

**Blind Minder**  
**The Invention of a Simple Reminder Device for Daylight Harvesting.**

by

Aaron Matthew Smith

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Thesis Adviser:

Russ Leslie

Rensselaer Polytechnic Institute

Troy, New York

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## **ABSTRACT**

Daylight harvesting is a energy saving strategy where daylight is utilized instead of electric lighting to perform visual tasks. Many visual tasks can easily be completed using daylight from a window alone, however many people do not regularly operate their blinds to admit daylight. The Blind Minder is designed to remind people to open their window blinds and use daylight from a window when it is free from direct sun glare.

A Blind Minder was designed, built, and tested to meet seven goals. The seven goals are to build a self powered device that: 1. provides an automatic reminder, 2. is easy to install and operate, 3. fits typical windows, 4. is low cost, 5. influences people to open the blinds, 6. is acceptable to people, and 7. saves energy.

Using the Blind Minder provides two paths to energy savings. First it increases the energy savings created by an automatic daylight harvesting system by increasing the daylight in the space, otherwise occluded by closed blinds. Second, when without automatic daylight harvesting, the Blind Minder creates energy savings when people reminded to open their blinds also manually switch off their electric lighting.

The Blind Minder was deployed in a real world application consisting of eight private offices. When people told about the benefits of daylight harvesting used the Blind Minder in their office for one week, blind occlusion decreased by 20% and people's use of the blinds increased by 59%. Also, 4 out of the 8 participants report that the Blind Minder helped them conserve energy and consider turning off the electric lighting to work by daylight.