# Energy Efficiency and Sustainable Construction Standards for State Buildings

## Georgia Peach Green Building Rating System



In accordance with the Energy Efficiency and Sustainable Construction Act of 2008 (O.C.G.A. §50-8-18)

BOR Facility Officers Conference; November 2015

### Georgia Peach Green Building Rating System

#### **OVERVIEW**

• This presentation is an overview of the Georgia Peach Green Building Rating System; which was formed January 2013 and is designed to rate and recognize buildings owned or managed by the State that optimize energy performance, increase the demand for materials and furnishings produced in Georgia, improve the environmental quality in the state, conserve energy, protect the state's natural resources, and reduce the burden on the state's water supply.

#### **OBJECTIVES**

- Identify the standards that State facilities must be designed and constructed in order to meet the requirements of the Energy Efficiency and Sustainable Construction Act of 2008 (EESCA).
- Provide information about the program's minimum requirements and Incentives of the rating system.
- Discuss the Commissioning Requirements, Water Use Reduction Requirements and Georgia Based Material & Products Requirements along with Incentive points to meet EESCA.
- Explain the submittal process to apply for Georgia Peach certification.

## **History and Purpose**

- The Energy Efficiency and Sustainable Construction Act of 2008 (the "Act", codified at O.C.G.A. § 50-8-18).
- Rate and recognize buildings owned or managed by the State that optimize energy performance and conserve energy.
- Increase the demand for materials and furnishings produced in Georgia by using Georgia based materials and products in these buildings.
- Improve the environmental quality in this state, protect the state's natural resources, and reduce the burden on the state's water supply.

## SCOPE OF EESCA

The provision of the EESCA standards apply to the Construction, Rehabilitation and Maintenance of State-Funded Facilities:

- New construction building projects exceeding 10,000 SF.
- A renovation project that is more than 50% of the replacement value of the facility (as determined by the Dept. of Administrative Services Risk Management Division).
- Any change in occupancy.
- Any roof replacement project exceeding 10,000 SF.
- A commercial interior tenant fit-out project exceeding 10,000 SF of leasable area where the state is intended to be the lessor of such property.
- Exception: Any building, regardless of size, that does not have conditioned space as defined by ASHRAE or a state owned building that is on the historical registry or any local, county or municipal building.

## Structure and Management of the Peach Program

- Comprised of an Executive Committee and a Review Committee.
- Executive Committee consist of members from the leadership of GSFIC, BOR & GEFA.
- The Review Committee consists of three (3) employees of the State of Georgia and Four (4) members from Industry Partners.
- Executive Committee may appoint Affiliate Members to the Review Committee.
- Review Committee shall meet at least on a quarterly basis.

### **Peach Award Nomination Submittals**

- Submitted by an **Authorized Representative** of the Using/Tenant Agency in PDF format to: <a href="mailto:georgiapeach@docs.e-Builder.net">georgiapeach@docs.e-Builder.net</a>.
- Award will be a formal letter of Certification and a Plaque.
- Each submission requiring a plaque must be accompanied by check for \$1,000 payable to GSFIC – may be paid from appropriated project funds.
- Submittal Status will be provided within three (3) months of the submission date.

### **Rating System Point Scale**

#### **Minimum Requirements**

- Fundamental Commissioning
- Water-Use Reduction
- Georgia-based Materials & Products

**Incentives** 

- Additional (Enhanced) Commissioning
- Water-Use Reduction
- Georgia-based Materials & Resources
- Energy Modeling & Life Cycle Cost Analysis

**Total Point Certification Level** 

- 12-30 Points = (
- 31-50 Points = ( )
- 51-70 Points =
- 71-100 Points =

Mandatory (No Points)
Mandatory (No Points)
Mandatory (No Points)

10 Points

2-20 Points

2-20 Points

5-50 Points

## **Incentive - Water Use Reduction**

Baseline – 15% less than current adopted minimum International Plumbing Code requirements

Water-Use Reduction Percentage	Points Earned	
15%	0 (Minimum Requirement)	
25%	2	
35%	4	
45%	6	
55%	8	
65%	10	
75%	12	
85%	14	
95%	16	
100%	20	

## Incentive - Georgia-based Materials & Products

Georgia-based Materials & Products Percentage

10%

20%

30%

40%

50%

60%

70%

80%

90%

100%

**Points Earned** 

0 (Minimum Requirement)

2

4

6

8

10

12

14

16

20

## Incentive – Energy Modeling & Life Cycle Cost Analysis

5 to 50 Points
Energy Modeling

- Computer simulation of building envelope & MEP systems
- Comparison "baseline" building per Current Adopted International Energy Code (ASHRAE 90.1) vs "proposed" building per ASHRAE 90.1

Energy Cost Savings Percentage	Points Earned		
0%	0 (Minimum Requirement)		
5%	5		
10%	10		
15%	15		
20%	20		
25%	25		
30%	30		
35%	35		
40%	40		
45%	45		
50%	50		

## Peach Award Application Submittals

## Mandatory

- Executive Project Summary
- Commissioning Checklist
- Water-use Reduction Checklist
- GA-based Materials & Products Checklist
- Certification by the Design Professional

### Incentives

- Additional (Enhanced) Commissioning Checklist
- Water-use Reduction Checklist
- GA-based materials & Products Checklist
- Energy Modeling Checklist
- Life Cycle Cost Analysis

## **Executive Project Summary**

- Executive Summary of the facility outlining:
  - Scope
  - Funding Source
  - Number of Stories
  - Gross Square Footage
  - Stated Cost Limitation
  - Project Duration
  - Other Key Characteristics/Information of the Building/Facility - Building Photos (4 max)
  - Primary Point of Contact (name, phone #, email)
  - Design & Construction Team Key Members (Design Professionals of Record – Architect, MEP Engineers; General Contractor, MEP subcontractors)

## Peach Award Application Submittals Quick Reference

- Submitted by an **Authorized Representative** of the Using/Tenant Agency in PDF format to <a href="mailto:georgiapeach@docs.e-Builder.net">georgiapeach@docs.e-Builder.net</a>.
- Award will be a formal letter of Certification and a Plaque.
- Each nomination requiring a plaque must be accompanied by check for \$1,000 payable to GSFIC – may be paid from appropriated project funds.
- Submittal Status will be provided within three (3) months of the Authorized Representative submission date.
- Executive Summary of the facility outlining:
  - Scope
  - Funding Source
  - Number of Stories
  - Gross Square Footage
  - Stated Cost Limitation
  - Project Duration
  - Other Key Characteristics/Information of the Building/Facility Building Photos (4 max)
  - Primary Point of Contact (name, phone #, email)
  - Design & Construction Team Key Members (Design Professionals of Record Architect, MEP Engineers; General Contractor, MEP subcontractors)

## Peach Award Application Submittals Quick Reference

### Mandatory

- Executive Project Summary
- Commissioning Checklist
- Water-use Reduction Checklist
- GA-based Materials & Products Checklist
- Certification by the Design Professional

#### Incentives

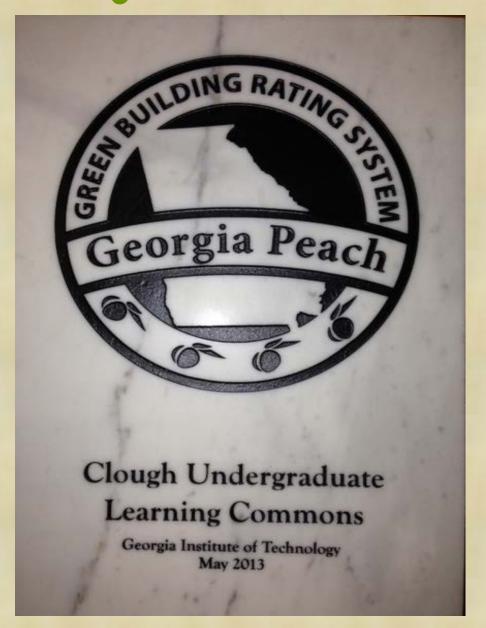
- Additional (Enhanced) Commissioning Checklist
- Water-use Reduction Checklist
- GA-based materials & Products Checklist
- Energy Modeling Checklist
- Life Cycle Cost Analysis
- <a href="http://www.dca.state.ga.us/development/constructioncodes/publications/">http://www.dca.state.ga.us/development/constructioncodes/publications/</a> Energy-Efficiency-and-Sustainable-Construction-Standards-FINAL.pdf
- Georgia State Financing & Investment Commission (GSFIC) Peach Guidelines – <a href="http://gsfic.georgia.gov/Construction">http://gsfic.georgia.gov/Construction</a>
   Division/Services/Peach Program

## Peach Award Application Submittals Review Checklist

#### PEACH AWARD APPLIUCATION SUBMITTAL - REVIEW CHECKLIST

REQUIREMENT	DESCRIPTION	INCLUDED YES/NO	PEACH POINTS REQUESTED	PEACH POINTS AWARDED	REMARKS
MANDATORY	STATE FUNDED/OWNED PROJECT				
	Scope				
	Number of Stories				
	Gross Square Footage				
	Stated Cost Limitation				
	Project Duration				
	Project Occupancy Date				
	Project Delivery Method				
	Other Key Characteristics/Information of the Building/Facility - Building Photos (4 max)				
	Primary Point of Contact (name, phone #, email)				
	Design & Construction Team Key Members (Design Professionals of Record – Architect, MEP Engineers; General Contractor, MEP subcontractors)				
MANDATORY	Commissioning Checklist				
	Water-use Reduction Checklist GA-based Materials & Products Checklist Certification by the Design Professional				
INCENTIVES	Additional (Enhanced) Commissioning Checklist				
	Water-use Reduction Checklist				
	Water Source - (grey/recycle)				
	GA-based materials & Products Checklist				
	Energy Modeling Checklist				
	Life Cycle Cost Analysis				
	Type of Plaque requested				
	TOTAL PEACH POINTS				

## PEACH PLAQUE - GEORGIA MARBLE



## PEACH CERTIFICATE



Certified - Two Peaches

Biological Sciences Building

Georgia Southern University March 2015

State Property Officer

Nathan Deal

Governor

## QUESTIONS???





- GEORGIA PEACH GREEN BUILDING RATING SYSTEM
- CERTIFICATION PROGRAM GUIDELINES ON HOW TO OBTAIN PEACHES
- Additional Questions/Comments? Submit to:
  - Peach Committee Chairman Gifton Passley, GSFIC
  - Phone (404) 463-5772
  - Email georgiapeach@docs.e-Builder.net