

BY-LAW NO. 12512

A By-law to amend the Building By-law No. 12511 Regarding New Requirements for Certain Water Systems and Energy Efficiency

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 12511.
2. In Book II, Division B, Council adds a new Article 2.2.11.6. as follows:

“2.2.11.6. Cooling Towers

(See Article 6.3.2.15. of Division B of Book I (General) of this By-law.)

- 1) An operating permit shall be obtained for the installation of a cooling tower, or the retention of an existing cooling tower.
- 2) The Chief Building Official shall be notified within 30 days of any changes to the information that was last provided to the City with regard to the operating permit, in the form prescribed by the Chief Building Official.
- 3) If a cooling tower is removed or its use is permanently discontinued, it shall be safely drained, thoroughly sanitized, and the make-up water line shall be disconnected and capped.”.

3. In Book II, Division B, Council adds a new Article 2.2.11.7. as follows:

“2.2.11.7. Indoor and Outdoor Decorative Water Features

(See Article 6.3.2.16. of Division B of Book I (General) of this By-law.)

- 1) An *operating permit* shall be obtained for the installation of an indoor or outdoor decorative water feature, or the retention of an existing indoor or outdoor decorative water feature, including green walls with an integrated water system, except for an indoor or outdoor decorative water feature in a *building* used exclusively for residential occupancy containing no more than four principal *dwelling units*.
- 2) The *Chief Building Official* shall be notified within 30 days of any changes to the information that was last provided to the *City* with regard to the *operating permit*, in the form prescribed by the *Chief Building Official*.
- 3) If a decorative water feature is removed or its use is permanently discontinued, it shall be safely drained, thoroughly sanitized, and the make-up water line shall be disconnected and capped.
- 4) Where an outdoor decorative water feature is provided as an auxiliary system to a *building*, then the outdoor decorative water feature shall be considered part of the *building* for the purposes of this Article.”.

4. In Book II, Division B, Table 2.8.1.1. Objections and Functional Statements, Council adds:

“

2.2.11.6. Cooling Towers	
(1)	[F40,F41,F43,F46,F81,F82,F130-OS3.4,OH1.1,OH2.2,OH5,OP5,OE1.2]
(2)	[F40,F41,F43,F46,F81,F82,F130-OS3.4,OH1.1,OH2.2,OH5,OP5,OE1.2]
(3)	[F40,F41,F43,F46,F81,F82,F130-OS3.4,OH1.1,OH2.2,OH5,OP5,OE1.2]

”.

5. In Book II, Division B, Table 2.8.1.1. Objections and Functional Statements, Council adds:

“

2.2.11.7. Indoor and Outdoor Decorative Water Features	
(1)	[F40,F41,F43,F46,F81,F82,F130-OS3.4,OH1.1,OH2.2,OH5,OP5,OE1.2]
(2)	[F40,F41,F43,F46,F81,F82,F130-OS3.4,OH1.1,OH2.2,OH5,OP5,OE1.2]
(3)	[F40,F41,F43,F46,F81,F82,F130-OS3.4,OH1.1,OH2.2,OH5,OP5,OE1.2]
(4)	[F40,F41,F43,F46,F81,F82,F130-OS3.4,OH1.1,OH2.2,OH5,OP5,OE1.2]

”.

6. In Book I, Division B, Article 6.3.2.15., directly beneath the title of the Article, Council adds “(See Article 2.2.11.6. of Division B of Book II (Plumbing Systems) of this By-law.)”.
7. In Book I, Division B, Article 6.3.2.16., directly beneath the title of the Article, Council adds “(See Article 2.2.11.7. of Division B of Book II (Plumbing Systems) of this By-law.)”.
8. In Book I, Division A, Sentence 1.4.1.2.(1) Defined Terms, Council adds the following in correct alphabetical order:

“Low Carbon Energy System means a professionally operated and maintained district-scale or on-site system that supplies heat energy, primarily derived from highly-efficient and renewable sources, in order to provide space heating and conditioned ventilation air for buildings, and may also provide domestic hot water and cooling service.”.

9. In Book I, Division B, Part 10, Council strikes Article 10.2.2.5 and substitutes:

“10.2.2.5. Building Energy and Emissions Performance

- 1)** For a *building* required to conform with this Article, energy modelling shall conform to:
 - a) the applicable requirements of ASHRAE 90.1 ECB, or Part 8 of the NECB, and
 - b) the City of Vancouver Energy Modelling Guidelines.
- 2)** Except as permitted in Sentences (3) or (4), a *building* designed with this Article shall demonstrate the performance values of the proposed building comply with the limits in Table 10.2.2.5.A.
- 3)** Compliance with the GHGI limits in Table 10.2.2.5.A is not required where a *building* can demonstrate the performance values of the proposed *building* comply with the TEUI and TEDI limits in Table 10.2.2.5.B.
- 4)** Compliance with the TEUI and TEDI limits in Table 10.2.2.5.A is not required where a building is connected to a Low Carbon Energy System, and can demonstrate the performance values of the proposed building comply with the limits in Table 10.2.2.5.C.

Table 10.2.2.5.A Maximum Energy Use and Emissions Intensities Forming part of Sentence 10.2.2.5.(2)			
Occupancy Classification (1)	Total Energy Use Intensity (kWh/m2a)	Thermal Energy Demand Intensity (kWh/m2a)	Greenhouse Gas Intensity (kgCO2e/m2a)
Group C <i>occupancies</i> in <i>buildings</i> up to 6 Storeys, except Hotel and Motel	110	25	5.5
Group C <i>occupancies</i> in <i>buildings</i> over 6 Storeys, except Hotel and Motel	120	30	6
Hotel and Motel <i>occupancies</i>	140	20	8
Group D and E <i>occupancies</i> , except Office	120	20	3
Office <i>occupancies</i>	100	20	3

Notes to Table 10.2.2.5.A.:

⁽¹⁾ For *buildings* containing multiple *occupancies*, refer to the procedures on mixed-use buildings in Section 5 of the CoV Energy Modelling Guidelines.

Table 10.2.2.5.B Maximum Energy Use and Emissions Intensities Forming part of Sentence 10.2.2.5.(3)			
Occupancy Classification	Total Energy Use Intensity (kWh/m2a)	Thermal Energy Demand Intensity (kWh/m2a)	Greenhouse Gas Intensity (kgCO2e/m2a)
Group C occupancies	100	15	N/A

Table 10.2.2.5.C
Maximum Energy Use and Emissions Intensities
For Buildings Connected to a *Low Carbon Energy System*
 Forming part of Sentence 10.2.2.5.(4)

Occupancy Classification	Total Energy Use Intensity (kWh/m2a)	Thermal Energy Demand Intensity (kWh/m2a)	Greenhouse Gas Intensity (kgCO2e/m2a)
Group C occupancies in <i>buildings</i> up to 6 Storeys, except Hotel and Motel	110	25	5.5
Group C occupancies in <i>buildings</i> over 6 Storeys, except Hotel and Motel	130	40	6
Hotel and Motel occupancies	170	30	8
Office occupancies	170	30	3
Business and Personal Services or Mercantile Occupancies, except Office	170	30	3

10. 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.

11. This By-law is to come into force and take effect as follows:

- a) sections 2, 4 and 6 of this By-law are to come into force and take effect on January 1, 2020;
- b) sections 3, 5 and 7 of this By-law are to come into force and take effect on July 1, 2020; and
- c) sections 8 and 9 of this By-law are to come into force and take effect on June 1, 2021.

ENACTED by Council this 23rd day of July, 2019

Signed _____ "Kennedy Stewart"
Mayor

Signed _____ "Katrina Leckovic"
City Clerk