



HVAC Design/Install: A Challenge Met for Aesthetic Quality, Historic Integrity and HVAC Performance

EXTRAORDINARY OFFICE SPACE - INCLUDING A BOWLING ALLEY

Complete HVAC Design and Installation on the 3rd Floor of this Mixed Use, Multi-Owner 6-story Historic Downtown Building, and That's Not All...

Just completed, this HVAC design and installation provided more than its fair share of opportunities for our design team. Besides the fact that it was on the middle floor of a 6-story building on busy Meridian Street in Downtown Indianapolis, our crew installed everything with great care to ensure that this open-office concept was an appealing space for its tenants. **This is an 18,118 sq. ft. open office concept that also features a brand new fully functioning bowling alley.**

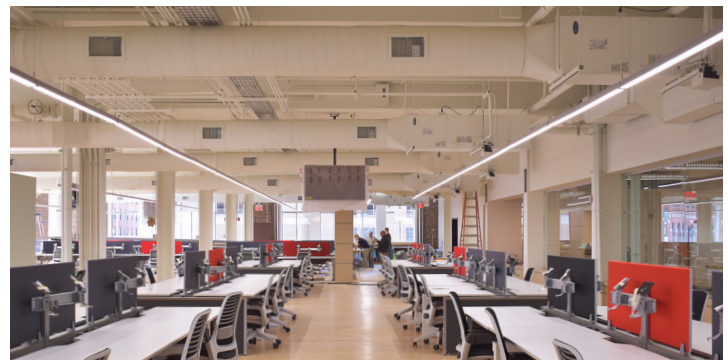
Challenge: The existing system in this building consisted of (2) large air handling units that used city steam, piped up from the basement to condensing units located in the mechanical room. This system had been abandoned. With non-modulating fresh air/exhaust air, there was no monitoring of air quality. With a constant, preset amount of unconditioned air brought into the space without any consideration of what was needed, the current system's efficiency was significantly decreased, and the comfort level was unacceptable. Johnson-Melloh was called upon to design a system that would not impact the residential floors above. A concern for the historic integrity of the exterior meant that our design could not include lines running through the walls and up to the rooftop. With fully exposed equipment, careful consideration of the visual appearance was necessary.

(more on reverse side)



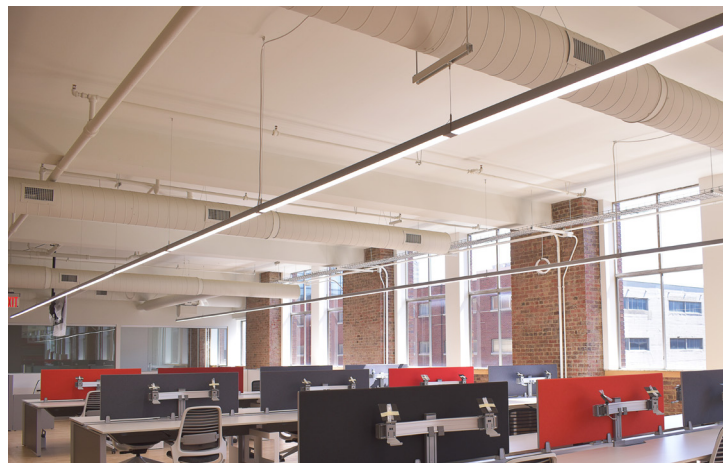
Johnson-Melloh Mechanical - Since 1976

- **Contracting** - Full Service Facility Planning
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This 18,118 sq. ft. open office concept included exposed mechanicals throughout.

JM Solution: We incorporated split system HVAC units with electric re-heat and demand space ventilation. This allows for proper building static pressure as well as monitoring and controlling the carbon dioxide levels in the space. This system delivers the required fresh air into the space while also controlling the volume of outside air being delivered – based on the varying number of people occupying the space. **Our design** used (11) smaller systems allowing for better zonal control, space pressure/ carbon dioxide monitoring with modulating fresh air intake dampers and frequency driven variable speed exhaust fans. Each zone is controlled by a Wi-Fi enabled 7-day programmable zone controller for enhanced efficiency and comfort.



We appreciated this opportunity to work with Kort Builders, and we look forward to assisting them on the 1st Floor of this building as well. More to come on this project!

Johnson-Melloh is the premier mechanical service, maintenance and design/build mechanical contractor serving the greater Indianapolis area. For private, public and commercial as well as healthcare facilities, we not only service and maintain boilers, chillers and specialized refrigeration units, we also offer design/build and installation for mechanical systems, building automation systems as well as LED lighting, solar hybrid solutions and more as part of an overall cost containment strategy for facilities.



About this:

- Split system HVAC units with electric re-heat and demand space ventilation
- Monitoring of static pressure and carbon dioxide levels
- 11 small systems for better zone control
- Modulating fresh air intake dampers
- Frequency driven variable speed exhaust fans
- Wi-Fi enabled, 7-day programmable zone controls

Other: With this, we were able to provide a design and system that did not impact the structural integrity of this 100-year old building while resulting in a comfortable, aesthetically pleasing, energy efficient workspace.