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By Katelyn Filippetti, Jeff Fullerton and David Atwood: Modular walls for sustainability and enhanced acoustical privacy

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For many years, walls made from studs and drywall have been used to divide space, provide visual and acoustical privacy, and contain power and communications for access to technology. With the emergence of sustainable design, building professionals are looking at new ways to improve the performance and flexibility of fixed wall construction while maintaining its benefits. To improve their bottom line and remain nimble for changing workplace configurations, many companies are finding modular wall solutions, such as moveable and demountable walls, as a high-performance alternative to fixed interior wall construction. Moreover, combining modular wall systems with an integrated application of sound absorbing finishes and background sound masking can result in a highly performing, adaptable environment that meets or exceeds traditional wall constructions.

Shire Pharmaceuticals constructed a traditional new office space in its laboratory facility in 2007. As the project neared completion, major changes to the office space were required necessitating significant demolition and new mechanical and electrical systems. After that experience, facility managers began looking at ways to provide organizational changes without the same impact on operations.

Shire did three things that serve as a blueprint for their anticipated interior office fit-out projects: they studied the probable design scenarios that might occur in the future, looked at the impact on the delivery of utilities and where fixed elements must be located, and worked collaboratively with the wall panel manufacturer Haworth to customize the product choices and installation details within the traditional construction process. As a result, the modular wall product - LifeSPACE ERA specified by Integrated Interiors of Boston - was then tailored to provide the most efficient utility delivery system, maximize future flexibility, and provide appropriate levels of sound privacy for the offices. Shire is currently constructing a new combination office and laboratory building that includes significant moveable walls based on the successful experience gained from past projects. Acentech of Cambridge, Mass. consulted with Shire and the architects, KlingStubbins, on noise control and sound absorption techniques.

Modular walls can maximize acoustical performance with exceptional sustainability while providing greater organizational adaptability in the long-term.

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