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# Energy Efficiency & Sustainable Construction Act of 2008

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# Energy Efficiency & Sustainable Construction Act of 2008

## Program Summary

Background & Overview of Senate Bill 130

Outline of the Program Requirements

The Georgia Peach Rating System



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## Background & Overview

# Senate Bill 130

Signed by Governor Perdue on May 6, 2008

*The General Assembly finds that the welfare of this state is enhanced by the promotion of effective energy and environmental standards for construction, rehabilitation, and maintenance of state-funded facilities and that such standards in turn improve this state's capacity to design, build and operate high-performance buildings, contributing to economic growth, promoting job development, and increasing energy conservation.*

Directed through the Department of Community Affairs with consultation from the Georgia State Finance and Investment Commission



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## Background & Overview

# Senate Bill 130

1. Optimize Energy Performance
2. Increase demand for Georgia construction materials and products
3. Improve environmental quality from reduce pollutant discharge
4. Conserve energy and promote local renewable sources
5. Protect and restore the State's Natural Resources
6. Reduce potable water consumption
7. Use Life Cycle Cost Analysis to determine a project's environmental performance
8. Encourage obtaining Energy Star designation



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## Background & Overview

# Regulated Buildings

- All new construction building projects exceeding 10,000 sq. ft.
- A renovation project that is more than 50% of the replacement value of the facility
- A change in occupancy
- Any roof replacement project exceeding 10,000 square feet
- A commercial interior tenant fit-out project exceeding 10,000 square feet of leasable area where the state is intended to be the lessor of such property.



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## Background & Overview

# Exceptions

- A major facility project shall not include a building, regardless of size, that does not have conditioned space
- A state owned building that is on the historical registry
- Any local, county, or municipal building



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Background & Overview

## Effective Date

Requirements apply to all major facilities  
projects entering into design agreements after

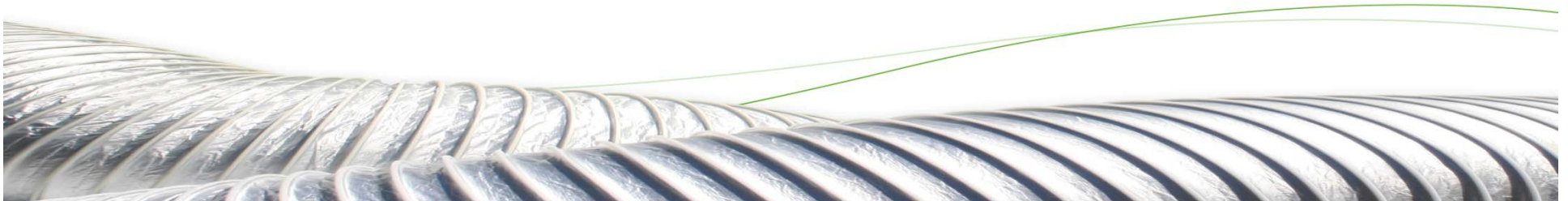
***July 1, 2010***



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# The Georgia Peach Green Building Rating System

The rating system and standards are a resource for state agencies, design professionals, contractors and building operations. It's a set of policies, procedures and guidelines that provide more stringent energy efficiency requirements for future State buildings







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# The Georgia Peach Green Building Rating System

## Total Point Certification Level

12-30 Points =



31-50 Points =



51-70 Points =



71-100 Points =



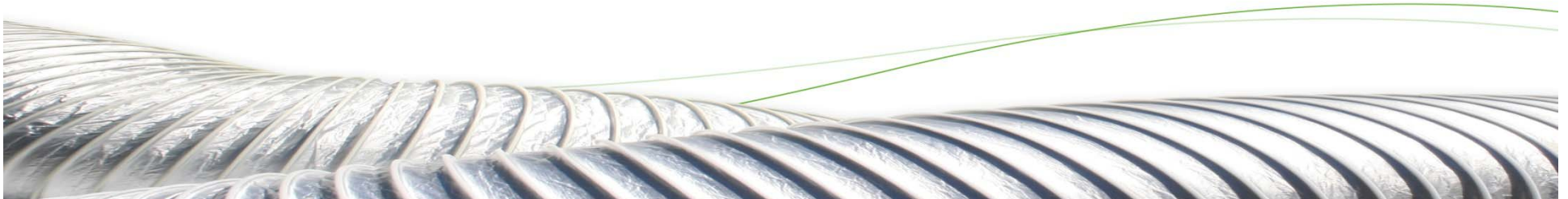


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Requirements

## Commissioning

A professional engineer, design professional, or commissioning agent **shall** certify that the building project's systems for heating, ventilating, air conditioning, energy conservation, and water conservation are installed and working properly to ensure that each building project performs according to the building's overall environmental design intent and operational objectives





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Requirements

## Commissioning

*Required:* Fundamental Commissioning

*Incentive:* Additional Commissioning

Also referred to as Enhanced Commissioning

Worth **10 Points**



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Requirements

## Water Use Reduction

All major facility projects *shall* be designed, constructed, and commissioned or modeled to achieve a **15 percent reduction** in water use when compared to water use based on plumbing fixture selection in accordance with the Energy Policy Act of 1992



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## Requirements

# Water Use Reduction

- *Required:* 15% Water Use Reduction using the Energy Policy Act of 1992 as a baseline design case
- *Incentive:* Water Use Reduction of 25% or more

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

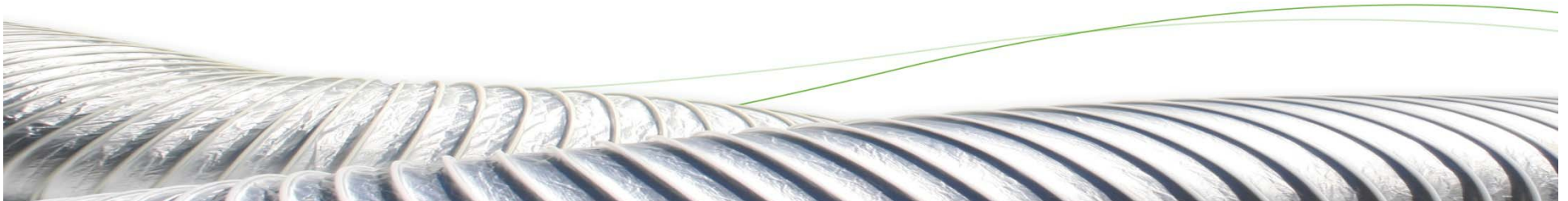


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Requirements

## Georgia Based Materials & Products

All major facility projects *shall* include Georgia products such that not less than **10 percent** of all building materials used in a project are harvested, extracted, or manufactured in the State of Georgia





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## Requirements

# Georgia Based Materials & Products

- *Required:* 10% of All building materials & Products must be Georgia Based
- *Incentive:* Georgia Based Materials & Product use of 20% or more

Materials & Products Percentage	Points Earned
10%	0 (Requirement)
20%	2
30%	4
40%	6
50%	8
60%	10
70%	12
80%	14
90%	16
100%	20



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## Recommendations

### Energy Modeling & LCCA

All major facility projects *may* be designed, constructed, and commissioned or modeled to exceed the standards set forth in ASHRAE 90.1.2004 by **30 percent** where it is determined by the department that such 30 percent efficiency is cost effective based on a life cycle cost analysis with a **payback at no more than ten years**. Commissioning or modeling must be performed by a professional engineer, design professional, or commissioning agent.





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Requirements

## Energy Modeling & LCCA

- *Recommendation: Reduce Energy consumption by 30% such that life cycle cost analysis yields a payback of no more than 10 years.*
- *Incentive: All energy use reduction is awarded by points accordingly*

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



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## Requirements

- Fundamental Commissioning
- 15% Water Use Reduction
- 10% Georgia Based Materials and Products

## Incentives

- Enhanced Commissioning
- Water Use Reduction of 25% +
- Georgia Based Materials and Products of 20% +
- Energy Use Reduction shown through Energy Modeling



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# The Georgia Peach Workshop

Held Throughout Georgia

4 Hour Training

Comprehensive Review of the Standards

AIA CE Credit / USGBC LEED CE Credit

Call Energy Ace to Ask about additional details and Scheduling



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# Questions? **Thank You!**

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