
Computer Workstation Ergonomic Assessment

1.0 Objective & Intent

The objective of this Standard Operating Procedure (SOP) is to establish a consistent, repeatable process for conducting ergonomic assessments of computer workstations within the cabinet and millwork manufacturing facility. The intent is to identify and mitigate risk factors associated with prolonged computer use, including repetitive strain injuries, awkward postures, and static loading, thereby reducing the incidence of work-related musculoskeletal disorders (WMSDs) among administrative, design, and management personnel. This procedure aligns with WorkSafeBC's Ergonomics (MSI) Requirements under the Occupational Health and Safety Regulation (OHSR) Part 4.47 and ensures proactive compliance with regulatory standards.

This SOP mitigates the specific risk of cumulative trauma disorders (CTDs) such as carpal tunnel syndrome, tendonitis, and lower back pain, which are common in office environments. By systematically evaluating and adjusting workstation components—including chair, desk, monitor, keyboard, and mouse—this procedure aims to create a neutral working posture that minimizes physical stress on the body. The ultimate goal is to foster a culture of ergonomic awareness, reduce lost-time injuries, and enhance overall employee well-being and productivity.

2.0 Operational Scope

This procedure applies to all computer workstations located within the administrative offices, design studios, and any other areas where employees perform computer-based tasks for more than two consecutive hours per day. It encompasses all fixed and mobile workstations used by full-time, part-time, temporary, and contract personnel. The scope includes the assessment of all primary workstation components: adjustable chair, work surface (desk), monitor(s), keyboard, mouse, document holder, footrest, and any other peripheral equipment.

This SOP is applicable to the following personnel: all employees who use a computer as part of their regular duties, including but not limited to administrative assistants, estimators, designers, project managers, and accounting staff. It also applies to the Joint Health and Safety Committee (JHSC) members, supervisors, and managers who are responsible for ensuring ergonomic compliance. The procedure is to be conducted initially upon new employee onboarding, following any report of discomfort or injury, after any significant workstation change, and on an annual basis as part of the facility's proactive ergonomics program.

3.0 Hazard Identification & Mandatory PPE

- Awkward Postures: Prolonged reaching for keyboard/mouse, neck flexion to view monitor, wrist extension/flexion while typing, and slouching in chair.
- Repetitive Motions: Continuous typing, mousing, and clicking without adequate rest breaks.
- Static Loading: Maintaining fixed positions for extended periods, leading to muscle fatigue and reduced blood flow.
- Contact Stress: Pressure from hard desk edges on forearms or wrists, and from chair armrests on elbows.
- Glare and Lighting: Screen glare from overhead lights or windows causing eye strain and compensatory head postures.
- Thermal Discomfort: Drafts or heat sources affecting circulation and comfort.
- CSA-Approved Safety Glasses (if prescribed for computer use, or if required by adjacent shop floor areas)
- Comfortable, closed-toe footwear (recommended to support proper posture and circulation)
- No loose clothing or jewelry that could catch on chair mechanisms or desk components

4.0 Required Safety Equipment & Tools

- Ergonomic Assessment Checklist (digital or paper form, approved by JHSC)
- Adjustable height chair with lumbar support, armrests, and five-point base
- Adjustable height desk or work surface (sit-stand capability preferred)
- Monitor arm or adjustable monitor stand
- Ergonomic keyboard (split or curved design recommended)
- Ergonomic mouse (vertical or contoured design recommended)
- Document holder (in-line with monitor height)
- Footrest (if feet do not rest flat on floor after chair adjustment)
- Wrist rest (for keyboard and mouse, gel or foam)
- Anti-glare screen filter (if glare is present)
- Tape measure or ruler (for measuring distances and heights)
- Camera or smartphone (for documenting current setup, with employee consent)
- Personal protective equipment (PPE) as identified in Section 3.0

5.0 Step-by-Step Safety Procedure

1. Obtain verbal consent from the employee and explain the purpose of the ergonomic assessment. Review any current discomfort or pain reports and document them on the assessment form.
2. Ensure the workstation is free of clutter and all cables are neatly managed to prevent tripping hazards. Verify that the chair is stable and all adjustment mechanisms (height, tilt, armrests, lumbar support) are functional.
3. Adjust the chair height so that the employee's feet rest flat on the floor or on a footrest, with knees at a 90-degree angle. The seat pan should be adjusted to leave 2-3 finger widths of space between the back of the knee and the front edge of the seat.
4. Set the desk height so that the employee's elbows are at a 90-degree angle when hands are on the keyboard, with forearms parallel to the floor. If using a sit-stand desk, adjust the height for both sitting and standing positions.
5. Position the monitor directly in front of the employee at arm's length distance (approximately 18-24 inches). The top of the screen should be at or slightly below eye level, so the employee looks slightly downward at the center of the screen. Use a monitor arm or stand to achieve this.
6. Place the keyboard and mouse at the same height, directly in front of the employee, with the mouse close to the keyboard. Ensure wrists are straight and not bent up, down, or sideways. Use a wrist rest if needed, but only to support the palm, not the wrist itself.
7. Adjust the chair armrests so that they support the forearms without lifting the shoulders. The armrests should be at the same height as the desk surface when the employee is in a relaxed typing posture.
8. Evaluate lighting and glare. Adjust blinds, reposition the monitor perpendicular to windows, or install an anti-glare filter. Ensure the employee has adequate task lighting without creating shadows on the work surface.
9. Instruct the employee on proper micro-break techniques: every 20-30 minutes, stand up, stretch, and look at a distant object for 20 seconds. Encourage the use of ergonomic stretches for hands, wrists, neck, and back.
10. Document all adjustments made, note any equipment deficiencies, and schedule a follow-up assessment in 2-4 weeks to confirm comfort and effectiveness. Have the employee sign the assessment form and provide a copy for their records.

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