

# COLLABORATIVE FOR HIGH PERFORMANCE SCHOOLS (CHPS) CERTIFICATION GUIDE

A certification specifically designed to create healthy learning environments and improve student performance, the Collaborative for High Performance Schools (CHPS – aka “chips”) is a national certification for new or existing buildings based on a core criteria for K-12 schools. There are also two recognition levels: Designed and Verified. CHPS Designed is more like a self-evaluation as there is no third party review and accountability is on the school and design team. CHPS Verified requires documentation and third party review for accountability.

Utilize the guideline below to better understand how Kawneer products can contribute to CHPS certification.

INDOOR ENVIRONMENT QUALITY	Potential Points	Requirements	Kawneer Product + Service
<b>EQ 9.1 Thermal Comfort – ASHRAE 55</b> To provide a high level of thermal comfort to support optimum health, productivity, and comfort.	1-4	Comply with the current ASHRAE Standard 55 for thermal comfort standards.	<b>High-Performance Thermal Products</b> High-performance thermal systems provide optimum performance leading to greater energy conservation. Kawneer systems accommodate double pane and triple pane insulating glass to maximize thermal performance and reduce acoustic transmission.
<b>EQ 10.2 Controllability of Systems</b> Enable teachers to have reasonable control of the thermal environment within classrooms.	1	Ninety percent (90%) for new schools and new school buildings, and seventy five percent (75%) for major renovations, of all classrooms shall have a minimum of one operable window per classroom that is reasonably accessible to the occupants. This precludes the use of ladders to adjust the window opening.	<b>Thermal, Architectural-Grade Operable Windows</b> Provide controllable natural ventilation with architectural grade windows to increase thermal comfort. Reduce waste on the construction site with pre-assembled and factory glazed operable windows.

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<p><b>EQ 11.0 Daylighting: Glare Protection</b></p> <p>Provide high quality daylighting in classrooms to enhance student performance, improve student productivity through quality daylighting designs that minimize glare and direct sunlight penetration, and ensure energy savings.</p>	<p>4</p>	<p>Design spaces to optimize daylight while preventing glare by controlling direct sunlight ingress with blinds, shades, overhangs, light shelves, translucent material, or other effective means. Use either of the following three metrics to document achievement of this criterion, and refer to the implementation section for documentation requirements:</p> <p>No direct sunlight can strike the teaching surfaces or a work plane located 4 ft. or more inside the exterior walls at 9:00AM, 12:00PM and 3:00PM on the winter and summer solstice and the equinox. OR The maximum illuminance to average illuminance ratio measured in the workplane cannot exceed 15 at 9:00AM, 12:00PM and 3:00PM on the winter and summer solstice and the equinox.</p> <p>OR</p> <p>The maximum Daylight Autonomy (DAm<sub>ax</sub>) for the daylit spaces must be below 5% for all daylit spaces. AND Skylights and roof monitors shall meet the requirements of no direct sun penetration as described above, unless they have diffusing devices such as a haze factor 99%+ or direct transmittance &lt;1%.</p> <p>1 Points: Achieve &gt;20fc annual average illuminance for &gt;75% of classroom area 2 Points: Achieve &gt;35fc annual average illuminance for &gt;75% of classroom area 3 Points: Achieve &gt;50fc annual average illuminance for &gt;75% of classroom area</p> <p>OR</p> <p>Spatial Daylight Saturation (sDS) Approach</p> <p>1 Points: Achieve &gt;50% sDS300/50% 2 Points: Achieve &gt;75% sDS300/75% 3 Points: Achieve &gt;90% sDA300/90%</p>	<p><b>All Kawneer Framing Systems</b></p> <p>From our core products like Framing Systems and Windows to specialty products like Overhead Glazing and InFrame™ Interior Framing, Kawneer offers strong and versatile solutions that maximize daylight autonomy and sunlight exposure.</p>

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<p><b>EQ 12. 1 Views</b> Provide a connection between indoor spaces and the outdoor environment through the introduction of sunlight and views into the occupied areas of the building.</p>	<p>1-3 (1) (2-3)</p>	<p>Provide direct line of sight to view glazing from 70% of the combined floor area of classrooms, library reading rooms, and administration areas. To qualify, a space shall have view glazing area equal to or greater than 7% of the floor area. View glazing shall be transparent, but not translucent, and only include window area above 2.5 ft. and below 7.5 ft. from the floor. The total width of view windows shall be greater than 1% of the floor area. Exception: For school buildings that share at least two sides with other buildings, shared walls are exempted from this requirement. Every effort shall be made to meet the view glazing requirement on walls not shared with other buildings.</p> <p>OR</p> <p>Provide direct line of sight to view glazing from at least 80% of the combined floor area of core classrooms and administration areas. Access to Views, 80% = 2 point Access to Views, 90% = 3 points To qualify, a space shall have view glazing equal to or greater than 7% of the floor area. View glazing shall be clear and only include window area above 2.5 ft. and below 7.5 ft. from the floor. The total width of view glazing shall be greater than 1% of the floor area.</p>	<p><b>All Kawneer Framing Systems</b> From our core products like Framing Systems and Windows to specialty products like Overhead Glazing and InFrame™ Interior Framing, Kawneer offers strong and versatile solutions that maximize daylight autonomy and sunlight exposure.</p>
<p><b>EQ 14.0 Acoustical Performance</b> Provide classrooms with adequate acoustical environments.</p>	<p>1 – 4</p>	<p>Operable partitions shall have same STC minimum STC rating of the wall they replace. Doors shall be selected to achieve the minimum requirements specified in Table 10. Interior glazing up to 10 ft2 immediately adjacent to a door shall have the same minimum STC requirement as the door. In all other cases, interior glazing shall have the same minimum STC requirement as the wall.</p>	<p><b>Acoustics and STC Rating</b> For every setting within a project, Kawneer offers solutions with acoustical performance and STC ratings. Contact your Kawneer Sales Rep to further explore acoustic options.</p>

ENERGY	Potential Points	Requirements	Kawneer Product + Service
<p><b>EE 1.0 Energy Performance</b> Reduce environmental impacts and operational costs associated with consuming energy.</p>	5	<p>School design for new construction shall comply with ASHRAE Standard 90.1-2010 or the IECC 2012 AND obtain an ENERGY STAR design score for your project.</p> <p>OR</p> <p>A new building on an existing campus shall comply with ASHRAE Standard 90.1-2010 or the IECC 2012.</p> <p>OR</p> <p>For renovation/modernization projects, the entire scope of work shall comply with the applicable provisions of ASHRAE Standard 90.1-2010 or the IECC 2012. The priorities and energy goals for the project/each phase of the project shall be as identified in the High Performance Transition Plan (II 4.1).</p>	<p><b>High-Performance Thermal Products</b> High-performance thermal systems provide optimum performance leading to greater energy conservation. Kawneer systems accommodate double pane and triple pane insulating glass to maximize thermal performance and reduce acoustic transmission.</p>
<p><b>EE 1.1 Superior Energy Performance</b> Reduce environmental impacts and operational costs associated with consuming energy.</p>	1 – 40	<p>Utilize the Energy EE 1.0 for quantifying reductions in total energy use. Points are awarded according the percentage saved over a baseline building.</p> <p>4 points 10% minimum reduction 8 points 20% minimum reduction 12 points 30% minimum reduction 16 points 40% minimum reduction 20 points 50% minimum reduction 24 points 60% minimum reduction 28 points 70% minimum reduction 32 points 80% minimum reduction 36 points 90% minimum reduction 40 points 100% minimum reduction (zero net-energy school)</p>	<p><b>High-Performance Thermal Products</b> High-performance thermal systems provide optimum performance leading to greater energy conservation. Kawneer systems accommodate double pane and triple pane insulating glass to maximize thermal performance and reduce acoustic transmission.</p>
<p><b>EE 2.1 Zero Net Energy (ZNE) Bonus</b> Encourage the school to produce as much energy as it consumes on an annual basis.</p>	1 – 3	<p>Zero Net-Energy Capable. A complete design of a PV system that will provide 100% of the annual electric energy needs and operate an average efficiency of at least 80% of the optimal for your location as determined by the US DOE's PWWatts program. The roof-top PV arrays must cover at least 65% (unless a smaller area is needed to provide full capacity) of the total roof area (the remainder of the PV can be located on parking covers or free-standing mounting structures). Other solutions may be considered on a case by case basis. The complete PV system can be installed with: No structural modification to the roof to accommodate 5 lbs. per sq. ft. additional weight. No additional roof or wall penetrations are needed for electrical wiring. No physical expansion of electrical or mechanical rooms to accommodate the inverter(s) and other electrical system components.</p>	<p><b>Sun Control</b> Kawneer sun control products combined with framing systems can reduce the amount of solar radiation when installed over a glazed opening on the exterior of the building or reflect natural light deeper into occupied spaces when installed over a glazed opening on the interior of the building.</p>

ENERGY	Potential Points	Requirements	Kawneer Product + Service
<p><b>EE 6.1 Natural Ventilation &amp; Energy Conservation Interlocks</b> Provide a bonus for school designs that incorporate natural ventilation and an incentive to install interlocks on doors and windows.</p>	5	<p>School design for new construction shall comply with ASHRAE Standard 90.1-2010 or the IECC 2012 AND obtain an ENERGY STAR design score for your project.</p> <p>OR</p> <p>A new building on an existing campus shall comply with ASHRAE Standard 90.1-2010 or the IECC 2012.</p> <p>OR</p> <p>For renovation/modernization projects, the entire scope of work shall comply with the applicable provisions of ASHRAE Standard 90.1-2010 or the IECC 2012. The priorities and energy goals for the project/each phase of the project shall be as identified in the High Performance Transition Plan (II 4.1).</p>	<p><b>High-Performance Thermal Products</b> High-performance thermal systems provide optimum performance leading to greater energy conservation. Kawneer systems accommodate double pane and triple pane insulating glass to maximize thermal performance and reduce acoustic transmission.</p>
<p><b>EE 1.1 Superior Energy Performance</b> Reduce environmental impacts and operational costs associated with consuming energy.</p>	2	<p>Design schools such that at least 75% of the classrooms are designed to provide comfort conditions with no mechanical cooling according to the comfort conditions defined in ASHRAE Standard 55-2010. Naturally ventilated classrooms (with no mechanical cooling) shall meet the classroom ventilation requirements of ASHRAE Standard 62.1-2010 § 5.1 or demonstrate that engineered natural ventilation systems satisfy the requirements.</p> <p>For hybrid systems that use natural ventilation in combination with mechanical cooling, install interlocks, or an equivalent mechanism, to prevent heating and cooling equipment from operating when exterior windows or doors are open.</p>	<p><b>Thermal, Architectural-Grade Operable Windows</b> Provide controllable natural ventilation with architectural grade windows to increase thermal comfort. Reduce waste on the construction site with pre-assembled and factory glazed operable windows.</p>

MATERIALS AND WASTE MANAGEMENT	Potential Points	Requirements	Kawneer Product + Service
<p><b>MW 2.1 Construction Site Waste Management</b> Divert construction and demolition waste from landfills.</p>	<p>2 – 4</p>	<p>Recycle, reuse, and/or salvage at least 50% (by weight) of non-hazardous construction and demolition waste, not including land clearing and associated debris.</p> <p>OR</p> <p>Recycle, reuse, and/or salvage at least 75% (by weight) of non-hazardous construction and demolition waste, not including land clearing and associated debris.</p> <p>OR</p> <p>Recycle, reuse, and/or salvage at least 90% (by weight) of non-hazardous construction and demolition waste, not including land clearing and associated debris.</p> <p>OR</p> <p>Fulfill the requirements of MW 2.1.3, and develop a comprehensive Waste Recovery Plan such that a minimum of 50% of the building waste (by weight) is reused or salvaged by donating or selling to a reuse organization within 1000 miles.</p>	<p><b>Aluminum is 100% Recyclable</b> Post-fabricated aluminum excess can be recycled into the metal waste stream.</p>
<p><b>MW 3.1 Single Attribute Recycled Content</b> Specify and install recycled content products in order to reduce the environmental impacts associated with extraction and processing of virgin materials.</p>	<p>1 – 2</p>	<p>Performance Approach: The weighted average recycled-content value by cost is at least 10% (post-consumer + ½ pre-consumer), or at least 20% for 2 points.</p>	<p><b>Use of Recycled Aluminum – All Kawneer Products</b> Upon request, aluminum extrusions can contain pre- and post-consumer recycled content. We provide Recycled Content Pre-Submittal SAMPLE documentation that outlines recycled content information.</p>
<p><b>MW 7.1 Multi-Attribute Material Selection</b> Specify materials that contain a third-party Environmental Product Declaration.</p>	<p>1 – 3</p>	<p>Select 10 products that contain a third-party certified Environmental Product Declaration conforming to the requirements of ISO 14025 on Type III environmental declarations and/or ISO 21930 on environmental declarations of building products.</p>	<p><b>Kawneer Product-Specific EPDs</b> Kawneer worked with leading third-party verifiers to create product-specific EPDs for the product entire portfolio.</p>

MATERIALS AND WASTE MANAGEMENT	Potential Points	Requirements	Kawneer Product + Service
<p><b>MW 10.1 Health Product Related Information Reporting for Building Products</b></p> <p>The Health Product Declaration Open Standard v1.0 is a streamlined methodology for reporting language to enable transparent disclosure of the content in a material and the related health information.</p>	<p>1 – 3</p>	<p>Performance Approach: Provide a published Health Product Declaration (HPD) with a disclosure level of 1000ppm for at least 20 permanently installed products from at least five different manufacturers in accordance with the Health Product Declaration Standard Version 1.0. Products with an HPD with full disclosure of known hazards shall count as two products for these calculations.</p> <p>OR</p> <p>Prescriptive Approach: Specify that a published Health Product Declaration with a disclosure level of 1000ppm must be provided for 50% (by cost) of one of the following major interior finish or structural materials (1/2 point each). Products with an HPD with full disclosure of known hazards may be selected and counted as double value. Adhesives &amp; Sealants, Paints &amp; Coatings, Flooring Systems, Composite Wood and Agrifiber Products, Furniture &amp; Furnishings, Ceiling &amp; Wall Systems</p>	<p><b>Kawneer Product Transparency</b></p> <p>Kawneer has a variety of programs that report chemical inventory information, including: Cradle-to-Cradle, DECLARE and Kawneer’s Manufacturers Inventory known as the Material Transparency Summary; many of which are LBC Red List free. Please visit Kawneer’s Product Transparency page on our website.</p>