What You Should Know About Office-to-Lab Adaptive Reuse

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Your facility needs more lab space, and you've been asked, "Can we just convert the under used office floors?" At first glance, converting your offices to labs, whether just a floor, a wing, or an entire building, may make a great deal of sense: The facility may already be equipped with many of the elements your labs will need, such as break areas, conference rooms, and workstations, the intended lab space may be in proximity to other amenities like the cafe, fitness center, or parking.

What may not be as obvious, though, are the unexpected capital expenses that may be lurking within those existing office spaces. Before your transition plans get too far along, make sure you consider the following:

- **HVAC Systems.** The element with the largest impact in adapting office space to lab is typically the HVAC system. The environmental requirements for a lab, including temperature, humidity, pressurization, and air-change rate, are usually much more rigorous than what is needed for an office space. In general, the HVAC system(s) serving your office space is not likely to be suitable for reuse in your new lab spaces for meeting laboratory environmental standards. Likely upgrades will include more and/or larger ducts above the ceiling, larger duct shafts from floor-to-floor, larger/heavier rooftop equipment, and additional sensors, monitors, and controls.

- **Building Structure/Shell.** The scope and cost of the HVAC replacement and/or modifications are only part of their overall impact. Reinforcing the roof structure may be needed to support the larger/additional rooftop equipment, while enlarging duct shafts through intervening floors may be required to house additional/larger ductwork. Often, because of existing office floor-to-floor heights, new labs will have lower-than-desired ceiling heights needed to accommodate the larger ductwork as well. Office floor slabs and framing are typically not designed to the same criteria that lab floors require; therefore, reinforcing may be necessary to accommodate labs with vibration sensitive equipment or increased loading.

Beyond these impacts, other unique laboratory requirements including lab-specific utilities, finishes, casework, and power will further impact the scope and cost of changing from existing office space into a lab. Before you sign on for this type of project, remember to get the complete picture of all that a new lab will require, as well as the building and other upgrades needed to support the re-designed space.

experience in brief

Hixson's Bryon Sutherly and Roselia Harris recently presented "Where We Work: How a Building Design Facilitates Collaboration and Innovation" at Prepared Foods Magazine's New Products Conference. Missed it? Catch the archive of their presentation at this link!

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