Understanding and Using LEED

March 17, 2009

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Department of General Services

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Today’s Agenda

• LEED Assessment Discussion
• California Public Policy - Overview
• Introduction to the U.S. Green Building Council & LEED Rating Systems
• LEED-NC Rating System (for new construction and major renovations)
• LEED Resources and Training
Assessment Survey

1. How many have worked on the LEED certification of a project?
2. How many are currently working on projects required to be LEED certified?
3. Any LEED accredited professionals? (LEED AP)
4. Any taken LEED training or workshop?
State of California

- 2.1 million acres of land
- 22,500 structures > 205 M sq. ft.
- Leases > 20 million sq. ft.
- Invests $3.8 billion annually in facilities
- >$9 billion annual purchases
California’s Motivations for Building Green

Lower Operating Costs
- Reduced energy use
- Conserve water, lower maintenance

Customer / Occupant Satisfaction
- Improved comfort and indoor air quality

Good for the Environment
- Reduced greenhouse gas emissions
- Reduced environmental impact
- Reduce Waste
One More Motivation…
Executive Order S-20-04
Signed December 14, 2004
Energy and Resource Efficiency

Reduce energy use by 20% by 2015
Retrofit, build and operate the most energy and resource efficient public buildings
CA Requirements: LEED

Design, construct and operate all State facilities as “LEED Silver” or higher

- New & renovated buildings >10,000 sq. ft.
- Existing buildings >50,000 sq. ft.

“Building projects less than 10,000 sq. ft. shall use the same design standard, but certification is not required.”
California’s AB 32
Global Warming Solutions Act of 2006

• California to reduce its greenhouse gas emissions to 1990 levels by 2020
• Scoping Plan adopted in January 2009
  • Zero Net Energy (ZNE) Homes by 2020
  • ZNE commercial bldgs by 2030
    - State of CA buildings ZNE by 2025
    - LEED-NC Gold certification for State bldgs
• [www.arb.ca.gov/cc/scopingplan/document/psp.pdf](http://www.arb.ca.gov/cc/scopingplan/document/psp.pdf)
2008 California Green Building Standards Code

• CA Code of Regulations, Title 24, Part 11
• Takes effect August 1, 2009
• Mostly voluntary measures, some mandatory
• Construction Methods

California LEED Building Owners

- Government: 42%
- Education: 20%
- Profit: 20%
- Non-Profit: 11%
- Individual: 7%
LEED for new construction buildings as of 1/08

Distribution by geography

- 200+
- 100-199
- 50-99
- 20-49
- 1-19

Map showing the number of LEED-certified buildings by state and territory.
California Cities w/ LEED Adoptions

Alameda County  Palo Alto  Santa Clara
Albany  Pasadena  Santa Clarita
Anaheim  Pleasanton  Santa Cruz
Burbank  Sacramento  Santa Monica
Costa Mesa  San Bernadino  Santa Rosa
Irvine  San Diego  Stockton
Long Beach  San Francisco  Temecula
Los Altos  San Jose  Ventura
Los Angeles  San Mateo  West Hollywood
Monterey  San Rafael
Oakland

USGBC Gov’t Policy Database:

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State of California’s LEED-NC Buildings

- 14 buildings already LEED-NC certified
- 221 current buildings pursuing LEED certif.

81 building projects (> 6.1 M sq. ft.)

CalSTRS Headquarters
West Sacramento

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Department of Education, Sacramento - LEED-NC Gold (Jan 2003)
LEED-EB Platinum (July 2006)
Dept. of Public Health, Sacramento - LEED-NC Certified (Feb 2004), LEED-EB Gold (Feb 2008)
CalTrans District 7, Los Angeles - LEED-NC Silver (Jan 2006)
Los Angeles Crime Lab - LEED-NC Silver (Fall 2008)
Riverside DMV Field Office - LEED-NC Silver (Dec 2008)
CA Requirements: LEED-EB

- Existing State Buildings >50,000 sq. ft.
- Status - 6 Buildings Certified
  - 59 buildings pursuing certif. in 2009/10 (13.1 M sq. ft.)
  - >200 buildings next 7 years

Dept. of Education LEED-EB Platinum (June 2006)

Dept. Public Health – 4 bldgs. LEED-EB Gold (Feb 2008)

Cal EPA Headquarters LEED-EB Platinum (November 2003)

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USGBC
What is our role?

- STEWARD this market transformation
- OFFER Expertise
- EDUCATE the industry and the public
- PROVIDE tools
- FORUM for industry dialog
Average Savings of Green Buildings

- **Energy Savings**: 30%
- **Carbon Savings**: 35%
- **Water Use Savings**: 30-50%
- **Waste Cost Savings**: 50-90%

Source: Capital E
Categories of LEED Ratings

- LEED for New Construction
- LEED for Commercial Interiors
- LEED for Existing Buildings
- LEED for Core & Shell
- LEED for Homes
- LEED for Neighborhood Development
- LEED for Schools

NEW PROGRAMS

- LEED for Healthcare
- LEED for Retail Laboratories
  Multi-building Campuses
- Multi-family Residential
Green Buildings worldwide are certified with a voluntary, consensus-based rating system. USGBC has four levels of LEED.
California Study:

• 2004 Report by California’s Sustainable Building Task Force
• Reviewed 33 bldgs built over previous 10 yrs
• ~2% investment yielded 20% return
  • $100K investment in $5 M project yields $1M return
Additional constructions costs for LEED-certified buildings

Overview

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Platinum (2 buildings)</th>
<th>Gold (9 buildings)</th>
<th>Silver (21 buildings)</th>
<th>Certified (8 buildings)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional Building Cost (100%)</td>
<td>6.8%</td>
<td>2.2%</td>
<td>1.9%</td>
<td>.66%</td>
</tr>
</tbody>
</table>

Average for offices and schools, based on 40 buildings
When to Use LEED-NC

New Construction or Major Renovations

Commercial Buildings

- Offices
- Retail & Service
- Institutional (libraries, schools, museums, etc.)
- Hotels
- Residential (typically 4 or more stories)

Other
There is no “S” in “LEED”

- Only buildings can become “LEED certified”
- People can only become “LEED accredited”
- No products nor companies can ever become “LEED certified”
- Organizations can become USGBC members of national USGBC organization
- Individuals can become members of USGBC chapters
  - See [www.usgbc-ncc.org](http://www.usgbc-ncc.org) for Northern CA events
LEED-NC

Leadership in Energy & Environmental Design

- Version 2.0 published 2001
- Version 2.1 published 2002
- Version 2.2 published 2005
- Version 2009 published 2009 (April/May)

Future of LEED

- Updates to versions every 3 years (2012 next)
- LEED Bookshelf
  - Harmonize & align credits & core elements of all LEED rating systems
  - Adaptive & flexible
Recommended References

LEED-NC for New Construction Reference Guide
2009 version available April/May 2009

- Bound book $150 ea. for USGBC members ($200 nm)
  - Includes 1 month access to .pdf version that can be downloaded, saved and printed

- Order LEED-NC Reference Guide(s) at

- Introductory Chapter online at

- Can download LEED-NC Rating System summary online

Additional On-Line References

Leadership in Energy and Environmental Design (LEED) Green Building Rating Systems (www.usgbc.org)

- **LEED-NC** for New Construction and Major Renovations,
- **LEED-EB** for Existing Buildings: Operation & Maintenance
- **LEED-CI** for Commercial Interiors
- **LEED-CS** for Core & Shell Development
- **LEED for Schools** for New Construction and Major Renovations
- **LEED-H** for Homes
- New, Draft or Pilot Rating Systems:
  - Neighborhood Development, Retail, Healthcare
<table>
<thead>
<tr>
<th>LEED-NC Rating System</th>
<th>v2.2 Prereq. Points</th>
<th>v2009 Prereq. Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable Sites</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>26</td>
</tr>
<tr>
<td>Water Efficiency</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Energy &amp; Atmosphere</td>
<td>3</td>
<td>3</td>
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<tr>
<td></td>
<td>17</td>
<td>35</td>
</tr>
<tr>
<td>(incl. 2 req’d pts.)</td>
<td></td>
<td></td>
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<tr>
<td>Materials &amp; Resources</td>
<td>1</td>
<td>1</td>
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<tr>
<td></td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>Indoor Environ. Quality</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Innovation</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Regional Points</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Total Available Points</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>69</td>
<td>110</td>
</tr>
</tbody>
</table>
LEED-NC Certification

Point System with 4 levels of certification:

<table>
<thead>
<tr>
<th>Level</th>
<th>v2.2 Points Range</th>
<th>v2009 Points Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. LEED Certified</td>
<td>26-32 Points</td>
<td>40-50 Points</td>
</tr>
<tr>
<td>2. LEED Silver</td>
<td>33-38 Points</td>
<td>50-60 Points</td>
</tr>
<tr>
<td>3. LEED Gold</td>
<td>39-51 Points</td>
<td>60-80 Points</td>
</tr>
<tr>
<td>4. LEED Platinum</td>
<td>52+ Points</td>
<td>80+ Points</td>
</tr>
</tbody>
</table>

www.usgbc.org
# Sustainable Sites – 14 Points (26 in v2009)

<table>
<thead>
<tr>
<th>Prereq 1</th>
<th>Construction Activity Pollution Prevention</th>
<th>Required</th>
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</thead>
<tbody>
<tr>
<td>Credit 1</td>
<td>Site Selection</td>
<td>1</td>
</tr>
<tr>
<td>Credit 2</td>
<td>Development Density &amp; Community Connectivity</td>
<td>(5) 1</td>
</tr>
<tr>
<td>Credit 3</td>
<td>Brownfield Redevelopment</td>
<td>1</td>
</tr>
<tr>
<td>Credit 4.1</td>
<td>Alternative Transportation, Public Transportation Access</td>
<td>(6) 1</td>
</tr>
<tr>
<td>Credit 4.2</td>
<td>Alternative Transportation, Bicycle Storage &amp; Changing Rooms</td>
<td>1</td>
</tr>
<tr>
<td>Credit 4.3</td>
<td>Alternative Transportation, Low-Emitting and Fuel-Efficient Vehicles</td>
<td>(3) 1</td>
</tr>
<tr>
<td>Credit 4.4</td>
<td>Alternative Transportation, Parking Capacity</td>
<td>(2) 1</td>
</tr>
<tr>
<td>Credit 5.1</td>
<td>Site Development, Protect of Restore Habitat</td>
<td>1</td>
</tr>
<tr>
<td>Credit 5.2</td>
<td>Site Development, Maximize Open Space</td>
<td>1</td>
</tr>
<tr>
<td>Credit 6.1</td>
<td>Stormwater Design, Quantity Control</td>
<td>1</td>
</tr>
<tr>
<td>Credit 6.2</td>
<td>Stormwater Design, Quality Control</td>
<td>1</td>
</tr>
<tr>
<td>Credit 7.1</td>
<td>Heat Island Effect, Non-Roof</td>
<td>1</td>
</tr>
<tr>
<td>Credit 7.2</td>
<td>Heat Island Effect, Roof</td>
<td>1</td>
</tr>
<tr>
<td>Credit 8</td>
<td>Light Pollution Reduction</td>
<td>1</td>
</tr>
</tbody>
</table>

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## Water Efficiency – 5 Points (10 in v2009)

<table>
<thead>
<tr>
<th>Credit Level</th>
<th>Description</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prereq. 1</td>
<td><strong>Water Use Reduction</strong>, Reduce by 20%</td>
<td>Required v2009</td>
</tr>
<tr>
<td>Credit 1</td>
<td><strong>Water Efficient Landscaping</strong>, Reduce by 50%</td>
<td>(2) 1</td>
</tr>
<tr>
<td>Credit 1.2</td>
<td><strong>Water Efficient Landscaping</strong>, No Potable Use or No Irrigation</td>
<td>(2) 1</td>
</tr>
<tr>
<td>Credit 2</td>
<td><strong>Innovative Wastewater Technologies</strong></td>
<td>(2) 1</td>
</tr>
<tr>
<td>Credit 3.1</td>
<td><strong>Water Use Reduction</strong>, 20% Reduction <em>(30% in v2009)</em></td>
<td>(2) 1</td>
</tr>
<tr>
<td>Credit 3.2</td>
<td><strong>Water Use Reduction</strong>, 30% Reduction <em>(35% in v2009)</em></td>
<td>(2) 1</td>
</tr>
<tr>
<td>Credit 3.3</td>
<td><strong>Water Use Reduction</strong>, 40% Reduction <em>(new in v2009)</em></td>
<td>(2) 1</td>
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</tbody>
</table>
# Energy & Atmosphere – 17 Points (35 in v2009)

<table>
<thead>
<tr>
<th>Prereq 1</th>
<th>Fundamental Commissioning of the Building Energy Systems</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prereq 2</td>
<td>Minimum Energy Performance</td>
<td>(10% &gt; in v2009) Required</td>
</tr>
<tr>
<td>Prereq 3</td>
<td>Fundamental Refrigerant Management</td>
<td>Required</td>
</tr>
<tr>
<td>Credit 1</td>
<td>Optimize Energy Performance</td>
<td>(19 in v2009) *2 of 10 Required</td>
</tr>
<tr>
<td>Credit 2</td>
<td>On-Site Renewable Energy</td>
<td>(7 in v2009) 1 to 3</td>
</tr>
<tr>
<td>Credit 3</td>
<td>Enhanced Commissioning</td>
<td>(2) 1</td>
</tr>
<tr>
<td>Credit 4</td>
<td>Enhanced Refrigerant Management</td>
<td>(2) 1</td>
</tr>
<tr>
<td>Credit 5</td>
<td>Measurement &amp; Verification</td>
<td>(3) 1</td>
</tr>
<tr>
<td>Credit 6</td>
<td>Green Power</td>
<td>(2) 1</td>
</tr>
</tbody>
</table>

* Min. 2 energy credits required for v2.2 projects registered after 6/26/07
Materials & Resources – 13 Points

<table>
<thead>
<tr>
<th>Prereq 1</th>
<th>Storage &amp; Collection of Recyclables</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit 1.1</td>
<td>Building Reuse, Maintain 75% (55%) of Exist. Walls, Floors &amp; Roof</td>
<td>1</td>
</tr>
<tr>
<td>Credit 1.2</td>
<td>Building Reuse, Maintain 95% (75%) of Exist. Walls, Floors &amp; Roof</td>
<td>1</td>
</tr>
<tr>
<td>Credit 1.3</td>
<td>Building Reuse, Maintain 95% of Exist. Walls, Floors &amp; Roof (v.2009)</td>
<td>1</td>
</tr>
<tr>
<td>Credit 1.4</td>
<td>Building Reuse, Maintain 50% of Inter. Non-Structural Elements</td>
<td>1</td>
</tr>
<tr>
<td>Credit 2.1</td>
<td>Construction Waste Management, Divert 50% from Disposal</td>
<td>1</td>
</tr>
<tr>
<td>Credit 2.2</td>
<td>Construction Waste Management, Divert 75% from Disposal</td>
<td>1</td>
</tr>
<tr>
<td>Credit 3.1</td>
<td>Materials Reuse, 5%</td>
<td>1</td>
</tr>
<tr>
<td>Credit 3.2</td>
<td>Materials Reuse, 10%</td>
<td>1</td>
</tr>
<tr>
<td>Credit 4.1</td>
<td>Recycled Content, 10% (post-consumer + ½ pre-consumer)</td>
<td>1</td>
</tr>
<tr>
<td>Credit 4.2</td>
<td>Recycled Content, 20% (post-consumer + ½ pre-consumer)</td>
<td>1</td>
</tr>
<tr>
<td>Credit 5.1</td>
<td>Regional Materials, 10% Extracted, Processed &amp; Manuf’d Regionally</td>
<td>1</td>
</tr>
<tr>
<td>Credit 5.2</td>
<td>Regional Materials, 20% Extracted, Processed &amp; Manuf’d Regionally</td>
<td>1</td>
</tr>
<tr>
<td>Credit 6</td>
<td>Rapidly Renewable Materials</td>
<td>1</td>
</tr>
<tr>
<td>Credit 7</td>
<td>Certified Wood</td>
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</table>
## Indoor Environmental Quality – 15 Points

<table>
<thead>
<tr>
<th>Prereq 1</th>
<th>Minimum IAQ Performance</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prereq 2</td>
<td>Environmental Tobacco Smoke (ETS) Control</td>
<td>Required</td>
</tr>
<tr>
<td>Credit 1</td>
<td>Outdoor Air Delivery Monitoring</td>
<td>1</td>
</tr>
<tr>
<td>Credit 2</td>
<td>Increased Ventilation</td>
<td>1</td>
</tr>
<tr>
<td>Credit 3.1</td>
<td>Construction IAQ Management Plan, During Construction</td>
<td>1</td>
</tr>
<tr>
<td>Credit 3.2</td>
<td>Construction IAQ Management Plan, Before Occupancy</td>
<td>1</td>
</tr>
<tr>
<td>Credit 4.1</td>
<td>Low-Emitting Materials, Adhesives &amp; Sealants</td>
<td>1</td>
</tr>
<tr>
<td>Credit 4.2</td>
<td>Low-Emitting Materials, Paints &amp; Coatings</td>
<td>1</td>
</tr>
<tr>
<td>Credit 4.3</td>
<td>Low-Emitting Materials, Carpet Systems (Incl. all Flooring in v2009)</td>
<td>1</td>
</tr>
<tr>
<td>Credit 4.4</td>
<td>Low-Emitting Materials, Composite Wood &amp; Agrifiber Products</td>
<td>1</td>
</tr>
<tr>
<td>Credit 5</td>
<td>Indoor Chemical &amp; Pollutant Source Control</td>
<td>1</td>
</tr>
<tr>
<td>Credit 6.1</td>
<td>Controllability of Systems, Lighting</td>
<td>1</td>
</tr>
<tr>
<td>Credit 6.2</td>
<td>Controllability of Systems, Thermal Comfort</td>
<td>1</td>
</tr>
<tr>
<td>Credit 7.1</td>
<td>Thermal Comfort, Design</td>
<td>1</td>
</tr>
<tr>
<td>Credit 7.2</td>
<td>Thermal Comfort, Verification</td>
<td>1</td>
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<tr>
<td>Credit 8.1</td>
<td>Daylight &amp; Views, Daylight 75% of Spaces</td>
<td>1</td>
</tr>
<tr>
<td>Credit 8.2</td>
<td>Daylight &amp; Views, Views for 90% of Spaces</td>
<td>1</td>
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Innovation & Design – 5 Points *(6 in v2009)*

<table>
<thead>
<tr>
<th>Credit</th>
<th>Title</th>
<th>Points</th>
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</thead>
<tbody>
<tr>
<td>Credit 1.1</td>
<td><em>Innovation in Design</em>: Provide Specific Title</td>
<td>1</td>
</tr>
<tr>
<td>Credit 1.2</td>
<td><em>Innovation in Design</em>: Provide Specific Title</td>
<td>1</td>
</tr>
<tr>
<td>Credit 1.3</td>
<td><em>Innovation in Design</em>: Provide Specific Title</td>
<td>1</td>
</tr>
<tr>
<td>Credit 1.4</td>
<td><em>Innovation in Design</em>: Provide Specific Title</td>
<td>1</td>
</tr>
<tr>
<td>Credit 1.5</td>
<td><em>Innovation in Design</em>: Provide Specific Title <em>(new in v2009)</em></td>
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</tr>
<tr>
<td>Credit 2</td>
<td>LEED® Accredited Professional</td>
<td>1</td>
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</tbody>
</table>

Regional Credits *(new in v2009)* – 4 Points

*(To be determined by Pacific Region)*

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Eight Steps to LEED Certification

1. LEED On-line Registration
2. Determine LEED credits sought
   • LEED charrette or preliminary LEED analysis
3. Set-up LEED-Online Project Teams & Assign Roles
4. LEED-Online Documentation
5. LEED Design Submittal
6. LEED Construction Submittal
7. Appeal Process – If any
8. Certification Awarded
# LEED Certification Fees

<table>
<thead>
<tr>
<th>Service</th>
<th>Members</th>
<th>Non-members</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LEED Registration</strong></td>
<td>$450 Flat Fee</td>
<td>$600 Flat Fee</td>
</tr>
<tr>
<td><strong>LEED Design Submittal</strong></td>
<td>$0.025/s.f.</td>
<td>$0.03/s.f.</td>
</tr>
<tr>
<td>&lt;50,000 s.f.</td>
<td>$1,250 min.</td>
<td>$1,500 min.</td>
</tr>
<tr>
<td>&gt;500,000 s.f.</td>
<td>$12,500 max.</td>
<td>$15,000 max.</td>
</tr>
<tr>
<td><strong>LEED Construction Submittal</strong></td>
<td>$0.01/s.f.</td>
<td>$0.015/s.f.</td>
</tr>
<tr>
<td>&lt;50,000 s.f.</td>
<td>$500 min.</td>
<td>$750 min.</td>
</tr>
<tr>
<td>&gt;500,000 s.f.</td>
<td>$5,000 max.</td>
<td>$7,500 max.</td>
</tr>
<tr>
<td><strong>Appeal Process – Per credit</strong></td>
<td>$500</td>
<td>$500</td>
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<tr>
<td>appealed, if any</td>
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<td></td>
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</table>

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Letter Templates

• On-line form required for every credit
• Access to letter templates
  - Registered projects have access to each template for credits sought
• Includes signature block for person responsible for credit
• Includes space for narrative for credit
• Can attach numerous types, formats and examples of documentation
  - Everything is electronic format
LEED for Existing Buildings: Operation & Maintenance (EBOM)

1. Focus on operation, maintenance, energy efficiency, policy implementation

LEED EBOM 2008: 92 total points

LEED EBOM 2009: 110 total points
LEED for Commercial Interiors (LEED-CI) v.2.0

LEED-CI v2.0: 57 total points

Certified: 20-26 points, Silver: 27-31 points, Gold: 32-41 points, Platinum: 42+ points

LEED-CI 2009: 110 total points

Certified: 40-49 points, Silver: 50-59 points, Gold: 60-79 points, Platinum: 80+ points
State of California Online Resources

Green Building Database
www.greenbuildings.dgs.ca.gov
- Interactive Map
- Spreadsheet

Green California Website www.green.ca.gov
- Commissioning Toolkit www.green.ca.gov/CxToolKit
- Green Building Executive Order & Green Building Action Plan
- LCCA Model
- Many other programs

LEED for Core & Shell (LEED-CS) v.2.0

LEED-CS v2.0: 61 total points

Certified: 23-27 points, Silver: 28-33 points,
Gold: 34-44 points, Platinum: 45+ points

LEED-CS 2009: 110 total points

Certified: 40-49 points, Silver: 50-59 points,
Gold: 60-79 points, Platinum: 80+ points
LEED for Schools 2007
For New Construction & Major Renovations
  • Similar to LEED-NC v2.2

LEED for Schools v2.0: 79 total points
  • **Certified**: 29-36 points, **Silver**: 37-43 points,
    **Gold**: 44-57 points, **Platinum**: 58-79 points

LEED for Schools 2009: 110 total points
  • **Certified**: 40-49 points, **Silver**: 50-59 points,
    **Gold**: 60-79 points, **Platinum**: 80+ points

Can substitute credits with LEED-NC

Collaborative for High Performance Schools
  [www.chps.net](http://www.chps.net)
LEED for Schools

Additional Credits beyond LEED-NC

• Environmental Site Assessment
• Site Master Plan
• Joint Use of Facilities
• Water Use Reduction
• Process Water Reduction
• Acoustical Performance (min. & enhanced)
• Daylighting & Views – 90% of classrooms, 75% of other
• Mold Prevention
• Teaching as a Tool

See: [http://www.buildgreenschools.org/](http://www.buildgreenschools.org/)
LEED for Homes

Released in 2007

- >200 certified in California
- >3,000 registered in California

LEED-H: 136 total points

**Certified:** 45-59 points, **Silver:** 60-74 points, **Gold:** 75-89 points, **Platinum:** 90+ points

Includes additional credit categories:

- Location & Linkages (LL)
- Homeowner Awareness (HA)

Includes onsite inspection by HERS rater
LEED for Neighborhood Development - LEED-ND

LEED Pilot Rating System

- Expected to officially launch 2009
- ANSI Standard development underway

Integrates Smart Growth, Urbanism and Green Building into one Standard

- Collaboration with Congress for New Urbanism & Natural Resources Defense Council
- 106 total points available in Pilot

Certifies Entire Neighborhoods & Communities

- 238 Registered Pilot Projects already
- Up to 12K acres in size

LEED Rating Systems Under Development

LEED for Retail
  • Pilot rating system on USGBC website will be launched in LEED 2009 format

LEED for Healthcare
  • Draft rating system on USGBC website
  • (Merging with Green Guide for Health Care)

Laboratories
  • Aligning with Labs21

Multi-family Residential
LEED Portfolio Program

• Currently in Pilot Phase
  - DGS in Pilot Program
• Applies to LEED-EBOM and LEED-NC
• Prototype credits may apply
• Volume certification may be available
  - Up to 50% discounted certification fees
• May be available to large organizations mid 2009
LEED-AP Exam

LEED-NC v2.2 Exam – www.gbci.org
  • Available until March 31, 2009
  • Register by March 31st to take exam before June 31st

LEED 2009 Exam(s)
  • LEED-NC & LEED-CI v2009 exams available in late August 2009 (estimated)
LEED Accreditation

Current LEED-AP designation did not need renewal

Accreditation structure changing to 3 levels of accreditation:

1. **LEED Green Associate** – core accreditation (200 level)
   - Minimal educational units required (~10 hrs/2 yrs.)
   - Implemented ~ May 2009

2. **LEED-AP plus** one of 5 types of accreditation (300 level)
   - LEED EBOM - May
   - Homes - June/July
   - Commercial Design & Construction (includes Core & Shell) - Aug
   - Commercial Interiors - August
   - Neighborhood Development TBD

3. **LEED Fellow** (yet to be determined)

Renewal fee (est. $50 every 2 yrs)

Educational units will be required (~20 hrs/2 yrs.)
LEED Training

LEED-NC v2009 Training for State Bldg. Prof’s

- 2-month course Begins May 4th & ends June 1st
- Contact daniel.burgoyne@dgs.ca.gov if interested

USGBC Sponsored Workshop

- LEED for New Construction Technical Review
- 8 hour 1-day workshop
- www.usgbc.org/education

UC Davis Extension Continuing Education

- LEED-NC v2009 Building Certification
- 2 month online class offered in September
  http://extension.ucdavis.edu/unit/online_learning/course/description/index.asp?type=I&CourseID=34293
Questions

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