

Centeno HVAC System Operation

Building Equipment-

An air handler located in the attic provides 100% fresh air to all spaces. There is a heat recovery coil in this unit which pre-heats the incoming outdoor air. It does so by flowing the warmer exhaust air through a coil filled with a glycol mixture and pumping that warmed glycol to another coil in the fresh air stream, thus warming the cold outdoor air.

All rooms have a fan unit in front of each window. This fan unit uses either hot water or chilled water to heat or cool the space.

Cooling/Heating control-

Enabling heating to the office wings uses a slightly complicated algorithm to turn on the heating pumps. 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.

The process of switching between using hot water or chilled water is done manually, this is done in the spring and fall. Because of this manual process, Facilities tries to do this switch only once a season. It's a guess as to the correct date this should occur. Typically, Facilities will look for sustained outdoor air temperatures that stay above 60 degrees daily before switching to using chilled water and cooling mode. (**NOTE:** A 70- degree day in early April will most likely **not** have the cooling season 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-

Centeno users must push the occupancy pushbutton on their room thermostats to put the room into an occupied state. The occupied state will last 4 continuous hours.

Once in an occupied state, the room heating/cooling fan (located near the windows) will keep the room at a desired room set point.

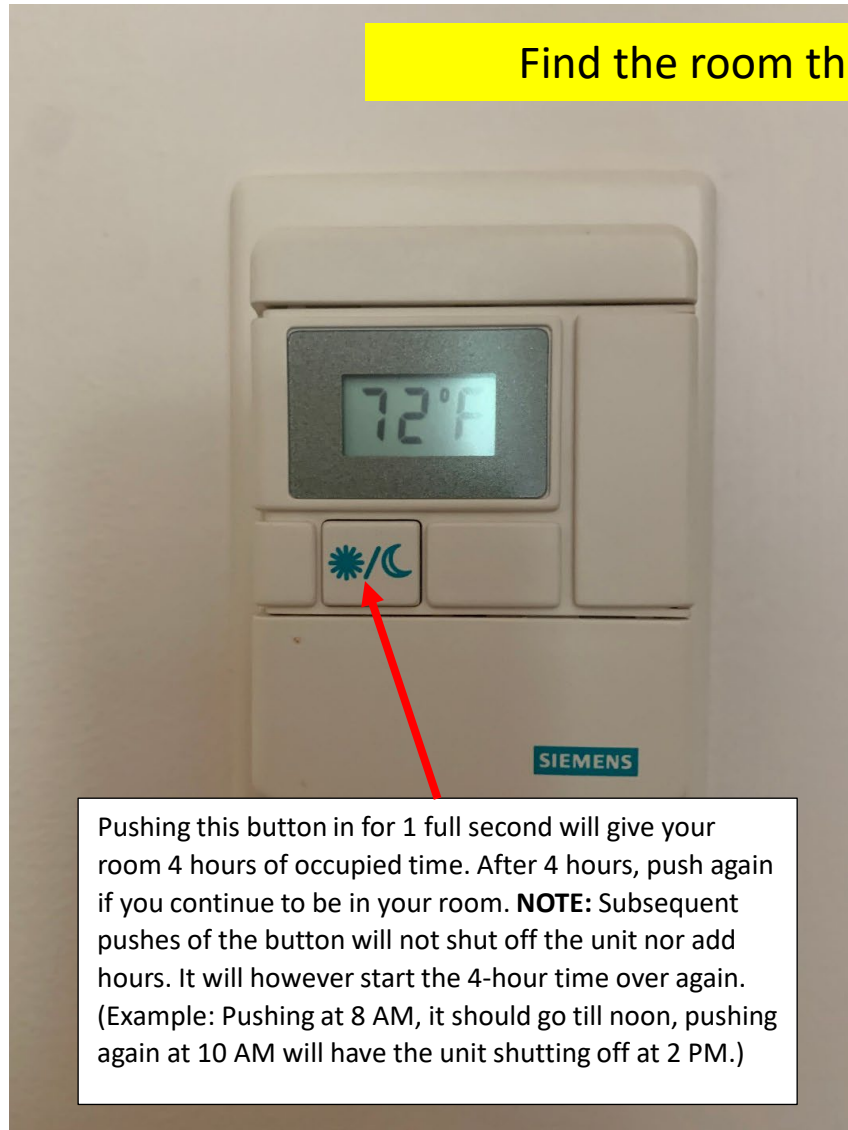
Occupants can adjust their heating and cooling set points by using a slide hidden under the cover on the right side of the thermostat. The scale is accurate (and admittedly hard to read) but gives the occupant a means to control their desired set point.

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 .

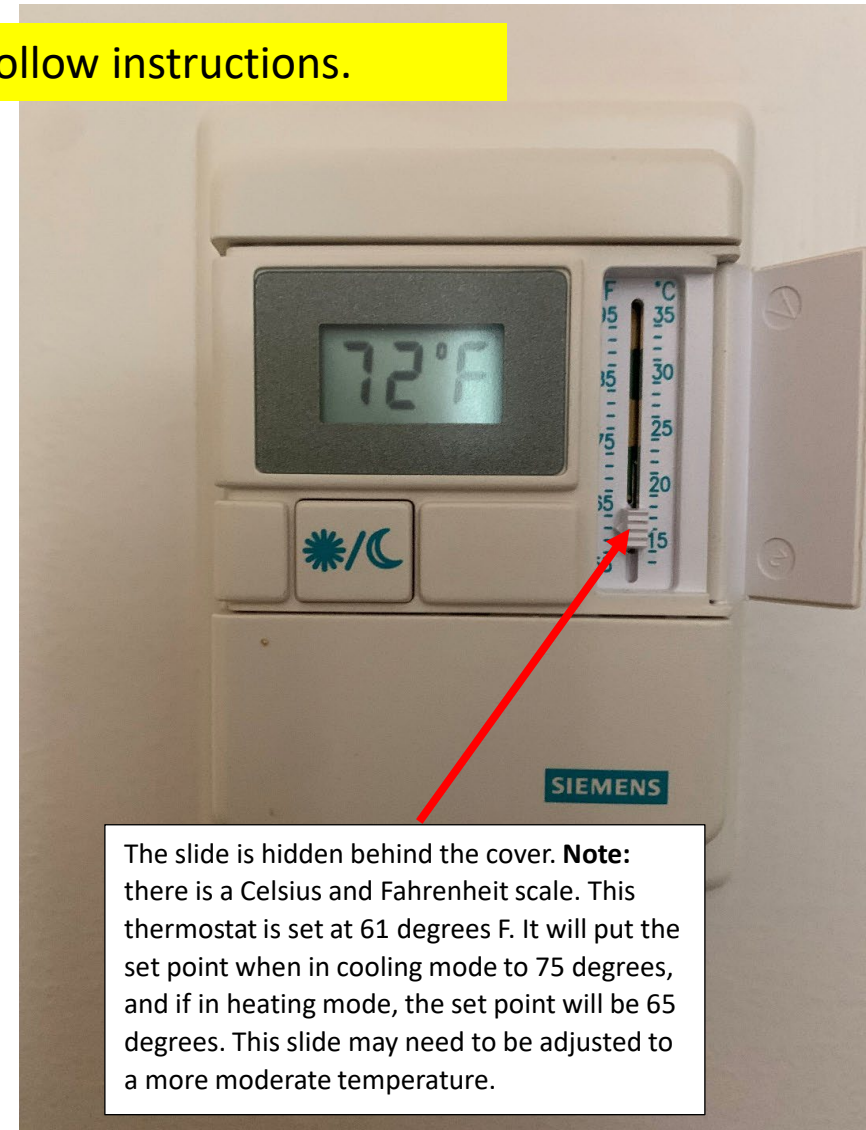
If the occupancy button is not pushed, the room will be in an unoccupied state. The heating and cooling set points will then be 65 degrees to 82 degrees respectively.

The fan unit near the window has a switch to select a fan speed or turn off the fan motor. Please do not turn this off. Select a speed that “feels” good to you. We suggest low in the winter and high for summer, however, if the fan is cycling on/off often, lowering the fan speed may help to keep the fan from cycling.

Find the room thermostat and follow instructions.



Pushing this button in for 1 full second will give your room 4 hours of occupied time. After 4 hours, push again if you continue to be in your room. **NOTE:** Subsequent pushes of the button will not shut off the unit nor add hours. It will however start the 4-hour time over again. (Example: Pushing at 8 AM, it should go till noon, pushing again at 10 AM will have the unit shutting off at 2 PM.)



The slide is hidden behind the cover. **Note:** there is a Celsius and Fahrenheit scale. This thermostat is set at 61 degrees F. It will put the set point when in cooling mode to 75 degrees, and if in heating mode, the set point will be 65 degrees. This slide may need to be adjusted to a more moderate temperature.

Once pushed, you can not “un-push”, the room will be in occupied mode for 4 hours. It will also take several minutes before you hear or feel results from the fan coil.

To adjust or check fan unit speed setting.



A door at the top of the unit should look like this.
(It can be on either the left or right side of the unit.)

This cover is hinged, lift at the face of the unit and
the door will open towards the wall.



You will see this switch under the cover. Adjust to
the speed desired, remember not to shut off.