

Texas Association of Realtors

Introduction to LEED

Leadership in Energy & Environmental Design

Course Number: 31560

Credit Hours: 1.0





INSTRUCTOR:
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Co-Founder & Broker
LEED AP O+M

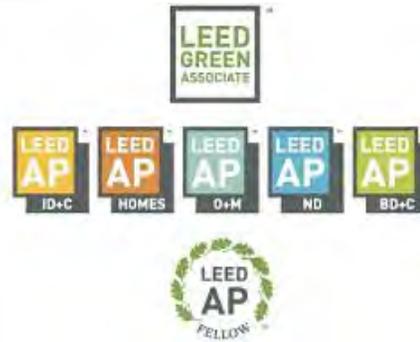


Buildings are LEED Certified



Professionals are Accredited





Distinguish yourself as a LEED AP with specialty

The LEED AP credential arms you with advanced knowledge in green building as well as expertise in a particular LEED rating system.

Which LEED specialty is right for me?



LEED Professionals



Global Numbers

Credential	Count	Percentage	Total (minus LEED for Homes Green Rater, and LEED Fellows)
LEED AP BD+C	39767	48%	82555
LEED AP Homes	701	1%	
LEED AP ID+C	2925	4%	
LEED AP ND	792	1%	
LEED AP O+M	2882	3%	
LEED for Homes Green Rater	247		
LEED Green Associate	35488	43%	
LEED Fellows	225		

Credentials held by people in Texas

Credential	Count
LEED AP BD+C	2095
LEED AP Homes	55
LEED AP ID+C	207
LEED AP ND	26
LEED AP O+M	126
LEED for Homes Green Rater	45
LEED Green Associate	1589
LEED Fellows	11



Existing Buildings ♦ New Construction

98% Existing Buildings



2% New Construction

Education Providers

- ✓ US Green Building Council www.usgbc.org
- ✓ Green Building Education Services www.gbcs.com
- ✓ everblue www.everbluetraining.com
- ✓ Universities and Community Colleges
- ✓ Consultants – Customized Courses
- ✓ Study Groups
- ✓ Local USGBC Chapters

Taking the exam

The professional credential exams measure your understanding of green building design, construction and operations. The LEED AP exams also assess your understanding of the LEED rating system and your ability to facilitate the certification process.

	LEED GREEN ASSOCIATE	LEED AP
Fees	\$200 (\$250 for non-members)	Full exam: \$400 (\$550 for non-members) Specialty only: \$250 (\$350 for non-members)
Eligibility Requirements	None	Experience working on a LEED-registered project is strongly recommended.
Timing Format	100 multiple-choice questions per section	
Language	Translation aids are available in Chinese, Spanish, Portuguese, Arabic and French. Learn more.	
Scoring	A passing score is 170 or higher on a scale of 125 to 200.	

REGISTER FOR THE EXAM

Green Building and LEED® Core Concepts Guide



Impacts of U.S. Buildings on Resources

40% primary energy use*

72% electricity consumption*

39% CO₂ emissions**

13.6% potable water consumption*

* Environmental Information Administration (2005). EIA Annual Energy Review

** Energy Information Administration (2005). Emissions of Greenhouse Gases in the United States

**ENERGY
USE**

24%* -50%**

**CO₂
EMISSIONS**

33%* -39%****

**WATER
USE**

40%**

**SOLID
WASTE**

70%**

Green Buildings Can Reduce...

* Turner, C. & Frankel, M. (2008). Energy performance of LEED for New Construction buildings: Final report.

** Kats, G. (2003). The Costs and Financial Benefits of Green Building: A Report to California's Sustainable Building Task Force.

*** GSA Public Buildings Service (2008). Assessing green building performance: A post occupancy evaluation of 12 GSA buildings.

What Green Building Addresses

- Climate change
- Resource depletion
- Water consumption
- Degradation of ecosystems/habitat
- Indoor environmental quality
- Occupant comfort and productivity



Photo by Benjamin Benschneider

Triple Bottom Line



Green Building Expertise



Project Team



Synergies





Sustainable Sites



Concepts: Building Location

Sustainable Sites

- Smart location
- Infrastructure
- Public and active spaces



Concepts: Building Site

Sustainable Sites



- Open spaces
- Stormwater
- Brownfield restoration
- Heat island
- Light pollution
- Alternative transportation facilities





Water Efficiency

Intents

Water Efficiency



- Reduce water consumption
- Reuse water when appropriate, safe, and legal



Concepts: Water Use

Water Efficiency



- Indoor water use
- Wastewater
- Landscaping





Energy & Atmosphere



Intent

Energy & Atmosphere

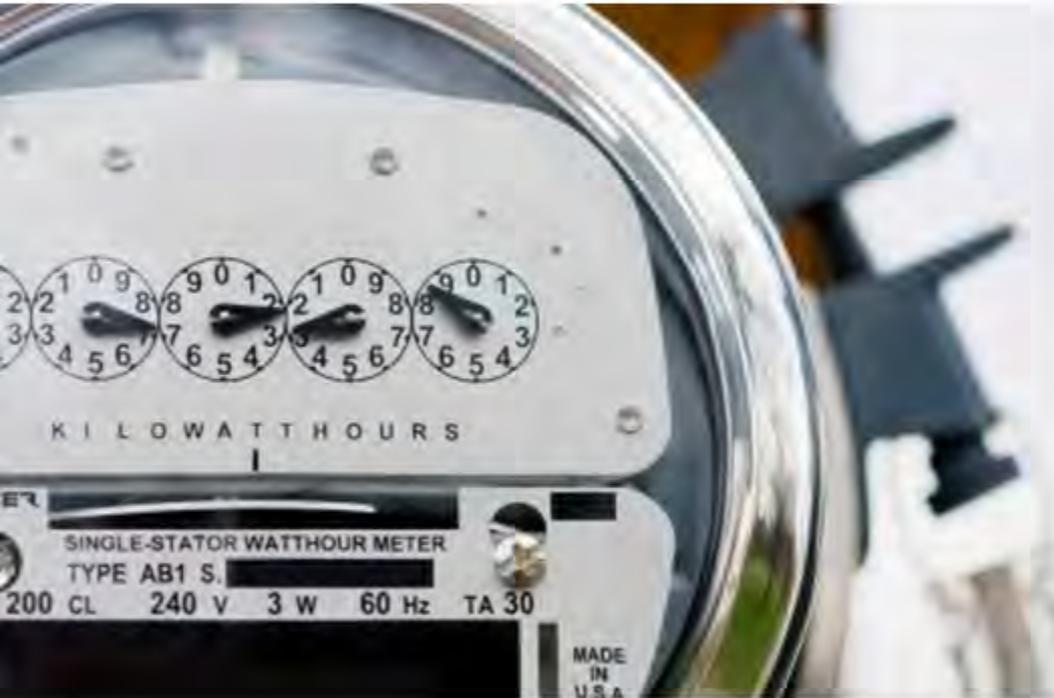


- Reduce energy use
- Encourage renewable energy supply



Concept: Energy Use

Energy & Atmosphere



- Demand reduction
- Energy efficiency
- Commissioning
- Monitoring and verification



Concept: Energy Supply

Energy & Atmosphere

- Generate onsite energy
- Purchase green power





Materials & Resources

Intents

Materials & Resources

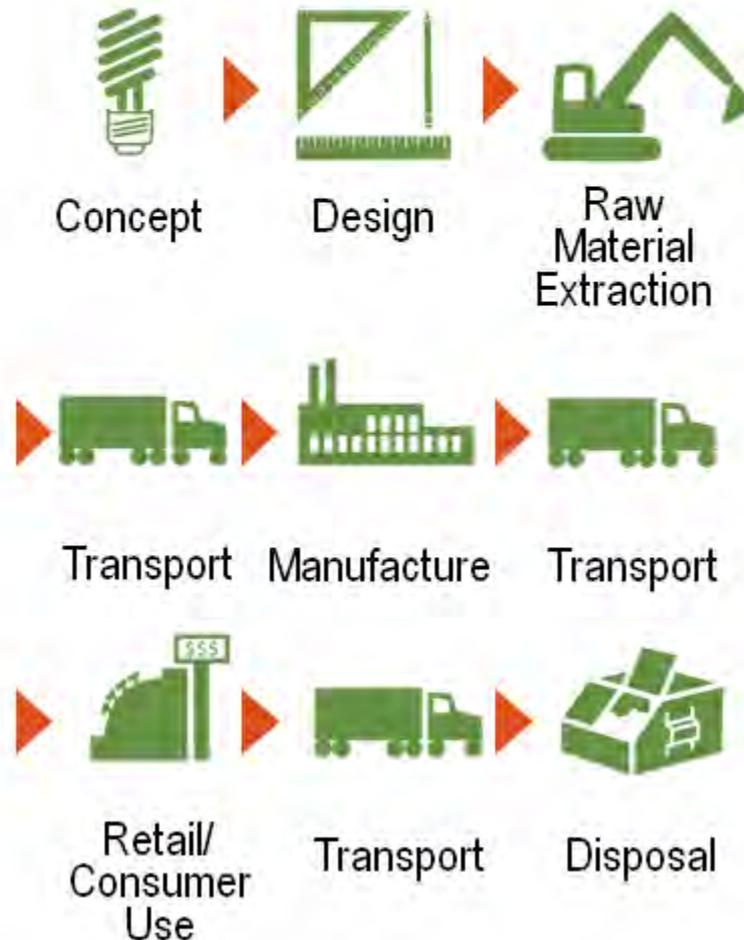


- Reduce the amount of materials needed
- Use materials with less environmental impact
- Reduce and manage waste



Concepts

Materials & Resources



- Life cycle
- Life cycle assessment





Indoor Environmental Quality

Intents

Indoor Environmental Quality



- Provide systems to ensure a quality indoor environment
- Eliminate, reduce, and manage contaminants



Concepts: Systems

Indoor Environmental Quality



- Ventilation
- Thermal comfort
- Daylight and views



Concepts: Contaminants

Indoor Environmental Quality

Common products:

- General construction adhesives
- Flooring adhesives
- Fire-stopping sealants
- Caulking
- Duct sealants
- Plumbing adhesives





Innovation in Design and Operations



Intent

Innovation in Design



- Recognize exemplary or exceptional green building
- Reward practices that the LEED Rating System does not specifically address



Concept: Exceptional Performance

Innovation in Design



- Substantially exceed LEED requirements
- Address issues not covered by LEED
- Demonstrate comprehensive approaches and quantifiable benefits



HOME

ABOUT US

SUSTAINABILITY

COMMERCIAL

RESIDENTIAL

Valtera Realty maximizes the economic value of every real estate asset while being excellent stewards to our environment and the communities where we live, work, and play.



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