2-A1, in the "Repair/Small suite" column; under the "Energy" heading, Council strikes out "E1" and substitutes "E1/E2".

244. In Book I, Division B, Appendix A, Appendix note A-11.2.1.2, Table 11.2.1.2.B, under the row "Design Level 'S3'", Council strikes out the row and substitutes the following:

"

S3	The building structure shall be upgraded to an acceptable level in order to provide a	**Entire Building** — Bolting floor and roof structure to bearing walls and strengthening of floor and

	minimum level of property and life safety to unreinforced masonry or other buildings having less than 30 percent of the current required seismic resistance. Falling hazards that may impact adjacent properties and over *public ways* must be addressed.	roof diaphragms as required to safely distribute lateral forces to bearing walls (i.e., Bolts Plus) All falling hazards such as cornices, parapets and awnings located above a *public way*, shared exits and sidewalks must be restrained to resist forces due to a seismic event.

"

245. In Book I, Division B, Appendix A, Appendix note A-11.2.1.2, Table 11.2.1.2.B, under the row "Design Level 'N3'", Council strikes out the row and substitutes the following:

"

N3	Building exits and to acceptable open space to be reviewed to ensure safety from overhead falling hazards.	Entire Building Exits - Restrain interior partition walls. Restrain all ceiling supporting frames, T-bars assemblies, ceiling gypsum wall boards, all overhead mechanical equipment and services, overhead electrical equipment and services. Restrain falling hazards from cladding, veneer, parapets, canopies and ornaments over exit and extended to 5 m on either side of exit.

"

246. In Book I, Division B, Appendix A, A-11.2.1.2, Table 11.2.1.2.B, under the row "Design Level 'N4'", Council strikes out the row and substitutes the following:

"

N4	Entire Building and to acceptable open space to be reviewed to ensure safety from overhead falling hazards.	Entire Building Exits - Restrain interior partition walls. Restrain all ceiling supporting frames, T-bars assemblies, ceiling gypsum wall boards, all overhead mechanical equipment and services, overhead electrical equipment and services. Restrain falling hazards from cladding, veneer, parapets, canopies and ornaments attached to the exterior of the building.

"

247. In Book I, Division B, Appendix A, Appendix note A-11.2.1.2, Table 11.2.1.2.C, under note 1(c), Council strikes out the words "24 months" and substitutes "18 months".

248. In Book I, Division B, Appendix A, Appendix note A-11.2.1.2., "REHABILITATION PROJECT TYPE (Flow Chart No. 1)", Council:

(a) repeals the Subheading "Repair" and its associated text and substitutes the following:

"**Repair** - Repair pertains to a limited scope of interior or exterior renovation work to replace existing building components with functionally equivalent components. Repair work may not include work that increases the usable floor area of a building, creates an interconnected floor space, supports an addition or change of use, or the consolidation of more than one existing suite into a single tenant space. If the renovation includes other categories of work or project types such as a change of major occupancy classification or an

addition, then the most restrictive upgrade levels from all project types would be applied. For Repairs, an E1 level of energy upgrade shall be applied.";

(b) following the Subheading "Repair" and its associated text and adds the following:

"**Small Suite** - The upgrade trigger Small Suite pertains to limited renovation work within a small suite as defined in Division A, Article 1.4.1.2. Small Suite work may include reconfiguration of the interior space of the suite, but may not include work on more than level (storey or mezzanine), interconnected floor spaces, exterior renovations, or the consolidation of more than one existing suite into a single new tenant space. If the renovation includes other categories of work or project types such as a change of major occupancy classification or an addition, then the most restrictive upgrade levels from all project types would be applied. For Small suite renovations, an E2 level of energy upgrade shall be applied."; and

(c) repeals the Subheading "Major Renovations and it associated text and substitutes the following:

"**Major Renovation** - Major renovations means work which may include (singly or in combination): Interior re-configuration of multiple tenant spaces, interconnected floor spaces, exterior alterations, or alterations that create more than one new tenant space. However, where such renovation includes a change of major occupancy classification or a new mezzanine, this work would not be considered as a major renovation. New mezzanines are considered to be additions. If the renovation includes other categories of work or project types such as a change of major occupancy classification or an addition (mezzanine) then the most restrictive upgrade levels from all project types would be applied."

249. In Book I, Division B, Appendix A, Appendix note A-11.2.1.2., "**CHANGE OF MAJOR OCCUPANCY CLASSIFICATION PROJECTS (Flow Chart No. 2)**", Council:

(a) repeals the Subheading "Change of Major Occupancy Classification" and it associated text and substitutes the following:

"**Change of Major Occupancy Classification** — Change of major occupancy classification means a change of use within a building, a suite, or its constituent floor areas where the proposed use is outside of the defined uses of the existing major occupancy classification permitted for the building, the suite, or its constituent floor areas."; and

(b) repeals the Subheading "Change of Major Occupancy Classification" and it associated text and substitutes the following:

"**Small Suite Change of Major Occupancy Classification** — Small suite change of major occupancy classification means a change of use within a small suite,

or its constituent floor areas where the occupant load for the entire suite does not exceed 60 persons and the small suite is limited to a Group A, Division 2, Group D, Group E, Group F, Division 2 (wholesale showroom), or Group F, Division 3 major occupancy."

250. In Book I, Division B, Appendix A, Appendix note A-11.2.1.2., **"ADDITION PROJECTS (Flow Chart No. 3)"**, Council:

(a) repeals the Subheading "Horizontal Addition" and it associated text and substitutes the following:

"**Horizontal Addition** – Horizontal additions include both "minor" and "major" horizontal additions. A minor horizontal addition is any expansion of a floor area beyond the extents of the existing floor area in which it is located by not more than 25 per cent of the existing building area, or by not more than 500 m^2 in aggregate floor area. A major horizontal is any expansion of a floor area beyond the extents of the existing floor area that exceeds the limits permitted by a minor horizontal addition. Any construction creates new floor area that in-fills existing roof or deck areas, or is superimposed over existing building structure or floor area is not considered a horizontal addition."; and

(b) repeals the Subheading "Vertical Addition" and it associated text and substitutes the following:

"**Vertical Addition** – Vertical additions include both "minor" and "major" vertical additions. A minor vertical addition is the addition of new floor area (storey or mezzanine) that in-fills existing roof or deck areas, or is superimposed over existing building structure or floor area, with an aggregate floor area increase of not more than 25 per cent of the building area, or by not more than 500 m^2 in aggregate building area. A major vertical addition is an addition that increases the aggregate floor areas or mezzanine area increase that exceeds the limits permitted by a minor vertical addition."

251. In Book I, Division B, Appendix A, Appendix note A-11.2.1.2., **"PROCEDURE FOR USING THE UPGRADE MECHANISM MODEL"**, under the subheading Step 3, Council strikes out the 3rd paragraph and substitutes the following:

"The alternative acceptable solution for energy efficiency requires that the determined E design upgrade level is used to enter Table A-11.2.1.2.C to obtain a solution. The solution column in Table A-11.2.1.2.C provides the L level to enter Table A-11.2.1.2.D. Within the L Level row of Table A-11.2.1.2.D the user is provided with various Section rows under the Section column. Each Section row provides one or more alternative acceptable solutions under the Alternative Acceptable Solution Options column. Each alternative acceptable solution is identified as a separate numeric solution. There are one or more alternative acceptable solutions for each Section row. The "Select 1-L*" solution in Table A-11.2.1.2.C means that only one (1) of the alternative solutions in the Alternative Acceptable Solution Options column in Table A-11.2.1.2.D are required to meet the objective. It is up to the user to determine which

Section(s) in the Section column and corresponding alternative acceptable solution in the Alternative Acceptable Solution Options column is (are) used to satisfy the objective. Within any 5 year period, when an alternative acceptable solution has been used previously within the project area, then that option is not permitted to be used as an alternative acceptable solution."

252. In Book I, Division B, Appendix A, Appendix note A-11.2.1.2., in the notes to Table 11.2.1.2.C, Council strikes out the 1st paragraph and substitutes the following:

"(1) The solution column in Table A-11.2.1.2.C provides the solution that will satisfy the objective. The solution column in Table A-11.2.1.2.C provides an L level to enter Table A-11.2.1.2.D. Within the L Level row the user is provided with various Section rows under the Section column. Each Section row provides one or more alternative acceptable solutions under the Alternative Acceptable Solutions Options column. Each alternative acceptable solution is identified as a separate numeric solution. There are one or more alternative acceptable solutions for each Section row. The "Select 1-L*" solution in Table A-11.2.1.2.C means that only one (1) of the alternative solutions in the Alternative Acceptable Solutions Options column in Table A-11.2.1.2.D are required to meet the objective. It is up to the user to determine which Section(s) in the Section column and corresponding alternative acceptable solution in the Alternative Acceptable Solution Option column is (are) used to satisfy the objective. Within any 5 year period, when an alternative acceptable solutions has been used previously within the project area, then that option is not permitted to be used as an alternative acceptable solution."

253. In Book I, Division B, Appendix A, Appendix note A-11.2.1.2., in Table 11.2.1.2.D, under the L2 level row, at the end of the Lighting sub-row, Council adds the following :

"**8)** Reduce total Skylight Fenestration/Glazing Area to 5% of gross roof area (per 5.5.4.2.2. of ASHRAE 90.1 - 2010)"

254. In Book I, Division B, Appendix A, Appendix note A-11.2.1.2., Council:

(a) in Table 11.2.1.2.D, under the L3 level row, in the Envelope sub-row, adds a new row as follows: "**6)** Inspect and remediate all floor/crawl space equipment and services including ductwork, plumbing, insulation, penetrations, dampers, valves, coils, pans and drains."

(b) in Table 11.2.1.2.D, under the L3 level row, in the Lighting sub-row, at the end of line 2) adds "of the building"; and

(c) in Table 11.2.1.2.D, under the L3 level row, in the Lighting sub-row, at the end of line 3) adds "of the suite".

255. In Book I, Division B, Appendix A, Appendix note A-11.2.1.2., in Table 11.2.1.2.D, under the L3 level row, in the Lighting sub-row, Council strikes out "**2)** Provide day lighting by skylight (per 5.5.4.2.3 of ASHRAE 90.1 - 2010)" and renumbers the following items in numerical sequence.

256. In Book I, Division B, Appendix D, Appendix note D-4.3.1., Council strikes out the words "asbestos cement,"

257. In Book I, Division C, Part 1, Article 1.4.1.5., at the end of Article 1.4.1.5. Council adds the following:

> "5) The *owner* shall ensure that all underground storage tanks on the subject property that are intended for the storage of heating oil but have not been used for over 2 years are removed and any associated contamination is remediated to the applicable standards as prescribed in the Contaminated Sites Regulation. All work must be completed in accordance with the requirements of the Vancouver Fire By-law."

258. In Book I, Division C, Part 1, Sentence 1.5.4.6.(1), Council strikes out Clause 1.5.4.6.(1)(1) and substitutes the following:

> "a) by mailing the order by registered mail and by regular mail to the owner at the owner's address as it appears on the records of the Assessment Authority of British Columbia, and posting the order on the premises which are the subject of the order"

259. In Book I, Division C, Part 2, Article 2.2.9.1.(1), in Clause 2.2.9.1.(1)(b) Council strikes out "[date of enactment of the by-law]" and substitutes "July 29, 1999".

260. In Book II, Division B, Article 2.2.5.1., Council adds the following:

> "(3) Asbestos-cement pipe shall not be used in new construction."

261. A decision by a court that any part of this By-law is illegal, void, or unenforceable severs that part from this By-law, and is not to affect the balance of this By-law.

262. This By-law is to come into force and take effect on May 1, 2017.

ENACTED by Council this day of , 2016

_____

Mayor

_____

City Clerk

EXPLANATION

Heritage Designation By-law
Re: 1102 Commercial Drive

At a public hearing on November 15, 2016, Council approved a recommendation to designate the structure, exterior envelope and exterior building materials of a building at 1102 Commercial Drive as protected heritage property. Enactment of the attached By-law will achieve the designation.

Director of Legal Services
November 29, 2016

1102 Commercial Drive
Florida Market

BY-LAW NO. ABF

A By-law to designate certain real property as protected heritage property

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

1. Council considers that the real property described as:

Structure and exterior envelope and exterior building materials of heritage building (Florida Market)	1102 Commercial Drive Vancouver, B.C.	PID: 014-979-004 LOT 1 EXCEPT THE EAST 8 FEET NOW LANE, BLOCK 37 DISTRICT LOT 264A PLANS 1099 AND 1771

has heritage value or heritage character, and that its designation as protected heritage property is necessary or desirable for its conservation.

2. Council designates the real property described in section 1 of this By-law as protected heritage property under Section 593 of the *Vancouver Charter*.

3. This By-law is to come into force and take effect on the date of its enactment.

ENACTED by Council this day of , 2016

Mayor

City Clerk

EXPLANATION

Street Name By-law No. 4054 Amending By-law regarding Yew Street and Lahb Avenue

Enactment of the attached By-law will implement Council's resolution of November 29, 2016 regarding street extension and new public Street name as set out in the attached By-law.

Director of Legal Services
November 29, 2016

BY-LAW NO.

ABF

A By-law to amend Street Name By-law No. 4054 regarding Yew Street and Lahb Avenue

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

1. Council amends By-law No. 4054 by:

   (a) assigning the name "Yew Street" to that portion of street labelled "Yew Street" and outlined in black on the plan marginally numbered LF 12020 attached to and forming part of this By-law;

   (b) assigning the name "Lahb Avenue" to that portion of street labelled "Labh Avenue" and outlined in black on the plan marginally numbered LF 12020, attached to and forming part of this By-law; and

   (c) adding to the "Official Street Name Map of the City of Vancouver", which is the plan marginally numbered L325 attached to and forming part of By-law No. 4054, "Yew Street" and "Lahb Avenue" located as shown on the plan marginally numbered LF 12020.

2. A decision by a court that any part of this By-law is illegal, void, or unenforceable severs that part from this By-law, and is not to affect the balance of this By-law.

3. This By-law is to come into force and take effect on the date of its enactment.

ENACTED by Council this day of , 2016

_____

Mayor

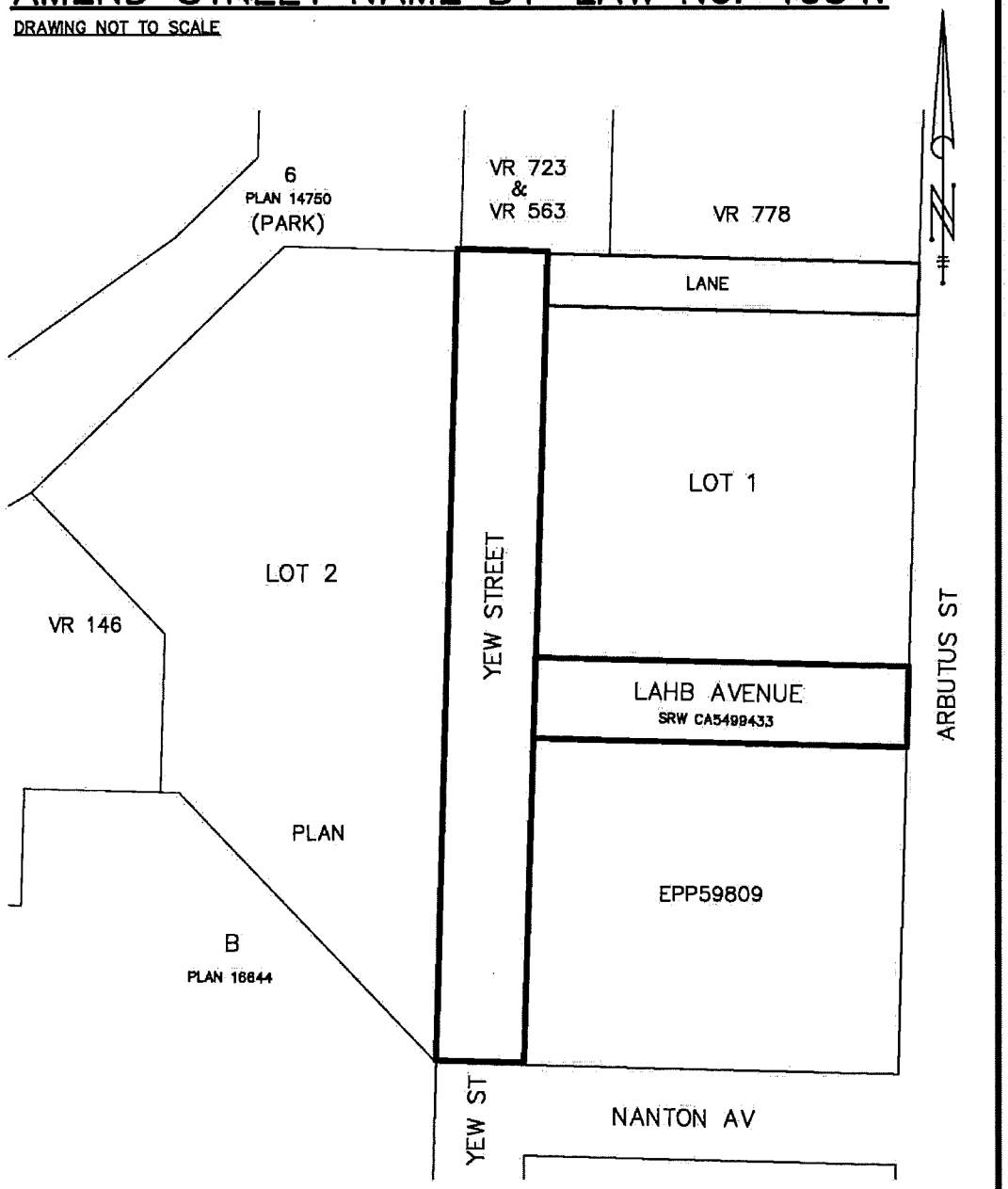
_____

City Clerk

LF12020

PLAN TO ACCOMPANY A BY-LAW TO AMEND STREET NAME BY-LAW No. 4054.

DRAWING NOT TO SCALE



JAS MAP: K-16, L-16

ENGINEERING SERVICES
OCTOBER 28, 2016

Y:\LAND_SURVEY\JAS\For Al Z\Street Name\LF12020-Yew St and Lahb Av.dwg

LF12020

EXPLANATION

A By-law to amend the Zoning and Development By-law
Re: 2805 East Hastings Street

Following the public hearing on July 12, 2016, Council gave conditional approval to the rezoning of the site at 2805 East Hastings Street. The Director of Planning has advised that all prior to conditions have been met, and enactment of the attached By-law will implement Council's resolution.

Director of Legal Services
November 29, 2016

2805 East Hastings Street

BY-LAW NO. ABF

A By-law to amend
Zoning and Development By-law No. 3575
to rezone an area to CD-1

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

Zoning District Plan Amendment

1. This By-law amends the Zoning District Plan attached as Schedule D to By-law No. 3575, and amends or substitutes the boundaries and districts shown on it, according to the amendments, substitutions, explanatory legends, notations, and references shown on the plan marginally numbered Z-707 (e) attached as Schedule A to this By-law, and incorporates Schedule A into Schedule D, to By-law No. 3575.

Uses

2.1 The description of the area shown within the heavy black outline on Schedule A is CD-1 (647).

2.2 Subject to Council approval of the form of development, to all conditions, guidelines and policies adopted by Council, and to the conditions set out in this By-law or in a development permit, the only uses permitted within CD-1 (647), and the only uses for which the Director of Planning or Development Permit Board will issue development permits are:

(a) Cultural and Recreational Uses, limited to Artist Studio, Arts and Culture Indoor Event, Billiard Hall, Club, Community Centre or Neighbourhood House, Fitness Centre, Library, and Museum or Archives;

(b) Dwelling Uses, limited to Dwelling Units in conjunction with any of the uses listed in this By-law;

(c) Institutional Uses, limited to Social Service Centre;

(d) Manufacturing Uses, limited to Jewelry Manufacturing and Printing or Publishing;

(e) Office Uses;

(f) Retail Uses, limited to Farmers' Market, Furniture or Appliance Store, Grocery or Drug Store, Liquor Store, Public Bike Share, Retail Store, and Secondhand Store;

(g) Service Uses, limited to Animal Clinic, Auction Hall, Barber Shop or Beauty Salon, Beauty and Wellness Centre, Catering Establishment, Laundromat or Dry Cleaning Establishment, Neighbourhood Public House, Photofinishing or

Photography Studio, Print Shop, Repair Shop - Class A, Repair Shop - Class B, Restaurant, School - Arts or Self-Improvement, School - Business, School - Vocational or Trade, and Wedding Chapel;

(h) Utility and Communication Uses, limited to Public Utility and Radio Communication Station; and

(i) Accessory Uses customarily ancillary to the uses listed in this Section 2.2.

Conditions of use

3.1 No portion of the first storey of a building, to a depth of 10.7 m from the south wall of the building and extending across its full width, shall be used for residential purposes except for entrances to the residential portion.

3.2 All commercial uses permitted in this By-law shall be carried on wholly within a completely enclosed building except for:

(a) Farmers' Market;

(b) Neighbourhood Public House;

(c) Public Bike Share;

(d) Restaurant; and

(e) display of flowers, plants, fruits and vegetables in conjunction with a permitted use.

3.3 The design and layout of at least 25% of the dwelling units must:

(a) be suitable for family housing;

(b) include two or more bedrooms; and

(c) comply with Council's "High-Density Housing for Families with Children Guidelines".

Floor area and density

4.1 Computation of floor space ratio must assume that the site consists of 2,313.5 m^2, being the site size at the time of the application for the rezoning evidenced by this By-law, prior to any dedications.

4.2 The floor space ratio for all uses must not exceed 3.72.

4.3 Computation of floor area must include all floors of all buildings, including earthen floor, above and below ground level, having a minimum ceiling height of 1.2 m, measured to the extreme outer limits of the building.

4.4 Computation of floor area must exclude:

(a) open residential balconies or sundecks and any other appurtenances which, in the opinion of the Director of Planning, are similar to the foregoing, except that:

(i) the total area of all such exclusions must not exceed 12% of the residential floor area; and

(ii) the balconies must not be enclosed for the life of the building.

(b) patios and roof gardens, if the Director of Planning first approves the design of sunroofs and walls;

(c) where floors are used for off-street parking and loading, the taking on or discharging of passengers, bicycle storage, heating and mechanical equipment or uses, which in the opinion of the Director of Planning are similar to the foregoing, those floors or portions thereof so used that are at or below base surface, except that the exclusion for a parking space must not exceed 7.3 m in length;

(d) amenity areas, recreational facilities and meeting rooms accessory to a residential use, to a maximum total area of 10% of the total permitted floor area; and

(e) all residential storage area above or below base surface, except that if the residential storage area above base surface exceeds 3.7 m^2 for a dwelling unit, there will be no exclusion for any of the residential storage area above base surface for that unit.

4.5 The use of floor area excluded under section 4.4 must not include any use other than that which justified the exclusion.

Building height

5. Building height, measured from base surface, must not exceed 21.34 m.

Horizontal angle of daylight

6.1 Each habitable room must have at least one window on an exterior wall of a building.

6.2 The location of each such exterior window must allow a plane or planes extending from the window and formed by an angle of 50 degrees, or two angles with a sum of 70 degrees, to encounter no obstruction over a distance of 24.0 m.

6.3 Measurement of the plane or planes referred to in section 6.2 must be horizontally from the centre of the bottom of each window.

6.4 The Director of Planning or Development Permit Board may relax the horizontal angle of daylight requirement if:

(a) the Director of Planning or Development Permit Board first considers all the applicable policies and guidelines adopted by Council; and

(b) the minimum distance of unobstructed view is not less than 3.7 m.

6.5 An obstruction referred to in section 6.2 means:

(a) any part of the same building including permitted projections; or

(b) the largest building permitted under the zoning on any site adjoining CD-1 (647).

6.6 A habitable room referred to in section 6.1 does not include:

(a) a bathroom;

(b) a kitchen whose floor area is the lesser of:

(i) 10% or less of the total floor area of the dwelling unit, or

(ii) 9.3 m^2.

Acoustics

7. All development permit applications require evidence in the form of a report and recommendations prepared by a person trained in acoustics and current techniques of noise measurement, demonstrating that the noise levels in those portions of dwelling units listed below do not exceed the noise level set opposite such portions. For the purposes of this section, the noise level is the A-weighted 24-hour equivalent (Leq) sound level and is defined simply as noise level in decibels.

Portions of dwelling units	Noise levels (Decibels)
Bedrooms	35
Living, dining, recreation rooms	40
Kitchen, bathrooms, hallways	45

Severability

8. A decision by a court that any part of this By-law is illegal, void, or unenforceable severs that part from this By-law, and is not to affect the balance of this By-law.

Force and effect

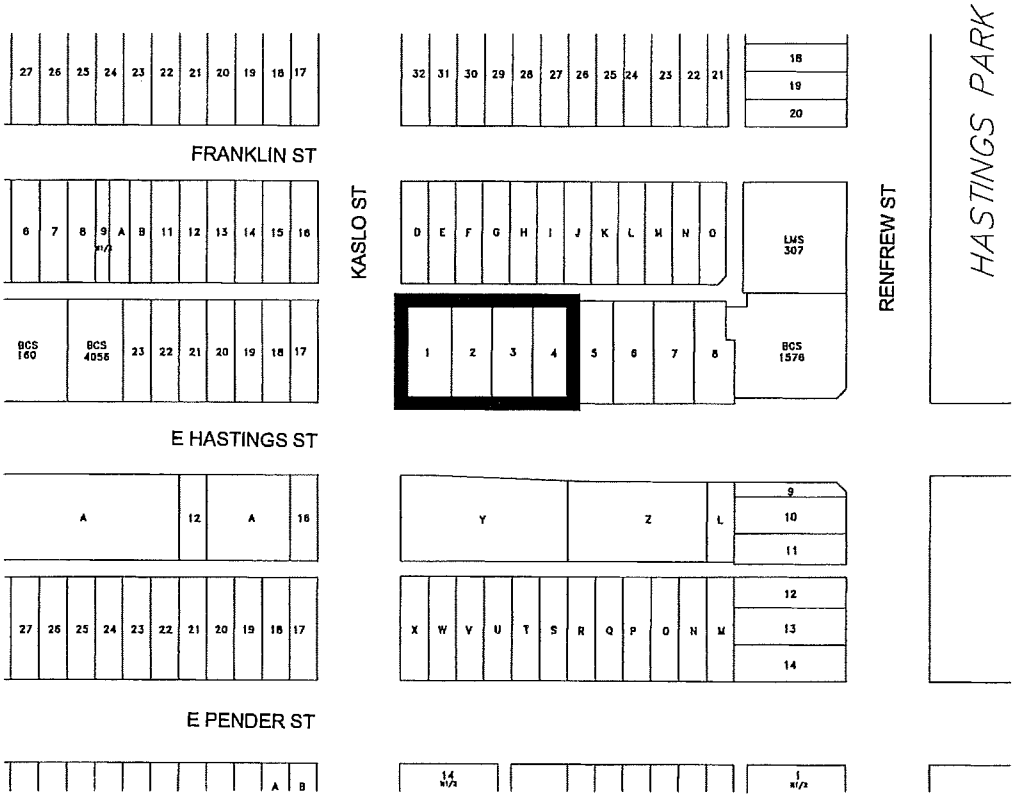
9. This By-law is to come into force and take effect on the date of its enactment.

ENACTED by Council this day of , 2016

_____
Mayor

_____
City Clerk

Schedule A



The properties outlined in black (▬) are rezoned:
From **C-2C1** to **CD-1**

Z-707 (e)

RZ - 2805 East Hastings Street	map: 1 of 1 scale: NTS	↑
City of Vancouver	date: 2016-06-14	

EXPLANATION

A By-law to amend the Zoning and Development By-law
Re: 4976-5010 Cambie Street

Following the public hearing on June 14, 2016, Council gave conditional approval to the rezoning of the site at 4976-5010 Cambie Street. The Director of Planning has advised that all prior to conditions have been met, and enactment of the attached By-law will implement Council's resolution.

Director of Legal Services
November 29, 2016

4976-5010 Cambie Street

A3F

BY-LAW NO. _____

A By-law to amend
Zoning and Development By-law No. 3575
to rezone an area to CD-1

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

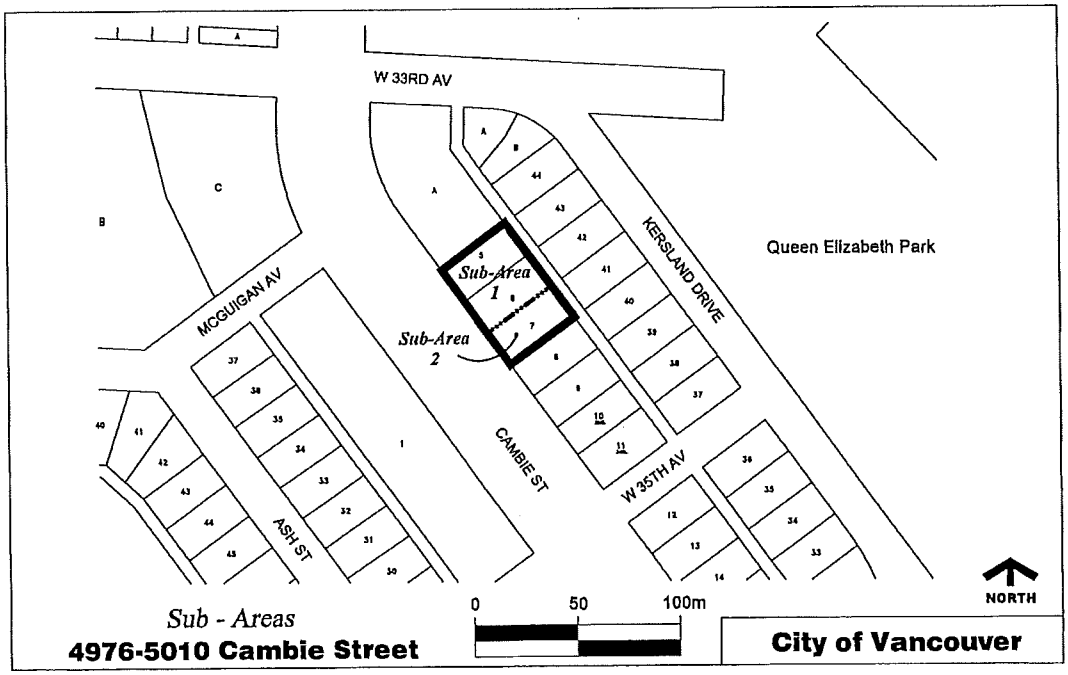
Zoning District Plan Amendment

1. This By-law amends the Zoning District Plan attached as Schedule D to By-law No. 3575, and amends or substitutes the boundaries and districts shown on it, according to the amendments, substitutions, explanatory legends, notations and references shown on the plan marginally numbered Z-704 (a) attached as Schedule A to this By-law, and incorporates Schedule A into Schedule D, to By-law No. 3575.

Sub-areas

2. The site is to consist of two sub-areas generally as illustrated in Figure 1, for the sole purpose of computation of floor area and allocation of maximum height and conditions of use.

Figure 1: CD-1 Sub-Areas



Uses

3.1 The description of the area shown within the heavy black outline on Schedule A is CD-1 (645).

3.2 Subject to Council approval of the form of development, to all conditions, guidelines and policies adopted by Council, and to the conditions set out in this By-law or in a development permit, the only uses permitted within CD-1 (645), and the only uses for which the Director of Planning or Development Permit Board will issue development permits are:

(a) Dwelling Uses, limited to Multiple Dwelling, Multiple Conversion Dwelling, Infill Two-Family Dwelling, Infill One-Family Dwelling, Lock-off Unit and Principal Dwelling Unit with Lock-off Unit; and

(b) Accessory Uses customarily ancillary to the uses listed in this section 3.2.

Conditions of use

4.1 The design and layout of at least 25 % of dwelling units in sub-area 1 must:

(a) be suitable for family housing;

(b) include two or more bedrooms; and

(c) comply with Council's "High-Density Housing for Families with Children Guidelines".

Floor area, density and site area

5.1 For the purposes of computing floor space ratio the site area of Sub-area one is 1,463 m^2, (15,753 sq. ft.) being the site area at the time of the application for the rezoning, as evidenced by this by-law, prior to any dedications.

5.2 For the purposes of computing floor space ratio the site area of Sub-area two is 731 m^2, (7,876 sq. ft.) being the site area at the time of the application for the rezoning as evidenced by this by-law, prior to any dedications.

5.3 The floor area and density for all uses in each sub-area must not exceed the maximum permitted gross floor area and density set out in the following table:

Sub-Area	Maximum Permitted Floor Area	Floor Space Ratio	Site Area
1	4,924 m^2 (53,012 sq. ft.)	3.37	1,463 m^2 (15,753 sq. ft.)
2	475 m^2 (5,115 sq. ft.)	0.65	731 m^2 (7,876 sq. ft.)

5.4 The maximum permitted gross floor area for the site is 5,399 m^2 (58,114 sq. ft.).

5.5 The maximum permitted floor space ratio for the site is 2.46.

5.6 Computation of floor area must include:

(a) all floors, including earthen floors, measured to the extreme outer limits of the buildings; and

(b) stairways, fire escapes, elevator shafts, and other features which the Director of Planning considers similar, measured by their gross cross-sectional areas and included in the measurements for each floor at which they are located.

5.7 Computation of floor area must exclude:

(a) open residential balconies or sundecks, and any other appurtenances which, in the opinion of the Director of Planning, are similar to the foregoing, except that:

(i) the total area of all such exclusions must not exceed 12% of the permitted floor area;

(ii) the balconies must not be enclosed for the life of the building;

(b) patios and roof gardens, if the Director of Planning first approves the design of sunroofs and walls;

(c) where floors are used for off-street parking and loading, the taking on or discharging of passengers, bicycle storage, heating and mechanical equipment, or uses which in the opinion of the Director of Planning are similar to the foregoing, those floors or portions thereof so used, which are at or below base surface, except that the maximum exclusion for a parking space must not exceed 7.3 m in length; and

(d) all residential storage area above or below base surface, except that if the residential storage area above base surface exceeds 3.7 m^2 for a dwelling unit, there is to be no exclusion for any of the residential storage area above base surface for that unit.

5.8 Computation of floor area may exclude amenity areas, including recreation facilities and meeting rooms, except that the total excluded area is not to exceed 10 % of the permitted floor area.

5.9 The use of floor area excluded under sections 5.7 and 5.8 must not include any use other than that which justified the exclusion.

Building height

6.1 In sub-area 1, building height, measured from base surface, must not exceed 23.5 m.

6.2 In sub-area 2, building height, measured from base surface, must not exceed 9.5 m.

Horizontal angle of daylight

7.1 Each habitable room must have at least one window on an exterior wall of a building.

7.2 The location of each such exterior window must allow a plane or planes extending from the window and formed by an angle of 50 degrees, or two angles with a sum of 70 degrees, to encounter no obstruction over a distance of 24.0 m.

7.3 Measurement of the plane or planes referred to in section 7.2 must be horizontally from the centre of the bottom of each window.

7.4 The Director of Planning or Development Permit Board may relax the horizontal angle of daylight requirement, if:

(a) the Director of Planning or Development Permit Board first considers all the applicable policies and guidelines adopted by Council; and

(b) the minimum distance of the unobstructed view is not less than 3.7 m.

7.5 An obstruction referred to in section 7.2 means:

(a) any part of the same building including permitted projections; or

(b) the largest building permitted under the zoning on any site adjoining CD-1 (645).

7.6 A habitable room referred to in section 7.1 does not include:

(a) a bathroom; or

(b) a kitchen whose floor area is the lesser of:

(i) 10% or less of the total floor area of the dwelling unit, or

(ii) 9.3 m^2.

Acoustics

8. A development permit application will require evidence in the form of a report and recommendations prepared by a person trained in acoustics and current techniques of noise measurement, demonstrating that the noise levels in those portions of dwelling units listed below do not exceed the noise level set opposite such portions. For the purposes of this

section, the noise level is the A-weighted 24-hour equivalent (Leq) sound level and is defined simply as noise level in decibels.

Portions of dwelling units	Noise levels (Decibels)
Bedrooms	35
Living, dining, recreation rooms	40
kitchen, bathrooms, hallways	45

Severability

9. A decision by a court that any part of this By-law is illegal, void, or unenforceable severs that part from this By-law, and is not to affect the balance of this By-law.

Force and effect

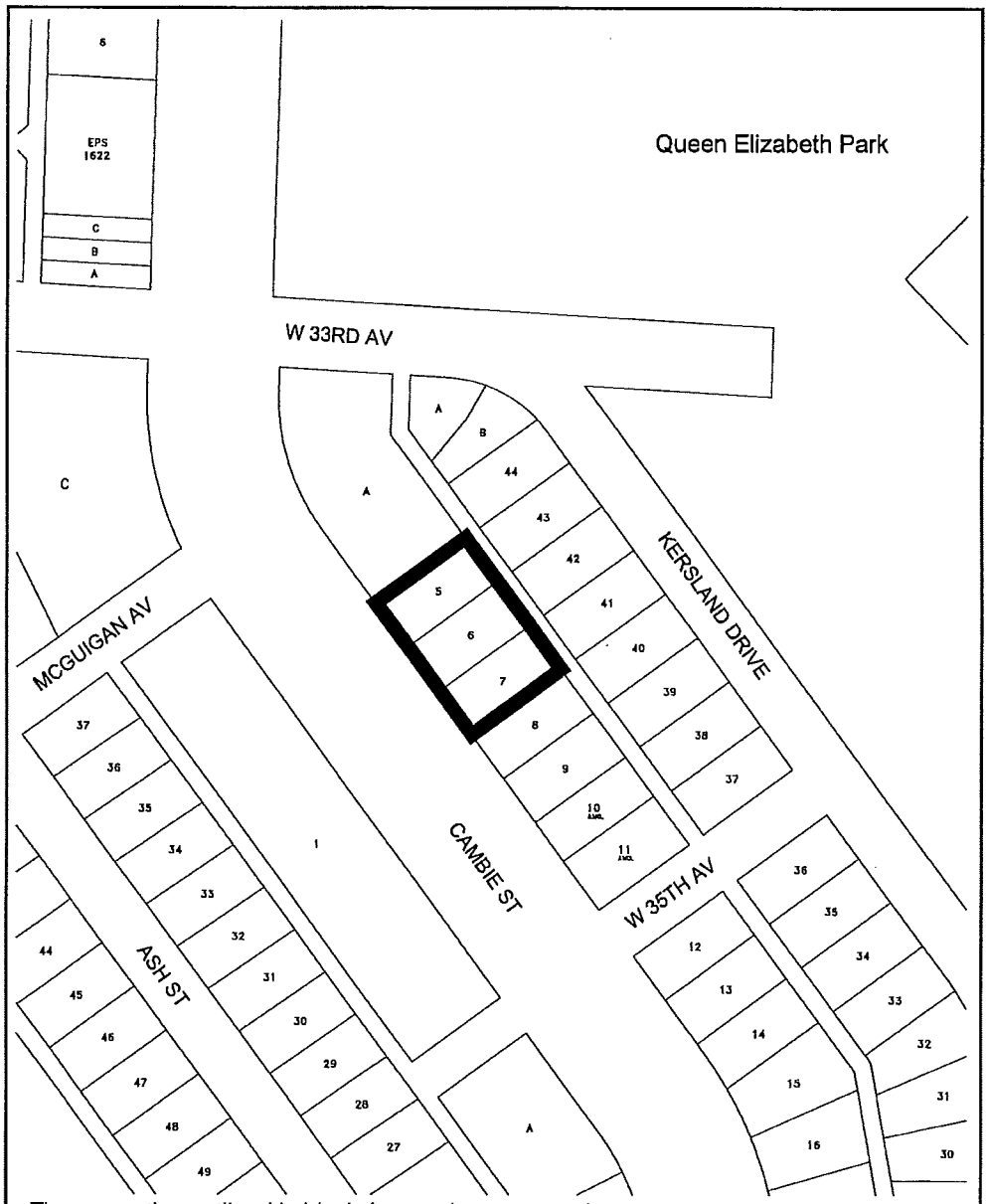
10. This By-law is to come into force and take effect on the date of its enactment.

ENACTED by Council this day of , 2016

_____
Mayor

_____
City Clerk

Schedule A



The properties outlined in black (▬) are rezoned:
From **RS-1** to **CD-1**

Z-704 (a)

RZ - 4976-5010 Cambie Street	map: 1 of 1 scale: NTS	↑
City of Vancouver	date: 2016-05-18	