

HVAC

- Check air filters and replace if dirty. If your facility does not have an air filter replacement protocol, create one to check and change the filters every 3-6 months. For constant-volume systems, dirty air filters will reduce the total air being supplied, which means the cooling/heating mechanism in the unit will have to run longer to cool/heat the space or will not be able to keep up the cooling/heating load on the hottest/coldest days. For VAV systems, the VFDs will increase the fan speed to overcome the additional pressure drop in the dirty filter.
- Reset all thermostats in unoccupied areas to an unoccupied setback. This could be set to a recommended maximum of 85 F for cooling and a minimum of 55 F for heating. When starting the units back up, stagger them and don't start all at the same time. Allow sufficient recovery time during off-peak hours for startup, and start units when other electrical loads are at a minimum (i.e., when lights and manufacturing equipment are off).
- Allow all units serving the unoccupied spaces to cycle on and off with the internal load. The fan should be running only when there is a need for heating and cooling during unoccupied periods.
- Shut off general exhaust fans serving all unoccupied spaces.
- Monitor building loads and run only the minimum number of boilers and chillers required to meet the loads.

LIGHTING

- Turn off the lights in all unoccupied areas, leaving on only security/egress lighting.
- Consider replacing the security lights with LEDs. For example, there are LED replacement tubes that fit into existing T5 and T8 light fixtures. Confirm the type of light fixture and availability of LED replacements compatible with that fixture. LEDs' superior lamp life, operational savings and dimmability can offset their higher initial cost.
- If your facility has automatic lighting controls that turn lights on in the morning, set them to unoccupied mode.

CONTROLS

- If your facility is using chilled water (water typically in the range of 44-56 F), reset the leaving water temperatures from the chillers. Each day, consider increasing the leaving water temperature by 1 degree to the lower of a maximum of 55 F or the manufacturer's recommendation. If the air handling units are unable to keep up with the load in the space or the pumps start to run excessively, stop and reduce the chillers' leaving water temperature.
- Your facility may not need heating during this time, but if your boilers are on, there are ways to save energy. If your facility has a condensing boiler for heating hot water, reduce loop temperatures. The boiler leaving water temperatures can be reduced to 120 F. Only do this if you are sure you have a condensing boiler. Non-condensing boilers must stay above an entering water temperature of 140 F.
- If the facility has a building management system, set the facility to unoccupied mode.

VENTILATION

- Shut off ventilation air being supplied to all unoccupied spaces. There are many ways ventilation can be supplied in a facility.
 - Dedicated outside air system (DOAS)
 - Modulating outside air damper
 - Fixed position outside air damper

MISCELLANEOUS

- Shut down dust collection/vacuum pumps while the processes are not running.
- Shut down compressed air systems. Leaks in compressed air piping will create a false load on the system, which can be significant (up to 30% of total load).