

National TAB was called to P.F. Chang's San Antonio to address concerns of humidity/condensation, and warm temperatures in the space.

Initial findings were of extremely negative building pressure (-0.095" W.C. average), and low RTU supply air flow on all RTUs. Hood exhaust was found to be within design or marginally low.

RTU supply air flow was increased as much as possible at time of visit. See issues section for recommendations on how to further increase RTU supply air flow. Outside air to the RTUs was set proportionally low, in order to not cause poor RTU performance with too high of an Outside air: Return air ratio. Kitchen hoods performed as designed despite some measuring lower than design CFM. These low flow rates were kept as-is to aid in achieving a positive building pressure. Kitchen staff were interviewed to ensure good performance. Hood supply air was kept low to aid in kitchen hood smoke capture. The type of plenum used is called a "back return" system. It is located behind the cooking equipment and can sometimes cause poor smoke capture if air flow is set too high.

After RTU supply cfm was increased, and outside air was set proportionally, the building pressure became -0.0095" W.C. average. The overall comfort in the building was improved. Humidity remains an issue in the dishwasher area.