

M/E/P FIELD REPORT

Date of Visit: 4/4/2024
Date Submitted: 4/9/2024
Project Name: Central Hardin High School
Project No.: 20009
Location: Hardin County, Ky
Time In/Out: 9:30am- 3:30pm
To: Inga Hardman
From: Michael Warren
Copy: Joe Jones; Brandon Cecil; David Epperson; Ethan Kelly

Comments:

STW attended the progress meeting on this date and reviewed the site for progress and quality of installation.

Items Observed and Discussed – Action Items are indicated with Bold text:

1. Sprinkler rough-in is ongoing in Area F, Area B sprinkler rough-in is 95% complete.
2. Rigid ductwork has been installed in the Café and Media Center. Ductwork openings have been covered with plastic. Ductwork in the Media Center has been covered with plastic for protection from fire-proofing.
3. Ductwork installation is ongoing on the East section of 2nd floor Area B.
4. Roof drains are being connected to the roof leaders in Area E today. This needs to be completed as soon as possible for the roofer to continue his work.
5. S&R is working on mechanical rough-in in Area F. Plumbers were hanging copper piping during this STW site visit.

6. Joe Jones raised a question regarding the fire-dampers in Area B, where the ducts penetrate the second-floor slab down to the first floor. While these fire-dampers are installed in the ducts, the opening around the ducts is much larger than what was needed for the duct routing. This opening will need a shaft wall to maintain the required 2-hour fire-rating.
7. AES is 90% complete with Area B, including trim. Rough-in in Area E is nearly complete. Rough-in for the second floor of Area F is ongoing. Rough-in in Area F is nearly caught up with what has been dried-in.
8. John Stith requested that AES coordinate Training for the Lighting Controls in Area A. This training needs to occur in the next 30-40 days prior to Graduation.
9. There are still several heat pumps that need to have the VAV (outside air) and Exhaust take-off swapped on the return air plenum. This needs to occur to ensure that Outside Air reaches the spaces served and doesn't short cycle out through the Exhaust. See Action Items below.
10. As discussed in previous meetings, the heat pumps are not to run during the day. The units shall only run at night when there is no construction activity. Until the units can be controlled via the BAS system, they must be manually shut ON/OFF at the disconnect of each unit. Filter media must be installed on Return Air grilles. The filter media must cover the entire grille and be secure. Filter media needs to be inspected on a weekly basis for cleanliness.

Action Items From Previous Reports – Items struck-through are complete:

1. There are several heat pumps on the mezzanine that will need to have the VAV Outside Air and Exhaust take-offs swapped on the return air plenum of the heat pump. The VAV outside air connection needs to be closest to the HP fan. In several cases, the Exhaust takeoff is closest to the HP fan, which will cause the outside air to short-cycle and not reach the occupied spaces. This was discussed after the progress meeting with Randy Dillard, Steve Turner, and Michael Warren. Examples were pointed out on the mezzanine.
 - a. **Correct take-offs for Outside Air and Exhaust Air take-offs at Return Air plenums for heat pumps on the mezzanine.**

2. The HPs, ductwork, and fittings were all covered with plastic as previously requested.

a. **Continue to protect equipment and ductwork.**





Roof drain in Area F. The roof drains in Area F need to be tied in as soon as possible for the roofer to continue his work.



AES is continuing rough-in on the platform of Area B and Area F.



Photo shows an example of takeoffs for VAV Outside Air and Exhaust Air being installed backwards. In this installation the Outside Air will be pulled through the Exhaust Air duct, instead of reaching the spaces served.

In the photo, the VAV serving outside air is the box/duct on the left, and the exhaust duct is to the right. The heat pump is shown sitting on the floor, to the far right.

This installation was observed on several heat pumps and will need to be corrected.

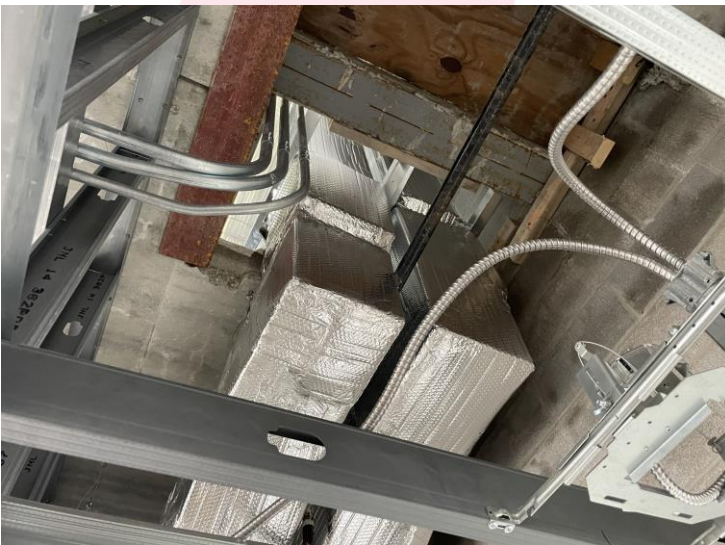
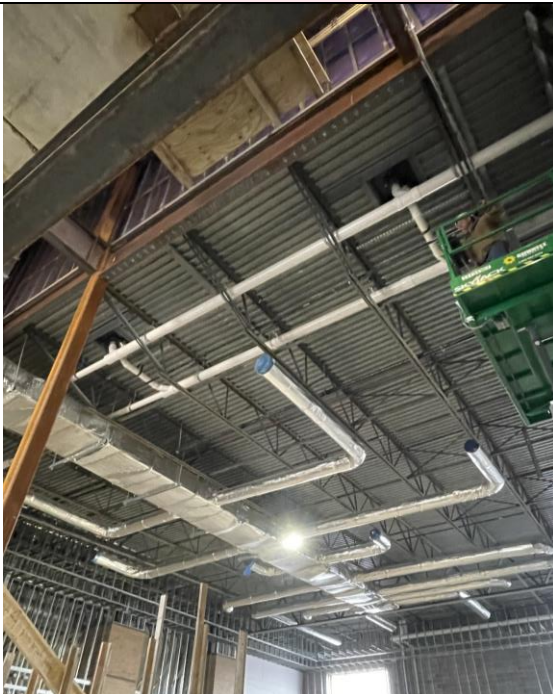


Photo of ducts penetrating the Second-floor slab in Area B. Note that the opening provided for the ducts is much larger than necessary. While the ducts do have the required fire-dampers, the remaining opening will need to be closed in via a shaft wall to maintain the 2 hour fire-rating. Access to the fire dampers must be maintained per code.



Installation of rigid ductwork in the Media Center and the Café is complete. Photo of the ductwork in the Media Center. Note that the ductwork has been wrapped with plastic to protect it from fireproofing of the structure overhead.



S&R is connecting the roof drains to the leaders in Area E Commons.



Plumbers are installing copper lines in the Admin Area F.



FCU-F102 was found laying on the floor of Work Room F127. This unit needs to be stored properly until installation. It needs to be off the slab and wrapped with plastic.



Supply air registers have been installed in the Café area. Roof leaders have been connected to the roof drains.



Conduit for fire-alarm on the platform of Area B.



Panels have been set and conduits connected on Area B platform. Installation of conductors is set to begin.



Area B (in partial) has passed above ceiling inspection for Lower Level, 1st floor, and 2nd floor. Installation of Ceiling tiles is ongoing.

Rough in of sprinkler lines is ongoing in Area F.



Insulation of ductwork has maintained pace with duct installation. Photo of insulated duct from the platform to below.



END OF REPORT