



DOCUMENT ADDENDA

For the documents titled: **LEED Reference Guide for Green Building Design and Construction—Healthcare Supplement, 2009 Edition** (first edition)

Note: This document contains addenda to the reference guide listed above and will be published on a quarterly basis beginning in April 2010. For more information, visit the USGBC website <http://www.usgbc.org/leed/tools/interpretations>.

Page	Location	Credit	Credit Title	Issue	Post Date
vii	Water Efficiency	n/a	n/a	Change the points for Water Efficient Landscaping—No Potable Water Use or No Irrigation from 2 points to 1 point.	8/1/2011
x	Materials and Resources (MR)	n/a	n/a	In Credit 1.2, add in "Existing" to the credit title so that it becomes, "Credit 1.2 Building Reuse--Maintain Existing Interior Nonstructural Elements."	8/1/2011
xviii	Credit Interpretation Requests and Rulings	n/a	n/a	<p>Replace the section with the following:</p> <p>In some cases, a LEED project team may encounter challenges when interpreting the requirements of a Minimum Program Requirement (MPR), prerequisite or credit for their project because a specific issue, situation, or a conflict is not addressed by available materials. To address such issues, two processes have been established for each LEED rating system: Project Credit Interpretation Rulings (Project CIR) and LEED Interpretations. See the USGBC and GBCI websites for more information, at www.usgb.org and www.gbci.org. Project CIRs and LEED Interpretations must be submitted online. Provide a brief but clear description of the challenge encountered, refer to the MPR, prerequisite or credit information found in the rating system, reference guide, or supporting documentation and emphasize the intent of the MPR, prerequisite or credit. If possible, the project team should offer potential solutions to the problem or a proposed interpretation.</p> <p>All communications related to Project CIRs and LEED Interpretations will be in electronic format.</p>	5/9/2011
xxiv	Exemplary Performance Strategies	EQc6.2	Controllability of Systems - Thermal Comfort	Under Indoor Environmental Quality, remove IEQ Credit 6.2 Controllability of Systems--Thermal Comfort. An exemplary performance point is not available for this credit in LEED for Healthcare.	4/2/2014
5*	Requirements	SSp2	Environmental Site Assessment	The second sentence should read: "If contamination is suspected, conduct a Phase II Environmental Site Assessment (as described in ASTM E1903-97, 2002)."	10/1/2012

Page	Location	Credit	Credit Title	Issue	Post Date
5*	Requirements	SSp2	Environmental Site Assessment	Add "Projects outside the U.S. may use a local equivalent to ASTM E1903-97 Phase II Environmental Site Assessment." at the end of the first paragraph.	10/1/2012
7*	Requirements	SSc1	Site Selection	Add the following sentence to the end of the first bullet: "Projects outside the U.S. may use a local equivalent."	10/1/2012
7*	Requirements	SSc1	Site Selection	Add the following to the end of the second bullet: ", an equivalent local regulatory agency, or a professional hydrologist."	10/1/2012
7*	Requirements	SSc1	Site Selection	Add the following sentence to the end of the third bullet: "Projects outside the U.S. may use a local equivalent."	10/1/2012
7*	Requirements	SSc1	Site Selection	Add the following after "Part 22" in the first sentence of the fourth bullet: "or a local equivalent definition outside the U.S.,"	10/1/2012
7*	Requirements	SSc1	Site Selection	Replace "fish" with "aquatic life" in the fifth bullet.	10/1/2012
7*	Requirements	SSc1	Site Selection	The parenthetical in the sixth bullet should read: "(park authority projects and projects which are operated by and support the function of the park are exempt)."	10/1/2012
15*	Option 1	SSc4.1	Alternative Transportation- Public Transportation Access	The Option 1 title should read: "OPTION 1. Rail Station, Bus Rapid Transit Station & Ferry Terminal Proximity"	10/1/2012
15*	Option 1	SSc4.1	Alternative Transportation- Public Transportation Access	Remove "or" before "subway station"	10/1/2012
15*	Option 1	SSc4.1	Alternative Transportation- Public Transportation Access	Add "bus rapid transit ¹ station or commuter ferry terminal." to the end of the option.	10/1/2012
15*	Option 1	SSc4.1	Alternative Transportation- Public Transportation Access	<p>After Option 2, add the following:</p> <p>"OR</p> <p>Option 3. Rideshare Proximity</p> <p>Projects outside the U.S. may locate the project within 1/4-mile (400-meter) walking distance (measured from a main building entrance) of 1 or more stops for 2 or more existing rideshare options² that that meet the definition of public transportation³ and are authorized by the local transit authority if one exists."</p>	10/1/2012

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15*	Footnotes	SSc4.1	Alternative Transportation- Public Transportation Access	<p>Add the following footnotes to the bottom of the page:</p> <p>¹Bus rapid transit an enhanced bus system that operates on exclusive bus lanes or other transit rights-of-way; it is designed to combine the flexibility of buses with the efficiency of rail.</p> <p>²Rideshare is a transit service that involves sharing a single vehicle with multiple people, excluding large-scale vehicles such as buses and trains. The rideshare transit facility must include a signed stop and a clearly defined waiting area. Additionally, the rideshare must include an enclosed passenger seating area, fixed route service, fixed fare structure, continuous daily operation, and the ability to pick up and drop off multiple riders. Rideshare options must hold 4 or more passengers, except for human-powered conveyances which must hold 2 or more passengers.</p> <p>³Public transportation consists of bus, rail, or other transit services for the general public that operate on a regular, continual basis.</p>	10/1/2012
25*	Footnote 2	SSc4.3	Alternative Transportation – Low-Emitting and Fuel-Efficient Vehicles	Change footnote text to, "For the purposes of this credit, low-emitting vehicles are defined as vehicles that are classified as Zero Emission Vehicles (ZEV) by the California Air Resources Board. Fuel-efficient vehicles are defined as vehicles that have achieved a minimum green score of 40 on the American Council for an Energy Efficient Economy (ACEEE) annual vehicle rating guide."	11/1/2011
29*	CASE 1, OPTION 2; CASE 2, OPTION 1	SSc4.4	Alternative Transportation – Parking Capacity	Add a superscript for footnote 1 to each occurrence of the term "preferred parking".	11/1/2011
29*	CASE 1, OPTION 2; CASE 2, OPTION 1	SSc4.4	Alternative Transportation – Parking Capacity	<p>Add a superscript for footnote 2 to each occurrence of the term "preferred parking".</p> <p>Add a second footnote at the bottom of the Requirements: 2 "To establish a meaningful incentive in all potential markets, the parking rate must be discounted at least 20%. The discounted rate must be available to all eligible customers (i.e. not limited to the number of customers equal to 5% of the vehicle parking capacity), publicly posted at the entrance of the parking area, and available for a minimum of 2 years."</p>	11/1/2011
29*	CASE 1, OPTION 2; CASE 2, OPTION 1	SSc4.4	Alternative Transportation – Parking Capacity	Delete the following text in the subparagraph, "Providing a discounted parking rate is an acceptable substitute for preferred parking for carpool or vanpool vehicles. In order to establish a meaningful incentive in all potential markets, the parking rate must be discounted at least 20%. The discounted rate must be available to all customers (i.e., not limited to the number of customers equal to 5% of the vehicle parking capacity), publicly posted at the entrance of the parking area, and available for a minimum of 2 years."	11/1/2011
33*	CASE 1	SSc5.1	Site Development – Protect or Restore Habitat	Revise the first bulleted item to say "40 feet beyond the building perimeter and parking garages"	8/1/2011

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33*	Requirements: footnotes	SSc5.1	Site Development-Protect or Restore Habitat	Delete footnote 2 (previously developed sites) and renumber footnotes	4/1/2013
33*	Requirements: footnotes	SSc5.1	Site Development-Protect or Restore Habitat	Footnote 1, delete: "those that are not previously developed or graded and remain in a natural state." Replace with: "sites not previously developed or graded that could support open space, habitat, or agriculture."	4/1/2013
41*	Case 1	SSc6.1	Stormwater Design – Quantity Control	Add a heading for "Option 1. Design Storms" before Case 1.	10/1/2012
41*	Case 1	SSc6.1	Stormwater Design – Quantity Control	Rename "Option 1" "Path 1"	10/1/2012
41*	Case 1	SSc6.1	Stormwater Design – Quantity Control	Rename "Option 2" "Path 2"	10/1/2012
41*	Case 1	SSc6.1	Stormwater Design – Quantity Control	Add a new option below Case 2. "OR" OPTION 2. Percentile Rainfall Events CASE 1. Non-Zero Lot Line Projects In a manner best replicating natural site hydrology ¹ processes, manage onsite ² the runoff from the developed site for the 95th percentile of regional or local rainfall events using Low Impact Development ³ (LID) and green infrastructure ⁴ . Use daily rainfall data and the methodology in the United States Environmental Protection Agency's Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act to determine the 95th percentile amount. OR CASE 2: Zero Lot Line Projects For zero lot line projects located in urban areas with a minimum density of 1.5 FAR (13,800 square meters per hectare net), in a manner best replicating natural site hydrology processes, manage onsite the runoff from the developed site for the 85th percentile of regional or local rainfall events using LID and green infrastructure."	10/1/2012

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41*	Footnotes	SSc6.1	Stormwater Design – Quantity Control	<p>Add the following footnotes to SSc6.1:</p> <p>¹ Natural Site Hydrology is defined as the natural land cover function of water occurrence, distribution, movement, and balance.</p> <p>² Manage Onsite refers to capturing and retaining the specified volume of rainfall to mimic natural hydrologic function. This includes, but is not limited to, strategies that manage volume through evapotranspiration, infiltration, or capture and reuse.</p> <p>³ Low Impact Development (LID) is defined as an approach to managing stormwater runoff that emphasizes on-site natural features to protect water quality by replicating the natural land cover hydrologic regime of watersheds and addressing runoff close to its source. Examples include better site design principles such as minimizing land disturbance, preserving vegetation, minimizing impervious cover, and design practices like rain gardens, vegetated swales and buffers, permeable pavement, rainwater harvesting, and soil amendments. These are engineered practices that may require specialized design assistance.</p> <p>⁴ Green Infrastructure is a soil and vegetation-based approach to wet weather management that is cost-effective, sustainable, and environmentally friendly. Green infrastructure management approaches and technologies infiltrate, evapotranspire, capture and reuse stormwater to maintain or restore natural hydrologies (US EPA).</p>	10/1/2012
51*	OPTION 1	SSc7.2	Heat Island Effect-Roof	<p>Below equation, add the text and equation:</p> <p>Alternatively, the following equation may be used to calculate compliance:</p> <p>(see image: https://www.usgbc.org/ShowFile.aspx?DocumentID=9756)</p>	8/1/2011
51*	OPTION 3	SSc7.2	Heat Island Effect-Roof	<p>Below equation, add the text and equation:</p> <p>Alternatively, a weighted average approach may be used to calculate compliance for multiple materials:</p> <p>(see image: https://www.usgbc.org/ShowFile.aspx?DocumentID=9757)</p>	8/1/2011
55*	Requirements: "For Exterior Lighting"	SSc8	Light Pollution Reduction	Replace "Addenda I" and "Addenda 1" with "Addenda i"	4/1/2013

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59*	Requirements: footnotes	SSc9.1	Connection to the Natural World-Places of Respite	<p>Delete footnote text: "For the purposes of this credit, "net usable program area" shall be defined as the sum of all interior areas in the project available to house the project's program. Areas housing building equipment, vertical circulation and structure shall be excluded."</p> <p>Replace with: "For the purposes of this credit, "net usable program area" shall be defined as the sum of all interior areas available to house a building's functions; areas for building equipment, vertical circulation, and structure are excluded. See ANSI/BOMA Z65.1-2010, Office Buildings: Standard Methods of Measurement (http://www.boma.org)."</p>	4/1/2013								
75*	Fixtures, Fittings, and Appliances	WEp1	Water Use Reduction	Add "Imperial Units" after "Current Baseline" in the second column	10/1/2012								
75*	Fixtures, Fittings, and Appliances	WEp1	Water Use Reduction	<div><div>Add a third column to the table, reading as follows:</div><table><tr><th>Current Baseline (Metric Units)</th></tr><tr><td>6 liters per flush (lpf)</td></tr><tr><td>4.0 lpf</td></tr><tr><td>8.5 liters per minute (lpm) at 4 bar (58 psi), private applications only (e.g., hospital patient rooms)</td></tr><tr><td>2.0 lpm at 4 bar (58 psi), all others except private applications</td></tr><tr><td>1 liter per cycle for metering faucets</td></tr><tr><td>Flow rate ≤ 6 liters per minute (lpm)</td></tr><tr><td>9.5 lpm at 5.5 bar (80 psi) per shower stall</td></tr></table></div>	Current Baseline (Metric Units)	6 liters per flush (lpf)	4.0 lpf	8.5 liters per minute (lpm) at 4 bar (58 psi), private applications only (e.g., hospital patient rooms)	2.0 lpm at 4 bar (58 psi), all others except private applications	1 liter per cycle for metering faucets	Flow rate ≤ 6 liters per minute (lpm)	9.5 lpm at 5.5 bar (80 psi) per shower stall	10/1/2012
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75*	Requirements	WEp1	Water Use Reduction	<p>Add showers and kitchen sinks to the list of fixtures:</p> <p>"Calculations are based on estimated occupant usage and must include only the following fixtures and fixture fittings (as applicable to the project scope): water closets, urinals, lavatory faucets, showers, kitchen sink faucets and pre-rinse spray valves. Fixtures used for clinical use, such as surgical scrub sinks and exam room sinks are exempt from this calculation."</p>	10/1/2013								

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76*	Requirements; Table 2: Equipment Performance Requirements Table	WEp1	Water Use Reduction	<div>Add a third column to the table under 'Process Water Use' with metric unit conversions, titled: 'Baseline (Metric Units).'</div> <table><tr><th>Baseline (Metric Units)</th></tr><tr><td>1,200 liters/m3/cycle</td></tr><tr><td>7.50 liters/rack</td></tr><tr><td>7.38 liters/rack</td></tr><tr><td>5.45 liters/rack</td></tr><tr><td>7.00 liters/rack</td></tr><tr><td>4.28 liters/rack</td></tr><tr><td>4.66 liters/rack</td></tr><tr><td>4.16 liters/rack</td></tr><tr><td>3.75 liters/rack</td></tr><tr><td>681 liters/hour</td></tr><tr><td><95 liters/46 kg ice</td></tr><tr><td><95 liters/46 kg ice</td></tr><tr><td><95 liters/46 kg ice</td></tr><tr><td><95 liters/46 kg ice</td></tr><tr><td><95 liters/46 kg ice</td></tr><tr><td><95 liters/46 kg ice</td></tr><tr><td><95 liters/46 kg ice</td></tr><tr><td>Must be on closed cooling loop</td></tr><tr><td>Not allowed</td></tr><tr><td>30.28 liters/hour/pan</td></tr><tr><td>30.28 liters/hour/pan</td></tr><tr><td>151.42 lph</td></tr><tr><td>151.42 lph</td></tr><tr><td>227.12 lph</td></tr><tr><td>Performance baseline based on industry standards</td></tr></table>	Baseline (Metric Units)	1,200 liters/m3/cycle	7.50 liters/rack	7.38 liters/rack	5.45 liters/rack	7.00 liters/rack	4.28 liters/rack	4.66 liters/rack	4.16 liters/rack	3.75 liters/rack	681 liters/hour	<95 liters/46 kg ice	<95 liters/46 kg ice	<95 liters/46 kg ice	<95 liters/46 kg ice	<95 liters/46 kg ice	<95 liters/46 kg ice	<95 liters/46 kg ice	Must be on closed cooling loop	Not allowed	30.28 liters/hour/pan	30.28 liters/hour/pan	151.42 lph	151.42 lph	227.12 lph	Performance baseline based on industry standards	4/2/2014
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97*	Fixtures, Fittings, and Appliances	WEc3	Water Use Reduction	Add "Imperial Units" after "Current Baseline" in the second column	10/1/2012																										
97*	Fixtures, Fittings, and Appliances Table	WEc3	Water Use Reduction	<div>Add a third column to the table, reading as follows:</div> <table><tr><th>Current Baseline (Metric Units)</th></tr><tr><td>6 liters per flush (lph)</td></tr><tr><td>4.0 lph</td></tr><tr><td>8.5 liters per minute (lpm) at 4 bar (58 psi), private applications only (e.g., hospital patient rooms)</td></tr><tr><td>2.0 lpm at 4 bar (58 psi), all others except private applications</td></tr><tr><td>1 liter per cycle for metering faucets</td></tr><tr><td>Flow rate ≤ 6 liters per minute (lpm)</td></tr><tr><td>9.5 lpm at 5.5 bar (80 psi) per shower stall</td></tr></table>	Current Baseline (Metric Units)	6 liters per flush (lph)	4.0 lph	8.5 liters per minute (lpm) at 4 bar (58 psi), private applications only (e.g., hospital patient rooms)	2.0 lpm at 4 bar (58 psi), all others except private applications	1 liter per cycle for metering faucets	Flow rate ≤ 6 liters per minute (lpm)	9.5 lpm at 5.5 bar (80 psi) per shower stall	10/1/2012																		
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97*	Requirements	WEc3	Water Use Reduction	<p>Add showers and kitchen sinks to the list of fixtures:</p> <p>"Calculations are based on estimated occupant usage and must include only the following fixtures and fixture fittings (as applicable to the project scope): water closets, urinals, lavatory faucets, showers, kitchen sink faucets and pre-rinse spray valves. Fixtures used for clinical use, such as surgical scrub sinks and exam room sinks are exempt from this calculation."</p>	10/1/2013																											
99*	Requirements; Table 2: Equipment Performance Requirements Table	WEc3	Water Use Reduction	<p>Add a third column to the table under 'Process Water Use' with metric unit conversions, titled: 'Baseline (Metric Units).'</p> <table><tr><th>Baseline (Metric Units)</th></tr><tr><td>1,200 liters/m3/cycle</td></tr><tr><td>7.50 liters/rack</td></tr><tr><td>7.38 liters/rack</td></tr><tr><td>5.45 liters/rack</td></tr><tr><td>7.00 liters/rack</td></tr><tr><td>4.28 liters/rack</td></tr><tr><td>4.66 liters/rack</td></tr><tr><td>4.16 liters/rack</td></tr><tr><td>3.75 liters/rack</td></tr><tr><td>681 liters/hour</td></tr><tr><td><95 liters/46 kg ice</td></tr><tr><td><95 liters/46 kg ice</td></tr><tr><td><95 liters/46 kg ice</td></tr><tr><td><95 liters/46 kg ice</td></tr><tr><td><95 liters/46 kg ice</td></tr><tr><td><95 liters/46 kg ice</td></tr><tr><td><95 liters/46 kg ice</td></tr><tr><td><95 liters/46 kg ice</td></tr><tr><td>Must be on closed cooling loop</td></tr><tr><td>Not allowed</td></tr><tr><td>30.28 liters/hour/pan</td></tr><tr><td>30.28 liters/hour/pan</td></tr><tr><td>151.42 lph</td></tr><tr><td>151.42 lph</td></tr><tr><td>227.12 lph</td></tr><tr><td>Performance baseline based on industry standards</td></tr></table>	Baseline (Metric Units)	1,200 liters/m3/cycle	7.50 liters/rack	7.38 liters/rack	5.45 liters/rack	7.00 liters/rack	4.28 liters/rack	4.66 liters/rack	4.16 liters/rack	3.75 liters/rack	681 liters/hour	<95 liters/46 kg ice	<95 liters/46 kg ice	<95 liters/46 kg ice	<95 liters/46 kg ice	<95 liters/46 kg ice	<95 liters/46 kg ice	<95 liters/46 kg ice	<95 liters/46 kg ice	Must be on closed cooling loop	Not allowed	30.28 liters/hour/pan	30.28 liters/hour/pan	151.42 lph	151.42 lph	227.12 lph	Performance baseline based on industry standards	4/2/2014
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103	Definitions, graywater	WEc4.1	Water Use Reduction-Building Equipment	Replace the definition of "graywater" with " Graywater is untreated household waste water which has not come into contact with toilet waste. Graywater typically includes used water from bathtubs, showers, bathroom wash basins, and water from clothes-washer and laundry tubs, though definitions may vary. Some states and local authorities also allow kitchen sink wastewater to be included in graywater. Project teams should comply with the graywater definition established by the authority having jurisdiction in the project area."	10/1/2012
105*	Requirements	WEc4.2	Water Use Reduction – Cooling Towers	Add "and evaporative condensers" after "Cooling towers" in the first bullet	10/1/2012
105*	Requirements	WEc4.2	Water Use Reduction – Cooling Towers	Add "and evaporative condensers" after "Cooling towers" in the second bullet	10/1/2012
105*	Requirements	WEc4.2	Water Use Reduction – Cooling Towers	Add "or evaporative condensers" after "cooling tower" in the third bullet	10/1/2012
105*	Requirements	WEc4.2	Water Use Reduction – Cooling Towers	Add "or evaporative condensers" after "cooling towers" in the fourth bullet	10/1/2012
117*	OPTION 1	EAp2	Minimum Energy Performance	Add the following second paragraph: For projects that registered after April 7, 2016 and are subject to the three point mandatory minimum, demonstrate a 16% improvement in the proposed building performance rating for new buildings, or a 12% improvement in the proposed building performance rating for major renovations to existing buildings, compared with the baseline building performance rating.	7/1/2016
117*	Option 1	EAp2	Minimum Energy Performance	Add the following sentence to the end of the second paragraph: "Projects outside the U.S. may use a USGBC approved equivalent standard ²⁵ ."	10/1/2012
117*	Option 1	EAp2	Minimum Energy Performance	Add "or USGBC approved equivalent." to the end of the first bullet.	10/1/2012
117*	Option 1	EAp2	Minimum Energy Performance	Add "or USGBC approved equivalent." after the parentheses in the third bullet.	10/1/2012
117*	Option 1	EAp2	Minimum Energy Performance	Add "or USGBC approved equivalent." after the parentheses in the third paragraph after the bullets.	10/1/2012
117*	OPTION 2	EAp2	Minimum Energy Performance	Add the following note above the first paragraph: "**Please note that Option 2 currently is not an eligible compliance option for projects that registered after April 7, 2016 to meet the four point mandatory minimum."	7/1/2016
117*	Option 2	EAp2	Minimum Energy Performance	Add the following sentence to the end of the second bullet: "Projects outside the U.S. may use ASHRAE/ASHRAE/IESNA Standard 90.1-2007 Appendices B and D to determine the appropriate climate zone."	10/1/2012

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118*	OPTION 3	EAp2	Minimum Energy Performance	Add the following note above the first paragraph: “*Please note that Option 3 currently is not an eligible compliance option for projects that registered after April 7, 2016 to meet the four point mandatory minimum.”	7/1/2016
117*	Footnotes	EAp2	Minimum Energy Performance	Add the following footnote to the bottom of the page: “Projects outside the U.S. may use an alternative standard to ANSI/ASHRAE/IESNA Standard 90.1-2007 if it is approved by USGBC as an equivalent standard using the process located at www.usgbc.org/leedisglobal ”	10/1/2012
127*	Points	EAc1	Optimize Energy Performance	Add the following note next to point breakdown: “(3 points mandatory for projects registered after April 7, 2016)”	7/1/2016
127*	Option 1	EAc1	Optimize Energy Performance	Add “Projects outside the U.S. may use a USGBC approved equivalent standard.” Before the last sentence of the first paragraph.	10/1/2012
127*	Option 1	EAc1	Optimize Energy Performance	Add “or USGBC approved equivalent” to the end of the first bullet.	10/1/2012
127*	Option 1	EAc1	Optimize Energy Performance	Add “or USGBC approved equivalent” to the end of the first sentence of the third bullet.	10/1/2012
127*	Option 1	EAc1	Optimize Energy Performance	Add “or USGBC approved equivalent” after the parenthetical in the third paragraph after the bulleted list.	10/1/2012
127*	Footnotes	EAc1	Optimize Energy Performance	Add the following footnote to the bottom of the page: “Projects outside the U.S. may use an alternative standard to ANSI/ASHRAE/IESNA Standard 90.1-2007 if it is approved by USGBC as an equivalent standard using the process located at www.usgbc.org/leedisglobal ”	10/1/2012
139*	Requirements	EAc4	Enhanced Refrigerant Management	Update equation on bottom of page to read: $\sum (LCGWP + LCODP \times 105) \times Q_{unit} \leq 100 Q_{total}$	5/9/2011

Page	Location	Credit	Credit Title	Issue	Post Date
139*	Option 2	EAc4	Enhanced Refrigerant Management	<div>Add a metric unit column to the first table as follows:</div> <div><div><div>Metric units</div><div><div>LCG WP</div><div>+</div><div>LCO DP</div><div>x</div><div>10⁵</div><div>≤</div><div>13</div></div></div><div>Calculation definitions for LCGWP + LCODP x 10⁵ ≤ 13 (Metric units)</div><div>LCODP = [ODPr x (Lr x Life +Mr) x Rc]/Life</div><div>LCGWP = [GWPr x (Lr x Life +Mr) x Rc]/Life</div><div>LCODP: Lifecycle Ozone Depletion Potential (kg CFC 11/(kW/year))</div><div>LCGWP: Lifecycle Direct Global Warming Potential (kg CO₂/(kW/year))</div><div>ODPr: Ozone Depletion Potential of Refrigerant (0 to 0.2 kg CFC 11/kg r)</div><div>GWPr: Global Warming Potential of Refrigerant (0 to 12,000 kg CO₂/kg r)</div><div>Lr: Refrigerant Leakage Rate (0.5% to 2.0%; default of 2% unless otherwise demonstrated)</div><div>Mr: End-of-life Refrigerant Loss (2% to 10%; default of 10% unless otherwise demonstrated)</div><div>Rc: Refrigerant Charge (0.065 to 0.65 kg of refrigerant per kW of ARI rated or Eurovent Certified cooling capacity)</div><div>Life: Equipment Life (default based on equipment type, unless otherwise demonstrated)</div></div> <div></div>	10/1/2012
139*	Option 2	EAc4	Enhanced Refrigerant Management	<div>Add the following metric units to the second table in Option 2:</div> <div><div><div>Metric units</div><div><div><div><div><div>∑</div><div>(</div><div><div>LCG WP</div><div>+</div><div>LCO DP</div><div>x</div><div><div>1 0⁵</div></div><div>)</div><div>x</div><div><div>Qu nit</div></div></div></div><div><div>_____</div><div>Qtotal</div></div></div><div>≤ 13</div></div></div><div></div></div></div>	10/1/2012
139*	Option 2	EAc4	Enhanced Refrigerant Management	<div>Add the following metric units to the third table:</div> <div><div>Calculation definitions for [∑ (LCGWP + LCODP x 10⁵) x Qunit] / Qtotal ≤ 13 (Metric units)</div><div>Qunit = Eurovent Certified cooling capacity of an individual HVAC or refrigeration unit (kW)</div><div>Qtotal = Total Eurovent Certified cooling capacity of all HVAC or refrigeration (kW)</div></div> <div></div>	10/1/2012

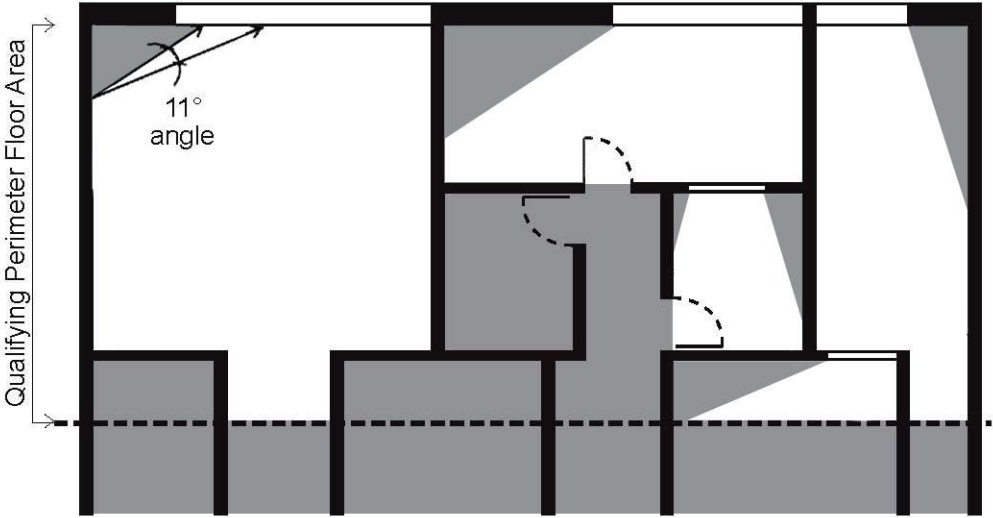
Page	Location	Credit	Credit Title	Issue	Post Date
141*	Requirements	EAc5	Measurement and Verification	Add the following at the end of the requirements: OR (1 point) Meet MPR 6 through compliance with Option1: Energy and Water Data Release Form. Projects must register an account in ENERGY STAR's Portfolio Manager tool and share the project file with the USGBC master account.	4/1/2012
145*	Requirements	EAc6	Green Power	Add "or an equivalent" to the end of the first sentence.	10/1/2012
145*	Requirements	EAc6	Green Power	Add the following after the second paragraph: "If the green power is not Green-e Energy certified, equivalence must exist for both major Green-e Energy program criteria: 1) current green power performance standards, and 2) independent, third-party verification that those standards are being met by the green power supplier over time."	10/1/2012
177*	Requirements	MRC3	Sustainably Sourced Materials and Products	After the third bullet, add: "OR <ul style="list-style-type: none"> Building materials or products shipped by rail or water have been extracted, harvested or recovered, as well as manufactured within a 500 mile (800 kilometer) total travel distance of the project site using a weighted average determined through the following formula: (Distance by rail/3) + (Distance by inland waterway/2) + (Distance by sea/15) + (Distance by all other means) ≤ 500 miles [800 kilometers]" 	10/1/2012
202	Table 1	MRC5	Furniture and Medical Furnishings	Revise the Total Sustainably Sourced Furniture & Medical Furnishings value from \$70,500 to \$74,250. All other calculations are correct.	8/1/2011
212	Definitions, departmental gross square footage (DGSF)	MRC6	Resource Use-Design for Flexibility	In the first sentence of " departmental gross square footage (DGSF) ", replace "square footage" with "floor area" and add this sentence to the end of the definition, "This calculation excludes Inpatient Units."	10/1/2012
212	Definitions, soft space	MRC6	Resource Use-Design for Flexibility	Replace the definition of " soft space " with "in healthcare facilities, a lightly programmed area that can be easily displaced to allow an adjacent department to expand"	10/1/2012
215*	Requirements	IEQp1	Minimum Indoor Air Quality Performance	Replace the first sentence "Meet the minimum requirements of Sections 6 through 6 of ASHRAE Standard 170-2008, Ventilation of Health Care Facilities (with errata but without addenda^1)." with "Meet the minimum requirements of Sections 6 through 8 of ASHRAE Standard 170-2008 (with errata but without addenda^1)."	8/1/2011

Page	Location	Credit	Credit Title	Issue	Post Date
243*	Requirements	IEQc3.1	Construction Indoor Air Quality Management Plan – During Construction	The first indented bullet regarding permanently installed air handlers should read as follows: <ul style="list-style-type: none"> “Filtration media must be used at each return air grille that meets one of the following criteria below.” 	10/1/2012
243*	Requirements	IEQc3.1	Construction Indoor Air Quality Management Plan – During Construction	Add three bullets, indented, below the above bullet.	10/1/2012
243*	Requirements	IEQc3.1	Construction Indoor Air Quality Management Plan – During Construction	The first new bullet should read: “Filtration media with a minimum efficiency reporting value (MERV) of 8 as determined by ASHRAE Standard 52.2-1999 (with errata but without addenda)”	10/1/2012
243*	Requirements	IEQc3.1	Construction Indoor Air Quality Management Plan – During Construction	The second new bullet should read: “Filtration media is Class F5 or higher, as defined by CEN Standard EN 779-2002, Particulate air filters for general ventilation, Determination of the filtration performance”	10/1/2012
243*	Requirements	IEQc3.1	Construction Indoor Air Quality Management Plan – During Construction	The third new bullet should read: “Filtration media with a minimum dust spot efficiency of 30% or higher and greater than 90% arrestance on a particle size of 3–10 µg”	10/1/2012

Page	Location	Credit	Credit Title	Issue	Post Date
253*	Group 3: Flooring	IEQc4	Low-Emitting Materials	<p>Below the fourth paragraph, add the following:</p> <p>“<input type="checkbox"/> For carpet adhesive, concrete, wood, bamboo and cork floor finishes, and tile setting adhesives, compliance can be demonstrated with test results of:</p> <ul style="list-style-type: none"> • Total volatiles fraction, based on one of the following, provided that water and exempt compounds are subtracted from total volatiles test results and the mass VOC content is calculated consistent with SCAQMD Rule 1113 and Rule 1168: <ul style="list-style-type: none"> ○ ASTM D2369 ○ EPA method 24 ○ ISO 11890 part 1 • Total volatile organic compounds fraction, based on one of the following, provided that all VOCs with a boiling point up to 280°C (536°F) are included, and exempt compounds are subtracted from total volatiles test results and the mass VOC content is calculated consistent with SCAQMD Rule 1113 and Rule 1168. <ul style="list-style-type: none"> ○ ASTM D6886 ○ ISO 11890 part 2” 	10/1/2012
259	Exemplary Performance	IEQc4	Low-Emitting Materials	<p>After section 7. ‘Documentation Guidance,’ add section 9. ‘Exemplary Performance’ with the following text: “Projects that comply with all five material groups are eligible for exemplary performance under the Innovation in Design section.”</p>	4/2/2014
277*	Requirements	IEQc6.2	Controllability of Systems – Thermal Comfort	<p>In the final paragraph, replace:</p> <p>“Conditions for thermal comfort are described in ASHRAE Standard 55-2004 (with errata but without addenda) and include the primary factors of air temperature, radiant temperature, air speed and humidity.”</p> <p>With:</p> <p>“Conditions for thermal comfort are described in IEQ credit 7.1: Thermal Comfort—Design and include the primary factors of air temperature, radiant temperature, air speed and humidity.”</p>	10/1/2012

Page	Location	Credit	Credit Title	Issue	Post Date
279*	Requirements	IEQc7	Thermal Comfort – Design and Verification	The beginning of the first sentence of the Requirements section should read as follows: “Design heating, ventilating and air-conditioning (HVAC) systems to meet the requirements of one of the options below...”	10/1/2012
279*	Requirements	IEQc7	Thermal Comfort – Design and Verification	Add a new option that reads: “OPTION 1. ASHRAE Standard 55-2004 or Non-U.S. Equivalent Meet the requirements of ASHRAE Standard 55-2004, Thermal Comfort Conditions for Human Occupancy (with errata but without addenda). Demonstrate design compliance in accordance with the Section 6.1.1 documentation. Projects outside the U.S. may use a local equivalent to ASHRAE Standard 55-2004 Thermal Comfort Conditions for Human Occupancy Section 6.1.1.”	10/1/2012
279*	Requirements	IEQc7	Thermal Comfort – Design and Verification	Add a new option that reads: “OPTION 2. ISO 7730: 2005 & CEN Standard EN 15251: 2007 Projects outside the U.S. may earn this credit by designing heating, ventilating and air conditioning (HVAC) systems and the building envelope to meet the requirements of International Organization for Standardization (ISO) 7730: 2005 Ergonomics of the thermal environment, Analytical determination and interpretation of thermal comfort using calculation of the PMV and PPD indices and local thermal comfort criteria; and CEN Standard EN 15251: 2007, Indoor environmental input parameters for design and assessment of energy performance of buildings addressing indoor air quality, thermal environment, lighting and acoustics.”	10/1/2012
279*	Requirements	IEQc7	Thermal Comfort – Design and Verification	Below option 2, add: “AND”	
279*	Requirements	IEQc7	Thermal Comfort – Design and Verification	Replace “ASHRAE Standard 55-2004 (with errata but without addenda)” with “the standard selected above” in the last sentence of the credit language.	10/1/2012
Entire section	All	IEQc8.1	Daylight and Views- Daylight	Replace section with that of the supplementary document: https://www.usgbc.org/ShowFile.aspx?DocumentID=9341	5/9/2011
283*	Requirements	IEQc8.1	Daylight and Views- Daylight	Delete this sentence: "Achieve a minimum of two points under IEQ Credit 8.2: Daylight and Views - Views AND"	10/1/2013

Page	Location	Credit	Credit Title	Issue	Post Date																											
287	4. Implementation	IEQc8.1	Daylight and Views- Daylight	Delete section 4: "4. Implementation. Meet the requirements of IEQ Credit 8.2, Daylight and Views - Views, for noninpatient areas prior to pursuing this credit."	10/1/2013																											
291*	INPATIENT UNITS	IEQc8.2	Daylight and Views- Views	Under INPATIENT UNITS, revise the first sentence so that it reads, "A minimum of 90% of the inpatient units, staff areas, and public areas shall be."	11/1/2011																											
291*	Perimeter Non-IPU Area with Window Access Required Table	IEQc8.2	Daylight and Views – Views	<div>Add the following columns relating to metric measurements to the table:</div> <table><tr><th>Floor plate area (bgm²)</th><th>Threshold A: 1 point</th><th>Threshold B: 2 points</th></tr><tr><td>Up to 1,395</td><td>683</td><td>766</td></tr><tr><td>1,800</td><td>816</td><td>928</td></tr><tr><td>2,325</td><td>937</td><td>1076</td></tr><tr><td>2,785</td><td>1,049</td><td>1,216</td></tr><tr><td>3,250</td><td>1,154</td><td>1,350</td></tr><tr><td>3,715</td><td>1,254</td><td>1,477</td></tr><tr><td>4,180</td><td>1,350</td><td>1,601</td></tr><tr><td>4,600 and larger</td><td>1,441</td><td>1,720</td></tr></table>	Floor plate area (bgm²)	Threshold A: 1 point	Threshold B: 2 points	Up to 1,395	683	766	1,800	816	928	2,325	937	1076	2,785	1,049	1,216	3,250	1,154	1,350	3,715	1,254	1,477	4,180	1,350	1,601	4,600 and larger	1,441	1,720	10/1/2012
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4,600 and larger	1,441	1,720																														
294	Step 1	IEQc8.2	Daylight and Views- Views	In the second sentence of the paragraph add "inpatient units" so that the clause reads, "determine the usable square footage of inpatient units, occupied staff and public areas that are within 20 feet of the perimeter."	11/1/2011																											
294	Step 1	IEQc8.2	Daylight and Views- Views	In the fourth paragraph under Inpatient Areas, add "inpatient units" so that the clause reads, "calculate the cumulative area of all inpatient units, staff and public spaces for all inpatient until floors."	11/1/2011																											
295	First bullet	IEQc8.2	Daylight and Views- Views	Delete "nursing unit" from the first bullet.	11/1/2011																											
295	6. Calculations	IEQc8.2	Daylight and Views- Views	Replace <i>Figure 1. Floor Plan Showing Compliant Area</i> with: (see image below)	10/1/2013																											

Page	Location	Credit	Credit Title	Issue	Post Date
	<p>Figure 1. Floor Plan Showing Compliant Area</p>  <p>Qualifying Perimeter Floor Area</p> <p>11° angle</p> <p>Qualifying floor area in white</p>				
298	9. Exemplary Performance	IEQc8.2	Daylight and Views-Views	Revise the section to read, "Projects that provide views 10% further into the space for Inpatient Units or exceed the area requirements in Table 1 by 10% or more for Noninpatient Areas are eligible for exemplary performance under the Innovation in Design section."	11/1/2011
321	Glossary	n/a	n/a	Below the glossary heading, insert the text, "Refer to the BD+C reference guide for a complete glossary section"	11/1/2011
322	Glossary, graywater	n/a	n/a	Replace the definition of "graywater" with " Graywater is untreated household waste water which has not come into contact with toilet waste. Graywater typically includes used water from bathtubs, showers, bathroom wash basins, and water from clothes-washer and laundry tubs, though definitions may vary. Some states and local authorities also allow kitchen sink wastewater to be included in graywater. Project teams should comply with the graywater definition established by the authority having jurisdiction in the project area."	10/1/2012
322	Glossary	n/a	n/a	Replace the definition of "departmental gross square footage (DGSF)" with "the floor area of a diagnostic and treatment of clinical department, calculated from the centerline of the walls separating the department from adjacent spaces. Walls and circulations space within the department are included in the calculation. This calculation excludes Inpatient Units."	4/1/2013

Page	Location	Credit	Credit Title	Issue	Post Date
324	Glossary	n/a	n/a	Replace the definition of "soft space" with "in healthcare facilities, a lightly programmed area that can be easily displaced to allow an adjacent department to expand"	4/1/2013
324	Glossary, departmental gross square footage (DGSF)	n/a	n/a	In the first sentence of " departmental gross square footage (DGSF) ", replace "square footage" with "floor area" and add this sentence to the end of the definition, "This calculation excludes Inpatient Units."	10/1/2012

*Shaded rows denote rating system changes. The purpose of these rating system changes within the rating system portions of the *LEED Reference Guide for Green Building Design and Construction – Healthcare Supplement* is to align with the LEED Rating System that comprises the guide.

Note: The online version of the rating system takes precedent over the rating system portions of the LEED Reference Guides in project guidance and application; project teams are required to adhere to the rating system and rating system addenda effective at the time of the project's registration date.