



UGL Unicco Guides Bay Colony through LEED-EBOM Certification

First multi-building, multi-tenant corporate campus to receive certification under new LEED-EBOM guidelines...

The Bay Colony Corporate Center is a four-building complex totaling 980,000 square feet of Class A office space. The first building was constructed in 1985 with development at the site continuing over the next few years until 1998. The buildings occupy a 59-acre wooded site in a prime location in Waltham, Massachusetts, a suburb of Boston. They are managed by Broadway Real Estate Services.

UGL Unicco on the Scene

Broadway Real Estate Services' Portfolio Manager, Brian Barriero, inquired about the feasibility of obtaining the U.S. Green Building Council (USGBC) Leadership in Energy and Environmental Design for Existing Buildings: Operations & Maintenance (LEED-EBOM) certification.

UGL Unicco, which was already providing custodial services for the four buildings using its UGL Unicco GreenClean® approach, engaged LEED-AP (Accredited Professionals) from its Facilities Management Solutions (FMS) group to evaluate the current operations, identify gaps, and develop a plan for LEED-EBOM certification. The FMS assessment revealed that the site could obtain LEED-EBOM certification (Silver) with no capital modifications, minor changes to current operations, and no additional burdens on the tenant population.

Because of their demonstrated expertise and extensive resume, UGL Unicco was awarded the contract to drive the complex through the LEED-EBOM certification process with the USGBC Green Building Certification Institute (GBCI). The team was headed by Professional Engineer Ken Stack, LEED-AP, Senior Director, Technical Services. The project began in 2008 with LEED-EBOM Silver certification being awarded in late 2009.

PROJECT SUMMARY

Customer: *Broadway Real Estate Services on behalf of Bay Colony Corporate Center*

Industry: *Commercial real estate*

Situation: *LEED-EBOM certification*

UGL Unicco service: *LEED-AP consulting*

Results: *The first LEED-EBOM certification (Silver) for a multi-building, multi-tenant corporate campus*

Bay Colony Corporate Center Certification Timeline:

- July 2008 – Performed initial assessment to determine if the buildings met the prerequisites, and performed a gap analysis for certification;
- August 2008-September 2008 – Created Standard Operating Procedures, performed assessments, audits, and engineering analysis in order to reach compliance for the Performance Period;
- October 2008-January 2009 – Performance Period. Steady-state operations and collecting operating data for submittal with the LEED application;
- February 2009 – Submitted LEED application to USGBC/GBCI;
- October 2009 – Received initial review comments from USGBC/GBCI;
- November 2009 – Submitted responses to the review committee;
- December 2009 – Received LEED-EBOM Silver certification.

Ken Stack outlined the project in a narrative:

The project team began preparations approximately three months before the anticipated Performance Period start date. Our first step was to review all of the prerequisites and credits to see which ones and how many points we thought were attainable.

Once those prerequisites and credits were identified, we held weekly team meetings. During these meetings, we assigned different credits to project team members and discussed our progress. We created or updated SOPs and management plans associated with the LEED credits and we completed as much preparation and credit templates as we could prior to the start of the Performance Period.



Given the multi-tenant nature of the complex, we concentrated our efforts on elements that were under the direct control of building management to avoid creating economic or administrative burdens on the tenant population.

Once the Performance Period began, we monitored daily operations

to make sure that all plans and procedures were being followed in accordance with LEED requirements. At the completion of the Performance Period, during the final data collection phase, the project team once again met weekly. All credits and prerequisites were reviewed; appropriate records and data were obtained and uploaded to LEED online; and credit templates were completed. Once we established that we had satisfied the requirements for every attempted credit, we submitted the application for review.

A Few Examples Illustrate the Approach

The operation review covered a wide range of the credits since it was not clear which elements would qualify for credits until they were thoroughly reviewed and compared to the required LEED standard. So, Stack and his team analyzed each element of the LEED credits in order to identify attainable credits. For instance, the Green Cleaning elements (*Indoor Environmental Quality, Prerequisite 3 and Credits 3.1-3.8*) were easily attained since UGL Unicco's GreenClean program met both reporting and operations LEED program requirements.

Indoor Integrated Pest Management (*Indoor Environmental Quality, Credit 3.9*) required better occupant notification procedures and improved data capture and reporting. Rectifying these two items enabled Bay Colony to qualify for this credit.

Stormwater Management (*Sustainable Sites, Credit 6*) covering Bay Colony's 3025-space surface parking areas and landscaping required an engineering survey to calculate water retention and runoff, measure the size of retention ponds, etc. In this case, the property as designed did qualify, so the engineering report satisfied the Credit requirement.

Light Pollution Reduction (*Sustainable Sites, Credit 8*) requires that all outdoor lighting fixtures be shielded and that lighting levels cannot exceed certain limits. The only way to verify qualification is to conduct an audit. In the case of Bay Colony, it was found that the lighting did not conform and that it would require an expensive retrofit to meet the criteria. It was decided to forego the one optional credit and concentrate on other areas.

Company: Broadway Real Estate Services

Industry: Commercial Real Estate

UGL Unicco's Energy Engineers also conducted an ASHRAE (Association of Heating, Refrigeration, & Air Conditioning Engineers) Level 2 energy audit, which provided valuable information for several credits under the Energy & Atmosphere category. This helped the property manager identify cost-effective, short-term energy projects and also develop longer-term capital projects.

The Bay Colony Corporate Center LEED-EBOM project took about 18 months but the results were worth it. Bay Colony joins an elite group of Class A buildings that qualify for LEED certification and has the distinction of being the first multi-building, multi-tenant campus certified under the LEED-EBOM qualification system. It is able to differentiate itself from the competition and, more importantly, is minimizing its impact on the environment.