



**District Energy Equipment Floor Area
Ratio Exemption – Richmond Zoning
Bylaw 8500, Section 4.19**

**No.: INFO-32
Date: 2017-07-04**

Purpose:

To assist Developers in meeting the objective of Richmond Zoning Bylaw 8500, Section 4.19, which is to provide a floor area exemption to developments that are committed to connecting to district energy and are also committed to installing more efficient in-building mechanical equipment.

Background:

- Richmond Zoning Bylaw 8500, Section 4.19 aims to increase the energy use efficiency for the buildings connectable to the district energy system by using equipment which does not operate vapour compressors in heating mode.
- Richmond Zoning Bylaw 8500, Section 4.19 aims to reduce noise in the units since technologies that do not use vapour compressors in heating mode are much quieter.
- Richmond Zoning Bylaw 8500, Section 4.19 applies to every building that has a written agreement with the City to connect to the district energy utility.
- Oval Village District Energy Utility Bylaw 9134; Section 20.2 and the City's standard written agreement incorporating the commitment to connect to the district energy utility, requires that building mechanical systems must utilize DEU for not less than 100% of all the annual space heating and domestic water heating requirements. This requirement cannot be achieved with equipment using a vapour compressor to provide heating, and therefore this type of equipment is not permitted unless approved by the City Engineer.

Implementation:

- Richmond Zoning Bylaw 8500, Section 4.19 exempts 1 m² from the floor area ratio* (FAR) calculation for any dwelling if:
 - The dwelling contains mechanical, heating, ventilation and air conditioning equipment where a vapour compressor is not being used to provide heating; and
 - The Developer has entered into a written agreement with the City to commit to connect to the district energy utility.

* As defined in Bylaw 8500, Floor Area Ratio means the numerical value of the floor area of the building or structure relative to the site upon which it is located divided by the area of the site.

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- Examples of technologies that do not use a vapour compressor in heating mode, and would qualify the FAR exemption, include:
 - Hybrid heat pumps;
 - Hydronic perimeter heaters; and
 - 4-pipe fan coil systems.
- To utilize this FAR exemption:
 - At Development Permit stage, applicant advises planner in the form of a letter of intent to use an efficient in-building mechanical system;
 - At Building Permit stage, prior to issuance of the permit and in addition to the building design plans, the applicant is to submit a sealed letter by a registered professional, verifying that conditions for the FAR exemption available in Richmond Zoning Bylaw 8500 including supporting data, Section 4.19 have been met. The Sustainability and District Energy Department with support from Lulu Island Energy Company will review the submitted documents and verify the proposed system is district energy compatible and is compliant with the conditions of the FAR exemption in the Richmond Zoning Bylaw 8500, Section 4.19; and
 - Prior to issuance of an Occupancy Permit, the building(s) may be inspected for confirmation of compliance with the conditions of this exemption.

Should you have any questions, comments or suggestions concerning this bulletin, please contact Alen Postolka at apostolka@richmond.ca.

For a complete copy of **Richmond Zoning Bylaw 8500, Section 4.19**, please visit the City of Richmond website at www.richmond.ca/cityhall/bylaws.