# Industrial Technology and Design

This checklist has been developed to assist Schools in addressing their hazard identification and reporting.

The checklist is not intended as a definitive list for the identification of all hazards and provides guidance only. Staff are encouraged to make modifications to suit their specific environment. **Note:** there will be hazards/deficiencies not mentioned on the checklists that will need to be identified and managed.

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| **School or location (block/campus/room):** | |
| **Person/s completing checklist:** | **Date:** |
| **Buildings** | **Action if required** **(✓ if no action)** |
| The area clean and tidy. There are no slip, trip or fall hazards. |  |
| There is sufficient space for each person to perform their work safely. |  |
| Floor surfaces are maintained in a safe condition and are suitable for the type of activities conducted. |  |
| Walls, ceilings and roofs are safe and in good condition. |  |
| Steps/stairs/ramps are in a safe condition with non-slip surface, and secure handrails where needed. |  |
| Doors, windows, locks and latches are in good condition and working order. |  |
| There is adequate ventilation. |  |
| Isolation valves are readily accessible and clearly labelled. |  |
| There is adequate lighting to work safely. |  |
| Toilet facilities are clean and in good condition. Items are available to maintain appropriate levels of hygiene. |  |
| Hand washing facilities are available. |  |
| All gas and compressed air pipes are clearly labelled. |  |
| **Electrical** | **Action if required (✓ if no action)** |
| Electrical equipment is in good condition and tested as required by the department’s electrical testing guide. |  |
| All new power boards purchased have an overload switch. |  |
| Overhead cables are not a hazard. |  |
| Electrical cables/cords are kept clear of walkways etc. |  |
| The power distribution board is clean and readily accessible. |  |
| **Fire safety and emergency response** | **Action if required (✓ if no action)** |
| Safety rules, emergency information and evacuation routes are prominently displayed. |  |
| The area has an audible evacuation alarm. |  |
| Doorways, walkways and evacuation exits are kept clear and at least 600mm wide. |  |
| External exit doors can be opened from the inside without a key and fire emergency exits are signed. |  |
| Fire control equipment is easily accessible, signed, regularly tested and of the appropriate type. |  |
| The facility has emergency isolation for gas where required. |  |
| A suitable first aid is kit readily available and stocked appropriately. |  |
| The first aid kit contains extra modules for eyes and burns. |  |
| There are recommended emergency eye wash and drenching facilities available. Records for weekly testing and maintenance can be produced on demand. |  |
| **Furniture, fixtures and fittings** | **Action if required (✓ if no action)** |
| All furniture is safe and in good condition. |  |
| Light fittings/fixtures and ceiling fans are in good condition and working order. |  |
| Light bulbs and tubes are guarded in areas where there is a risk of damage. |  |
| No hanging displays create a hazard. |  |
| **Hazardous chemicals** | **Action if required (✓ if no action)** |
| Current (within five years) safety data sheets are readily available for hazardous chemicals. |  |
| Hazardous chemicals are stored according to their compatibility and labelled appropriately. |  |
| Decanted substances are correctly labelled and stored in appropriate containers. Food containers ARE NOT appropriate. |  |
| Chemical storage areas are clean, tidy and safely organised. For example:   1. Chemicals are stored according to separation and segregation requirements. 2. Storage is dedicated to chemicals only – there is no combustible materials, waste, rags or materials in chemical storage areas. 3. No chemicals stored directly on the floors. 4. Shelves are structurally sound and do not exceed their load capapcity. 5. Heavy cans and drums are stored on shelving or pallets between knee and waist height. 6. Volumes aligned with minimum operational requirements are kept. |  |
| Spill control systems are in place i.e. earth bunds, absorbing materials etc. and staff are trained in emergency spill response. |  |
| Banned substances or timbers producing toxic dust are not present. |  |
| Appropriate washing/dousing facilities are available in the event of an accident with chemicals. |  |
| Surplace, expired or waste chemicals are disposed of according to the SDS in a timely and safe manner. |  |
| There is a process for the safe disposal of rag waste used with paints and solvents to eliminate fire risk. |  |
| **Management procedures** | **Action if required (✓ if no action)** |
| A general induction process for students and staff is in place to explain safe workshop practices and advise of hazards and risks. Records of any training are maintained and available on request. |  |
| A sound induction process for students and staff is in place to manage the safe use of machines and equipment. Records of any training are maintained and available on request. |  |
| Required personal protective equipment is available and in good condition. |  |
| Procedures are in place to respond to fire, chemical spills/accidental release, welding incidents and incidents involving gas cylinders. |  |
| **Plant** | **Action if required (✓ if no action)** |
| Operating instructions/manuals are available for safe use of equipment and machinery. |  |
| A maintenance register is in place for all equipment and machinery that requires regular maintenance. |  |
| All guarding of machinery and equipment is in place and maintained in good condition. |  |
| All machines have SOPs and any other appropriate safety signs. |  |
| Emergency stop devices and switch gear on all fixed/static-use machines are functioning and in good condition. |  |
| There is no machinery and equipment that is hazardous due to noise, fumes, dust or other factors? (i.e. noise over 85 dBA for eight hours) |  |
| Dust extraction and/or fume control systems are fitted and working efficiently where required. |  |
| A fixed dust extraction system has an operational inspection point at any place where a blockage is likely to accumulate. Cleaning of the system is scheduled as part of the annual maintenance program. |  |
| A fume extraction system is in place where required e.g. plastics, spray painting, photography, welding etc. |  |
| Machines have clearly marked (with 50mm wide sunflower yellow) safe boundary areas. (generally 600mm clearance for the operator) |  |
| **Spray painting** | **Action if required (✓ if no action)** |
| When spray painting or air brush painting is carried out, appropriate spray booths are used. |  |
| Spray painting booths are located away from a possible source of ignition. Lights and switches are spark proof. |  |
| Ventilation systems are maintained/inspected according to manufacturer instructions and are part of the annual maintenance program. |  |
| **Storage** | **Action if required (✓ if no action)** |
| Storage areas can be secured to prevent unwanted access. |  |
| Flammable material is stored and handled in a safe manner. |  |
| Required resources and equipment are stored safely. |  |
| Free standing shelves/cupboards are secured to ensure stability. |  |
| Waste containers are readily available and are labelled appropriately where necessary. These containers are emptied or disposed of regularly. |  |

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| **Welding and soldering** | **Action if required (✓ if no action)** |
| There is a separate storage area for full and empty gas cylinders. |  |
| All gas cylinders are stored in an upright position and secured to a wall or stand. |  |
| Where applicable, manifolds are located and guarded to protect them from damage. |  |
| Operating instructions are displayed for safe operation of gas supply manifolds. |  |
| Appropriate gloves, welding glasses/shields and aprons are available for welding. *(AS/NZS 2161.4 Occupational Protective Gloves Pt 4: Protection against thermal risks)* |  |
| All metal benches used for electric welding are insulated from the floor and/or the operator is insulated from the floor by rubber matting or duck boards. |  |
| All arc-welding bays are adequately screened from flash. |  |
| The electronics soldering area has good ventilation and fume extraction where required. |  |
| **General** | **Action if required (✓ if no action)** |
| Other hazards such as sharp edges, glare, noise, fumes, waste or vermin have been identified. |  |
| Systems are in place to manage waste and fumes generated from work processes (e.g. plasma cutting, 3D printing fumes, welding). |  |
| **Use the following space to record additional issues or hazards** | **Action if required** |
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