

Green Building Awards: Guidance for Applicants

Reduce, Reuse, Recycle

- When renovating an existing space, donate quality used/new surplus of building materials and appliances to an environmental non-profit such as Center for EcoTechnology
 - <https://www.centerforecotechnology.org>; www.ecobuildingbargains.org
 - Contact freya.bromwich@cetonline.org

Construction Materials

- Utilization of low(er) embodied carbon building materials, such as mass timber from sustainably managed forests
- Building materials with high recycled content (Including recycling of demolished building)
- Tight envelope to minimize leakage (Blower Door Test)
- Eliminate use of Living Building Challenge Red List Materials. (Use Products with Declare Labels)
 - <https://living-future.org/lbc/red-list/>
- Use of windows with Low U-Factor (Measure of insulation of window & frame), and appropriate Solar Heat Gain Coefficient (SHGC). A Low SHGC will decrease cooling load but increase heating load.
- Include nature in indoor design (Biophilic Design)
 - <https://living-future.org/biophilic-design/>
- Use of Bird Friendly Materials (BFM) with low threat factor (TF)
 - <https://abcbirds.org/glass-collisions/threat-factor-rating/>

Mechanical Systems

- Use of energy recovery devices such as Energy Recovery Ventilators
- Use of electric heat pumps to provide both heating and cooling
- Use of radiant floors to reduce fan power
- Provide advanced air cleaning including MERV13 Particulate filters and/or Ultra Violet Germicidal Irradiation (UVGI) in HVAC systems.
- Reduce or eliminate Greenhouse Gas Emissions from refrigerants (Low-GWP Refrigerants)
- Use of natural ventilation and/or passive cooling (Phius Certification)
 - <https://www.phius.org/standards>

Plumbing Systems

- Low flow plumbing including the use of EPA's Watersense Label
 - <https://www.epa.gov/watersense/about-watersense>
- Use of rainwater storage system
- Use of Heat Pump water heaters
- Use of instantaneous water heaters
- Test drinking water and provide water treatment to remove organic chemicals, sediment, and microbes

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Landscape

- Landscaping and use of plantings (preferably native) which may require less watering, pesticides and fertilizers
- Incorporation of recycled water drip irrigation systems
- Use of pervious or semi-pervious pavement for paved surfaces
- Use of solar pool covers to reduce evaporation and heating requirements

Energy

- Generation of on-site renewable energy and/or purchase of off-site renewable energy
 - Photovoltaic System with or without storage
- Use of solar thermal to heat building
 - www.energy.gov/energysaver
- Choose energy supplier that provides renewable energy
 - <https://www.energizect.com/>

Lighting

- Use of light fixtures to reduce lighting power density (W/SF).
 - LED Fixtures
- Provide natural light - include glare control with internal or external shading such as:
 - Blinds, light shelves, film with micro-mirrors, electrochromic glazing
- Use of Circadian Lighting (WELL Standard)
 - <https://standard.wellcertified.com/light/circadian-lighting-design>

Appliances

- Elimination of fossil fuels on site
- Use of appliances containing EPA's ENERGY STAR label
 - <https://www.energystar.gov/products/how-product-earns-energy-star-label>

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