MATERIALS

Building materials are a key consideration in sustainable design because the extraction, processing, and transportation activities involved in their manufacture and distribution pollute air and water, destroy natural habitats, and deplete natural resources. Construction and demolition wastes constitute about 40% of the country’s total solid waste stream.

To minimize the environmental impact of construction, the project team methodically tracked the waste that was removed from the site to ensure that approximately 93% of all construction waste was diverted from a landfill and either recycled or reused.

This accounts for over 3,300 tons, or about 6.6 million pounds of waste that would otherwise have been shipped to a landfill. Furthermore, at least 25% of the content of all materials used in the building came from recycled material, and 34% of all building materials were manufactured within a 500-mile radius to minimize the environmental impact of transporting and shipping.

In addition, almost 60% of the wood used in the building is certified in accordance with the Forest Stewardship Council’s Principles and Criteria. FSC certification is a “foot of approval” awarded to forest managers who adopt environmentally and socially responsible forest management practices and to companies that manufacture and sell products made from FSC-certified wood.

Moving forward, WPI is encouraging users of the building to take recycling seriously by providing dedicated recycling stations on each floor so users can responsibly dispose of paper, corrugated cardboard, glass, plastic, and metal. These materials are subsequently collected and organized into a central recycling zone on the first floor by facilities staff for proper discharge to an offsite recycling facility.