

PLANT & EQUIPMENT MAINTENANCE

# GUIDANCE FOR SCHOOLS

[](https://www.minnesotamedical.com/maintenance/preventive-maintenance/)

## WHAT YOU NEED TO DO

* Identify who is responsible in the establishment for ensuring all plant and equipment is maintained
* Identify all plant and equipment in the establishment that requires regular inspection, testing and maintenance
* Develop a scheme of inspection, testing and maintenance based upon legal requirements and/or best practice
* Ensure that third party contractors are competent to undertake the necessary inspection, testing and maintenance
* Ensure that any remedial work recommended following testing, inspection and maintenance is undertaken
* Ensure that suitable finances are allocated to inspection, testing and maintenance
* Ensure that suitable records of all testing, inspection and maintenance are kept

## INTRODUCTION

This guidance provides information in relation to statutory requirements for inspection of facilities, plant and equipment in buildings. It is intended to assist those persons responsible to meet the requirements of current legislation, by summarising requirements for inspection contained in a number of specific regulations, approved codes of practice and guidance notes.

All establishments should be aware of the division of responsibility for the maintenance of plant and equipment and the overall repair and maintenance of the premises.

The checklist below should be referred to. This is based upon current best practice. However, in determining the frequency and requirements of maintenance regimes, including any relevant testing, inspection and examinations, information from manufacturers and competent persons should also be considered.

| Access Elements & Equipment | Pedestrian powered access doors | Provision and Use of Work Equipment Regulations 1998  BS EN 16005 | Inspection and maintenance of devices and pressure edges | 12 months | Competent contractor |
| --- | --- | --- | --- | --- | --- |
| Pedestrian/vehicle powered access gates | Provision and Use of Work Equipment Regulations 1998  BS EN 12453 | Inspection and maintenance of devices and pressure edges | 12 months | Competent contractor |
| Eyebolts/Anchorage Points | Provision and Use of Work Equipment Regulations 1998  Lifting Operations and Lifting Equipment Regulations 1998  BS EN 795  BS 7883 | Periodic examination | 12 months for fall arrest  6 months for rope access | Competent contractor  Competent contractor |
| Car park barriers | Provision and Use of Work Equipment Regulations 1998 | Inspection and maintenance of devices | According to manufacturer’s guidelines | Competent contractor |
| Tower scaffolds | Work at Height Regulations 2005 | Inspection of tower scaffold | Before use  After substantial alteration  After events affecting stability | Trained user |
| Ladders | Work at Height Regulations 2005  BS EN 131 | Visual check  Visual inspection | Before use  According to manufacturer’s guidelines | Trained user  Competent person |

| Asbestos | Asbestos: survey | Control of Asbestos Regulations 2012  HSG264 | Asbestos survey completed by competent person  Asbestos survey subject to review  Materials and priority assessments completed  Abatement works completed | On-going  12 months  Periodic review  On-going | Competent surveyor  Competent surveyor  Competent person  Competent/licensed contractor |
| --- | --- | --- | --- | --- | --- |
| Asbestos: Management Plan | Control of Asbestos Regulations 2012  L143  HSG227 | Asbestos Management Plan on-site  Asbestos Management Plan reviewed | On-going  12 months | Competent person  Competent person |
| Asbestos: labelling Asbestos Containing Materials (ACM) | Control of Asbestos Regulations 2012  L143  HSG227 | ACM’s labelled | On-going | Competent person |
| Asbestos: monitoring | Control of Asbestos Regulations 2012  L143  HSG227 | Condition of ACM’s regularly monitored | 12 months or in accordance with risk assessment findings | Competent person |
| Asbestos: awareness/supervision training | Control of Asbestos Regulations 2012  L143  HSG227 | Nominated school staff trained in asbestos awareness and/or supervision to UKATA standard  Training repeated at regular intervals | On-going  24 months | Competent trainer  Competent trainer |

| Catering Equipment | Electrical equipment (Fixed) | Electricity at Work Regulations 1989  CAIS12 | Visual inspection  Inspection and test | 12 months  5 years | Competent person  Competent electrician |
| --- | --- | --- | --- | --- | --- |
| Electrical equipment (Portable) | Electricity at Work Regulations 1989  CAIS12  IET Guidelines | Visual inspection  Inspection and test | In accordance with manufacturers guidelines  1-5 years | Competent user  Electrically competent person |
| Gas equipment | Gas Safety (Installation and Use) Regulations 1998  CAIS23 | Inspection | In accordance with manufacturers guidelines/12 months | Gas Safe Registered competent person |
| Ventilation extract system (inc hood, filters, and ducting) | Workplace (Health, Safety, and Welfare) Regulations 1992  Gas Safety (Installation and Use) Regulations 1998  CAIS10  BES TR19  BS EN 15780 | Inspection and testing  Cleaning | In accordance with manufacturers guidelines/12 months  3 months (heavy use)  6 months (medium use)  12 months (light use) | Specialist service contractor  Specialist cleaning contractor |
| Pressure cookers/espresso machines etc. | Pressure System Safety Regulations 2000  L122 | Maintenance and thorough examination | In accordance with written scheme of examination | Competent person |

| **Educational Equipment** | D&T Workshops | Provision and Use of Work Equipment Regulations 1998  Control of Substances Hazardous to Health Regulations 2005  Pressure System Safety Regulations 2000  CLEAPSS L154  Design & Technology Association  BS 4163  HSG 258 | Sharpening of hand tools  Inspection and cleaning of workshop machines  Examination of gas system (metal-heating equipment)  Cleaning filters of local exhaust ventilation  Examination of local exhaust ventilation  Thorough examination of compressed air systems  Visual inspection of personal protective equipment | Dependent on tool, usage and materials/12 months  According to manufacturer’s guidance/L154  5 years/L154  Weekly  14 months  In accordance with written scheme of examination  Before use | Competent technician  Competent technician (cleaning)  Competent person (Inspection)  Gas Safe registered engineer  Competent technician  Competent person  Competent person  Competent technician |
| --- | --- | --- | --- | --- | --- |
| Laboratories | Provision and Use of Work Equipment Regulations 1998  Control of Substances Hazardous to Health Regulations 2005  Pressure System Safety Regulations 2000  Ionising Radiation Regulations 1999  CLEAPSS G9  CLEAPSS L93 | Examination of LEV/Fume Cupboards  Inspection of chemical storage  Manage radioactive sources  Inspection of equipment | 14 months  12 months  On-going  In accordance with manufacturers guidelines | Competent person  Competent technician  Radiation Protection Adviser  Competent contractors |
| Textiles | Provision and Use of Work Equipment Regulations 1998 | Inspection and maintenance of equipment | In accordance with manufacturers guidelines | Competent contractors |
| Ceramics | Provision and Use of Work Equipment Regulations 1998  Control of Substances Hazardous to Health Regulations 2005  CLEAPSS | Service of kilns | In accordance with manufacturers guidelines | Competent person |
| Physical education (e.g. gym equipment) | Provision and Use of Work Equipment Regulations 1998  Association for Physical Education | Visual check  Formal inspection | Before use  12 months | Supervising staff  Competent contractor |

| Electrical Systems & Equipment | Fixed electrical installation | Electricity at Work Regulations 1989  BS7671: IET Wiring Regulations  IET Guidance Note 3 | Inspection and testing of fixed installation | 5 years or more frequently if determined by competent person | Competent electrician |
| --- | --- | --- | --- | --- | --- |
| Portable electrical appliances | Electricity at Work Regulations 1989  HSG107  IET Guidance | Visual inspection  Inspection and testing | Before use  In accordance with HSE recommendations | Competent user  Competent electrician |
| Stage lighting (switches, racks, plugs sockets etc.) | Electricity at Work Regulations 1989 | Inspection and testing | 12 months | Competent electrician |
| Lightning protection system | Provision and Use of Work Equipment Regulations 1998  BS EN 62305 | Inspection and testing  Maintenance | LP1/LP2: visual annual  LP1/LP2: physical 2 years  LP3/LP4: visual 2 years  LP3/LP4: physical 4 years  According to LPS level | Competent contractor  Competent contractor |
| Emergency escape lighting | Regulatory Reform (Fire Safety) Order 2005  BS 5266  BS EN 50172 | Duration test of luminaires  Full discharge/duration and check of system | Monthly  12 months | Premise controller  Competent contractor |

| Energy & Environment | Display energy certificate (DEC) | Energy Performance of Buildings (England and Wales) Regulations 2012 | Display valid DEC in a prominent place clearly visible to members of the public who visit the building | Updated annually | Competent assessor |
| --- | --- | --- | --- | --- | --- |
| Energy performance certificate (EPC) | Energy Performance of Buildings (England and Wales) Regulations 2012 | Have EPC on construction/rented/sold  Display EPC when building is 500sqm/produced as part of construction/regular public visits | Valid for 10 years | Competent assessor |
| F-Gases (HFC 23/227ea/404A/410a/134a) | F-Gas Regulation (EU) No. 517/2014 | Equipment containing F-gas checked for leaks  Equipment containing 500 tonnes or more of CO2 equivalent F-gas fitted with leak detection system  F-gas is labelled correctly | 5 tonnes or more of CO2 equivalent-12 months  50 tonnes or more of CO2 equivalent-6 months  500 tonnes or more of CO2 equivalent-3 months  On-going  On-going | Specialist contractor |
| Air conditioning systems | Energy Performance of Buildings (England and Wales) Regulations 2012 | Inspection of air conditioning systems with cooling capacity of 12kW | 5 years | Specialist contractor |
| Waste | Waste (England and Wales) Regulations 2011 | Duty of care to prevent unauthorised or harmful deposit, treatment or disposal of waste | On-going | Premise controller/waste producer |
| Oil storage | Control of Pollution (Oil Storage)(England) Regulations 2001 | Dipping of ground tanks for leaks  Visual check oil storage bunds  Condition survey and limit test of installation  Pressure test of underground pipework | Weekly for tanks up to 10 years old  Daily for tanks over 10 years old  Weekly  12 months  5 or 10 years | Premise controller  Premise controller  Specialist contractor  Specialist contractor |

| Fire Safety | Fire risk assessment | Regulatory Reform (Fire Safety) Order 2005  PAS79 | Suitable and sufficient fire risk assessment  Review of fire risk assessment | On-going  When significant change occurs/12 months | Competent fire risk assessor  Responsible person |
| --- | --- | --- | --- | --- | --- |
| Fire emergency plan | Regulatory Reform (Fire Safety) Order 2005  BS 9999 | Suitable and sufficient fire emergency plan  Review of fire emergency plan | On-going  When significant change occurs/12 months | Competent person  Responsible person |
| Fire detection and alarm system | Regulatory Reform (Fire Safety) Order 2005  BS 5839-1  BS 5839-6  BS 5839-8 | Visual check of panel  Functional test of alarm and associated elements (e.g. hold open devices)  Visual check of back-up power supply  Inspection and testing of whole system  Inspection and testing of cause and effect systems | Daily  Weekly  Monthly  12 months  12 months | Premise Controller  Premise Controller  Premises Controller  Competent contractor  Competent contractor |
| Fire extinguishers and blankets | Regulatory Reform (Fire Safety) Order 2005  BS 5306-3  BE EN 3 | Visual inspection  Service  Extended service  Overhaul | Monthly  12 months  5 years  10 years | Premise controller  Competent contractor  Competent contractor  Competent contractor |
| Fire hose reels | Regulatory Reform (Fire Safety) Order 2005  BS 5306  BS EN 671 | Visual inspection  Inspection and test  Pressure test | Monthly  12 months  5 years | Premises controller  Competent contractor  Competent contractor |
| Sprinkler systems | Regulatory Reform (Fire Safety) Order 2005  BS EN 12845 | Schedule of test, service and maintenance  Visual check of valves and gauges  Test of water motor alarm and automatic pump  Test and inspection of whole system | On-going  Weekly  Weekly  3 months to 12 months | System user  System user  System user  Competent contractor |
| Fire doors | Regulatory Reform (Fire Safety) Order 2005  BS 8214 | Visual inspection | Monthly (high-risk)  6 months (other) | Premise controller |
| Fire shutters | Regulatory Reform (Fire Safety) Order 2005  BS EN 12635 | Testing and maintenance | According to manufacturer’s guidelines/12 months | Competent contractor |
| Fire dampers | Regulatory Reform (Fire Safety) Order 2005  BS 9999 | Testing and maintenance | 12 months (spring loaded)  24 months (all other) | Competent contractor |
| Fire curtains | Regulatory Reform (Fire Safety) Order 2005  BS 8524 | Test operation  Test operation (part of smoke control system)  Inspection | Monthly  3 months  12 months | Premise controller  Premise controller  Competent contractor |
| Dry risers | Regulatory Reform (Fire Safety) Order 2005  BS 9990 | Inspection of parts  Pressure test | 6 months  12 months | Premise controller  Competent contractor |
| Evacuation chairs | Regulatory Reform (Fire Safety) Order 2005 | Visual check  Inspection and test | Monthly  12 months | Premise controller  Competent contractor |
| Smoke control systems | Regulatory Reform (Fire Safety) Order 2005  BS 7346  BS EN 12101 | Simulated test  Actuation test  Inspection and performance test | Weekly  3 months  12 months | Premise controller  Premises controller  Competent contractor |
| Signage | Regulatory Reform (Fire Safety) Order 2005  Health and Safety (Safety Signs and Signals) Regulations 1996  BS5499-4  BS5499-10 | Inspection and maintenance of all fire signage | 12 months | Premise controller |
| Stair pressurisation system | Regulatory Reform (Fire Safety) Order 2005  BS EN 12101 | Test  Inspection | Weekly  12 months | Premise controller  Competent person |
| Fire hydrants | Regulatory Reform (Fire Safety) Order 2005  BS 9990 | Inspection of parts | 12 months | Competent person |
| Gas suppression system | Regulatory Reform (Fire Safety) Order 2005  BS EN 15004  BS EN 18003 | Visual check of gauges  Mechanical test/gas level check  Inspection and testing of system  Hydrostatic test | Weekly  6 months  12 months  10 years | Premise controller  Premise controller  Competent contractor  Competent contractor |
| Foam suppression system | Regulatory Reform (Fire Safety) Order 2005  BS 5306  BS 13565 | Visual check of gauges, valves and levels  Functional test  Inspection and testing of system | Weekly  Monthly  12 months | Premise controller  Premise controller  Competent contractor |

| Gas Safety | Gas appliances, flues and installation pipework | Gas Safety (Installation and Use) Regulations 1995 | Maintenance | In accordance with manufacturers guidelines/12 months | Gas safe registered contractor |
| --- | --- | --- | --- | --- | --- |
| Gas water heater/calorifier, flues and installation pipework | Gas Safety (Installation and Use) Regulations 1995 | Maintenance | In accordance with guidelines/12 months | Gas safe registered contractor |

| Grounds & Playgrounds | Outdoor play equipment | Management of Health and Safety at Work Regulations 1999  BS EN 1176 | Visual check  Inspection  Formal inspection and maintenance | Daily  Monthly  12 months | Supervising staff  Premises controller  Competent contractor |
| --- | --- | --- | --- | --- | --- |
| Outdoor safety surfaces | Management of Health and Safety at Work Regulations 1999  BS EN 1177 | Visual check  Inspection  Formal inspection and maintenance | Daily  Monthly  12 months | Supervising staff  Premises controller  Competent contractor |
| Trees | Management of Health and Safety at Work Regulations 1999  National Tree Safety Group guidance | Identification of tree risks  Visual check on tree condition  Formal inspection regime | On-going  According to risk  According to risk | Competent contractor  Premises controller  Competent contractor |
| Walls, fences and gates | Workplace (Health, Safety and Welfare) Regulations 1992 | Visual inspection  Formal condition survey | 4 months  2 years | Premises controller  Competent surveyor |
| Traffic routes (pedestrian and vehicle) | Workplace (Health, Safety and Welfare) Regulations 1992 | Inspection | 4 months | Premises controller |

| H&S Misc | Glazing | Workplace (Health, Safety and Welfare) Regulations 1992 | Survey of glazing for safety  Inspection of glazing | One-off  4 months | Competent contractor  Premises controller |
| --- | --- | --- | --- | --- | --- |
| Premises structural elements | Workplace (Health, Safety and Welfare) Regulations 1992 | Condition survey | 2 year | Competent surveyor |
| Uninterrupted power supplies | Provision and Use of Work Equipment Regulations 1998  BS EN 62040  BS EN 50272 | Testing, inspection and maintenance | In accordance with manufacturers guidelines | Competent contractor |
| Induction loops | Workplace (Health, Safety and Welfare) Regulations 1992  BS 7954 | Maintenance | 12 months | Competent contractor |
| PA system | Workplace (Health, Safety and Welfare) Regulations 1992  BS 6259  BS 5839 | Testing  Maintenance | Weekly  12 months | Premises controller  Competent contractor |
| First aid | Health and Safety (First Aid) Regulations 1981  L74 | Maintenance and upkeep of first aid kits and equipment | 4 month | Premises controller |
| Defibrillators | Provision and use of Work Equipment Regulations 1998  Health and Safety (First Aid) Regulations 1981 | Inspection and maintenance | Weekly check of battery  Termly check of all parts and replacement as necessary | Premises controller |
| Hazardous/dangerous substances | Control of Substances Hazardous to Health Regulations 2002  Dangerous Substances and Explosive Atmospheres Regulations 2005 | Storage of substances to prevent unauthorised access and fire | On-going | Premises controller |
| Signage and posters | Health & Safety (Safety Signs and Signals) Regulations 1996 | Maintenance of safety signs | 4 month | Premise controller |

| Legionella | Risk assessment | Control of Substances Hazardous to Health Regulations 2002  L8 | Suitable and sufficient risk assessment completed  Risk assessment reviewed | On-going  Significant change in systems | Competent contractor  Competent contractor |
| --- | --- | --- | --- | --- | --- |
| Competent responsible person | Control of Substances Hazardous to Health Regulations 2002  L8 | Appointment of competent person | On-going when risk control measures required | Premise controller |
| Written scheme of control | Control of Substances Hazardous to Health Regulations 2002  L8 | Written Scheme of control prepared  Written scheme of control reviewed | On-going  12 months | Premise controller/competent contractor  Premise controller |
| Risk control | Control of Substances Hazardous to Health Regulations 2002  HSG274 | Risk control measures implemented | In accordance with Written Scheme of Control | Premise controller/competent contractor |
| Cooling towers | Notification of Cooling Towers and Evaporative Condensers Regulations 1992  Control of Substances Hazardous to Health Regulations 2002 | Notification to local authority of operation of cooling tower or evaporative condenser | On-going | Premise controller |

| Lifts, Lifting Equipment and Escalators | Passenger lifts and accessories | Lifting Operations and Lifting Equipment Regulations 1998  L113  LG1 | Thorough examination  Maintenance and inspection | 6 months or to an examination scheme  According to risk assessment, competent person recommendations and manufacturers guidelines | Competent contractor/Insurer  Competent contractor/Insurer |
| --- | --- | --- | --- | --- | --- |
| Goods lifts/dumb waiters | Lifting Operations and Lifting Equipment Regulations 1998  L133  LG1 | Thorough examination  Maintenance and inspection | 12 months or to an examination scheme  According to risk assessment, competent person recommendations and manufacturers guidelines | Competent contractor  Competent contractor/Insurer |
| Escalators | Provision and Use of Work Equipment Regulations 1998  L22  SAFED | Examination and inspection | According to risk assessment, manufacturers guidance, HSE guidance recommends 6 months | Competent contractor |
| Lifting equipment (other) | Lifting Operations and Lifting Equipment Regulations 1998  L133 | Thorough examination  Maintenance and inspection | 6 months or to an examination scheme  According to risk assessment, competent person recommendations and manufacturers guidelines | Competent contractor/Insurer  Competent contractor/Insurer |
| Stairlifts (disabled access) | Lifting Operations and Lifting Equipment Regulations 1998  L133 | Thorough examination  Maintenance and inspection | 6 months or to an examination scheme  According to risk assessment, competent person recommendations and manufacturers guidelines | Competent contractor/Insurer  Competent contractor/Insurer |

| Pressure Systems | Any pressure system including compressed air, chiller plant, calorifiers etc. | Pressure Systems Safety Regulations 2000  L122 | Written scheme for periodic examination developed  Examination of pressure systems  Inspection of pressure systems | On-going  In accordance with Written Scheme  In accordance with Written Scheme | Competent contractor  Competent contractor  Competent contractor |
| --- | --- | --- | --- | --- | --- |

| Security Equipment | CCTV | Provision and Use of Work Equipment Regulations 1998  L22  BS IEC 62676-4  BS EN 50132-7: | Maintenance | 12 months | Competent contractor |
| --- | --- | --- | --- | --- | --- |
| Intruder alarm system | Provision and Use of Work Equipment Regulations 1998  L22  BS EN 50131 | Maintenance | 12 months or 6 months depending on grade of system | Competent contractor |
| Automatic access control systems (e.g. cardex) | Provision and Use of Work Equipment Regulations 1998  L22  NSI code of practice | Maintenance | 12 months | Competent contractor |
| Outdoor lighting | Workplace (Health, Safety and Welfare) Regulations 1992  L24 | Maintenance | 12 months | Competent contractor |

| Ventilation & Air Conditioning Systems | Mechanical ventilation | Workplace (Health, Safety and Welfare) Regulations 1992  L24  BS EN 15780  BESA TR19  CIBSE TM44 | Inspection and testing | |  | Low | Med | High | | --- | --- | --- | --- | | AHU | 24m | 12m | 12m | | Filter | 12m | 12m | 6m | | Wet | 12m | 6m | 6m | | Duct | 48m | 24m | 12m | | Terminal | 48m | 24m | 12m | | Competent contractor |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Toilet vents | Workplace (Health, Safety and Welfare) Regulations 1992  L24 | Inspection and testing | 12 months | Competent contractor |
| LEV | Control of Substances Hazardous to Health Regulations 2002  L5 | Examination of local exhaust ventilation | 14 months | Competent contractor |
| Fume cupboards | Control of Substances Hazardous to Health Regulations 2002  L5 | Examination of fume cupboards | 14 months | Competent contractor |

| Water Quality | Swimming pools | Control of Substances Hazardous to Health Regulations 2002 | Water quality test | According to normal operating plan | Competent contractor |
| --- | --- | --- | --- | --- | --- |
| Water temperature | Workplace (Health, Safety and Welfare) Regulations 1992  Education (School Premises) Regulations 2012 | Water and surface temperature checks | 12 months | Competent contractor |
| Water fittings | Water Supply (Water Fittings) Regulations 1999 | Water fittings to be of appropriate quality and not to cause contamination of water | On-going | Premise controller |
| Drainage interceptors | Water Supply (Water Fittings) Regulations 1999  BS EN 858 | Physical inspection  Internal inspection | 6 months  5 years | Premise controller  Competent contractor |
| Water pollution | Water Resources Act 1991 (Chapter 85)  Water Industry Act 1991 (Section 118) | Consent to discharge trade effluent | On-going | Premise controller |