

IDc1.5 – Pilot Credit 44: Ergonomics Strategy

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Comprehensive Ergonomics Strategy

General note: This innovation credit outline follows the requirements of the Pilot Credit 44: Ergonomics Strategy

Intent: To promote healthy, comfortable, and productive work by designing the workplace to accommodate its users

Environmental Benefits: Maintaining and optimizing human health is a central goal of green building. The activities in the offices were identified to have benefit from the application of ergonomics. Building occupants spend a great amount of time using work-related furniture and equipment, and proper workplace ergonomics helps prevent workplace injury and chronic problems.

Proposed requirements and metrics: Develop and implement a comprehensive ergonomics strategy that will have a positive impact on human health and comfort when performing daily activity for at least 75% of Full Time Equivalent building users. This strategy must include the four components listed below:

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. The building users should be consulted and their needs analyzed prior to designing the interior of the building. The occupants should review the potential design options to get their feedback.
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. These should include the following actions:
 - a. Make the performance goals and ergonomics plan available to building users
 - b. Provide a feedback system to collect anonymous responses and respond to them. This should be informal and ongoing.
 - c. Maintain ongoing building user access to appropriate ergonomics METWA's, furnishings, and accessories and education.
 - d. Conduct a survey of user satisfaction. This should be more formal than the feedback system, and occur periodically. The survey must be collected from a representative sample of building occupants making up at least 30% of the total occupants.
3. Provide machine, 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. In a setting where building users spend 50% or more of their time at computer workstations, the following four areas must be addressed: display, computer peripherals (keyboard/mouse), work surface, and chair.

4. 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 with the campus ergonomist, 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.

How requirements are met:

1. Preventive workstation evaluations for all faculty and staff who use a computer four hours a day or more are (1) required by the campus Health and Safety Guidelines for Computer Users, and (2) the responsibility of each department. The BAM/PFA building has a Department Safety Coordinator and at least one staff or faculty member who serves as a Department Computer Workstation Evaluator (DCWE) after being trained by the campus-wide ergonomics program. In addition, the ergonomics staff have consulted with the architects for the BAM/PFA project to identify the activities in the building where ergonomic enhancement would be possible and desirable. These activities are primarily computer use in offices and at customer service counters.
2. A plan has been developed to meet the ergonomics goals, track results, and identify areas of potential improvement, including:
 - a. Plan and goals: The new building will be furnished with computer furniture and equipment that meet or exceed the ANSI/HFES 100-2007 standard. The building's goals and plans are part of our campus-wide ergonomics program and are widely available through the program's website: <http://www.uhs.berkeley.edu/facstaff/ergonomics/ergoatwork.shtml>
 - b. Ongoing feedback: workstation evaluations are performed by the Department Computer Workstation Evaluators (DCWE) for all building occupants using a computer 50% time or more. DCWE(s) will perform evaluations upon building occupancy, and as needed thereafter for new users, survey respondents scoring 11 or less, and by request on an ongoing basis.
 - c. Ongoing access to equipment and education is also available through our campus-wide program, please see #4 below.
 - d. User satisfaction: the department will conduct a computer user ergonomics survey (see attached) of relevant users with the following goals and follow-up:
 - i. Target at least a 30% response rate of relevant building users.
 - ii. Target 80% of the survey respondents to score 12 or higher on the satisfaction survey (out of 15 yes/no questions).
 - iii. For non-satisfactory results, the DCWE(s) will review the workstations and make recommendations.
 - iv. The department will make any necessary changes.
3. UC has negotiated Strategic Sourcing Agreements that enable departments to purchase computer furniture and equipment that meet or exceed the ANSI/HFES 100-2007 standard. We maintain a pre-approved product list available at <http://www.uhs.berkeley.edu/facstaff/ergonomics/matchingfunds/productlist.shtml> , and also use the attached checklists for Interior Designers, DCWEs, systems furniture, task chairs to ensure the furniture and equipment outside the pre-approved list meets the ANSI/HFES 100-2007 standard for computer users. These products offer a wide range of adjustability and reduce the risk of work-related musculoskeletal disorders through adjustability and ample work surface to support the computer

equipment and peripherals. This list covers computer peripherals including keyboards, mice, and keyboard trays.

4. Ergonomics education and workstation evaluations will be provided to the building users using the following approaches:

a. Interactive Computer Health Matters trainings can be taken either in person (taught by campus ergonomists) or online.

b. Ergonomics@Work's website provides ergonomics resources and information for computer users including the Campus Computer Health and Safety guidelines, and the pre-approved product list of computer workstation furniture and equipment.

<http://www.uhs.berkeley.edu/facstaff/Ergonomics/computer/ergguide.shtml>

c. Appointments to learn about or select adjustable computer workstation furniture and chairs can be scheduled at the Campus ergonomics showroom by calling 1-877-722-9090.

d. Stretch Break software is downloadable through blu.berkeley.edu

e. For more information about training and support, please see:

<http://www.uhs.berkeley.edu/facstaff/Ergonomics/computer/ergresour.shtml>

Summary of performance: The University's campus-wide ergonomics program has participated in the selection of furniture and equipment for the BAM/PFA project and offers excellent support for all faculty, staff, and students to enhance the ergonomics of their workplaces. The offices will have a Herman Miller computer workstation with an adjustable keyboard tray, as well as a fully adjustable ergonomic chair (Herman Miller Sayl chair). Our program exceeds the requirements of the established Pilot Credit 44 : Ergonomics strategy.

Supporting documents:

1. Overview of office furniture and equipment provided at BAM PFA

2. Overview of customer service counter provided at BAM PFA

3. Checklist for reception counters: covers requirements for work surfaces:

[http://uhs.berkeley.edu/facstaff/ergonomics/pdf/customerservicecounters%200213%20final%20\(3\).pdf](http://uhs.berkeley.edu/facstaff/ergonomics/pdf/customerservicecounters%200213%20final%20(3).pdf)

4. Designers checklist: covers requirements for work surfaces for seated or standing users

[http://uhs.berkeley.edu/facstaff/ergonomics/pdf/designersstep3checklist%20rev%200912%20\(3\).pdf](http://uhs.berkeley.edu/facstaff/ergonomics/pdf/designersstep3checklist%20rev%200912%20(3).pdf)

5. Checklist for task chair selection:

<http://uhs.berkeley.edu/facstaff/ergonomics/pdf/TaskChairChecklist809ml.pdf>

6. Department evaluators checklist: used in individual evaluations

http://uhs.berkeley.edu/facstaff/ergonomics/pdf/departmentevaluators_checklist.pdf

7. Checklist for display screen selection

http://uhs.berkeley.edu/facstaff/ergonomics/pdf/displayscreen_checklist.pdf

8. Computer workstation design guidelines (primarily for faculty and staff)

<http://www.uhs.berkeley.edu/facstaff/Ergonomics/computer/ergguide.shtml>

9. Survey form

<http://uhs.berkeley.edu/facstaff/ergonomics/pdf/Usersurvey%20ergonomics.pdf>