

PLANT & EQUIPMENT MAINTENANCE

# GUIDANCE FOR SCHOOLS



## 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 1998BS 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 1998BS EN 12453 | Inspection and maintenance of devices and pressure edges | 12 months | Competent contractor |
| Eyebolts/Anchorage Points | Provision and Use of Work Equipment Regulations 1998Lifting Operations and Lifting Equipment Regulations 1998BS EN 795BS 7883 | Periodic examination | 12 months for fall arrest6 months for rope access | Competent contractorCompetent 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 useAfter substantial alterationAfter events affecting stability | Trained user |
| Ladders | Work at Height Regulations 2005BS EN 131 | Visual checkVisual inspection | Before useAccording to manufacturer’s guidelines | Trained userCompetent person |

| Asbestos | Asbestos: survey | Control of Asbestos Regulations 2012HSG264 | Asbestos survey completed by competent personAsbestos survey subject to reviewMaterials and priority assessments completedAbatement works completed  | On-going12 monthsPeriodic reviewOn-going | Competent surveyorCompetent surveyorCompetent personCompetent/licensed contractor |
| --- | --- | --- | --- | --- | --- |
| Asbestos: Management Plan | Control of Asbestos Regulations 2012L143HSG227 | Asbestos Management Plan on-siteAsbestos Management Plan reviewed | On-going12 months | Competent personCompetent person |
| Asbestos: labelling Asbestos Containing Materials (ACM) | Control of Asbestos Regulations 2012L143HSG227 | ACM’s labelled | On-going | Competent person |
| Asbestos: monitoring | Control of Asbestos Regulations 2012L143HSG227 | 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 2012L143HSG227 | Nominated school staff trained in asbestos awareness and/or supervision to UKATA standardTraining repeated at regular intervals | On-going24 months | Competent trainerCompetent trainer |

| Catering Equipment | Electrical equipment (Fixed) | Electricity at Work Regulations 1989CAIS12 | Visual inspectionInspection and test | 12 months5 years | Competent personCompetent electrician  |
| --- | --- | --- | --- | --- | --- |
| Electrical equipment (Portable) | Electricity at Work Regulations 1989CAIS12IET Guidelines | Visual inspectionInspection and test | In accordance with manufacturers guidelines1-5 years | Competent userElectrically 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 1992Gas Safety (Installation and Use) Regulations 1998 CAIS10BES TR19BS EN 15780 | Inspection and testingCleaning | In accordance with manufacturers guidelines/12 months3 months (heavy use)6 months (medium use)12 months (light use) | Specialist service contractorSpecialist cleaning contractor |
| Pressure cookers/espresso machines etc. | Pressure System Safety Regulations 2000L122 | 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 1998Control of Substances Hazardous to Health Regulations 2005Pressure System Safety Regulations 2000CLEAPSS L154Design & Technology AssociationBS 4163HSG 258 | Sharpening of hand toolsInspection and cleaning of workshop machinesExamination of gas system (metal-heating equipment)Cleaning filters of local exhaust ventilationExamination of local exhaust ventilationThorough examination of compressed air systemsVisual inspection of personal protective equipment | Dependent on tool, usage and materials/12 monthsAccording to manufacturer’s guidance/L1545 years/L154Weekly14 monthsIn accordance with written scheme of examinationBefore use | Competent technicianCompetent technician (cleaning)Competent person (Inspection)Gas Safe registered engineerCompetent technicianCompetent personCompetent personCompetent technician  |
| --- | --- | --- | --- | --- | --- |
| Laboratories | Provision and Use of Work Equipment Regulations 1998Control of Substances Hazardous to Health Regulations 2005Pressure System Safety Regulations 2000Ionising Radiation Regulations 1999 CLEAPSS G9CLEAPSS L93 | Examination of LEV/Fume CupboardsInspection of chemical storageManage radioactive sourcesInspection of equipment | 14 months12 monthsOn-goingIn accordance with manufacturers guidelines | Competent personCompetent technicianRadiation Protection AdviserCompetent 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 1998Control of Substances Hazardous to Health Regulations 2005CLEAPSS | Service of kilns | In accordance with manufacturers guidelines | Competent person |
| Physical education (e.g. gym equipment) | Provision and Use of Work Equipment Regulations 1998Association for Physical Education | Visual checkFormal inspection | Before use12 months | Supervising staffCompetent contractor |

| Electrical Systems & Equipment | Fixed electrical installation | Electricity at Work Regulations 1989BS7671: IET Wiring RegulationsIET 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 1989HSG107IET Guidance | Visual inspectionInspection and testing | Before useIn accordance with HSE recommendations | Competent userCompetent 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 1998BS EN 62305 | Inspection and testingMaintenance | LP1/LP2: visual annualLP1/LP2: physical 2 yearsLP3/LP4: visual 2 yearsLP3/LP4: physical 4 yearsAccording to LPS level | Competent contractorCompetent contractor |
| Emergency escape lighting | Regulatory Reform (Fire Safety) Order 2005BS 5266 BS EN 50172 | Duration test of luminairesFull discharge/duration and check of system | Monthly12 months | Premise controllerCompetent 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/soldDisplay 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 leaksEquipment containing 500 tonnes or more of CO2 equivalent F-gas fitted with leak detection systemF-gas is labelled correctly  | 5 tonnes or more of CO2 equivalent-12 months50 tonnes or more of CO2 equivalent-6 months500 tonnes or more of CO2 equivalent-3 monthsOn-goingOn-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 leaksVisual check oil storage bundsCondition survey and limit test of installation Pressure test of underground pipework  | Weekly for tanks up to 10 years oldDaily for tanks over 10 years oldWeekly12 months5 or 10 years | Premise controllerPremise controllerSpecialist contractorSpecialist contractor  |

| Fire Safety | Fire risk assessment | Regulatory Reform (Fire Safety) Order 2005PAS79 | Suitable and sufficient fire risk assessmentReview of fire risk assessment | On-goingWhen significant change occurs/12 months | Competent fire risk assessorResponsible person  |
| --- | --- | --- | --- | --- | --- |
| Fire emergency plan | Regulatory Reform (Fire Safety) Order 2005BS 9999 | Suitable and sufficient fire emergency planReview of fire emergency plan | On-goingWhen significant change occurs/12 months | Competent personResponsible person |
| Fire detection and alarm system | Regulatory Reform (Fire Safety) Order 2005BS 5839-1BS 5839-6BS 5839-8 | Visual check of panelFunctional test of alarm and associated elements (e.g. hold open devices)Visual check of back-up power supplyInspection and testing of whole systemInspection and testing of cause and effect systems | DailyWeeklyMonthly12 months12 months | Premise ControllerPremise ControllerPremises ControllerCompetent contractorCompetent contractor |
| Fire extinguishers and blankets | Regulatory Reform (Fire Safety) Order 2005BS 5306-3BE EN 3 | Visual inspectionService Extended service Overhaul | Monthly12 months5 years10 years | Premise controllerCompetent contractorCompetent contractorCompetent contractor |
| Fire hose reels | Regulatory Reform (Fire Safety) Order 2005BS 5306BS EN 671 | Visual inspectionInspection and testPressure test | Monthly12 months5 years | Premises controllerCompetent contractorCompetent contractor |
| Sprinkler systems | Regulatory Reform (Fire Safety) Order 2005BS EN 12845 | Schedule of test, service and maintenance Visual check of valves and gaugesTest of water motor alarm and automatic pumpTest and inspection of whole system | On-goingWeeklyWeekly3 months to 12 months | System userSystem userSystem userCompetent contractor |
| Fire doors | Regulatory Reform (Fire Safety) Order 2005BS 8214 | Visual inspection | Monthly (high-risk)6 months (other) | Premise controller |
| Fire shutters | Regulatory Reform (Fire Safety) Order 2005BS EN 12635 | Testing and maintenance | According to manufacturer’s guidelines/12 months | Competent contractor |
| Fire dampers | Regulatory Reform (Fire Safety) Order 2005BS 9999 | Testing and maintenance  | 12 months (spring loaded)24 months (all other) | Competent contractor |
| Fire curtains | Regulatory Reform (Fire Safety) Order 2005BS 8524 | Test operationTest operation (part of smoke control system)Inspection | Monthly3 months12 months | Premise controllerPremise controllerCompetent contractor |
| Dry risers | Regulatory Reform (Fire Safety) Order 2005BS 9990 | Inspection of partsPressure test | 6 months12 months | Premise controllerCompetent contractor |
| Evacuation chairs | Regulatory Reform (Fire Safety) Order 2005 | Visual checkInspection and test | Monthly12 months | Premise controllerCompetent contractor |
| Smoke control systems | Regulatory Reform (Fire Safety) Order 2005BS 7346BS EN 12101 | Simulated testActuation testInspection and performance test | Weekly3 months12 months | Premise controllerPremises controllerCompetent contractor |
| Signage | Regulatory Reform (Fire Safety) Order 2005Health and Safety (Safety Signs and Signals) Regulations 1996BS5499-4BS5499-10 | Inspection and maintenance of all fire signage  | 12 months | Premise controller  |
| Stair pressurisation system | Regulatory Reform (Fire Safety) Order 2005BS EN 12101 | TestInspection | Weekly12 months | Premise controllerCompetent person |
| Fire hydrants | Regulatory Reform (Fire Safety) Order 2005BS 9990 | Inspection of parts | 12 months | Competent person |
| Gas suppression system | Regulatory Reform (Fire Safety) Order 2005BS EN 15004BS EN 18003 | Visual check of gauges Mechanical test/gas level checkInspection and testing of systemHydrostatic test | Weekly6 months12 months10 years | Premise controllerPremise controllerCompetent contractorCompetent contractor |
| Foam suppression system | Regulatory Reform (Fire Safety) Order 2005BS 5306BS 13565 | Visual check of gauges, valves and levelsFunctional testInspection and testing of system | WeeklyMonthly12 months | Premise controllerPremise 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 1999BS EN 1176 | Visual checkInspectionFormal inspection and maintenance | DailyMonthly12 months | Supervising staffPremises controllerCompetent contractor |
| --- | --- | --- | --- | --- | --- |
| Outdoor safety surfaces | Management of Health and Safety at Work Regulations 1999BS EN 1177 | Visual checkInspectionFormal inspection and maintenance | DailyMonthly12 months | Supervising staffPremises controllerCompetent contractor |
| Trees | Management of Health and Safety at Work Regulations 1999National Tree Safety Group guidance | Identification of tree risksVisual check on tree conditionFormal inspection regime | On-goingAccording to riskAccording to risk | Competent contractorPremises controllerCompetent contractor |
| Walls, fences and gates | Workplace (Health, Safety and Welfare) Regulations 1992 | Visual inspectionFormal condition survey | 4 months2 years | Premises controllerCompetent 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 safetyInspection of glazing | One-off4 months | Competent contractorPremises 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 1998BS EN 62040BS EN 50272 | Testing, inspection and maintenance | In accordance with manufacturers guidelines | Competent contractor |
| Induction loops | Workplace (Health, Safety and Welfare) Regulations 1992BS 7954 | Maintenance | 12 months | Competent contractor |
| PA system | Workplace (Health, Safety and Welfare) Regulations 1992BS 6259 BS 5839 | TestingMaintenance | Weekly 12 months | Premises controllerCompetent contractor |
| First aid | Health and Safety (First Aid) Regulations 1981L74 | Maintenance and upkeep of first aid kits and equipment  | 4 month | Premises controller  |
| Defibrillators | Provision and use of Work Equipment Regulations 1998Health and Safety (First Aid) Regulations 1981 | Inspection and maintenance | Weekly check of batteryTermly check of all parts and replacement as necessary | Premises controller  |
| Hazardous/dangerous substances | Control of Substances Hazardous to Health Regulations 2002Dangerous 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 2002L8 | Suitable and sufficient risk assessment completed Risk assessment reviewed | On-goingSignificant change in systems | Competent contractorCompetent contractor |
| --- | --- | --- | --- | --- | --- |
| Competent responsible person | Control of Substances Hazardous to Health Regulations 2002L8 | Appointment of competent person | On-going when risk control measures required | Premise controller |
| Written scheme of control | Control of Substances Hazardous to Health Regulations 2002L8 | Written Scheme of control preparedWritten scheme of control reviewed | On-going12 months | Premise controller/competent contractorPremise controller |
| Risk control | Control of Substances Hazardous to Health Regulations 2002HSG274 | 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 1992Control 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 1998L113LG1 | Thorough examinationMaintenance and inspection | 6 months or to an examination schemeAccording to risk assessment, competent person recommendations and manufacturers guidelines | Competent contractor/InsurerCompetent contractor/Insurer |
| --- | --- | --- | --- | --- | --- |
| Goods lifts/dumb waiters | Lifting Operations and Lifting Equipment Regulations 1998L133LG1 | Thorough examinationMaintenance and inspection | 12 months or to an examination scheme According to risk assessment, competent person recommendations and manufacturers guidelines | Competent contractorCompetent contractor/Insurer |
| Escalators | Provision and Use of Work Equipment Regulations 1998L22SAFED  | 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 1998L133 | Thorough examinationMaintenance and inspection | 6 months or to an examination schemeAccording to risk assessment, competent person recommendations and manufacturers guidelines | Competent contractor/InsurerCompetent contractor/Insurer |
| Stairlifts (disabled access) | Lifting Operations and Lifting Equipment Regulations 1998L133 | Thorough examinationMaintenance and inspection | 6 months or to an examination schemeAccording to risk assessment, competent person recommendations and manufacturers guidelines | Competent contractor/InsurerCompetent contractor/Insurer |

| Pressure Systems | Any pressure system including compressed air, chiller plant, calorifiers etc. | Pressure Systems Safety Regulations 2000L122 | Written scheme for periodic examination developedExamination of pressure systemsInspection of pressure systems | On-goingIn accordance with Written SchemeIn accordance with Written Scheme | Competent contractorCompetent contractor Competent contractor |
| --- | --- | --- | --- | --- | --- |

| Security Equipment | CCTV | Provision and Use of Work Equipment Regulations 1998L22BS IEC 62676-4BS EN 50132-7: | Maintenance  | 12 months | Competent contractor |
| --- | --- | --- | --- | --- | --- |
| Intruder alarm system | Provision and Use of Work Equipment Regulations 1998L22BS 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 1998L22NSI code of practice | Maintenance  | 12 months | Competent contractor |
| Outdoor lighting | Workplace (Health, Safety and Welfare) Regulations 1992L24 | Maintenance  | 12 months | Competent contractor |

| Ventilation & Air Conditioning Systems | Mechanical ventilation | Workplace (Health, Safety and Welfare) Regulations 1992L24BS EN 15780BESA TR19CIBSE 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 1992L24 | Inspection and testing | 12 months | Competent contractor |
| LEV | Control of Substances Hazardous to Health Regulations 2002L5 | Examination of local exhaust ventilation | 14 months | Competent contractor |
| Fume cupboards | Control of Substances Hazardous to Health Regulations 2002L5 | 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 1992Education (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 1999BS EN 858 | Physical inspectionInternal inspection | 6 months5 years | Premise controllerCompetent contractor |
| Water pollution | Water Resources Act 1991 (Chapter 85)Water Industry Act 1991 (Section 118) | Consent to discharge trade effluent | On-going | Premise controller  |