# Standards for Heat Pumps 118 Aldersmith Place October 1, 2021

# **Type of Residential Heat Pumps:**

### Permitted

Air-Source Heat pump (Ducted or Non-Ducted).

#### **Not Permitted**

- Ground Source Heat pump (uses thermal energy from the ground) due to the requirement to dig below the earth's surface on the common property of the Strata; and
- Inverter Air Source Heat pump (no outdoor compressor unit is required), however, exterior duct holes are required to support air intake and exhaust, which requires holes bored into the exterior of the strata building structure).

## **Installation of heat pumps:**

- Homeowner of the strata unit must submit the 118 Aldersmith Place Alteration
   Agreement form and a completed "Heat Pump Installation Checklist" to Strata Council
   for approval;
- Heat pumps must comply with Natural Resources Canada standards for high efficiency:<sup>1</sup>
  - SEER (Seasonal Energy Efficiency Ratio, cooling seasonal efficiency performance): minimum rating for Canada is 14, best is 20.5 SEER;
  - o HSPF (Heating Seasonal Performance Factor) minimum for Canada is 7.1.
  - Electrical components must be CSA approved.
- Heat pumps are the sole responsibility of the homeowner for its installation and maintenance, including all parts interior and exterior to the homeowner's strata unit (compressor unit, duct channeling etc).

#### Locations allowed regarding the placement of the outdoor heat pump compressor unit:

- The outdoor condenser unit must be located at ground level, seated on a styrofoam/concrete-coated pad and the condenser unit anchored to the building with "L" shape brackets; and
- Residential heat pumps installed must comply with the Town of View Royal Bylaws, in particular Zoning Bylaw 900:

<sup>&</sup>lt;sup>1</sup> Natural Resources Canada high efficiency heat pump standards: <a href="https://www.nrcan.gc.ca/energy-efficiency/energy-star-canada/about/energy-star-announcements/publications/heating-and-cooling-heat-pump/6817">https://www.nrcan.gc.ca/energy-efficiency/energy-star-canada/about/energy-star-announcements/publications/heating-and-cooling-heat-pump/6817</a>

- i. Article 3.7.2 b) and d) regarding Projections. The compressor unit must meet the threshold distance limits for placement of outdoor heat pumps that states a heat pump "may project into the rear yard setback up to 1.5 metres".
- ii. Article 4.6.4 states "residential heat pumps are not permitted within the front, side or flanking yard, and must be at least 3m from any side or flanking lot line." The permitted locations for individual residents' heat pumps for 118 Aldersmith will be permitted in the rear yard, and the side yard of the unit. <sup>2</sup>

## Installation must be performed by a Contractor who:

- Is a certified heating and cooling professional who services and preferably operates in the Greater Victoria area;
- Confirms it will provide all required permits and a certified Electrician for installation; and
- Has the appropriate liability insurance and WorkSafe BC coverage.

<u>Maximum number of outdoor heat pump compressor units</u> allowed per strata unit is limited to one compressor unit only.

<u>Sound level of the outdoor compressor unit:</u> the maximum decibels (dB) of the individual compressor unit cannot exceed 55dB.

**Exterior slim-duct (or wide-duct) channeling** (for ductless heat pump installation): slim-duct or wide-duct channeling must be installed by the contractor at the time of heat pump installation and *must* be the same colour as the siding paint, eg. Cloverdale Drifting Sand.

<sup>&</sup>lt;sup>2</sup> The Town of View Royal Planner and Bylaws Officer clarified that a Strata is defined as one physical property regarding the definitions in Zoning Bylaw 900; hence, the lot lines and boundaries defined as a 'flanking lot,' 'lot lines,' and 'flanking yard' refer to the entire exterior perimeter of the Strat Lot. For 118 Aldersmith Woods, this would extend from Unit 1 to Unit 18, to Units 62, which are considered to be the exterior physical boundary of the Strata itself.