

USGBC Ergonomics Requirements for Innovation and Design (1 Point)

Steps	Requirements	Guidance	Checked
1	Identify activities and building functions for which ergonomic enhancement (i.e., ergonomic strategies which exceed standard industry practice) is both possible and desirable through education and equipment, and wherever possible building users should be consulted on their preferences.	Consult one or more of the existing ergonomics standards and guidelines when identifying ergonomic enhancement opportunities, such as the ANSI/HFES 100-2007 standard for computer workstations and the Canadian CSA Z412-00.	<input type="checkbox"/>
2	Define a set of performance goals and expectations for the ergonomics strategy that address productivity, comfort, and health. Develop a plan and design process to meet them. Provide procedures to track and report the results of the ergonomics strategy, ensure that the performance goals have been met, and identify areas of potential improvement.	<ul style="list-style-type: none"> • Make the performance goals and ergonomics plan available to building users. • Provide an informal and ongoing feedback system to collect anonymous responses and respond to them. • Maintain ongoing building user access to appropriate ergonomics machines, equipment, tools and work-aids (METWA's), furnishings, and accessories and education. • Conduct a periodic user satisfaction survey from a representative sample of at least 30% of the total building occupants. (see example survey) 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
3	Provide machines, equipment, tools, work-aids (METWA's), furnishings, and accessories that reduce the risk of work-related musculoskeletal disorders and are acceptable to a wide range of building users.	<p>Consult Summary Checklist of the LEED guidelines on meeting step 3 of the requirements for:</p> <ul style="list-style-type: none"> • Display - adjustability • Display - reduced glare • Peripherals • Surface • Chair 	<input type="checkbox"/>
4	Provide ergonomics education to building users. Provide at least two opportunities for building users to understand and take advantage of ergonomic features in their environment. At least one of these opportunities must be interactive, and at least one must include an explanation of the provided METWA's and furnishings, preferably by the manufacturer. Post-education evaluations must be conducted.	<ul style="list-style-type: none"> • Participatory classroom sessions conducted by an ergonomics professional • Access to literature on products and basic ergonomic knowledge relevant to the building user's tasks • Repetitive or regularly-scheduled workstation evaluations • Interactive internet-based products such as assessment and training tools • Hands-on experiences, such as access to the showroom of an ergonomic furnishing supplier. 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

USGBC Ergonomics Requirements for Innovation and Design Point:

Step 3 Summary Checklist For users that spend 50% or more of their time at computer workstations

Item	Guidance	Checked
Display - adjustability	The display should be centered directly in front of the body.	<input type="checkbox"/>
	The top of the display screen should be placed no higher than the eyes.	<input type="checkbox"/>
	The display screen should be placed 18 to 36 inches from the eyes.	<input type="checkbox"/>
	The user should have control over the tilt angle of the screen and its position on the work surface.	<input type="checkbox"/>
	The user must have the capability to position the display low enough to accommodate bifocals or progressive addition lenses (PALs), which may be significantly lower than eye height.	<input type="checkbox"/>
Display - reduced glare	The use of technologies such as flat-screen or antiglare devices is encouraged.	<input type="checkbox"/>
	The display should be positioned such that light sources will not create glare.	<input type="checkbox"/>
Peripherals	Paper documents should be placed on a document holder immediately to the left, right or below the display.	<input type="checkbox"/>
	The keyboard should be positioned so the home row (row with F and J keys) is no higher than the elbow.	<input type="checkbox"/>
	The user must have the ability to adjust the keyboard angle and set the slope of the keys flat, if so desired.	<input type="checkbox"/>
	There must be enough room for the mouse or pointing device to be used adjacent to the keyboard (left, right or in front). If a separate adjustable keyboard support is used it must have space specifically designed for using a mouse or pointing device; preferably the mouse pad should have the capability to be positioned flat if the keyboard is tilted. The arm used to control the pointing device supported, either on the work surface or armrest of the chair.	<input type="checkbox"/>
	Ergonomically correct keyboards, mouse, phones and other supporting peripherals should be purchased when possible.	<input type="checkbox"/>
Surface	There must be enough work surface to properly support the computer and peripherals. Provide a surface with minimum dimensions of 28 inches wide by 24 inches deep	<input type="checkbox"/>
	Enough clear space should be allowed under the surface to enable the legs and feet to be positioned in multiple postures	<input type="checkbox"/>
	Furnishings in multi-occupant workstations that allow the user to control surface and support heights, with surface height initially at proper seated elbow height. If workstations are single-occupant it is acceptable for facilities management to adjust the heights of surfaces.	<input type="checkbox"/>
Chair	Provide a range of chair types or chair features that optimize employee fit and task requirements.	<input type="checkbox"/>
	Chairs must have a wide range of adjustability.	<input type="checkbox"/>

USGBC Ergonomics Requirements for Innovation and Design Point:

Submissions Verification Checklist - For users that spend 50% or more of their time at computer workstations

Required narrative	Checked
1. The steps taken to identify ergonomic enhancement opportunities.	<input type="checkbox"/>
2. Brief verification that it is possible to exceed standard industry practices to achieve an ergonomically superior workplace.	<input type="checkbox"/>
3. The performance goals and expectations, and the steps taken to meet them.	<input type="checkbox"/>
4. The procedures put into place to track and report the results of the ergonomics strategy. This includes describing how each of the required actions will be take place and the collaboration with the management team that will carry out these procedures.	<input type="checkbox"/>
5. How purchased METWA's and furnishings will benefit the building users as they conduct routine tasks and activities, the selection criteria used for choosing the products (i.e., how the safety and health of the building user was considered), and how the products will accommodate a wide range of size needs. They note that size needs can typically be met by buying products that come in 'families' (small, medium, large) or are highly adjustable.	<input type="checkbox"/>
<p>6. Two ergonomics education opportunities must be made available to building users, including their objectives and content. The opportunities should consider including coverage of the following topics:</p> <ul style="list-style-type: none"> a. The possible causes of musculoskeletal discomfort. b. Changing the workstation or work habits if discomfort is experienced during or after work. c. Benefits of taking work breaks either through altering tasks performed or leaving their workstation. d. Benefits of resting the eyes every 20 minutes. e. How to properly position and adjust display height and angle, keyboard height and angle, mouse location, use of task light and chair adjustments. f. Acceptable postures for the head, neck, shoulders, upper arms, wrists, back, legs and feet. g. Benefits of regularly changing posture either through adjusting the furnishings or altering the tasks performed. h. How to manage glare on the computer screen. i. A point of contact if discomfort becomes frequent (multiple times per week) 	<input type="checkbox"/>
7. A list of purchased METWA's and furnishings that have been selected to minimize the risk of work-related musculoskeletal disorders. (The submission can include cut sheets and manufacturer information for each METWA).	<input type="checkbox"/>
<p>8. Have the described METWA's, furnishings and other ergonomic solutions been shown to reduce the following:</p> <ul style="list-style-type: none"> o Awkward, non-neutral work postures (e.g. neck, shoulders, hands-wrist, low back, elbows, lower extremities). o Duration of sustained/static work postures (e.g. leaning forward, elevated arms, continuous grip). o Grip and pinch forces associated with required tasks (e.g. correct tools). o Repetition and duration of tasks, especially those with non-neutral postures and/or higher forces. o Contact stress - resting soft tissues of the body on hard or sharp surfaces. 	<input type="checkbox"/>