Service Building Rms. 002-004 and Lower Suite common space HVAC System Operation

Building Equipment-

A small HRU (heat recovery unit) located in the storage room in this space provides 100% fresh air to all rooms. This unit pre-heats the incoming outdoor air. It does so by flowing the warmer exhaust air through a specially designed core all while flowing the fresh air through this same core, thus warming the cold outdoor air. The two air streams never touch one another.

There is also a fan unit next to the HRU which helps to push this air around. This fan unit uses either steam or chilled water to heat or cool the space.

Cooling/Heating system-

Enabling heating to the building uses a slightly complicated algorithm to turn on the steam. But basically, with outdoor temperatures that are less than 55 degrees, the heat will be enabled. If outdoor temps stay below 65 for a day or so, the heat will also be enabled until they rise above 65 degrees, at which point the heat shuts off.

There is a chiller in the Service Building that produces the chilled water for cooling. It needs to be enabled for the season and that typically happens when outdoor air temperatures will stay high enough so as not to have any below freezing nights, otherwise, the cooling tower water that is outside may freeze and ruin equipment. (**NOTE:** A 70- degree day in early April will most likely **not** have the chiller enabled for the season)

Once cooling is enabled for the season, the outdoor air temperatures will need to be above 62 before the chiller starts. At that point, cooling will be enabled to the building.

Occupant comfort control-

These spaces have occupancy sensors and will turn on the HRU and fan unit once occupants are in the space. They shut off 30 minutes after the last motion is sensed. Each space can have an impact on the space temp set point. Here is how that works-

Heating-

Because the common space has its own heating coil, the set point for that space is just what you see, within a range. During the summer cooling season, users can adjust their set point from a low of 75 degrees F to 82 degrees F. For the winter heating season, the set point can be adjusted from a low of 65 Degrees F to 72 degrees F.

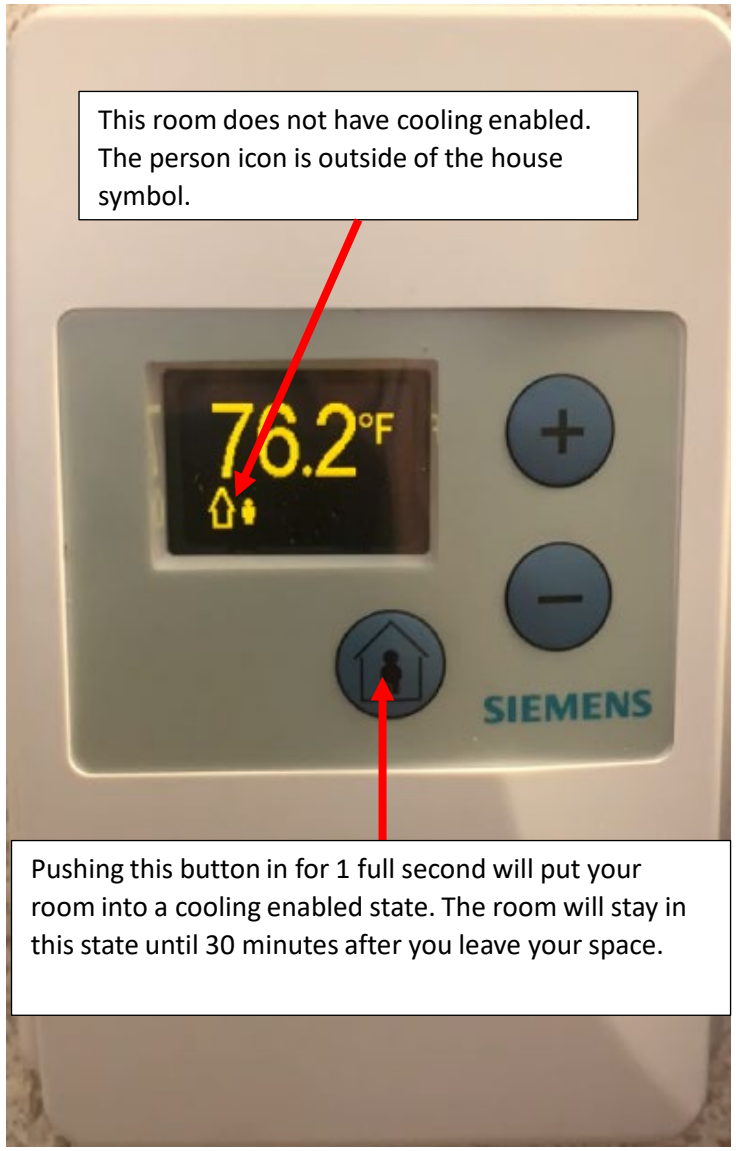
For rooms 002-004, they share a heating coil. The rooms that are occupied (motion has been sensed in them) will have that room's set point used in an average with any other occupied rooms' set point. Also, the temperatures of each occupied space is used to get an average for space temperature control. The same temperature set point control band is used as above.

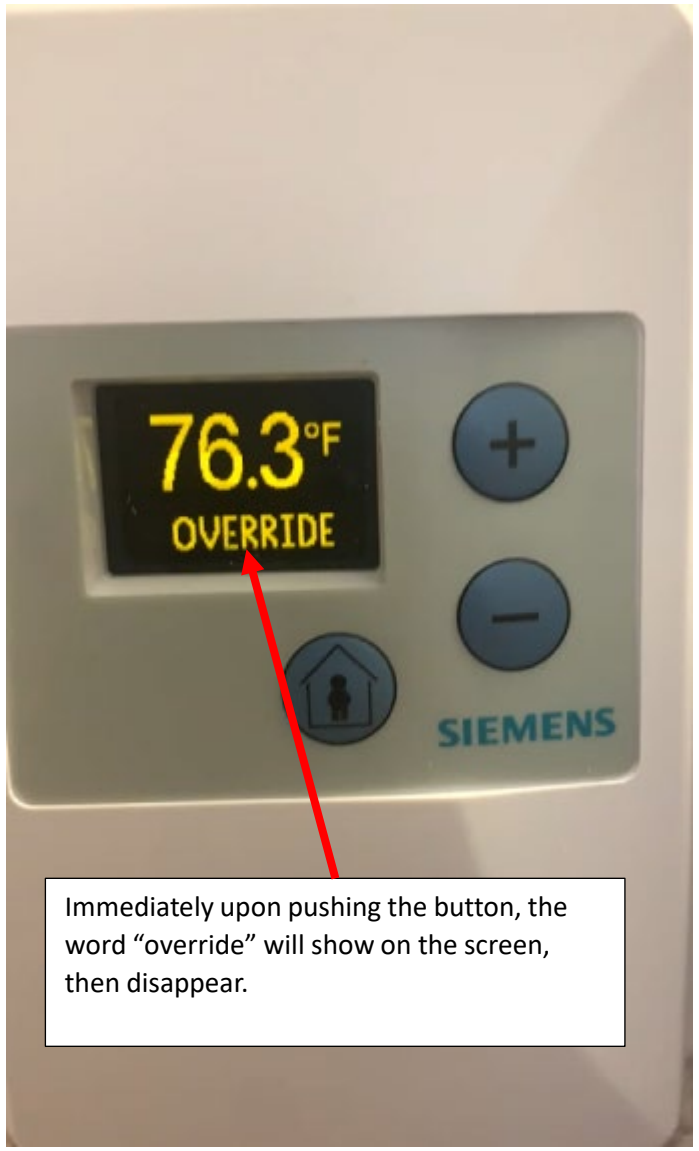
Cooling-

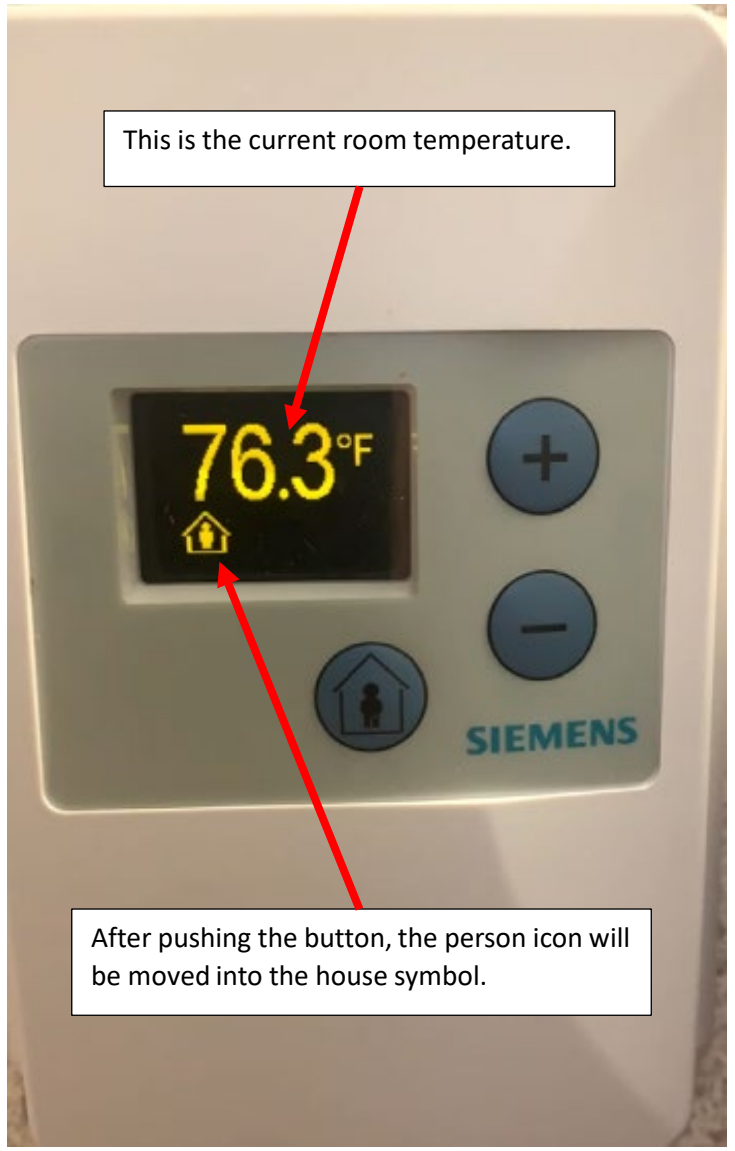
Because this entire lower suite area utilizes the same chilled water coil, all spaces can be used for both set point and temperature control. However, an occupant will need to push a button in order to get cooling enabled in the space AND for their room to be used in the averaging calculations. Once the button is pushed, the space will stay enabled for cooling for 30 minutes after the motion has ended in that space.

If the button is not pushed, the room will be in a non-cooling state. The cooling set points will then be 82 degrees and that room will not be used for averaging or set point calculations.

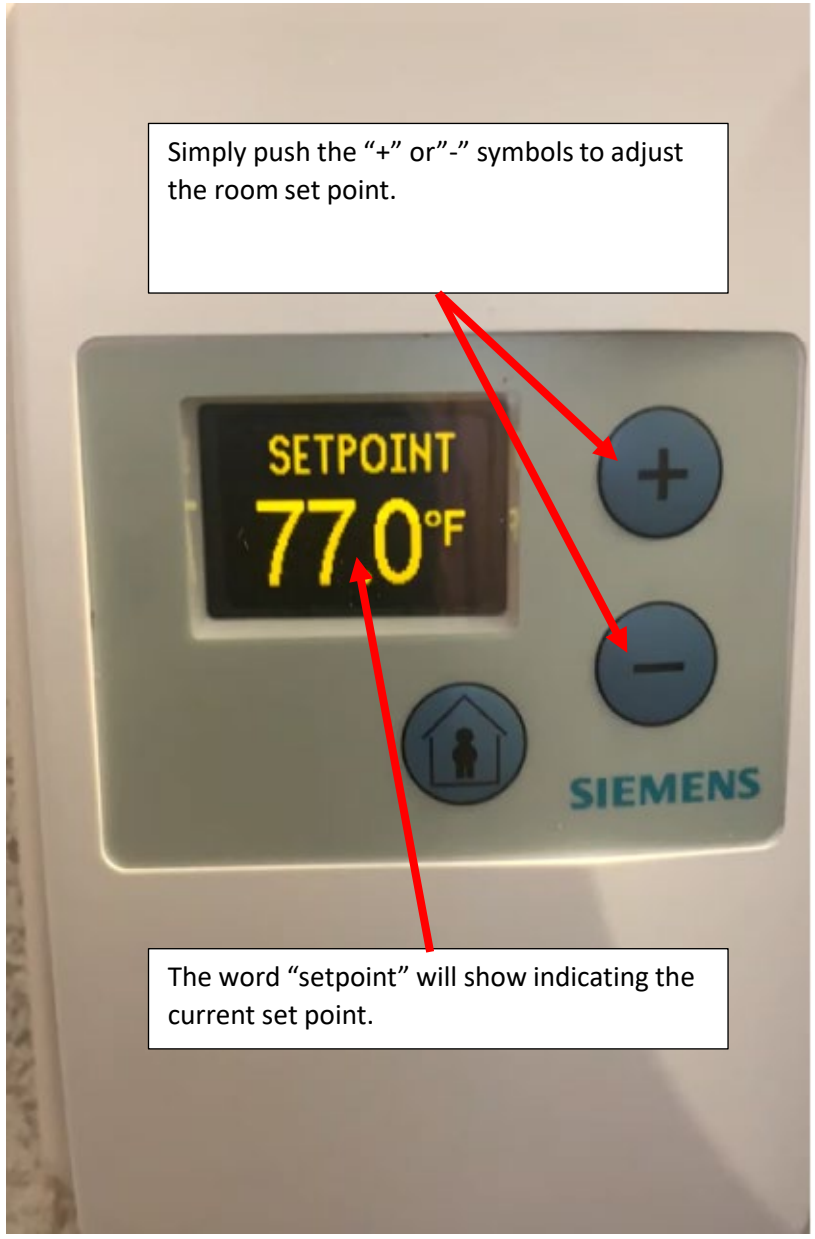
Find the room thermostat and follow instructions.







Adjusting the room temperature set point.



Please note: While these devices will show a minimum set point of 55 and a maximum set point of 95, the room controller will only control between 65 - 72 during heating season and between 75 - 82 for the cooling season.

Example: Leaving the set point at 72, will have the unit cooling to 75 degrees during the summer and 72 degrees in winter.