

Overview of LEED® 2009 for Healthcare



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Agenda

- Unique Needs, Challenges & Opportunities of Healthcare Facilities
- Overview of LEED® 2009 for Healthcare
- Minimum Program Requirements
- LEED® for Healthcare Prerequisites
- LEED® for Healthcare Credits
- Innovation & Design / Pilot Credits
- Resources & Tools

The Goal: First Do No Harm

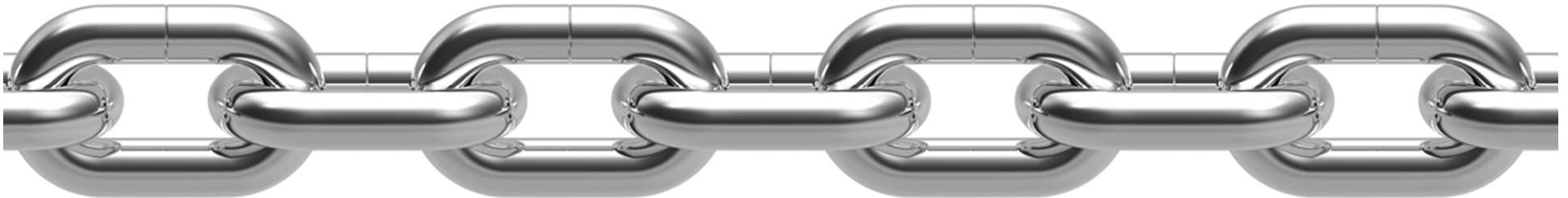
To design, build and operate a high-performance, healing environment that:

- Protects public health
- Enhances the health and well-being of ALL of the building occupants
- Reduces environmental impacts
- Minimizes waste
- Makes economical sense



The Link

Significant link between the physical environment and the health of the building occupants, the community, and the environment.



The Benefits

- Promotes healing
- Minimizes length of hospital stays
- Reduces the need for medications
- Reduces stress
- Enhances well-being
- Reduces medical errors
- Improves patient outcomes
- Retains and attracts talented staff
- Competitive edge
- Minimizes costs
- Increases philanthropy

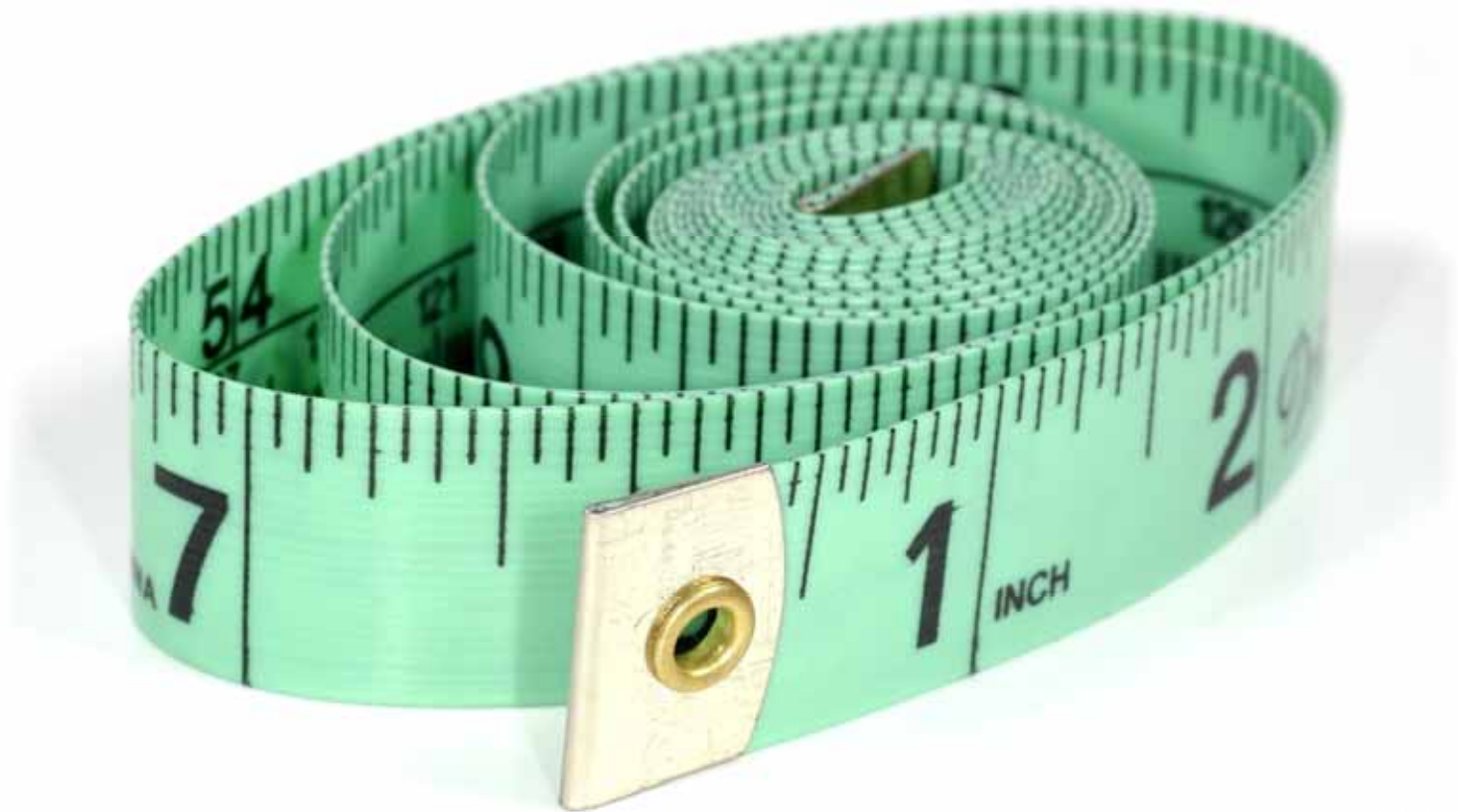


Unique Needs, Challenges & Opportunities

- Complex Facilities
- 24/7 Operations
- Process (Energy & Water) Intensive
- High Ventilation Requirements
- Regulatory Requirements
- Infection Control Risks Assessment (ICRA)
- Integration of Multiple Technologies
- Redundant Systems
- Medical Equipment Requirements
- Medical Technology is Constantly Changing
- Unique Occupants
 - High stressed staff w/ long shifts
 - Patients have compromised immune systems and are highly vulnerable

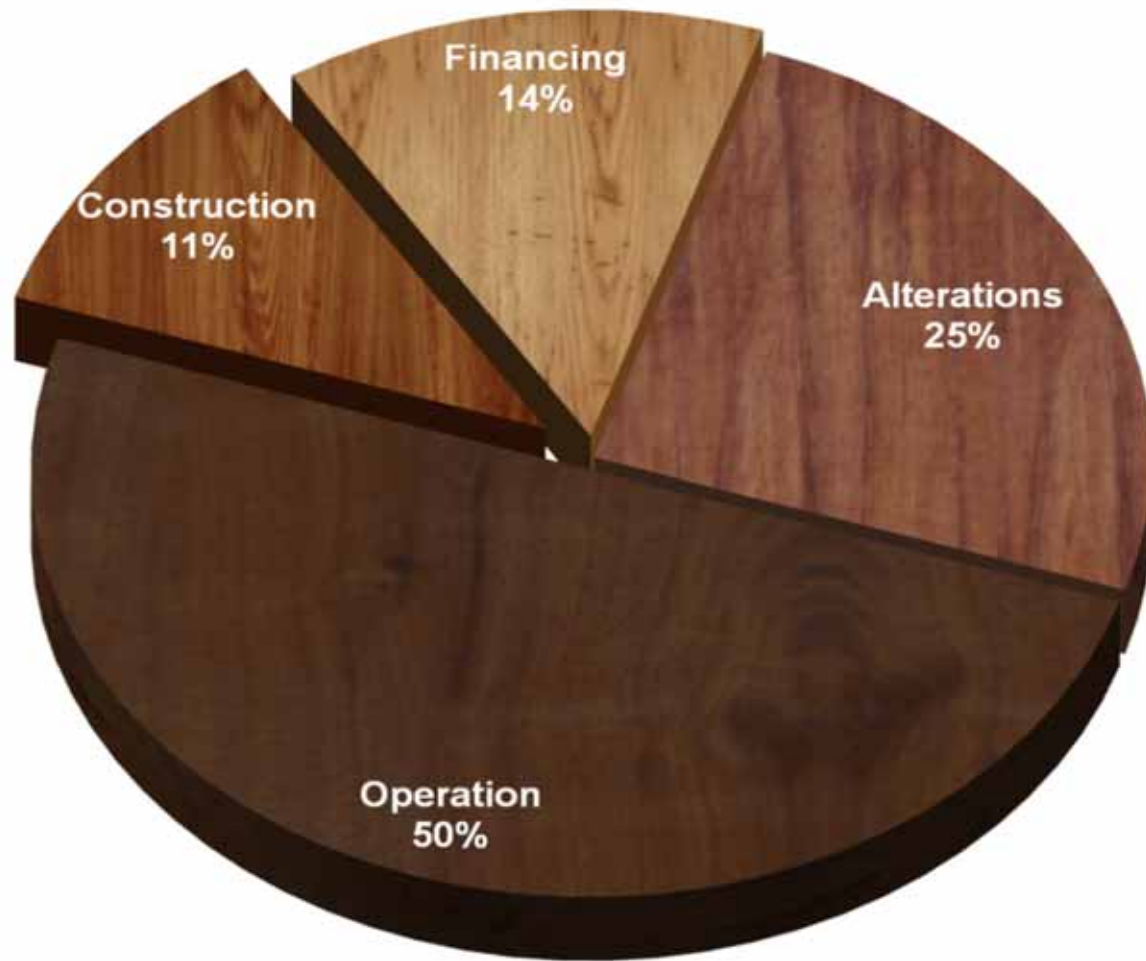


The Business Case Benchmark & Measure Your Results



The Business Case

Analyze Life Cycle Costs



The Business Case

Know Your Financial Goals



- Capital Budget
- ROI
- Payback
- Annual Operational Costs



Leadership in Energy & Environmental Design

Organization of LEED



LEED Addresses...

GREEN BUILDING DESIGN & CONSTRUCTION	LEED FOR NEW CONSTRUCTION
	LEED FOR CORE & SHELL
	LEED FOR SCHOOLS
	LEED FOR HEALTHCARE
	LEED FOR RETAIL
GREEN INTERIOR DESIGN & CONSTRUCTION	LEED FOR COMMERCIAL INTERIORS
	LEED FOR RETAIL INTERIORS
GREEN BUILDING OPERATIONS & MAINTENANCE	LEED FOR EXISTING BUILDINGS
	LEED FOR EXISTING SCHOOLS
GREEN HOMES DESIGN & CONSTRUCTION	LEED FOR HOMES
GREEN NEIGHBORHOOD DEVELOPMENT	LEED FOR NEIGHBORHOOD DEVELOPMENT

Certification Levels



40-49



50-59



60-79



80+

Points



LEED[®] 2009 for Healthcare

- Developed in partnership between Green Guide for Healthcare (GGHC) and the U.S. Green Building Council (USGBC) using evidence-based design as a fundamental driver.
- Rating System Released November 2010
- Supplement Guide Released May 2011

LEED[®] Certified Healthcare Facilities



5

1

2

3

4

6





LEED[®] 2009 for Healthcare

- Serves as a roadmap for sustainably designing and constructing and/or majorly renovating
 - Licensed inpatient, outpatient, long-term care facilities, skilled nursing and assisted living facilities,
 - Federal healthcare facilities,
 - May be used for medical office buildings, dental clinics, and medical education and research centers.
- Prototype: 250,000 square foot acute-care facilities
 - 3 to 4 stories
 - 150 beds
 - Suburban setting



LEED[®] 2009 for Healthcare

- ID – Recognizes Complexity and Size of Team Requiring Integrative Design Prerequisite
- EA - Alternative compliance paths for High Process (Energy) Loads from Medical Equipment and 24/7 Operations
- WE - Process Water Use
- IEQ - Minimum IAQ Standards for HC Facilities and Infection Control



LEED[®] 2009 for Healthcare

- 13 Prerequisites
 - 6 prerequisites modified; 5 added
- 100 Points
 - 25 credits modified; 14 added
- Priority Focus Shifted
 - SS (26% to 18%)
 - WE (10% to 9%)
 - EA (35% to 39%)
 - MR (14% to 16%)
 - IEQ (15% to 18%)



LEED[®] 2009 for Healthcare

- Existing registered LEED 2009 projects may switch over to HC at no cost.
 - Know capital cost impacts
 - Documentation fee impacts
- Earlier LEED projects may switch, but will be required to pay the additional fees.
 - Must meet Minimum Program Requirements (MPR).



LEED® 2009 for Healthcare New Additions

- Sustainable Sites (SS)
 - SSp2 – Environmental Site Assessment
 - SSc9.1 – Connection to the Natural World-Places of Respite
 - SSc9.2 – Connection to the Natural World – Direct Access for Patients
- Water Efficiency (WE)
 - WEp2 – Minimize Potable Water Use for Medical Equipment Cooling
 - WEc2 – Water Use Reduction: Measurement & Verification
 - WEc4.1 – Water Use Reduction: Building Equipment
 - WEc4.2 – Water Use Reduction: Cooling Towers
 - WEc4.3 – Water Use Reduction: Food Waste Systems



LEED® 2009 for Healthcare New Additions

- Energy & Atmosphere (EA)
 - EAc7 – Community Contaminant Prevention: Airborne Releases
- Materials & Resources (MR)
 - MRp2 – PBT Source Reduction: Mercury
 - MRc4.1 – PBT Source Reduction: Mercury in Lamps
 - MRc4.2 – PBT Source Reduction: Lead, Cadmium and Copper
 - MRc5 – Furniture and Medical Furnishings
 - MRc6 – Resource Use: Design for Flexibility



LEED® 2009 for Healthcare New Additions

- Indoor Environmental Quality (IEQ)
 - IEQp3 – Hazardous Material Removal or Encapsulation (Renovations ONLY)
 - IEQc2 – Acoustic Environment
 - IEQc4 – Low-Emitting Materials
- Innovation & Design (ID)
 - IDp1 – Integrated Project Planning & Design
 - IDc3 – Integrated Project Planning & Design

www.usgbc.org/leed/healthcare

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LEED for Healthcare

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Announcing the Launch of LEED for Healthcare

On April 8, 2011, the U.S. Green Building Council (USGBC) introduced its latest green building rating system, LEED for Healthcare. The rating system guides the design and construction of both new buildings and major renovations of existing buildings, and can be applied to inpatient, outpatient and licensed long-term care facilities, medical offices, assisted living facilities and medical education and research centers. Gail Vittori, Co-Director of Center for Maximum Potential Building Systems and Founding Chair of the LEED for Healthcare Committee, announced the launch of LEED for Healthcare at the CleanMed conference in Phoenix, AZ.

While at CleanMed, Gail Vittori, along Steve Guttman, Principal at Guttman & Blaevoet Consulting Engineers and Chair of the LEED for Healthcare Committee, offered the first-ever, in depth exploration of the LEED for Healthcare Rating System. This instructor-led workshop focused on the unique challenges of implementing LEED in a healthcare setting as well as a comparison between the new healthcare rating system and the current LEED tools. The LEED 2009 for Healthcare workshop at CleanMed was sponsored by USGBC and the Green Guide for Health Care in partnership with Practice Greenhealth and CleanMed.

New! LEED 2009 for Healthcare: Educational Offerings and Events

- **REFERENCE GUIDE:** Order now!
- **PODCAST SERIES**
- **WEBINAR SERIES**
- **HEALTHY HOSPITALS WORKSHOP:** Jun. 13-14

[Click here to access these LEED 2009 for Healthcare resources »](#)

LEED Reference Guide for Green BD&C-Healthcare Supplement

This supplement guide is a supporting document to the LEED 2009 for Healthcare: New Construction and Major Renovations Green Building Rating System. [more...](#)

\$100 hard copy; \$90 e-book (member prices)

[BUY NOW](#)



More Info...

LEED 2009 for Healthcare New Construction and Major Renovations Rating System (PDF)

The Rating System lists the intent, requirements, and technologies/strategies for each credit. (Updated: May 2011)

LEED 2009 for Healthcare New Construction and Major Renovations Checklist (XLS)

Frequently Asked Questions

LEED for Healthcare

New

LEED Pilot Credit Library

[RESOURCES](#) [OPEN PILOT CREDITS](#) [USER GENERATED PILOT CREDITS](#) [REGISTER](#)

The LEED Pilot Credit Library is a testing ground for new and innovative credit ideas. There are currently 41 credits available for immediate project use.

[Register Today!](#)
Open Pilot Credits
New Ideas:

[Pilot Credit 1: Life Cycle Assessment of Building Assemblies and Materials](#)
[Pilot Credit 2: PBT Source Reduction: Dioxins and Halogenated Organic Compounds](#)
[Pilot Credit 3: Medical and Process Equipment Efficiency](#)
[Pilot Credit 4: Innovative Ventilation](#)
[Pilot Credit 11: Chemical Avoidance in Building Materials](#)

LEED Next Version Credits:
These credits will be modified in July 2011 as a result of public comment ([view list of credits that will be changed](#))

	Commercial Rating System Credits BD+C, ID+C, EBOM		Residential Rating System Credits LEED for Homes, Mid-Rise Residential
	Pilot Credit 12: LT - Reduced Automobile Dependence		Pilot Credit 9: Open & Connected Community
	Pilot Credit 13: LT - Bicycle Network, Storage and Changing Rooms		Pilot Credit 28: IP - Trades Training
	Pilot Credit 14: LT - Walkable Streets		Pilot Credit 29: LT - Housing and Jobs Proximity
	Pilot Credit 15: LT - Parking Reduction		Pilot Credit 30: LT - Alternative Transportation
	Pilot Credit 16: SS - Rainwater Management		Pilot Credit 31: SS - Heat Island Reduction
	Pilot Credit 7: SS - Light Pollution Reduction		Pilot Credit 32: WE - WaterSense for New Homes
	Pilot Credit 10: WE - Sustainable Wastewater Management		Pilot Credit 33: EA - Performance of ENERGY STAR for Homes
	Pilot Credit 17: WE - Cooling Tower Makeup Water		Pilot Credit 34: MR - Design for Adaptability
	Pilot Credit 18: WE - Appliance and Process Water Use Reduction		Pilot Credit 35: EQ - Environmental Tobacco Smoke
			Pilot Credit 36: EQ - Compartmentalization
			Pilot Credit 37: EQ - Balancing of Heating & Cooling Distribution Systems
			Pilot Credit 38: PF - Advanced Utility Tracking

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The *Green Guide for Health Care* is a best practices guide for healthy and sustainable building design, construction, and operations for the healthcare industry. Download the *Green Guide* today!

DOWNLOAD NOW

1 2 3 4 5

Oregon Health and Science University Kohler pavilion, Portland OR.
Photo courtesy of Perkins+Will

Transforming the way healthcare facilities are designed, constructed and operated.

EVENTS
WEBINARS: 2011 DESIGN & CONSTRUCTION SERIES

FREE WEBINAR: Jun 22 @ 2pm ET: Test Driving the Operations Pilot Program by Kunkum Dilwali, Blake Jackson, Jessica Heiss, Robert Airo, and Krisanne Hanson

Jul 27 @ 2pm ET: Case Studies in International Healthcare Greening Strategies by Keith Davis (Royal Melbourne Children's) and Mark Lutz (Rio Negro).

HIGHLIGHTS
LEED for Healthcare Reference Guide Supplement is available to the Green Guide community

This healthcare-specific supplement, to be used along with the LEED Reference Guide for Green Building Design and Construction, includes information on the process for achieving LEED for Healthcare certification, detailed credit and prerequisite information, resources, and standards for the LEED for Healthcare 2009: New Construction and Major Renovations Green Building Rating System. [Click here with promo code GREENGUIDE](#)

Food Services Workgroup offers tool for "Planning and Benchmarking Your Progress"

Looking for a framework to organize your Healthy Food in Health Care (HFHC) work? The GGHC Food Service

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