

Summary

Purpose of the visit to Freddy's in McDonough GA was to address complaints of hood capture issues.

Arrived on site and talked to the manager. They explained that grease is accumulating throughout the building. The dining room floors are slippery with grease. They also showed grease that had accumulated on the ceilings and in the walk in coolers that has to be cleaned regularly.

Initial airflows were measured. The hood exhaust airflow was found to be at design. However the MUA airflow is very low (1072 CFM out of 2321 CFM). There was some minor grease accumulation on the bottom of the PSP at the hood. Pulled down the PSP and confirmed that the tops were clean and not clogged. RTU's 1 and 3 are low on flow. RTU-2 is within tolerance but on the low end. The outside air dampers for RTU's 1 and 2 were opened too much and bringing in a high ratio of outside air. Reduced some for better performance. Building pressure is currently very negative. Smoke capture was observed on both hoods. Hood serving the fryer has adequate capture unless the drive thru door is left open in which case there is some loss. The grill hood has significant smoke loss out the back of the hood and is the primary cause of grease throughout the space.

Recommendations:

1. The most significant issue causing smoke capture issues is the griddle not being centered under the hood. There is very little overhang over the side of the hood closest to the back door and this is where the smoke loss is occurring. The griddle cannot be moved due to adjacent table that is secured in place with large diameter conduit underneath. Next steps to resolving will require some collaboration to determine the next best step:
 - Not sure if feasible, but moving the table so that griddle can be moved over would be the best case scenario.
 - 2nd best option would be to install a full vertical endpanel or wall on backs of the hoods. Would require that the monitors be moved.
 - Cooking on griddles only on the half closest to the front of the store should also reduce smoke loss if possible with Operations.
 - A small (12"x24") perforated diffuser between the hood and wall behind the hood may help push smoke back into the hood. An accessible damper needs to be installed at the takeoff. Still will likely be some smoke loss so this method is not preferred. In this situation the return grilles will also need to be split and distributed throughout the kitchen to reduce the return air path.
2. The equipment on the roof is very dirty and appears to be impacting airflow. The MUA and RTU blower compartments have significant buildup in the blower wheels. The interior of the units are also very dirty and should be cleaned. Evaporator coils need to be thoroughly cleaned. Once these units are fully cleaned it's anticipated that airflow will increase.

3. Once the units are cleaned, recommend checking that the adjustable motor pulleys can be adjusted for balancing.
4. The kitchen RTU perforated diffusers are clogged with grease and need to be thoroughly cleaned or replaced.
5. The AC-PSP portion of the hoods are dirty and need to be dropped down and cleaned.
6. RTU-3 evaporator coil had frost forming likely due to the very low airflow on this unit. Once unit and diffusers are cleaned, anticipated airflow will increase and that the frosting will stop.
7. 4-way style diffusers in the kitchen need to be changed out for perforated style diffusers. 4-way diffusers near hoods can direct drafts at the hood and cause rollout issues.
8. Economizer for RTU-3 is not functional and needs to be repaired. It was found unplugged. Plugged in and heard the actuator moving but the damper did not move.
9. Drive thru air curtain and door are not functional and need to be repaired. The door is staying open and drafts from the window are traveling through the space making the smoke capture worse at the fryer and griddle.
10. RTU Outside air filter is dirty and needs to be cleaned.

Other issues that are not impacting hood performance but need to be addressed:

11. Condensate drains are not connected and water is pooling up on the roof.

See punchlist items on the following pages for more details/pictures.