Main Differences Between Airflow Balancing and Air Balancing

Airflow balancing can be confused with air balancing when dealing with building management systems. Although both are part and parcel of routine operations of the HVAC system, their nature and operation still differ from each other.

Air Balancing

Air balancing is responsible for maintaining balanced airflow in your facility with the proper functioning of HVAC components. Since every temperature controlled building has hot and cold spots which can increase the energy consumption of the HVAC system, proper adjustment of the HVAC system can play a vital role in dealing with imbalanced temperature.

Airflow Balancing

Airflow balancing on the other hand directly relates to adjusting temperature points in the heat exchanger of your HVAC system. The heat exchanger is a device that transfers heat from one matter to another and in this case, it exchanges thermal energy taken from inside air to the outside air and maintains a balanced airflow in the facility. So airflow balancing entirely depends upon the proper functioning of heat exchanger which thus optimizes your HVAC system.

Comparison between Air Balancing and Airflow Balancing

After ascertaining the fundamental difference between air balancing and airflow balancing, let's dig deeper into the main differences between them.

- Air balancing is responsible for maintaining a balanced atmosphere in different parts of the temperature control facility, while Airflow Balancing deals with adjusting temperature points inside the heat exchanger device of the HVAC system.
- The air Balancing process takes place outside the HVAC System's body on building management level, while Airflow balancing happens in the heat exchanger device inside the HVAC system.
- Ai Balancing is mostly handled by BMS professionals. These facility controllers use BMS software to tackle with hot and cold spots. While Airflow Balancing is normally dealt with by HVAC technicians who perform this task by optimizing the HVAC system. However, recently a new software called ClevAir has been manufactured—which can be installed in the heat exchanger device—to optimize the HVAC system. This software enhances the efficiency of the airflow balancing process by monitoring and adjusting the heat exchanger almost after every minute by keeping it optimized 24/7. To know more about the ClevAir you read more on this here.

Which one is more Energy Efficient?

Both are equally important when reducing energy consumption. Air Balancing reduces the extra burden on your HVAC system by tackling hot and cold spots of your building and maintaining a balanced atmosphere, while Airflow Balancing reduces the cost of HVAC operations and saves your precious money. If you want your BAS and HVAC systems to function at their maximum potential this user-friendly software can make it happen.