# HVAC & A/C NOISE: (Residential)

-Information to assist in purchase and installation of HVAC & Air Conditioners

Many residents of Cambridge find that after their HVAC system or air conditioner is installed it is in violation of the Cambridge Noise Ordinance-

The allowable HVAC and air conditioner noise levels, in accordance with the Cambridge Noise Ordinance, are as follows:

- -50db(A) between the hours of 6:00 p.m.-7:00 a.m.
- -60db(A) between the hours of 7:00 a.m.-6:00 p.m.

To be able to use your unit without restriction you must be in compliance from your neighbor's property line.

Listed below are some guidelines to help you be with in the allowable levels so that you can use your unit(s) without restriction.

## **BUYING AN HVAC or AIR CONDITIONER:**

Check the sound power level label on any HVAC or air conditioner that you may want to purchase. The lower the number the quieter the unit will be. The power level should be noted as a "db(A)" amount. If it is not on the label check the unit specifications for the db(A) level. Most units with have a 60-65db(A) listed which is already a violation of the City of Cambridge Noise Ordinance, but the high db(A) level is when you are standing next to the unit and the db(A) will decrease as distance from the unit increases.

## **INSTALLATION PLACEMENT:**

Placement of the HVAC or air conditioner is of the utmost importance. If an HVAC or air conditioning unit or units are placed at the side of your house, close to your neighbor's lot line, it is likely to be in violation of the Cambridge Noise Ordinance. This is due to the noise being reflected between the houses and amplifying the noise from the air conditioner. Building a fence to baffle the noise between you and your neighbor's house is minimally effective since fence height may only protect the first floor level and still be a violation from the height of the fence to the higher floor levels of your neighbor's home.

Placement of the HVAC or air conditioner in the front or side facing a street may reduce the noise since distance may be further. Placement in the back, if the neighbor's property line is enough distance away, may be an option too. It is easier to construct a sound barrier on the units that have distance from your neighbor's property line.

# **BAFFLING AN HVAC OR AIR CONDITIONER:**

If there is no reasonable distance from a neighbor's house and an HVAC system or air conditioner must be installed an acoustic enclosure must be installed. The enclosures are custom

built to allow proper ventilation. (Also, please check with the manufacturer so that the warranty will not be affected)

### **INSTALLATION CONTRACT:**

During purchase or during contractor installation ask for a contract that includes the HVAC or air conditioning unit being installed will be in compliance with the Cambridge Noise Ordinance. This will ensure that the retailer or installation contractor will select the best placement for the air conditioning unit. If the contractor refuses to sign a contract to be in compliance choose a contractor that is willing to sign a contract. Please include in the contract the Cambridge Noise Ordinance allowable levels or daytime and nighttime so that you can use your unit without restriction.

#### **NOISE INCREASE:**

Allow for noise increase due to mechanical deterioration. Worn bearings, compressor wear and worn rubber mountings increase noise. Regular scheduled maintenance will keep this noise reduced, but slight increase of noise over time should be taken into consideration.