

Green Building Certifications

Beyond
Commercial
Recycling



Green
Building in a
Commercial
or
Institutional
Building



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City of Tallahassee
Your Own Utilities™



Green Building Programs

- USGBC LEED®
- FGBC Commercial Standards
- Green Globes (GBI)
- Energy Star Building Rating (EPA)



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The Municipal GB Voyage

- 2004 - Green Epiphany
- Renovation of their 6,500 sq. ft. operations and administrative building
- Current building was 30 years old
- City wanted to set the standard for environmentally responsible design and building practices
 - Pursue USGBC LEED-NC® Certification for New Construction or Major Renovation

City of Tallahassee
Your Own Utilities™



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Green Building Team



- Owner: City of Tallahassee Solid Waste Services Department
- Other City Departments
- Kessler Consulting, Inc.
- Rolando J. Gutierrez Architects
- TLC Engineering for Architecture
- Rosenbaum Engineering, Inc.
- Allstate Construction, Inc.



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USGBC LEED® Green Building Rating System™

- LEED: Leadership in Energy & Environmental Design.
- LEED projects/buildings get certified, people get accredited.
- LEED is a voluntary rating system with 6 specific rating areas.
 - New Construction/Major Renovation Points System:
 - Certified: 26 to 32
 - Silver: 33 to 38
 - Gold: 39 to 51
 - Platinum: 52 or more



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LEED® Certification


- Sustainable Sites: 
 - **Purpose:** To reduce impacts on previously undeveloped lands and local ecologies and to improve previously contaminated sites
 - **Applications:** Erosion and sedimentation control, alternative transportation, light pollution reduction
- Water Efficiency: 
 - **Purpose:** To reduce maintenance, life-cycle, and operational costs associated with excessive water usage
 - **Applications:** Water efficient landscaping, innovative technologies, water reduction



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LEED® Certification


- Energy & Atmosphere: 
 - **Purpose:** To reduce energy consumption through practices that are economical and readily achievable
 - **Applications:** Energy performance, renewable energy, and green power

- Indoor Environmental Quality: 
 - **Purpose:** To enhance the indoor environment and optimize interior spaces for building occupants
 - **Applications:** CO₂ monitoring, low emitting materials, ventilation effectiveness, thermal comfort, and daylighting/views



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LEED® Certification

- Materials & Resources (MR): 
 - **Purpose:** To reduce environmental impacts such as air and water pollution, habitat destruction, and the depletion of natural resources that are associated with the production and delivery of new building products
 - **Applications:** Building and resource reuse, recycled content, rapidly renewable material, and construction waste management



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MR: Storage & Collection of Recyclables

- A Prerequisite
- The intent of this required point is to reduce waste generated by building occupants collected and disposed in landfills.



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MR: Building Reuse

- Maintain 75% (1) and/or 95%(2) of Existing Walls, Floors, and Roof.
 - Extend the life cycle of existing building stock, conserve resources, retain cultural resources, reduce waste, and reduce environmental impacts of new buildings.



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MR: Building Reuse (cont)

- Use existing interior non-structural elements (interior walls, doors, floor coverings and ceiling systems) in at least 50% (by area) of the completed building (including additions).
 - Extend the life cycle of existing building stock, conserve resources, retain cultural resources, reduce waste, and reduce environmental impacts of new buildings.



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MR: Construction Waste Mgmt.

- Divert 50%(1) and/or 75%(2) from Landfill.
 - Divert construction, demolition, and land-clearing debris from disposal in landfills and incinerators.
 - Redirect recyclable recovered resources back to the manufacturing process.



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Project Demolition



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Project Demolition - Recycling



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Project Demolition - Recycling



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MR: Resource Reuse



- Reuse 5%(1) and/or 10%(2) of Materials.
- Reuse building materials and products in order to reduce the demand for virgin materials and to reduce waste.



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MR: Recycled Content



- Utilize Materials with 10%(1) and/or 20%(2) Post-consumer Recycled Content
 - Increase demand for building products that incorporate recycled content materials.



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MR: Regional Materials



- Purchase 10%(1) and/or 20%(2) of Materials Harvested and Manufactured within 500 mile radius (regionally).
 - Increase demand for building products that are extracted and manufactured within the region, thereby supporting indigenous resources.



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MR: Rapidly Renewable Materials



- Reduce the use and depletion of finite raw materials and long-cycle renewable materials by replacing 2.5% of them by cost with rapidly renewable materials.



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MR: Certified Wood



- Encourages environmentally responsible forest management through the use of 50% of the wood based materials and products certified by the Forest Stewardship Council's (FSC) Principles and Criteria.



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End Result – LEED® Silver



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Contact Information

*“Remember that some days you’re the pigeon and others the statue.”
Adlai Stevenson*

*“The privilege of a lifetime is being who you are.”
Joseph Campbell*

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