



**State of Oklahoma
Office of Management and Enterprise Services
Division of Capital Assets Management
Construction and Properties**

**High Performance
Building Certification Program
Guidelines for Implementation**

1. General

This document contains operational guidance for the implementation of House Bill No. 3394 of the 2008 Legislative Session, signed into law by the Governor on May 23rd, 2008 and codified as 61 O.S. § 213 in the Public Building Construction and Planning Act. The requirements set forth by this legislation are referred to herein as the High Performance Building Certification Program (Program).

61 O.S. § 213 requires the Division of Capital Assets Management (DCAM) to adopt and periodically update standards, monitor and evaluate associated benefits of the broad requirements, and issue an annual report regarding program guidelines, monitoring and evaluation procedures and the benefits of the high performance certification program. The Administrator of the Division of Capital Assets Management has delegated DCAM's responsibilities under 61 O.S. § 213 to the State Construction Administrator of the Construction and Properties Department.

These guidelines outline the Program adopted by DCAM, which include the certification standards, guidance for applying the requirements of 61 O.S. § 213 and provisions for ongoing monitoring, evaluation and revisions.

2. Program Applicability

Public Building Owners (Agency Constructing or Renovating Building)

As defined by 61 O.S. § 213 (B)(3), the Program requirements apply to all State Agencies and the Oklahoma State System of Higher Education who initiate design work on a qualified public building construction project on or after July 1, 2009. Other State entities subject to the Program as defined by 61 O.S. § 213 (B)(3) include any board, commission, counsel, court, office, officer, bureau, institution, unit division, body, or house of the executive or judicial branches of state government, whether elected or appointed. Each such operational unit of the State should examine their status as a State entity according to the given definition and determine the applicability of the Program to their organization.

Included Building Construction Projects

The requirements of the Program apply to any new public building where all of the following conditions are met:

- Is constructed with State funds contributing at least fifty percent of the project cost;
- Contains 10,000 or more gross square feet;
- Includes a heating, ventilation or air conditioning system.

The requirements of the Program also apply to a substantial renovation of a public building when all of the following conditions are met:

- Is renovated with State funds contributing at least fifty percent of the project cost;
- Contains 10,000 or more gross square feet;
- Includes a heating, ventilation or air conditioning system;
- Where the cost of renovation exceeds 50% of the replacement value of the building.

Small Projects, Minor Construction and Maintenance Projects

Any building project less than 10,000 square feet that would otherwise qualify under the Program, or any minor construction project or maintenance project must adhere to the requirements as much as possible.

Projects Exempt from the Program and Marginally Qualified Projects

Building construction projects may not have to comply with all provisions of the Program when:

- Extenuating circumstances exist that preclude compliance, as determined by the State Construction Administrator;
- The cost of obtaining certification, as described in paragraph 3, is estimated to exceed five percent (5%) of the total cost of design, construction or renovation, as verified upon examination by the State Construction Administrator;
- Or when the historical nature of an existing building precludes certification, or the increased cost of certification for substantial renovation cannot be recouped from operational savings within five years, certification is not required. However, the licensed design professional must certify in writing that the project was carried out as far as possible in accordance with the Program and will be designated as a "Marginally Qualified Project."

3. Adoption of Certification Standards

The Construction and Properties Department has adopted the certification standards of the United States Green Building Council's Leadership in Energy and Environmental Design Rating System (LEED), latest edition in effect at the time design for a qualified project is initiated.

Alternatively, a State entity may choose to use the certification standards of the Green Building Initiative's Green Globes Rating System, latest edition when: the State entity has construction contracting authority independent of the Construction and Properties Department; the entity has a compelling reason, such as prior familiarity, to do so; and, the entity ensures that the Green Globes system will be implemented in accordance with the requirements of the Program. This alternative use will be subject to the reporting requirements stated in paragraph 6.

For projects administered by the Construction and Properties Department, all construction projects subject to the requirements of the Program will include a base requirement to be designated as an ENERGY STAR building by the United States Environmental Protection Agency.

4. Certification Level Required

Both LEED and Green Globes offer a hierarchy of certification levels based on points earned under the respective certification standards. Regardless of the certification standard used for a particular project, any project subject to the Program shall achieve the highest certification level attainable. A certification level is attainable if the increased initial costs of achieving a certification level can be recouped through reduced operating costs within five (5) years. The method of determining the required certification level may vary depending on whether a particular project has already been funded or if it is in the pre-planning stage.

Below are two examples. The first addresses a recommended approach when planning a new project, prior to obtaining funding, as would normally occur during Pre-Design Service as performed by a design consultant. The second presents an analytical approach that may be used after a project has been funded but for which compliance with the Standard was not initially considered.

Example 1: Pre-Project Planning

Planning for a New 50,000 Square Foot Office Building:

Estimated Cost of Traditional Design and Construction =	\$ 10,000,000	(\$200 per SF)
Estimated Annual Operating Cost of Traditional Project =	300,000	(\$6 per SF)
Estimated Annual Operating Cost of High Performance Building:	200,000	(\$4 per SF)
Operational Savings per year:	100,000	
Accumulative five year savings	\$ 500,000	

Therefore, this project example would achieve the Highest Certification possible spending an additional \$500,000 in project costs. The project budget would then be established at \$10,500,000. This is only an example. A project could be planned to any desired certification level and the budget established accordingly.

Example 2: Project Has Been Funded, Budget is Set

New 50,000 Square Foot Office Building:		
Budget Set for Construction using traditional cost data:	\$ 10,000,000	(\$200 per SF)

Since the budget is fixed and there is no possibility of obtaining additional funds, the Agency and Design Consultant should develop alternatives for consideration, including a reduction of the project scope. One possible scenario would be:

Reduced Scope budget	\$ 9,523,800	Does this scope meet the requirement?
5% Allowance for Program Upgrades	476,190	What certification level can we achieve with this amount?

If the reduced scope does not meet the requirement for the building's intended purpose, increase the scope until it does, and determine the level of certification, if any, achievable from the balance. If the project cannot be certified within the available funding, apply for an exemption from the State Construction Administrator. If the exemption is granted, the project will be executed as a Marginally Qualified Project as described in paragraph 2, Projects Exempt from the Program.

Note: A public agency may voluntarily fund a project to achieve any level of certification higher than that required. If it is determined that a particular project, by means of cost comparison, is exempt from the Program, it is recommended that as many components of the Program are incorporated as allowed by the budget. Energy Star certification should be considered as a basic requirement, as that designation has the greatest potential to reduce future energy costs.

5. Program Guidelines for Implementation

A. Project Planning and Budgeting

When establishing the scope and budget for a project subject to the Program, the estimating state agency, or the agency's consultant shall compare the cost of certification to a baseline cost using traditional building construction. Normally, DCAM/CAP will rely on the analysis provided by a licensed design consultant to develop costs, life-cycle analysis and comparative analysis to optimize a project scope and budget.

B. Building Commissioning

Every project subject to the Program (substantial renovation or new construction $\geq 10,000$ square feet) will include Building Commissioning by a consultant acting as a Building Commissioning Agent to insure building system performance and return on investment. This requirement may be waived by the State Construction Administrator when the nature of the project warrants.

C. Method of Certification

When certification is required by the Program, the normal method of certification will be enrollment in the LEED (or Green Globes) certification program, with certification verification occurring through the application and approval process. The design consultant will normally be responsible for handling the documentation and submittal process, with the fees for certification paid from the project budget.

Alternatively, or when appropriate for a Marginally Qualifying Project, compliance with the certification standard may be verified by a Building Commissioning Agent when said agent holds certification from the respective certification organization.

D. Priority for Certification Points (LEED or Green Globes)

For each project, the Public Building Owner, with the assistance of the design consultant, should develop a strategy for achieving certification points. The priorities of each project may differ, depending on the goals and needs of the agency, use of the building or other factors. A balance of points may enhance both the long term operational saving and the soft objectives (recycling, use of Oklahoma materials, etc.) of the statute. For Marginally Qualified Projects, the agency should consider a strategy for partial certification points that achieves long term operating benefits.

6. Program Evaluation and Monitoring

Upon completion of each project subject to the Program, the Public Building Owner shall report the following data to the Construction and Properties Department:

- Project Cost and percent attributable to certification
- Baseline estimate of energy usage
- Baseline estimate of water usage or other consumption or discharge
- Other measurable performance benchmarks of the Program that the operator intends to measure
- Other measureable or perceived benefits, hardships or roadblocks to compliance with the Program
- A copy of any certification verification received from the independent certification organization

This information would normally be compiled by the design consultant and/or building commissioning agent. The format for reporting may be standardized by DCAM/CAP in future updates to the Program.

At the end of the first year of full facility operations, the agency shall file a supplemental report on actual operations and include:

- Statement of comparison of baseline to actual energy usage
- Statement of comparison of baseline to actual water usage or other consumption or discharge
- Comparison of other measurable performance benchmarks identified for the project
- Update on other measureable or perceived benefits, hardships or roadblocks to compliance with the Program

7. Summary

This policy statement has been prepared to implement 61 O.S. § 213 by establishing a High Performance Building Certification Program for state construction. The guidelines presented herein have been developed for compliance with the law and are designed to achieve long term benefits for the Public Building Owner subject to the requirements of the Program.

Please contact the Construction and Properties Department at 405/521-2112 with any questions or comments. Comments or suggestions may be submitted in writing at any time to the State Construction Administrator. This policy will be reviewed periodically for effectiveness and updated or revised as appropriate.