AS 3590.2—1990

# Australian Standard®

## Screen-based workstations

Part 2: Workstation furniture

This Australian Standard was prepared by Committee SF/38, Screen-based Workstations. It was approved on behalf of the Council of Standards Australia on 27 November 1989 and published on 2 April 1990.

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## Screen-based workstations Part 2: Workstation furniture

First published as AS 3590.2-1990.

PUBLISHED BY STANDARDS AUSTRALIA (STANDARDS ASSOCIATION OF AUSTRALIA) 1 THE CRESCENT, HOMEBUSH, NSW 2140

ISBN 0 7262 6051 7

### PREFACE

This Standard was prepared by the Standards Australia Committee on Screen-based Workstations at the direction of the Safety Standards Board.

The Standard is one of a series of three Standards dealing with screen-based workstations, the other being as follows:

Part 1: Visual display units Part 3: Input devices

Its purpose is to facilitate the development of safe working environments for people performing screen-based tasks. However, there are essential elements in the process of developing safe working environments which are outside the scope of this Standard. The Standard should therefore be implemented in conjunction with other documents such as AS 2713, *Lighting and the visual environment of screen-based tasks*, and Worksafe Australia *Guidance Note for the prevention of occupational overuse syndrome in keyboard employment*. (The latter covers the organization and design of work systems, work places, training, and education.)

In the absence of suitable data on the Australian population, published American data have been used to specify dimensions to accommodate people in the 2.5 percentile female to 97.5 percentile male range.

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### STANDARDS AUSTRALIA

### Australian Standard

### Screen-based workstations

Part 2—Workstation furniture

**1 SCOPE.** This Standard sets out guidelines for the evaluation, design, setting-up, and selection of furniture for desk-top, screen-based workstations in offices. The guidelines are aimed at selection of furniture and equipment that will suit particular screen-based tasks and encourage appropriate posture in screen-based equipment (SBE) operators.

This Standard does not apply to special cases such as schools, where the height of counters, for example, might vary from those given.

The Standard does not include requirements for wheelchair access.

**2 REFERENCED DOCUMENTS.** The following documents are referred to in this Standard:

- AS
- 2281 Flexible cellular polyurethane for seat cushioning and bedding
- 3000 SAA Wiring Rules
- 3100 Approval and test specification— Definitions and general requirements for electrical materials and equipment
- 3260 Approval and test specification— Safety of information technology equipment including electrical business equipment
- 3590 Screen-based workstations
- 3590.1 Part 1: Visual display units
- IEC
- 447 Standard directions of movement for actuators which control the operation of electrical apparatus
- BS
- 5459 Specification for performance requirements and tests for office furniture Part 1: Desks and tables
- Worksafe Australia: Guidance Note for the prevention of occupational overuse syndrome in keyboard employment

**3 DEFINITIONS.** For the purpose of this Standard, the definitions below apply.

**3.1 Workstation** — a facility at which people operate screen-based equipment (SBE). Includes desks and the facilities which accommodate the visual display unit (VDU), input device, documents, and other equipment used in conjunction with screen-based equipment.

**3.2 Work surface** — the part of a workstation upon which equipment is placed and tasks are performed.

**4 BASIS FOR SELECTION OF WORKSTA-TION FURNITURE.** The appropriate design of workstation furniture depends on the functions to be performed at the workstation. Screen-based tasks vary in aspects such as input rates, emphasis on use of documents and screen, need for writing space, and control over work pace.

Selection of the appropriate furniture should be made on the following basis:

- (a) Tasks performed at the workstation
  - (i) data processing;
  - (ii) word processing;
  - (iii) typing;
  - (iv) typesetting;
  - (v) counter operations, e.g. travel reservations, banking; and
  - (vi) programming.
- (b) Duration and intensity of the tasks.
- (c) Equipment to be located at the workstation.
- (d) Environment in which workstation is located.
- (e) Method of operation of equipment.
- (f) Changing nature of function of workstation.
- (g) Whether workstation is single or multiple user.

A major aim in selecting workstation furniture is to promote good working posture. The fundamental principles of good working posture are outlined in the Worksafe Australia Guidance Note for the prevention of occupational overuse syndrome in keyboard employment.

## **5** LOCATION OF EQUIPMENT ON WORK SURFACE.

**5.1 General.** The optimum location of equipment on the work surface is governed by acceptable reach limits and visual limits.

**5.2 Reach limits.** The parameters for reach limits are shown in Figure 1. From these parameters, the reach areas on the work surface or the VDU, keyboard, and reference material are derived.

The recommended limits for the location of highly repetitive tasks such as keyboard data entry, and of infrequent tasks such as handling papers, are shown in Figure 2.

**5.3 Visual limits.** The parameters for visual limits are shown in Figure 3. From these Parameters, the optimum visual areas for the location of the VDU keyboard and reference materials are derived (see Figure 4).