



Errata Sheet

for the document titled:

LEED for Schools Reference Guide First Edition 2007

Notes:

- Updates to this document are posted on the LEED for Schools Rating System page and the Reference Guide electronic access Web page (via www.usgbc.org/myUSGBC).

Errata posted 6/13/2008

EQc3.1	341	Under the heading “Requirements”, in the first bullet point, the referenced standard has been updated to the “SMACNA IAQ Guidelines for Occupied Buildings under Construction, Second Edition-November 2007, chapter 3”
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Errata posted 4/7/2008

MRc7	298 & 301	Under “Summary of Referenced Standard” (p288) and “Resources” (p291), change the Forest Stewardship Council, United States’ phone number to (703) 438-6401
MRc7	298	Revise the “Chain of Custody (COC) Certification” definition to: Chain-of-Custody (COC) Certification enables tracking of wood all the way through the value chain into final products. It is awarded to companies that produce, sell, promote, or trade forest products after audits verify proper accounting of material flows and proper use of the FSC name and logo.
MRc7	299	Replace the text under “Chain-of-Custody Requirements” with the text below: Chain-of-Custody Requirements Each wood products vendor that invoices FSC-certified wood products to project contractors and subcontractors must be COC-certified by an FSC-accredited certifier. Contractors and subcontractors are not required to have COC certification.
MRc7	299	Replace the text under “Calculations” with the text below: List all new (i.e. not reclaimed, salvaged, or recycled, etc.) wood products used on the project and identify which products are FSC certified. Using Equation 1 , tally both the non-FSC-certified wood and the FSC certified wood. Wood products that are identified as “FSC Pure” or “FSC Mixed Credit” shall be valued at 100% the product cost. Wood products identified as “FSC Mixed [NN]” should be valued at the indicated percentage of their cost, e.g., a product identified as “FSC Mixed 75%” should be valued at 75% of the cost. “FSC Recycled” and “FSC Recycled Credit” products do not contribute to this credit.
MRc7	299- 300	Replace the title “Assemblies” with “Products that Combine Wood and Other Materials” and under that heading replace the existing text with the following:

		<p>In the case of manufactured products such as windows and some furniture systems that combine wood and non-wood materials, only the wood portion can be applied toward the credit. To determine the value of the wood portion, calculate the amount of wood as a percent of the total weight, volume, or cost of the product and multiply this by the total value of the product as invoiced to project contractors, subcontractors, or buying agents.</p> <p>If the wood portion of the assembly product is identified as “FSC Pure” or “FSC Mixed Credit,” then 100% of the value of the wood portion shall count toward achievement of the credit. If the product is identified as “FSC Mixed [NN]%,” then the wood portion should be valued at the indicated percentage, e.g., for a product identified as “FSC Mixed 75%,” the wood portion should be valued at 75% of the cost.</p> <p>The calculations for certified wood shall include only new wood products. The value of any recycled wood fiber content of a product that qualifies as contributing to MR Credit 4, Recycled Content Materials, shall be excluded</p>
MRC7	300	<p>Replace the text under “Submittal Documentation” with the text below:</p> <p>This credit is submitted as part of the Construction Submittal.</p> <p>The following data and calculation information is required in order to complete the v2.2 Submittal Templates:</p> <ul style="list-style-type: none"> □ For all permanently-installed wood products, both FSC-certified and not, vendor invoices must be compiled, and wood price values entered into the submittal template. A Vendor is defined as the company that sells wood products to building project contractors or subcontractors. <p>Each vendor invoice must conform to the following requirements:</p> <ol style="list-style-type: none"> 1. Each wood product must be identified on a line-item basis; 2. FSC products must be identified as such on a line-item basis and must be identified as “FSC Pure,” “FSC Mixed Credit,” or “FSC Mixed [NN]%”; 3. The \$ value of each line item must be shown; 4. The vendor’s chain-of-custody (COC) number must be shown on any invoice that includes FSC products. <p>Exceptions – in some rare instances, it may not be practical for a vendor to invoice wood products on a line-item basis because the invoice would be dozens of pages long. In such cases, the invoice should indicate the aggregate value of wood products sold by the vendor. If the wood products are FSC certified:</p> <ol style="list-style-type: none"> 1. The vendor’s COC number must be shown on the invoice; 2. The invoice must be supplemented by a letter from the vendor stating that the products invoiced are FSC certified. 3. The invoice or the letter must state whether the products are “FSC Pure,” “FSC Mixed Credit,” or “FSC Mixed [NN]%.” <p>An optional narrative can be submitted describing any special circumstances or</p>

		considerations regarding the project's credit approach.
MRc7	301	Under Definitions, revise the “Chain of Custody (COC)” definition so it reads as follows: Chain-of-Custody (COC) is the path taken by raw materials, processed materials, and products from the forest to the consumer, including all successive stages of processing, transformation, manufacturing and distribution. The COC certificate number is listed on vendor invoices for products to document that an entity has followed FSC guidelines for product accounting.
MRc7	301	Under Definitions, strike the last sentence of the definition of “Vendor,” so it reads as follows: Vendor is defined as the company that supplies wood products to the building projects contractors or subcontractors.

Errata posted March 7, 2008

EAc1	194	Beneath option 2, please insert the text below. “OPTION 3 – ADVANCED ENERGY DESIGN GUIDE FOR K-12 SCHOOL BUILDINGS (4 Points) Comply with the prescriptive measures of the ASHRAE Advanced Energy Design Guide for K-12 School Buildings. The following restrictions apply: <ul style="list-style-type: none"> • K-12 school building must be under 100,000 square feet. • The school building uses one of the HVAC systems specified in Chapter 3 climate zone tables and follow recommendations contained in Chapter 5 (HV1-32), as appropriate for the climate zone in which the building is located. • The scope of the Advanced Energy Design Guide applies to K-12 buildings with administrative and office areas, classrooms, hallways, restrooms, gymnasiums, assembly spaces, food preparation spaces, and dedicated spaces such as media centers and science labs. Schools that include any of the following specialty spaces cannot use the Advanced Energy Design Guide: indoor pools, wet labs (e.g., chemistry), “dirty” dry labs (e.g., wood-working or auto shop) or other unique spaces with extraordinary heat or pollution generation.”
EAc1	198	Above the heading “Approach and Implementation” insert the following text: “OPTION 3 – ASHRAE Advanced Energy Design Guide for K-12 Schools Buildings For school buildings less than 100,000 square feet and which meet the scope restrictions outlined in the Introduction, the ASHRAE Advanced Energy Design Guide for K-12 Schools provides an effective means of limiting building energy usage, and documenting improved building energy performance without the need for a building energy model. The climate-specific recommendations listed in the ASHRAE Advanced Energy Design Guide should be incorporated into the project early in the building design in order to optimize building performance with minimal impact on capital costs. To comply with the prescriptive measures of the ASHRAE Advanced Energy Design Guide, the project team must first identify the climate zone where the building is located. Chapter 3 contains a United States map defining the eight climate zones by county borders. The project team can then find the appropriate Climate Zone Recommendation table identifying all of the prescriptive criteria required for their project. These criteria include recommendations for roofs, walls, floors, slabs, doors, vertical glazing, skylights, interior lighting, HVAC components, and service water heating. To achieve EA Credit 1, project teams must fully comply with all recommendations established in

		the Advanced Energy Design Guide for the climate zone in which the building is located.
EAc1	201	At the end of the paragraph that starts with "Process energy cost shall be equal to at least 25%...", insert the following sentence: "If the process energy cost is more than 25% of the baseline energy cost, the actual percentage must be used."
EQc6.1	372	Left hand column, last paragraph, end of first sentence, change "...EAc1.2." to "...EAc1." There is no EAc1.2

Errata posted October 26, 2007

EAc9	405	In the first sentence under the title, "Requirements" delete the words "and Impact Insulation Class (IIC)". This standard does not apply to this credit. The sentence should then read: "Design classrooms and other core learning spaces to meet the Reverberation Time (RT) requirements of ANSI Standard S12.60-2002, Acoustical Performance Criteria, Design Requirements and Guidelines for Schools.
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Errata posted October 15, 2007

Credit	Page	Erratum
EAp2	181	In the first and second requirement bullets, strike references of "(without amendments)" that follow "ASHRAE/IESNA Standard 90.1-2004". Project teams may use amendments to this standard, per the USGBC memo published April 26, 2007: http://www.usgbc.org/ShowFile.aspx?DocumentID=2664
EAc1	193	Under "Option 1 – Whole Building Energy Simulation," in the first and third requirement bullets, strike references of "(without amendments)" that follow "ASHRAE/IESNA Standard 90.1-2004". Project teams may use amendments to this standard, per the USGBC memo published April 26, 2007: http://www.usgbc.org/ShowFile.aspx?DocumentID=2664
MRc2.1-2.2	269	In the first sentence of the intent, strike "land-clearing" so the intent reads as follows: Divert construction, <u>and</u> demolition and land-clearing debris from disposal in landfills and incinerators. As stated in the requirements section, land-clearing debris does not contribute to the MRc2 series.
MRc6	294	Under "Approach and Implementation," starting in the third sentence in the first paragraph, replace the following figures: For example, if the project has a \$10 million budget, the materials cost (and subsequently 5% <u>2.5%</u> of that cost) can be estimated using the 45% default rate. The team would calculate that the project would need to use at least \$225,000 <u>\$112,500</u> of materials meeting the requirements of this credit (\$225,000 <u>\$112,500</u> is 5% <u>2.5%</u> of \$4.5 million, which is 45% of the \$10 million project cost). Under "Exemplary Performance," in the last sentence, replace the following figure: For rapidly renewable materials, the percentage must be 40% <u>5%</u> or greater.

Errata posted October 25, 2007

EAc1	194	<p>Replace the title and paragraph</p> <p>“OPTION 2—ADVANCED BUILDINGS™ CORE PERFORMANCE™</p> <p>This option is not yet available at the printing of the first edition of the LEED for Schools Reference Guide, but is expected to be an option in the future. Please check the CIR page on the USGBC Web site for updates.”</p> <p>With</p> <p>OPTION 2 — PRESCRIPTIVE COMPLIANCE PATH: Advanced Buildings™ Core Performance™ Guide (2-5 Points)</p> <p>Comply with the prescriptive measures identified in the Advanced Buildings™ Core Performance™ Guide developed by the New Buildings Institute. The following restrictions apply:</p> <ul style="list-style-type: none"> • The projects must be a school under 100,000 square feet. • Project teams must fully comply with Sections One, <i>Design Process Strategies</i>, and Two, <i>Core Performance Requirements</i>. <p>Minimum points achieved under Option 3 (2-3 points):</p> <ul style="list-style-type: none"> • Three (3) points are available for all school projects under 100,000 square feet that comply with Sections One and Two of the Core Performance Guide. • Two (2) points are available for all other project types under 100,000 square feet (except health care, warehouse, or laboratory projects) that implement the basic requirements of the Core Performance Guide <p>Additional points available under Option 3 (up to 2 additional points):</p> <ul style="list-style-type: none"> • Up to two (2) additional points are available to projects that implement performance strategies listed in Section Three, <i>Enhanced Performance</i>. For every three strategies implemented from this section, one point is available. • Any strategies applicable to the project may be implemented except: <ul style="list-style-type: none"> 3.1-Cool Roofs 3.8-Night Venting 3.13-Additional Commissioning <p>These strategies are addressed by different aspects of the LEED program and are not eligible for additional points under EA Credit 1.</p>
EAc1	198	<p>At the bottom of the left hand column, under the title “Option 2- Prescriptive Compliance Path” replace the paragraph</p> <p>“This option is not yet available at the printing of the first edition of the LEED for Schools Reference Guide but is expected to be an option in the future. Advanced Buildings™ Core Performance™ provides a prescriptive means of improving building energy performance. Please check the CIR page on the USGBC Web site for updates.”</p> <p>With</p>

		<p>“The Core Performance Guide describes the requirements of the program. The Guide is divided into five basic sections, describing different elements of the program requirements. In the Core Performance program, specific program requirements are referred to as criteria.</p> <p>Introduction</p> <p>The introduction section includes a brief overview of the Core Performance program, including the analysis protocols used to develop the program. The introduction also includes a Quick Start Guide that provides a program overview, and a table that correlates the program criteria (requirements) to other LEED credits.</p> <p>Section 1</p> <p>Design Process Requirements—REQUIRED by LEED</p> <p>This section describes a series of requirements that encourage the development of a more integrated building design by addressing the design process. Most of the criteria in this section are typically implemented by LEED project teams and can help the team to track building performance issues more effectively through the design and construction process. <i>LEED projects following this prescriptive path for points under EA credit 1 must implement all of the criteria listed in this section of the Core Performance Guide.</i></p> <p>The specific criteria in this section of Core Performance are:</p> <ul style="list-style-type: none"> 1.1 Identify Design Intent 1.2 Communicating Design Intent 1.3 Building Configuration 1.4 Mechanical System Design 1.5 Acceptance Testing 1.6 Operator Training 1.7 Performance Data Review <p>Section 2</p> <p>Core Performance Requirements—REQUIRED by LEED</p> <p>This section includes the specific energy performance measures that form the basis of achievement of energy savings under the Core Performance program, compared to ASHRAE 90.1-2004. <i>LEED projects following this prescriptive path for points under EA credit 1 must implement all of the criteria listed in this section of the Core Performance Guide.</i> (Note that under some specific conditions, certain criteria in Core Performance may not be applicable to specific projects. For example, projects without server rooms need not implement the Dedicated Mechanical Systems criteria.)</p> <p>The specific criteria in this section of Core Performance are:</p> <ul style="list-style-type: none"> 2.1 Energy Code Compliance 2.2 Air Barrier Performance 2.3 Indoor Air Quality 2.4 Below Grade Insulation 2.5 Envelope Performance 2.6 Fenestration 2.7 Lighting Controls 2.8 Lighting Power Density
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		be required to utilize a different mechanical system baseline and therefore may not be able to demonstrate the same level of relative energy savings as suggested by the Core Performance program. The relative performance of the baseline does not affect the predicted energy use of the proposed building, but does affect the performance of the project relative to LEED.”
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Errata posted September 14, 2007

Credit	Page	Erratum
SS	22	<p>Replace Table 1 with the table in this document listing SS credits: http://www.usgbc.org/ShowFile.aspx?DocumentID=3168 (PDF)</p> <p>Under “Overview of LEED Prerequisites and Credits (continued),” replace “EQ Credit 9” with “SS Credit 9,” and replace “EQ Credit 10” with “SS Credit 10.”</p>