



BUILT GREEN™ for Urban Multi-Family Construction

With growing consumer interest in environmentally-friendly and energy-efficient homes, condos and apartments, BUILT GREEN™ is a great tool for “greening” your multi-family residential project. One of the many features of BUILT GREEN™ is its flexibility. With six categories and more than 200 environmentally-friendly building strategies to select from, you have many opportunities for certifying your urban multi-family project. This fact sheet describes several BUILT GREEN™ Multi-Family program strategies that are appropriate to most urban multi-family projects.

Site

- Build on infill lots.** BUILT GREEN™ encourages the use of developed properties in lieu of greenfield sites and awards infill projects 3 points.
- Qualify as a “mixed-use” development.** Many projects in Seattle will be eligible to receive at least 5 and up to 26 points, depending upon the specifics of your project.
- Make alternate transportation accessible.** Urban areas, especially Seattle, enjoy easy access to public transportation. BUILT GREEN™ awards points for projects that:
 - Are located near public transportation (3 points).
 - Provide subsidized bus passes (2 to 4 points).
 - Provide bus shelters (2 points).
 - Provide bicycle lockers (2 points).

To help reduce heating and cooling loads, **consider using advanced air sealing techniques.** The U.S. Department of Energy estimates that up to 30% of a residential building’s energy can be lost through air leaks. BUILT GREEN™ offers a total of 7 points for 4 air sealing methods and 3 points for conducting blower door tests on units.

For air sealing consider:

- Using an air infiltration barrier.
- The Airtight Drywall Approach (ADA). ADA includes installing caulk or gasket drywall on exterior walls at the top and bottom plates, windows and doorframes, on interior walls at intersections with exterior ceilings and at penetrations.
- Reducing floor-to-floor or unit-to-unit duct penetrations by compartmentalizing units.
- Using airtight structural elements. Airtight structural elements for reducing air penetration include structural insulated panels (SIPs), insulating concrete forms (ICFs) and concrete masonry units.

Energy

The Energy Efficiency category of BUILT GREEN awards points for strategies that:

- Reduce heating and cooling loads.
- Use the energy required to meet those loads more efficiently.
- Site buildings to take advantage of natural resources and site features.

To help you efficiently use the energy required to meet a building’s heating and cooling loads:

- Participate in the BUILT SMART program.** This is a great way for Seattle projects to earn BUILT GREEN™ points, benefit from technical assistance and receive financial incentives. Seattle City Light’s BUILT SMART for multi-family housing is an energy-efficiency program that provides technical support, certification

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and incentives to builders and developers for improvements in thermal efficiency, heating systems, indoor air quality and lighting.

BUILT SMART projects receive 5 points towards BUILT GREEN™ certification. In addition, strategies that builders incorporate for BUILT SMART, such as using compact fluorescents in common areas, earn further BUILT GREEN™ points. For information about BUILT SMART (see *Assistance and Incentives*).

- ❑ **Utilize free consultations by the Lighting Design Lab in Seattle.** The Lighting Design Lab offers free consultations from lighting and daylighting specialists to assist you in implementing high quality, energy-efficient lighting (see *Assistance and Incentives*).

Finally, siting a building to maximize solar and daylighting design is an example of the third strategy mentioned above. Since urban projects typically have less control over siting and orientation, focus on:

- ❑ Improving envelope performance.
- ❑ Designing efficient systems for heating, cooling, lighting and water heating.
- ❑ Selecting efficient equipment and appliances.

Materials

Strategies in the *Materials Efficiency* category of BUILT GREEN™ aim to increase the efficiency of job-site operations through use of the “Three R’s” - Reduce, Reuse, Recycle - as well as encourage the use of environmentally-preferable building materials.

- ❑ **Recycle and reuse construction materials.** The urban and suburban areas of Seattle and King County benefit from many convenient outlets for recycling and reusing construction materials. For example, within Seattle, there are several building material reuse outlets and two City recycling and disposal stations that recycle clean wood, cardboard and metals. In most cases, you’ll save money by recycling these materials rather than disposing of them as garbage. Plus, BUILT GREEN™ awards more

than 25 points for recycling construction materials and up to 9 points for reusing them.

- ❑ **Join the Construction Works program.** Seattle area projects can get recognition for their recycling programs through the *Construction Works* program and will earn 5 to 10 extra BUILT GREEN™ points for doing so. The Resource Venture administers the Seattle *Construction Works* program (see *Assistance and Incentives*).
- ❑ **Purchase environmentally-preferable materials.** The Seattle area offers many options for purchasing environmentally-preferable materials such as low-emitting paints and sealants, bamboo flooring, plastic lumber, certified wood and recycled-content materials. These materials protect indoor air quality and conserve resources. Many environmentally-preferable materials are also highly durable and low-maintenance, features that are important to consumers. You can earn over 65 points in this category. For help identifying products contact the Resource Venture (see *Assistance and Incentives*).

High-Rise Residential

BUILT GREEN™ Multi-Family is not suitable for high-rise projects, e.g. projects over 5 ½ stories. If your multi-family project is a high-rise, it would be more appropriate to use LEED™ (*Leadership in Energy and Environmental Design™*), a green building rating system from the U.S. Green Building Council. LEED™ provides environmental criteria for qualifying commercial and institutional buildings, which can be applied to high-rise residential buildings. Like BUILT GREEN™, LEED™ is a voluntary program providing market distinction to buildings incorporating green building strategies. For more information, visit www.usgbc.org.

Assistance & Incentives

BUILT GREEN™ offers many opportunities and a workable structure for building “green” multi-family developments in the city. As a participating BUILT GREEN™ builder, you’ll have access to numerous resources and technical assistance, such as BUILT SMART and Construction Works, in carrying out your

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plan. The result will be a high-quality building that you can market to increasingly environmentally savvy renters and condo buyers for its superior indoor air quality, energy efficiency and sensitive use of materials and resources.

■ Resource Venture

The Resource Venture's Sustainable Building Program offers free services to help you identify and achieve the best measures for your urban multi-family project in the City of Seattle. Our Web site also features information and additional resources to help you reach green. Visit www.resourceventure.org or call (206) 389-7304.

■ BUILT SMART

Seattle City Light's energy-efficiency program for multi-family housing provides technical support, certification, and financial incentives to builders and developers for improvements in thermal efficiency, heating systems, indoor air quality and lighting. Visit www.ci.seattle.wa.us/light/conserve/resident/cv5_bs.htm or call John Forde at (206) 684-4288.

■ Lighting Design Lab

The lab offers a wide range of free services including: consultations from lighting and daylighting specialists, model studies, mock-ups, classes, workshops and a library. Visit www.lightingdesignlab.com or call (206) 325-9711.

■ City of Seattle

Learn about rebates on energy- and water-efficient appliances at www.cityofseattle.net/sustainablebuilding.

BUILT GREEN™

BUILT GREEN™ is a program of the Master Builders Association (MBA) of King and Snohomish Counties in partnership with King County, Snohomish County and the Fannie Mae Foundation.

- This voluntary, self-certifying program identifies more than 200 environmentally-friendly building strategies in six categories that you can use to construct your building to a 1-Star, 2-Star or 3-Star certification level.
- Categories are: *Green Codes, Site and Water Protection, Energy Efficiency, Health and Indoor Air Quality, Materials Efficiency and Promote Environmentally Friendly O&M.*
- Participating builders receive a BUILT GREEN™ checklist and handbook for their single-family, multi-family, or residential remodeling project. (A new component for development actions will debut in Winter 2001-2002). Enrollment in the program also entitles you to resources that will help you gain market distinction for building green.
- Non-profit developers are encouraged to certify their "green" residential projects. Contact the MBA for information about non-profit requirements.

For more details about the program and to download a copy of the Multi-Family Checklist, see www.builtgreen.net. Or call (800) 522-2209 to request a program brochure.

At Your Service

The Resource Venture provides *free* information and assistance to help Seattle businesses improve their environmental performance. We are a partnership of the Greater Seattle Chamber of Commerce and Seattle Public Utilities.



Seattle
Public
Utilities

www.resourceventure.org / (206) 389-7304