

Lessons Learned



— MECHANICAL CONTRACTORS —

Date: 2/15/22

Region: Kennewick

Project: Trios Tower Expansion

Incident Title: AHU-4 Frozen Chilled Water Coil

Summary

During the construction phase at Trios Hospital, a new AHU-4 was purchased and put into service for the operating room HVAC system while the new floors were constructed. This set up was temporary as, the final use of this unit was to serve the new level 2 and 3 buildouts.

After AHU-3 was brought back online, the temporary duct and piping was removed from AHU-4, and the AHU-4 was lifted on to the newly constructed roof and set in its permanent location.

On 2.2.22, the Apollo team onsite put water to the unit, and upon doing so discovered that there were multiple cracks to both chilled water coils in the unit.



What Went Right?

- The cracks in the coils were discovered before the space and unit were turned over, meaning there would be no impact to the owner's occupation of the space.
- The Apollo team formulated a plan for replacement of the coils and were able to have new coils built and delivered in 2 weeks.

What Went Wrong?

- Water was trapped in the coil after the gravity-fed drain down process was complete and froze as the unit sat through the winter not in use.
- Coils were not blown out with compressed air, only drained out at the low points

Lessons Learned

- You cannot trust that a coil will gravity drain. There are too many bends in a coil which increases the possibility of water getting trapped during the drain down process.
- Always drain and then blow out your coils with compressed air, no matter what time of year it is.
- Train your crews on proper winterization. You may not be the one performing this operation and every member of the Apollo team needs to know proper winterization procedures.