Chapter 5 of Part 2: Display Screen Equipment

Chapter 5 of Part 2 of the regulations transposes Directive 90/270/EEC on the minimum safety and health requirements for work with display screen equipment. In effect, the provisions relate to the safety and health requirements for employees who habitually use display screen equipment (VDUs) as a significant part of their normal work.

Employers are required to evaluate health and safety at workstations with particular reference to eyesight, physical difficulties and mental stress. Appropriate steps must be taken to control any risks identified. The employer needs to carry out an analysis of individual workstations and a competent person with the necessary skills, training and experience must complete this analysis.

The analysis of a workstation must take account of the minimum requirements in Schedule 4 to the General Application Regulations, which are outlined below. The results of the workstation analysis must be shared with the employee and a written record must be kept of it. Any changes to be made to the workstation to meet the requirements of Schedule 4 must be recorded.

Definitions

Display Screen Equipment
The definition of “display screen equipment” (referred to in this Guide as VDUs) covers computer screens and microfiche readers, and applies to both conventional cathode ray tube (CRT) display screens and other display processes, such as liquid crystal displays.

A laptop is not covered by these regulations due to the fact that under these regulations the keyboard shall be tiltable and separate from the screen so as to allow the user to find a comfortable working position which avoids fatigue in the arms or hands. A laptop does not have a separate keyboard and should not be used for long periods of time and a risk assessment must be carried out to assess the usage of the laptop and the set up of the temporary laptop workstation.

Employee
An employee is covered by the regulations:

(a) If the employee has no choice but to the use the VDU to carry out his or her work

(b) If the employee normally uses the VDU for continuous periods of more than one hour

(c) If the VDU is generally used by the employee on a daily basis
Workstation
The definition of “workstation” is all-encompassing and includes VDUs and all the individual pieces of equipment, chair, desk and work environment, which can constitute a workstation. One of the most critical factors affecting the health of employees working at VDUs is the design and layout of the workstation.

Duties of Employer

1. Workstations
Workstations must be laid out and kept tidy so as to avoid any employee slipping, tripping or falling. Workstations must be analysed to evaluate possible risks which may give rise to visual or physical difficulties or to mental stress. A competent person must carry out the analysis of the workstation and this analysis must be documented.

A documented analysis or risk assessment of a workstation should include the following:

- Brief overview of the tasks completed at the workstation
- Evidence that all aspects detailed in Schedule 4 to the regulations were taken into account as part of the analysis
- Details of issues that need to be followed-up
- Details of an action plan to address outstanding issues, which stipulates who is responsible, what actions will be taken and when they will be completed

2. Breaks
Employers must plan work so that daily work at VDUs is interrupted periodically by breaks or changes in activity which reduces the work at the screen. Although the regulations set no frequency for breaks, no single continuous period of work at a screen should, in general, exceed one hour. There is no generally accepted standard covering the frequency and duration of work breaks although there are employer/trade union agreements on these.

The flow of work to a VDU user should be designed to allow natural breaks to occur. Alternatively, a change in the pattern of work by combining VDU and non-VDU work could be introduced. However, rest breaks are essential where continuous VDU work, requiring sustained attention, is likely to result in fatigue. Ideally, the length of the rest should reflect the intensity of the individual job. However, there are four important points:

1. Rest breaks or changes in the pattern of work, where they are necessary, should be taken before fatigue sets in
2. The employee should not sit in the same position for long periods and should make sure to change posture as often as practicable
3. Short, frequent rest breaks are more satisfactory than longer breaks taken occasionally
4. Rest breaks should be taken away from the VDU. Other duties may be assigned during this period, provided they are not too intensive
3. Information on VDU Workstations
In addition to the requirement on employers under Section 9 of the Health, Safety and Welfare at Work Act 2005 to provide information on safety and health matters to employees, an employer is also required to provide information on VDU workstations.

This includes any measures taken to protect eyesight, any risks to eyesight, physical effects or stress, as well as the arrangements for rest breaks in VDU work, or changes in work activity which are planned, as well as the results of any eye or eyesight tests which are conducted.

4. Training
In addition to the requirement on employers under Section 10 of the Health, Safety and Welfare at Work Act 2005 to provide training on safety and health matters to employees, employers are also required to provide training in the use of the workstation before an employee commences work on a VDU and, again, should the organisation of the workstation be altered. Training should include a general appreciation of the computer system to which the VDU may be linked, appropriate induction training, instruction on the general principles of ergonomics, the proper adjustment of furniture, screens, keyboard, lighting etc so as to suit individual employee’s height, reach etc.

Provision of Eye Tests and Corrective Appliances

The employer must inform employees that they are entitled to be provided with an appropriate eye and eyesight test, which would be carried out by a competent person. The employer may do this in a number of ways including the following:

- Consult with the Safety Representative(s) and formulate a memo to be placed on a notice board
- Inform the human resource manager/ specialist and request that he/she inform all relevant employees of the availability of such tests
- Inform the employee while carrying out the analysis of the workstation
- Other appropriate means of effective communication

Eye and Eyesight Tests

Every employee who habitually uses a VDU as a significant part of normal work (using a VDU for one continuous hour or more as part of everyday work) has a right to opt for an eye test and an eyesight test, which must be made available by the employer at his or her own cost, except where there may be a social welfare entitlement.

Schedule for Testing

Employees have the right to an eye and eyesight test before taking up work if it is habitual work with a VDU as well as at regular intervals. In determining the intervals, factors such as the ages of the employees and the intensity of VDU work should be taken into account in deciding the frequency of repeat tests.
Provision of Eye Tests and Corrective Appliances

Where eye tests carried out by the doctor or optometrist reveal that particular lenses are required for VDU work, the costs of minimum requirement frames and lenses must be borne by the employer, taking account of any social welfare entitlement that might apply.

Schedule 4 - Minimum Requirements for All Display Screen Equipment

The regulations set out a minimum list of requirements for all display screen equipment which includes the following:

1. Equipment
   
   (a) Display screen:
      - The characters on the screen shall be well defined and clearly formed
      - The image on the screen shall be stable, with no flickering or other forms of instability
      - The brightness or the contrast (or both) between the characters and the background shall be easily adjustable by the employee
      - The screen shall be free of reflective glare. When replacing monitors preference should be given to those with a non-reflective finish
      - The screen shall be able to swivel and tilt easily and freely to suit the needs of the user
      - It shall be possible to use either a separate base for the screen or an adjustable table

   (b) Keyboard
      - The keyboard shall have a matt surface to avoid reflective glare
      - The arrangement of the keyboard and the characteristics of the keys shall be such as to facilitate the use of the keyboard
      - The symbols on the keys shall be adequately contrasted and legible from the design working position
      - The keyboard shall be tiltable and separate from the screen
      - The space in front of the keyboard shall be sufficient to provide support for the hands and arms of the user

   (c) Work desk or work surface
      - The work desk or work surface shall have a sufficiently large, low reflectance surface and allow a flexible arrangement of the screen, keyboard, documents and related equipment
      - The document holder shall be stable and adjustable and shall be positioned so as to minimise the need for uncomfortable head and eye movement
      - There shall be adequate space for users to find a comfortable position
(d) Work chair

- The work chair shall be stable and allow the user easy freedom of movement and a comfortable position
- The seat shall be adjustable in height
- The seat back shall be adjustable in both height and tilt
- A footrest shall be made available to any user who requires one

2. Environment

(a) Space requirements

- The workstation shall be dimensioned and designed so as to provide sufficient space for the user to change position and vary movements. There should be sufficient space for the employee to feel comfortable and to have room to stretch or reach arms or legs and to turn from side to side. In office environments 4.65 square metres should be the minimum amount of floor space allowed for every person employed in any room, including the area occupied by the office desk and chair but excluding filing cabinets and other office furniture.

(b) Lighting

- Lighting (including room lighting, spot lighting or work lamps) shall ensure satisfactory lighting conditions and an appropriate contrast between the screen and the background environment, taking into account the type of work and the user’s vision requirements
- Possible disturbing glare and reflections on the screen or other equipment shall be prevented by coordinating the layout of workstations within the place of work with the positioning and technical characteristics of the artificial light sources.

(c) Reflections and glare

- Workstations shall be so designed that sources of light, such as windows and other openings, transparent or translucent walls and brightly coloured fixtures or walls cause no direct glare and, as far as possible, no distracting reflections on the screen
- Windows shall be fitted with a suitable system of adjustable covering to attenuate the daylight which falls on the workstation