

Bielfeldt Athletics Administration Building



Building Gross Sq. Ft: 40,084

Retrocommissioning December 2020 - March 2021

Team Visit Period:

Principal Building Use: Administration, coaching, marketing

Building & Occupant Overview

The \$7.2 million, 43,000-square-foot Bielfeldt Building was built in 1994 and incorporates facets of other DIA and university buildings throughout campus. The roof is arched similarly to that of the Armory. Columns are imbedded in the wall of the Hall of Fame Room subtly reminding visitors of the columns found at Memorial Stadium. Window sills look like those found at Huff Hall. The red brick and limestone materials are similar to those used on most campus buildings. While the glass found on the exterior of the building is a light blue echoing the University's colors of orange and blue.

Highlights include:

- A professional development and seminar room equipped with state of the art audio/visual equipment
- A large lounge used to greet recruits and entertain potential donors, locker rooms used by both the DIA staff and women's soccer team, a training room, exercise room & DIA library
- The HVAC systems consist of 2 main AHUs and several FCUs throughout multiple zones with various uses/needs and run



Project Highlights

- ☐ Calibrate room t-stats for all AHU's
- ☐ Confirm operation of perimeter heat actuators and valves
- ☐ Install MA static pressure sensor in AHU's
- ☐ Adjust dampers so they close tightly when called to be closed
- ☐ Clean, test, and calibrate all VAVs
- ☐ Reduced/controlled exhaust in mechanical rooms
- ☐ Install separate DDC t-stat to control perimeter heat
- ☐ Replace VFD serving the return fan for AHUB
- ☐ Fixed chiller problems
- ☐ Implemented occupancy schedules, units were running 24/7 365 day per year

Retrocommissioning Specifics & Results

Retired existing building temperature control system and replaced with an Alpha system. This improved the visibility of the building systems.

Reduced airflow noise in the athletics directors office, a problem for a long period of time.

Maintained the VAV boxes, over 50% of them had operating problems

Repair or adjust reheat coil controller for makeup air in VRF served areas to provide 66-degree makeup air

Provide separate t-stats or provide a dead band such that the mechanical room doesn't vacillate between heating and exhaust

RCX installed EP main for min and max OA, RA, and EA dampers that energizes on supply fan damper command

Install occupancy sensor to run the exhaust fan (EF-B) serving the locker rooms, shower rooms, and exercise rooms for a specified amount of time

Modify diffusers and airflow to reduce over ventilating and control room airflow in locker rooms

Overall, the Retrocommissioning Team has been successful in reducing costs by over \$112,600 as of November 2023, with a projected savings of \$25,000 annually, corresponding to a substantial 47.7% reduction in