

AMERICA'S FIRST LEED® PLATINUM HOTEL AND RESTAURANT



The Proximity Hotel and Print Works Bistro are certified LEED Platinum by the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) program. LEED is the USGBC's rating system for designing and constructing the world's greenest, most energy-efficient and high performing buildings. Opened in late 2007, Proximity Hotel and Print Works Bistro are the first in the hospitality industry to obtain the USGBC's top level of certification.

Dennis Quaintance, the CEO and CDO (Chief Design Officer) of Quaintance-Weaver: "When we started the design process four years ago, I would have never believed that we could use 39.2% less energy and 33.5% less water without one iota of compromise in comfort or luxury and with minimal additional construction costs. It just goes to show what a determined team can accomplish if they use common sense and get a little bit of help from the sun."

His "sun" comment refers to the 100 solar rooftop panels that heat water for the AAA Four Diamond hotel. To illustrate how the hotel and bistro save energy without negatively affecting guest comfort, he asks, "How is it a compromise for a guest to shower with water that is heated by the sun? Or, how is it a compromise for a bistro guest if his or her dishes are washed with solar heated water?"

Rigorous testing for a variety of water saving products was done by Quaintance and his family at their home, and it is paying off. The hotel and restaurant is on track to use two million gallons less water during the first year, saving more than \$13,000 by spending less than \$7,000 in additional construction costs.

"I've come to believe it is an urban legend that employing sustainable practices with new construction is too expensive," says Quaintance. "We are very happy with the results, including the costs and returns, of everything that we did for these two buildings. It's not easy—but it's not hard. And it's definitely worth it."



LEED certification considers energy use, lighting, water and material use as well as a variety of other sustainable strategies. LEED verifies environmental performance, occupant health and financial return. LEED was established for market leaders to design & construct buildings that protect and save precious resources while also making good economic sense.

"Proximity Hotel is to be commended for achieving LEED Platinum. This facility is one that both the community and its guests can be proud of," said Rick Fedrizzi, President, CEO, Founding Chair, U.S. Green Building Council. "Proximity is a showcase for high-performance, energy-efficiency, a healthy environment and an inspiration for others."

Built and operated by Quaintance-Weaver Restaurants and Hotels, the Proximity is just a stone's throw away from its sister businesses, Lucky 32, Green Valley Grill and the Four Diamond O.Henry Hotel. For more information visit www.proximityhotel.com.

About the U.S. Green Building Council

The U.S. Green Building Council is a nonprofit membership organization whose vision is a sustainable built environment within a generation. Since USGBC's founding in 1993, the Council has grown to more than 17,000 member companies and organizations, a comprehensive family of LEED® green building rating systems, an expansive educational offering, and a network of 78 local chapters, affiliates, and organizing groups. For more information visit www.usgbc.org.

About LEED®

The LEED® (Leadership in Energy and Environmental Design) Green Building Rating System™ is a feature-oriented rating system that awards buildings points for satisfying specified green building criteria. The six major environmental categories of review include: Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, Indoor Environmental Quality and Innovation and Design. Certified, Silver, Gold and Platinum levels of LEED green building certification are awarded based on the total number of points earned within each LEED category. LEED can be applied to all building types including new construction, commercial interiors, core & shell developments, existing buildings, homes, neighborhood developments, schools and retail facilities.

Incentives for LEED are available at the state and local level and LEED has also been adopted nationwide by federal agencies, state and local governments, and interested private companies. For more information, visit www.usgbc.org/LEED.

MORE ABOUT SUSTAINABLE PRACTICES AT PROXIMITY AND PRINT WORKS

Here is a sampling of the 70+ sustainable practices at Proximity Hotel & Print Works Bistro:

- The building uses 39.2% less energy than a conventional hotel/restaurant by using ultra efficient materials and the latest construction technology.
- The sun's energy heats hot water with 100 solar panels covering 4,000 square feet of rooftop.
- 700 linear feet of stream were restored by reducing erosion, planting local, adaptable plant species and rebuilding the buffers and banks.
- The bistro bar is made of salvaged, solid walnut trees that came down through sickness or storm and room service trays made of Plyboo (bamboo plywood).
- Variable speed hoods in the restaurant use a series of sensors to set the power according to the kitchen's needs and adjust to a lower level of operation (typically 25% of their full capacity). The sensors also detect heat, smoke or other effluents and increase the fan speed to keep the air fresh.
- Geothermal energy is used for the restaurant's refrigeration equipment, instead of a standard water-cooled system, saving significant amounts of water.
- North America's first Regenerative Drive model of the Otis' Gen2 elevator reduces net energy usage by capturing the system's energy and feeds it back into the building's internal electrical grid.
- Abundant natural lighting, including large energy-efficient "operable" windows (7'4" square windows in guest rooms), connects guests to the outdoors by achieving a direct line of sight to the outdoor environment for more than 97% of all regularly occupied spaces.
- Building materials with recycled content include reinforced steel with 90% post consumer recycled content, sheetrock 100%, asphalt 25% and staircase steel 50%. Concrete contains 4% fly ash (224,000 pounds), the mineral residue left after the combustion of coal that is diverted from landfills.
- 87% of construction waste was recycled, diverting 1,535 tons of debris from landfills.
- Water usage has been reduced by 33.5% by installing high-efficiency Kohler plumbing fixtures, saving three million gallons of water the first year.
- Air quality is improved by circulating large amounts of outside air into guestrooms (60 cubic feet per minute) and doing so in an energy efficient way by employing "energy recovery" technology where the outside air is tempered by the air being exhausted.
- Regional vendors and artists were used for materials to reduce transportation and packaging.
- Low-emitting volatile organic compound (VOC) paints, adhesives, carpets, etc. reduce indoor air contamination.
- Guestroom shelving and the bistro's tabletops are made of walnut veneer, over a substrate of SkyBlend, a particleboard made from 100% post-industrial recycled wood pulp with no added formaldehyde.
- A green, vegetated rooftop in test containers is planted on the restaurant to reduce the "urban heat island effect." This helps reflect the heat and slows rain runoff, as well as insulates the roof.
- "Education Center" for sustainable practices includes tours of our "green" hotel for guests, symposia and outreach programs for students of all ages.
- Bicycles are available for guests to ride on the nearby five-mile greenway.



LEED - NC

NEW CONSTRUCTION

PURPOSE

The Leadership in Energy and Environmental Design (LEED) Rating System was designed by the US Green Building Council to encourage and facilitate the development of more sustainable buildings.

LEED CREDITS

The environmental categories are subdivided into the established LEED credits, which are based on desired performance goals within each category. An assessment of whether the credit is earned or denied is made and a narrative describes the basis for the assessment.

CREDITS ACHIEVED

55

RATING

Platinum

OFFICIAL SCORES

Official LEED v2.2-2008 Scores: **Certified:** 26-32 **Silver Rating:** 33-38 **Gold Rating:** 39-51 **Platinum Rating:** 52+

CREDITS
EARNED

12

SUSTAINABLE SITES

POSSIBLE POINTS 14

CONSTRUCTION ACTIVITY POLLUTION PREVENTION – PREREQUISITE

The project has followed local erosion and sedimentation control standards and codes, which are more stringent than the NPDES program requirements.

1

SITE SELECTION

The hotel site does not meet any of the prohibited criteria.

1

DEVELOPMENT DENSITY; COMMUNITY CONNECTIVITY

The project has been renovated or constructed on a previously developed site within 1/2 mile of a residential zone or neighborhood with an average density of 10 units per acre net and within 1/2 mile of at least 10 Basic Services.

1

ALTERNATIVE TRANSPORTATION: PUBLIC TRANSPORTATION ACCESS

The project is located within 1/4 mile of one or more stops for two or more public or campus bus lines usable by building occupants.

1

ALTERNATIVE TRANSPORTATION: BICYCLE STORAGE; CHANGING ROOMS

Secure bicycle racks/storage has been provided for at least 5% of all peak building users within 200 yards of a building entrance and shower/changing facilities have been provided within 200 yards of the building entrance for at least 0.5% of Full-Time Equivalent occupants.

1

ALTERNATIVE TRANSPORTATION: LOW-EMITTING; FUEL EFFICIENT VEHICLES

Preferred parking has been provided for low-emitting and fuel-efficient vehicles for 5% of the total vehicle parking capacity of the site.

1

ALTERNATIVE TRANSPORTATION: PARKING CAPACITY

The parking capacity has been sized to meet, but not exceed, the minimum local zoning requirements, and that preferred parking has been provided for 5% of the total provided parking spaces.

1

SITE DEVELOPMENT: PROTECT OR RESTORE HABITAT

A minimum of 50% of the site area that does not fall within the building footprint has been restored with native planting.

1

SITE DEVELOPMENT: MAXIMIZE OPEN SPACE CREDIT

Local zoning requirements do not require open space, so an area of open space has been allocated which is equal to or greater than 20% of the total site area.

1

STORMWATER MANAGEMENT: QUANTITY CONTROL

Existing Imperviousness less than or equal to 50%. A stormwater management plan or stream channel protection strategy has been implemented that protects receiving stream channels from excessive erosion.



1 **STORMWATER MANAGEMENT: QUALITY CONTROL**

1 **HEAT ISLAND EFFECT: ROOF CREDIT**

Reflective roofing materials have been used for at least 75% of the project's roof surface.

1 **LIGHT POLLUTION REDUCTION**

The maximum candela value from interior fixtures does not intersect transparent or translucent exterior building surfaces OR automatic lighting controls turn off non-essential lighting during non-business hours and the Lighting Power Density is within the LEED Allowable threshold and the percentage of site lamp lumens above 90 degrees from nadir is no greater than 2%.

CREDITS
EARNED

4 **WATER EFFICIENCY**

POSSIBLE POINTS 5

2 **WATER EFFICIENT LANDSCAPING**

The landscaping and irrigation systems have been designed to reduce irrigation water consumption from a calculated baseline and the irrigation water used on site is supplied by a non-potable source.

2 **WATER USE REDUCTION**

Water use has been reduced by 33.5% through the use of low-flow fixtures.

CREDITS
EARNED

16 **ENERGY; ATMOSPHERE**

POSSIBLE POINTS 17

FUNDAMENTAL COMMISSIONING – PREREQUISITE

MINIMUM ENERGY PERFORMANCE – PREREQUISITE

FUNDAMENTAL REFRIGERANT MANAGEMENT – PREREQUISITE

The project's HVAC & Refrigeration systems do not contain CFC-based refrigerants.

9 **OPTIMIZE ENERGY PERFORMANCE**

The energy modeling output indicate a 39.2% savings between the design case and the budget case based on ASHRAE 90.1-2004.

3 **ON-SITE RENEWABLE ENERGY**

Calculations indicate that 8.49% of the building's regulated energy cost is provided by on-site renewable energy.

1 **ENHANCED COMMISSIONING**

1 **ENHANCED REFRIGERANT MANAGEMENT**

The base building HVAC & Refrigeration equipment does not exceed the LEED Ozone Depletion and Global Warming maximum threshold formula.

1 **MEASUREMENT; VERIFICATION**

The project has developed and implemented a measurement and verification plan consistent with Option (D) of the IPMVP.

1 **GREEN POWER**

35% of the Electricity is from renewable sources.



CREDITS
EARNED

6 **MATERIALS; RESOURCES**

POSSIBLE POINTS 13

STORAGE; COLLECTION OF RECYCLABLES – PREREQUISITE

Appropriate facilities for recycling have been provided.

2 **CONSTRUCTION WASTE MANAGEMENT**

The project diverted 1,535 tons (86.9%) of on-site generated construction waste from landfill.

2 **RECYCLED CONTENT**

22.4% of the total building materials content, by value, have been manufactured using recycled materials.

2 **REGIONAL MATERIALS**

45.9% of the total building materials value is comprised of building materials and/or products that have been extracted, processed and manufactured within 500 miles of the project site.

CREDITS
EARNED

12 **INDOOR ENVIRONMENTAL QUALITY**

POSSIBLE POINTS 15

MINIMUM INDOOR AIR QUALITY PERFORMANCE – PREREQUISITE

The requirements of ASHRAE 62.1-2004 have been met.

ENVIRONMENTAL TOBACCO SMOKE (ETS) CONTROL — PREREQUISITE

No smoking is allowed in the building and designated exterior smoking areas are located at least 25 feet away from entries, outdoor air intakes and operable windows.

1

OUTDOOR AIR DELIVERY MONITORING

A CO2 monitoring system has been installed.

1

INCREASED VENTILATION

Outdoor air ventilation rates have been increased to all occupied spaces by at least 30% above the minimum rates required by ASHRAE Standard 62.1-2004.

1

CONSTRUCTION INDOOR AIR QUALITY MANAGEMENT PLAN: DURING CONSTRUCTION

The project developed and implemented a construction IAQ management plan that followed the referenced SMACNA Guidelines. A copy of the project's IAQ Management Plan and photos highlighting the implemented IAQ measures have been provided.

1

LOW-EMITTING MATERIALS: ADHESIVES; SEALANTS

All adhesive and sealant products comply with the VOC (Volital Organic Compounds) limits.

1

LOW-EMITTING MATERIALS: PAINTS; COATINGS

All indoor paints, stains, and clear finishes comply with the VOC (Volital Organic Compounds) limits of the referenced Green Seal and SCAQMD standards.

1

LOW-EMITTING MATERIALS: CARPET SYSTEMS

Installed carpet systems comply with the VOC (Volital Organic Compounds) limits of the CRI Green Label Plus Testing Program.

1

CONTROLLABILITY OF SYSTEMS: LIGHTING

Sufficient lighting controls have been provided for all shared multi-occupant spaces and that at least 50% of the individual workstations have been provided with lighting controls.

1

CONTROLLABILITY OF SYSTEMS: THERMAL COMFORT

Individual comfort controls have been provided.

1

THERMAL COMFORT: DESIGN

The project has been designed to maintain indoor comfort within the ranges established by ASHRAE 55-2004.

1

THERMAL COMFORT: VERIFICATION

A post-occupancy survey will be conducted to determine occupant thermal comfort satisfaction.

1

DAYLIGHTING; VIEWS: DAYLIGHT 75% OF SPACES

1

DAYLIGHTING; VIEWS: VIEWS FOR 90% OF SPACES

97.15% of critical visual task areas have direct access to views of the outdoors.



CREDITS
EARNED

5

INNOVATION; DESIGN PROCESS

POSSIBLE POINTS 5

1

INNOVATION IN DESIGN

Achieving views for 97.15% of critical visual task areas.

1

INNOVATION IN DESIGN

Green Building Education efforts.

1. Poster board narratives
2. A series of "Sustainable Practices Symposiums" available to the public
 - (a) Outreach to the education community
 - (b) Providing speakers (in the first year, over 70 speaking engagements were fulfilled by team speakers)
 - (c) Sustainable Practices tours (over 9,000 in the first year)
3. NC A&T State University collaboration program with their Center of Energy Research and Technology

1

INNOVATION IN DESIGN CREDIT

Restoration of 700 linear feet of stream to the NC Department of Water quality standards.

1

INNOVATION IN DESIGN

Over 40% of the building materials sourced locally.

1

LEED ACCREDITED PROFESSIONAL

A LEED AP has been a participant on the project development team.

