

### **Summary**

Initial building pressure upon arrival was  $-0.156''$ . After looking through the mechanical plans it appears the building may have been designed negative. Outside airflow designed to enter the building per prints equaled 10,451 cfm. Exhausted airflow per prints added up to equal 13,369 cfm, causing the building to have a design of negative -2918 cfm. This doesn't include roughly 800 CFM of outside air that can be brought in through FCU-1 and FCU-2 but which isn't specifically stated on the mechanical floor plan. The mechanical schedule was not available. Some designs such as the ERV were taken off of the original balance report.

Currently read airflow is OA +8980 cfm. and exhausted air flow at -9930 cfm. This leaving a net airflow of -950 CFM.

Upon arrival MAU was running at 89% on the ECM. MAU was read at hood PSP and also traversed. Hood reading at PSP was calculated as 4311 CFM. MAU traverse was also measured as 4416 CFM. Upon further inspection, MAU intake on the side of the building was covered in dust and dirt and restricting the MAU airflow. Steak 48 is going to have this intake cleaned to allow for proper flow.

ERV supply airflow was running above design CFM but was not reduced to prevent increasing negative building pressure. Exhaust on ERV was not operational upon arrival; Daikin tech was on site Wednesday Morning and was able to get the exhaust fan to run but was unable to set exhaust fan speed. Exhaust fan was turned back off per the request of Steak 48 to prevent building from becoming further negatively pressured.

PCU fan total is within design airflow.

EF1 dish hood is above design cfm currently operating at 1406 CFM while design calls for 1125 CFM. Per Steak 48 fan has to run at current speed and remain above design to capture dish hood steam.

Building pressure was taken with all equipment turned off, building pressure was positive neutral  $+0.003''$  at door. This indicates that the base building is not having a major impact on Steak 48's pressure.

### **Recommendations:**

1. The original mechanical schedule from the engineered designs and/or the DOAS submittal are critical for understanding the original design of the space. It appears that the building may have been designed -2400 CFM negative originally. Recommend trying to get these documents. National TAB reached out to the architect on 5/15/25 with no response yet.
2. In order to help not increase negativity of the building, the ERV exhaust was left off. However, the exhaust component of the ERV is critical for operation of the ERV. This could cause temperature and humidity issues in the space.
3. The MUA intake louver is clogged with dirt and needs to be cleaned. Airflow is 4311 CFM out of 6451 CFM design as a result.

4. After the above items are addressed, a return trip is recommended to re-test the MUA, possibly slow down the PCU, balance the ERV exhaust, slow down the ERV supply, and measure/balance FCU-1 and FCU-2 outside air.