



electric lighting

The SNAP House's lighting design aims for elegant simplicity in concept, use, and maintenance. Throughout the house, soft, ambient light is juxtaposed with bright, direct task lighting. All ambient and most task lighting is integrated directly into the architectural design of the house. An accent light wall between the bedroom and bathroom provides a glowing light for nighttime navigation.

Using less than one watt per square foot, our lighting design is extremely energy-efficient. Simple T8 fluorescent fixtures with efficient ballasts, placed in coves, provide ample ambient light in the main space, the bedroom, and the bathroom. T2 fluorescent fixtures are affixed to the undersides of shelves in the kitchen, bathroom, and office, providing focused task lighting in these areas. Although some new technologies conserve slightly more energy, we chose to use the more familiar fluorescent tubes because future residents will find them easy to maintain. Replacement bulbs will be inexpensive, easily procured, and quickly installed.



We have designed our lighting system to be unobtrusive. In the main living space, the coves that conceal ambient fluorescent tubes are incorporated into the HVAC chase sections. Similar coves built into the storage wall separating the bedroom from the bathroom mask the ambient lighting for these two spaces. The chase and the storage wall are ideal locations to house the ambient lighting coves, as they also contain many other utilitarian aspects of the architectural design. Fluorescent task lighting is concealed by lips on the lowest shelves in the kitchen, bathroom, and office.

As a lighting accent, we have designed a color-changing LED display within the bed/bath storage wall. The LEDs will illuminate the translucent ecoresin paneling between the bedroom and bathroom, providing a soft wash of light. Not only will this light wall be a visually interesting component of the lighting design, it will also provide adequate illumination for occupants to find their way into the bathroom in the middle of the night without being the discomfort of bright overhead lights. With life spans of 50,000 hours (up to eight years of continuous use), the bulbs in the LED accent wall will only rarely need changing.

