Creating Flexible Environments for People with Low Vision

Adaptable and Flexible Lighting Design

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Goals

Develop tools and techniques for lighting flexibility that allow designers, builders, individuals and building owners to respond to differing vision impairments. These will include lighting sources, fixtures, and controls, as well as integration of building envelope components, including fenestration.
Keys to Success

• Clear and achievable measures for success.
• More intensive lighting and daylighting education in architecture and engineering schools.
• Designers need to be sensitized to the subject of designing for the low-vision population to enable the development of better design intuition on the subject.
• The Design community must find common goals between LV population and the broader population through universal design.
• Current design fashions should be re-examined.
Design Tools

• Designers
  – Whole building design
  – Coordination between trades

• Technology:
  – Revit and Similar 3D/4D modelling platforms.
  – Photometric calculation programs
  – Integrated controls for holistic lighting experience

• Clients
  – Budgets
  – Time
Demystifying the issues

• Simple moves make a big difference
  – Rethinking the grand atrium with fields of glass.
  – Managing day-lighting: sometimes it’s as simple as tinted glass and mini-blinds
  – Adequate lighting
  – Lighting transitions between spaces
  – Stairs contrasting the nosing and the riser/tread
  – Balancing daylight and natural light
  – Signage – Grey on grey just isn’t that cool.

• Looking beyond the written “requirements”; There is real work to be done.
Where we were!
Where we might be going!
Success

- Patience
- Craft
- A new direction in design and aesthetics
- Shared risk
- Involving multiple expertise to create a platform for innovation
- Continued research and development
- Leadership in the design community