

Maplewood Senior Living at Brewster: M.P. Renaissance

LEED for Homes

In an effort to minimize the environmental impact of the M.P. Renaissance (MPR) Building, located in Brewster, Massachusetts, Maplewood Senior Living has elected to pursue a certification under the U.S. Green Building Council's (USGBC): Leadership in Energy and Environmental Design (LEED): Homes rating system. LEED for Homes (LEED H) was initially developed and released in 2008 and is tailored to the unique design, construction, and operations considerations necessary for efficient residential projects.

This program addresses many components contributing to a high-performance, sustainable building, including: resilient site and landscape design, energy and water efficiency, selection of healthy building materials, increased standards of indoor air quality, improved occupant comfort, and general green living features. A unique component of the LEED H program is a requirement for third-party verification via an USGBC-approved Green Rater, ensuring that the project is constructed to meet the designed and specified LEED requirements. This quality control measure results in much-improved building performance and minimized operations concerns.

The MPR team is pursuing a minimum silver level certification under the LEED H rating system.

To learn more about the LEED for Homes program, please visit:
<http://www.usgbc.org/cert-guide/homes>

Overview of Incorporated Green Features

Site Design

The landscaped site surrounding the MPR building was thoughtfully designed to provide residents with a beautiful connection to the outdoor environment while minimizing the potential negative effects of landscaping and site design on the environment. These measures include:

- No installation of invasive species or water-intensive turf grasses;
- Incorporation of drought tolerant plantings where reasonable; and
- Water-efficient drip irrigation system with smart controls, to minimize overwatering.

Building Features

A team of experts, specializing in high-performance buildings, designed the building's structure. The team emphasized sustainable design throughout the building systems and components, which help reduce energy usage and utility bill rates, provide a comfortable and healthy indoor environment, and facilitate greener living for building residents. These measures include:

- Well insulated exterior and unit demising walls- minimizing air leakage to the outside, as well as air transfer between interior living spaces;
- Very high-efficiency heating and cooling systems;
- Filtered supply air into each unit, providing a continuous healthy indoor environment;
- High-performance plumbing fixtures, including toilets, showerheads and faucets;
- Energy efficient appliances throughout the building;
- High-efficiency lighting fixtures and bulbs;
- Environmentally preferable building materials, including available local and recycled content products;
- Flooring and Cabinetry with no harmful chemical emissions; and
- Low Volatile Organic Compounds (VOC) within all installed primers, paints, sealants, caulking, and adhesives.

Construction Methodology

Throughout the construction process, careful attention was paid to opportunities to minimize the environmental impact of all onsite activities and generation. These measures included:

- Off-site panelized construction to minimize the amount of waste produced on-site;
- Management of run-off from the construction site to avoid erosion and sedimentation in surrounding areas;
- Continuous protection of all ductwork for heating, cooling, and fresh air transport- minimizing dust contamination; and
- Responsible construction waste management to maximize recycling and reduce landfilled waste.