



Several of the ecological design features for Draper Hall are identified throughout the building by these signs. Learn more about specific green building design features by going on a self-guided tour.



Natural Materials

Production of building materials often requires the destructive extraction of non-renewable natural resources. Building materials made of natural, renewable resources use less energy to create and leave a smaller ecological footprint. Most natural building materials can also be reused or recycled with minimal processing.

The hallway walls of Draper Hall include a natural wall covering made of sisal, a stiff fiber harvested from an agave plant. The cork tile flooring in the third-floor study lounge is made from the renewable bark of the cork oak tree. Additional new flooring in hallways and offices is made of Marmoleum[®], composed of linseed oil, rosins, and wood flour with a natural jute backing. Countertops throughout the building are made of Homasote[®], a structural fiberboard produced with natural resins and fibers.



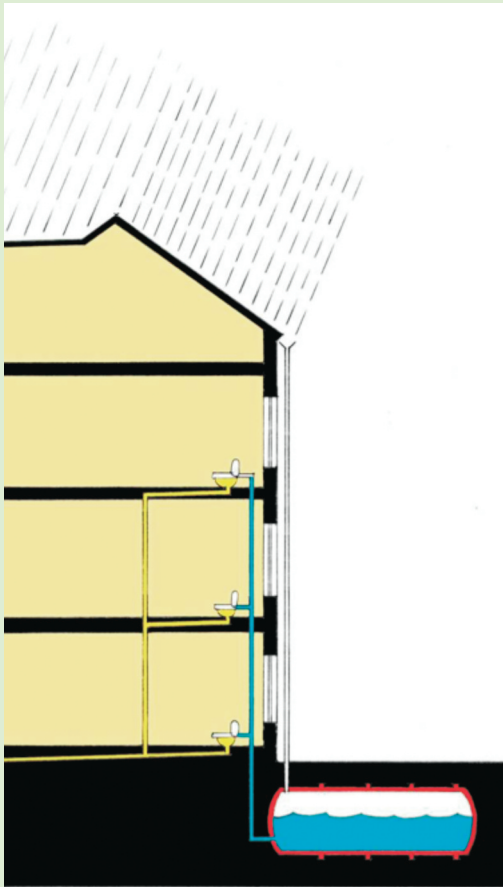
Storage & Collection of Recyclables



The Recycling Program is an important part of Berea College's overall sustainability initiative. The Recycling Coordinator along with a team of student workers maintain indoor and outdoor receptacles across campus and recycle paper, plastic, aluminum, and other common materials. Convenient and clearly-labeled recycling stations are built into every floor of Draper Hall.



Water Efficiency & Stormwater Management



All of the plumbing in Draper Hall is fitted with high-efficiency, low-flow fixtures that reduce overall building water usage by one-third. These fixtures include low-flow toilets, water fountains as well as kitchen, restroom, and janitorial sinks.

In addition to water-saving devices throughout Draper, the roof design channels rainwater into a 12,000-gallon underground cistern beneath the brick circle behind the building. The rainwater is then returned to the building and used for flushing the toilets in the restrooms.

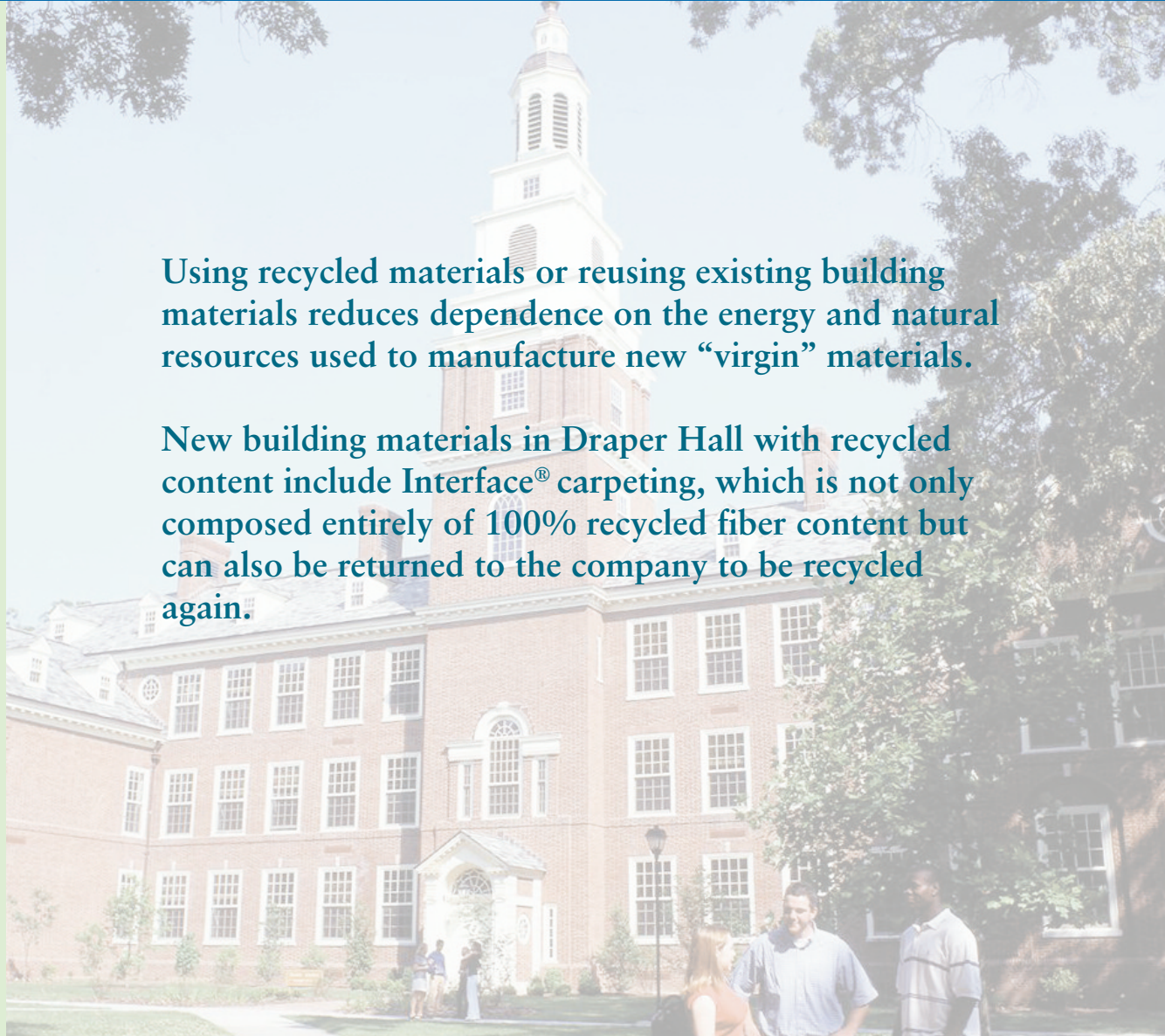


Recycled Content



Using recycled materials or reusing existing building materials reduces dependence on the energy and natural resources used to manufacture new “virgin” materials.

New building materials in Draper Hall with recycled content include Interface® carpeting, which is not only composed entirely of 100% recycled fiber content but can also be returned to the company to be recycled again.

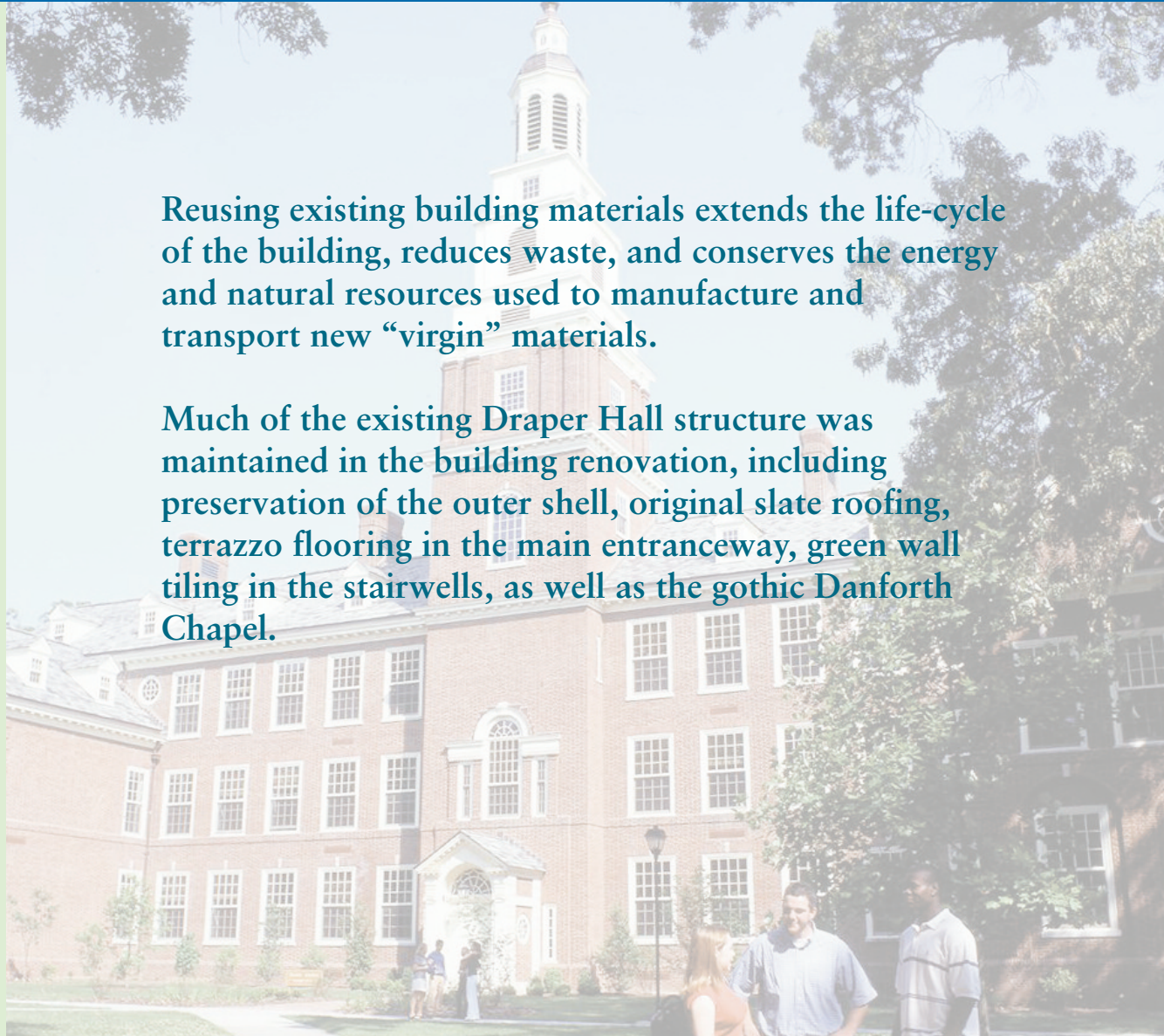


Building Reuse

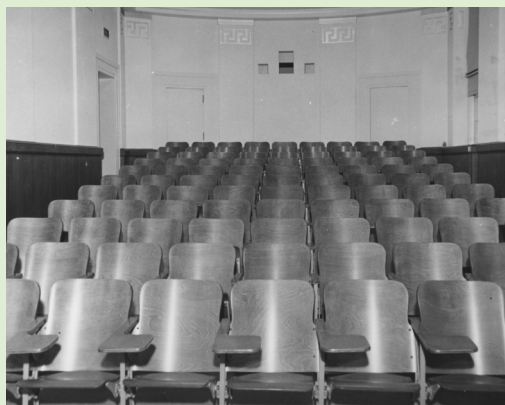


Reusing existing building materials extends the life-cycle of the building, reduces waste, and conserves the energy and natural resources used to manufacture and transport new “virgin” materials.

Much of the existing Draper Hall structure was maintained in the building renovation, including preservation of the outer shell, original slate roofing, terrazzo flooring in the main entranceway, green wall tiling in the stairwells, as well as the gothic Danforth Chapel.

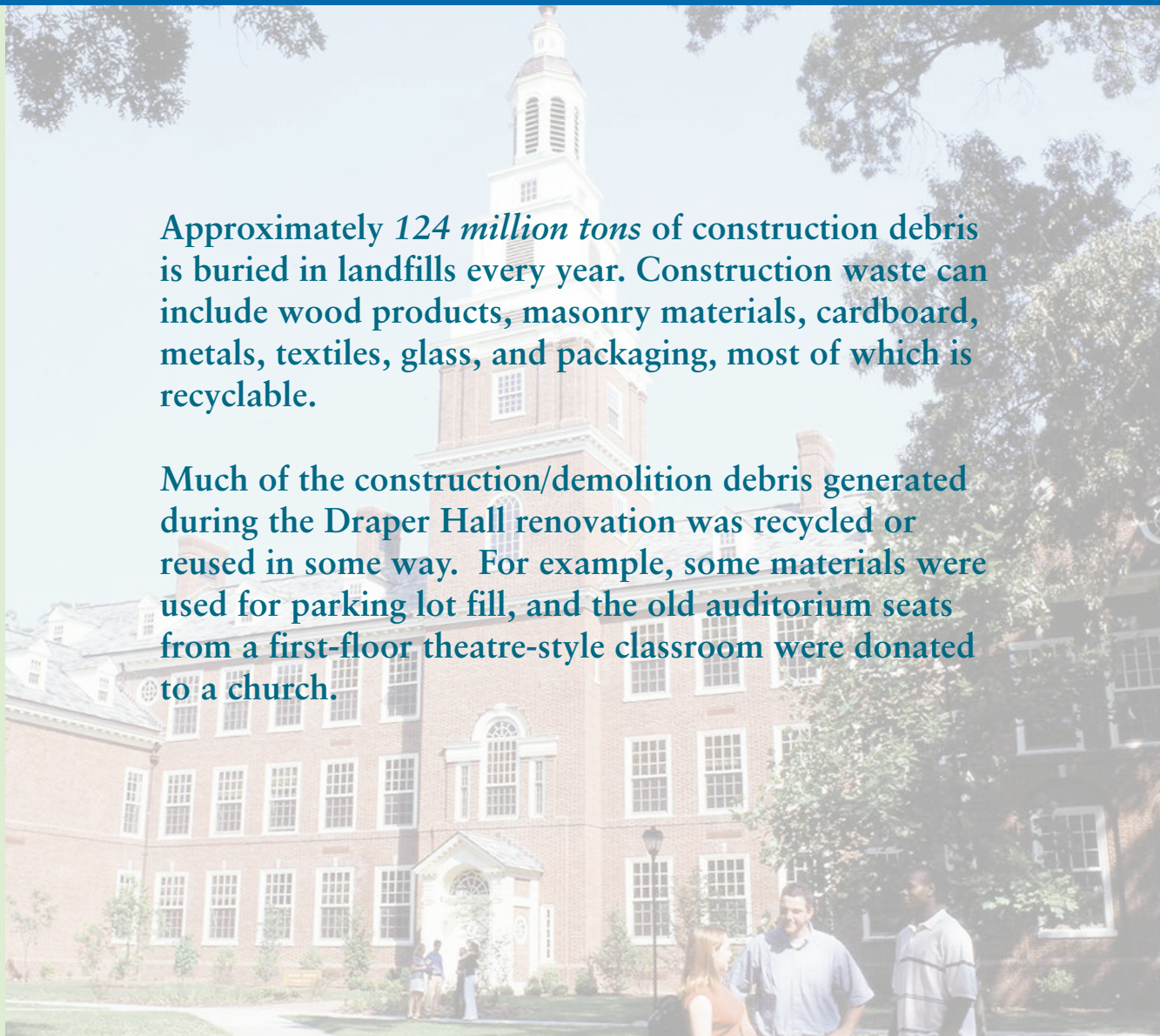


Construction Waste Management



Approximately *124 million tons* of construction debris is buried in landfills every year. Construction waste can include wood products, masonry materials, cardboard, metals, textiles, glass, and packaging, most of which is recyclable.

Much of the construction/demolition debris generated during the Draper Hall renovation was recycled or reused in some way. For example, some materials were used for parking lot fill, and the old auditorium seats from a first-floor theatre-style classroom were donated to a church.

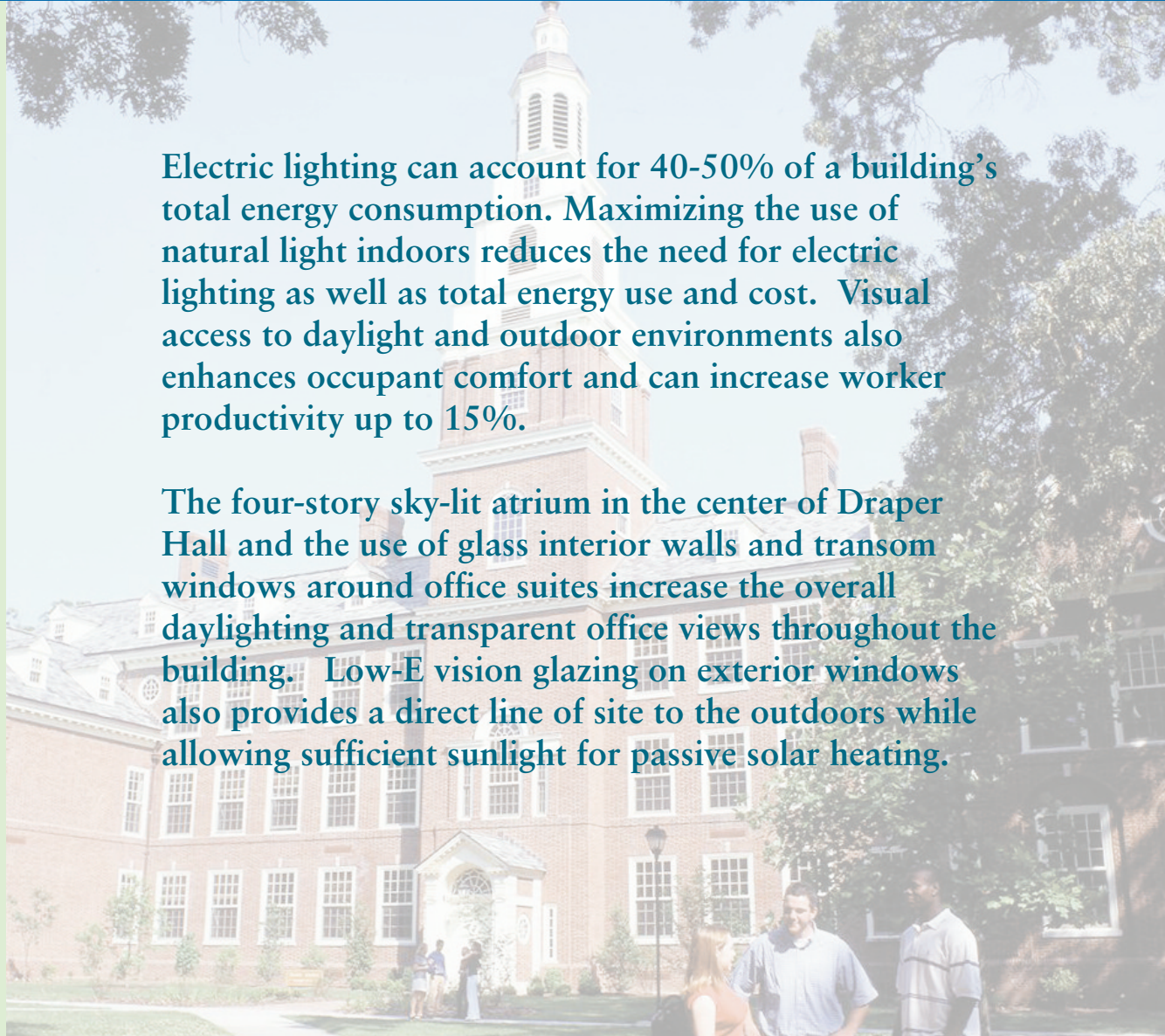


Daylight & Views



Electric lighting can account for 40-50% of a building's total energy consumption. Maximizing the use of natural light indoors reduces the need for electric lighting as well as total energy use and cost. Visual access to daylight and outdoor environments also enhances occupant comfort and can increase worker productivity up to 15%.

The four-story sky-lit atrium in the center of Draper Hall and the use of glass interior walls and transom windows around office suites increase the overall daylighting and transparent office views throughout the building. Low-E vision glazing on exterior windows also provides a direct line of site to the outdoors while allowing sufficient sunlight for passive solar heating.

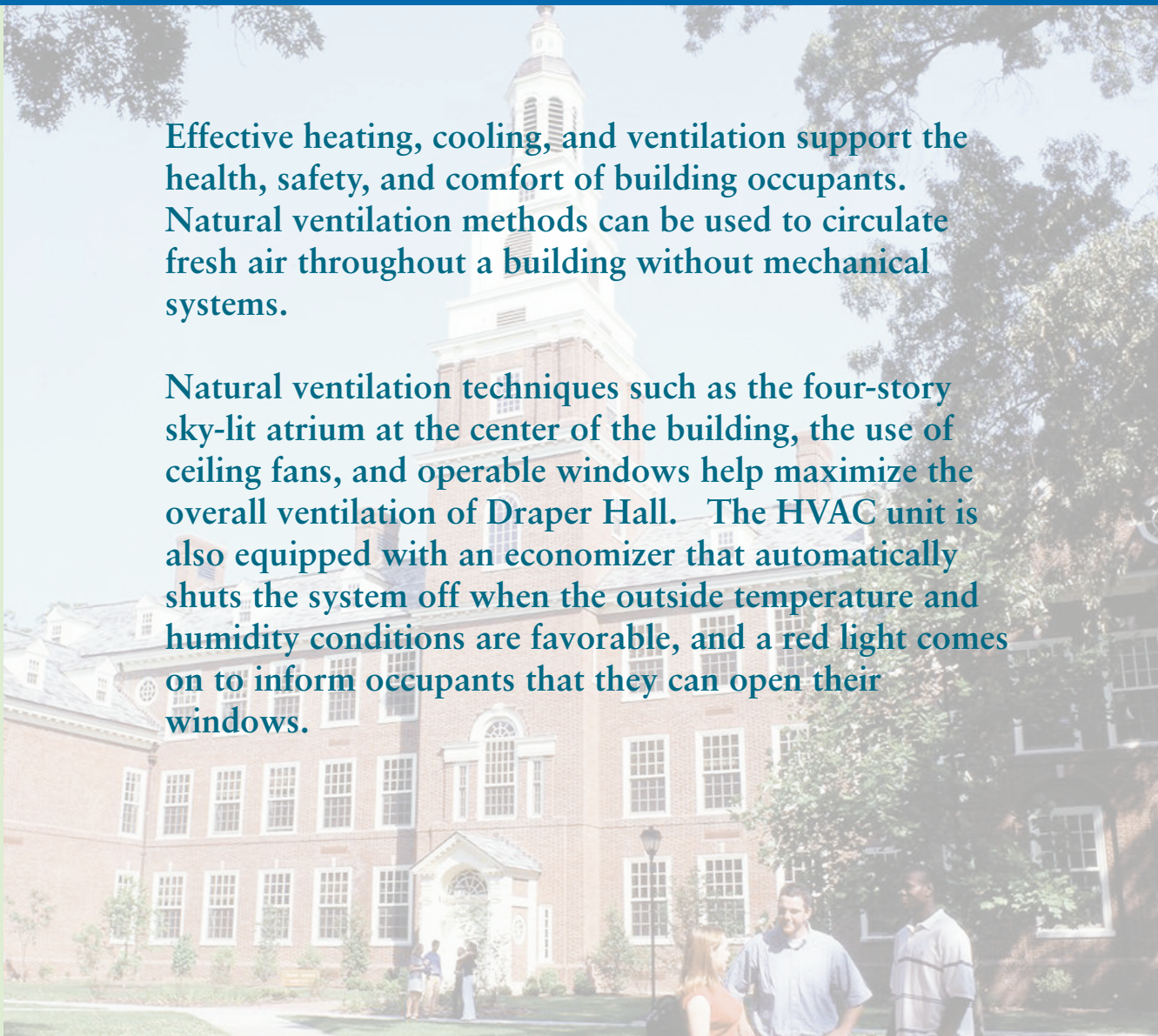


Ventilation Effectiveness



Effective heating, cooling, and ventilation support the health, safety, and comfort of building occupants. Natural ventilation methods can be used to circulate fresh air throughout a building without mechanical systems.

Natural ventilation techniques such as the four-story sky-lit atrium at the center of the building, the use of ceiling fans, and operable windows help maximize the overall ventilation of Draper Hall. The HVAC unit is also equipped with an economizer that automatically shuts the system off when the outside temperature and humidity conditions are favorable, and a red light comes on to inform occupants that they can open their windows.



Technology and the Curriculum



As part of Berea College's overall technology initiative, Draper Hall is equipped with network connections in every room and multi-media systems in every classroom. The building renovation also doubled the number of offices and created a variety of learning spaces for whole-class activities, small group projects, individual learning, and one-on-one conversations.

In addition to integrated classroom technology, there is a comprehensive resource monitoring system inside the main Draper entrance that provides a real-time analysis and visual illustrations for indoor and outdoor temperature and humidity, as well as energy and water use in the building.

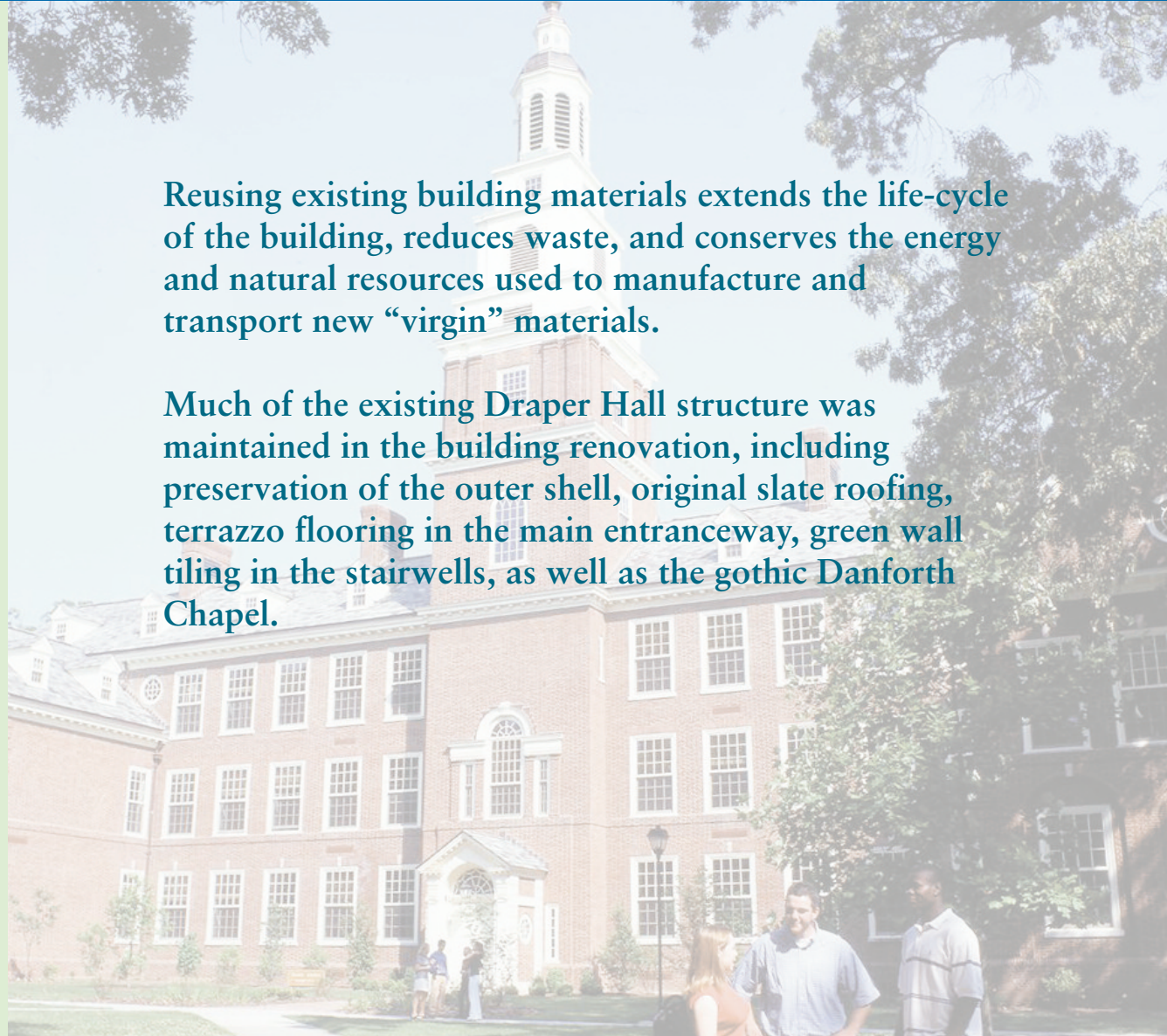


Building Reuse



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Functional Outdoor Space



Draper Hall includes two exterior courtyards adjacent to either side of Danforth Chapel. One extends off the rear exit of the Learning Center, and the second, more rustic courtyard is accessible by a public exit. Both courtyards include fountains, benches, and native landscaping and provide a peaceful outdoor environment for relaxation and contemplation.

The three exterior walls of the Chapel, including a wall in each of the courtyards, also feature a series of stones collected by William H. Danforth from various historical and religious sites from around the world. Visitors can follow outdoor signage for a self-guided tour to read descriptions about the different stones, where they came from, and their historical significance.

