Voter Hall 2nd Floor Cooling System

This cooling system uses recirculation fans with MERV 13 filters and a chilled water coil to cool the offices and commons rooms. The chilled water is made in the basement of Voter using 4 separate chillers. The chilled water is then pumped through metal pipes to the 2nd floor.

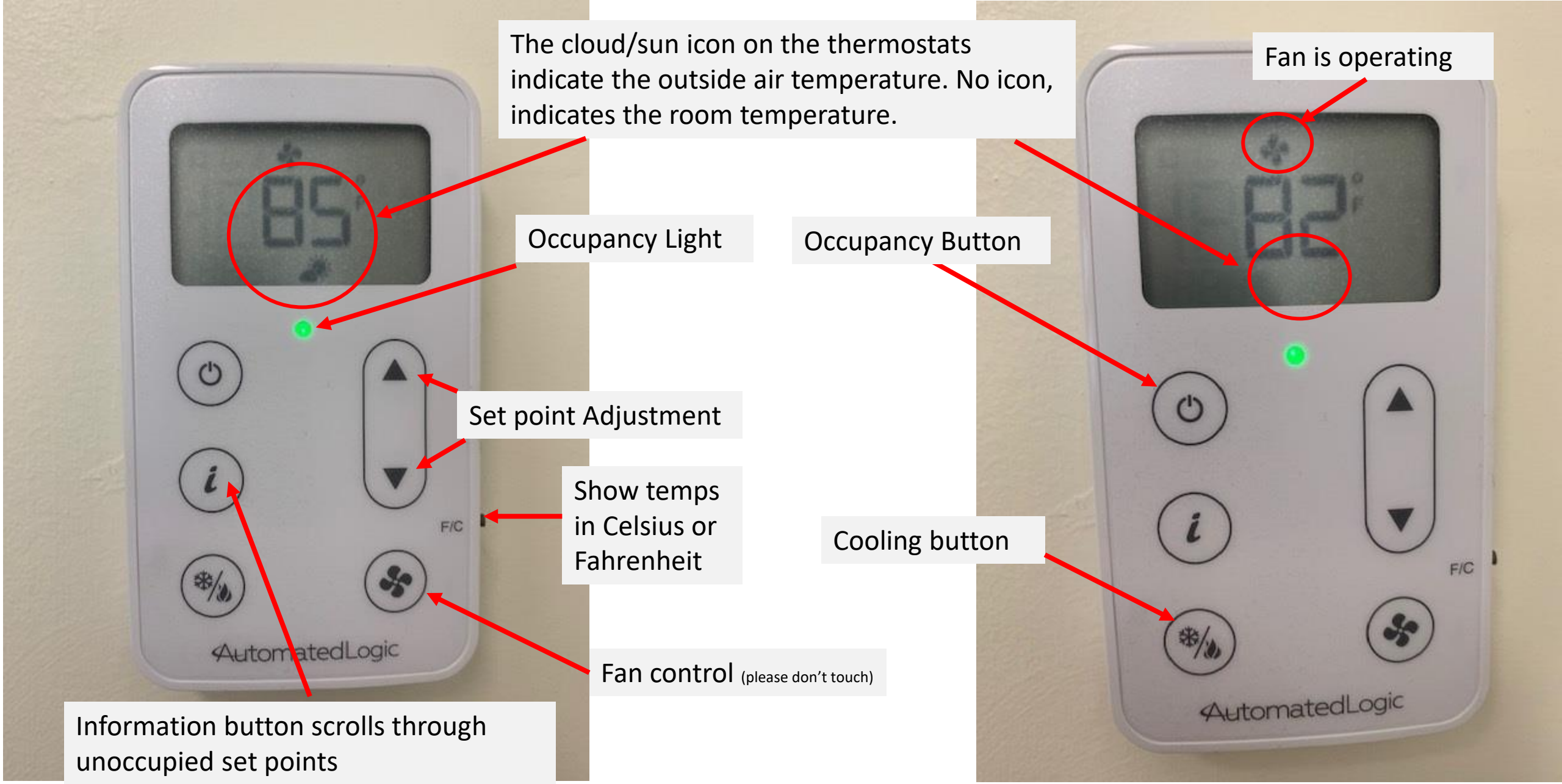
There are 9 separate zones of cooling. The zones are broken up as such-

- Zone 1- Room 206
- Zone 2- Rooms 207, 208 & 209
- Zone 3- Room 210
- Zone 4- Rooms 211 & 212
- Zone 5- Room 213
- Zone 6- Room 220 (large common space)
- Zone 7- Rooms 202, 203 & 204
- Zone 8- Room 200 (large common space)
- Zone 9- Room 205 (Meeting Room)
    - This room also uses a reheat coil to help heat the room as well as an Energy Recovery Ventilator to bring more fresh air into the space for the potential increased occupant load.

The zones utilize occupancy sensors as a means of energy savings. Upon entering a space, the occupancy sensor will detect motion and after a 1 ½ minute delay, the fan will operate (the delay is meant for short visits in a space to grab something, **to not** engage the system). Cooling will also begin for all spaces if the room temperature is above 75 degrees. The cooling set point for those spaces is 75 degrees. The single office zones, rooms 206, 210 & 213 are treated a bit differently. The fan will start as described above, but the occupant will need to initiate cooling through the push of a button on the thermostat. Offices on their own zone as well as the meeting room can increase the setpoint of the cooling from 75 to 79 degrees. All spaces will operate indefinitely if the occupancy sensor detects motion. If no motion is detected after a 30-minute period, the fan will stop, and the room will go to vacancy mode. The common spaces have a time delay of 2 hours before they go to vacant mode.

The below shows how the rooms are zoned and locations of thermostats and describes how to use the thermostats for single office cooling.

T = Room thermostat


The cloud/sun icon on the thermostats indicate the outside air temperature. No icon, indicates the room temperature.
Occupancy Light
Occupancy Button
Fan is operating
Set point Adjustment
Show temps in Celsius or Fahrenheit
Cooling button
Fan control (please don't touch)
Information button scrolls through unoccupied set points
AutomatedLogic
F/C

To manually place room in occupied mode

Upon first entering, you will notice the light is not lit. The room is in vacancy mode. You must wait for the 1 ½ minute delay before this turns green.

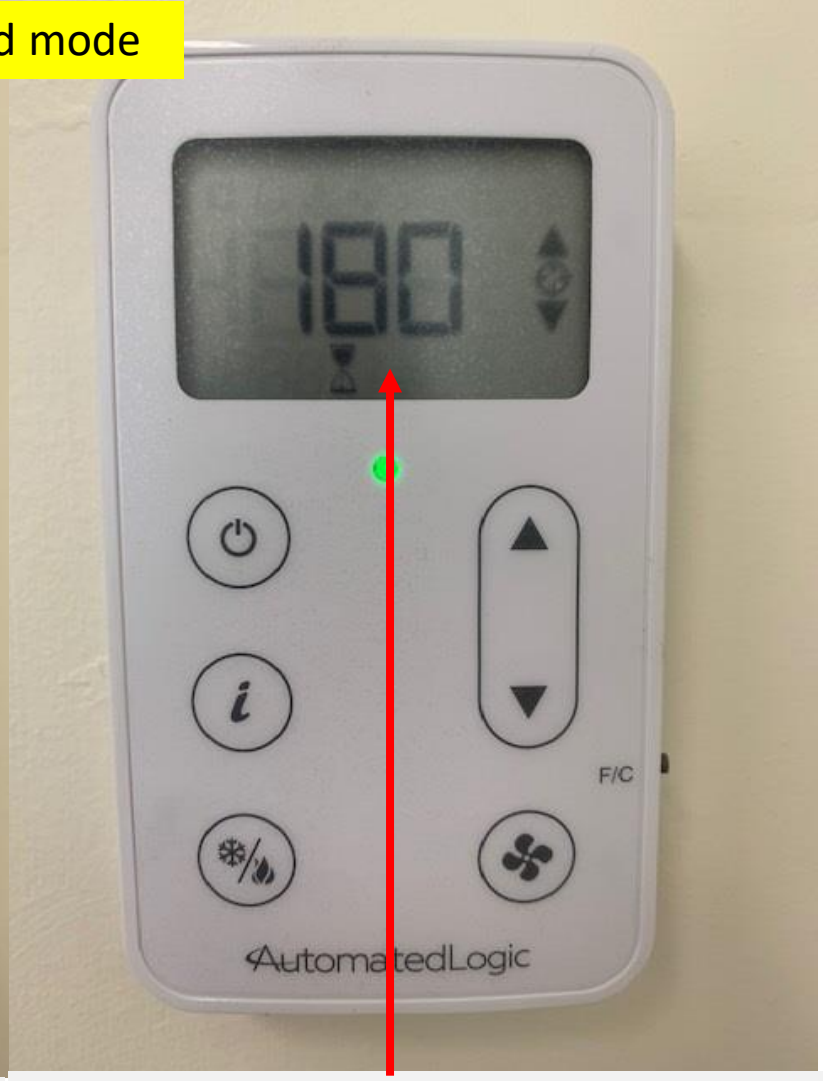
If you do not wish to wait the 1 ½ minutes, push this button once. The green light will turn on and a time of 60 will show on the screen.

Do not push any more buttons and the room temperature will show again along with how many minutes you will have left in occupancy mode.

To adjust manually the amount of time in occupied mode

If the motion sensors are broken or there is a desire to keep the system running for longer than 30 minutes because of lack of movement. Push once.

Then use the up/down arrows. Time will increment/decrement by 60 minutes.



180 minutes will be the most at one time. Stop pushing buttons when you have the time that you wish and the system will revert back to the room temperature and begin the timed countdown.

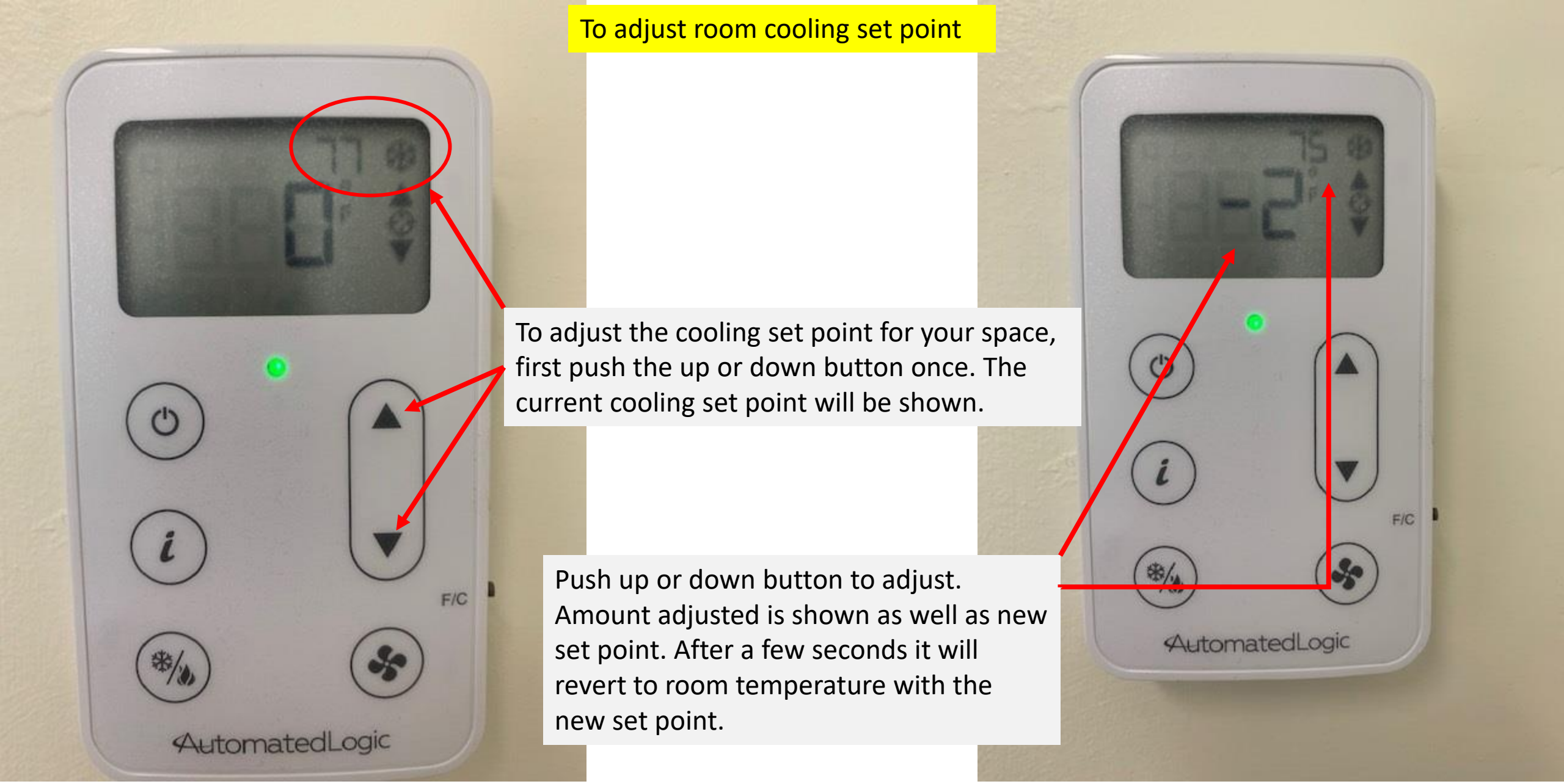
To manually place room in cool mode

If the occupancy light is green(either from the occupancy sensor, or manually through the push button), then you may use the cool button. The first push will have the words “fan only” scroll across the screen.

Push the button a second time and “cool on” will scroll across the screen. Only push the button twice, and then leave it alone.

After several seconds, the screen will revert back to the room temperature and the amount of time the unit will be in occupied mode. After several more seconds, the snowflake icon will appear. The unit is now in cooling mode.

To adjust room cooling set point



To adjust the cooling set point for your space, first push the up or down button once. The current cooling set point will be shown.

Push up or down button to adjust. Amount adjusted is shown as well as new set point. After a few seconds it will revert to room temperature with the new set point.