

Display Screen Equipments Work Instruction Application

This WI applied to all staff that use display screen equipment in the course
Of their duties and covers both conventional PC's & VDT

Application

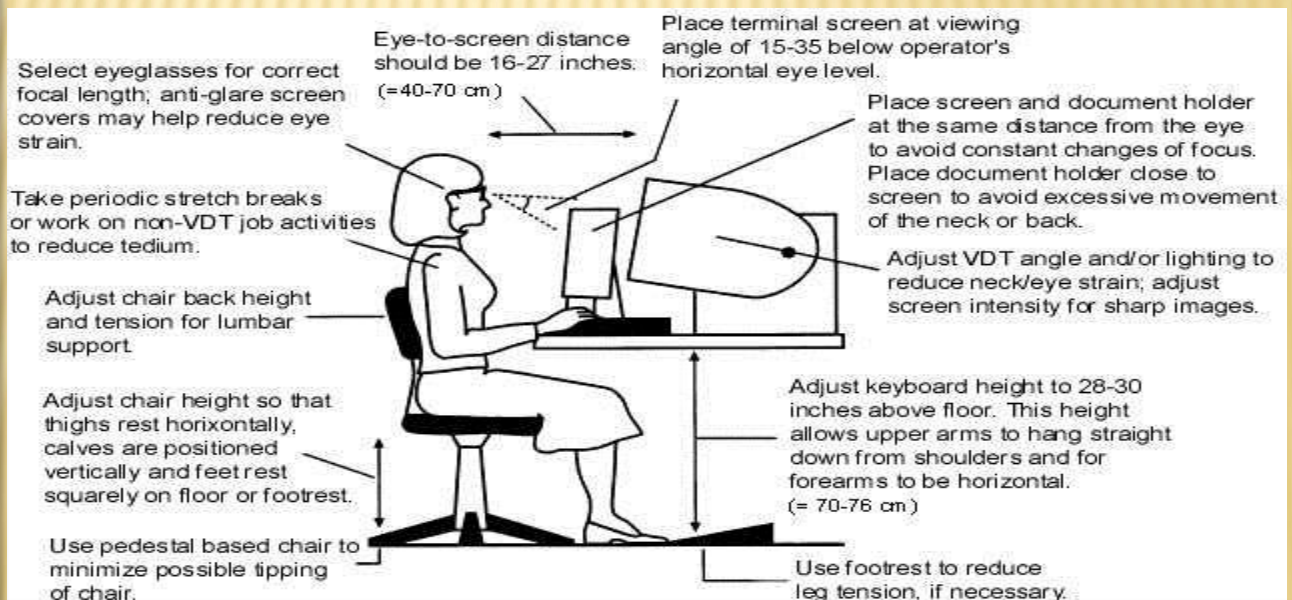
Assessing dangers at workplaces, offices and social buildings often fall into oblivion: Typical workplace equipment we meanwhile find in nearly every office is a PC or rather a Video Display Terminal Workstation (VDT). Typical strain factors come out of the design of the workplace and the behavior of the user. Basic ergonomic principles and rules of behavior can be derived from the drawing opposite; steps might become necessary to be taken to correct situations which may increase the risk of developing repetitive strain injuries (RSIs).

The checklists we normally use focus on posture, the chair, desk and table, the keyboard, accessories (e.g. copy stand), lighting, vision, breaks and training; typing tips to prevent RSIs are available as well.

Instructions For Users

The following are the instructions to be followed by personnel using PC's or VDT:

1. Use pedestal based chair to minimize possible tipping of chair.
2. Adjust chair height so that thighs rest horizontally, calves are positioned vertically and feet rest squarely on floor or footrest.
3. Adjust chair back height and tension for lumbar support.
4. Adjust keyboard height to 28-30 inches above the floor. This height allows upper arms to hang straight down from shoulders and for forearms to be horizontal (70-76 cm).
5. Adjust PC or VDT angle and/or lighting to reduce neck/eye strain, adjust screen intensity for sharp images.
6. Place screen and document holder at the same distance from the eye to avoid constant changes of focus.
7. Place document holder close to screen to avoid excessive movement of the neck or back.
8. Place terminal screen viewing angle of 15-35 below operator's horizontal eye level.
9. Eye-to-screen distance should be 16-27 inches (40-70 cm)
10. Select eyeglasses for correct focal length, anti-glare screen covers may help reduce eye strain.
11. Use footrest to reduce leg tension, if necessary.
12. Take periodic stretch breaks or work on non-VDT job activities to reduce tedium.



Office Noise Safety Work Instruction

Application

This WI applied to all staff that use noisy machines, such as high speed printers, noisy telephones, fax m/c.

Introduction

Noise can be defined very simply as unwanted sound. Office workers are subjected to many noise sources including video display terminals, high-speed printers, telephones, fax machines, and human voices. Noise can produce tension and stress as well as damage to hearing at high noise levels. For noise levels in offices, the most common effects are interference with speech communication, annoyance, and distraction from mental activities. The annoying effect of noise can decrease performance or increase errors in some task situations. If the tasks require a great deal of mental concentration, noise can be detrimental to performance.

Instructions For Users

For many of the annoying sounds in the office environment, the following measures are useful for reducing the level of noise or its effects:

1. Select the quietest equipment if possible. When there is a choice between two or more products, sound levels should be included as a consideration for purchase and use.
2. Provide for proper maintenance of equipment, such as lubrication and tightening of loose parts that can cause noise.
3. Locate loud equipment in areas where its effects are less detrimental. For example, place impact printers away from areas where people must use the phone.
4. Use barrier walls or dividers to isolate noise sources. Use of buffers or acoustically-treated materials can absorb noise that might otherwise travel further. Rubber pads to insulate vibrating equipment can also help to reduce noise.
5. Enclose equipment, such as printers, with acoustical covers or housings.
6. Schedule noisy tasks at times when it will have less of an effect on the other tasks in the office.

Application

This WI applied to all staff that working in the office.

Introduction

Falls are the most common office accident, accounting for the greatest number of disabling injuries. The disabling injury rate of falls among office workers is 2 to 2.5 times higher than the rate for non-office employees. A fall occurs when you lose your balance and footing. One of the most common causes of office falls is tripping over an open desk or file drawer. Bending while seated in an unstable chair and tripping over electrical cords or wires are other common hazards. Office falls are frequently caused by using a chair or stack of boxes in place of a ladder and by slipping on wet floors. Loose carpeting, objects stored in halls or walkways, and inadequate lighting are other hazards that invite accidental falls. Fortunately, all of these fall hazards are preventable. The following checklist can help stop a fall before it happens

Instruction For Users

The following checklist can help stop a fall before it happens:

- Be sure the pathway is clear before you walk.
- Close drawers completely after every use.
- Avoid excessive bending, twisting, and leaning backward while seated.
- Secure electrical cords and wires away from walkways.
- Always use a stepladder for overhead reaching. Chairs should never be used as ladders.
- Clean up spills immediately.
- Pick up objects co-workers may have left on the floor.
- Report loose carpeting or damaged flooring.
- Never carry anything that obscures your vision.
- Wear stable shoes with non-slip soles.

If you find yourself heading for a fall, remember - roll, don't reach. By letting your body crumple and roll, you are more likely to absorb the impact and momentum of a fall without injury. Reaching an arm or leg out to break your fall may result in a broken limb instead.

Office Material Storage Work Instruction

Application

This WI applied to all staff that working in the office.

Introduction

poor visibility, and create a fire hazard. A good housekeeping program will reduce or eliminate hazards associated with improper storage of materials. Examples of improper storage include - disorderly piling, piling materials too high, and obstructing doors, aisles, fire exits and fire-fighting equipment.

Instruction For Users

The following are good storage practices:

1. Boxes, papers, and other materials should not be stored on top of lockers or file cabinets because they can cause landslide problems. Boxes and cartons should all be of uniform size in any pile or stack. Always stack material in such a way that it will not fall over.
2. Store heavy objects on lower shelves.
3. Try to store materials inside cabinets, files, and lockers.
4. Office equipment such as typewriters, index files, lights or calculators should not be placed on the edges of a desk, filing cabinet, or table.
5. Aisles, corners, and passageways must remain unobstructed. There should be no stacking of materials in these areas.
6. Storage areas should be designated and used only for that purpose. Store heavy materials so you do not have to reach across something to retrieve them.
7. Fire equipment, extinguishers, fire door exits, and sprinkler heads should remain unobstructed. Materials should be at least 18 inches minimum away from sprinkler heads.

Office Lighting Work Instruction

Application

This WI applied to all staff that working in the office.

Introduction

Lighting is one of the most important factors affecting personal comfort on the job. The best lighting system is one in which the light level is geared to the task, where brightness ratios are controlled (no intensely bright or dark areas in one field of vision) and where ceilings, walls, and floors are carefully chosen to minimize glare. Glare is defined as a harsh, uncomfortable bright light that shines directly in the eyes. Glare may be either direct, coming from lights or sunshine, or indirect, coming from a reflected surface.

Vision problems are one of the leading sources of complaints among office workers. Poor office lighting can cause eye strain and irritation, fatigue, double vision, watering and reddening of the eyelids, and a decrease in the power of focus and visual acuity. Headaches as well as neck and back pains may occur as a result of workers straining to see small or detailed items. Poor lighting in the workplace is also associated with an increase in accidents. Direct and reflected glare and shadows as well as delayed eye adaptation when moving from bright surroundings into dark ones (or vice versa) may prevent an employee from seeing tripping and other similar hazards.

Instructions For Users

There are a number of measures that can be used to prevent and control poor lighting conditions in the work environment:

1. Regular maintenance of the lighting system should be carried out to clean or replace old bulbs and faulty lamp circuits.
2. A light-colored matte finish on walls, ceilings, and floors to reduce glare is recommended by the Illuminating Engineering Society.
3. Whenever possible, office workers should not face windows, unshielded lamps, or other sources of glare.
4. Adjustable shades should be used if workers face a window.
5. Diffuse light will help reduce shadows. Indirect lighting and task lighting are recommended, especially when work spaces are separated by dividers.
6. Task lamps are very effective in supplementing general office lighting for those who require or prefer additional lighting. Some task lamps permit several light levels.

Office Fire Prevention Work Instruction

Application

This WI applied to all staff that working in the office.

Introduction

The best time to think about fire safety is before a fire starts. Learn the location of fire escape routes and how to activate the fire alarm. Participate in practice fire drills on a regular basis. Become familiar with stairway exits - elevators may not function during a fire, or may expose passengers to heat, gas and smoke.

Instructions For Users

There are a number of measures that can be used to prevent office fire:

1. Heat-producing equipment - copiers, work processors, coffee makers and hot plates - are often overlooked as a potential fire hazard. Keep them away from anything that might burn.
2. Electrical appliances can be fire hazards. Be sure to turn off all appliances at the end of the day. Use only grounded appliances plugged into grounded outlets (three prong plug).
3. If electrical equipment malfunctions or gives off a strange odor, disconnect it and call the appropriate maintenance personnel. Promptly disconnect and replace cracked, frayed, or broken electrical cords.
4. Keep extension cords clear of doorways and other areas where they can be stepped on or chafed and never plug one extension cord into another.
5. Do not allow combustible material (boxes, paper, etc.) to build up in inappropriate storage locations (near sources of ignition).

Through a program of scheduled inspections, unsafe conditions can be recognized and corrected before they lead to serious injuries. Take a few moments each day to walk through your work area. Look for items previously pointed out, such as objects protruding into walkways, file cabinets that are weighted toward the top or frayed electrical cords. Advise personnel in the area of the hazards and set about correcting them.

Application

This WI applied to all staff that working in the office.

Introduction

One result of the recent trend toward open office environments is that smoke from office fires is not contained or isolated as effectively as in less open designs. Open office designs allows smoke to spread quickly and the incorporation of many synthetic and other combustible material in office fixtures (such as furniture, rugs, drapes, plastic wastebaskets, and vinyl covered walls) often makes "smoky" fires. In addition to being smoky, many synthetic materials can emit toxic materials during a fire. For example, cyanide can be emitted from urethane which is commonly used in upholstery stuffing. Most burning materials can emit carbon monoxide. Inhalation of these toxic materials can severely hamper an office worker's chances of getting out of a fire in time. This makes it imperative for office workers to recognize the signal to evacuate their work area and know how to exit in an expedient manner.

All employees must understand what actions they are to take in the work area and assemble in a safe zone. All new employees should discuss how they should respond to emergencies with their supervisors shortly after starting work and whenever their responsibilities under the plan change

Instructions For Users

General guidance for fires and related emergencies includes:

If you discover a fire or see/smell smoke, immediately follow these procedures:

- a. Notify the local Fire Department
- b. Notify Security or Building Security Force
- c. Activate the building alarm (fire pull station). If not available or operational, verbally notify people in the building.
- d. Isolate the area by closing windows and doors and evacuate the building, if you can do so safely.
- e. Shut down equipment in the immediate area, if possible.
- f. If possible and if you have received appropriate training, use a portable fire extinguisher to:
 - assist oneself to evacuate;
 - assist another to evacuate; and
 - control a small fire.
- g. Do not collect personal or official items; leave the area of the fire immediately and walk, do not run to the exit and designated gathering area.
- h. You should provide the fire/police teams with the details of the problem upon their arrival. Special hazard information you might know is essential for the safety of the emergency responders. You should not re-enter the building until directed to do so. Follow any special procedures established for your unit.
- i. If the fire alarms are ringing in your building, you must evacuate the building and stay out until notified to return. Move to your designated meeting location or upwind from the building staying clear of streets, driveways, sidewalks, and other access ways to the building. If you are a supervisor, try to account for your employees, keep them together and report any missing persons to the emergency personnel at the scene.

If an individual is overexposed to smoke or chemical vapors, remove the person to an uncontaminated area and treat for shock. Do not enter the area if you suspect that a life threatening condition still exists (such as heavy smoke or toxic gases). If CPR certified, follow standard CPR protocols. Get medical attention promptly.

If your or another person's clothing catches fire, extinguish the burning clothing by using the drop-and-roll technique, wrap victim in a fire blanket or douse victim with cold water (use an emergency shower if it is immediately available). Carefully remove contaminated clothing; however, avoid further damage to the burned area. Cover injured person to prevent shock. Get medical attention promptly.

Safe Lifting & Handling Work Instruction

Application

This WI applied to all staff that working in the office.

Introduction

Although a typical office job may not involve lifting large or especially heavy objects, it's important to follow the principles of safe lifting. Small, light loads (i.e., stacks of files, boxes of computer paper, books) can wreak havoc on your back, neck, and shoulders if you use your body incorrectly when you lift them. Backs are especially vulnerable; most back injuries result from improper lifting. Before you pick up a carton or load, ask yourself these questions:

- Is this too heavy for me to lift and carry alone?
- How high do I have to lift it?
- How far do I have to carry it?
- Am I trying to impress anyone by lifting this?
- If you feel that the lift is beyond your ability, contact your supervisor or ask another employee to assist you.

Instructions For Users

Safe Lifting Steps

- Take a balanced stance, feet placed shoulder-width apart. When lifting something from the floor, squat close to the load.
- Keep your back in its neutral or straight position. Tuck in you chin so your head and neck continue the straight back line.
- Grip the object with your whole hand, rather than only with your fingers. Draw the object close to you, holding your elbows close to your body to keep the load and your body weight centered.
- Lift by straightening your legs. Let your leg muscles, not your back muscles, do the work. Tighten your stomach muscles to help support your back. Maintain your neutral back position as you lift.
- Never twist when lifting. When you must turn with a load, turn your whole body, feet first.
- Never carry a load that blocks your vision.
- To set something down, use the same body mechanics designed for lifting.
- Lifting from A Seated Position
- Bending from a seated position and coming back up places tremendous strain on your back. Also, your chair could be unstable and slip out from under you. Instead, stand and move your chair out of the way. Squat and stand whenever you have to retrieve something from the floor.
- Ergonomic Solutions to Backbreaking Tasks
- If you are doing a lot of twisting while lifting, try to rearrange the space to avoid this. People who have to twist under a load are more likely to suffer back injury.
- Rotate through tasks so that periods of standing alternate with moving or sitting. Ask for stools or footrests for stationary jobs.
- Store materials at knee level whenever possible instead of on the floor. Make shelves shallower (12-18") so one does not have to reach forward to lift the object. Break up loads so each weighs less.
- If your must carry a heavy object some distance, consider storing it closer, request a table to rest it on, or try to use a hand truck or cart to transport it.

Struck by or Striking Objects Work Instruction

Application

This WI applied to all staff that working in the office.

Introduction

Striking against objects is another cause of office injuries. Incidents of this type include:

- Bumping into doors, desks, file cabinets, and open drawers.
- Bumping into other people while walking.
- Striking open file drawers while bending down or straightening up.
- Striking against sharp objects such as office machines, spindle files, staples, and pins.

Instructions For Users

- Pay attention to where you are walking at all times,
- properly store materials in your work area
- and never carry objects that prevent you from seeing ahead of you.

Objects striking employees occur as a result of:

- Office supplies sliding from shelves or cabinet tops.
- Overbalanced file cabinets in which two or more drawers were opened at the same time or in which the file drawer was pulled out too far.
- Machines, such as typewriters, that were dropped on feet.
- Doors that were opened suddenly from the other side.

Proper material storage and use of storage devices can avoid these accidents.

Please refer to Office Material Storage Work Instruction – WI-004

Indoor Air Quality & Ventilation Work Instruction

Application

This WI applied to all staff that working in the office.

Introduction

An inadequately ventilated office environment or a poorly designed ventilation system can lead to the build up of a variety of indoor air pollutants. Air pollutants can originate within the building or be drawn in from outdoors. Examples of sources that originate outside a building include: (1) pollen, dust and fungal spores; (2) general vehicle exhaust; (3) odors from dumpsters; and (4) re-entrained exhaust from the building itself or from neighboring buildings. Examples of sources that originate from within the building include: (1) building components and furnishings; (2) smoking; (3) maintenance or remodeling activities (painting, etc.); (4) housekeeping activities; (5) unsanitary conditions (standing water from clogged drains or dry traps) and water damage; and (6) emissions from office equipment or special use areas (print shops, laboratories, or food preparation areas).

Instructions For Users

Controls to Prevent Indoor Air Pollution

The following recommendations and guidelines are useful in preventing indoor air quality problems:

1. High Ventilation and Air Conditioning systems (HVAC) should receive periodic cleaning and filters should be changed on a regular basis on all ventilation systems.
2. The ventilation system should introduce an adequate supply of fresh outside air into the office and capture and vent point air pollutant sources to the outside.
3. Office machinery should be operated in well-ventilated areas. Most office machinery does not require local exhaust ventilation in areas that are already provided with 7-10 air changes per hour. Photocopiers should be placed away from workers' desks. Workers should vary work tasks to avoid using machines excessively.
4. Office equipment should be cleaned/maintained according to the manufacturer's recommendations. Properly maintained equipment will not generate unhealthy levels of pollutants.
5. Special attention should be given to special operations that may generate air contaminants (such as painting, pesticide spraying, and heavy cleaning). Provisions for adequate ventilation must be made during these operations or other procedures, such as performing work off-hours or removing employees from the immediate area, utilized.

Office Electrical Safety Work Instruction

Application

This WI applied to all staff that working in the office.

Introduction

Electricity is essential to the operations of a modern automated office as a source of power. Electrical equipment used in an office is potentially hazardous and can cause serious shock and burn injuries if improperly used or maintained.

Electricity travels through electrical conductors which may be in the form of wires or parts of the human body. Most metals and moist skin offer very little resistance to the flow of electrical current and can easily conduct electricity. Other substances such as dry wood, porcelain, or pottery offer a high resistance and can be used to prevent the flow of electrical current. If a part of the body comes in contact with the electrical circuit, a shock will occur. The electrical current will enter the body at one point and leave at another. The passage of electricity through the body can cause great pain, burns, destruction of tissue, nerves, and muscles and even death. Factors influencing the effects of electrical shock include the type of current, voltage, resistance, amperage, pathway through body, and the duration of contact. The longer the current flows through the body, the more serious the injury. Injuries are less severe when the current does not pass through or near nerve centers and vital organs. Electrical accidents usually occur as a result of faulty or defective equipment, unsafe installation, or misuse of equipment on the part of office workers.

Instructions For Users

Ungrounded Equipment

Grounding is a method of protecting employees from electric shock. By grounding an electrical system, a low-resistance path to earth through a ground connection is intentionally created. When properly done, this path offers sufficiently low resistance and has sufficient current-carrying capacity to prevent the build-up of hazardous voltages. Most fixed equipment such as large, stationary machines must be grounded. Cord and plug connected equipment must be grounded if it is located in hazardous or wet locations, if operated at more than 150 volts to ground, or if it is of a certain type of equipment (such as refrigerators and air conditioners). Smaller office equipment, such as typewriters and coffee pots, would generally not fall into these categories and therefore would not have to be grounded. However much of the newer office equipment is manufactured with grounded plugs as a precaution (three prong plugs). In such cases, the equipment should be used in accordance with the manufacturer's instructions. In any case, never remove the third (grounding) prong from any three-prong piece of equipment.

Overloaded Outlets

Insufficient or overloading of electrical outlets should be avoided. A sufficient number of outlets will eliminate the need for extension cords. Overloading electrical circuits and extension cords can result in a fire. Floor mounted outlets should be carefully placed to prevent tripping hazards.

Unsafe/Non-Approved Equipment

The use of poorly maintained or unsafe, poor quality, non-approved (by national testing laboratory) coffee makers, radios, lamps, etc. (often provided by or used by employees) should be discarded. Such appliances can develop electrical shorts creating fire and/or shock hazards. Equipment and cords should be inspected regularly, and a qualified individual should make repairs.

Defective, frayed or improperly installed cords for electrically-operated office equipment

When the outer jacket of a cord is damaged, the cord may no longer be water-resistant. The insulation can absorb moisture, which may then result in a short circuit or excessive current leakage to ground. If wires are exposed, they may cause a shock to a worker who contacts them. These cords should be replaced. Electric cords should be examined on a routine basis for fraying and exposed wiring.

Office Safety Do and Don't Checklist

Application

This WI applied to all staff that working in the office.

DO

- ✓ Report slippery or uneven floor surfaces, torn carpet or linoleum.
- ✓ Keep file and desk drawers closed.
- ✓ Stack cartons and supplies carefully so they won't fall.
- ✓ Be sure file cabinets aren't top-heavy.
- ✓ Replace electrical cords when insulation frays.
- ✓ Report poor lighting or missing handrails on stairs.
- ✓ Make sure plugs match their outlets.
- ✓ Put materials and papers away when not in use.
- ✓ Check container labels and material safety data sheets before using office chemicals.
- ✓ Be careful when knife cutter, razor blades, scissors, and other pointed objects that could cause injuries.
- ✓ know whom to contact and where to go in an emergency.
- ✓ know where fire extinguishers and first-aid kits are kept.
- ✓ Check that fire extinguishers are inspected regularly.
- ✓ Use dollies and similar equipment to move large or heavy items.
- ✓ Use proper lifting techniques that let the legs, not the back, do the work.
- ✓ Use a ladder or step stool, rather than standing on furniture or boxes, to reach high places.

DON'T

- leave cords, boxes, and other materials in aisles.
- Block emergency exits.
- Use extension cords unless necessary.
- Overload electrical outlets.
- Leave combustible trash in open containers.
- Leave containers of chemicals open.
- Carry loads you can't see over.
- Smoke in unauthorized areas.
- Run in aisles, halls, or on stairways.
- Throw objects or engage in horseplay.