



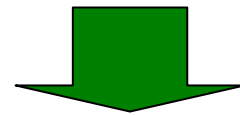
GREEN
BUILDING
INITIATIVETM

Green Building Initiative



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Green Building Practices
Become Mainstream



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Promote Credible and
Practical Approaches

WHY ARE WE HERE?



GBI Basics



- Founded in 2005 as 501(c)3 educational organization
- Formed to provide credible and affordable green building options for mainstream builders
- Created with seed funding from building materials, appliances, financial services, insulation industries
- 5000 associate members
 - Builders, architects, engineers, specifiers

GBI Leadership

RAY
TONJES
BUILDER, INC.

WCI®

WOOD
PROMOTION NETWORK
BE CONSTRUCTIVE
www.beconstructive.com



NATIONAL CENTER
FOR HOUSING AND
THE ENVIRONMENT

GREEN
BUILDING
INITIATIVE™
Framing the Future™

National Institute of
BUILDING SCIENCES

THE GREEN COMPANY

ASU ARIZONA STATE
UNIVERSITY

CENTEX

ATHENA

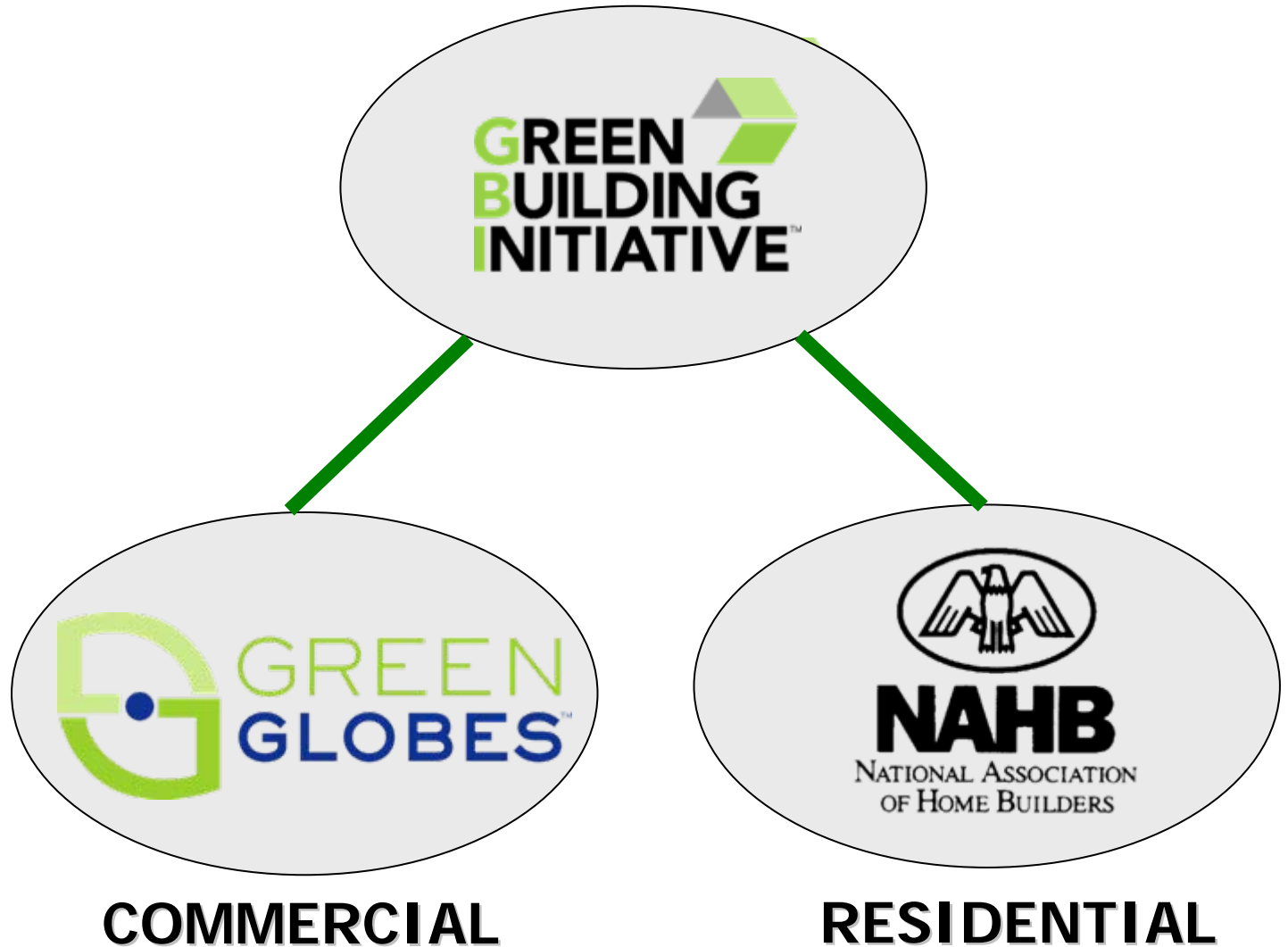


PRBDESIGN

Belcher
Homes

Custom Build Remodeling Real Estate Company
CHAPMAN
COMPANIES

OUR APPROACH





Leadership Position

GBI Becomes Standards Developer



GREEN BUILDING INITIATIVE™ FIRST GREEN BUILDING ORGANIZATION TO BECOME ANSI ACCREDITED NATIONAL STANDARDS DEVELOPER

-- Submits Application for Green Globes™ to Become an American National Standard --

Portland, Ore. (September 22, 2005) – Today, the American National Standards Institute (ANSI) formally recognized the Green Building Initiative™ as an accredited national standards developer — making the Green Building Initiative the first green building organization permitted to develop, maintain and withdraw American national standards.

On the heels of this announcement, the Green Building Initiative submitted an application to establish Green Globes™ — the first Web based environmental design and rating system for commercial buildings in the United States — as an American National Standard (ANS).

"ANSI accreditation demonstrates that the Green Building Initiative is committed to the ideals of openness, balance and consensus," said Ward Hubbell, executive director of the non-profit Green Building Initiative. "We are happy to be recognized as an ANSI standards developer, but eager to proceed to the next step in this process to establish Green Globes as an American National Standard. Doing so will bring the standards closer to a level of increasing adoption of green building practices among owners, team builders, architects and developers. As an American National Standard, Green Globes will help owners integrate multiple design principles into their buildings with the knowledge that the standard is backed by the U.S. scientific consensus-based development procedure."

In accordance with ANSI requirements, the Green Building Initiative is now assembling a technical committee which will include a balance of users, producers and interested third parties — to oversee the standard. The entire process of establishing Green Globes as a national standard is estimated to take up to two years. GBI's ANSI-approved procedures will guide technical committee review, research, revision and voting on the standard, all in an effort to reach consensus on the final document. GBI will require the committee to accommodate input and objections from all stakeholders. Once finalized, ANSI will evaluate the evidence of consensus and the final standard may claim designation as an American National Standard.

APPROVED



What the Media Are Saying



Environmental Building News



Green Globes Emerges to Challenge LEED

What's Happening - *Enviro*
News March 2005

A Web-based green building certification program from Canada, Green Globes was introduced to the U.S. market by the U.S. Green Building Council (USGBC) to the U.S. Green Building Council's Green Building Rating System. The Green Globes (GBI), established to promote green building, is a National Association of Homebuilders (NAHB) Model Green Home Building Guidelines (see *EBN* [Vol. 14, No. 2](#)), has expanded into the nonresidential building market by licensing Green Globes to the U.S. GBI is

“...first serious competitor to LEED in the U.S.”
March 2005



“...competition can be good.”
March 2005

... U.S. GBI is
...tion Network
... groups that
... ED and, as
... wowed to join the
... ee *EBN* [Vol. 13,](#)



What the Media Are Saying



ECONOMIC GAIN THROUGH ENVIRONMENTAL INNOVATION Sustainable Industries



FUTURE OF GREEN BUILDING

NOVEMBER 2005

Green Globes gets a leg up on LEED

BY MICHAEL BURKHAW

What's in a name? Big bucks, it seems. The American National Standards Institute has recognized the Green Building Initiative (GBI) as an accredited national standards developer, making GBI the first green building organization able to develop U.S. construction industry standards.

The Portland-based Green Building Initiative introduced its Green Globes building certification program into the U.S. market only a year ago, but the certification is already being used throughout England and Canada. Accredited by the New York-based American National Standards Institute (ANSI), the official certifier of U.S. voluntary assessment systems, is just the first step GBI is taking to try to gain a dominant position in the United States' growing market for environmentally sound buildings.

"Our mission is to bring green building to the mainstream. To do this, we need practical, recognized standards."

—Ward

Services, a Port

The U.S. Gr

leadership in

program is cur

certification sy

thus 2,000 build

LEED to date, while

green building, ANSI, however, would have the final say whether Green Globes and LEED are

"Green Globes gets a leg up on LEED."
November 2005

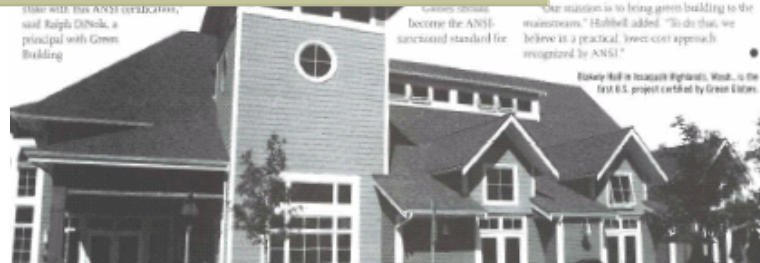
"GBI is the first to develop U.S. construction industry standards."
November 2005

HOW WILL THIS ANSI CERTIFICATION, said Ralph DiNola, a principal with Green Building

become the ANSI-sanctioned standard for

"Our mission is to bring green building to the mainstream," Hubbell added. "In doing so, we believe it a practical, lower-cost approach recognized by ANSI."

Banking Hall in Manhattan (right), West, is the first U.S. project certified by Green Globes.



GREEN BUILDING INITIATIVE™



Residential Programs



NAHB
NATIONAL ASSOCIATION
OF HOME BUILDERS

Marketing Support



ADVERTISING

BREATHE EASIER

KANSAS CITY

When you buy your dream home, it's about more than square footage, custom cabinets and granite counter tops. It's about creating a healthy environment for your family.

That's why you should consider a home built by a participant in the Kansas City Green Building Initiative™.

Green homes feature superior indoor air quality and improved livability. They reduce pollutants and improve ventilation, so your family can breathe easier.

Buy a home that's good for you and the environment. Buy green.

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LOCAL WEB SITE

GREEN BUILDING INITIATIVE HOUSTON

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Did you know that the next house you buy could help you save on your energy bills?

Or maybe, improve the indoor air quality to keep your family healthy?

Buy a home that's good for you and the environment. Buy GREEN.

To learn more, click on the links above.

ALBUQUERQUE • CLEVELAND • DURHAM • HOUSTON • KANSAS CITY • LAS VEGAS • ST. LOUIS • UTAH

PUBLIC RELATIONS

April/May 2005
A Supplement to *Builder & Tradesman*

The Greater Boston Builder

The Official Publication of the Builders Association of Greater Boston

BUILDING GREEN
BAGB Leads the Way to State Environmental Construction Standards
BY KATIE CURNUTTE

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CO-OP MATERIALS

KANSAS CITY

THE KANSAS CITY GREEN BUILDING INITIATIVE™ IS "GREENING THE AMERICAN DREAM."

For more information ON THE BENEFITS OF GREEN BUILT HOMES, visit WWW.KCHBA.ORG or call (816) 942-8800.

GREEN BUILDING INITIATIVE
Preserving the Future

BUILDERS ASSOCIATION OF GREATER BOSTON

CURRENT NETWORK





Commercial Programs





Online Tool: www.thegbi.org



Rating System/ Assessment Tool



+



Design Guidance

WELCOME TO GREEN GLOBES™:
A **REVOLUTIONARY** WAY TO ASSESS AND RATE YOUR COMMERCIAL BUILDING ONLINE.



Why Build Green? Green Globes in the News

REVOLUTIONARY

- ATTRIBUTES
- INTEGRATED ENERGY STAR TARGETING
- FREQUENTLY ASKED QUESTIONS
- COST
- CERTIFICATION
- GREEN GLOBES REPORT
- PRESENTATIONS
- USER'S GUIDE
- CASE STUDIES
- TEST DRIVE GREEN GLOBES

Green Globes™ is more than an assessment tool. It's like having a 24-hour sustainability design consultant on

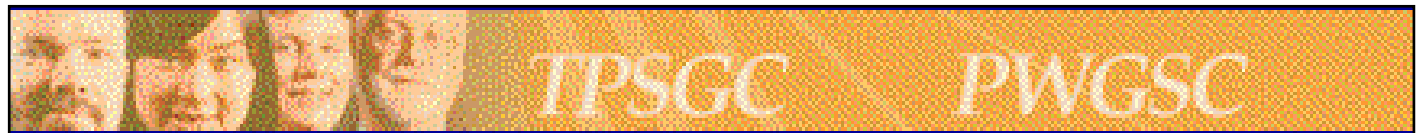
Want to learn more about the Green Globes™ system?



Usage



BOMACANADA



Seven Areas of Assessment

5% **1** Project Management

11.5 **2** Site

38 **3** Energy

8.5 **4** Water

10 **5** Resources

7 **6** Emissions, Effluents & Other Impacts

20 **7** Indoor Environment

1000 points available



Complete the Questionnaire

Construction Documents (Plans and Specifications) Stage
User type selected: All

Emissions, Effluents and Other Impacts

Updating information for Students dormitory (School)

Minimization of air emissions

Are low-NOx boilers and furnaces specified? Yes No N/A

Heat Input: BTU/hour

Emissions: mg/kWh ppm

Minimization of ozone depletion

Are refrigeration systems specified that avoid the use of ozone-depleting substances (ODS) and potent industrial greenhouse gases (PIGGs) in the cooling systems? Yes No There are no refrigerants Retro-fit

Indicate which refrigerant is specified:

In the case of a new building or a retro-fit, where CFC (chlorofluorocarbon), HFC (hydrofluorocarbon) or HCFC (hydrochlorofluorocarbon) refrigerants are specified, what will be their ozone-depleting potential (ODP)? Higher than 0.05 Less than 0.05 Equal to 0

Do the construction documents indicate that the building's air-conditioning system complies with the requirements of the Federal Halocarbon Regulations under CEPA and Safety Code for Mechanical Refrigeration, ASHRAE 15 -1994? Yes No N/A

Avoiding contamination of sewers or waterways

Are there measures to intercept and/or treat contaminated water to prevent contaminants from entering sewers or waterways? Yes No N/A

Briefly describe measures:

Pollution minimization

Compliant storage tanks

Do the construction documents indicate that soil and surface water

Review the construction documents to verify that the requirements of the federal *Technical Guidelines for Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products* and the *Technical Guidelines for Aboveground Storage Tank Systems Containing Petroleum* are met for all on-site storage tanks. If storage tanks are to be removed, check that the removal procedures address the requirements set out in these Guidelines as well as any applicable provincial regulations. If there are to be no storage tanks, mark "n/a".

Control other pollutants (PCBs, asbestos, radon)

In the case of a retro-fit, do all PCBs present in the building meet applicable

Project Stage and User Questionnaire has settings for individuals team members (architects, engineers, etc.)

Questionnaire Questions are "yes" or "no", multiple choice, or require data entry.

Tip box For assistance, move the mouse over the question.

Reports

Water-conserving features

Opportunities for Improvement

RECOMMENDATIONS

SUPPLEMENTARY INFORMATION

Minimal consumption of potable water

In addition to a water meter to measure the total amount of water supplied to the building, major water consumption operations such as boilers, cooling tower make-up lines, water-cooled air-conditioning units or special laboratory operations, should also be individually monitored.

Metering provides continuous information of system efficiency and can give early warnings of system problems such as leaks. When each tenancy is accountable for water use, this can motivate occupants to cut back.

◆ Meter Selection

Consider integrating the following water efficient equipment:

Specify the implementation of water-saving fixtures and appliances such as:

- infrared faucet sensors and delayed action shut-off or automatic mechanical shut-off valves;
- low-flow toilets at 6 L/flush or 1.6 gal./flush;
- waterless urinals;
- lavatory faucets with flow restrictors for a maximum rate of 7.5 LPM, metering faucets at 1 L/cycle; and, where applicable, low-flow kitchen faucets at 9 LPM;
- low-flow showerheads at 9 LPM;
- domestic dishwashers that use 38 L/cycle or less; (or commercial dishwashers (conveyor) which use 450 LPH); etc.

◆ Spec

◆ CSA

◆ Prov

◆ Ultra

◆ Insta

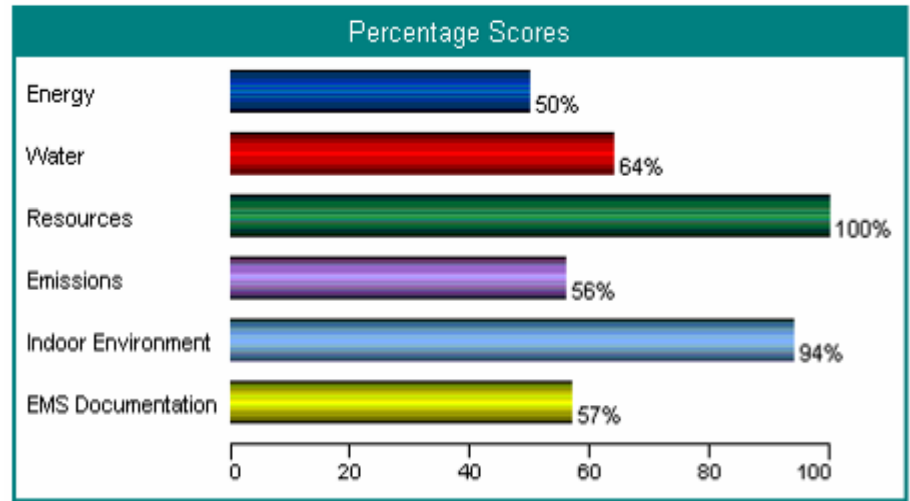
Provide manufacturers' data and proven-in-use documentation.

Minimal use of water for cooling

If air-conditioning is to be used, specify air-cooling towers where feasible. Alternatively, select cooling

Avoid evapo comp water

The screenshot shows a report section titled "DHW - Install shower and tap flow restrictions". It includes a "The Measure" section, an "Application" section (listing "Suites, kitchens, bathrooms, recreation rooms, etc."), and a "Benefits" section (listing "Increased water savings", "Reduced energy costs to heat domestic hot water", and "Upgrade in appearance of shower/tap fixtures"). A "Considerations" section follows, detailing various factors like water pressure, equipment selection, and tenant communication.



Performance ratings

Supplementary information

Recommendations

Web references

schematic design → preliminary rating
 construction documents → final rating



CERTIFICATION

TWO-GLOBES CERTIFIED
BLAKELY HALL

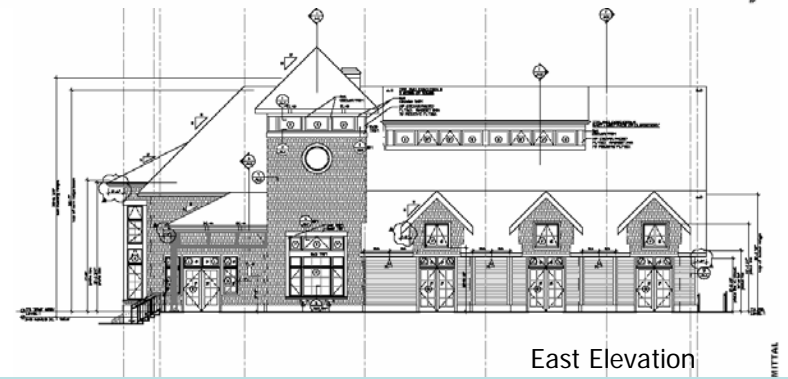
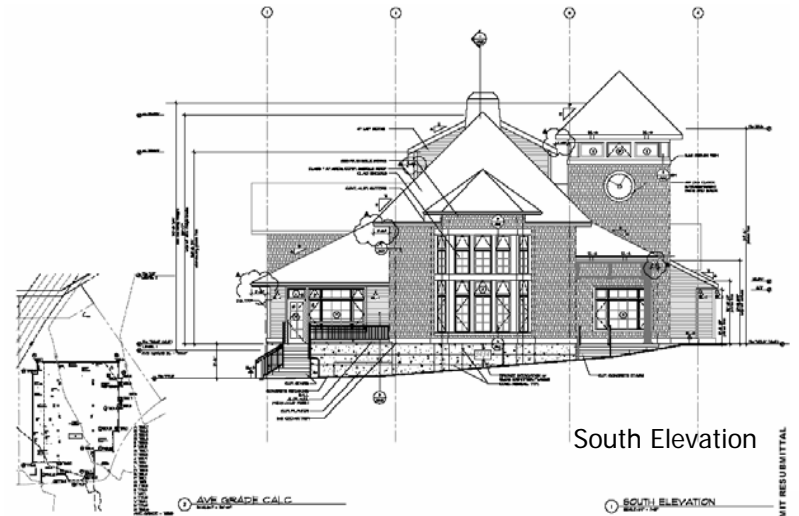


2005

RECOGNIZED FOR ENVIRONMENTAL AND
ENERGY-EFFICIENT DESIGN BY THE
GREEN GLOBES™ DESIGN AND RATING SYSTEM.

**GREEN
BUILDING
INITIATIVE**
www.thegbi.org

First U.S. Green Globes Building



Blakely Hall, Issaquah, Washington

Weber + Thompson, PLLC Architects

ATTRIBUTES

- **User-Friendly**
 - Web infrastructure provides real time feedback and design guidance
- **Affordable**
 - Web platform reduces internal/external costs
- **Flexible**
 - Can accommodate large and smaller commercial structures

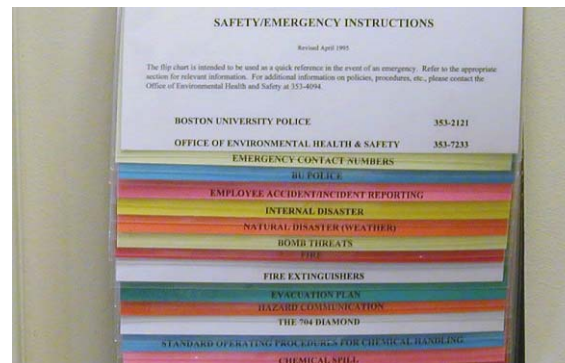
ATTRIBUTES

- **Comprehensive**
 - Tackles every aspect of environmental design and implementation
- **Rigorous**
 - When used with third party verification, the Green Globes™ system helps to publicly demonstrate environmental commitment

Seven Areas of Assessment

1 Project Management (50 pts.)

- Integrated design process
- Environmental purchasing
- Commissioning (plans for systems testing after construction)
- Emergency response plan



Emergency response flip charts



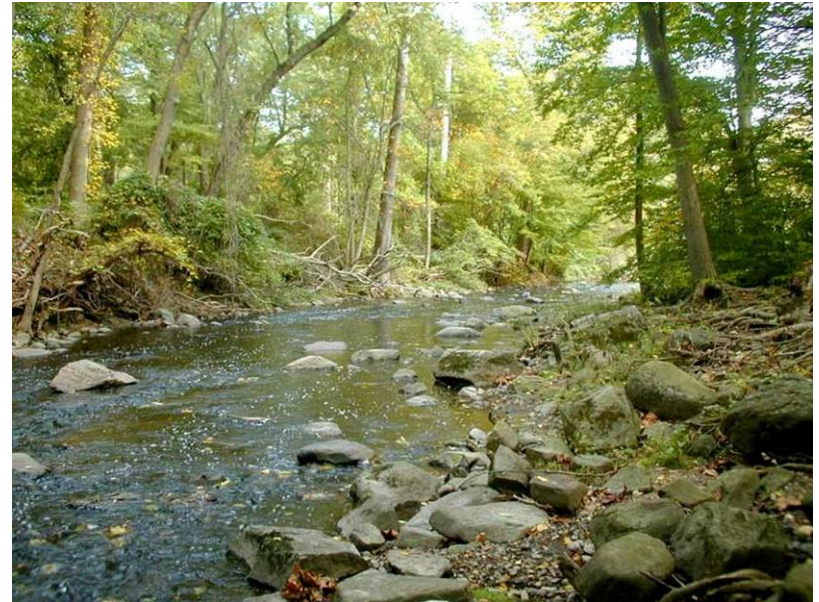
Environmental Choice™ Program



Seven Areas of Assessment

2 Site (115 pts.)

- Development area
- Ecological impacts (erosion, heat island, light pollution)
- Watershed features
- Site ecology enhancement



Natural corridor and Riparian Zone



Green roof



Brownfield

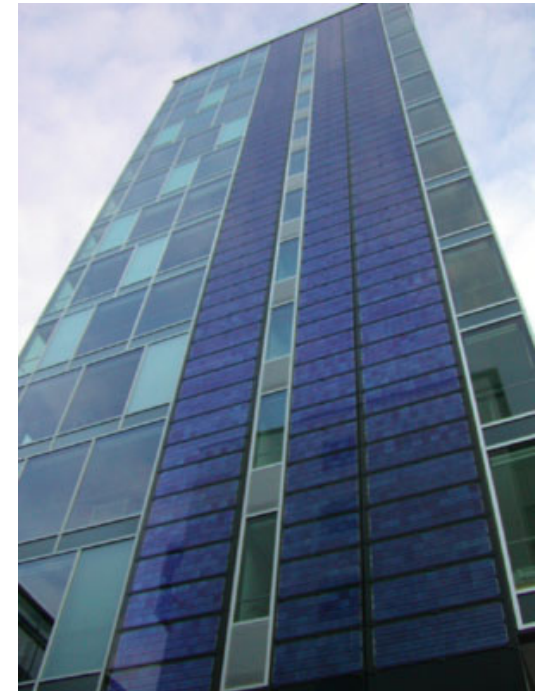


Native plant species – Bullrushes, Goldenrod, and Switchgrass

Seven Areas of Assessment

3 Energy (380 pts.)

- Energy performance
- Reduced demand (space optimization, microclimatic design, daylighting, envelope design, metering)
- Energy efficiency features (lighting, heating & cooling equipment).
- Renewable energy (solar, wind, biomass, etc)
- Transportation



Solar panels



Hydrogen station



Green roof



Efficient lighting



Bicycle storage



Energy metering

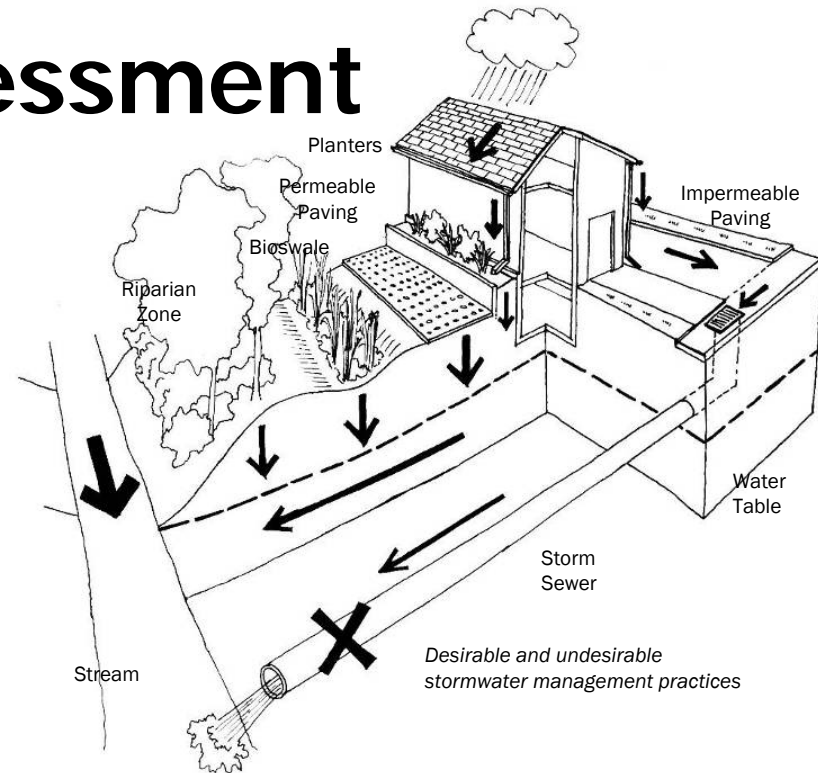


Wind turbine

Seven Areas of Assessment

4 Water (85 pts.)

- Water performance
- Water conserving features (equipment, meters, irrigation systems)
- On-site treatment (stormwater, greywater, blackwater)



Permeable paving



Solar aquatics wastewater treatment,



Low-flush toilet



Bioswale,

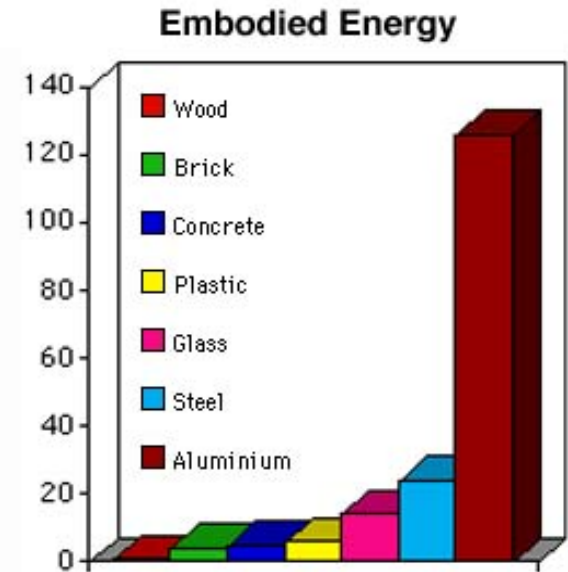


Water-saving showerheads

Seven Areas of Assessment

5 Resources (100 pts.)

- Low-impact systems and materials (LCA).
- Minimal use of non-renewables.
- Reuse of existing buildings.
- Durability, adaptability and disassembly.
- Demolition waste (reduce, reuse, recycle).
- Recycling & composting facilities.



Reused Buildings



Alternative composite panels



Recycled carpet



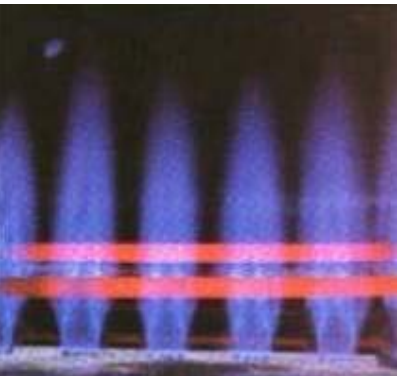
Seven Areas of Assessment

6 Emissions, Effluents & Other Impacts (70 pts.)

- Air emissions (boilers)
- Ozone depletion
- Sewer & waterway protection
- Pollution control (procedures, compliance with standards)



Recuperative boiler



Low-NOx burners



Pest prevention



Storage Tank



Smog

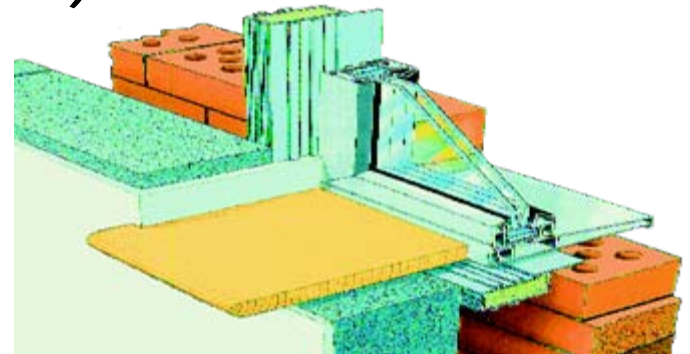


MSDSs, equipment manuals, etc.

Seven Areas of Assessment

7 Indoor Environment (200 pts.)

- Ventilation system
- Indoor pollution control
- Lighting (daylighting & electric)
- Thermal comfort
- Acoustic comfort



Insulated cavity closer discourages mould and bacteria growth

