

Integrating day-lighting science to design effective work environments

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ABSTRACT

Welch Allyn, a leading global manufacturer of frontline medical products and solutions, decided to improve the image, function, and sustainability of its global headquarters in upstate New York by designing a new expansion that incorporates day-lighting science to ensure the design was effective, comfortable and energy efficient.

This LEED-Gold facility included the addition and renovation of their original 1980 manufacturing facility. The project implemented multiple sustainable initiatives including master planning the entire campus to transform the corporate headquarters into a safer, environmentally responsible manufacturing facility allowing the company to recruit and retain top quality research and development professionals. The design proposed the creation of a multistory atrium that would recreate the exterior environment, connecting manufacturing, engineering and administrative environments, to provoke a behavioral change in the company's employee culture.

The atrium was positioned to capture the vistas to the exterior and maintain the natural light in the original facility. The development of informal and flexible meeting areas around trees, plants and water feature, complemented the optimum design of daylight structures. The multiuse central plaza created an effective energy efficient break space, opened to employees from all departments for informal interaction, meetings of multiple sizes, and display of manufacturing. The refined daylight strategy in combination with functional and programmatic adjustments improved the working environment resulting in better human performance and higher productivity.

BIOGRAPHY

Eugenia joined QPK Design in 1996 and became a partner in 2001. She received her combination Masters and Bachelor of Architecture from the Pontifical Catholic University of Chile, and worked as design architect in Chile before moving to the United States. Eugenia is committed to environmentally responsible development, the revitalization of deteriorated urban areas and adaptive reuse projects. Her philosophy of design is to provide quality sustainable design to respond to the clients needs, capitalizing on the financial incentives available to implement sustainable strategies regardless of the size or type of project. She has been involved in sustainable design projects for 28 years, in Chile and USA, being one of the first LEED register architects in the region.