

## Ergonomics in the Design Phase of a Fit-Out

Ergonomics = design of work (systems, strategies, equipment, tools, and environment) to fit the person (worker or maintainer).

Ergonomics may provide for critical decisions early in the design phase of your office fit-out. A Certified Professional Ergonomist is part of a comprehensive design team. An Ergonomist specialises in work and task design to optimise human performance: safety, health, well-being, productivity, inclusivity, and sustainability.

During the **initial project scope** phase, the Ergonomist may be involved in discussing design ideas and contributing to the development of the needs analysis.

**Pre-design:** The Ergonomist may be engaged to conduct job and task analysis to identify the critical performance requirements, from biomechanics, cognitive, and organisational work demands, with an understanding of seasonal work flow. An analysis of the current workforce may be conducted to determine design considerations through the lifespan, among different cultures, gender, and work role. Further consideration should involve design for the evolving workforce: the strategy for the next 20 years!

A model or work performance (either the project or the team office functions) may be mapped out with consideration of relationships among tasks, resources required, contingencies (or pre-conditions), and time to help optimise the design process.

The Ergonomist can provide advice for procurement strategies that will be used for vendor contracts and tendering requirements.

**Design:** An Ergonomist specialises in participative co-design practices with the application of human performance science.

Specifically, the Ergonomist may, through participative practices, address these issues:

- Agile or Activity-Based Work Strategy: design for 5 elements:
  - Solo: focused, thinking space
  - Team: collaboration, planning, and meetings
  - Drive: human movement and standing options
  - Recharge: relax and retreat
  - Converge: meet and greet, dine, or socialise
- Guidance for standing workstation use
- Workstations: desk types, monitors, monitor holders, keyboards, input devices (e.g. mouse types), chair types, document holders, footrests, focal lighting, and other peripherals
- Workstation positioning relative to windows, window treatments, and lighting source
- Noise and work performance
- Lighting and performance: prevent direct and reflective glare, enhance mood for work tasks
- Colour schemes to suit tasks and people

- Biological health needs
- “Green design” with the use of flora
- Work teams and functional interactions required: type, frequency, and needs
- Mobile workforce strategies and connectivity

The ergonomist may be involved with iterative design development with ongoing consultation with the workforce. Industry standards and evidence-based findings relating to ergonomics are referred throughout the process.

For companies aiming to achieve Green Star Ergonomics Credit for Office Interiors, the Certified Professional Ergonomist will provide the review when ergonomics has been considered for furniture and task demands, in addition to health and sustainability.

**Post-Occupancy:** Training is an important part of the suite of ergonomic service delivery. Training can be provided for use of space and equipment and this can be delivered in multiple media to suit the work schedule and learning styles of workers.

An ergonomic, human-centred performance strategy can make the positive difference to productivity, performance, well-being, social interactions, and post-occupancy satisfaction.

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