

College Testing and Inspection Requirements

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AREA/ITEM	WHO OWNS IT?			FREQUENCY If not determined by College policy or statutory requirements, follow manufacturer's instructions	WHO IS RESPONSIBLE FOR ARRANGING TESTING/INSPECTION?	Who is responsible for funding?	WHAT DO I NEED TO DO? NOTE: Where the advice is to register or contact Estates, please contact the Estates Customer Services Centre . NOTE: all third parties are responsible for making their own arrangements, and for funding except where stated.
	Estates	Departments	Third Parties – including contractors, site partners and tenants				
Lifting equipment							
Follow LOLER and PUWER requirements for maintenance, user checks and logging use. See http://www.hse.gov.uk/pubns/indg422.pdf							
Safety anchors (eyebolts), latch-way systems and cradles, fall arrest equipment, ropes, etc.	Estates	Departments may own fall arrest gear, ropes, etc.	Third Parties	Annual. Abseil anchors & cradles 6 monthly.	Owners	Owners	Registration of item(s) via Estates Customer Services Centre
Lifts – passenger and goods, dumb waiters	Estates	May own lifting equipment	n/a	6 monthly for passenger; annual for Goods.	Estates	Owners	If you have a lift or lifting platform, contact Estates Customer Services Centre
Genie lifts and MEWP, hand-operated FLT and pallet trucks etc	Estates	May own lifting equipment	Third Parties	3 monthly, 6 monthly and annual Inspections.	Owners	Owners	Registration of item(s) via Estates Customer Services Centre .
Fork lift trucks (not used for lifting people): see HSE CoP: www.hse.gov.uk/pubns/books/l117.htm	Estates	May own lifting equipment	Third Parties	Annual thorough examination; in accordance with WSE; inspected between examinations as determined by risk assessment.	Owners	Owners	Registration of item(s) via Estates Customer Services Centre . Ensure operators have current training on the relevant items of equipment.
Lifting attachments, accessories and machines for lifting persons www.hse.gov.uk/pubns/books/l117.htm	Estates	May own lifting equipment	Third Parties	6 months – check HSE CoP	Owners	Owners	Registration of item(s) via Estates Customer Services Centre .
Working at Height (see also lifting equipment)							
See: www.imperial.ac.uk/safety/safety-by-topic/work-equipment/ Attend College training – www.imperial.ac.uk/staff-development/safety-training/safety-courses-/ladders-and-steps-safety/							
Ladders / step-ladders, steps	Estates	Departments	Third Parties	Check prior to use; formal inspection every 6 months.	Owners, Department ladder safety representative	Owners	Departments must inspect, date tag equipment and keep records of equipment inspections.
Tower scaffold Lanyards & harnesses Webbing, D-rings Shock absorbers, Snap hooks Anchor points/Lateral mansafe system	Estates	May own lifting equipment	Third Parties e.g. Telecoms Window cleaners	Check prior to use; formal inspection as required by specific item..	Owners, Department ladder safety representative	Owners	Departments must inspect, date tag equipment and keep records of equipment inspections. Ensure operators have current training on the relevant items of equipment.

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Electricity at Work							
Electrical – fixed wiring	Estates	n/a	n/a	5 years	Estates	Estates	Contact Estates as fixed wiring is part of infrastructure.
Portable electrical equipment	Estates	Departments	Third Parties must undertake their own	Frequency determined by risk assessment Annual for equipment	Owners	Owners	Arrange for Estates to undertake PAT; Some Depts. have their own electricians or arrange for an external
			checks	in high risk areas such as labs and workshops; 6-monthly for mobile items such as wet and dry floor polishers; low risk items in low risk areas: See http://www.hse.gov.uk/pubns/indg236.htm			contractor. Best arranged on a Faculty-wide basis, on the understanding that Third Parties must expect the College to conduct quality control checks (to ensure they do the tests, not just label the items); and that they must provide the College with a record of location, passes/fails; must label passed and failed equipment, must notify person in charge of all failed equipment on the day. This and the full range of checks must be specified in the contract.
Control of Legionella							
See HSE CoP: http://www.hse.gov.uk/pubns/books/l8.htm							
Legionella testing and inspection of hot and cold water systems (including showers in corridors)	Estates	Departments may have high risk equipment (hydroponic systems, water tanks, water baths, cooling jackets on instrument, water purification systems with large storage tanks and/or where there is an increased risk of deposit accumulation that can support bacterial growth such as rust, sludge, scale, organic matter and biofilms)	Third Parties	In accordance with risk assessment and L8 Code of Practice; before the commencing work after a long shutdown.	Owners	Estates for building water systems; Departments for their equipment.	Estates undertake testing of Building water systems.

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Hand held emergency showers associated with laboratory sinks	N/A	Departments	N/A	Monthly	Departments/Estates	Estates	This is undertaken by cleaning staff and recorded above the shower; if not in place, contact your Building Manager/ Estates Customer Services Centre . Where cleaners cannot get access to certain areas due to access control, Departments are responsible for ensuring this occurs.
Fire detection and control equipment							
Fire extinguishers Fire Blankets CO ₂ extinguishers have a 12 year use life	Estates	Estates Facilities may supply Departments with specialist extinguishers (e.g. for metal fires). Estates Facilities are responsible for conducting checks.	Third Parties must undertake their own checks.	Annually	Estates; Departments for specialist extinguishers.	Estates; Departments for specialist extinguishers	Extinguishers are automatically tested by Estates, but the test dates should be checked at departmental inspections, particularly for specialist extinguishers. Contact Estates Customer Services Centre if test is out of date.
Fire Trace CO ₂ extinguisher systems in some fume cupboards	N/A	Departments	N/A	Quarterly visual inspection. 6 monthly gas and Electrics.	Departments arrange via Estates Facilities.		Departments need to check the inspections and checks are taking place.
Smoke and heat detectors	Estates	N/A	N/A	Annual	Estates	Estates	These are tested automatically by Estates; but may be missed on occasion. Check for and report any orange covers on detector heads.
Fire detection and alarm systems	Estates	N/A	N/A	Daily to annual, in accordance with: BS5839-1:2002 & BS 9999: 2008	Estates	Estates	Report faults to Estates Customer Services Centre
Emergency lighting and batteries	Estates	N/A	N/A	Daily visual check. Monthly short duration test. 6 monthly full inspection. Annual full duration.	Estates	Estates	Contact Estates Customer Services Centre immediately if you find these are not working.
Fire mains – wet and dry risers	Estates	N/A	N/A	6 monthly and annual detailed service following BS 9999 and BS 9990.	Estates	Estates	Report faults to Estates Customer Services Centre .

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Sprinkler systems https://broker.aviva.co.uk/documents/view/aviva_sprinkler_systems_-_how_they_operate_lps.pdf	Estates	N/A	N/A	BS5306. BS EN 12845 lists various other monthly, quarterly, six-monthly, etc. checks and tests for items such as flow switches, remote signaling and water supply. Further guidance available from insurers and sprinkler servicing companies.	Estates	Estates	Report faults to Estates Customer Services Centre .
Lightning conductors and earthing systems BS EN 62305 states that Lightning Protection Systems should be tested at maximum intervals of 12 months.	Estates	N/A	N/A	6 – 12 months The Electricity at Work Regulations 1989 (EAWR) BSEN 62305 (1-4) Protection Against Lightning.	Estates	Estates	Report faults to Estates Customer Services Centre
Local Exhaust Ventilation (LEV) used as a COSHH control - College policy to test at 12 months except where stated. Users must check alarms, indicators and airflows and report problems immediately.							
Fume cupboards – ducted (fan, ductwork, airflow meter, services)	Estates	Departments	N/A	Annually	Automatically via Estates. Repairs to cabinet body, lights, sash, taps, switches, etc. will be charged to Department.	As stated in the relevant service level agreement, but generally FM are responsible for testing and maintenance and users for repairs.	Follow the College CoPs on Local Exhaust Ventilation : where responsibilities, frequency and test requirements are detailed. Estates should contact the Department to arrange testing when due. Check the date of next inspection on label on cabinet; contact Customer Services Centre and the Safety Department if the test is overdue.
Fume cupboards - recirculating	N/A	Departments	Third Parties	Annually	Users	users	Follow the College CoPs on Local Exhaust Ventilation : Department must arrange for a specialist contractor to undertake the checks. Contact the Safety Department for advice on suppliers

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Microbiological safety cabinets - ducted	Ducts and extract fans may be owned by ICL Estates. Check with the Building Manager.	Departments own the cabinets and visible ductwork.	Ducts and extract fans may be owned by third parties. Check with the ICL Building Manager.	Varies with containment level. Follow the College CoP	Users	Users	Follow the College CoP on Microbiological Safety Cabinets - responsibilities, frequency and test requirements are detailed. Department must arrange for a specialist contractor to undertake the checks. Contact the Safety Department for advice on suppliers
Microbiological safety cabinets - recirculating	N/A	Departments	Third Parties	Varies with containment level. Follow the College CoP	Users	Users	Follow the College CoP on Microbiological Safety Cabinets - responsibilities, frequency and test requirements are detailed. Department must arrange for a specialist contractor to undertake the checks. Contact the Safety Department for advice on suppliers
Weighing enclosures	N/A	Departments	Third Parties	Annually	Users	Users	Department must arrange for a specialist contractor to undertake the checks. Contact the Safety Department for advice on suppliers
Downflow benches, wet benches; downflow cabinets where used as COSHH controls	N/A	Departments	Third Parties	Annually – and user monitoring	Users	Users	Department must arrange specialist contractor to undertake the checks. Contact the Safety Department for advice on suppliers
Snorkels, capture hoods, paint enclosures etc	Ducts and extract fans may be owned by ICL Estates. Check with the Building Manager.	Departments	Ducts and extract fans may be owned by third parties. Check with the ICL Building Manager.	Annually	Users	Users	Contact Safety Department who will register the equipment and undertake the checks
Magnehelic gauges associated with safety control equipment (e.g. CL3)	Estates	Departments	N/A	Annually	Users	Contact Safety Department	Contact Safety Department who will register the equipment and undertake the checks

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Room HEPA filters used as part of COSHH control system (e.g. CL3, Constant Temperature Rooms, CBS)	N/A	Departments	N/A	At installation as part of validation. Annually where used as a general COSHH control measure. 6-monthly in CL3s (in use). The filters that require 6 monthly testing will change depending on the work being carried out within the areas, as will the decontamination requirements.	The Safety Department is responsible for ensuring that any changes to room use, frequency and decon arrangements are notified to FM. Estates should arrange testing through EVS Faculty and Safety Dept monitor if testing has been undertaken.	FM	Follow College CoP: www.imperial.ac.uk/safety/safety-by-topic/laboratory-safety/biological-safety/control-measures/ Contact the Safety Department if you are unsure HEPAs have been tested at the correct frequency.
Respiratory protective equipment							
Face masks (full face, half masks and dust masks)	Estates	Departments	Third Parties must undertake their own checks	First use + if significant weight change/beard growth.	Users	College	Face fit testing required. Contact the Safety Department unless in FOM/CBS (contact Occupational Health).
Breathing apparatus (See also Pressure equipment)	N/A	Departments	Third Parties must undertake their own checks	Annually	Users	Departments (e.g. Chemistry) pay for kit and service and maintenance.	Register new equipment with Estates Customer Services Centre as Pressure equipment. Dept arrange 6 monthly full maintenance & checks.

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Pressure systems and equipment

Inspections are needed where the pressure, multiplied by the vessel's volume, is greater than 250 bar litres. Pressure is measured in bars - 1 bar is equal to approximately 15 psi (pounds per square inch); the volume of the vessel is measured in litres.

Pressure vessels in this category require annual inspection by the College Insurance Inspector or as stated in the Written Scheme.

Register plant and equipment containing pressure systems with Customer Services Centre: See Pressure guidance on www.imperial.ac.uk/safety/safety-by-topic/work-equipment/

USERS MUST - where relevant:

- conduct a thorough visual inspection of pressure equipment,
- leak test all equipment and gas lines prior to use,
- test all interlocks and emergency stops,
- ensure all gas detection systems are in test date,
- ensure all ventilation/LEV systems including filters and scrubbers are working as designed.

Building-wide piped gas systems - natural	Estates	N/A	N/A	In accordance with WSE	Estates	Estates	Arrangements are undertaken by Estates. You need do nothing unless you are concerned these are not being met.
Building-wide piped gas systems - laboratory gas	Estates	Faculties	N/A	In accordance with WSE	Not yet determined		Under consideration by the College. Users – check inspections are current by checking item date tag.
Piped gas systems - medical	Estates	Departments	N/A	In accordance with WSE	Usually part of NHS Trust FM	NHS Trust Estates	Under consideration by the College. Users – check inspections are current by checking item date tag.
Piped gas systems in one room	N/A	Department	Third Parties	In accordance with WSE if applicable	Department		Register new equipment with Estates Customer Services Centre as Pressure equipment. Users – check inspections are current by checking item date tag.
Manifolds	N/A	Department	Third Parties	Annually	Owners	Owners	Make separate arrangements with BOC or other competent supplier of insurance inspections
Over-pressure devices (bursting discs, pressure relief valves)	Estates	Departments	Third parties	Annually and in accordance with written scheme	Owners	Owners	Where not associated with gas cylinders and pressurised cryogenic liquid vessels (which should be checked by BOC), register with Customer Services Centre. E.g. gas guns, high pressure pumps, reactor vessels. Users – check inspections are current by checking item date tag.

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Regulators	Estates (e.g. portable welding sets)	Departments	Third parties	Annual	Users	Part of BOC contract	Users to check regulators are in date. Contact BOC and your Faculty Safety Manager to arrange. Note that regulators must be changed every 5 years or for toxic, flammable and explosive gases, every two years - regardless of whether it has been used.
Portable welding systems	Estates	Departments	Third Parties	Annual	Owners	Owners	Contact BOC on campus directly to arrange
Autoclaves, benchtop sterilisers	Estates may own the steam supply and drainage system.	Departments	Third parties may own the steam supply and the drainage system	Annual inspection and servicing as required by the manufacturers' instructions. Additional specific requirements for calibration and validation depending on type of use (contact the Safety Department).	Owners	Owners	Register new equipment with Estates Customer Services Centre . Arrange with Building Manager, maintenance engineer, and Maintenance Manager to coordinate the insurance inspection with the College Insurance Inspector. Decontaminate prior to inspection if used for hazardous agents. Note if used for biological agents, there are specific requirements for calibration and validation. Contact the Safety Department. a) Maintenance and servicing in accordance with manufacturer's instructions b) Performance testing dependent upon use c) Inspection under PSSR in accordance with WSE.
Coffee machines Tea Urns	Catering	Departments	N/A	Annually	Owner	Owner	Register new equipment with Estates Customer Services Centre Users – check inspections are current by checking item date tag.
Pressurised catering equipment/steam boilers; jacketed pans, steam ovens;	Catering	N/A	N/A	Annually	Owner	Owner	Register new equipment with Estates Customer Services Centre Users – check inspections are current by checking item date tag.
Steam pressure plant	Estates	N/A	N/A	Every 26 months or in accordance with WSE	Estates	Estates	Estates process
Air pressure plant	Estates	N/A	N/A	Every 26 months or in accordance with WSE	Estates	Estates	Estates process

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Air conditioning plant (above 25 kW) -	Estates	N/A	N/A	Every 48 months	Estates	Estates	Estates process
Refrigeration plant (above 25 kW)	Estates	N/A	N/A	Every 48 months	Estates	Estates	Estates process
Compressors with receivers	Estates	Departments	Third Parties	Annually or in accordance with WSE	Owner	Owner	Users – check WSE inspections are current by checking item date tag. Register new equipment with Estates Customer Services Centre .
Hot water boilers (above 100°C) Pressure is measured in bars - 1 bar is equal to approximately 15 psi (pounds per square inch); the volume of the vessel is measured in litres. This calculation excludes most domestic heating boilers from the requirements of PSSR.				Every 14 months (annually). Inspections needed where the pressure, multiplied by the vessel's volume, is greater than 250 bar litres.			Owners to check inspection has been conducted where relevant and contact Estates Customer Services Centre to arrange
Nitrogen pressurised vessels (over 250 bar litres)	N/A	Departments	Third parties	Annually + 5 yearly full WSE inspection	Owner (BOC driver undertakes this automatically)	Owner	Follow College COP. Register any pressure vessel of 250 bar litres and over with College insurers via Estates Customer Services Centre. Inform Safety Department who label all nitrogen vessels and maintain the College list. Users – check WSE inspections are current by checking date tag on vessel
Nitrogen pressurised vessels (under 250 bar litres)	N/A	Departments	Third parties	Annually	Owner (BOC driver undertakes this automatically)	Owner	Follow College COP. Inform Safety Department who label all nitrogen vessels and maintain the College list.

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Helium, hydrogen and argon pressure vessels	N/A	N/A Never owned by Departments, remain property of supplier (contractor)	Third Parties	Annually	Contractor/supplier (owner)	Owner	You need to check that your supplier has undertaken the inspection and maintenance – ask for a copy of the current certificate.
Power presses							
Presses for stamping cold metal: see www.zurich.co.uk/-/media/project/zwp/united-kingdom/docs/engineering/information-library/technical-updates/powerpressesengineeringtechnicalfactsheet.pdf?l=a=en&hash=B06B80F3C6E526EB3A584E21E2BDF633	N/A	Departments	N/A	Six-monthly for power presses with interlocked guards, press brakes with light guards and guillotines in printing works. Annually for power presses with fixed guards and guillotines outside printing works.	Owner	Owner	Make arrangements directly with Zurich or equivalent for examination and examination (could try Customer Services Centre).
Ionising Radiation Protection Some examples below, and see specific guidance - www.imperial.ac.uk/safety/safety-by-topic/laboratory-safety/ionising-radiation-safety/							
X-ray generator	Estates (Post Room)	Departments	N/A	Annual or biannual College RPO inspection. Service according to manufacturer's requirements. All active engineering controls (interlocks, warning lights, etc.) must be examined and tested annually.	Safety Department responsible for carrying out the annual inspection. Owner responsible for arranging servicing and testing of engineering controls.	RPO inspection free of charge. Owner is responsible for all costs and charges.	Departments must inform the RPA if new equipment is planned, changed or re-located to discuss the content and nature of the required 'Critical Examination'.
Radiation Monitors – Contamination	N/A	Departments	N/A	Annual testing	Owner	Testing by the Safety Department is free of charge, but the owner is responsible for the cost of repairs.	Owners to make contamination monitors available for testing by the Safety Department when requested by the College RPO.

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Radiation Monitors – Dose Rate	N/A	Departments	N/A	Annual testing and service	Owner	Owner	Owners must send monitors to a suitable calibration and testing house (check with College Radiation Team).
Scintillation counters	N/A	Departments	N/A	Dependent on use: i.e. annual calibration required if used as part of a contamination monitoring program (e.g. H-3 wipe testing).	Owner	Owner	Department must register equipment with the Safety Department and must arrange for servicing as per manufacturer's requirements.
Sealed sources leak testing	n/a	Departments	N/A	At least every two years leakage testing (statutory biannual testing).	Safety Department carry out annual test following liaison with owner.	Safety Department provide this service free of charge.	Departments must provide access to sealed sources, normally during annual inspection.