

Shedding Light on the Lab - Evaluation of a Daylighting Market Transformation Program

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The purpose of the evaluation was to identify the strengths and additional opportunities of the BetterBricks Daylighting Lab in Seattle through in-depth interviews with designers and building owners whom received services from the Lab.

Research Questions Asked

The study utilized in-depth telephone interviews to gain a better understanding of the daylighting aspects and the design process of the projects and, specifically, how the Daylighting Lab (Lab) impacted the design process and the installed daylighting system. There were three over-arching questions that the study sought to answer within the context of the specific daylighting projects discussed during the interview:

- Is the Daylighting Lab being influential?
- Is any energy being saved as a result of the Lab's efforts?
- What were the missed opportunities?

Influence of the Daylighting Lab

The Lab's influence has the potential to extend beyond the specific projects we studied to future projects by the influenced design teams. Two-thirds of the respondents indicated that they learned more about daylighting and specifically about sun angles and penetration due to the modeling studies. These designers should be able to approach future projects with a better understanding of daylighting and a larger repertoire of strategies to use.

Energy Savings

Most designers were confident that energy would automatically be saved through the use of daylighting. However, energy savings were rarely quantified. When energy savings were estimated, these were usually only the savings due to lighting energy, as opposed to complete building savings incorporating changes in heating or cooling loads. The whole building lighting energy savings estimates ranged from 20% to 46%.

Missed Opportunities

We identified several missed opportunities that the Daylighting Lab should try to capture, including:

- Reaching out to engineers
- Supporting the use of automatic photocontrols
- Encouraging engineering integration with daylight design
- Developing a network of other daylight resources outside of the Lab.

