Cooling System Assessment Guide



This sheet will help you establish your desired specifications for a permanent cooling system (heat pumps, PTACs, central air conditioning) that will be communicated to an HVAC or engineering consultant.

BC Housing recommends that an air conditioning system have the following minimum requirements:

- Seasonal Energy Efficiency Ratio (SEER) > 15
- Energy Star certified (label on system)

Additionally, you need to know the following information about the system in order to make sure that the operation and maintenance of the system can be incorporated into existing maintenance and operation plans.

Go through the list below before engaging an engineering or HVAC consultant.

- System Control Type
 - Do you prefer centralized vs. decentralized, hard wired vs. remote controlled?
- Condensate Management Requirements
 - Does water get collected in the system? If so, how do you drain the water and how often does this system need to be drained?
- Filter Type
 - For air quality considerations (wildfire, smog, etc), look at combined systems that have air purifiers with MERV 13 and up filters
- Installation Instructions
 - Self installation vs. professional installation, plug in system vs. wall or window alterations
- Materials Warranty
 - How long is the warranty for and what does it cover?
- Labour Warranty
 - How long is the warrant for and what does it cover?
- Maintenance Requirements
 - How many times a year/season does the system need to be maintained?
 - Can you do the maintenance yourself? What is the maintenance process?
- Repair/Replacement Details
 - Where can you get replacement parts for this system? Is there a local supplier?
 - Is there a nearby repair shop that the supplier recommends?

Many factors can affect the type and size of air conditioning system that you need to purchase – these are some of the things that the engineering or HVAC consultant should consider:

- Room occupancy (maximum number when cooling room is in use)
- Room orientation (facing N, S, E, W)
- Number of windows
- · Room area and ceiling height
- The presence of a kitchen in a room
- Age of building (well insulated vs. not well insulated space)

- Air conditioning Time of use (only at night vs. all day vs. only during the day)
- The room/building electrical supply
- Number and location of outlets
- Local Climate (typical summer temperature range)

Make sure that the consultant you choose is a professional experienced with sizing air conditioning systems.