



BUILT GREEN™ for Remodeling

In urban areas remodeling is the most common type of residential construction, making the Master Builders Association's BUILT GREEN™ Remodeler Program a perfect match for your next project. With the flexibility of six categories and more than 200 environmentally-friendly building strategies to select from, there are opportunities for incorporating green into every type of remodeling project from a small bathroom remodel to a major addition. This means remodel designers and builders can take advantage of a growing consumer interest in green building, no matter what the project.

Site

When a remodel project involves site work of any kind, you have the opportunity to implement strategies that protect water quality and, consequently, salmon habitat. BUILT GREEN™ Remodeler supports this objective by providing points for a number of different activities.

- ❑ **Cover or amend disturbed soils.** To control sedimentation and improve soil water holding capacities, protect topsoil by covering with mulch (1 point). Restore disturbed soil by amending the top 8-10 inches with compost (4 points).
- ❑ **Consider pervious paving options where paving will be installed.** Use porous concrete or asphalt, pavers or reinforced grids for grass or gravel to help reduce stormwater run-off.
- ❑ **Install a “green roof.”** Green roofs are planted roofs installed on top of a waterproof membrane. They create green space and manage stormwater. The lightweight versions, with just 2-6 inches of soils, are great for remodels and will earn 10-15 points.
 - To help consumers, designers and builders learn more about this technology, the Northwest EcoBuilding Guild is building residential demonstrations around the Seattle and King County area (see *Resources and Assistance* below).

Energy

Remodeling is a great time to give a home an “energy tune-up” to enhance its overall performance and save the homeowner money.

- ❑ **Use energy modeling software.** If the project involves changing mechanical systems and opening structural cavities, use software like Energy 10 or WATTSUN to calculate energy performance. Improving performance by 10%-40% really cuts energy bills and earns 2 to 10 points under BUILT GREEN™.
- ❑ **Use simple strategies** like inspecting or installing new weather-stripping; adding insulation to the wall, ceiling or floor; fully insulating headers, wall intersections and corners and putting in programmable thermostats for additional points.
- ❑ Add a **solar hot water system** (5 points) or **photovoltaic system** (10 points) to supplement the home's water heating or electrical needs. Both options are becoming more cost-effective with improvements in technology and increases in heating and electricity costs - even in the rainy Pacific Northwest.
- ❑ On a more modest scale, **consider a drainwater heat recovery system**, worth 3 points, to capture heat from hot water going down the drain and reuse it to pre-heat fresh water.

Energy (continued)

- ❑ **Add renewable sources or systems that capture and reuse energy**, such as those recommended in BUILT GREEN™. This can significantly reduce the energy costs of operating a home, and also preserve the nation and the world's energy resources for future needs.

Water

In this rainy part of the country, it is easy to forget that water conservation is important to preserve the water supply for both people and fish. With water rates continuing to increase, upgrade water-using appliances and fixtures to promote efficiency and save the homeowner money.

- ❑ **Install low-flush toilets** (1 point). An analysis conducted by Seattle Public Utilities (SPU) shows that dual-flush toilets (toilets with 1.6 and .8 gallon flush options, depending on need) save significant amounts of water.
- ❑ **Install an Energy Star dishwasher** (3 points). These dishwashers save water and energy and are quiet.
- ❑ **Install a horizontal-axis washing machine** (2 points). They are quiet and save between \$85 and \$115 on average per year in water bills. SPU offers a rebate on these washing machines through their "WashWise" program. For more information call SPU at 206-684-7284 or visit www.savingwater.org.

Health

People expect their home to be safe and secure, but trends like growing asthma rates in Washington state's children, increasing chemical sensitivities and mold scares show that not all residences are healthy places to live.

- ❑ **Take an American Lung Association "Healthy House Professional Training" course.** The course provides an in-depth focus on indoor air quality issues in residential construction. Builders can earn 5 BUILT GREEN™ points and offer their customers a service by participating. For

more information, contact Amy Duggan at the American Lung Association (206) 441-5100 or aduggan@alaw.org.

Keep the remodel project safe:

- ❑ **Focus on healthy job-site operations.** BUILT GREEN™ offers up to 22 points for job-site operations that help protect workers and homeowners, such as isolating construction spaces, protecting against dust and good cleaning.
- ❑ **Use less toxic and durable materials.** Using low pile, tacked down carpet, or no carpet at all, earns additional points as does the use of formaldehyde-free sheet goods and low-VOC interior paints and finishes. Durable materials such as ceramic tile (3 points) do not collect pollutants, are easy to clean and add a feel of quality to any project.
- ❑ **Provide appropriate moisture control and ventilation.** When it comes to moisture control and a healthy air supply, BUILT GREEN™ Remodeler offers over 20 different measures, worth 1 to 10 points each, from installing a doormat to installing a ductless heating system, such as radiant heat.

Materials

In the *Materials Efficiency* category, BUILT GREEN™ Remodeler aims 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 resource-efficient building materials.

The urban and suburban areas of Seattle and King County benefit from many convenient outlets for recycling and reusing construction materials. Remodel projects are particularly well-suited for reusing materials, either ones found on site or from one of Seattle's many building material reuse outlets.

- ❑ **Take the owner to a building material reuse facility early in the project to scope out possible materials to use**, then check back throughout the project for any new "finds."

Materials (continued)

- ❑ **Take clean wood, cardboard and metals that are not reusable to one of the two City recycling and disposal stations for recycling.** BUILT GREEN™ awards up to 14 points for using salvaged and reusable materials and up to 37 points for recycling various construction materials.
- ❑ **Join the Construction Works program.** Seattle area projects can get recognition for their recycling efforts 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 *Resources and Assistance* below).
- ❑ **Purchase environmentally-preferable materials.** The Seattle area offers many options for purchasing recycled content building materials like plastic lumber, rapidly renewable materials such as bamboo or cork flooring, low-VOC materials like interior paints and carpets and certified wood. These materials protect indoor air quality and conserve resources. Remodel designers and builders can contact the Business and Industry Resource Venture for help identifying products.

Resources and Assistance

BUILT GREEN™ offers many opportunities and a workable structure for green remodeling in the city. As a participating BUILT GREEN™ builder, you'll have access to numerous resources and technical assistance in carrying out your plan. The result will be a high-quality project that increasingly environmentally savvy homeowners want 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 remodeling project in the city of Seattle. The Web site also features information and additional resources to help you reach green. Visit www.resourceventure.org or call (206) 389-7304.

Northwest EcoBuilding Guild

A non-profit association of residential design and construction professionals and interested homeowners that holds monthly educational meeting on green building topics. Visit their Web site at www.ecobuilding.org for a calendar of upcoming meetings.

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.

For more details about the program and to download a copy of the Multi-Family Checklist, visit 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