

Assessment Tool

2012 Edition HAWAII CHPS Criteria

FOR
NEW CONSTRUCTION
MAJOR MODERNIZATIONS



H A W A I I
COLLABORATIVE FOR
HIGH PERFORMANCE
SCHOOLS

DEVELOPED IN
PARTNERSHIP WITH:



EXHIBIT 17

Overview

Disclaimer

IMPORTANT NOTICE TO THE READER: This publication is designed to provide accurate and authoritative information with regard to the subject matter covered. It is distributed with the understanding that local, state and federal laws, regulations and requirements will vary based on the particular circumstances such as building characteristics, geographic region and similar factors. It is also distributed with the understanding the publisher is not engaged in rendering engineering, architectural, legal, or other professional advice or service. The publisher and its participants, officers, directors, employees, contractors and affiliates cannot be responsible for errors or omissions, or any material set forth or referenced in this publication. If professional advice or other expert assistance is required, the services of a competent advisor familiar with the law, regulation, practices and circumstances of the project should be sought.

All rights reserved. Published 2012, Collaborative for High Performance Schools (CHPS).

Cover image courtesy of:

Project: Hālau Ho'olako

Client: Kanu o ka 'Āina Learning 'Ohana (KALO)

Location: Waimea, Hawaii

Completion: 2009

Architect: Group 70 International

Photographer: Olivier Koning



Overview

Table of Contents

Overview	2
Disclaimer	2
Collaborative for High Performance Schools.....	6
Acknowledgements.....	7
HI-CHPS Criteria	9
Recognition.....	12
Integration.....	19
II.P1 Integrated Design	19
II.P2 Microclimate Based Design.....	22
II.P3 Educational Display.....	25
II.C1 Enhanced Integrated Design	26
II.C2 Demonstration Areas, Staff Training and Community Outreach	28
II.C3 Life Cycle Cost Analysis	30
II.C4 Outdoor Classrooms	32
II.C5 School Garden	34
II.C6 Grid Neutral / Zero Net Energy	36
II.C7 Plug Load Reduction.....	38
II.C8 School Master Plan.....	39
II.C9 Innovation.....	41
II.C10 Design for Adaptability, Durability and Disassembly	43
Indoor Environmental Quality	46
EQ.P1 Air Quality in Naturally Ventilated and Conditioned Spaces.....	46
EQ.P2 Air Quality in Mechanically Ventilated and Conditioned Spaces	49
EQ.P3 Construction IAQ Management.....	55
EQ.P4 Moisture Management	59
EQ.P5 View Windows.....	61
EQ.P6 Daylighting and Glare.....	63
EQ.P7 Minimum Acoustical Performance	65
EQ.P8 Minimum Low-Emitting Materials	68
EQ.C1 View Windows.....	72
EQ.C2 Daylighting in Classrooms	74
EQ.C3 Pollutant & Chemical Source Control	77



Overview

EQ.C4 Advanced Low-Emitting Materials	80
EQ.C5 Enhanced Air Quality Measures	85
EQ.C6 Post Construction IAQ	88
EQ.C7 Enhanced Acoustical Performance.....	89
EQ.C8 Electric Lighting.....	92

Energy 94

EE.P1 Minimum Energy Performance.....	94
EE.P2 Commissioning	96
EE.P3 Facility Staff & Occupant Training	101
EE.P4 Eliminate Ozone Depleting Refrigerants	103
EE.P5 Base Level Energy Management System	104
EE.P6 ENERGY STAR® Equipment.....	107
EE.C1 Superior Energy Performance.....	109
EE.C2 Renewable Energy	111
EE.C3 Advanced Energy Management Systems and Submetering	114
EE.C4 Flex Energy – Solar Ready	117
EE.C5 Control Building Envelope Openings	119
EE.C6 Enhanced Commissioning	121

Water 124

WE.P1 Outdoor Water Budget and Irrigation System Performance	124
WE.P2 Minimum Reduction in Indoor Potable Water Use	126
WE.C1 Indoor Water Use Reduction.....	130
WE.C2: Reduce Potable Water Use for Sewage Conveyance	132
WE.C3: Reduce Potable Water Use for Non-Recreational Landscaping Areas	136
WE.C4 Reduce Potable Water Use for Recreational Landscaping Areas	138
WE.C5: Irrigation System Commissioning.....	140
WE.C6: Water Management System.....	142

Sites 145

SS.P1: Site Selection and Evaluation.....	145
SS.P2: Construction Site Runoff Control.....	148
SS.C1 Sustainable Site Selection	150
SS.C2: Joint-Use of Facilities and Parks.....	153
SS.C3: Central Location and Public Transportation.....	155
SS.C4: Cultural Responsive Design.....	158



Overview

SS.C5: Reduced Building Footprint.....	160
SS.C6: Human Powered Transportation	162
SS.C7: Parking and Electric Vehicles.....	165
SS.C8: Post Construction Stormwater Management	168
SS.C9: Reduce Heat Islands – Landscaping	173
SS.C10 Reduce Heat Islands – Cool Roofs / Vegetated Roofs.....	176
SS.C11: Light Pollution Reduction	178

Materials and Waste Management..... 182

MW.P1: Storage and Collection of Recyclables.....	182
MW.P2: Minimum Construction Site Waste Management	184
MW.C1: Construction Site Waste Management.....	186
MW.C2: Single Attribute - Recycled Content.....	187
MW.C3: Single Attribute - Rapidly Renewable Materials	192
MW.C4: Single Attribute – Certified Wood	195
MW.C5: Single Attribute – Regional Materials	197
MW.C6 Materials Reuse.....	199
MW.C7 Durable and Low Maintenance Flooring.....	201
MW.C8: Building Reuse - Exterior.....	202
MW.C9: Building Reuse – Interior	204
MW.C10: Environmental Performance Reporting	206

District Planning, Operations and Maintenance..... 209

OM.P1: District High Performance Operations.....	210
OM.P2: Systems Maintenance Plan.....	211
OM.C1: District High Performance Planning	213
OM.C2: Enhanced High Performance Operations	215
OM.C3: Anti-Idling Measures.....	217
OM.C4: Green Cleaning	219
OM.C5: Work Order and Maintenance Management System.....	221
OM.C6: Indoor Environmental Management Plan.....	222
OM.C7: Integrated Pest Management.....	223
OM.C8 Climate Change Action / Carbon Footprint Reporting.....	225
OM.C9: Green Power	227



Overview

Collaborative for High Performance Schools

The Collaborative for High Performance Schools (CHPS®) began in November 1999 when the California Energy Commission called together Pacific Gas and Electric Company, San Diego Gas and Electric, and Southern California Edison to discuss the best way to improve the performance of California's schools. Out of this partnership CHPS grew to include a diverse range of government agencies, utility companies, school districts, non-profit organizations and private companies, all with a unifying goal: to improve the quality of educational facilities for California's children. When first published in 2001, in California, the CHPS Criteria established the nation's first building rating program created to specifically facilitate the design of high performance schools. The Criteria was published with the launch of the CHPS Best Practices Manual, a comprehensive guide to facilitating high performance ideas at all aspects of a schools life cycle. In 2002 CHPS incorporated as a non-profit organization, and interest in high performance design grew. CHPS expanded its focus beyond California, developing a national version of the manuals as well as other state-specific versions in Massachusetts, Washington, New York, Maine, Vermont, Virginia, Connecticut, New Hampshire, Rhode Island, Colorado, Texas and Hawaii. Today CHPS is a national organization committed to building a new generation of healthy, efficient, environmentally responsive schools for all school children. CHPS offers technical resources and databases, training and education, membership, verification and recognition.

CHPS Technical Resource Oversight

A state adaptation of the CHPS Criteria, including Hawaii-CHPS (known as HI-CHPS), is developed and revised with oversight from four bodies.

- CHPS Board of Directors. The CHPS Board of Directors is responsible for ensuring the state adaptation is a credible and reliable resource that is acceptable to be released for use by the public.
- CHPS National Technical Committee. The CHPS National Technical Committee is responsible for ensuring the technical rigor, cohesion and consistency to the extent possible with other state adaptations
- State Advisory Committee. The State Advisory Committee is responsible for ensuring that the Criteria is representative of the unique needs, climates, policies, codes, requirements, and natural resources in a given state.
- Public. The public, or all stakeholders in the school design, construction and operation industry, are responsible to participate in public reviews to the extent possible to ensure the Criteria is a comprehensive, usable and valuable resource.



Overview

Acknowledgements

A great number of people have supported, and contributed to the development of the HI-CHPS Criteria. The adaptation in Hawaii would not have been possible without the support and partnership of the Hawaii Department of Education, whose leadership and vision of a standard for high performance schools in Hawaii made this possible.

The HI-CHPS Criteria would also not have been possible without the contributions of the HI-CHPS Advisory Committee, including:

- Scott Fleming (Fleming & Associates LLC and AIA Honolulu Chapter)
- Tim Higa (ECS, Inc. and ACECH, American Council of Engineering Companies of Hawaii)
- Charles Kaneshiro (Group 70 International and AIA Honolulu Chapter)
- Alan Levy (Nordic PCL Construction, Inc. and GCA, General Contractors Association of Hawaii)
- Brenda Lowrey (Hawaii Department of Education)
- Jonathan Weintraub (Hawaii Department of Education)
- Nick Nichols (Hawaii Department of Education)
- Ryan Rutenschroer (Hawaiian Building Maintenance and USGBC – Hawaii Chapter)
- Carilyn Shon (Hawaii Department of Business, Economic Development, and Tourism)
- Bill Wiecking (Hawaii Preparatory Academy and HAIS, Hawaii Association of Independent Schools)
- Joel Yuen (InSynergy Engineering, Inc. and ACECH, American Council of Engineering Companies of Hawaii)

The HI-CHPS Advisory Committee utilized the National Core Criteria, as well as the California, Colorado, Texas, Virginia, and Massachusetts CHPS Criteria as a base and adapted them to the unique climates, needs, codes and regulations of Hawaii.

Bill Orr is the Executive Director of CHPS and serves as its technical editor. Kristin Parineh, CHPS Project Associate, contributed to research, development and production.

The CHPS Technical Committee has spent many hours reviewing and developing the criteria under the leadership of Bill Orr, CHPS' Executive Director, and Jim Ogden, of 3QC, Inc., chairman of the CHPS Technical Committee.

Finally, the current and past CHPS Board of Directors deserves special acknowledgement for their continued guidance and support. Current chair Chip Fox, (San Diego Gas & Electric), and past chairs Jackalyn Pfannenstiel (California Energy Commission), Steve Castellanos (State Architect) and Robert Pernell (California Energy Commission) provided exceptional leadership and direction. Current board members include: Mike Kozlowski (Johnson Controls), Greg Dick (California Department of Resources Recycling and Recovery), Jessica Mack (Southern California Edison), Steve Castellanos (Derivi Castellanos Architects), Kelvin Lee, (Johnson Controls), Steve Nicholson (Fairfax County Public Schools), Stephen Oliver (Sacramento Municipal Utility District), Brian Dougherty (Dougherty & Dougherty), Rob Samish (Lionakis), Kim Kennedy (Los Angeles Unified School District), Carolyn Sarno (Northeast Energy Efficiency Partnership), Roy Sprague (Cypress Fairbanks Independent School District), Jim Ogden (3QC) and John Zinner (Zinner Consultants). Advisors to the Board include: Claire Barnett (Healthy Schools Network), James Davis (Garza,



Overview

Bomberger and Associates), Caterina Hatcher (US Environmental Protection Agency), Kathleen Moore (California Department of Education).



Overview

HI-CHPS Criteria

The HI-CHPS Criteria explicitly defines a high performance school, environments that are healthy, comfortable, energy, resource, and water efficient, safe, secure, adaptable, and easy to operate and maintain. The HI-CHPS Criteria was developed to take advantage of Hawaii climates, school needs, state codes and regulations, and environmental priorities of the region by Hawaii stakeholders. The Criteria will be updated on a regular cycle to take advantage of the latest strategies and tools for high performance schools.

Schools that meet the HI-CHPS Criteria are environmentally sustainable and healthy places of learning that demonstrate that while high performance technologies may be new, they need not be complicated, expensive or unreliable. CHPS schools are saving their school districts money through energy and water utility savings and increasing occupant health and productivity. Quite simply, a CHPS school belongs to the next generation of schools.

A high performance school is designed to optimize the durability of the facility and to utilize high efficiency strategies to ventilate, light, and heat and cool a space when necessary. Glare-free daylight is brought into the school to enhance the learning environment. The building shell integrates the most effective combination of insulation, glazing, and thermal mass to ensure energy efficiency, and plumbing fixtures are specified to reduce water consumption. Together, these measures significantly reduce the operational costs of running the school building. It is reasonable to assume a 20%-40% cost savings in utility bills versus a non-high performance building of the same size, shape and location.

A high performance school is thermally, visually, and acoustically comfortable. Thermal comfort means that teachers, students and administrators should neither be hot nor cold as they teach and learn. Visual comfort means that the quality of lighting makes visual tasks, such as reading and following classroom presentations, easier. Acoustic comfort is achieved when students and teachers can hear each other and are not impeded by loud ventilation systems or noise from adjoining spaces.

High quality indoor air is another important feature of a high performance school. Air intakes are located away from potential sources of contamination and ventilation systems are designed to optimize fresh air. Architects and engineers incorporate best design practices to prevent water intrusion into wall and roof assemblies. This, in turn, prevents the accumulation of moisture in materials that could support mold growth or lead to premature replacement of indoor finishes and even structural elements.

A high performance school has an environmentally responsive site. To the extent possible, the school's site conserves existing natural areas and incorporates them into the curriculum. Stormwater runoff is minimized and/or captured on site for irrigation or flushing water closets. The site is accessible to bicycle and pedestrian traffic and is conveniently located for community activities.

While operational savings, environmental stewardship, and community-building are attractive benefits, it is important to emphasize that, above all, a high performance school provides an environment that enhances the primary mission of public schools: education of future citizens.

The Criteria is also useful as a goal-setting and planning tool. Districts can use it to simply and clearly communicate their design goals to project managers, architects, engineers, construction managers and contractors. At the same time, the Criteria's flexibility allows designers to deliver a CHPS school while managing the regional, district, and site-specific constraints of the school design. The Criteria is also intended for use as the basis for incentive funding.

Throughout this document references are made to Hawaii Climate Zone 1. While Hawaii does have several microclimates, CHPS is defining the Hawaii climate zone in accordance with the American Society of Heating,



Overview

Refrigeration, and Air Conditioning Engineers (ASHRAE) *Advanced Energy Design Guide for K-12 Schools*. ASHRAE standards are used frequently throughout the CHPS Criteria.

The HI-CHPS Criteria should be used in conjunction with local, state and federal regulations, including the Hawaii Department of Education "Educational Specifications and Standards for Facilities":

http://fssb.k12.hi.us/educational_specifications.htm



Overview

Criteria Organization

The HI-CHPS Criteria is provided as a benchmark for high performance buildings. The Criteria was developed based on the CHPS National Core Criteria, which establishes a baseline for all CHPS adaptations that includes the following:

- Three high performance school priorities, in order of importance: 1) maximize health and performance; 2) conserve energy, water and other resources; and 3) minimize waste, pollution and environmental degradation.
- A common structure required of all new CHPS adaptations comprised of three phases: Strategy, Design and Persistence
- Seven categories within the three phases: Integration (II), Indoor Environmental Quality (EQ), Energy (EE), Water (WE), Sites (SS), Materials & Waste Management (MW) and District Planning, Operations and Maintenance (OM). The last category was significantly altered to accommodate the fact that Hawaii public schools are uniquely governed by a single school district. In an effort to streamline the HI-CHPS Criteria, high performance measures intended for the school district were separated into this category addressing district planning and district influences on school operations, leaving the remaining credits intended for design and construction teams working on an individual project. The category is intended to encourage further support at the district level for implementation of high performance features at the school level and district wide. Private and charter schools may still gain points in this category if they are equivalently implemented at a school board or governing body level.
- Core prerequisites and credits.

As mentioned above, this document is divided into three phases: Strategy, Design, and Performance, and seven categories: Integration & Innovation (II), Indoor Environmental Quality (EQ), Energy (EE), Water (WE), Site (SS), Materials and Waste Management (MW), and District Planning, Operations & Maintenance (OM). Each section has both prerequisites and optional credits. Points are assigned to each credit. Prerequisites are required for all CHPS projects before any points may be obtained, except for major renovations and new buildings on existing campuses, in which compliance with prerequisites varies based on the scope of the project.

Table 1, offers an example of how the prerequisites and credits are organized. In Table 1, *Design* is the main category and *Site* is the section. There is a prerequisite, *SS.P1 Joint Use of Facilities and Parks* (prerequisites are all denoted with a "P"), which has one requirement *SS.P1.1*. There is also one credit, *SS.C1: Sustainable Site Selection*, which has four possible requirements for points, *SS.C1.1*, *SS.C1.2*, *SS.C1.3*, *SS.C1.4*. Compliance with the requirements under *SS.C1* would achieve a CHPS project one to five points in this example.

Table 1– Volume Organization Example

Category	Section	Credit/Prerequisite	Requirements	Points
Design	Site	SS.P1: Joint use of Facilities and Parks	SS.P1.1	P
		SS.C1: Sustainable Site Selection	SS.C1.1	1-5
			SS.C1.2	
			SS.C1.3	
			SS.C1.4	



Overview

Finally, under each prerequisite and credit there is helpful guidance, examples, calculations and documentation procedures for meeting each prerequisite or credit. The applicability section offers guidance on appropriate use of the prerequisite or credit based on the project type. The resources section lists resources, websites, and alternate publications and websites that may offer additional information or support for compliance.

Recognition

A district or school may choose to be recognized for compliance with CHPS prerequisites and credits for a new school, a major modernization project, or a new building on an existing campus that meets the eligibility levels defined above. A project is subject to the most current version of the CHPS Criteria and applicable codes at the time of permitting or registration, whichever comes first. CHPS offers two recognition programs, CHPS Designed and CHPS Verified™, to allow flexibility in compliance. CHPS realizes that school districts and design teams are constantly faced with multiple challenges with student population growth, demand for improved student performance, and social and financial constraints. The two options are described in further detail below; however, the underlying difference is that CHPS Designed projects are self-certified, while CHPS Verified™ projects are independently, 3rd party reviewed.

CHPS Designed

CHPS Designed is a self-certification recognition program. It is ideal for a school district's or design team's first attempt at using the CHPS Criteria, implementing the Criteria late in a project, or for school districts with limited need for an independent project review. The program relies on a project scorecard that helps design teams manage the features they are implementing and the associated points they are claiming, and can be used to designate responsible team members and track compliance with credits. CHPS Designed is free to participate in, and the primary accountability rests on the school district and design team for ensuring the CHPS Criteria has been met. Ideally the same documentation required of a CHPS Verified School would be maintained by the district for self accountability.

CHPS Verified

CHPS Verified offers projects the ability to be independently, 3rd-party reviewed and is ideal for those seeking to verify their project is designed and built to the highest performance standards. Participation in this program will help ensure that the school project has the required high performance features to realize all the benefits associated with high performance schools, including improved student and worker health, increased productivity and student performance, decreased operating costs through energy and resource savings, and reduced environmental impact.

Since with CHPS Verified the accountability rests not only on the school district and design team, but also on CHPS and an assigned independent reviewer, registration is required and there are associated review fees, both of which can be found at: <http://www.chps.net/Hawaii>

CHPS Verified helps design teams manage the design and documentation process with tools for project management, plan review and other resources. In order to be recognized as CHPS Verified, a project must first start with registration. Registration must take place through the HI-CHPS website <http://www.chps.net/Hawaii>. Once registered, the project will have access to a project website for uploading submittal requirements, and will also gain access to a series of CHPS Verified Plan Sheets that must be incorporated into construction drawings. The plan sheets contain the HI-CHPS Scorecard along with other tools for showing compliance with various prerequisites and credits.



Overview

Submissions to the website must be made during three different review periods: Design Review, Construction Review and Performance Review. The Design Review must occur prior to construction, the Construction Review after construction is complete, and the Performance Review anywhere between 12-18 months after occupancy. Each prerequisite and credit has a section called verification that lists what materials need to be submitted to show that compliance was achieved, and during which review periods the materials will be checked. For further guidance see the HI-CHPS website.

Eligibility Levels

There are 171 total points possible for the following project types in Hawaii:

- New school construction (including new buildings on an existing campus and replacement campuses)
- Major Renovations (with or without additions to existing buildings)

Repair projects (i.e. those that involve only replacement of finishes or equipment) do not qualify for HI-CHPS recognition. It is recommended that the school district use CHPS best practices where appropriate with the intent that over time, through a series of improvements, the school will achieve essentially the same high performance building as if it had been designed that way.

Renovations and existing schools can also utilize the CHPS Operational Report Card (ORC). The ORC benchmarks the current performance of existing schools, provide a report card of results and make suggestions for improvement. A renovation project can utilize the report to prioritize funding, and the scope of the renovation.

Minimum requirements for recognition for New School Construction:

New School Construction (including new buildings on an existing campus)								
Recognition Level	Prerequisites	Minimum Total Points Required	Integration (II)	Indoor Env. Quality (IEQ)	Energy (EE)	Water (WE)	Sites (SS)	Materials & Waste (WM)
CHPS Verified	All Required	45*	2	2	5	4	2	2
* If a project is only meeting the minimum required points, no more than 4 points may be claimed from the District Planning, Operations and Maintenance (OM) category. A project may earn more than 4 points from the category once it has reached the 45 point minimum. For example, a project that earns 45 points can only receive 4 of them from the OM category, however a project that earns 55 points can earn as many as 14.								
CHPS Verified Leader	All Required + OM.C2.1.	85	5	5	12	6	5	5
A HI-CHPS Verified Leader is a higher level of recognition for school projects that perform well beyond minimum eligibility requirements. HI-CHPS Verified Leaders must be HI-CHPS Verified, and have inspirational designs that incorporate their high performance features into architectural expression. The school should be an image of environmental and social responsibility, and must be balanced in providing benefits to the environment, student health and student performance.								



Overview

Major renovations are defined by a substantial improvement to a school in at least two of the following: lighting, HVAC, building envelope systems and/or interior surfaces. A substantial improvement is when more than half the system or surfaces are being replaced or upgraded.

Minimum requirements for recognition for Major Renovations (with or without additions to existing buildings):

Major Renovations (with or without additions to existing buildings)								
Recognition Level	Prerequisites	Minimum Total Points Required	Integration (II)	Indoor Env. Quality (IEQ)	Energy (EE)	Water (WE)	Sites (SS)	Materials & Waste (WM)
CHPS Verified	Required based on scope of project in Table 2.	35*	2	2	5	3	2	2
* If a project is only meeting the minimum required points, no more than 4 points may be claimed from the District Planning, Operations and Maintenance (OM) category. A project may earn more than 4 points from the category once it has reached the 35 point minimum. For example, a project that earns 35 points can only receive 4 of them from the OM category, however a project that earns 45 points can earn as many as 14.								
CHPS Verified Leader	Required based on scope of project in Table 2 + OM.C2.1	65	5	5	12	5	5	5
A HI-CHPS Verified Leader is a higher level of recognition for school projects that perform well beyond minimum eligibility requirements. HI-CHPS Verified Leaders should be HI-CHPS Verified, and have inspirational designs that incorporate their high performance features into architectural expression. The school should be an image of environmental and social responsibility, and must be balanced in providing benefits to the environment, student health and student performance.								

Table 2 – Prerequisite Applicability for Major Renovation Projects

Prerequisite	Systems and Surfaces	Requirements
II.P1 Integrated Design		Always Required
II.P2 Microclimate Based Design		Always Required
II.P3 Educational Display		Always Required
EQ.P1 Air Quality in Naturally Conditioned and Ventilated Schools	HVAC and Envelope	Required when an HVAC system is being removed and/or the envelope is substantially improved.
EQ.P2 Air Quality in Mechanically Conditioned and Ventilated Schools	HVAC	Required when HVAC is substantially improved.



Overview

EQ.P3 Construction IAQ Management		Always Required
EQ.P4 Moisture Management	HVAC	Required when HVAC is substantially improved.
EQ.P5 View Windows	Envelope	Required only when the envelope is substantially improved, including configuration of windows.
EQ.P6 Daylighting and Glare	Envelope	Required only when the envelope is substantially improved, including configuration of windows.
EQ.P7 Minimum Acoustical Performance	HVAC and/or Interior Surfaces	Required when HVAC and/or duct work are substantially improved. Reverberation time only required when interior surfaces are included.
EQ.P8 Minimum Low-Emitting Materials	Interior Surfaces	Required only when interior surfaces are substantially improved.
EE.P1 Minimum Energy Performance		Always Required
EE.P2 Commissioning		Always Required
EE.P3 Facility Staff & Occupant Training		Always Required
EE.P4 Eliminate Ozone Depleting Refrigerants	HVAC	Required for all new HVAC installations.
EE.P5 Base Level Energy Management Systems		Always Required
EE.P6 ENERGY STAR Equipment		Always Required
WE.P1 Outdoor Water Use Budget and Irrigation System Performance		Required for outdoor water system improvements including plant replacement.
WE.P2 Minimum Reduction in Indoor Potable Water Use		Required for indoor water system improvements such as fixture or appliance replacement.
SS.P1 Site Selection and Evaluation		Always Required
SS.P2 Construction Site Runoff Control		Always Required
MW.P1 Storage and Collection of Recyclables		Always Required
MW.P2 Minimum Construction Site Waste Management		Always Required
OM.P1 District High Performance Operations		Always Required
OM.P2 Systems Maintenance Plan		Always Required



Overview

Criteria Summary

CATGORY	ID	TITLE	TOTAL POSSIBLE POINTS	POINTS TARGETED
STRATEGY	INTEGRATION		24	
	II.P1	Integrated Design	P	
	II.P2	Microclimate Based Design	P	
	II.P3	Educational Display	P	
	II.C1	Enhanced Integrated Design	2	
	II.C2	Demonstration Areas, Staff Training and Community Outreach	2	
	II.C3	Life Cycle Cost Analysis	2	
	II.C4	Outdoor Classrooms	1	
	II.C5	School Garden	1	
	II.C6	Grid Neutral/Zero Net Energy	6	
	II.C7	Plug Load Reduction	1	
	II.C8	School Master Plan	1	
	II.C9	Innovation	6	
	II.C10	Design for Adaptability, Durability and Disassembly	2	
DESIGN	INDOOR ENVIRONMENTAL QUALITY		23	
	EQ.P1	Air Quality in Naturally Conditioned and Ventilated Schools	P	
	EQ.P2	Air Quality in Mechanically Conditioned and Ventilated Schools	P	
	EQ.P3	Construction IAQ Management	P	
	EQ.P4	Moisture Management	P	
	EQ.P5	View Windows	P	
	EQ.P6	Daylighting and Glare	P	
	EQ.P7	Minimum Acoustical Performance	P	
	EQ.P8	Minimum Low Emitting Materials	P	
	EQ.C1	Enhanced View Windows	2	
	EQ.C2	Daylighting in Classrooms	6	
	EQ.C3	Pollutant and Chemical Source Control	2	
	EQ.C4	Advanced Low-Emitting Materials	3	
	EQ.C5	Enhanced Air Quality Measures	3	
	EQ.C6	Post-Construction IAQ	1	



Overview

	EQ.C7	Enhanced Acoustical Performance	3	
	EQ.C8	Electric Lighting	3	
DESIGN	ENERGY		45	
	EE.P1	Minimum Energy Performance	P	
	EE.P2	Commissioning	P	
	EE.P3	Facility Staff & Occupant Training	P	
	EE.P4	Eliminate Ozone Depleting Refrigerants	P	
	EE.P5	Base Level Energy Management Systems	P	
	EE.P6	ENERGY STAR Equipment	P	
	EE.C1	Superior Energy Performance	24	
	EE.C2	Renewable Energy	10	
	EE.C3	Advanced Energy Management System and Submetering	5	
	EE.C4	Flex Energy – Solar Ready	1	
	EE.C5	Control Building Envelope Openings	2	
	EE.C6	Enhanced Commissioning	3	
DESIGN	WATER		19	
	WE.P1	Outdoor Water Budget and Irrigation System Performance	P	
	WE.P2	Minimum Reduction in Indoor Potable Water Use	P	
	WE.C1	Indoor Water Use Reduction	5	
	WE.C2	Reduce Potable Water Use for Sewage Conveyance	4	
	WE.C3	Reduce Potable Water Use for Non Recreational Landscaping Areas	3	
	WE.C4	Reduce Potable Water Use for Recreational Landscaping Areas	2	
	WE.C5	Irrigation System Commissioning	1	
	WE.C6	Water Management System	4	
	SITE		23	
	SS.P1	Site Selection and Evaluation	P	
	SS.P2	Construction Site Runoff Control	P	
	SS.C1	Sustainable Site Selection	4	
	SS.C2	Joint-Use of Facilities and Parks	3	
	SS.C3	Central Location and Public Transportation	2	
DESIGN	SS.C4	Cultural Responsive Design	1	
	SS.C5	Reduced Footprint	1	
	SS.C6	Human Powered Transportation	3	
	SS.C7	Parking Minimization and Electric Vehicles	2	
	SS.C8	Post-Construction Stormwater Management	2	
	SS.C9	Reduce Heat Islands – Landscaping	2	



Overview

	SS.C10	Reduce Heat Islands – Cool Roofs/ Vegetated Roofs	2	
	SS.C11	Light Pollution Reduction	1	
DESIGN	MATERIALS & WASTE MANAGEMENT		19	
	MW.P1	Storage and Collection of Recyclables	P	
	MW.P2	Minimum Construction Site Waste Management	P	
	MW.C1	Construction Site Waste Management	2	
	MW.C2	Single Attribute – Recycled Content	2	
	MW.C3	Single Attribute - Rapidly Renewable Materials	2	
	MW.C4	Single Attribute - Certified Wood	1	
	MW.C5	Single Attribute - Regional Materials	2	
	MW.C6	Material Reuse	2	
	MW.C7	Durable and Low Maintenance Flooring	1	
	MW.C8	Building Reuse – Exterior	2	
	MW.C9	Building Reuse – Interior	1	
	MW.C10	Environmental Performance Reporting	4	
PERFORMANCE	DISTRICT PLANNING, OPERATIONS & MAINTENANCE		18	
	OM.P1	District High Performance Operations	P	
	OM.P2	Systems Maintenance Plan	P	
	OM.C1	District High Performance Planning	1	
	OM.C2	Enhanced High Performance Operations	7	
	OM.C3	Anti-Idling Measures	1	
	OM.C4	Green Cleaning	2	
	OM.C5	Work Order and Maintenance Management System	1	
	OM.C6	Indoor Environmental Management Plan	2	
	OM.C7	Integrated Pest Management	1	
	OM.C8	Climate Change Action / Carbon Footprint Reporting	2	
	OM.C9	Green Power	1	

TOTAL POINTS POSSIBLE

171

