
Top 5 Calls We Get for an HVAC Test & Balance

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1. Comfort Complaints

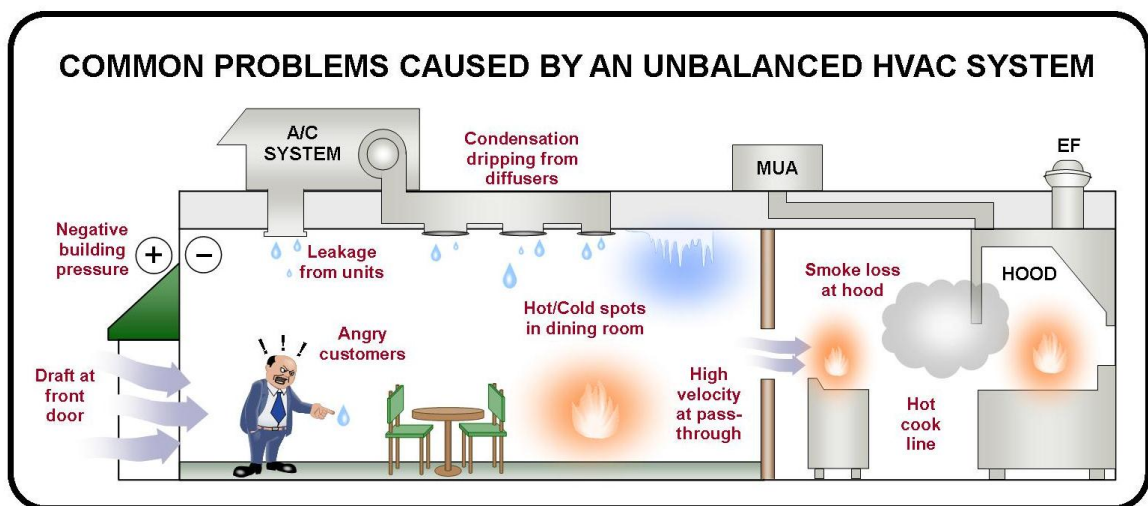
Unhappy customers complain to management, sometimes all-too-often, when discomfort is affecting their dining experience. Common reported complaints include: hot/cold spots in the dining room, doors are difficult to open, odor, and draft entering in from the front door. In a majority of circumstances, these issues are caused by an HVAC system that is not performing to design specifications. For example, if your facility is experiencing temperature-rated comfort issues, you may want to first check your coils. In one particular balance in July 2014, we found that a restaurant's coils were covered in a foot of ice!



“Why is it so cold in here?”

2. Sick Building Symptoms

Just like people, if health isn't maintained, every building will eventually show symptoms of illness. We see the following symptoms on a regular basis when we're called out for an HVAC rebalance: condensation, stale/stuffy air, slippery floors, and poor smoke capture.



3. Replacing Old HVAC Equipment

When upgrading rooftop units, coils, ductwork, moving diffusers around, etc., Facilities Managers (FM) want to be ensured that their new equipment was properly installed and is going to work as they expect. Unfortunately, it's not as simple as other replacements, such as changing a light bulb. HVAC equipment replacements must be inspected and tested for proper operation, otherwise the entire facility's ecosystem could be thrown out of balance.



An improperly installed exhaust fan on a restaurant rooftop

4. Balance After Remodel

Reconstructing the floor plan of a building affects the facility's HVAC and airflow. As referenced in the ASHRAE kitchen ventilation handbook, *"Rechecking the air balance should not be necessary more than once every 2 years unless basic changes are made in facility operation."* Changes in facility operation that affect airflow include the following: Layout changes, adding/removing walls, adding rooms, and installing new cooking equipment. Each HVAC system is originally designed for a particular building layout. Once that layout changes, the HVAC must be adjusted to keep efficiency and lowest possible operating cost. In many situations, a post-remodel HVAC rebalance report is specified in the mechanical prints.



When planning for a remodel, don't make ductwork an afterthought, or you might end up scaring guests away with the duct-octopus.



5. Missing Balance Report

Facilities Managers (FM) appreciate a documented balance report to act as a factual starting point when HVAC issues arise. Sometimes these reports get lost with changes in management, so when FMs need to verify the proper settings of their HVAC equipment, they'll order a rebalance to obtain this data. We find this especially frequent in leased facility situations whereby tenants want to be sure they are getting the correct airflow that they are paying for. Having a balance report documented provides functional data to analyze in the event that equipment malfunctions.

We recommend that Facilities Managers have a grip on their HVAC health and performance to prolong the life of their facility investments. In the wild world of HVAC, there's no telling what you might encounter.



A pigeon just might make a home of your rooftop unit
